Protecting the Past, Preserving the Present

Report on Phase 1 Activities of the Oyu Tolgoi Cultural Heritage Program Design for Ömnögoi Aimag

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1. INTRODUCTION

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On 17 June 2010, Oyu Tolgoi LLC (OT) entered into a contract with Sustainability East Asia LLC (SEA) to design a long-term cultural heritage program (CHP). The objective of the CHP is: “to mitigate and manage cultural heritage threats associated with the OT project, monitor and understand culture change, pursue opportunities for cultural heritage promotion and preservation, and encourage and support non-profit, for-profit, and public-sector opportunities in the field of cultural heritage in the process” (OT 2009). Although special emphasis was placed on the cultural heritage of the OT area, defined as the region encompassed by Khanbogd, Bayan-ovoo, and Manlai soums, the CHP will cover Ömnögovi aimag; hopefully, it will serve as a model for a national CHP (Figure 1).

The CHP design consultancy is divided into two phases. Phase 1 consists of the creation of a cultural heritage baseline and gap assessment, Phase 2 uses the information gathered during Phase 1 to develop the CHP and implementation plan. This report summarizes the results of the Phase 1 work.

1.1 WHAT IS CULTURAL HERITAGE?

Culture is what makes us human. Although anthropologists have never agreed on a definition (see Kroeber and Kluckhohn 1952), most view culture as the framework by which people relate to each other. Culture consists of a system of shared beliefs and values, a common language and symbolic thought, common political and social institutions, and shared economic patterns. As important as these aspects are individually, culture is the result of integrating them into a cohesive way of life.

Heritage is a major aspect of culture. To a degree unknown among other animals, human development is a product of learned behavior. What makes one person a Bantu, another a Hopi, and yet another a Mongol is their culture and in learning their culture, people take cues from their group's collective past. Sometimes these cues are physical. The remains of something as small as the family home may embody the importance of familial ties and obligations. A battlefield, in contrast, may symbolize a nation, forged on the lives of a group’s forefathers.
Figure 1: (a) Map of Ömnögovi and (b) Oyu Tolgoi and area of influence, indirect and/or cumulative impact areas
What make some physical locations important are the cultural values that a group places on them. Mythical or historical events, for example, are often encoded in mountains, rivers, and other natural places, which are used by elders to teach lessons to the young about how to behave and what it means to be part of a group (Basso 1996). These values can also be transmitted through social events. Religious pilgrimages, weddings, funerals, festivals, dances, concerts, and meals are only a small number of the types of events that reinforce and recreate social ties and bonds.

The loss of cultural heritage is often viewed as a necessary consequence of economic and social development. Most countries try to balance economic development with cultural heritage preservation. The pace of modernization in developing countries, however, puts this balance in favor of economic interests. The loss of cultural heritage can be devastating. As developed countries have learned all too well, once heritage is lost it is difficult, if not impossible, to retrieve. The consequences of losing heritage are not simply the loss of old buildings or traditional songs. Heritage is the anchor that holds groups together and its loss can lead to alienation, a sense of defeat, and loss of goodwill.

Mongolia wants to ensure that economic development does not fundamentally change Mongolian culture. Nowhere is the balance between modernization and cultural heritage as precarious as in Ömnögovı aimag. The province is rich in mineral resources and Mongolia is relying on the development of these resources to fuel economic growth. Yet, the Gobi Desert is fundamental to Mongolian culture. It is not simply a place, but part of the psyche; its harsh climate and openness is a metaphor for the nomadic way of life.

To be successful, the CHP must allow economic development without destroying a traditional lifestyle. The CHP is not so much about preserving places and things as it is about establishing a process by which Mongolians determine who they are to become by ensuring that they know who they were.

1.2 THE STUFF OF HERITAGE: TANGIBLE AND INTANGIBLE RESOURCES

Cultural heritage can be divided into two types of resources: tangible and intangible. According to UNESCO-EIIHCAP (2007:97):

The distinction between tangible and intangible cultural heritage might be elaborated in the following way. Many (but certainly not all) cultural heritage sites are invaluable because of their significance to a former era of humankind; visitors of authentically preserved cultural heritage sites might feel transported to this previous era. Intangible cultural heritage, in contrast, is living heritage. Dance, music, theatre and craft traditions are invaluable because they manifest dynamic communities and are a driving force in cultural diversity. They are constantly recreated by communities and groups in response to their environment, their...
interaction with nature and their history, and they provide communities with a sense of identity and continuity. While they are bound to tradition, they are also constantly evolving and depend on the community to maintain and transmit them to future generations.

For many years, preservation efforts focused almost exclusively on tangible resources. Buildings, archaeological sites, memorials, and the like were placed on national and international lists and protected. Recently, there has been a move to recognize intangible resources. In 2003, UNESCO adopted the Convention for the Safeguarding of the Intangible Cultural Heritage. Recognizing that the boundary between tangible and intangible is fluid, UNESCO suggests that both types of resources be treated in a comprehensive manner.

Despite their individualities, tangible and intangible cultural heritage together create a full picture of the richness and diversity of the world’s cultural traditions. For this reason, the 2004 Yamato Declaration (on Integrated Approaches for Safeguarding Tangible and Intangible Cultural Heritage) affirms that safeguarding tangible and intangible cultural heritage demands an integrated approach that recognizes both their interdependence and their distinct characters. Indeed, the aims of safeguarding tangible and intangible cultural heritage are the same: to preserve and protect invaluable cultural heritage for the benefit of all humanity (UNESCO-EIIHCAP 2007:97).

1.3 THE MONGOLIAN INTERNATIONAL HERITAGE TEAM

Our approach to designing the CHP was combine national expertise in Mongolian culture with international expertise in heritage management. The result was the Mongolian International Heritage Team (MIHT) (Figure 2). Lead by Dr. B. Gunchinsuren (Mongolian Academy of Sciences, Institute of Archaeology [MASIA]), Dr. John Olsen (University of Arizona), and Dr. Jeffrey Altschul (Statistical Research, Inc. [SRI]), the MIHT is divided into three teams, each lead by a Mongolian scholar. Dr. Amartubshin C. (MASIA) leads the tangible resource team; Dr. S. Chuluun (MAS, Institute of History) leads the intangible resource team; and Dr. Gerelbadrakh J. (Mongolian State University of Education) leads the public programs team.

In Phase 1, each team, both independently and together, conducted a: (1) literature search; (2) community and stakeholder consultations; (3) assessment of the legal framework protecting cultural heritage; (4) gap assessment; and (5) baseline fieldwork. This information will be used to perform a risk analysis and to establish a standards of acceptable culture change process, ultimately leading to the CHP.
1.4 PROJECT HISTORY

Phase 1 of the CHP design began in June 2010 and was largely complete by the end of January 2011. Phase 1 consisted of eight basic tasks:

- Literature search
- Gap analysis
- Baseline fieldwork
- Community and stakeholder consultation
- Assessment of the legal framework affecting cultural heritage
Although the schedule called for the Phase 1 tasks to be performed sequentially, it became clear that many of the tasks overlapped and were accomplished more efficiently if conducted in a simultaneous manner. Given the logistical difficulties of fieldwork, it became imperative that each field trip include not only time for baseline surveys, but also time scheduled for meetings with local officials, interviews with interested local residents, and scouring of local libraries and other repositories for information on cultural heritage. It also became clear that the last two tasks—the risk analysis workshop and the establishment of a standards of acceptable cultural change framework—were best performed in Phase 2 so that participants in these processes could review the Phase 1 report and have a basic understanding of all aspects of cultural heritage for Ömnögovi aimag.

The project began as proposed with the few months devoted to a comprehensive literature search. Each of the three teams reviewed published and unpublished literature on cultural heritage, compiling a bibliography. Although we gathered a substantial amount of literature in the first month, we also determined that significant documents, particularly those related to the registration of heritage resources, resided in each soum. We needed to visit each soum center to obtain these data, and these visits would have to be folded into other tasks throughout Phase 1.

Fieldwork, although scheduled to start after the literature search and gap analysis, began almost immediately to ensure that the intangible and public program teams could document the manner in which Naadam is celebrated throughout Ömnögovi aimag. This fieldtrip also allowed the MIHT to begin community and stakeholder meetings, which were geared to introducing the project as well as gathering public sentiment about cultural heritage preservation. During this period, Dr. Amartuvshin undertook an analysis of the laws and governmental structure surrounding the protection of cultural heritage. Together with Dr. Gunchinsuren, Dr. Amartuvshin met with officials at the national, aimag, and soum levels, gathering information on how the system is supposed to work and how it actually works.

By September, the Mongolian team was in a position to present its preliminary results to the MIHT international specialists. The entire team spent 10 days split between Ulaanbaatar and Ömnögovi aimag. The team visited OT and other mining projects, held community meetings in soums in the direct impact zone, met with aimag officials, toured the provincial museum and library in Dalandzadgad, and visited a variety of heritage sites. Throughout the visit, Mongolian teams were paired with appropriate international specialists. The meeting resulted in a clear understanding of what is currently known about each facet of cultural
heritage, what needs to be known to construct a CHP, and guidance for the next steps in the process. This information was relayed to OT first in an oral presentation and later in a gap analysis memo issued in October (Appendix 1).

After the specialists meeting, the teams completed baseline surveys. Recorded archaeological resources in Ömnögovi aimag were first entered into a database. Known site locations were then used to create a predictive model for the province using geographic information system (GIS) technology. Fieldwork focused on testing the model. The intangible continued to document baseline nomadic culture, while the public programs team examined existing cultural programs at soum centers and the provincial capital as well as heritage tourism opportunities. Due to weather conditions, the paleontology team could not complete fieldwork during Phase 1; it is scheduled to be conducted early in Phase 2 with the Phase 1 report amended, as appropriate.

Key components of the CHP design are a risk analysis workshop and the establishment of a standards of acceptable culture change framework. The two overlap in many ways and we decided the fold the risk analysis workshop, which was envisioned as a one time event, into the standards of acceptable cultural change framework, which will last the life of the CHP. Independent of both processes, OT and the MIHT established an advisory board with 15 members which represent the major constituencies interested in the cultural heritage of Ömnögovi aimag. The purpose of the advisory board is to ensure that stakeholders have a formal mechanism by which they can provide guidance on the CHP design. As such, they form ideal participants for the risk analysis workshop. This group will be augmented with representatives of industry and other economic development. Prior to the workshop, the participants need to be properly prepared with background materials on cultural heritage and economic development plans for the province. The Phase 1 report is a critical piece of the background and thus, we chose to move the workshop to Phase 2 so that participants could have this report.

1.5 REPORT ORGANIZATION

The Phase 1 report is divided into nine chapters. Following this introduction, we present the results of each team. The tangible resources team’s report is divided between archaeology, which is presented in Chapter 2, and paleontology, which is provided in Chapter 3. Chapter 4 is devoted to intangible heritage, whereas Chapter 5 provides the results of the public programs team. A major emphasis in Phase 1 was placed on gathering the opinions and advice of various stakeholders; the results of these meetings are provided in Chapter 6. The current national and international laws and conventions covering cultural heritage are provided in Chapter 7, along with the current and proposed compliance frameworks. Chapter 8 describes our approach to taking the information from Phase 1 and conducting a
risk analysis and establishing a public process aimed at defining standards of acceptable culture change for Ömnögovi aimag. The Phase 1 report closes in Chapter 9 with a summary of Phase 1 work and few conclusions pertinent to the development of the CHP.

Following the text, there are 16 appendices. The gap analysis memo that the MIHT provided OT is presented in Appendix 1. Appendix 2 is the complete bibliography of references found and examined during the literature search. Appendix 3 is a geoarchaeological model of where buried sites may be found in the south Gobi; Appendix 4 is the results of the November field work; and Appendix 5 is the chance find procedure developed by the MIHT. The intangible team has three appendices. Appendix 6 contains the report of the paleontological field trip. The team’s informants and lists of information collected are summarized in Appendix 7 and Appendices 8 and 9 are field reports. The public programs team has four appendices. Appendix 10 provides the purpose of the public programs field work. Appendices 11 and 12 are the interim and final reports on the Naadam festival in OT and Ömnögovi aimag. Appendix 13 is the public program’s field report. Appendix 14 is the fact sheet developed by the MIHT for OT. The final appendix, Appendix 15 provides the Terms of Reference of the CHP Advisory Board. Appendix 16 consists of the OT CHP Advisory Board minutes.
2. TANGIBLE RESOURCES – ARCHAEOLOGY

Ch. Amartuvshin and B. Gunchinsuren

The first step in the design of the cultural heritage plan (CHP) is to review what is known about cultural heritage of the South Gobi in all its aspects—anthropology, history, archaeology, and paleontology—as well as the manner in which it is conveyed to the public. Once compiled, we will assess whether what is known is sufficient or if there are gaps in our knowledge that must be filled before we design the CHP.

The literature review begins with a discussion of the methods used to collect the information on cultural heritage. Next, we discuss how we managed the data collected, including how the data were arranged in digital form so that they could be manipulated and displayed. We then describe our approach to predictive modeling of surface and subsurface sites. Next, each team—tangible, intangible, and public—reports on their findings.

2.1 METHODS AND METHODOLOGY

2.1.1 History of Publication on Cultural Heritage in Mongolia

To understand the results of the literature search, one must first have a firm background in the history of scientific publication in Mongolia. The term "documents" herein refers to scientific monographs, research papers, and reports as well as printed material for public consumption, such as books, popular articles, newspaper reports, and so forth related to tangible and intangible cultural heritage. We cast a wide net, in part, because little documentation exists specifically for Ömnögovi aimag. Considerable documentation exists, however, for the Gobi Desert in general.

The fact that a literature review of Mongolian literature is possible is a direct result of Mongolian independence for prior to 1921, no documents produced by Mongolians on cultural heritage exist. The seminal date is November 9, 1921, the day the Government of Mongolia established the Institute of Books and Treatises. This event, in turn, led to the founding of the Mongolian Academy of Sciences with the stated goal of developing science and technology in Mongolia.

The Rule for Preserving Ancient Monuments, issued by the Institute of Books and Treatises on August 7, 1924, was the first significant legal act related to the evaluation, examination and preservation of the ancient historical and cultural values of Mongolia. This rule not only led to internally-driven research in Mongolia, but also allowed the establishment of scientific
agreements with foreign researchers interested in pursuing research in Mongolia. The latter was critically important in the development of Mongolian archaeology and paleontology.

The newly established Institute of Books and Treatises worked hard to establish cooperative relationships with foreign scientific organizations and researchers. Important advances in Mongolian archaeology were achieved largely in cooperation with Soviet researchers, including V. I. Lisovsky, V. A. Kazakevich, G.I. Borovka, S. A. Condratyev, P. K. Kozlov, S. A. Teploukhov, A. D. Simukov, D. Ya. Vladimortsov, B. Baradin, L. A. Amsterdamskaya, B. B. Bambayev, S. I. Rudenko and D. D. Bukinich. Research ties also were established with Western scholars. Of particular note was Roy Chapman Andrews, who led the American Museum of Natural History’s Central Asiatic Expeditions, which were the first substantial paleontological and archaeological survey in the southern region of Mongolia (1922-1923 and 1925).

Beyond professional scientists, local residents of the Gobi figure prominently in the development of Gobi archaeology and paleontology. In particular, Dash of Ömnögovi aimag, and Buddari of Dornod found artifacts dating to the Stone Age. These objects were transferred to the Institute of Books and Treatises in the mid 1920s, where they were later documented by D. D. Bukinich, a Soviet archaeologist who worked in Mongolia in 1933 and 1934. Based on these results, the Institute of Science began exploring rural areas. In 1934, a proposal by the Governing Board of the Institute was approved that sent scientists and journalists to discover ancient historical and cultural monuments, rock art, and ancient graves. Those sent to rural areas were to disseminate scientific knowledge to the public, publicize the objectives and activity of the Institute, and garner public support for the Institute. At first, journalists were sent to Ulaanbaatar, Tuv, Dornod and Uvs provinces. In order to provide guidance to them, the Institute established the Bureau of the Study of Rural Area, which became a division of the institute in 1940.

Because of its expanded activity, the Institute of Science established a journal to disseminate their research results. After initially proposing the journal, Research News, the Institute successfully established a publication under the title, New Mirror, in 1936. In the very first edition, J. Tseveen published the first scientific article (“Issues in the Mongolian Archaeology”) presenting results of an archaeological survey in Mongolia by a Mongolian archaeologist.
2.1.2 Documents

As part of Phase 1 of the CHP design, the tangible, intangible and public program teams compiled a bibliography of published and unpublished literature. The full bibliography is listed in Appendix 2. Table 1 summarizes the results.

In the following chapters, we will present the results of various team’s literature searches. Relevant to all the teams are two documents prepared by OT. “Basic survey of Ömnögovi aimag - 2008” (Ulaanbaatar, 2008) and “Social and economic impact assessment of the Oyu Tolgoi project (final report)” (Ulaanbaatar, 2009). “Social and economic impact assessment of the Oyu Tolgoi project (final report)” presented public perceptions of the positive and negative impacts of the Oyu Tolgoi project. The work is based on high-level and specialized surveys of the initial mine proposal by professional advisors, experts and local citizens. The impact assessment briefly addresses the importance of cultural heritage. “Basic survey of Ömnögovi aimag - 2008” is more comprehensive and focuses on more precise research works related to the cultural heritage.

Table 1: Source Analysis of the CHP Design Project

<table>
<thead>
<tr>
<th>№</th>
<th>Category</th>
<th>Number of Registered Books</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tangible heritage</td>
<td>170</td>
</tr>
<tr>
<td></td>
<td>Archaeology</td>
<td>170</td>
</tr>
<tr>
<td></td>
<td>Paleontology</td>
<td>80</td>
</tr>
<tr>
<td>2</td>
<td>Intangible heritage</td>
<td>8</td>
</tr>
<tr>
<td>3</td>
<td>Public program</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>294</td>
</tr>
</tbody>
</table>

2.2 SUMMARY OF ARCHAEOLOGICAL RESEARCH IN ÖMNÖGOVI AIMAG BASED ON THE LITERATURE

In the late 19th and early 20th century Russian, American, Swedish, and Japanese scientists started to participate in research projects on the flora, fauna, geography, history and culture of Mongolia. In 1878-1879, MV. Pevtov initiated research by traveling in the Altai mountain range and Ikh Nuuruudin Khotgor and documenting how the unique geographic and climatic features of Ömnögovi aimag differ from those in the Khangai region. Beginning with the People’s Revolution in 1921 and lasting until about 1950, substantial scientific research took place on the environment, geography, history and culture of Mongolia. During this period, the Institute of Science and the National Museum were established, both of which became engaged in the study of ancient sites and the collection of artifacts and other historical materials.
Between 1922 and 1925, Roy Chapman Andrews led the Central Asiatic Expeditions for the American Museum of Natural History. Famous for its spectacular dinosaur finds, the expedition traveled throughout the Gobi Desert and most notably through Ömnögovi aimag. In 1922, the expedition’s path went respectively through Uurgu, Mishig Gun, palace of Sain noyon, Taatsin Tsagaan lake, Baga Bogd, Gurvainsaihan of Altai mountain range of Gobi, Bayanzag, and Sair-Us khaalgan. In the following year, they started in Khaalgalan and traveled to Bayanzag, Taatsin Tsagaan lake, Baga Bogd, and Khaalgalan. In 1925, the expedition returned to Bayanzag and continued to Orog lake, Ikh Bogd, Bayanzag, Khyalga, Khuh Khom, and Borzon.

In 1940 Mongolian archeologists first began to conduct surveys both independently and jointly with foreign researchers. In 1957 Kh. Perlee explored Doloon, Tsogts-Tsetsii, Argalant, Nomgon, Khankhongor, and Mandal-Ovoo soums of Ömnögovi aimag. As a part of this work, the expedition team surveyed the remains of ancient settlements, such as Godil balgas in Argalant soum, Shar tolgoin kherem in Nomgon soum, and the ruin of Bayanbulag. They created an overall map of the sites.

In 1960, the Mongolia-Russia Joint Historical and Cultural Expedition, led by N. Ser-Odjav, D. Dorj and Ts. Dorjsureng from Mongolia and Professor A. P. Okladnikov and V. V. Volkov from Russia, conducted a joint archaeological survey. During the survey, the expedition excavated a burial associated with the Mongolian period in Khar Argalant of Manlai soum in Ömnögovi aimag and discovered a leather purse, metal knife, wooden arch covered by thin leader, saddle wood, and metal arrowheads from the burial¹. Additionally, the expedition discovered numerous stone weapons from the south and north parts of the Gurvan Saikhan range².

In 1970, the Gobi Region Expedition, led by D. Navaan, worked in most of the soums of Ömnögovi aimag. While excavating in Gobi tukhum of Manlai soum, they discovered evidence of metal processing. In 1976, during the expedition’s excavation in the ruin of Bayanbulagin of Nomgon soum, they found more than 200 artifacts, including bronze arrowheads. They also excavated the Khan Khadni burial located in Bayan-Ovoo soum and found that the monument is related to the Khunnu period. Furthermore, they discovered 54 u-shu coins from Altan Unert in Nomgon soum³.

In 1971, a team of the Mongolia-Russia Joint Historical and Cultural Expedition searching for ancient stone weapons, discovered alloys of copper, fragments of a bronze pouch, and pieces of a thin clay bowl from Bayanzag in Bulgan soum of Ömnögovi aimag. They also

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¹ N. Ser-Odjav, D. Dorj. Report of the MRJHCE. TGKhGBSKh. UB.,1960
found Stone Age objects, such as scrapers, splinters, and plates, from Gurvantes and Sevrei soums. A report was prepared by the expedition team, which consisted of archaeologists D. Dorj from Mongolia and A. P. Okladnikov, A. P. Derevyanko, A. P. Alekseev, R. S. Vasilevskii and V. E. Larichev from Russia.

In 1985, the Stone Age team of Mongolia-Russia Joint Historical and Cultural Expedition worked near the ancient weapons team in Ömnögovi aimag. The Stone Age team consisted of Mongolian archaeologists D. Dorj and D. Tseveendorj and Russian researchers A. P. Derevyanko, A. P. Alekseev, R. S. Vasilevskii, V. E. Larichev and V. T. Petrin. The team discovered sites dated to the Stone Age and early Bronze Age.

In 1988, a field team from the Mongolian-Russian Joint Historical and Cultural Expedition worked in Tsogt-Ovoo, Nomgon, Tsogts-Tsetsii, bayandalai, Gurvantes, Sevrei, Bulgan and Khurmen soums of Ömnögovi aimag. N. Ser-Odjav and T. Sanjmyatav participated in the expedition and found a lost saddle arch and bow from Ikh Bayan cave in Tsogt-Ovoo soum of Ömnögovi aimag. Some of the objects remained in the cave; others were brought to Ulaanbaatar for analysis. The objects were returned to the soums where they were found for storage along with newly discovered and analyzed rock art panels and human stone statues. One square burial with four high stone poles in each corner was located and excavated in Khurmen soum (deer image facing to the sunrise was painted on the stone pole of south east corner).

In 1990, the Mongolian-Russian Joint Expedition worked in Nomgon soum territory of Ömnögovi aimag. The team consisted of D. Tseveendorj and Z. Batsaikhan from Mongolia and P. B. Konovalov from Russia. The team conducted two limited excavations at Bayanbulag in Nomgon soum and made further observation at Byaruukhain related to the Stone Age. They discovered a plate made of flint, platter and other remains associated with the New Stone Age.

In 1995 and 1996, the Mongolian-Russian-American Joint Archaeological Expedition’s project "Stone Age of Mongolia" conducted survey and excavations in Bulgan, Gurvantes, Sevrei soums of Ömnögovi aimag. The expedition consisted of D. Tseveendorj and B. Gunchinsuren from Mongolia, A. P. Derevyanko, V. T. Petrin, and A. N. Zenin from Russia, and J. Olsen, R. Rivs and D. Brantingham from the United States. The field expedition team conducted
excavations in 5 sites in Tsakhurt valley of Bulgan soum and recovered approximately 3,000 stone tools associated with the Old Stone Age\(^8\).

In 2000, archaeologists U. Erdenebat and Ch. Amartuvshin worked in Dalanzadgad and Noyon soum of Ömnögovi aimag. They participated in the conference “Rationale for the proper use of natural resources in the state protected areas of South Gobi and its surrounding areas” organized by the administration offices of the State protected areas of South Gobi held in Dalanzadgad. They made a presentation on historical and cultural sites located in Ömnögovi aimag and the issue of their conservation. Further, based on information that an ancient grave in Tsagaan Khanan cave in Noyon soum of Ömnögovi aimag had been vandalized, they excavated the site and discovered rags of blue silk and red cloth, pieces of white felt, and straw and reed that had probably been used under the burial. Straw objects, three pieces of animal back bone, bronze rings, nutsheells, a pendant made of beads and glass, cotton purse, cotton sac, broken wooden brush, and so on also were gathered and brought to Ulaanbaatar. The coffin wood left in the cave was taken to the soum center\(^9\).

In addition to academic research, compliance surveys began in Ömnögovi aimag in 2001 (Figure 3). Besides surveys conducted in the license areas of the Ivanhoe Mines Mongolia Inc and “Oyu Tolgoi LLC” which was mentioned above, surveys and excavations have been conducted in the license areas of many mining companies. These include Ukhaa hudag” coal mining license area of “Energy Resource” company in Tsogt-Tsetsii soum in 2008-2010; in 2009 in “Baruunnaranan” license area of “Khangad Exploration” LLC in Khankhongor soum; in 2010 “Olon Ovoot Gold” gold mining license area of “Just” LLC in Mandal-Ovoo soum; “Toromkhon” license area of “AGM Mining” in Gurvantes soum; “Tasarkhai deel” license area in Khurmen soum; and in the license area of the “Altan Erdene Gazar” LLC located in Khurmen soum.

Due to the lack of a centralized database, it is not possible to state the exact number of archeological monuments located in Ömnögovi aimag. We discovered documentation for 606 sites in the province during the literature review for the CHP. The sites are not evenly spread over the entire aimag. We believe the uneven distribution of sites is due to the following reasons: compliance surveys only cover select areas (license areas of mining companies), whereas some academic surveys have concrete research targets, such as Stone Age sites, and do not record all sites encountered. Finally, the result could reflect the lack of a long term survey plan and the trend to the focus on specific location due to the severe weather and climate of the region.

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\(^9\) Erdenebat.U, Amartuvshin.Ch. Field expedition report conducted in Umnugobi province. TKhGBSKh. UB., 1999
2.3 ARCHAEOLOGY OF THE OT DIRECT IMPACT ZONE

2.3.1 Literature review

With regards to archaeological and paleontological compliance, OT has sponsored various projects in the direct impact area of CHP design project (for paleontological reports see Chapter 3). This area includes the mine site as well as Khanbogd, Manlai, Bayan-Ovoo and Dalanzadgad soums. Since 2001, the Institute of Archaeology, MAS has performed the compliance studies and prepared research papers and monographs on the resulting surveys and excavations. A brief synopsis of these reports is provided below (Table 2).
## Table 2: List of the Archaeological Field Surveys Conducted Near the Oyu Tolgoi Mine Site

<table>
<thead>
<tr>
<th>No</th>
<th>Research Area</th>
<th>Team Members</th>
<th>Year</th>
<th>Purpose</th>
<th>Key Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>License area of Ivanhoe Mines Mongolia Inc LLC at Oyu Tolgoi of Khanbogd soum, Ömnögovi aimag</td>
<td>D.Tseveendorj, B.Gunchinsuren, Ya.Tserendagva</td>
<td>2001</td>
<td>Survey</td>
<td>Documentation of an ancient copper mine</td>
</tr>
<tr>
<td>2</td>
<td>License area of Ivanhoe Mines Mongolia Inc LLC at Oyu Tolgoi of Khanbogd soum, Ömnögovi aimag</td>
<td>D.Tseveendorj, B.Gunchinsuren, Ya.Tserendagva</td>
<td>2002</td>
<td>Survey and excavation</td>
<td>Excavation of 4 copper mines and rock art survey of Javkhant Mountain</td>
</tr>
<tr>
<td>3</td>
<td>License area of Ivanhoe Mines Mongolia Inc LLC at Oyu Tolgoi of Khanbogd soum, Ömnögovi aimag</td>
<td>D.Tseveendorj, B.Gunchinsuren, Ya.Tserendagva, N.Batbold, D.Bazargur, Ts.Bolorbat, J.Gantulga</td>
<td>2003</td>
<td>Survey</td>
<td>Documentation of a Stone Age settlement and 51 Bronze Age and Iron Age sites</td>
</tr>
<tr>
<td>4</td>
<td>License area of Ivanhoe Mines Mongolia Inc LLC at Oyu Tolgoi of Khanbogd soum, Ömnögovi aimag</td>
<td>Ch. Yuruul-Erdene, J.Gantulga</td>
<td>2005</td>
<td>Survey</td>
<td>Documentation of 23 Bronze Age sites</td>
</tr>
<tr>
<td>5</td>
<td>License area of Ivanhoe Mines Mongolia Inc LLC at Oyu Tolgoi of Khanbogd soum, Ömnögovi aimag</td>
<td>B.Gunchinsuren, Ch.Amartuvshin, J.Gantulga, Ch.Yuruul-Erdene</td>
<td>2005</td>
<td>Excavation</td>
<td>Excavation of 13 Bronze Age burials</td>
</tr>
<tr>
<td>6</td>
<td>License area of Ivanhoe Mines Mongolia Inc LLC at Oyu Tolgoi of Khanbogd soum, Ömnögovi aimag</td>
<td>S.Khurelsukh, R.Munkhtulga</td>
<td>2005</td>
<td>Survey</td>
<td>Ruins of the Demchig monastery of XIX century were excavated.</td>
</tr>
<tr>
<td>7</td>
<td>License area of Ivanhoe Mines Mongolia Inc LLC at Oyu Tolgoi of Khanbogd soum, Ömnögovi aimag</td>
<td>Ch.Amartuvshin, J.Gantulga, Ch.Yuruul-Erdene</td>
<td>2006</td>
<td>Survey</td>
<td>Documentation of f1-sites dated to the Bronze, Iron, Xiongnu and Turks periods</td>
</tr>
<tr>
<td>8</td>
<td>License area of Ivanhoe Mines Mongolia Inc LLC at Oyu Tolgoi of Khanbogd soum, Ömnögovi aimag</td>
<td>J. Galdan, P.Aldarmunkh</td>
<td>2008</td>
<td>Survey</td>
<td>Documentation of 21 sites</td>
</tr>
</tbody>
</table>
In 2001, a team consisting of D. Tseveendorj and B. Gunchinsuren conducted reconnaissance exploration near the Oyu Tolgoi mine site. The work was promising and led to 12 archaeological investigations, primarily between 2004 and 2007. The survey reports document where sites were found, what types of sites were represented, and their time of use. The archaeologists offered recommendations for further archaeological work depending on the scientific importance of the site and whether it was scheduled to be disturbed as part of the development of the mine.

The results of the OT-sponsored survey and excavations were compiled in the monographs, *Petroglyphs of Javkhlant Mountain* by D. Tseveendorj, Ya. Tserendagva, B. Gunchinsuren and D. Garamjav (2004) and *Petroglyphs of Khanbogd* by D. Tseveendorj, D. Garamjav, B. Gunchinsuren, Ya. Tserendagva, J. Gantulga, Ch. Amartuvshin and T. Munkhbat (2010). These monographs summarize and synthesize the archaeology in the direct impact areas; hence, they play a major role in the source analysis performed by the tangible resource team.

Some of the results from Oyu Tolgoi have been surprising and their scientific importance incorporated in the work of Mongolian and foreign archaeologists. For example, a previously undocumented prehistoric mortuary feature was discovered in excavations in Javkhlant bag in 2005. This mortuary feature has been cited in comparative research and discussed at international scientific conferences held in Russia, Japan and China. It also is the subject of a Master’s dissertation at the National University of Mongolia.

In 2005, a mud castle, located in Galba Gobi 70 km from Khanbogd soum, was documented. This mud castle is known as Mangasiin Kherem by local residents. Based on artifacts found in this castle, archaeologists identified the site as a town established during the Khunnu
Empire more than 2,000 years ago (Amartuvshin and others, 2009). The remnants of this castle are considered a significant tangible property of Mongolia and it was included in the list of special protected historical and cultural properties in the province proposed in 2008.

2.3.2 Summary of Archaeological Research in the OT Direct Impact Zone

Since 2000, largely foreign countries have dominated the mining sector in Mongolia. During this period, Ivanhoe Mines Mongolia Inc began exploration at Oyu Tolgoi in Khanbogd soum of Ömnögovi aimag. Along with geological exploration, the company sponsored archaeological surveys and rescue work in the license area in compliance with the Cultural Heritage Law of Mongolia and other regulations. The archaeological surveys and excavations were conducted solely by the Institute of Archaeology, MAS.

In 2001 a team consisting of Ph. D. D.Tseveendorj (Director) and Dr. B. Gunchinsuren of the Institute of Archaeology initially performed limited archaeological reconnaissance near Oyu Tolgoi. During the reconnaissance, they discovered tools for quarrying copper associated with the Bronze Age; other objects of the Stone Age also were discovered.

The following year (2002) some of the sites discovered in the 2001 survey were excavated and analyzed. The excavation team consisted of D. Tseveendorj, B. Gunchinsuren and Ya. Tserendagva. During the excavation, the team documented rock art panels found at Javkhlan Khairkhan, located about 17 km west from Oyu Tolgoi. These drawings were published under the title Petroglyphs of Javkhlan Khairkhan in 2004 jointly by the Institute of Archaeology and Ivanhoe Mines Mongolia Inc (Tseveendorj et al. 2004).

In 2003, the Institute of Archaeology performed an archeological survey along the route of the proposed road from Oyu Tolgoi to Gashuun Sukhait, on the Mongolian-China border. The survey team consisted of D. Tseveendorj, B. Gunchinsuren and Ya. Tserendagva. In total, they discovered 61 sites (Tseveendorj et al. 2003).

Additional survey work was conducted in 2005 along a proposed canal in the vicinity of Oyu Tolgoi. B. Gunchinsuren led the survey team, with Ch. Amartuvshin Ch. Eroo-Erdene, and J. Gantulga serving as field crew. During the survey, the team documented 5 monuments (Gunchinsuren et al. 2005) together with rock art from Dalain duulga, Shiir Uul, Tsagaan tolgoi and Zuun khatsavch. The ruin of the ancient city of Mangasin khuree in Galbin Gobi, which was occupied from the 1st century BC to the 1st century AC, was plotted as well.

Also in 2005, some of the sites discovered in 2003 were excavated. The excavation team consisted of D. Tseveendorj, Ch. Amartuvshin, B. Gunchinsuren, and B. Tsogtbaatar. Excavations were undertaken at 13 sites. Bronze age materials were recovered from burial
sites termed *khirgisuur* (Tseevendarj et al, 2005). During this excavation the team excavated the remains of a copper casting stove, the type of which had not be previously identified.

In 2006, Ch. Amartuvshin, B. Gunchinsuren and others conducted an archeological survey of the proposed airport in Oyu Tolgoi and an associated road and water pipeline. They found about 19 sites (Amartuvshin et al. 2006).

Two years later in 2008, J. Gantulga and P. Aldarmunkh conducted an archaeological survey in the license area of “Heruga”, which is jointly owned by Ivanhoe Mines Mongolia Inc. and Entrée Gold Inc. They discovered 21 sites (Gantulga et al. 2008).

In 2010, G. Galdan conducted a survey along the proposed path of a paved road south of Oyu Tolgoi; he identified 3 sites. Later, B. Gunchinsuren and Ch. Amartuvshin re-examined the results while working near the airport in Oyu Tolgoi (Gunchinsuren et al. 2010). Also in 2010, Ch. Erool-Erdene and J. Gantulga conducted an archaeological survey prior to the construction of an electricity line, road, and mining facility; they discovered 12 sites (Erool-Erdene et al. 2010).

Prior to 2001, no information existed on the archaeology of Oyu Tolgoi. Between 2001 and 2010, the Institute of Archaeology performed 12 archaeological surveys in the vicinity of Oyu Tolgoi and in the direct impact areas in Khanbogd soum of Ömnögovi aimag. Oyu Tolgoi LLC sponsored all these projects. In total, 145 monuments were discovered, of which 13 were excavated. Two publications—*Petroglyphs of Javkhlan khairkhan* (2004) and *Petroglyphs of Khanbogd* (2010)—and 5 scientific articles on the results of the survey and excavations were published.

The discovery of the above mentioned 149 sites are the results of compliance surveys sponsored by Ivanhoe Mines Mongolia Inc between 2001–2008 and Oyu Tolgoi, LLC in 2010. Some sites are situated in the mining area at Oyu Tolgoi, while others are located in areas of proposed construction for roads, water pipelines, facilities, airport, etc., which are some distance from the mining area.

Between 2001 and 2008, archaeological work followed the Ivanhoe Mines Mongolia Inc master plan. Currently, it is unclear if all aspects of this plan will be followed. The exact footprint of the mine development has a direct relationship with the preservation of sites and determines the course of future archaeological work.

We defined the “Oyu Tolgoi vicinity” as a circle with an 80-km radius centered on the mine site (Figure 4). We divided the zone into 8 concentric circles each 10-km wide. The circles were numbered from the center with sites closer to the center being considered at greater risk.
Figure 4: Information about the Sites in the Oyu Tolgoi Vicinity NB: The OT site is marked by the Blue square, Archeological sites by green dots and paleontological sites by red triangles.
The 149 sites included in Table 3 can be divided into 5 types. These types are: 1) rock art; 2) burial, grave; 3) settlement/open settlement; 4) cairns; and 5) monastery. Most sites have been classified as burials (stone covered structure) (Table 4).

Table 3: Information about the Sites in the Vicinity of Oyu Tolgoi

<table>
<thead>
<tr>
<th>Site Numbers</th>
<th>Report</th>
<th>Total Number of Sites Documented</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airport site 1, 2</td>
<td>D. Tseveendorj et al. 2006. Report on archaeological survey works made at the Oyu Tolgoi airstrip to be built in the exploration site of “Ivanhoe Mines Mongolia Inc.” company in the territory of Khanbogd soum, Omnogovi aimag. Ulaanbaatar.</td>
<td></td>
</tr>
<tr>
<td>Road -1, 2, 3, 4, 5, 6</td>
<td>Ch. Yorool-Erdene and J. Gantulga 2010. Report on the archeological survey conducted in the exploitation area of “Oyu Tolgoi” LLC in the territory of Khanbogd soum of Omnogovi aimag. Ulaanbaatar.</td>
<td></td>
</tr>
<tr>
<td>Site Numbers</td>
<td>Report</td>
<td>Total Number of Sites Documented</td>
</tr>
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<tr>
<td>Resource area-1, 2, 3</td>
<td>Ch. Yorool-Erdene and J.Gantulga 2010. Report on the archaeological survey conducted in the license area of “Oyu Tolgoi” LLC in the territory of Khanbogd soum of Ömnögovi aimag. Ulaanbaatar.</td>
<td></td>
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<tr>
<td>OTW-02, 03</td>
<td>D. Tseveendorj et al. 2006. Report on the archaeological survey conducted along the water pipeline to be newly built in Oyu Tolgoi by Ivanhoe Mines Mongolia Inc in Khanbogd soum of Ömnögovi aimag. Ulaanbaatar.</td>
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<tr>
<td>Site Numbers</td>
<td>Report</td>
<td>Total Number of Sites Documented</td>
</tr>
<tr>
<td>--------------</td>
<td>--------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>UHGZ-01, 02, 03, 04</td>
<td>Ch. Amartuvshin et al. 2010. Report on the archaeological excavation conducted along the paved road to be built by “Nuursni zam” company passing through the territory of Tsogt-Tsetsii, Bayan-Ovoo and Khanbogd soums of Ömnögovi aimag. Ulaanbaatar.</td>
<td></td>
</tr>
<tr>
<td>Shiveet rock art-03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36</td>
<td>B. Gunchinsuren and Ch. Amartuvshin 2004. Report on the survey conducted “Entrée Gold Inc” company’s license area in Bayan-Ovoo soum of Ömnögovi aimag. Ulaanbaatar.</td>
<td>36</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>149</td>
</tr>
</tbody>
</table>
Table 4: Types of Archeological Monuments Located in the Vicinity of Oyu Tolgoi

<table>
<thead>
<tr>
<th>Site Type</th>
<th>Rock Art</th>
<th>Burials and Graves (stone covered structure)</th>
<th>Settlement / Open Settlement</th>
<th>Cairns</th>
<th>Monastery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>47</td>
<td>99</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Site Definition</td>
<td>Pecked or painted images on boulders. Site named after general surroundings. (e.g., mountain)</td>
<td>This site type includes burials, graves, and stone covered structures associated with all time periods.</td>
<td>This site type includes all objects related to the ruins of ancient settlements.</td>
<td>This site type includes structures constructed by stone for special purposes.</td>
<td>Monasteries are ruins of religious buildings associated with Buddhism.</td>
</tr>
</tbody>
</table>

Figure 5 shows that 86 sites are located within 30 km of the Oyu Tolgoi mine site. These sites are at most risk and will require considerable protection and conservation. Of the 149 sites in the 80-km area, 6 are complex rock art sites, such as Javkhlan Khairkhan (Khanbogd), Dalain Duulga (Khanbogd), Tsagaan Tolgoi (Khanbogd), Zuun Khatsavch (Khanbogd) and Shiveet (Bayan-Ovoo). There are publications on the rock art discovered in Khanbogd soum (Tseveendorj et al. 2004; Tseveendorj et al. 2010); no publications exist for the rock art sites in Shiveet of Bayan-Ovoo soum (Gunchinsuren et al. 2004).

2.4 MAPPING CULTURAL HERITAGE SITES IN ÖMNÖGOVI AIMAG

One of the major outcomes of the literature review was the development of a database of tangible heritage for Ömnögovi aimag. This database is based on published and unpublished research in the entire province, not just the direct impact zone. Although discussed in detail in the next section, it is important to mention here how the database was used in the literature review. The database employs geographic information system (GIS) technology to visually display the distribution of archaeological sites preserved in the impact zone. From this display, we can identify errors and weaknesses in the site register. For example, sites are more frequent and more densely distributed in the eastern soums of Ömnögovi aimag where most compliance surveys have been conducted. Based on meetings with local residents, however, we suspect that more sites are actually located in the western region. Further, based on our experience, we suspect that many archaeological sites also will be found near the east end of the Gobi Altai Mountains. Accordingly, we adjusted our mapping...
methods with statistical techniques that base predictions of site location not only on where sites have been found, but also on conjectures of where sites will be found in the future. These methods and results are discussed below in the section on “predictive models” of archaeological site location. Model predictions were then preliminarily tested during our baseline field survey in November 2010, which is described further below.

### 2.5 CULTURAL HERITAGE GIS DATABASE

#### 2.5.1 What information is included in the database?

In designing the CHP, the next step was the mapping of cultural heritage sites. To accomplish this task, we first had to decide how to create a cultural heritage database and how to make it comprehensible for other researchers. In this effort, our experience and that of others aided us in creating similar archaeological databases in Mongolia over the past few years. Between 1997 and 2001 the Institute of Archaeology, MAS together with the University of Michigan carried out detailed archeological survey work in Egin Gol basin area of Khutag-Undur soum of Bulgan province. We discovered numerous archaeological sites and mapped them in a GIS Database (тэдээрийг мэдээллийн сан бүхий газрын зурагт бүүлгэх ажлыг гуйцэтгэжээ, Amartuvshin, 2004). Later, between 2003 and 2008, the Institute of Archaeology jointly with the Yale University, conducted a similar survey in Baga Gazrin Chuluu of Delgertsoqt soum of Dundgobi province (Amartuvshin et al. 2010). In 2007 the Institute of Archaeology joined with the Institute of Altai Studies to carry out an
archaeological survey and excavation project throughout Bayan-Ulgii and Khovd provinces (Turbat et al. 2009). Since 2008, the Cultural Heritage Center of Mongolia under the Ministry of Education, Culture and Science is working to create a tangible monuments’ database of eastern provinces of the country, including Khentii, Dornod, Sukhbaatar and Dornogobi, and publishing the compiled outcomes (Enkhbat et al. 2008).

We created databases of the sites found in the archaeological field surveys listed above. These databases were not created using a single methodology. Instead, from each project we learned more about building and using databases, and these new ideas were incorporated into the next database design. The tangible heritage database for the CHP represents the culmination of these efforts.

2.5.2 Fields of the database

The structure of the CHP database, known as metadata, consisted of a series of descriptive elements. These are described below.

**Soum name.** The first field in the database is the general location of the site. Because the CHP is restricted to Ömnögovi aimag, there is no need to have a provincial field. Instead, we place the soum name in the first field. This field allows us to sort sites by soum, thereby we can determine the number of sites in each soum and in the direct and indirect impact areas.

**Place name.** Historically, Mongolian archaeological sites are registered and recorded by the traditional place name where they are located. For the last few years, mining companies have been designating their license area by a name that refers to the general surroundings, such as a river or mountain range. In areas where compliance archaeology has been done for these companies, the name of the license area is used in registering sites. We have used both the traditional place name and, if available, the license name in the database. Usually, the connection between the license area name and the traditional place name is clear. However, we know that the names of license areas can change or be forgotten, so we have preserved the traditional names as well.

**Site number.** The third field is the number of the site. Usually the name of a mineral resource license area is abbreviated in Latin letters followed by its number.

**Coordinates.** For the last 20 years, Mongolian archaeology has used satellite coordinates obtained through global positioning stations (GPS) to record the location of archaeological sites. Coordinates of sites discovered before the use of GPS have not been re-recorded. Consequently, approximate coordinates taken from the survey report mark their locations. It should be noted that site locations recorded through GPS have an average coordinate error of ±3-7 m (GPS units commonly used in Mongolia are Garmin 12, Garmin 12xp, and Garmin Etrex).
**Site Type.** For sites that can be dated to a specific cultural period, this field refers to a particular site type. If the site cannot be dated, this field refers to the site’s form. Undated sites are recorded simply as round, square, or oval. Some site types such as rock art, ruins of ancient settlements, and monasteries are recorded with their proper names. In some cases, it is difficult to type sites accurately as a burial, stone structure, sacrificial structure, and so on. While excavation will resolve this matter, with survey data we have to rely on the experience of the field worker.

**Size.** If site size is recorded, we can perform statistical comparison and evaluation. Circular shaped monuments are measured by diameter from back to front, whereas square structures are measured by the length of two sides. Size is recorded in meters and centimeters.

**Date and period.** For archaeological survey data, it is often possible to determine the date a site was occupied by its external structure. However, for some regions, particularly the Gobi, such age determinations are commonly quite difficult. The reasons are: a) the small number of archaeological surveys and excavations that have been conducted in the Gobi region; b) even where surveys and excavations have been performed, comparative materials in the form of temporally diagnostic artifacts and other objects were not found (in this case, we generally simply find human and animal bones), and c) organic objects recovered from the site have not been sent for radiocarbon analysis due to limited financial means. Some sites, however, have been securely dated and these are classified by their external and internal forms in the database.

**Sponsor.** This field relates only to recent survey work which has been sponsored by a particular agency. In these cases, the agency that requested the archaeological rescue survey is identified. This information may be useful in the future for comparisons and analyses.

**Date.** The year in which a site was discovered as well as the year in which the site was reported are recorded in the database.

**Survey source.** This field contains information about the researchers who discovered the site and who wrote the survey report, scientific articles, and other relevant documents. If there are numerous scientific articles, only sources and materials for the original survey are entered in the database.

**2.5.3 How the data were converted to GIS**

GIS is a computerized system of spatially-arrayed information that allows geographically-based data processing and analysis. GIS traces its roots to the 1960s, when geographers
and other land-based scientists started to develop procedures for digitally saving and organizing spatial information. Beginning in the 1980s with improvements in computer speed and data storing capacity, commercial GIS software packages became readily available. Now it is common to organize, analyze, and present spatial data through GIS. Many industrial sectors including natural resource management, land use and planning, transportation and communication, market analysis, and so on use GIS. Because geological survey work is closely linked to topography, GIS is commonly used by various geological organizations for storing and processing location and topographic data.

The term “database” refers to a collection of information about particular objects and the correlations of their interactions to other objects. Creating a geo-reference for all physical objects in the world becomes the basis for aggregating data to GIS. GIS is an information system used for working with the data linked to location. In other words, GIS has specific abilities for processing data in relation to their spatial dimension. Furthermore, GIS software routinely performs an array of statistical calculations and present data in the form of colored maps, tables, and other graphics.

2.5.4 Explanation of GIS files

Results of archeological survey work conducted in Ömnögovi aimag have been digitized and entered in a GIS. Generally, GIS stores data related to location in the form of points, polylines, and/or polygons. To create the Ömnögovi aimag cultural heritage GIS, we transformed all locational data to point format. Information about the GIS file structure that we used and the contents are provided below:

- Survey area: Ömnögovi aimag
- Coordination system: UTM Zone 48N
- Datum: WGS (World Geodetic System) 1984
- Software: ArcGIS v9.3
- Materials: ASTER GDEM with 30-by-30-m resolution, hillshade image clearly demonstrating elevation variations in the landscape, topographic map at the scale of 1:100000, shape file of the license area provided by the Mineral Resource Authority.

**Georeferencing.** To convert photographic data to digital form it is necessary to georeference the source material. Further, in order to process overlapping photographic data, it is necessary to convert the data to the same geographic coordinate system. The fewer the georeferencing errors, the more accurate the data processing results. Geographic data were
selected as below depending on the survey site location, size of the area to be covered, and the topic of the survey:

- WGS_1984_UTM_Zone_48N
- Projection: Transverse_Mercator
- False_Easting: 500000.000000
- False_Northing: 0.000000
- Central_Meridian: 99.000000
- Scale_Factor: 0.999600
- Latitude_Of_Origin: 0.000000
- Linear Unit: Meter

**Topographic referencing.** A topographic map of the scale of 1:100,000, covering the entire territory of Ömnögovi aimag, was georeferenced with the Georeferencing command of ArcGIS program. To reduce the referencing error, the base map was converted by collecting geographic coordinates of 4 corners of each trapeze of the topographic map and creating a network of hard points. The topographic map was converted to GIS using ArcGIS v9.3 program. The map contains a total of 129 georeferenced images with the total size of 25 GB, as summarized in Table 5.

**Table 5: Maps Used for Georeferencing**

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<thead>
<tr>
<th>No</th>
<th>Code</th>
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<tr>
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<td>3</td>
</tr>
<tr>
<td>4</td>
<td>L-48</td>
<td>30</td>
</tr>
</tbody>
</table>
2.5.5 GIS files and description of their tabled data and sources

Point data of field measurements that describe the location of archeological survey findings are stored as shown in Table 6.

Table 6: Data Stored for Field Measurements

<table>
<thead>
<tr>
<th>ID</th>
<th>Aimag_mgl</th>
<th>Soum_mgl</th>
<th>Land_mgl</th>
<th>Type_mgl</th>
<th>Dursgal_mgl</th>
<th>X</th>
<th>Y</th>
<th>Size</th>
<th>Date</th>
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</tr>
</tbody>
</table>

Points_umnugobi

- ID        Number
- Aimag_mgl Aimag name (Mongolian language)
- Soum_mgl  Soum name (Mongolian language)
- Land_mgl  Place name
- Type_mgl  Site type
- Dursgal_du Site number
- X         Longitude
- Y         Latitude
- Size      Size
- Date      Discovered date
- Sud_hereg Survey conducted company
- Tailan_name Report name
We entered more than 650 points as archaeological sites for Ömnögovi aimag. We converted these sites to digital data in two phases. The first phase covered Tsogt-Tsetsii, Manlai, Khanbogd, Bayan-Ovoo, Mandal-Ovoo and Nomgon soums of Ömnögovi aimag; more than 500 points were entered into the GIS. Figure 6 presents the site locations for the eastern part of the province. Figure 6 illustrates sites recorded by GPS and those recorded prior to GPS; we also have marked the borders of exploration and operating mining leases.

Because the area covered is so large, Figure 6 only provides a general view of site distribution in eastern Ömnögovi aimag. Figure 7 is a close up of an area of eastern Ömnögovi aimag, displaying the location of sites by site types.

The second phase of the GIS work was for sites in Sevrei, Gurvantes, Bayandalai, Khankhongor and Khurmen soums of Ömnögovi aimag. Here, we discovered about 150 sites. Field coordinates were transferred to digital form. Figure 8 shows general site locations in the western Ömnögovi aimag. The figure shows site locations (either through GPS or from reports) and the borders of areas where exploration and operating mining licenses have been granted.

Figure 6: Site locations and mining license areas, eastern Ömnögovi aimag
Figure 7: Archaeological site locations by site type, eastern Ömnögovi aimag

Figure 8: Site locations and mining license areas, western Ömnögovi aimag
Due to the size of the western portion of the province, Figure 8 only shows the broad distribution of sites in the region. Figure 9, in contrast, shows site locations by site type for a portion of western Ömnögovi aimag.

The two phased archeological literature survey covered Tsogt-Tsetsii, Manlai, Khanbogd, Bayan-Ovoo, Mandal-Ovoo, Nomgon, Sevrei, Gurvantes, Bayandalai, Khankhongor, Khurmen soums of Ömnögovi aimag. Figure 10 displays the results of all site locations documented during the literature review. These data are now available for others to use. The GIS will be further enriched and improved with new data each year.
In summary, there were three basic results of the CHP design literature search. First, we developed a common database for previous archaeological work in the direct impact zone. Second, the project team was able to assess the strengths and weaknesses of the available literature on archaeological sites for Umungobi province. Third, the provincial database became the foundation for evaluating the distribution of the archaeological sites, their scientific value, and their conservation and preservation needs. It is to this third goal that we now turn.

2.6 PREDICTIVE MODELING OF ARCHAEOLOGICAL SITE LOCATION

(Contribution by Jeffrey H. Altschul and William E. Hayden)

The management of archaeological cultural heritage hinges on the answers to three basic questions: Where are archaeological sites located? What types of archaeological sites exist? And, which of these sites needs to be managed? Often, we are not in a very good position to answer these questions well when we begin managing the cultural assets of a region (see Altschul et al. 2011; Ciolek-Torrello et al. 2011). Such is certainly the case for Ömnögovi aimag. Upon completion of Phase 1 of the CHP design we had documented more than 500
recorded archaeological sites in the province. Although it may sound like a lot of sites, in reality we have documented far less than 1 percent of all sites in the province. In comparison, the state of Washington in the United States, which is comparable in size to Ömnögovi aimag, there are more than 50,000 recorded archaeological sites, with many newly discovered sites continuing to be found each year.

Given the paucity of archaeological information on Ömnögovi aimag, one might argue that the first step in managing these cultural assets should be a sample survey of the province that would provide a representative sample of the types of archaeological sites that exist in the province and where they are located. Such a survey, however, would be prohibitively expensive and would probably take years to complete. In the meantime, development would continue to place unidentified archaeological resources at risk.

An alternative approach, termed predictive modeling, builds on what is known about the archaeology of Ömnögovi aimag, recognizing that as we learn more our ability to manage archaeological resources will improve. Originally developed in the late 1970s and early 1980s in the United States, predictive modeling in archaeological heritage management generally refers to quantitative spatial modeling using geographic information system (GIS) technology (see Allen et al. 1990; Judge and Sebastsian 1988; Kamermans et al. 2009; Lock and Stančič 1995; Mehrer and Wescott 2006). Most management-oriented predictive models are based on the assumption that humans place themselves on the landscape in relation to a set of key natural resources, such as distance to water, access to stone or mineral resources, forage for animals, protection from the wind, and so forth. Although we can never know what prehistoric people were actually thinking when they located sites, we can statistically associate known archaeological sites with mappable environmental variables, such as elevation, slope, aspect, and springs, which can be viewed as proxy measures of prehistoric settlement decisions. In this way, we can create “environmental” signatures of areas likely to contain archaeological sites and those that probably will not contain such sites.

The first step in creating the predictive model for archaeological site locations was to establish in GIS the model area (Figure 11). Using digital data from the Shuttle Radar Topography Mission (SRTM), we defined a rectangular area that included all of Ömnögovi aimag as well as sufficient areas to fill in the rectangle (Figure 12). The model area was then divided into equally-sized cells, termed pixels. The resolution of the cells of the SRTM source data is one arc second; however, only three-arc-second (approximately 90-meter) data are available for Mongolia. The study area, therefore, was divided into 45,616,892 cells which are approximately 90 by 90 m.
Figure 11: Steps in creating the predictive model in GIS
Figure 12: Final predictive model

For each cell we determined values for the following environmental variables:

- World Wildlife Fund Ecozones
- World level Surficial Geology (Digital Chart of the World [DCW])
- 'Points of Interest' gleaned from Placenames with key words identified by John Olsen
- 'Heavy' Runoff areas (derived from SRTM)
- Slope (derived from SRTM)
- Elevation (SRTM)
- Distance to major faults (derived from DCW)
- Distance to 'Springs' (derived from DCW)

Environmental variables also analyzed but not included in the model include

- Aspect (measured in degrees) (derived from SRTM)
- Aspect (cardinal directions) (derived from SRTM)
- Distance to "cairns" (from place names)
- Distance to "named springs" (from place names)
- Distance to water (derived from DCW)
MIHT: MONGOLIAN INTERNATIONAL HERITAGE TEAM

- Terrain roughness (derived from SRTM)
- Cost distance to "named springs"
- Cost distance to major faults (derived from DCW)

We also have two cultural variables:

- Archaeological sites by site types
- Archaeological survey areas

The environmental variables are measured on different scales. Elevation, slope, heavy run off areas, and distance to faults and springs are interval-scale variables; that is, one unit on the scale represents the same magnitude on the trait or characteristic being measured across the whole range of the scale. The difference between 1 and 2 m in elevation is the same as the difference between 999 and 1,000 m in elevation. Ecozones, geology, and points of interest, in contrast, are nominal-scale variables; there is no quantitative information contained in their different states and the order of the states is of no importance. A pixel can be scored 1 if it falls on a place name “ovoo” (cairn); 2 if it is located on a “Shar” (corpse); 3 if it lies on an “erden” (treasure); and 4 if it falls on nothing of note. The scores reflect qualitative differences between the locations, and there is no quantitative information being reflected in the numbered score.

For cultural variables, MASIA first marked all areas that had been surveyed for archaeological sites. The result was 3,013,654 cells coded as “surveyed” and the remainder as “unsurveyed.” MASIA had locational data on 526 sites within the surveyed areas. Because sites tend to be small and located near each other, some cells contained two or more sites. Consequently, only 387 cells were coded as “sites,” with the remaining 3,013,267 “surveyed” cells marked as “nonsites.”

The next step is to determine if the scores of environmental variables in areas that have been surveyed for archaeological sites mirror the scores for the entire modeled area. In essence, we want to know if the sample of pixels that will be used in the analysis is representative of the overall environment. Although statistical tests could be performed to test the representativeness of the sample, we have found that a visual examination of histograms is sufficient. Figure 13 presents such histograms for the variable “heavy runoff areas.” The top two histograms are identical, showing the scores of all pixels in the model area. The bottom row shows on the left, the scores of all pixels that cover known archaeological sites and the right, all pixels that have been surveyed and are known not to contain sites. Visually, the bottom left histogram follows the same general pattern as those in the top row. Consequently, we can conclude that the sample is representative of the
Figure 13: Histograms representing environmental variables in the model

pattern of scores on this variable. The fact that “site” pixels do not conform to this pattern also is important for it indicates that the decisions past humans used to locate sites in the South Gobi desert is partially captured by this environmental variable; thus, it is a useful variable to include in the predictive model.

In this manner we selected the eight variables listed above for inclusion in the model. We also computed the model without two variables: distance to springs and distance to major faults. The results, however, were extremely similar. Below, we only discuss the 8-variable model.

The modeling technique used was the multi-layer perception (MLP) neural network classifier using a back propagation algorithm that is available in the IDRISI software package. Artificial neural network (ANN) derives from attempts to create mathematical representations of biological neural networks. Although largely abandoned by neuroscience, ANN has been used to model adaptive systems, including archaeological site locations (Rust 2010). Essentially, an ANN neuron acts like a biological neuron: it receives an input, it transforms this input, and it outputs a response. ANN is particularly useful for problems involving patterns or hidden structure to datasets because a network of neurons, trained on a dataset, can often unravel these structures, whereas techniques focused on the analysis of each neuron individually (such as regression-based analyses) cannot. ANN is particularly
useful for our study because the technique can accommodate input variables measured on
different scales. Finally, convolutional ANN has the ability to identify patterns in a grid while
maintaining the spatial control of the data (see LeCun et al. 1998; LeCun and Bengio 2002;
Huang and Lectern 2006).

To use the IDRISI MLP algorithm, the investigator first defines a training raster, consisting
of cells that we know have sites and cells that we know do not have sites. This training
raster becomes the desired outcome and is conceptualized as the Output Layer Nodes (or
neurons) (Figure 14). In our case, there are only two neurons: Non-Site and Site. The set of
input variable rasters are conceptualized as the Input Layer, consisting of one neuron for
each of the input variables (our 8 environmental variables).

At this point, the MLP must be trained using a process where connections are formed
between the Input Layer neurons and those of a Hidden Layer (the number of neurons in
the hidden layer can be varied, but Idrisi and most MLP software suggest an appropriate
number). The Hidden Layer neurons are arbitrary and intermediary; they exist to allow more
complex mathematical linkages to the Output Layer neurons, and in fact there can be
multiple Hidden Layers depending on the kind of process being modeled (our model only
used one, with 4 neurons). The relationship between the Input Layer and the Hidden Layer
is initially formed by assuming random mathematical weights for the connections between
all of the Input and Hidden layer neurons. The same process is then repeated to create the
initial relationship between the Hidden Layer and the Output Layer. The MLP processes
these connections for each cell in the training raster, examining the current state of the
Output Layer neurons and comparing them to the known values from the training raster.

Because the initial weights are randomly assigned, these values will not match. The
connection weights are all re-evaluated (backpropagated). The algorithm first examines the
weights between the Output and Hidden Layer neurons. Once complete, it moves on to
examine the weights between the revised Hidden Layer neurons and the Input Layer
neurons. The connections are all then reprocessed, yielding slightly different results.

The entire process is reiterated until the desired accuracy is achieved or a set number of
iterations or epochs have been processed. The standard number of iterations in IDRISI is
10,000. We experimented with higher thresholds, but found that iterations over 10,000 did
not significantly improve accuracy. Finally, a raster with the highest valued Output Layer
neuron for each cell (Non-Site or Site) is created.
Because of the paucity of data used to create the model, the final Non-Site/Site raster is not very useful. Instead of “strong” statements (hard classification) that a cell either contains a site or not, predictive models are better viewed in terms of probabilistic zones. It is highly unlikely that we can predict with any confidence that a particular 15 km² area does not contain a single site, but we can say that the probability is so low that we would not expect to find more than 5 sites. This type of reasoning is often referred to as fuzzy probability.

IDRISI allows users to create rasters for the penultimate step in the MLP process; each Output Layer neuron can create a raster showing the degree of membership to that class for every cell (a fuzzified probability— in our case one raster for membership to Non-Site and one for membership to Site). To create the Ömnögovi aimag predictive model, we used these Output activation layer rasters, one for the fuzzy probability that a cell did not contain a site and one for the fuzzy probability of a cell containing a site (i.e. the weight for Neuron 1 to fire or the weight for Neuron 2 to fire). These two class membership rasters were used as input variables to a logistic regression that computed a “final” probability map that a cell contained an archaeological site.
The final step in the creation of the predictive model is the definition of sensitivity zones. Generally, we define three zones: low, medium, and high likelihood to contain an archaeological site. The goal of predictive modeling is to maximize the size of low sensitivity areas and minimize the size of high sensitivity areas. In this endeavor we used the following rules:

- Low sensitivity zones should contain 70 percent of the areas surveyed and no more than 20 percent of the recorded sites
- Medium sensitivity zones should contain 15 percent of the areas surveyed and 18 percent of the recorded sites
- High sensitivity zones should contain 15 percent of the areas surveyed and 62 percent of the recorded sites

The final predictive model for the CHP design is presented in Figure 12.

It is important to remember that this map is not necessarily very accurate. It is based on relatively crude environmental data and a relatively small amount of systematic archaeological data. Because all previous work in Ömnögovi aimag has been based on finding sites with surface expressions (i.e., sites with surface artifacts or features), the model does not predict where we might find buried sites (Appendix 3). Even with these caveats, the predictive model is useful. Our objective at this point is to create a model that trends in the right direction. As more work is performed in Ömnögovi aimag, the model will improve. One measure of how much we are learning about the archaeology of the South Gobi is the rate of model improvement. At first, we expect the model to change dramatically and later for refinements to be more limited in scope (see Altschul et al. 2010).

To test whether the model approximates the archaeological record, we tested it through limited field work. This work (described below) confirms that high sensitivity zones contain more sites than medium sensitivity zones. Our work was too limited to adequately test whether this trend continues to low sensitivity zones, but we suspect it does.

### 2.7 ARCHAEOLOGICAL BASELINE STUDIES

Field work was an important component of Phase 1 research. The main thrust of our field work was designed to test the predictive model presented above. The Tangible Resource team also performed compliance surveys for OT as well as provided proposals for the Oyu Tolgoi ancient mine site and drafted a chance find protocol. These activities are described below.
2.7.1 Summary of Field Survey August 18-27, 2010

Although the third field trip by the CHP team, this trip represented the first field work by the tangible resource team. The members of the trip included B. Gunchinsuren and Ch. Amartuvshin of the Institute of Archaeology, Mongolian Academy of Sciences, accompanied by Ch. Bolorbat and N. Dovchinkhorol. The main purpose of the trip was to introduce the project to local administrators and residents and document their opinions. The trip was successful on both counts.

The field survey was composed of four main parts. First, we met and interviewed local administrators and those responsible for protecting historical and cultural properties. Second, we visited local organizations (museum, library, culture center, etc.) in charge of the conservation of tangible heritage in order to gather information and to understand their concerns. Third, we obtained locally published research reports and other documents pertaining to cultural heritage. Fourth, we examined archaeological monuments preserved in the area and conducted an archaeological reconnaissance survey and emergency excavation, as described below.

Archaeological investigations along the proposed road alignment between Oyu Tolgoi and Gashuun sukhait. In accordance with the articles of the Law on Protecting Cultural Heritage of Mongolia, we conducted archaeological investigations in Khanbogd soum in 2006. Sponsored by Ivanhoe Mines Mongolia Inc, we surveyed the area stretching from the north gate of mining license area to the port of Gashuun sukhait.

Because of changes in the alignment, we decided to survey the area from the south gate of Oyu Tolgoi to where it joins the main alignment. From July 24-26, 2010, G. Galdan surveyed 20 km of the proposed road and found three sites. We extended our field trip to examine these sites on the August 22, 2010. Ultimately, we defined two sites. We notified and offered recommendations on the two sites to the environmental officers of Oyu Tolgoi LLC.

Archaeological survey Of the Oyut Airport. An archaeological survey sponsored by Oyu Tolgoi LLC was conducted around Oyut airport in Khanbogd soum of Ömnögovi aimag on the 21th of August 2010. No archaeological sites were found.

Ancient Burial of Bulan Toirom. On the August 23, 2010, we met with O. Batzorig who graduated from Ulaanbaatar University with a degree in archaeology, who resides in Bayan bag, an administrative subdivision of Khanbogd soum. O. Batzorig was informed that an ancient burial had been found in his bag and was in danger of being destroyed by livestock or vandalism. Following Article 8.9 of the Law on Protecting Cultural Heritage of Mongolia, he informed the local administration and the head of the cultural center. They suggested he
collect the surface artifacts and skeletal remains instead of conducting an archaeological excavation. The purpose of our work was to complete the excavation of the burial.

The burial was located in swampy area surrounded by forest at the east end of Toirom. All material was on the surface and there was no indication of a stone cover. The cranium had been displaced from the rest of the skeleton and both arms and some of the rib bones were missing. Pottery shards were found near the cranium.

We only excavated the burial pit. The skeleton was placed with the head to the north. The body had been covered by felt and pottery vessels had been placed in the pit. We suspect that the person was an adolescent who was wearing a green mineral necklace. He held a knife in his right hand and had a belt decorated with pieces of metal.

The artifacts recovered from the excavation were brought to the Laboratory of Archaeology in Ulaanbaatar for restoration. O. Batzorig is preparing the drawings and description of the artifacts and the excavation for publication. Ultimately, the plan is for the mortuary objects to be transmitted to the “Galba” museum of Khanbogd soum. Prior to their final disposition, however, we need to ensure that the security and protection standards of the museum are adequate.

2.7.2 Summary of Field Survey November 11-20, 2010

Our focus on this field visit was the western soums of Ömnögovi aimag (Appendix 4). The rationale and objectives of this field work were:

- The Terms of Reference of the Oyu Tolgoi CHP tender (dated November 16, 2009) identifies Khanbogd, Bayan-Ovoo, Manlai, Dalanzadgad soums as the direct impact zone, but clearly states that the CHP must cover Ömnögovi aimag. As such one of the objectives was to determine the nature of cultural resources and the types of risks to cultural resources that prevail in the other 11 soums of Ömnögovi aimag.

- Although there have been attempts to gather and centralize registration information on cultural heritage sites in Mongolia, these attempts have not reached the western portion of Ömnögovi aimag. The GIS established for the CHP clearly demonstrates the lack of information for this area. Thus, a key objective of this field work was to take a step to remedy the situation.

- The field work included a survey to test critical parts of the predictive model. Because the model is based on data from areas undergoing mining activities, we wanted to make sure it worked in areas not affected by mining as well.
Members of the tangible heritage team had identified 10 toponyms that might be associated with prehistoric land use. These included toponyms of extinct spring, lakes and active river, dry lake beds, mineral deposits, and mountains and visible land forms. We selected a sample of places with these toponyms for survey.

Based on available data, archaeological sites appear more densely distributed in the eastern part of Ömnögovi aimag than in the west. We wanted to test whether this distribution reflects prehistoric settlement or is an artifact of where archaeologists have looked.

We wanted to find and inventory as many large and important archaeological sites as possible. Thus, we focused field work on the most significant sites and did not record all the small site we encountered.

We also wanted to meet with local adminstrators and interested members of the public to collect information related to cultural heritage.

The research team consists of 8 members, divided into two groups. The first group was led by B. Gunchinsuren and included Ts. Bolorbat, B. Erdene, and a driver. The second group was led by Ch. Amartuvshin and contained G. Galdan, Ts. Amgalantugs and a driver. We divided into two groups for three reasons: a) the 11 soums of western Ömnögovi aimag cover a large area, which contains large numbers of archaeological sites; b) B. Gunchinsuren needed to meet with proposed members of the CHP Advisory Board and if everyone went to these meetings we would have wasted considerable effort; and c) we could more efficiently drive to targeted areas in smaller teams.

During the field survey, we documented 146 sites in 9 soums, including Tsogt-Ovoo, Dalanzadgad, Khankhongor, Khurmen, Bayandalai, Bulgan, Sevrei, Noyon and Gurvantes. The sites are located in the east end of Gobi Altai mountain range, which include the Gurvansaikhan range covering the area of Bulgan, Bayandalai, Dalanzadgad and Khurmen soums, the Zuulun range in Sevrei and Bayandalai soum, the Toson bumba and the Erdene ranges in Noyon and Gurvantes soum, and the Nemelt range in Gurantes soum. Site locations are largely consistent with the predictive model. We observed mountains named Takhilgat and Takhilga in 5 of the 9 soums. We examined all five ranges and found large numbers of archaeological sites in four of them. Due to weather conditions, we were unable to visit the fifth Takhilga mountain in Khankhongor soum.

We began the survey late in the year and there was heavy snow in the mountains. We were unable to examine all the areas we selected in the short time frame we had for the survey. Thus, we resorted to a “windshield” survey, examining many areas from the vehicle.

As predicted by the model, we found that sites were sparsely distributed Most of the sites are located near high mountain peaks, hills, active or relict rivers, lakes, and springs. Several sites will be put under the proection of the soum or province. These include Bronze Age sites located near high mountain peaks, hills, active or relict rivers, lakes, and springs.
sites near Khan mountain in Dalanzadgad soum, khirgisuur complexes also dated back to the Bronze age at the south-east of the Gurvansaikhan mountain range, rock art of Uizen or Takhilt in Sevrei soum and the rock art near Takhilt of Noyon soum. Petroglyphs have been found throughout the Gobi; the styles are similar to petroglyphs found in the Western Altai region.

The most impressive monument we found was a khirgisuur complex in the Gurvansaikhan mountain range. This monument probably dates from between 2,000 and 3,000 years ago when this cultural expression spread throughout south Siberia, the Altai mountains, and central Mongolia. Archaeologists do not believe that residents of the Gobi region participated in rituals involving the khirgisuur complexes. Thus, the region may have been occupied by other groups at this time. Finding these types of monuments in the Gobi, extends the known distribution of this cultural expression.

2.8 A REGIONAL RESEARCH DESIGN FOR MONGOLIAN ARCHAEOLOGY: ÖMNÖGOVI AIMAG

Archaeology as a science is cumulative. We move forward by accumulating data, interpreting those data, testing those interpretations with new data, and beginning the process again by offering refined interpretations. While all data in the archaeological record may be important, archaeologists, like all scientists, must make decisions about how to sample those observations to make from all possible observations. In a compliance setting, archaeologists, managers, and regulators first need to know what types of archaeological resources exist within an area proposed for development. They then must make a decision about which of these resources, if any, need to be studied in more detail. These decisions generally rest on two criteria. First, the nature of the impact is assessed. Will the site be destroyed entirely? Will only a portion be disturbed? Can the site be avoided entirely? Second, the importance of the resource is determined. Archaeological sites can be considered important for their scientific information as well their traditional, religious, or sacred value to a community. The latter aspects will be treated in Chapter 4; here we focus on their scientific value.

An archaeological resources scientific importance hinges on its ability to tell us something about prehistory or history that we heretofore did not know. In one sense, all sites yield new knowledge because they are unique products of human behavior. However, adopting such a criterion would lead to a situation in which all sites must be studied in their entirety. Not only is such an approach financially unrealistic, it makes little scientific sense. Lots of data would be collected which would not be interpretable and would make it more difficult to discern patterns of importance in past human behavior. Instead, scientific importance needs to be guided by what we know (or think we know) and what we want to learn. Previous archaeological work in the South Gobi has outlined the basic culture historical framework; in
essence, we know the basic sequence of events in human history. What we do not know, or know well, are the finer details of the history of Gobi cultures and why cultures grew, evolved, declined, and were succeeded by others. To advance our understanding, we need to find sites that have data that can address these issues and studied in depth.

To identify these sites, we first need to provide the cultural context of the south Gobi; essentially, the who, what, when, and where of history. Based on this chronology, we will develop a series of broad research questions that we believe are the next logical steps that must be taken in South Gobi archaeology. As sites are found, whether in development projects or in research settings, they will be assessed against these questions. If they can possibly help address them, they will be considered "significant" and worthy of more detailed study. Because the questions posed here are very broad, they serve only as a "litmus test" of significance. Prior to further work, sites that are considered significant will have these questions refined in a site specific research design.

2.8.1 Periodization of Mongolian Archaeology

In order to develop a comprehensive and broadly-based plan for the future of archaeology in Ömnögovi aimag, it is important first to assess what we already know and to contextualize that knowledge within a regional framework for Mongolian archaeology. To that end, we provide at the outset a periodization of Mongolian archaeology to delineate the chrono-spatial limits of our knowledge and then suggest a matrix within which both archaeological and historical data might be situated in order to achieve the most complete and nuanced understanding of the cultural history of this important region.

2.8.2 The Stone Age

The Stone Age is the earliest and longest period of human development in Mongolia, usually divided into three periods—the Paleolithic or Old Stone Age, Mesolithic or Middle Stone Age and Neolithic or New Stone Age.

During this long period of prehistoric development, ancient people made significant changes and modifications in stone tool manufacturing methods, their interaction with the natural environments around them, and developed adaptations to harsh climatic conditions encountered during the occupation of new territories.

During the earlier Stone Age, fossil human ancestors who were the forerunners of modern populations managed to expand their populations out of Africa to occupy many global environments that provided favorable conditions for adaptation and growth.
In the later Stone Age, we begin to detect the first signs of artifact diversity that might signal the emergence of parallel and distinct cultural streams that are expressed in material ways. Obviously, the critical challenge for archaeologists in Mongolia and elsewhere is to correctly interpret such diversity as the result of increasing reliance on material expressions of non-material concepts, or some other mechanism.

**Lower Paleolithic Period (ca. 800,000–100,000 years ago).** The Paleolithic can be divided into three sub-periods: lower, middle and upper. In Mongolia, traces of early human settlement dating back to the Lower Paleolithic period have been discovered on the Nariin River in Ulziit soum, in Tsagaan Agui Cave in Bayanlig soum, on the Baidrag River in Jargalant soum and at Bosgo in Shinejinst soum, all in Bayankhongor aimag. The Tsakhiurt Valley in Bulgan soum and Otson Maanit in Khanbogd soum of Umnugobi aimag and Khovd aimag, and Tsengker Cave in Manchan soum, Khovd aimag and Altan tsoqts in Bayan-Ulgii aimag have also yielded early Paleolithic remains.

The main stone tools used by humans inhabiting Mongolia during the Lower Paleolithic period consisted of chipped and pointed elements which could have been used for a multitude of actions including cutting, chopping, slicing and scraping. In addition to these basic tools, people utilized various-sized flakes broken off of larger chunks of stone, as well as the bones of large mammals such as tigers and mammoths, as well as, presumably, wooden clubs and cudgels.

**Middle Paleolithic (ca. 100,000–40,000 years ago).** The basic tool of the Middle Paleolithic was a triangular scraper made on a wide flake knapped from a large core and retouched to sharpen its edges. These sharp triangular scrapers were used as knives, and thin flakes attached to a wood and bone shaft were used as spears, although these scrapers were used mainly for processing animal hides and making wooden or bone implements.

The Mousterian Culture associated with anatomically and behaviorally archaic members of the species *Homo sapiens* in the Middle Paleolithic Period has been identified in numerous small campsites and settlements in Mongolia, among which the best studied are the sites of Orkhon I and Orkhon VII (Layers 9 and 10), in Kharkhorin soum, the Arts Bogd sites in Bogd soum, Uvur-Khangai aimag, Argalant I, Orog Nuur I and II in Bogd soum, Bayankhongor aimag, and the Otson Maanit locality in Khanbogd soum, Ömnögovi aimag.

It is also known that Middle Paleolithic people used modified large animal bones as tools as well as wooden sticks with fire-hardened points instead of spears and large oval stones with slings for daily activities in addition to stone tools. The controlled use of fire in the Middle Paleolithic facilitated human development in a variety of ways.

**Upper Paleolithic (ca. 40,000–12,000 years ago).** The transition from the Middle to Upper Paleolithic also witnessed the emergence of anatomically and, perhaps, behaviorally
modern humans (*Homo sapiens sapiens*), which is evident from the appearance of new stone-working strategies. In this period, which defines the closing millennia of the last Ice Age (the Pleistocene Epoch), people begun to knap long, knife-like blades from oblong cores and produce finely retouched bifacial implements. The repeated sharpening of stone tools through the development and application of sophisticated reduction techniques dramatically improved our ancestors’ stone tool-making activities.

The traces of the human activity in this period (mostly stone tools) occur in great numbers all over Mongolia, including the well-investigated and reported sites of Moiltiin-am in Kharkhorin soum, Uvur-Khangai aimag, Rashaan Khad in Batshireet soum, Khenty aimag, and the Tulburiin gol settlement in Khutag-Undur soum, Bulgan aimag.

**Mesolithic Period (ca. 12,000–8,000 years ago).** During the Mesolithic (or Epi-Paleolithic) Period during the first few millennia of the Holocene or Recent geological epoch, the initial foundations for agriculture and animal husbandry were lain and the bow and arrow were invented. During this period, glacial episodes came to an end globally, with northern Asia becoming a forested zone, and adopting the geographical characteristics, including flora and fauna of the present day.

Mesolithic artifacts have been discovered in Mongolia at Chikhen Cave in Bayan-Undur soum, Bayan-Khonggor aimag; Kheree Mountain in Khalkhgol soum, Dornod province; on the west bank of the Kherlen River near Choibalsan; at Moiltyn-am (Stratum I) in Uvurkhangai aimag; Rashaan khad (Strata I–III) in Khentii aimag; Dulaany Gobi in Dornogobi aimag, West and East Mountains in Bulgan soum, Ömnögovi aimag and at a variety of locations in Bayan-Ulgii, Khovd, Gobi-Altai, Dundgobi, Dornogobi and Sukhbaatar aimags.

**Neolithic Period (ca. 8,000-3,000 years BCE*).** During this period, Neolithic humans began to transition from traditional foraging patterns of subsistence such as hunting and gathering to increased reliance upon agriculture and animal husbandry initiated during the preceding Mesolithic Period.

Stone tool production became technologically more sophisticated, with a wide variety of implements being produced to serve nearly every purpose. Stone chips were flaked off of convex cores from all sides, giving tools from this period a characteristic form resembling long, thin strips of stone.

The main technological developments in this period were the discovery of methods of sharpening and polishing by grinding and drilling holes. Humans inhabiting the territory of

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10 BCE and CE refer to *Before the Common Era* and *Common Era*, respectively. They are used increasingly now, globally, to replace the older BC/AD system rooted in the Western intellectual tradition. Both systems refer to the same point in time, now roughly 2011 years ago.
Mongolia in the Neolithic Period also commonly employed bone implements in addition to stone tools. Another important technological advance characteristic of the Neolithic was the development of pottery for both utilitarian and ceremonial purposes.

Neolithic tools and pottery have been excavated from sites in most regions of Mongolia, including, especially, Bayankhongor, Gobi-Altai, Dornogobi, Dornod, Dundgobi, Zakhan, Uvurkhangai, Ömnögovi, Sukhbaatar, Tuv, Uvs and Khentii aimags.

2.8.3 The Metal Ages

**Bronze Age.** The Bronze Age began on the Eurasian steppe approximately 4,000 years ago (ca. 2000 BCE), with the appearance of technologies for alloying copper and tin to produce bronze. The beginning of the Bronze Age not only brought about economic development, but also drove fundamental social and cultural changes. Bronze Age humans have left behind various monuments, including remains of bronze smelting activities, slab graves, *khirgisuur* tombs, deer stones, rock painting and petroglyphs.

**Early Iron Age.** The early Iron Age may be thought of as the final stage of pre-modern Mongolian society. This was the period of time when ancestral Mongolians discovered the means to smelt iron ore and began to produce tools and weapons of this durable metal.

The Iron Age was brief in comparison to the Stone and Bronze Ages. In fact, iron remains a principal construction material to this day. However, the term “early Iron Age” is applied in order to separate the study of the history of highly mobile, likely tribal, peoples living in pre-modern societies from those in regions like Mesopotamia, Egypt, Greece, India, etc. where complex societies based on slave economies were founded in the Neolithic and Bronze Age. Iron Age industries were developed at different times in various places throughout the world.

**Slab burials.** The *slab grave* is one of the most significant archaeological traces of the Mongolian Bronze Age. Such slab graves are often found on the flanks of hills in groups of two or three, or in clusters of dozens on the slopes of mountains or on the open steppe. They are spread over the large territory extending from the eastern Mongolian steppe west to the Altai Mountains and from Lake Baikal south to the Gobi Desert.

Slab graves usually consist of a structure in which the body of the deceased is buried within a coffin made of thin stone slabs covered by larger, thick blocks; the site immediately above the coffin is marked with an open box-shaped structure made of stone slabs placed on edge, supported from either side by smaller stones.

**Khirgisuur complexes.** The *khirgisuur* is a unique monument dating back to the Bronze and early Iron Ages in Mongolia. Such remains are attributed to then nomadic peoples, as
they often coincide with slab graves and deer stones in a single ritual complex. Khirgisuurs encountered in Mongolia can be classified into 30 different types according to their appearance and construction, yet all khirgisuurs have a similar basic layout centered on a large, circular mound of earth (a tumulus) covered with stones. Surrounding this central mound is a round or square outline of stones, which is often accompanied both within and without by numerous square or round cairns or other stone structures. Researchers believe the earliest khirgisuurs date from the end of the second millennium or the beginning of the first millennium BCE.

**Deer Stones.** These large, standing stones are engraved with images of the sun and moon on the top portion, with several figures of rampant deer in the middle and weapons belonging to warriors such as knives, battle-axes, bows, quivers, spears, shields and mirrors forming a circumferential belt. This belt is decorated with many kinds of patterns. About a century ago, scholars began to study deer stones as an outstanding historical and cultural property which was widely distributed throughout the Eurasian steppe zone during the Bronze and Early Iron Ages. Approximately 700 deer stones have been identified of which approximately 550 are located in Mongolia.

**Rock art.** Rock art is a unique trace left by ancient humans inhabiting Mongolia in the Bronze Age. Petroglyphs (pecked or chipped) and pictographs (painted) comprise the two main variants of rock art. “Selenge” rock paintings represent those dating back to the Mongolian Bronze Age. Petroglyphs demonstrate the mental development of peoples inhabiting the territory of Mongolia in the Bronze Age and are found in large quantities all over the country.

**Chandmani Culture.** The special graves which have been excavated at Chandmani Uul near Ulaangom soum in Uvs aimag are of vital significance for the study of early Iron Age economy and culture in Mongolia. Identified as the remains of a specific tribe, these graves are considered to be the indicator of an independent culture based on archaeological research in Mongolia. According to the appearance and burial rituals, the Chandmani Uul graves are divided into four types: those having a large square stone embankment; those having a stone embankment without a coffin; those having a small stone coffin; and those having a log-tomb or crypt.

**Pazyryk Culture.** Remains of the Iron Age Pazyryk Culture, dating back to the sixth through the second centuries BCE, are found in the Altai Mountains of Mongolia, Russia, China and Kazakhstan. Mortuary complexes associated with this culture have been studied since the nineteenth century; the first comprehensive excavations having been conducted by S. I. Rudenko and M. P. Gryaznov around 1920. Artifacts excavated from these graves suggest that the Pazyryk people were semi-nomadic and skillful craftsmen. Currently, 600
small and large graves scattered among 120 localities have been excavated. These graves are rightly considered to be an outstanding cultural heritage of all humanity.

2.8.4 The Period of Ancient States

Xiongnu Period. During the third century BCE, the Xiongnu, or proto-Huns, became more powerful than other contending tribal peoples and began to move their society to a new level of social organization. The Xiongnu tribe was ruled by the Shanyu Khaan. Before the third century BCE, the ruler was elected by the majority of a council, and then succession was changed to a hereditary basis. After the assumption of the throne by Modun Shanyu, the proto-Huns pursued a policy of territorial expansion by conquest of neighboring peoples.

Due to internal conflicts among the proto-Huns and warfare among their affiliated tribes, the Xiongnu Empire split into two parts, northern and southern, between 57–55 BCE. The southern Xiongnu, led by Huhane Shanyu, was a subordinate of the Chinese Han Dynasty while the northern Xiongnu were controlled by Chjichji, a brother of Huhane.

Archaeological traces which testify to the existence of the proto-Huns and the establishment of their states over vast stretches of the Central Asian steppes during the third and second centuries BCE, have been found in large numbers within the territory of Mongolia. In general, archaeological monuments of the Xiongnu Empire can be classified as graves, urban settlements, and petroglyphs.

Xiongnu burials. Graves dating to the Xiongnu Period are divided into two groups; elite graves and those of ordinary people. The appearance and structure of these two groups are quite different and they also differ with respect to the artifacts excavated from them.

Elite graves are larger than those of ordinary people and are enclosed within a square stonework embankment and gate. The gate was built with stones piled up in front of the square embankment. Standing stones were installed between the gate and the grave. Some grave enclosures have several rows of stone walls. The deceased was laid in a hollowed log coffin inside a log tomb which was a double-storey structure and was dug as deep as eight meters. There are many such Xiongnu Period elite graves known at Sujigt, Zuramt and Hujirtiin-am located in Bornuur soum in Tuv aimag; at Tahiltiin Khotgor in Mankhan soum, Khovd aimag; at Gol Mod on the Khunui river in Khairkhan soum, Arkhangai aimag; and at Borbulag and Duurlig nars in Bayan-Adarga soum, Khentii aimag. There are also Xiongnu elite graves at Deresrui in Ilimoviin-am, Buryatia, Russia.

Graves of common Xiongnu people have been discovered in many places, such as Tevsh uul in Bogd soum, Uvurkhangai aimag; Uvgunt and Uudent in Buregkhangai soum, Bulgan aimag; Nukhtiin-am in Galt soum, Khuvsgul aimag; Naimaa tolgoi in Erdenemandal soum...
and Khudgiin-am and Solbi uul in Battsengel soum, Arkhangai aimag; Sul tolgoi in Khutag-Undur soum, Bulgan aimag; Morin tolgoi in Altanbulag soum, Tuv aimag; and Duulga uul in Jargaltkhan soum in Khentii aimag, among others.

Such Xiongnu graves are covered by a circular rock tumulus with a diameter of 5–13 meters. At a depth of 1–7 m below the mound, a timber coffin and a fence made of stone and wood were erected and the deceased’s body was oriented north-south in an extended position.

Upon examining finds excavated from ordinary Xiongnu people’s graves, it is apparent that the geographical location, appearance and structure of the burials and funerary rituals are very similar not only with Medieval, but also with modern Mongolians. This evidence constitutes the main proof of the common origin of the Xiongnu and Mongol peoples from an archaeological perspective.

**Settlements.** The most significant category of archaeological remains dating to the Xiongnu Period is settlements. Along with nomadic animal husbandry, the proto-Huns were engaged in agriculture and established a settled way of life.

Throughout the territory of Mongolia, the remains of settlements relating to the Xiongnu Period have been discovered and excavated including the sites of Boroo in Bornuur soum, Khureen dov, Tereljiin durvuljin and Burkhiin dov in Mungunmorit soum, Undur dov in Erdene soum and Gua dov at Tsagaan aral on the Kherlen River in Bayanjargalan soum, all within the territory of Tuv aimag; the castle of Baruu duruu and Bars Town-II in Tsagaan-Ovoo soum, Dornod aimag; the fortress of Tsenkheriin Gol located on the border of Jargaltkhan and Delgerkhaan soums in Khentii aimag; the fortress of Shuvuutain Gol located in Buregkhangai soum, Bulgan aimag and Bayanbulag’s ruin in Nomgon soum, Ömnögovi aimag.

**Rock art.** Another category of archaeological remains left by the Xiongnu is petroglyphs. Thousands of petroglyphs have been found throughout Mongolia. Those dating to the Xiongnu Period include images of a wheeled cart drawn by three horses and a stamp which were identified at Khanan Rock in Yamaan Us Canyon on the border of Uyench and Altai soums in Khovd aimag and a hunter shooting a mountain sheep stalked by a dog from the south at Tsagaan Salaa Rock in Ulaan Khus soum, Bayan-Ulgii aimag. Throughout Mongolia, there are still many places with petroglyphs dating back to the Xiongnu Period which have not yet been studied in detail.

2.8.5 The Turkic Period

Turkic tribes who had resided in Central Asia from ancient times were nomadic and their history and origin was similar to that of the Mongols and their ancestors. The Turks
belonged to the Altaic language family like the Mongolian and Zorchid ethnic groups. In the sixth through the eighth centuries CE, they established a powerful Central Asian empire including the territory of modern Mongolia, initiating approximately 400 years of domination by the Turkic ethnic group in this region.

Archaeological traces associated with the Turkic empire include memorial monument complexes that were built for emperors and for commoners, stone stelae covered with runic script, architectural objects, drawings and inscriptions on rocks and other components, as well as burial sites and graves.

**Sacrificial memorial complexes.** Turkic historical artifacts, particularly sacrificial memorial complexes (which are the most common and widespread historical constructs) are widely distributed in Eurasia over the vast area where the Turks resided and are especially numerous in Mongolia in areas from the Khentii Mountains to the Altai Mountain range. These structures are variable in size and organization depending on the deceased’s origin, social rank and title.

Memorial complexes for common people consist of a barrier made from four quadrangular stone slabs, anthropomorphic stone statues located in front of the barrier (on the east side), and *balbal* stones placed in a row towards the rising sun. Memorial complexes dedicated to noblemen were constructed by erecting four stone slabs which were polished and engraved with patterns, placing a delicate stone statue, and erecting stone sequences.

**Anthropomorphic statues.** Human statues made of granite, marble, and other rock-types associated with Turkish sacrificial memorial complexes are not only a source of information concerning the characteristics, clothing, ornaments and weapons of a past people, but they are also an indicator of highly developed fine art and aesthetic sense. Within the territory of Mongolia, more than 500 human statues have been discovered, of which over 400 belong to the Turkic Period.

**2.8.6 The Uyghur Period**

After the collapse of the Turkic empire, Central Asian Uyghurs seized control of Mongolia in the eighth and ninth centuries CE. Uyghurs are members of a Turkic subfamily belonging to the Altaic language family.

Uyghurs are distinguished from other nomads by their towns and settlement building strategies. They adopted Manichaeism and built monasteries with the help of Sogdian craftsmen. The Uyghurs created networks of towns fortified with earthen enclosures. In particular, they formed bow-shaped walls with several fortresses to minimize danger from the north. In Mongolia, archaeologists have discovered cities such as Ordu Balyq or Khar
Balgas, the majestic capital of the Uyghur Empire, as well as Biibulag, situated in the Selenge River valley, which was one of the largest Uyghur religious centers. Uyghurs developed high culture among the numerous tribes residing in Mongolian territory; characteristic monuments include the Snake New Water Stela inscribed with what is known as “Selenge Script” and “Terkh Script” from Tariat soum in Arkhangai aimag.

2.8.7 The Khitan Period

The Khitan was a state-level political entity that occupied Mongolia from 901 CE when Ambagyan of the Elui tribe ascended to the throne of the Khitan and established the Khitan Empire, which persisted until roughly 1125 CE. The Khitan comprised some 55 tribes, of which 16 were from the south, 28 from the north and eight “foreign” groups. The Khitan state is known to have had five capital cities and its territory extended from the eastern ocean (the Pacific) to the Altai Mountains and from the Kherlen River to the Chinese White Canal.

Archaeological monuments associated with the Khitan Period are found with lower frequency than other periods within the territory of Mongolia. The most abundant archaeological monuments dating back to the Khitan period in Mongolia are settlement ruins which have been well-studied. According to historical records, about ten settlements of the Khitan Period are preserved in Mongolia. Burial sites of Khitan Period are mostly found near the Yellow and Urchi Rivers, which was their homeland. In terms of the structure of Khitan graves, they may be divided into two main categories; graves which deceased commoners were buried in a simple hole dug in the ground, and elite (including royal) graves in which the deceased were buried in an underground cave.

2.8.8 The Medieval Period or Middle Ages

Mongolian Empire. After the collapse of the Khitan State in the twelfth century, Mongolian descendant tribes occupied a territory that extended from the Great Wall of China north to the Selenge River valley.

Among these tribes, the All-Mongol Khanlig empowered and united other tribes under its control during the early thirteenth century. In 1206 CE, the Great Mongolian Empire was established and Temuujin was declared Chinggis Khaan.

Chinggis Khaan re-organized the administration of Mongol territories and strengthened the military and territory. According to his decree, the capital city of Kharakhorum was founded and his successors completed the construction work. In 1260 CE, Khubilai Khaan moved the Mongol capital to north China and named his dynasty the Great Yuan. In 1368 CE, the Yuan Dynasty, established by ethnic Mongols was destroyed due to Chinese rebels. After the
decline of the Mongolian Empire, Mongols experienced sustained downfall, warfare and internal conflicts before suffering colonization by the Manchu Qing Dynasty during the seventeenth and eighteenth centuries.

**Settlements.** The best studied urban settlement established by Mongols, is Kharakhorum (or Kharakhorin), capital of Mongol Empire during the thirteenth century CE. The Kharakhorum urban precinct is surrounded by an earthen rampart with a gate on each of its four sides. Inside the rampart, there were two cross streets which divided the city into districts for craft production, trade, housing, and religious/ceremonial purposes. The structure and interior design of constructions in Kharakhorum bear the architectural methodology and technology of the ninth through the twelfth centuries. Apart from Kharakhorum, there are several other urban settlements in Mongolia which are known from historical sources, including Saorin, Toskhu, and four royal palaces. According to current research, the most ancient urban settlement established by the imperial Mongols is Avargyn Balgas, dating back to the twelfth century, located on the southern slope of a mountain named Rashaan Dersnii Ukhhaa on the western bank of the Avarga River which flows into the Kherlen River and covers an area of 4.5 square kilometers.

Other known settlements relating to the Mongol Empire include Kherlen Bars, the ruins of Khar Khul Khaan, Shaazan (China) City, the Khaltar ruins, and others.

**Mongolian graves.** Graves and burial sites are a significant archaeological resource for studying social relations, industrial development, behavior, religion and lifestyles of ancient periods.

According to historical records, ancient Mongols buried their deceased by interring them in a simple grave with the things they owned. At present, based on information derived from archaeological reconnaissance carried out both in Mongolia and Russia, graves of common people are the most frequent type that have been encountered. From a geographical point of view, most such graves are located on broadly similar sites on the southern slopes of mountains and elevated areas.

Mongolian graves in the Medieval Period are usually constructed with fewer stones on low, hidden ground surfaces with a north-south long axis. Such graves are usually filled with earth, sometimes, but not always, including a coffin; none are very deep.

**Anthropomorphic statues.** Human statues in Mongolia are divided into two chronological categories: those associated with the Turkic occupation of the sixth through the ninth centuries CE, and those associated with the Mongol Empire. Human statues of the Mongol Empire are located in southeastern Mongolia. These statues depict males holding a drinking vessel in their right hand, their left hand on the back of a chair, or sitting on a chair. Many are also depicted wearing a *deel* with a right-side flap, a long, lower hem, and narrow
sleeves as well as boots with upturned toes; all features that are very different from Turkic anthropomorphic statues.

Human statues provide significant historical data, depicting the natural physiognomy, clothing, decorations and objects owned by contemporary people and are also a valuable property of fine art demonstrating the aesthetic sense, artistic development and craftsmen’s skill of that period.

2.8.9 Research Questions to Guide Future Research in Ömnögovi Archaeology

With an understanding of the basic culture history of Mongolia extending back over at least three-quarters of a million years in mind, it is now possible to suggest a series of hypothetically-framed questions that can guide future archaeological research in Ömnögovi aimag. Such questions are explicitly constructed to both answer specific questions concerning the early history of Mongolia as well as provide data that are comparable with other world regions so that the Mongolian story might be articulated with that of many world regions by way of comparison and contrast.

We especially recommend the acquisition and interpretation of archaeological data relevant to elucidating six principal questions:

- How can extant archaeological data complement the historical record to help us define Mongol ethnicity (In other words, "What is ‘Mongol culture’ and when did it emerge as a distinct entity?"). Similarly, can the archaeological record be used to define Turk, Uyghur, Khitan, and other ethnic groups that are mentioned in the historical records and are critical elements of Mongolian history?

- How did changing climatic and environmental circumstances impact the development of culture in Mongolia?

- Can changing patterns in the exploitation of raw materials be detected in the prehistoric archaeological record? What might the explanations be for these changing patterns of exploitation?

- Does the spatial distribution of archaeological sites allow reconstruction and interpretation of changing patterns of human-landscape interaction?

- Is it possible on the basis of archaeological evidence to detect and interpret past human definitions of and interactions with “non-empirical” environments? That is, at what point do “sacred spaces” of various types manifest themselves in the archaeological record?
To what extent can the archaeological remains of Ömnögovi aimag be associated with historically known places and people? In other words, how can Mongolia’s historical and archaeological records complement one another to yield the richest possible understanding of the genesis and florescence of the successive cultures on the territory of present-day Mongolia?

2.8.10 Data Categories Necessary to Implement the Research Agenda

All six of these broadly interrelated questions require a hierarchically related set of material culture evidence, some of which can be articulated with historical accounts at the later end of the chronological continuum.

First, large scale landscape use must be understood through the collection and interpretation of geospatial data. A systemic attempt must be made to carry out statistically reliable reconnaissance for archaeological sites of all periods so that such data can be integrated within a Geographic Information Systems (GIS) approach to yield a better understanding of changes in land-use patterns through time. Surveys performed as part of development projects can help in covering parts of Ömnögovi aimag, but regions not subject to development should also be surveyed to ensure that all parts of the South Gobi are examined.

Second, such reconnaissance should identify a subset of archaeological sites to be investigated in greater detail by surface sampling and excavation, ideally in geologically stratified contexts.

Third, archaeological data must be compared with historical and oral traditions to maximize the interpretive potential of material culture remains, especially those that are taken to be fundamental artifactual indicators of cultural trajectories of identifiable historical cultures.

Fourth, archaeological data must also be articulated with proxy records of past climate change, so it is important that extant lakes and ephemeral playas (nuur) be cored to unlock the record of paleoclimates recorded in their sediments. In addition, the analysis of plant pollen and animal bone remains from archaeological contexts will allow a more subtle reconstruction of the roles played by climate and environment in the changes apparent in proto-Mongolian culture.

Finally, it will be necessary to adopt a broadly-based interdisciplinary approach to maximize the data return from such a wide spectrum of data sources. In so doing, it will be possible to accomplish a number of related goals simultaneously, including limiting future destruction of the archaeological record, developing efficient means of comparing the significance of archaeological remains from many regions of Mongolia, and producing an integrated
approach to defining the unique aspects of Mongolian cultures in the context of their origins and florescence.

2.8.11 Oyu Tolgoi Archeological Mining Sites

In 2002, the Institute of Archaeology, MAS conducted an archaeological survey of the exploration license area of Kharmagtai, located on the border between Tsogtsetsii and Manlai soums. Sixty-one sites were found (Tseveendorj et al. 2002). In 2003, archaeologists found an ancient copper deposit at Oyu Tovgort, which had been destroyed by a geological trench. The company was notified and the archaeologists performed emergency excavations (referred to as Kharmagtai excavations) numbered: KHR Ex.03.01, KHR Ex.03.02, KHR Ex.03.03 and KHR Ex.03.04. They determined the structure and organization of the archaeological resource (Tseveendorj et al. 2003).

Several lines of evidence indicate that these resources were the remnants of an open pit Bronze Age copper mine (ca. 3,000–4,000 years ago) (Figure 15 and Figure 16). In 2008, these properties were included in the list of historical and cultural immovable properties under the protection of the province in compliance with the 175th Resolution of the Government [Historical and cultural, 2008; 281].

Figure 15: The excavation of the Bronze Age Oyut Tolgoi copper mine, showing some of the stone tools that were found
Another ancient copper mine, which currently is preserved within the Oyu Tolgoi mining area, is in danger of disappearing (Figure 17). In 2002, this mine was excavated (Tseveendorj and others, 2002), with the artifacts collected. Currently, the company has been working in cooperation with professional organizations to document this property and to transmit the findings to future generations.

2.9 OT CULTURAL HERITAGE COMPLIANCE

Since its establishment, OT has been committed to responsible mining practices. The company is dedicated to preserving historical and cultural properties in Mongolia. However, there have been instances in which tangible cultural heritage has been destroyed by the direct and indirect impact of the mining. Local citizens repeatedly raised concerns about these actions.

For example, Mangasiin Khuree is located in the Galba Gobi, 70 km to the south-eastern from Oyu Tolgoi (Figure 18). It is assumed to be a military fortress dating to the Khunnu Period and it is included in the list of historical and cultural immovable properties under the province according to the Government Resolution No. 175 of 2008 [Historical and cultural., 2008; 281]. When archaeologists visited in 2005, the property was well preserved. Unfortunately, when it was revisited in 2009, the site had been subject to illegal excavation and vandalism (see Figure 18). Ninja miners and antique collectors may have been responsible, believing that bronzes are preserved under ground. Additionally, people passing through Gashuun Sukhait might have dug in the site hoping to find bronzes to sell. Regardless, it is not clear how these people found out about the property. Mangasiin Khuree is located 20-30 km from the road leading to Gashuun Sukhait and 10 km from the border post; there is just one dirt road that leads to the site. Yet, vandals brought in heavy equipment and used it to dig the site, suggesting that they had reliable information.
OT has worked hard to protect against illegal excavation. As part of the CHP, OT will develop on-site procedures and protocols to protect archaeological and paleontological resources that are found during the construction and operation of the mine. The MIHT provided a chance find protocol to OT on October 26, 2010 (Appendix 5). The protocol was designed for construction managers and operators. It outlined the rational for the procedures, the legal basis, the types of archaeological and paleontological remains that might be encountered, lines of accountability, and penalties. Human burials were singled out as a major cause of concern, with specific instructions for how to handle these types of chance finds.
In addition, OT is reaching out to help use archaeological resources to further educate visitors to the mine site about the importance of mining in the development of Mongolian culture. We close this chapter with the following case study.

2.9.1 Why are these sites important?

The Iron Age plays a significant role in the history of human development. The mining and processing of copper and other minerals into metal tools was a critical achievement. Not surprisingly, Mongolian archaeologists have long been interested in the subject. Mongolia’s first archaeologist, Kh. Perlee, focused much of his attention on the development of Mongolian metallurgy. He inventoried and registered many archaeological sites involved with processing copper, including ancient furnaces in Khalh Gol soum of Dornod aimag, Erdene, Mandakh, Dalanjargalan soums of Dornogobi aimag, Erdenetsagaan, Ongon, Khongor, Draiganga soum of Sukhbaatar aimag, Guchin us soum of Uvurkhangai aimag, and Biger soum of Gobi-Altai aimag. Furthermore, Kh. Perlee found fragments of stone tools and pottery sherds from Neolithic settlements associated with mining in the vicinity of Bulgan, Bayanzag and Gurvan Tes soums of Ömnögovi aimag as well as two furnaces to melt copper ore at Zoog-Zuukh of Bayankhongor aimag.

As a result of archeological and geological surveys conducted over the last few years, we have found the remains of copper mines and furnaces for copper smelters as well as ancient mining and processing tools. Near Oyu Tolgoi, Geologists have long suspected that the “holes” in the terraces east of Umdain Gol swash near the top of Khanbogd Mountain in Khanbogd soum were ancient mining prospects. Their suspicions were confirmed when archaeologists found abundant stone tools and pottery sherds from Neolithic settlements associated with mining in the vicinity of Bulgan, Bayanzag and Gurvan Tes soums of Ömnögovi aimag as well as two furnaces to melt copper ore at Zoog-Zuukh of Bayankhongor aimag.

In 2002 the Institute of Archeology, MAS performed an archaeological survey in the license area held by Ivanhoe Mines Mongolia Inc at Oyu Tolgoi. The Institute discovered four ancient copper prospects, which were subsequently excavated. This excavation marks the first time that ancient copper mines in Mongolia have been systematically analyzed. We recovered a stone sledge and hatchet used to grind copper ore as well as the animal bone. Based on the size and shape of the grinding tools, the four mining prospects have been dated to between 4,000 and 5,000 years ago. These mines, then, were in operation during the transition from the New Stone Age to the Copper Age, or what archaeologists have defined as the Eneolit period. The rock art in the Javkhlan Mountain located 18 km to the west, might also be with the ancient mines. Images of a three-fingered person, which are associated with the Eneolit period, were found on some of the boulders at Javkhlan Mountain.

Mongolians acquired metal tools about the same time as other people in Asia. The research at Oyu Tolgoi shows that ancient Mongolians did not import their metal tools, but made
them. Thus, it was not metal tools that were traded throughout Asia, but the knowledge of acquiring and processing copper ore, which was transmitted from one area to another.

2.9.2 An Opportunity

One element of the CHP should focus on telling the story of ancient mining in Mongolia and how Oyu Tolgoi fits into it. We have suggested that a small scale model of the ancient copper mines of Oyu Tolgoi be built that shows how ancient mining was conducted and how metal tools fundamentally changed Stone Age life. The exhibit should also highlight the importance of conservation and protection of significant cultural resources, particularly in light of the dramatic development that is associated with modern mining.

The situations described above illustrate that identifying heritage properties and raising the awareness and understanding of cultural heritage to those in the mining industry is as important as the results of compliance and rescue archaeological research. Oyu Tolgoi and other mining companies in Mongolia are required to take timely and appropriate measure for the preservation of the tangible properties in cooperation with authorized organizations and scientists. When they do, everyone benefits.
3. TANGIBLE RESOURCES - PALEONTOLOGY

Kh. Tsogtbaatar and B. Gunchinsuren

In many countries dinosaur remains and other paleontological fossils are treated solely as scientific objects, but in Mongolia these resources are viewed as part of the nation’s cultural heritage. In part, the treatment of paleontological resources is the result of the history of the discipline’s evolution in Mongolia. Many early scientific expeditions were designed to discover both paleontological and archaeological remains as part of an interdisciplinary study. Many archaeologists and paleontologists in Mongolia are cross-trained in the other discipline. But the primary reason that paleontological remains are treated as cultural objects is that for generations the people of the Gobi have attached cultural values to dinosaur remains. The interest in Mongolian paleontology by the world community is a source of national pride. It also is a source of income, both in terms of tourism as well as the illegal trade in fossils.

In this chapter, we begin with a basic discussion of paleontology: what is it and why is it important? Next, we present a summary of the major paleontological sites of the OT direct impact zone and Ōmnögovi aimag. We then turn to the status and threats to the aimag’s paleontological record. We close with a presentation of standards from the United States, which can serve as a model of Mongolia and can be incorporated into the CHP. The bibliography of reports on the paleontology of Ōmnögovi aimag is presented in Appendix 2.

3.1 WHAT YOU SHOULD KNOW ABOUT VERTEBRATE FOSSILS

Fossil vertebrates are usually unique or rare, non-renewable resources that constitute an important part of Mongolia’s natural heritage. They provide data by which the history of vertebrate life on Earth may be reconstructed and are one of the primary means of studying evolutionary patterns and processes as well as environmental change. Since the 1920s, Mongolia has been recognized world-wide as a critically important source of fossil remains, especially dinosaur fossils, and geological environments that collectively allow an enhanced understanding of Earth history extending back nearly 150 million years.

Many kinds of fossils, including most vertebrate fossils, are rare for several reasons. Far less than 1 percent of the organisms that have ever lived become fossils. Many organisms are not readily preserved as fossils because they do not have hard parts like bones, teeth, or shells.
Unusual sedimentary environments are required to preserve soft parts long enough to become fossilized. The remains of small organisms are more readily destroyed by mechanical and biological processes than the remains of large organisms. Also, organisms can only be preserved where sediments accumulate quickly. Most organic remains are not buried fast enough to contribute to the fossil record. In addition, vertebrate fossils are generally less common than invertebrate fossils because there have been fewer living vertebrates than invertebrates over geologic time. All of this means that the chances of a vertebrate becoming a fossil are very small. Vertebrate fossils are therefore extremely valuable because of the information they provide about the past. Furthermore, fossils of extinct groups are not renewable. More fossils will be discovered and collected, but always from a finite supply. Although there are some exceptions to these generalizations, spectacular deposits of diverse and complete organisms are rare over the history of the Earth. In fact, the richness of Mongolia’s fossil deposits, especially in the Gobi Desert, is equaled by only a few other regions in the world.

The layered rocks in which fossils are found provide information about past environments and climates, the fossils’ relative and, in some cases, absolute ages, and their paleogeographic location. Fossil assemblages provide information about ecological interactions and the evolution of biotic communities.

A fossil collected without accompanying locational information has lost much of its value; in such cases we can know little more than that this individual animal lived and died. In contrast, when contextual data are collected and studied, we can reconstruct how the animal lived. As paleontologists and geologists learn more ways to interpret ancient environments and ecological communities from fossil assemblages in their original contexts, this scientific information becomes increasingly valuable and important.

The understanding of evolutionary processes and relationships comes primarily from comparing the skeletons from different animals to one another. In order to do this, researchers must be able to compare new specimens with those previously unearthed. Only when fossils are properly collected and curated in public institutions, can researchers access these specimens in order to make the necessary comparisons. And, when these comparisons are made, scholars and the general public benefit greatly by having access to new interpretations.

3.2 WHY SHOULD MONGOLIA’S FOSSILS BE PRESERVED?

Fossils are for everyone—children and adults, amateur and professional paleontologists. We learn about the history of life from fossils, but much of the story is yet to be written. Fossils are an educational and scientific resource for our generation and those in the future. Scientifically significant fossils belong to all Mongolians. They should not be removed from the public domain; they should be preserved for the enjoyment and education of all Mongolians for all time.
3.3 HOW MANY AND WHAT KINDS OF PALEONTOLOGICAL PROPERTIES ARE LOCATED IN THE OYU TOLGOI AREA?

There are many paleontological sites of worldwide renown in the OT Direct Impact Zone, Khanbogd soum, and the OT Indirect Impact Zones of Manlai and Bayan-Ovoo soums in Ömnögovi aimag. Paleontological localities like Baishin Tsav, Khuurai Tsav, Amtgai, Urlub Khudag, and Shar Tsav located in the above-mentioned soums constitute the main evidence of animal (especially dinosaurs) and plant evolution dating back to the early Late Cretaceous Period of the Mesozoic Era, nearly 145 million years ago (Figure 19).

Researchers affiliated with the Joint Mongolian-Soviet Paleontological Expedition working during the 1970s and 1980s and the Joint Mongolia-Japan Paleontological Expedition which began its work in 1990 have discovered and analyzed many unique finds at these and other sites, some of which are identified as new genera and species. In particular, herbivorous/carnivorous dinosaurs discovered thus far include Segnosaurus galbinensis, Erlikosaurus andrewsi, and Enigmosaurus mongoliensis; carnivorous dinosaurs include Garudimimus brevipes and Alectrosaurus olsoni; and herbivorous dinosaurs include Quaesitosaurus orientalis and two new genera and species of hadrosaurid and pachycephalosaurid dinosaurs.

Figure 19: Fossiliferous sites in southern Mongolia.
Fossils that reflect the most dramatic and complex period of dinosaur evolution are found in this region, rendering such localities very useful for conducting further research on the evolution of vertebrates. Conservation of these and other yet-to-be-discovered fossil localities should be the focus of international attention, not only that of Mongolia. Dinosaur fossils and other remains found in this region prove that Central Asia was the center of dispersal of the hadrosaurid superfamily of "duck-billed" dinosaurs, which lived widely in North America (including the USA and Canada) as well.

As part of Phase 1 baseline studies for the CHP, we examined sites in the Direct and Indirect Impact Zones as well as specific locales throughout Ömnögovı aimag (Appendix 6). Below we describe the paleontological localities at greatest risk from the OT project.

3.3.1 Baishin Tsav

**Geological Period:** Late Cretaceous (Bayan Shireh Formation; ca. 93–80 million years ago)

**Geography:** Coordinates: N43-29-32 / E107-44-50; 905 meters above sea level. Area of locality: 1.8 × 2.1 km. This fossil locality is comprised of many small ridge-like deposits and outcrops on a vast plain. This site is divided into five parts (BTs-I, II, III, IV, V). Baishin Tsav-I stretches east-west and is composed of stacked sediments rising to the south. Baishin Tsav-II and -V are composed of several outcrops that stretch southward from the eastern edge of Baishin Tsav-I. Baishin Tsav-III and -IV are isolated small outcrops on the low bank and small hill located southwest of the other localities.

**Geology:** The fossiliferous strata are composed of sand and mud, with sand dominant; no traces of ancient soils (paleosols) were observed. Large footprints (10–30 cm in diameter) were found in the sand stratum at Baishin Tsav-V. It is known that an ancient river or stream flowed here, generally from the south to the west according to the stream’s channel and the sandy stratum of parts of the site. These strata are rich in vertebrate fossils. In recent years, many skeletons, accumulated bones, and isolated elements have been revealed and studied at Baishin Tsav (e.g., Tsogbaatar, 2007). Many fossil finds of dromaeosaurid, ornithomimid, and segnosaurid dinosaurs were also made here. Elongatoolithid dinosaur eggshells were found in the western part of the Baishin Tsav-I sub-locality. Leaf remnants of plants with hidden seeds were found for the first time in 2004 in a muddy stratum near the western margin of Baishin Tsav-I (Suzuki et al. 2004).
3.3.2 Khuurai Tsav

**Geological Period:** Late Cretaceous (Bayan Shireh Formation; ca. 93–80 million years ago)

**Geography:** 904 meters above sea level. Area of this locality: 0.8 × 1.2 km. This fossiliferous site is located 2.9 km southwest of Baishin Tsav. Fossiliferous strata similar to Baishin Tsav form a bank stretching towards the south.

**Geology:** Lithology of these fossiliferous strata is similar with Baishin Tsav.

Direction of the paleo-stream flows towards northwest (301.8 degrees, std = 8.15, N = 26)

Well-preserved ornithopod hadrosaurid fossils, including skulls and cervical (neck) vertebrae and articulated caudal (tail) segments were found.

3.3.3 Urlub Khudag

**Geological Period:** Late Cretaceous (Bayan Shireh Formation; ca. 93–80 million years ago)

**Geography:** 970 meters above sea level. Area of this locality: 7.4 × 6.0 km. This large locality takes its name from a nearby well (khudag) and is characterized by fossiliferous strata broadly dispersed over this region in small widely separated hills.

**Vertebrate fossils:** Remains of ornithopod hadrosaurid dinosaurs, large theropod dinosaurs, ancient turtles, and crocodiles have been found at Urlub Khudag.

**Geology:** The lithology of fossiliferous strata at Urlub Khudag is similar to those at Baishin Tsav and Khuurai Tsav; its paleo-stream flowed toward the west (252.2 degrees, std = 4.17, N = 12).

3.3.4 Shar Tsav

**Geological Period:** Late Cretaceous (Nemegt/Maastricht Formation; ca. 76–65 million years ago)

**Geography:** This site is divided into two parts; an eastern area (with dinosaur footprints) and a western area (with Avimimus fossils). 905 meters above sea level, covering an area of 0.5 × 1.4 km. The western area 911 meters above sea level, covering an area of 0.7 × 0.6 km. The distance between the eastern and western sub-localities is 2 km.
Geology: The geology of the Shar Tsav locality was first described by Ivakhnenko and Kurzanov (1982). In the past decade, the Joint Mongolia-Japan Paleontological Expedition has conducted detailed geological and paleontological surveys here, determining that the lithology of the fossiliferous deposits is composed mainly of mud, with intervening strata of fine sand.

The thickness of the strata in the eastern portion of the Shar Tsav site reaches 16 meters. Ripple marks are preserved at the upper surface of the sand stratum and the direction of these ripple marks extend from the northeast to the southeast and from the northeast to the southwest (31.2 +180 degrees, N = 18). The paleo-stream flowed to the north-northwest (338.5 degrees, normal fluctuation = 5.42, N = 9).

The western outcrops at Shar Tsav face south and stretch from the east to the west. The lithology of these sections is consists mainly of thick sand strata with dipping and parallel units yielding evidence of varied erosional activity. The thickness of the section in this area approaches 14 meters.

Dinosaur tracks and vertebrate fossils: The Shar Tsav dinosaur fossil locality was first found on July 31, 1995 by the Joint Mongolia-Japan Paleontological Expedition about 10 km northeast of the Baishin Tsav site in Khanbogd soum. The same expedition conducted more detailed investigations there in 1996 and 2001. The dinosaur trackways at Shar Tsav are preserved in a solidified sandy stratum composed of coarse sandstones. This dinosaur trackway is diverse in terms of the shapes and sizes of the footprints preserved, with at least four or five different dinosaur species represented. This well-preserved dinosaur trackway is very useful in reconstructing the ecology, behavior, and movement of animals dating back to this early period.

Ornithomimid dinosaur fossils have also been found at Shar Tsav (Ivakhnenko и др., 1982; Ivakhnenko et al. 1982). Quesiatosaurus, a new sauropod dinosaur, was described here first based on a fossil skull (Курзанов и др., 1983; Kurzanov et al. 1983). More than five fossils of Avimimus (a small carnivorous dinosaur) were recovered from the lower mud strata at this site. Many dinosaur tracks, elongatoolithid and spheroolithid dinosaur eggshells, and bones of ancient birds, turtles, and crocodiles were also recovered here (Watabe et al. 2010).

3.3.5 Amtgai

Geological Period: Late Cretaceous (Bayan Shireh Formation; ca. 93–80 million years ago)

Geography: Map 863 meters above sea level. Area of this locality: 0.3 × 0.5 km. This site is composed of small hills facing the east and many small outcrops forming a ridge.
Geology: The lithology of the fossiliferous strata at Amtgai is very similar to that of Baishin tsav, consisting of sand and mud strata of gray and bright blue colors. The total thickness of the exposed strata is less than 20 meters; the paleo-stream flowed to the southwest (239 degrees), based on measurements of the dip of the fine sandy strata.

Vertebrate fossils: Many dinosaur fossils have been found at Amtgai, including several fossils of segnosaurs, meat and plant eating dinosaurs, ornithopod vertebrae, a pachysephalosaur skull and the carapace of a large fossil turtle.

3.3.6 Principal paleontological localities of Ömnögoví aimag

Research undertaken since the 1920s has revealed about 60 fossiliferous sites in southern Mongolia, of which 31 (53.3 %) are located in Ömnögoví aimag (Table 7).

Table 7: List of Paleontological Sites in Ömnögoví Aimag

<table>
<thead>
<tr>
<th>№</th>
<th>Soum Name</th>
<th>Locality Name</th>
<th>Geological Time Frame</th>
<th>Dimensions (kms)</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Gurvan Tes</td>
<td>Bugiin Tsav</td>
<td>Late Cretaceous, Nemegt Formation</td>
<td>12 X 5</td>
<td>Watabe, Tsogtbaatar, Suzuki, and Saneyoshi, 2010</td>
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<tr>
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<td>Gurvan Tes</td>
<td>Khermen Tsav</td>
<td>Late Cretaceous, Baruu goyot and Nemegt Formations</td>
<td>4 X 8</td>
<td>Сочава, 1975; Курганов, 1990; Gradzinski, 1970;</td>
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<td>Gurvan Tes</td>
<td>Khermen Tsav-II</td>
<td>Late Cretaceous, Nemegt Formation</td>
<td>0.5 X 1.5</td>
<td>Watabe, Tsogtbaatar, Suzuki, and Saneyoshi, 2010</td>
</tr>
<tr>
<td>4</td>
<td>Gurvan Tes</td>
<td>Tsagaan Khushuu</td>
<td>Late Cretaceous, Nemegt Formation</td>
<td>1.2 X 1</td>
<td>Барсболд, 1970</td>
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<td>5</td>
<td>Gurvan Tes</td>
<td>Naranbulag</td>
<td>Late Cretaceous, Nemegt and Paleogene Formations</td>
<td>1 X 1.3</td>
<td>Мартинсон и др., 1969; Watabe, Tsogtbaatar, Suzuki, and Saneyoshi, 2010</td>
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<td>Шувалов, 1970</td>
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<td>Gradzinskii et al. 1974; 1977;</td>
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<td>Watabe, Tsogtbaatar, Suzuki, and Saneyoshi, 2010</td>
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<td>Watabe et al., 2000; Watabe, Tsogtbaatar, Suzuki, and Saneyoshi, 2010</td>
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<td>Late Cretaceous</td>
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<td>Watabe et al., 2000; Watabe, Tsogtbaatar, Suzuki, and Saneyoshi, 2010</td>
</tr>
<tr>
<td>№</td>
<td>Soum Name</td>
<td>Locality Name</td>
<td>Geological Time Frame</td>
<td>Dimensions (kms)</td>
<td>Sources</td>
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<tr>
<td>13</td>
<td>Manlai</td>
<td>Ikh Shunkht</td>
<td>Late Cretaceous, Baruun goyot Formation</td>
<td>2 X 1.9</td>
<td>Михайлов, 1991; Ивахненcko и др., 1988</td>
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<td>14</td>
<td>Manlai</td>
<td>Shar Tsav</td>
<td>Late Cretaceous, Nemegt Formation</td>
<td>0.5 X 1.4</td>
<td>Ивахненcko и др., 1988; Курганов и др., 1983</td>
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<td>15</td>
<td>Manlai</td>
<td>Shar Tsav (western unit)</td>
<td>Late Cretaceous, Nemegt Formation</td>
<td>0.7 X 0.6</td>
<td>Ивахненcko и др., 1988; Курганов и др., 1983</td>
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<td>16</td>
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<td>Amtgai</td>
<td>Late Cretaceous, Bayan Shireh Formation</td>
<td>0.3 X 0.5</td>
<td>Мартинсон, 1982; Watabe, Tsogtbaatar, Suzuki, and Saneyoshi, 2010</td>
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<td>17</td>
<td>Manlai</td>
<td>Amtgai (western corner)</td>
<td>Late Cretaceous, Bayan Shireh Formation</td>
<td>0.9 X 0.6</td>
<td>Watabe, Tsogtbaatar, Suzuki, and Saneyoshi, 2010</td>
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<td>Khanbogd</td>
<td>Baishin Tsav</td>
<td>Late Cretaceous, Bayan Shireh Formation</td>
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<td>Цыбин и др., 1979; Барсбюлд, 1988; Tsogtbaatar, 2004; 2006; 2008.</td>
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<td>Khanbogd</td>
<td>Khuurai Tsav</td>
<td>Late Cretaceous, Bayan Shireh Formation</td>
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<td>Khanbogd</td>
<td>Urlub Khudag</td>
<td>Late Cretaceous, Bayan Shireh Formation</td>
<td>7.4 X 6</td>
<td>Watabe, Tsogtbaatar, Suzuki, and Saneyoshi, 2010</td>
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<td>Khanbogd</td>
<td>Tugrugiin Shiree</td>
<td>Late Cretaceous, Djoadochta Formation</td>
<td>1.8 X 5</td>
<td>Твердохлебов и др., 1974; Fastovsky et al. 1997; Suzuki et al. 2002; Watabe, Tsogtbaatar, Suzuki and Saneyoshi, 2010</td>
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<td>22</td>
<td>Bulgan</td>
<td>Alag Teeg</td>
<td>Late Cretaceous, Djoadochta Formation</td>
<td>0.5 X 1.6</td>
<td>Твердохлебов и др., 1974</td>
</tr>
<tr>
<td>23</td>
<td>Bulgan</td>
<td>Bayan Zakh, “Shabarakh Usu”</td>
<td>Late Cretaceous, Djoadochta Formation</td>
<td>1.3 X 3.4</td>
<td>Dashzeveg et al. 2005; Jerzykewicz et al. 1991; Watabe, Tsogtbaatar, Suzuki, and Saneyoshi, 2010</td>
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<td>Sevrei</td>
<td>Uuden Sair</td>
<td>Late Cretaceous, Djoadochta Formation</td>
<td>1.2 X 2.2</td>
<td>Ивахненcko и др., 1988; Watabe, Tsogtbaatar, Suzuki, and Saneyoshi, 2010</td>
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<td>25</td>
<td>Sevrei</td>
<td>Zamyn Khond</td>
<td>Late Cretaceous, Djoadochta Formation</td>
<td>0.5 X 0.4</td>
<td>Watabe, Tsogtbaatar, Suzuki, and Saneyoshi, 2010</td>
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<td>26</td>
<td>Sevrei</td>
<td>Bor Tolgoi</td>
<td>Late Cretaceous, Djoadochta Formation</td>
<td>?</td>
<td>Watabe, Tsogtbaatar, Suzuki, and Saneyoshi, 2010</td>
</tr>
<tr>
<td>27</td>
<td>Sevrei</td>
<td>Yagaan Khovil</td>
<td>Late Cretaceous, Nemegt Formation</td>
<td>0.6 X 0.8</td>
<td>Курганов, 1983; 1987; Watabe, Tsogtbaatar, Suzuki, and Saneyoshi, 2010</td>
</tr>
<tr>
<td>28</td>
<td>Sevrei</td>
<td>Altan Teeg</td>
<td>?</td>
<td>0.5 X 0.4</td>
<td>Watabe, Tsogtbaatar, Suzuki, and Saneyoshi, 2010</td>
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Ten of these localities are located in Gurvan Tes soum, two in Nomgon soum, six in Manlai soum, three in Khanbogd soum, four in Bulgan soum, five in Sevrei soum, and one in Tsogt Ovoo soum, indicating that most paleontological properties are located in western Ömnögovi aimag.

3.4 THE STATUS OF AND THREATS TO MONGOLIA’S FOSSIL HERITAGE

It is apparent that current efforts to preserve Mongolia’s fossil animal and plant remains and the localities where they are found are wholly inadequate. Illegal survey and excavation of the country’s world-renowned paleontological localities is on the rise and international trafficking in Mongolian fossils is intensifying. Sophisticated networks of thieves have emerged whose contraband includes a wide variety of historically significant objects. Such networks include local herders who live near fossil localities and middlemen at the soum and aimag levels whose activities are sustained by the urban residents and foreigners who sponsor them. There are many traces of illegal excavations, including destroyed and half-excavated objects, in sites in Ömnögovi and Bayankhongor aimags. According to feedback received from local communities, there are groups of people who have been digging at such sites for years, many of whom have become wealthy on the profits earned from these illegal activities. Such groups generally begin their nefarious work at sites in March and April, before official academic research fieldwork usually starts, and they evaluate the “quality” and "significance" of the objects they discover in purely pecuniary terms, digging artifacts and fossils out of the ground in as cheap and efficient a manner as possible without regard to consequent breakage and destruction. These excavation methods essentially eliminate the scientific value of the objects encountered by destroying their context, even as they ruin the ecology and otherwise pristine nature of the looted localities.

We know that gangs transport their illegal gains through a variety of border points and every year we hear rumors about the trafficking of exquisite dinosaur remains across Mongolia’s border. As a result of the vigilant actions of our Customs, Police, and Intelligence Agency, confiscated objects are officially transferred to the Mongolian Academy of Science – Centre of Paleontology in Ulaanbaatar. Confiscated properties include many rare and scientifically significant finds, but it is impossible to determine what fraction that represents relative to the much larger body of significant objects that are removed from the country.
Mongolia’s lawmaking bodies have promulgated responses to this problem for the past several years (including the national *Law on Protecting the Cultural Heritage of Mongolia*), but the mild penalties and low fines legislated for such illegal actions fail to stem their proliferation.

Today, these laws and regulations are violated by people who excavate fossil remains without any professional guidance or rationale and who are completely unqualified to assess the scientific significance of what they find, even if they care. They are able diggers but they have no access to the sophisticated laboratory facilities or foreign collaborations that make the scientific endeavor of paleontology in Mongolia so distinct from the actions of these thoughtless thieves. It is perhaps most regrettable that in Mongolia there is evidence that official soum and provincial agencies, geological exploration expeditions, mining and tourist companies, and even some universities have been engaged in such activities, like their equally illegal but more secretive counterparts.

### 3.5 A MODEL FOR THE PROTECTION OF MONGOLIA’S FOSSIL HERITAGE

In the United States, the Society of Vertebrate Paleontology (http://www.vertpaleo.org/) has worked for many years to protect fossils on federal lands by encouraging enactment of *The Paleontological Resources Preservation Act* (PRPA). This effort culminated on March 30, 2009, when the *Omnibus Lands Act* of 2009, into which the PRPA had been incorporated, became Public Law 111-11. The provisions of this act protect scientifically significant fossils on federal land. It provides a permitting system whereby researchers can collect and study scientifically significant fossils which will remain in the public trust. The act also provides for the collecting of common plant and invertebrate fossils for personal non-commercial use on some federally-administered lands. A similar system could work in Mongolia.


#### I. Common Questions

**How does the PRPA preserve fossils in the United States?** In the United States, the *Paleontological Resources Preservation Act* of 2009 codifies the existing practice of requiring that vertebrate fossils and other rare and scientifically significant fossils be collected only by qualified researchers who obtain a permit. They must agree to deposit the fossils in public institutions which will ensure their future availability to researchers and the public.

**How does the PRPA affect amateur collecting on federal lands?** It does not change anything. Agencies such as the U.S. Bureau of Land Management and the U.S. Forest Service often allow recreational collecting of common plant and invertebrate fossils for non-
The PRPA ensures that this will continue, as one of the purposes of the PRPA is “To ensure that amateur collecting of rocks, minerals, and invertebrate and plant fossils on Federal lands is not affected by this Act.” The collection of vertebrate fossils on U.S. national lands requires a permit, and collection is allowed only for educational purposes. This practice is continued under the PRPA.

**How does the PRPA affect private lands?** It does not affect them. The PRPA specifically states that “Nothing in this Act shall be construed to affect any lands other than Federal lands or affect the lawful recovery, collection, or sale of paleontological resources from lands other than Federal lands.”

**Aren’t fossils on federal lands already protected by national laws?** Yes, but previous national laws were inadequate to protect vertebrate fossils and to ensure the broadest access to citizens. Penalties for illegal collecting were extremely weak, and were not a deterrent because of the high commercial value commanded by vertebrate fossils.

**Is the need to preserve these fossils urgent?** Yes. In a study commissioned by the United States Forest Service, it was found that almost one-third of the paleontological sites surveyed in the Oglala National Grassland in the central U.S. state of Nebraska showed evidence of unauthorized collecting. In 1999, the U.S. National Park Service identified 721 documented incidents of paleontological resource theft or vandalism, many involving multiple specimens, in U.S. national parks between 1995 and 1998. We suspect that Mongolia’s experience parallels that of the U.S., even though there are no reliable quantitative data currently available to support that contention.

**What are the guiding principles of the PRPA?**

**Fossils on federal lands are a part of America’s heritage**  
*Recommendation:* Future actions should reaffirm the use of federal fossils for their scientific, educational, and where appropriate, educational values.

1. **Most vertebrate fossils are rare**

   *Recommendation:* Future actions should reaffirm the restriction of vertebrate fossil collection to qualified personnel, with the fossils remaining in federal ownership in perpetuity.
2. Some invertebrate and plant fossils are rare

Recommendation: Future actions should reaffirm the use of mission-specific agency approaches to the management of plant and invertebrate fossils.

3. Penalties for fossil theft should be strengthened

Recommendation: Future actions should penalize the theft of fossils from federal lands in a way that maximizes the effectiveness of prosecutions and deters future thefts. Penalties should take into account, among other factors, the value of fossils themselves, as well as any damage resulting from their illegal collection. Future program strategies should emphasize education of federal managers, prosecutors, law enforcement personnel, and the judiciary regarding the value of fossils and the techniques for the appropriate protection of fossil resources.

4. Effective stewardship requires accurate information

Recommendation: Future actions should acknowledge the need for gathering and analyzing information about where fossils occur, in particular the critical role of inventory in the effective management of fossil resources. Increased emphasis on fossil inventory should take into consideration, where possible, regional approaches across agency lines, using modern technology such as Geographic Information Systems (GIS). Such work could also address specific issues, such as the impact of erosion on the loss of resources.

5. Federal fossil collections should be preserved and available for research and public education

Recommendation: Future actions should affirm the importance of curating scientifically valuable fossils as federal property, often in partnership with non-federal institutions. Future program approaches should emphasize the use of modern technology to improve curation and access, as well as sharing of information between and among federal agencies and other institutions.

6. Federal fossil management should emphasize opportunities for public involvement

Recommendation: Future actions should include an emphasis on public education and participation in the stewardship of fossil resources. Future program approaches should emphasize the use of technology to increase public education and awareness of the importance and benefit of fossil resources.
How can the U. S. *Paleontological Resources Preservation Act* (PRPA) of 2009 provide a template for the protection of Mongolia’s fossil heritage?

Paleontological finds and their localities of origin properly belong to the historical and cultural legacy of Mongolia as defined by the *Law on Protecting the Cultural Heritage of Mongolia (LPCHM)* and related regulations.

Both the provisions and the limitations of the U.S. PRPA provide a potential model for Mongolia to modify according to local circumstances and adopt to address the concerns of scientists who consider Mongolia’s current legislation weak and inadequate and who are rightly focused on the preservation of the country’s unique fossil treasures. At the same time, the worries of the economic sector, much of which regards the potential uniform protection of Mongolia’s fossils as an impediment to development of the Gobi region’s other resources, including its mineral wealth and nascent tourist industry, can also be mitigated.

The American experience demonstrates that it is possible to accommodate all of these concerns simultaneously through thoughtful legislation enacted at the national level that consciously addresses the dynamic relationship between preservation and development and between public and commercial access. The U.S. *Paleontological Resources Preservation Act* of 2009 creates a framework for the protection and curation of a country’s fossil heritage while simultaneously recognizing the importance of fossils as an educational resource for all its citizens. The goal of such legislation is not to limit, let alone preclude, public access to the country’s paleontological property. Rather, it is meant to function as an unambiguous, nationally applicable set of regulations that both protect and enhance appropriate access to this ultimately non-renewable resource.

The framework of the U. S. *Paleontological Resources Preservation Act* can be modified to be broadly applicable to the Mongolian case and we encourage OT to play a leadership role in encouraging the Government of Mongolia to adopt similar national legislation at the earliest possible date.
4. INTANGIBLE RESOURCES

S. Chuluun

Unlike archaeological or paleontological resources, little has been written specifically about the culture or intangible resources of Ömnögovi aimag. Indeed, compared to other regions of Mongolia, the people and culture of the South Gobi has been poorly studied. There are two primary reasons for this lack of interest. First, the South Gobi is settled entirely by the Khalha—who constitute the dominant population of Mongolia. Lacking unusual lifestyles or cultural elements, Ömnögovi aimag has been passed over by ethnographers, who for the last century have focused their efforts on smaller and more exotic ethnic groups. Second, the South Gobi is a huge territory with sparse settlement. Ethnographic research requires substantial time and effort. Comparatively few ethnographers, therefore, have chosen to make that investment.

Given this situation, Phase 1 work for the intangible resource team focused less on literature or available documents and more on ethnographic research (Appendices 7–9). The purpose of these studies was to document the current state of cultural practices, identify elements of cultural importance affected by mining development, and develop measures to manage culture change as well as to protect and promote the cultural heritage of this region.

In the first part of this chapter, we begin with a general description of Gobi culture. Next, we summarize what we have learned about the culture of Ömnögovi aimag. Some of the more important categories of the aimag’s intangible resources are described. We begin with what is Ömnögovi aimag’s best known cultural tradition: silversmithing and blacksmithing. Next, we describe some of the other material culture traditions, such as snuff bottles, animal brands, wooden containers, and felt carpet marking. We then move on to one of the hallmarks of Mongolian culture: the ger. Food and diet of the residents of Ömnögovi aimag is the subject of the next section, with emphasis placed on the preparation of Und and Tsulkihir and Bajuun flour. The next section shifts focus from material culture to social practices. We begin with a discussion of the concept of ownership among the herdsmen. The religions of Ömnögovi aimag—Buddhism and Shaminism—are described next along with their material aspects. We move on to the revival of lineage names, language, traditional songs, and traditional games that are intrinsic elements of the nomadic culture of the Gobi. We then move to a discussion of the traditional sacred places of Omnogovi aimag and of the Oyu Tolgoi area. We have compiled lists of, and assess the status of sacred and taboo places in Ömnögovi aimag and in the OT direct impact zones. We recognize that these are
preliminary lists, but they provide the reader with the types and relative abundance of these
types of resources in the aimag and project site.

We conclude with some brief comments on culture change and continuity in Omnogovi
aimag. Culture change in Ömnögovi aimag is inevitable. The CHP is not intended to stop
change or to return the residents to a nomadic herding past way of life that can be
romantically envisaged as in some way superior to the present, nor is the intent to preserve
an idealized ‘nomadic lifestyle’ in a sealed environment. The aim is not therefore to
‘preserve’ traditional lifestyles or beliefs. The aim is rather to provide local people with an
awareness of what is happening and a series of mechanisms by which they can exert some
influence over the trajectory and speed of change. The objective is enabling some degree
management of change, not preservation.

4.1 OVERVIEW OF GOBI CULTURE

To identify intangible resources, we first need to understand the culture. In the South Gobi,
to understand culture requires a thorough understanding of the environment and how
topographic, hydrologic, and climatic forces have shaped the people. It is also critical to
understand how outside forces, particularly those related to economic development, are
impacting the largely traditional culture of the South Gobi.

4.2 THE LAND AND THE PEOPLE

The Mongolian Gobi desert is a hostile environment. It is a land of very low grass; small
plants adapted to a harsh continental climate with very low rainfall. Mongolians called the
residents of the Gobi, who have survived in this land, breeding their livestock and creating a
distinctive culture, the "The Brave people of the Great Gobi." The culture, adapted to to
water scarcity and great variation in temperatures, has enabled the people not only to
survive but also to flourish.

The Gobi environment is characterized by little rainfall and extremes in temperature. There
is little precipitation in the summer and temperature ranges from +30° C to +35° C. During
the lengthy dry spells of the summer, residents have to move from 50 to 70 km to find
adequate pasture. The rains in September are always welcome, when fertile plants such as
“taana” and “humuul” grow. Herdsmen prepare for the winter by fattening livestock in the
"otor", which refers to several movements through good pastures in the autumn designed to
fatten and strengthen the livestock.

Winter in the Gobi is the warmest in Mongolia; temperatures range from -15°C to -20°C.
Herdsmen prefer to spend the winter with the herds, whereas the women of some families
spend the winter with the children in a soum center. If it is too cold, the herdsmen will spend the winter with their livestock in warmer or more sheltered places. The most difficult season is spring, when severe storms are common. The harsh storms of the Mongolian Gobi are often severe sandstorms and are thus exhausting for the herdsmen and his livestock.

4.3 THE CULTURE

Life in Ömnögovi aimag has, until the very recent past, been based entirely upon herding of camels and cattle, with lesser numbers of sheep and goats. Agriculture is extremely limited, although market-gardening has emerged to serve the increased populations in the soum centers.

Gobi herdsmen have a rich store of traditional knowledge on which they rely to come through the difficulties of the four seasons. They have acclimatized by skill, knowledge and culture practices accumulated over centuries. The culture is best understood through a series of relationships between Livestock (camels, sheep, horses, goats and cows)—Herdsman (hereditary and new)—Pasture (movement habitat, wintering habitat, spring habitat, summer habitat and autumn habitat).

The camel and the well are critical cultural elements. Gobi culture cannot be imagined without the camel and life in the Gobi cannot exist without the water of the wells. The livestock harnesses, foods and meals, songs and praises, and all that encompasses the regional pedagogy are connected with the camel. To maintain camels, one must have water. Because of the limited water supply, herdsmen roam far from their homeland to different pastures throughout the year.

Gobi herdsmen have their own special way to breed different types of domestic animals that they have conveyed from generation to generation. The use of pastures in the Gobi is different from that in the much more forested Khangai region. Gobi herdsmen move shorter distance than their counterparts in the Khangai. Unlike herdsmen to the north, Gobi winter and spring herding practices are practically the same. Differences between herdsmen are primarily a function of plant spread and cattle type.

The herding lifestyle is threatened by environmental change, lack of the “otor” pasture, the lack of guaranteed veterinary service, the limited breeding regulation, and living too far from the soum center or the border to be near the market. Even with these risks, local residents consider herding a good lifestyle choice for a new family. A herding lifestyle is easily adopted. There are many government handbooks available that detail the practice, methods, and experience of herding.
Although anyone can become a herdsman, those who come from herding families have distinct advantages over herdsmen who consider herding ‘a job.’ Herding families have hereditary rights to winter habitats and summer habitats. As importantly, traditional knowledge is passed from generation to generation.

In socialist times, it was common practice to have particular otor pasture restricted to specific domestic animals according to the kind of plants in the area. This practice, although diminished, continues in some places. For example, the south and southeast part of Bayan-Ovoo soum, that are rich in black saksaul, are the best pasture for the camels. This area is responsible for the increase in the number of camels in the South Gobi. The southeast part of the Manlai soum is rich in plants for horses and this area became, and continues to be, the main horse pasture.

4.3.1 Industrialisation and an Influx of Foreigners

Modern mining is on the rise in the South Gobi, particularly the areas around Khanbogd and Bayan-Ovoo soums. The environmental and social consequences of mining are already visible and are affecting the social customs and practices of local inhabitants. The effect of mining is greatest for herdsmen, especially as it affects livestock and pasture. The local people say that the long mining roads are destroying or preventing access to large areas of livestock pasture and causing a deterioration of the pasture condition. The perception of the herdsmen is that the amount of and depth of water is decreasing at the same time the amount of air pollution is increasing.

The number of employees in the mining field is increasing rapidly, and many of these employees are ‘foreigners’—whether Mongols from other aimags who are not culturally part of the Gobi or workers from outside Mongolia. Although grateful for jobs, local communities view the influx of people as a threat to their local, distinctive culture and dialect. The mining industry also is responsible for improvements in local infrastructure, which offers local communities greater access to resources and better communication with the outside world.

The effects of mining on the people of Khanbogd, Manlai and Bayan-Ovoo soums are being felt most keenly in the soum centers. Although people have always resided in the soum center, there has been a growing trend in the last decade for the elderly, children of school age, and one of the parents of a schoolchild to reside the entire winter in the soum center. Moreover, families whose herds have dwindled because of severe cold in the recent winters, are also increasingly moving to the soum centers. These demographic changes are part of a more generalized trend for people to move to the soum centers to gain access to what are perceived as the benefits of ‘modern’ society.
As the pace of economic development accelerates, Gobi culture is threatened not by nature but by culture change. The time has come to protect the unusual culture of this region, to document its cultural resources through research and registration, to assess the risks posed by economic development, and to develop programs of protection.

4.4 METHOD AND APPROACH TO THE INTANGIBLE RESOURCES OF ÖMNÖGOVI AIMG

The Mongolian Academy of Science, Institute of History (MASIH) performed ethnographic research in several soums of the South Gobi as part of Phase 1 studies. Research on intangible heritage was conducted using standard ethnographic techniques. We held a series of village or soum meetings, followed by small-group meetings and finally culminating in detailed interviews with specific individuals or families selected because of their knowledge of or expertise in particular aspects of the culture of Ömnögovi. This was undertaken over the course of nearly a year, allowing a degree of trust and confidence to be built between the researchers and the local herders. Throughout, detailed notes were made by the researchers as well as an extensive photographic record.

Throughout this process, the researchers asked the local residents what they considered to be the most significant aspects of the intangible heritage and the social practices involved. In many instances the researchers have combined the comments or stories to make a series of heritage practices more comprehensible and useful to the OT project. Thus, the selection of intangible resources is largely based upon the perceptions and categories of the herders and soum-center residents. The researchers have concluded that silver-smithing and blacksmithing are perhaps of the greatest importance, but the discussion below is not otherwise in any prioritised order.

In the discussion below the alert reader will note that we are frequently discussing material elements of culture, such as objects crafted of silver. It is important to note that the focus is less on the intrinsic interest or value of the objects per se, but rather upon the cultural practices, accumulated expertise, and the socio-cultural meaning with which the objects become imbued. The economic value of silver objects may be discussed elsewhere – in this chapter the focus is upon the social and cultural uses of the objects and the role of the craftsman who created them.

The principle elements of the Ömnögovi intangible heritage, based upon our research, are the following:

1. Material Culture
   a. Silver-smithing and Blacksmithing
   b. Heirlooms: Other Elements of Material Culture
      i. Snuff Bottles Passed Down through Many Generations
ii. The Culture of Animal Brands
iii. Wooden Containers
iv. Felt Carpet Making, Dugluur and Toirog

C. Making and Living in a Mongolian Ger
D. Foods
i. Und – Milk tea with rice and meat
ii. Tsulkhir and bajuun flours

2. Society, Religion, and Language
a. Religions of Ömnögovi aimag
b. Ownership and Laws
c. Revival of Lineage Names and Kinship Relations
d. Language
e. Songs and Singers
i. Urtyn duu Ballads and Blessing Poems
ii. Songs and Feasts
iii. Instruments
f. Games
i. Stone Ger Building and Other Games
ii. Shagai (Ankle Bone Shooting)

3. Ùvt gazruud: Traditional Sacred Places in Ömnögovi aimag

4.5 MATERIAL CULTURE

4.5.1 Blacksmithing & Silver-smithing

Ömnögovi is famous for its metal-smithing crafts, including the so-called Noyon-Sevrei School as well as several other branches of craftspeople. (Noyon and Sevrei are soums located in southwestern Ömnögovi aimag). We have identified a tradition of silver-smithing extending back three generations. The first and second generations include the period from the end of 19th century until the 1970s, when there were well-known blacksmiths as well as artisans in wood and silver including Suntag, “Tall” Luvsan, Uran Nyam, Bazar and Dorj. Uran Nyam had the responsibility of crafting silver bowls and cattle-shaped statues given as prizes for “Champion Herders.” There was a ranking system for smiths and Uran Sanj was awarded the title of “Merited Craftsman of Mongolia” from this area. “Fat” Darjaa was famous for his exceptionally thin silver-crafting; Jamyandorj had special skills in decorative styles for silver bowls that use a silver thread pattern. Other great local craftspeople included Suntag, Uran Bazar, Perenlei, “Silver” Chimid, Uran-Bugtur, “Gorgeous” Osor, “Six Fingers” Banzragch, Gunjaa Nyam, and Tumur from Ugalzyin Hets.
Tseden-Ish of Bayan-Ovoo soum has in his possession an iron lock, over 40 years old, made by Suntag. Suntag’s grandson, Rashnyam, retains Suntag’s smithy tools (Figure 20).

The craftsman, Suntag was from the border of Nomgon and Khurmen soums, and he had box-bellows. He was a great craftsman who could produce high-quality steel. According to one story about Suntag, a person asked him to make a knife for cutting camel wool. When the knife was ready, the customer asked how long it would remain sharp. Suntag replied that the knife would remain sharp for two years. Precisely three years later, the knife was worn out. This was done by forging ordinary metal to remove impurities and set up (create) high quality steel. Suntag also made knives dedicated to wood and metal crafting. For example, his knives could cut through metal like scissors, and his knives for wood cut like an axe cuts fire wood. Another story about Suntag concerns the construction of a new hospital in the soum center. The wood used in the construction was recycled from other uses and contained many metal fasteners. Suntag brought a whole bag of his tools and shaped the wood like new, cutting out all the parts with metal. When other carpenters saw his tools, the edges were normal with no damage.  

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Batsukh, of Khulgaryin Uus, Javkhlant bag, Khanbogd soum, keeps a lock made by Suntag, a silver bowl by Uran Bazar, and a traditional Mongolian stove (tulga) (Figure 21).

The third generation of smiths, beginning in the 1980s, inherited the techniques, technologies and styles of previous generations. This generation is represented by craftspeople including Jargalsakhlan of Javkhalnt bag in Khanbogd soum; Borkhuu and Batnyam of Dalanzadgad soum, and disciples of Sharkhuu such as Altangerel, Battur, and Batbyan of Manlai soum.
4.5.2 Characteristic Features of the Noyon-Sevrei School of Silver-smithing

U. Batnyam of Dalanzadgad has launched a workshop on Gobi crafts production and has trained about 70 people in blacksmithing, wood- and silver-crafting. Batnyam (Figure 22) describes the Noyon-Sevrei School in the following way:

*The Noyon-Sevrei School is distinctive in its use of purer silver in its craft tradition, allowing products to be used generation after generation. Also, when making silver bowls, a special technology is used to eliminate the need for any seams; when a wooden bowl is covered with silver, a single sheet of the metal is used with no connection. There is an interesting explanation for why this specific fabrication technique was developed in Ömnögovi: in the past, the people of the South Gobi traded with the Uyghur people of Xinjiang.*
Traders passed through the Shivee Khuren border station, Ezenee, and travelled 500-600 km to the west along the Mongolian-Chinese frontier, ultimately reaching Bar-Khul and Baruun Zuu town, in Kharlag Tag of the Tianshan Mountains, famous for its large silver mine. The inhabitants of that town lacked sufficient food and leather. On their way, the Mongolian traders crossed Raisin Mountain with its abundant raisin crops. The horses could not roam freely because the raisin crops were so highly valued. People of the area mixed raisins with cattle dung and dirt to create an adope-type mixture to thicken the walls of their houses. When I was a child, my uncle told me in the past traders visited that region of Xinjiang secretly and raisins were a sort of contraband. When my uncle returned from Xinjiang with the caravan, he brought us raisins but told us not to let others know and not to drop any on the ground! In those days, the Xinjiang miners were paid in silver, so Mongolian caravans acquired silver inexpensively by exchanging wool and cattle hides. As a result, people of the South Gobi had plenty of silver and there developed locally a tradition of high quality silversmithing, which explains why some of the greatest silversmiths were born in Ömnögovi. Around 1800, there were a lot of silversmiths in Gurvan Tes soum. The great painter, D. Manibadar, a student of D. Gendensamba, was also from this area. Other famous regional craftspeople included Uranmanibadar, Sanj, Tuvden, and Bazar. There are four main schools of craft in Khalkh (Mongolia), including Dalai Choinkhor Wan in metal, and Borjigin and Batnorov of Hentii and Dariganga, respectively. The Noyon-Sevrei School can compete with any of them, including the Zasagt Khan School in Khovd and Zavkhan aimags.

Figure 22: Silversmiths and Silversmithing. a) S. Batsukh, Khulgaryin Uus, Javkhlant bag, Khanbogd soum; b) Silver bowl made by Uran Bazar, 1960s; c) S. Batsukh’s traditional Mongolian iron stove (tulga).
4.5.3 Silver-smithing Bellows

U. Batnyam explained what kinds of tools were used by Ömnögovi silversmiths, including the bellows used to stoke the fires in which the silver was crafted. Leather bellows were made of goat-hide that, when filled with air and tied off, provided the means to prepare the fire for silver and other metal crafting. Wooden box bellows were made of wood with a leather cover which could be opened to fill the bellows with air. The wind bellows was the most powerful of the three types. Here, a funnel-shaped cone was erected in the path of the wind on a hilltop, allowing the shape of the device to channel air into a fire prepared for smelting and other metal-working activities. The wind bellows was turned into the wind; if the wind was strong it could be turned diagonally to the path of the wind. In milder breezes, the wind bellows functioned perfectly.

4.5.4 Saddle Blankets, Bridles and Traps

Saddle blankets: Noyon-Sevrei saddle blankets are thick so both sides can be used and the different parts are well matched with each other (see Figure 21e). The saddle blanket is sewn through both sides creating a pattern that remains visible even when the saddle blanket is worn down. There are also high quality saddle blankets that smell of leather—these are only used on special occasions.

Bridles: Bridles are decorated with silver mountings, and the rings and link plate are joined without any links (see Figure 21c).

Jilijuu traps: Traps which are decorated with brass patterns.

Silver bowls: The edges of bowls are linked with silver threads and there is always a lotus pattern in the bottom of the bowl (Figure 23d and f). The largest bowls fabricated by the Noyon-Sevrei School weigh 18 liang (a liang is also known as a Chinese ounce or tael; one tael equals approximately 37.5 metric grams). Such bowls may last many lifetimes.
Figure 23: Altangerel, a young herder from Javkhlanbag, Khanbogd soum (a), has worn this silver bracelet made by “Tall” Luvsan since his mother presented it to him when he was seven years old (b–e).

4.5.5 Making Birch-handled Knives

U. Batnyam emphasized the sturdiness of knives with birch handles. He told us,

Knives with birch handles are sturdy and can last for a long time. The craftsperson cuts thin strips of birch bark which are soaked in water and then wrapped around the knife’s handle. Excess water is squeezed out of the birch bark and it is allowed to dry. Now, it is difficult to find this type of knife. They never need to be returned and they never break. It’s an example of the unique characteristic of the Noyon-Sevrei School of metal-crafting that its products last for generations.
Herder and silversmith, Borkhuu, of Javkhlan bag in Khanbogd soum said:

*Usually, a silver bowl lasts for three generations. But, the silver bowls I make can last for four generations. For example, children often bite and drop silver bowls resulting in breakage and discoloration. But, my bowls are made with very thick silver and are, therefore, resistant to this type of damage.*

Borkhuu’s characteristic silver-smithing approach nests a wooden burl bowl into a thick silver mounting with no mismatching designs and with no space between the wooden bowl and its silver mounting. The lotus pattern then decorates the bottom of the bowl and there is a thick silver insert on the bottom. In recent times, some craftspeople insert sand or copper as a filler between the wooden bowl and its silver mounting. To check for such debasement, the bottom of the bowl can be rapped on the ground to listen for a characteristically hollow sound.

### 4.5.6 Metalworking and Silver-smithing Glue

The craftsmen of Bayan-Ovoo soum prepare five different types of glue, each associated with a different color. The glue preparations differ in whether or not the metal workers use their bare hands. The glue is made from cattle skin and bones that have been cleaned of all meat and fat. The skins and bones are left out to dry in the spring winds for 3 to 7 weeks. After they are thoroughly dried they are cut into small pieces and boiled in a large kettle for 24 to 36 hours, preferably on a windy hill (for ventilation to get rid of the smell). After 24 to 36 hours, the water is boiled off leaving a thick black or yellow glue stock. When this happens, it is good to try sticking the ‘glue stock’ to something to see if it works. If it is sticky, the mixture can be laid out to dry. After it is dry, it can be packed in bags. When you want to use the glue, you add must add water to the dried compound. It is important to use good clean water without any salt. The best water can be found in the mountains, such as the water found at Khachig Mountain, Delgeer Suuj, and Khukh-Tolgoi.

### 4.5.7 Silver Jewelry

Silver bracelets of the type made by “Tall” Luvsan have been worn by the people of Khanbogd and Bayan-Ovoo soums for many generations (see Figure 23). During our fieldwork, we met people wearing these bracelets, including a wife of Bandia and a herder named Altangerel and several other people in Bayan-Ovoo soum. Such bracelets are commonly inherited from parents and grandparents. For example, when Altangerel was seven years old, his mother gave him a silver bracelet set with a red stone, perhaps coral. He also began
wearing two silver rings when he was in his twenties that have worn thin after many years of use. The tradition of silver-smithing in the Gobi has become famous due to its multi-generational impact, transmitting the knowledge of peoples’ ancestors and their culture through time.

4.5.8 Three Taboos of the Metal-smith

According to Borkhuu, there are three objects metal workers do not want to make: knives, locks, and brands. In his words:

Blacksmiths do not want to make knives, locks or animal brands. Knives can be used for evil purposes like hurting animals and people; locks are a manifestation of people’s jealousy, requiring them to hide things from others; and animal brands convey negative concepts of personal material possession. Therefore, animal brands for cattle, horses, or camels were fairly expensive. Also, when a metal-smith makes a locker, he accompanies it with a file that can break a lock.  

Sukhbaatar of Bayan-Ovoo soum relayed the following story that shows how these taboos are transmitted from generation to generation.

There was a notorious bank robbery in Ömnögovı aimag in 1970s. The prime suspect was a leading metal-smith of that time, Uran Sanj. However, there was insufficient evidence to pursue a conviction and the thief’s true identity was unknown for a decade. Later, the robber was identified as a former intelligence agency officer, Angarag, from Tsogt-Ovoo soum. Many people had assumed that the large, high quality metal lock could have been melted only by Uran Sanj!

4.5.9 Conclusion on Metalworking and Silver-smithing

Traditional Ömnögovı silver-smithing is well-developed today. Batnyam provides a popular silver-smithing workshop that has already trained some 70 apprentices. The residents of the region continue to use the products of former silversmiths for many generations. The crafts, however, are changing. The traditional transmission of metal-smithing knowledge from father to son within a particular lineage has broken down. Now, craftspeople learn their craft from established masters. The change in knowledge transmission has its advantages. The weakness of the traditional means of learning metal working was that if a young male did

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12 Borkhuu, Javkhlanbag, Khanbogd soum, 26 October 2010
13 Sukhbaatar, Bayan-Ovoo soum center, 27 October 2010
not learn from his family or lineage, for whatever reason, that knowledge could be forgotten completely. For example, Rashnyam, the grandson of the famous smith, SunTag, could not talk in detail about his grandfather’s craft except to show us a few of his tools. Because no one inherited SunTag’s knowledge, his skills no longer exist. However, the new ways are not accepted by all. In particular, the older generation does not recognize “newly learned” or “uninherited” craftspeople like Borkhuu, of Javkhlant bag in Khanbogd soum. Eighty-three year-old L. Bataa said of Borkhuu, “I don’t know about him; I just heard that he was coming to people and asking about silver-smithing.”

Regardless of the changes within the silver-smithing tradition, there is little question that there is a viable market for hand-crafted silver products that can be further developed. Crafts, therefore, need to be incorporated into the CHP.

4.6 OTHER MATERIAL CULTURE

4.6.1 Snuff Bottles Passed Down through Many Generations

The use of material culture over many generations is an important aspect of Mongol culture. Snuff bottles are an especially important aspect of Mongolian male cultural heritage, being used by many famous political, cultural, and ancestral icons. Traditionally, Mongolian men greet guests by offering them snuff contained in decorative bottles, most commonly made of stone, while relating with pride the bottle’s history and “ancestry.” According to traditional beliefs, inherited objects carry knowledge, stories and history and relating such information imparts impressions and images of the object’s owner. If it is an inherited object, it imparts to the owner certain social status and respect. For example, an elderly herder named Shagdarsuren, who is a descendant of Chinggis Khaan and grandson of the last banner darga (governor), carries his grandfather’s historical snuff bottle (Figure 24). During the Socialist period, Shagdarsuren had to hide his ancestry, even though he had little knowledge of his ancestors, having learned about them in books. However, he has in his possession the main inherited cultural object of his grandfather—a snuff bottle—which embodies enormous history and heritage.

L. Bataa told us, “My snuff bottle was taken by Dandar. People say the stone is actually ice which lay on the bottom of the ocean for a thousand years and it is called “Hesuuujin.” It has coral cap. In our land, there is a plenty of agate from the east side of Khavch out of which people make snuff bottles, rings, and bracelets.”
4.6.2 The Culture of Animal Brands

The brands of herding families are usually inherited from one generation to the next. Today, herding households use animal brands. As noted during our fieldwork, the herder, Batsukh employs a brand that resembles a fish with eyes and a mouth (Figure 25). The herder, Rashnyam uses a brand shaped like the Cyrillic letter Ƿ. His wife’s ancestors used a single moon brand. The main cattle brands in this area are builan, uilan, moon, and triangle.

4.6.3 Wooden Containers

Wooden containers for fermenting mare’s milk into airag are still used and employed in traditional ways. Sugir, a woodcrafter in Manlai soum center, makes wooden herding utensils and there is demand for his work (Figure 26).

4.6.4 Felt Carpet Making, Dugluur and Toirog

The elder, Juulkhuu, who lives in the Manlai soum center makes traditional Mongolian felt carpets called dugluur and toirog (Figure 27). They are handmade for local consumption rather than for a market system; just a few are produced on special order.

D. Byambaa of Dalanzadgad provided information on felt carpets. He stated: “In the past, people made dugluur and toirog with Tumennast, coin, and wall-set patterns. Then they were made of red-brown cloth called odonchuu which is quite firm. Felt should be the akharyin (early) variety.”
Figure 25: Animal Brands: a) Animal brand of Batsukh, Javkhant bag, Khanbogd soum resembling a fish with eye and mouth; b) Animal brand of Rashnyam shaped like the Cyrillic letter Π

Figure 26: Wooden containers made by Sugir

Figure 27: Juulkhuu and his wife making felt carpets
4.7 MAKING AND LIVING IN A MONGOLIAN GER

Most pastoral peoples in Ömnögovi aimag live in a ger which they purchase mainly in Ulaanbaatar and in Uyanga soum, Övörkhangai province (Figure 28). Ger making is not well-developed in Ömnögovi because of the lack of wood. However, there are people like Sugir of Manlai soum, who make gers on demand. Lenten, a herder from Javkhlan bag in Khanbogd soum, said that people preferentially choose Uyanga gers because they are “strong, gorgeous, and spacious.”

It is quite rare to make and use gers with a khuruu too no (“finger too no,” the circular wooden crown of the ger is connected to thin roof sticks) and no-one makes this type of ger locally in Ömnögovi. We met a young herder in Gun Khar Uus, Khar Zag bag, Bayan-Ovoo, who inherited such a Uyanga ger from his grandparents. The advantage of this type of ger is it can last a lifetime.

![Figure 28: Gers: a) “Finger too no,” belonging to the herder, Munkhbat, Gun Khar Uus, Bayan-Ovoo soum; b) Uyanga ger from Övörkhangai aimag. The herder, Lenten is building a new ger with modern furniture.](image)

4.7.1 Ger Furniture and Facilities

As was mentioned above, most herding families live in a ger (Figure 29). Galaa, a young herder from Manlai soum built a ger at his winter camp site last year. The ger’s interior and furniture retains its traditional structure that is divided into three main parts; the khoimor-north area is dedicated to the host-husband, the right side is for guests and the left is for the wife and children. Beds and wooden boxes for clothing, decorated with intricate patterns, are located in the north. A shrine containing deity images and other ritual paraphernalia and family photographs is placed on a wooden clothing box or on the wall.
MIHT: MONGOLIAN INTERNATIONAL HERITAGE TEAM

Figure 29: The young herder, Münkhbat, and his family live in a ger in Gun Khar Uus, Khar Zag bag, Bayan-Ovoo soum

In the past, most herding households had a 14-inch black-and-white TV set and solar battery charger. Beginning in the fall of 2010, satellite television feeds became a pay-for-service enterprise and an expensive luxury for herders. It is common now for pastoralist households to have both a motorcycle and Korean Hyundai Excel or similar car.

Sarhinagan toono. The toono is placed in the top of the ger and functions as a window. The sarhinagan toono is the toono with the “unis” fastened to it like a hinge. A “Uni” is one of the many long sticks that form the upper side of the ger. The foldable walls are made of whole willows. The door of the ger opens to the south. In moving, the toono with the unis is packed oriented north; it is oriented south when the ger is disassembled.

“Urkh”, the cover of the toono, is square. The door is made of the felt. The pull cord of the urkh is made of white horse bristle, whereas the other 3 cords are made of black bristle. The ger chagtaga, the balancing cord fastened in the center of the toono is made of 7 male camel manes of any color. Correct disassembly of the ger is important and requires pulling
back of the urkh cord in a clockwise direction. Incorrect disassembly and the incorrect pulling of the urkh is done only when someone has died.

The chagtaga is made by the wife’s grandmother. The chagtaga is the symbol of the power. The chagtaga is folded behind the unis showing the shape of “ulzii”, the national pattern. The upper eyelet hangs over the opening through which a three-year-old sheep goes. The floor of the ger is covered with a carpet made of felt pricked with special thread to make the mesh pattern. The ger wooden details are not made here, although the door and two door-jambs are made here.

The doorstep and the two jambs are painted with an ochre pattern and the upper and lower parts of the folding walls are fastened with lace made of hide. Formerly, the guest with the knife has the knife hang over the door, blows his nose, touches his hate to the doorstep with his upward right palm, and enters. The khoshlon of the ger begins from the right side. The walls are assembled beginning with the right (correct side) wall. You should not put your open hands to the two door jambs and you should not sit on the doorstep.

**Uniny segeldreg**: There are two kinds of toonos: the seamed toono (Khorol toono) and sarkhinagan toono. The stove is iron and the place of the stove is respected as the heart of the ger. The mother of the new wife starts the first fire of a new family with her son-in-law’s flint. The wife sits to the left of the fireplace. The host of the family keeper sits to the north-west of the fireplace. The female people sit to the south of the pillars. The western part, for the men, is treated with great respect. There is a bed in the northwest of the ger. The bed for women is in the east of the ger. There was a “Jan”—the shelf for the caldron—and there was another self to the north of the caldron shelf. There was “uheg”, a pram or cradle for the child. The uheg is prepared by the wife’s side. The uheg is covered with felt and the top part of the felt cover is pulled up. The uheg is called “oujin”, in the other hand.

The chest next to the uheg belongs to the wife. The chest next to the diety belongs to the host. The host’s bed is next to the chest and there is another chest next to the host’s bed in which the halters are kept. The “hohuur” for the airag is hung on “tsah”, two wooden crooks to the south of the chest. The “hohuur” is made of the cow hide or camel hide. A monk should not pass on the left side of the ger; he is to sit in the northwest of the ger.

Most herdsmen families live in the gers. Galaa, a young herdsman built a house in his winter camp. The furniture and interior of the ger keep largely to the traditional arrangement. The furniture of the ger consists of the beds in the west and east of the ger, a patterned wooden chest in the north, the board for dishes, the stove and the small wooden table. There is a shrine in the north on the chest or on the special shelf on the wall. The host sits in the north, the guest in the west, and the wife and children are in the east of the ger.
4.8 FOODS

4.8.1 Und – Milk tea with rice and meat

Und is one of the main daily foods of Ömnögovi people, prepared by putting fresh or dried meat (called borts) and rice into milk tea. Byambasuren, the wife of herder, Enkhbayasgalan, told us “without und, a day barely passes,” and laughed.

How is und prepared? According to Enkhbayasgalan (Figure 30),

First, fairly strong green tea should be brewed. If the tea is not greasy, it cannot make good und; it will be like hyaram. Then, the boiled tea should be put in a different pan for a while. Now, fat and rice should be fried. If the rice is well fried, the und will be delicious. While the rice is frying in fat, the green tea is brewed. Milk is added to the tea when the tea is done, or the tea will have a red color. The milky tea is then added to the fried rice and fat mixture and boiled for 20–25 minutes.

Due to the recent proliferation of information promoting healthy eating and vegetarian foods, some local people worry that changes in behavior might negatively influence the tradition of und consumption, targeting its combination of milk and meat as an inherently unhealthy mix. However, according to the results of our fieldwork, most pastoralist families eschew such ideas and continue to follow very traditional diets. In the morning, herding families have milk tea with fritter-cookies and at lunch they eat und. Sometimes when und is consumed at midday, people do not eat meat again in the evening, especially in summer. The traditional Ömnögovi diet consists of meat, flour and rice and prepared und, noodle soup, tsuivan, buuz, and khuushuur.

4.8.2 Preparing Tsulkhir and Bajuun Flour

Tsulkhir (Goosefoot, Agriophyllum vungens) is a chenopod which grows abundantly in the Gobi region (Figure 31). Local people gather and use it for food and as a medical treatment. Inhabitants of the Gobi used tsulkhir as rice and flour during World War II. Also, tsulkhir is famous for its medicinal characteristics, including lowering body temperature and cleansing the five inner organs.

The grandmother of Altangerel, and his wife Nasan-Ulzii, Tsendeehuu of Khanbogd, Javkhlan bag, and Bataa and Rashnyam of Bayan-Ovoo soum told us about Tsulkhir “rice” and flour preparation technology and use.
Figure 30: The preparation of und.

Figure 31: The preparation of Tsulkhir flour and rice: a) Tseden-Ish gatherers and prepares Tsulkhir flour in Nalikh bag, Bayan-Ovoo soum; b) Gathered and dried Tsulkhir; c) Tsulkhir “rice”
4.9 SOCIETY, RELIGION, AND LANGUAGE

4.9.1 Religions of Ömnögovi aimag

Ömnögovi aimag is primarily a Buddhist landscape, but Buddhism has not always been the main religion of the residents of the Gobi. As is the case elsewhere in Mongolia, many Buddhist monasteries were founded in Ömnögovi aimag during the 18th–20th centuries (Figure 32). The monasteries followed their own laws and rules. “Jayag”, the rule followed in temples in the South Gobi, was identical to practices followed in central and west Mongolia. The monk who did not follow the “jayag” was punished with “baa”—which included lighting hundreds of temple candles “zul”, giving money to the temple, praying hundreds of times, preparing breakfast for other monks, and being beaten. If a monk violated the jayag that exceeds its baa, he was excluded from the temple forever as in other parts of Mongolia.

The Buddhist temples were abandoned, with most being destroyed, during the Soviet period. With independence in 1990, many temples have re-opened. At present, Demchig, Puntsagtegchilen and Ulgii monasteries have revived their religious activities in the area. According to the folkloric recollections of Bayan-Ovoo and Manlai elders, it seems that Shankh Monastery in Tsogt-tsetsii soum was a key center for the ritual and festival activities of people living in this region. Also mentioned are Urtyin and Ehen Zagiin Monasteries in Nomgon soum, although in the pre-Revolutionary Period, all of these monasteries comprised a single Buddhist culture area. Elders in Bayan-Ovoo soum retain precious stories regarding the history and traditions of Nalikh and Doloon Shag Zag Monasteries in this area. L. Bataa and Tseden-Ish studied at Nalikh and Doloon Shar Zag Monasteries in their childhood. As L. Bataa retains substantial religious knowledge about this area, he provided input as to which ovoos (rock cairns) were worshipped in Bayan-Ovoo soum. He said since the original dedicatory prayers are forgotten, it is not possible to revive the rituals associated with the ovoos of Bayan-Ovoo soum because if the prayers are forgotten, no ritual ceremonies should take place. Three main ovoos located in three bags (work brigades) of Bayan-Ovoo soum are places where curses were buried by one of the leading monks of Doloon Sha Zag Monastery following arguments with the banner darga (governor).

There are now around 20 shamans living in Khanbogd soum and they conduct shamanistic rituals such as calling spirits, ongod duudakh. There are shamans from outside the soum that are identified with Khanbogd as well and one ovo in Manlai soum was said to have been constructed by Khanbogd shamans. We asked permission to meet with Ochira, a Khanbogd shaman, however he declined on the grounds that it is inappropriate to meet and associate with outsiders. We plan further study of shamans’ remaining knowledge of this area.
4.9.2 Deities

During the 20th century Socialist modernization of Mongolia an atheist ideology prevailed. Mongolians were not free to worship their traditional deities; all families were forced to abandon their traditional belief-systems. Many people hid icons and deity-statues, only resurrecting them in the 1990s and placing them back in their ger’s shrine area, called the khoimor (Figure 33). Most Ömnögovi families worshipped the Buddhist Altangerel, Dorjzod, and Dorjjavd sutras and the deity, Ochirvaani or Bazarvaani (Skt. Vajrapani). It is interesting that most deity images that survived the anti-religious ideology of the Socialists were those that were passed down within a family.

Buddhism has not always been the main religion of the residents of the Gobi. The main shrine object of the Gobi residents has been the Gobi Saint Lord Danzanravjaa. Some local residents go to the “Three Saridag temples” established by Danzanravjaa to pray. In addition, there is the Khotny ovoo”, the hill in the north of the family area. The family members have donated their food essence, wishes and aims on the first day of a new year until now.

The Buddhist religion became common from 18th to the beginning of the 20th century and established many temples. The Demchig, Puntsagteghilen, Ulgii temples in Khanbogd soum re-established their activities in 1990. As shown in the stories about the participation of the residents from Bayan-Ovoo and Manlai soums in the tsam, maidar cortege ritual in the Shankh temples, the Shankh temple was a religious centre of two soums. The Urtyn, Ekhen and Zagiin temples of Nomgon soum were often mentioned which proves the Nomgon was one region of Buddhist religion before the revolution. There is no longer anyone who knows the content of the writings of the main sacrificial “ovoo”, the sacred place in Bayan-Ovoo soum. Therefore the sacred ritual of this ovoo cannot be continued anymore.
Nonetheless, some shamans are doing rituals on the ovoo last years and there are 7 or 8 shamans now in Khanbogd soum. Some of them came from other soums and some of them are natives of the soum.

One of the ritual locations that has continued to be used/practised is sacrificing at specific trees and plants. Residents have until recently donated their food essences to the “toroi” tree and almond tree as sacred objects.

4.10 CHRISTIAN CHURCHES

Three Christian churches were established between 2003 and 2007 in Khanbogd, Manlai, and Dalanzadgad (Table 8). There are 59 worshipers, one head or pastor and one assistant. Children, healing, and prayer services take place on Fridays and Saturdays. In addition, training
Table 8: Christian Churches in the South Gobi

<table>
<thead>
<tr>
<th>Name of the Christian Religion Service</th>
<th>The Established Year</th>
<th>Number of Workers</th>
<th>Number of Worshipers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manlai “Salvation glow” home church</td>
<td>2007</td>
<td>Pastor 1</td>
<td>50-60</td>
</tr>
<tr>
<td>Khanbogd</td>
<td>2006</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dalanzadgad “Jesus salvation” church</td>
<td></td>
<td></td>
<td>80</td>
</tr>
</tbody>
</table>

and caring activities take place throughout the week. These churches are financed by tithing (10%), the Mongolian Gospel organization, World Vision, Forever Truth and other faith-based organizations. The churches also cooperate with the foreign Concord column cooperation service and associated Korean organizations, citizens, worshipers, and students. The churches are trying to increase the number of Christians in the South Gobi, by training 3 teams to organize services and community outreach programs. The churches wish to work closely with the soum administrations, but the leaders have had difficulties overcoming the protests of the atheists and getting people to understand the precepts of benefaction, help, donation, and accommodation.

4.10.1 Worshipers and believers

Buddhism is the most widely practiced religion in the South Gobi (Table 9), although few practice with a teacher (Table 10). Just over half the people who identified themselves as Buddhists said they take part in the religious ritual for their annual/yearly horoscope. A much smaller percentage practiced to overcome difficult problems in life (Table 11).

Christianity and Shamanism have much fewer followers than Buddhism. Atheism remains strong in the South Gobi, particularly in Bayaan-Ovoo soum.

Table 9: Religious Followers by Religion and Soum

<table>
<thead>
<tr>
<th>Name of the Soum</th>
<th>Atheist</th>
<th>Buddhism</th>
<th>Christian</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bayan-Ovoo</td>
<td>67.4</td>
<td>26.1</td>
<td>6.5</td>
<td></td>
</tr>
<tr>
<td>Manlai</td>
<td>26.6</td>
<td>73.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Khanbogd</td>
<td>11.9</td>
<td>86.2</td>
<td>1.8</td>
<td></td>
</tr>
<tr>
<td>Dalanzadgad</td>
<td>20.5</td>
<td>73.3</td>
<td>5.4</td>
<td>0.8</td>
</tr>
</tbody>
</table>
Table 10: Buddhists Following a Teacher

<table>
<thead>
<tr>
<th>Name of the Soum</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bayan-Ovoo</td>
<td>7.1</td>
<td>92.9</td>
</tr>
<tr>
<td>Manlai</td>
<td>12.5</td>
<td>87.5</td>
</tr>
<tr>
<td>Khanbogd</td>
<td>22.9</td>
<td>77.1</td>
</tr>
<tr>
<td>Dalanzadgad</td>
<td>28.9</td>
<td>71.1</td>
</tr>
</tbody>
</table>

Table 11: Reasons to Observe Religious Rituals in Bayan-Ovoo and Manlai Soums

<table>
<thead>
<tr>
<th>Soum</th>
<th>Listening to Prayers by Monks of Different Ranks</th>
<th>To be Under the Power of Shamans (zairan, udgan)</th>
<th>Listening to the Church Sermons</th>
<th>Going to the Fortune Tellers</th>
<th>Participating in Sri-Sri Meditation</th>
<th>Being Under the Ritual of Feng Shui</th>
<th>Number of Participants in the Questionnaire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bayan-Ovoo</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Manlai</td>
<td>1</td>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>8</td>
</tr>
</tbody>
</table>

Ownership and Laws

Each of the soums of the South Gobi has their own administrative organization, governor’s department and “ovoo” for holding sacrificial ceremonies. The residents of the South Gobi have been fortunate; they have had more rights than residents in other parts of Mongolia to “own” their winter camps and other traditional places and they have never had to fight for their land.

Traditionally, there have been no formal rules for the division of winter camps. Nobles, officers, and assistants of khoshuns commonly owned their favorite winter camps, named sheds after them, and wrote their names on the “boards”. Nobody moved to a camp that had a “name board.” This tradition connects current practices with the ancient rule of the kings.

Herdsmen in the South Gobi “own” their sheds and can pass them on to the next generation. Anybody can choose a camp near a water resource and put a stone named “on.” No one has the right to assemble his ger on the place that is marked with an “on” stone. In addition, no family can unload their belongings before the marking with an “on” stone.

The South Gobi traditions connected with wells and other water source also are peculiar to the region. In a land lacking water, it is not surprising that conflicts emerged when
ownership rights were asserted for a well. Although no one could own a well, several families often banded together to use water from a particular well. The essential fact in these cases was that the water remained public.

In the course of our work, we found some interesting rules enacted by lords and nobles in the South Gobi. For example, the Governor’s department of the Daichin beil khoshun is situated in a place named “Governor’s old shed”. This governor’s department had its own internal structure and laws. Punishment depended on the local circumstance connected with the particular crime involving stealing, games of chance, and disrespect of high-ranking aristocrats. These punishments were same as meted out in the other part of Mongolia.

4.11 REVIVAL OF LINEAGE NAMES AND KINSHIP RELATIONS

Kinship relations were fundamentally important to the social structure of traditional Mongolian nomadic society. In the 1990s a government-initiated campaign was launched to revive lineage names and today every citizen of Mongolia uses a lineage name in addition to his or her father’s name (patronymic). Therefore, the investigation of lineage names and kinship relations in Ömnögovi can be a productive research avenue from which pre-modern social networks and their traces and new functions can be discerned.

Sukhbaatar of Bayan-Ovoo soum (Figure 34), who has noble roots, told us,

*By my account, there are three main lineages in Bayan-Ovoo: Ulaan Daavuu, Undur Manuul (Borjigin), and Yokhchuud (which has Turkic origins). However, at the moment, there are 120–130 names in use. I won’t say that the kinship name re-identification process was wrong. But the process by which lineage names were investigated and identified was misleading, which in turn could endanger the nation’s ability to maintain traditional Mongolian society. The purpose of identifying traditional lineage names was correct, but it was implemented in the wrong way. Another example is Erdenedalai soum in Dundgovi aimag. There are five main lineages in Dundgovi, but local people self-identified as members of many more kinship networks. There is a traditional fundamental Mongolian taboo against marrying within a single lineage for at least three generations. People who do so are termed alag maria and others are reluctant to visit such families within the first three days of the Tsagaan Sar (Lunar New Year) celebration.*

According to our research in Ömnögovi, the herders Otgooloi and Bandia are Uriankhai nationality (one of Mongolia’s ethnic minorities) of Udaid lineage; they associate with an ovoo that is worshipped by members of their lineage. This example demonstrates the kinship continuity of this area.
Language

The language of the South Gobi is a regional dialect of Mongolian. Traditionally, it is distinctive in a vocabulary rooted in the land, its topography and its plants, and most importantly of all, in the herding economy that has developed and flourished in the harsh landscape. Much of the distinctiveness of South Gobi dialect lies in the peculiar accent. For example, residents in the South Gobi say “baranshaa” or “barantga” instead of the more common Mongolian phrase “baruun tiish” (the meaning is “to the right”). The endings—caap, -ceep, -coop ( -saar, -seer, -soor) with the meaning of continuance are spoken as –a, -e, -o, -o. For example, the word “yavaas baiqaa’d” (keeping going) is spoken as -yawa baiqaa’d, “Ugsuur baiqaa’d” (keeping walking up) as ogso baiqaa’d. Such minor differences distinguish the South Gobi dialect from the main Mongolian language. Immigrants, however, do not recognize these nuances and currently, the South Gobi dialect is losing its distinctiveness and becoming more homogenized with greater Mongolian.

4.12 SONGS AND SINGERS

The Mongolian long and short songs are connected with the nation’s lifestyle, custom and conditions. In the Khanbogd, Manlai and Bayan-Ovoo soums, Mongolian songs are sung in many different versions depending on the tradition. Many long and short songs are sung only in specific soums of the South Gobi. For example, the songs “Ergelengiin deeguur (Above the Ergelen),” “Gishgedel sait ureen zeerd (The powerful four-year chestnut horse),” “Kholch mori (Long distance horse)” are sung only in Khanbogd soum and “Naranzul hul (Sunny light-brown horse)” only in Manlai soum, “Hurdan saikhan (The quick and nice)” only
in Bayan-Ovoo. Many of the songs tell of legends connected with the mountains, rivers and people of Gobi. The tradition to teach the songs and poems to the next generation has not interrupted.

### 4.12.1 Urtyn duu Ballads and Blessing Poems

Ömnögovi aimag has a long tradition of singers and songs. We talked about the ballads called *urtynduu*, or “long songs” of this area with Sukhbaatar and Tseenzen of Bayan-Ovoo soum and Byamba of Dalanzadgad soum (Figure 35). Sukhbaatar has noble roots and he inherited a compilation of *urtynduu* ballads from his ancestors. He said, “The compilation includes *urtynduu* lyrics which were forbidden during the Socialist period due to the religious themes, which were then unknown to the public. Also, the authorities believed that some songs had been altered either deliberately or accidentally to embarrass them.”

Tseenzen and his two brothers are *urtynduu* balladeers; one, Tserendorj, has been awarded the title, State Great *Morin Khuur* (Mongolian horse-headed fiddle) Player. In September 2010, Tseenzen participated in the “Three Urtyn Duu Gobi-Shankh” contest in Tsogt-Tsetsii soum sponsored by Energy Resource Co., Ltd and was awarded a Third Place prize. He clarified the distinctiveness of the Gobi-Shankh *urtynduu* ballads.

These three songs were composed by the Geser Lama (a Buddhist monk), “Undriin Saikhan” (High Beautiful), “Hulch Bor” (Light-Brown Horse), and “Khurdan Saikhan” (Beautiful Racer). Today, nobody can sing “Undriin Saikhan” properly. On the eve of the contest, preparations were taking place and all attendees were involved. I sang “Undriin Saikhan.” Some very quick-minded younger singers recorded my performance and repeated it. However, nobody could find the proper melody and techniques. It appears to me that the Gobi *urtynduu* tradition is going to be lost.”

Tseenzen then told a story of how these songs were composed:

> There was a rich man named Geser Gelen who lived in Shavkhda, Ar Shiree of Shankh. He had a very fast horse. Once Geser Gelen had an argument with a person in Sangyin Dalai and was accused of that person’s murder. He caught his swift horse and reached Bogdyin Khuree (current Ulaanbaatar) in one day. There, he was arrested while attacking Chinese traders, He showed that on the day he was in Ikh Khuree he could not have murdered anyone. He survived by paying back what he had robbed from the Chinese traders and then composed three songs about that horse.

L. Bataa learned *urtynduu* singing in a very interesting way. When he was a child, his grandfather asked him to recite the lyrics of long songs and checked his progress constantly.
Later, when he visited festivals, he could learn the melodies quickly since he already knew the lyrics. He collected urtyn duu lyrics in this area in his free time and expressed to us his interest in publishing them. Batnaa has become blind over the last 20 years and he likes to cajole people into writing down the lyrics and asked us to do so. Accordingly, we transcribed the lyrics of the urtyn duu ballads, "Tumnii Eh," "Undriin Uvs," "Hulch Mori," "Shavi Khuriin Magnai," "Shashin Turiiin Duu," "Turiiin Tovchoo," and "Yurtuntsyin Gurvan Zavkhai" and related stories. (His compilation is in the hands of his granddaughter, Otgontsetseg).

Another urtyn duu balladeer in Dalanzadgad, D. Byambaa, attended the September 2010 contest as well. Now he is working as an urtyn duu teacher in the 3rd School of Dalanzadgad. He said the Gobi urtyn duu tradition is going to be lost, so he decided to train children to sing ballads. He said past great singers included Khanshin, Tavanjin, and Zurgaanjin. Today there are urtyn duu singers Banzragch and Bat-Ulzii.

Aviraa learned to sing urtyn duu when she came to Khanbogd from Khankhongor in 1964. She also has unique skills and knowledge of throat singing (khooloin tsuur). She agreed to record her urtyn duu and throat singing.

When I first started, I learned to sing urtyn duu from Maljig, so it is possible to say that I learned from a local person. Maljig taught me the urtyn duu of "Ereglengiin Deeguur" which was composed by Danzanravjaa. I learned "Guidel Sait Ureen Zeerd" from my mother-in-law, Ijiihuu, and then "Shar Talyin Tsetseg" from Ulzan. These songs are not sung in other places. One of my songs is broadcast on Mongolian radio; sometimes I hear my own singing (smiling). That’s when I was young. Danzanravjaa’s songs are often associated
with the Eastern Gobi. I know two choruses of “Ereglengiin Deeguur.” There was a person who knew the whole lyrics, named Nadmis, but unfortunately, he passed away recently. Also, he had a compilation of urtyn duu lyrics. He always told me that I should write lyrics down, I am like “a wolf in sheep’s clothing.”

We were told that Tsedengombo and Idertsog of Khanbogd soum are adept at the Blessing Poem (yeruul) literary form and S. Batsukh of Javkhlangt bag in Khanbogd composed a yeruul dedicated to the people of that soum.

**Songs and Feasts**

Every feast has beginning, climax, and ending songs that have survived to the present. There are sayings about the sequence of the songs/singing in the feast as ““Tumen ekh” begins, “Khuur magnai” shows that the end is approaching, and “Zun tsag” closes the feast. In the south part of Tusheet Khan province, “Arvan hoyor jil (12 years)” is sung at midnight (at Rat hour), “Uulen bor” before the down, “Bor Byalzuuhai” at the dawn, and “Naman takhil” at sun rise, usually closing the feast according the strict observance. The songs “Алтан боgd”, “Богдон үүлэн сундэр”, “Хан үүл”, “Урт сайхан хүрэн”, “Богдын өндер”, “Бор өлөөхэй”, “Гарав зул хул”, “Тумэн эх” begin the feast. “Холч морь”, “Хурдан сайхан”, “Ялбуулсан эрхэй”, “Уяхан замбатив”, “Жаргалтай дэлгэр”, “Эр бор харцага”, “Гишгээл сайг”, “Ар хөвч”, “Хүрмэст тэнгэр”, “Хэндийн өндер” are sang in the middle of the feast. The song “Хурдан сайхан” finishes the feast.

According the custom when the “Kholch mori” is sung, airag is given to every guest and the guest has to drink the cup completely on his own. The family that filled "Darkhan hul" gives the airag in the hul, the big wooden cup, to guests passing clockwise not to “freeze the Darkhan hul”. Everyone drinks the airag in this hul together and then it is refilled with airag. Some families give a full cup of airag of “Darkhan hul” to everyone, which is called “dagnaa”.

**Instruments**

Morin khuur, khuuchir, bamboo and metal flutes, mouth organs and other musical instruments are found throughout the South Gobi, ranging from collectors items in the South Gobi Museum to inexpensive instruments tucked away in individual’s cabinets and rooms. In addition to the more common instruments, we recorded 10 other types of musical instruments during the course of our fieldwork, including copper horn, gandan, tsam, selmen dun, duu, duran khengereg, bronze khengereg and kharanga.
Traditional music often requires an ensemble of instruments. Such ensembles are well recorded in the oral tradition. For example, according to the traditional folktale, there was a music group of more than 40 musicians in the “Play ground” of the Saint Lord Danzanravjaa.

Many families own a morin khuur with a green horse head. The morin khuur is one of the most respected objects in a Mongolian family and every man who visited a family with a morin khuur must touch the instrument, whether he can play it or not, to make all his activities of the day successful. The residents of South Gobi follow this tradition faithfully.

There are many interesting melodies in the South Gobi, such as “Khoni hurga niiluuleh (Meeting of sheep and lambs)”, “Inge builuulah (Sound by the mother camel)”, and “Unee tugal Mooruleh (Lowing of the cow and calf)”. One of the more interesting songs is “Ayaga builuulakh (Singing of a cup as a camel)” of the south Khalha. The singer puts on his left palm a half of the well washed china cup water and moves his fourth finger tampered by the water in the cup clockwise. It will give the melody “Ayaga builuulakh (Singing of a cup as a camel)”. This melody was used when the herdsman sang the special song for the mother camel that abandons her baby camel.

4.13 GAMES

4.13.1 Stone Ger Building and Other Games

The game of Building Stone Gers is a precious intangible heritage (Figure 36). It is imbued with cultural knowledge and concrete practices of the ethics and morality of the Mongol household, including respecting guests and engaging in elaborate greetings. Teenagers mainly engage in this play, behaving as a family, with a “husband” and “wife” performing greetings, affording respect to men, entertaining guests, etc. During our visits to herding households in Ömnögovi we investigated the game and its practice among current teenagers. Bandia and Bunten, herders of Javkhlan bag in Khanbogd soum and Tseden-Ish of Nalikh bag in Bayan-Ovoo soum have maintained the places where their children built stone gers. They told us, “Now children no longer play the Stone Ger Building Game; it was alive only until the 1960-70s.”

Baladeer Tseenzen’s sons make traditional wooden and metal puzzles of the sort they played with themselves (Figure 37). Also, every herding family has a shagai (ankle bone game), a traditional game of Mongolian herders. However, the herders admit that ankle bone games, including shagai, are no longer popular among their children. The daughters of herder Enkhbayasgalan of Manlai soum said that they know how to play various ankle bone games such as “horse race” and “catch the ankle bone,” etc.
Figure 36: Remains of a stone *ger* made by Tumurtogtokh Tseden-Ish in Nalikh
*bag*, Bayan-Ovoo soum.

Figure 37: Daughters of herder, Enkhbayasgalan of Manlai soum playing with astragali
(ankle bones). The wooden and metal puzzles were made by sons of Tseenzen, Khar
Zag *bag*, Bayan-Ovoo soum.
4.13.2 *Shagai* (Ankle Bone Shooting)

*Shagai*, the ankle bone shooting game, became quite popular among Mongolian men in the 1990s as a sport (Figure 38). This is interesting since during the Socialist period everything associated with traditional Mongolian culture was branded backward and undeveloped; consequently such activities were not popular or well-known by most people. *Shagai* evolved into a fourth type of national holiday game for Mongolia; its popularity during Naadam was one reason (see reports on Naadam, Appendices 11 and 12). Even so, it is still interesting why *shagai* is so popular today. This game was well-developed and broadly distributed in Khanbogd and other OT Direct Impact Zone soums. The herder, Bandia is a member of the champion Khanbogd *shagai* team and has many students now. *Shagai* players say that engaging in the sport heightens players’ respect for elders, as well as the ability to be disciplined and patient.

4.14 TABOOS OF ÖMNÖGOVI PEOPLE

The taboo system is the part of culture that carries ethics, meaning and symbolism unique to that culture. It is important to develop within the CHP a component to enhance understanding of the taboo system’s meaning and structure.

Fieldwork explored taboos related to the consumption of camel meat (e.g., it is inappropriate to consume camel meat in the presence of a deity); that the Stone *Ger* Building Game’s stones should not be abandoned in an old camp; one should not carry a chiru (*Tibetan Antelope, Pantholops hodgsonii*) horn on camelback since it can hurt pregnant mares; and buils tree should not be used (or at least it is not the preferred wood) for firewood.

Bandia, a herder from Javkhlant *bag* in Khanbogd soum, told us that once Dolio Myatav of Manlai soum left his son’s two camel stones from the Stone *Ger* Building Game at an old campsite and his son then became an invalid. Camel meat was thought of as impure and people would often refuse to visit a family known to consume camel meat. Because Ömnögovi people regard the camel as a focal point of South Gobi culture, it is interesting that camel meat is seen as impure. We need to further investigate the circumstances of this camel meat taboo, including when and under what circumstances it first appeared and its underlying meaning.

Other taboos we encountered in our survey include the belief that a sheep’s head should be put on one’s knee when it is slaughtered; a prohibition against urinating on the top of hills and mountains; and the preclusion of hunting wild sheep and gazelle as they migrate from one mountain to the next.
4.15 ÜVT GAZRUUD: TRADITIONAL SACRED PLACES IN ÖMNÖGOVI AIMAG

The ethnographic team has invented a phrase to describe geographically specific places of religious, ritual, and ceremonial importance—this is üvt gazruud meaning ‘inherited places.’ Table 12 compiles a list of traditional sacred places in Ömnögovi aimag that were recorded during Phase 1. This list is by no means complete—other sacred sites are expected to be present within the study area, but local people were naturally reluctant to tell the researchers everything upon first meeting. Table 12 demonstrates, however, that there are places on the landscape that have spiritual or sacred value to local residents. Many of the sacred places are mountains, a common feature among nomadic societies. Springs and other water sources are another type of physical feature that are embued with cultural and spiritual values. Others sacred places include archaeological and built environments, such as cairns, ovoos, or cemeteries. We suspect that as locals become more comfortable speaking about cultural heritage, many more sacred places will be encountered. Figure 39 provides photographs of a sample of these sacred places.
### Table 12: Traditional Sacred Places – Ŭvt Gazruud in Ömnögovi Aimag

<table>
<thead>
<tr>
<th>Name of Sacred Place</th>
<th>Location</th>
<th>Information Source</th>
<th>Related Rituals, Performances, and Taboos</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Undur Bogd Uul</td>
<td></td>
<td>Vice <em>Darga</em> of Manlai soum, Uulii; Herders, Altangerel and Galaa</td>
<td>Sacred mountain</td>
</tr>
<tr>
<td>2 Khankhoryin Ovoo</td>
<td></td>
<td>Herder Galaa</td>
<td>Worshipped by Khanbogd soum shamans</td>
</tr>
<tr>
<td>3 Zaanyi Ovoo</td>
<td></td>
<td>Herder Enkhbayasgalan</td>
<td>No ritual activities</td>
</tr>
<tr>
<td>4 Javkhlant Uul</td>
<td></td>
<td>Herders Bunten and Bandia</td>
<td>Biannual ritual activity</td>
</tr>
<tr>
<td>5 Khanbogd Mountain</td>
<td></td>
<td>Herders Bunten and Bandia</td>
<td>Biannual ritual activity</td>
</tr>
<tr>
<td>6 Nomgon Mountain</td>
<td></td>
<td>Herders Bunten and Bandia</td>
<td>Annual ritual, sponsored in 2010 by Bayasgalan and Saikhandelger</td>
</tr>
<tr>
<td>7 Gyalainitoirom</td>
<td></td>
<td>Sukhbaatar, tax official in soum center</td>
<td>Public burial ground</td>
</tr>
<tr>
<td>8 Ikh Ulziit</td>
<td></td>
<td>Herders Altangerel and Galaa, Manlai soum</td>
<td></td>
</tr>
<tr>
<td>9 Ikh Ovoot</td>
<td></td>
<td>Herders Altangerel and Galaa</td>
<td>Sacred mountain</td>
</tr>
<tr>
<td>10 Maanituyin Ovoo</td>
<td></td>
<td>Herder Altangerel, Javkhlant <em>bag</em>, Khanbogd soum</td>
<td>Burial ground and sacred place dedicated to ancestors</td>
</tr>
<tr>
<td>11 Alag Deliin Ovoo</td>
<td></td>
<td>Herder Altangerel, Javkhlant <em>bag</em>, Khanbogd soum</td>
<td>Sacred place, no ritual activities</td>
</tr>
<tr>
<td>12 Shavgiin <em>Duulgaa</em> (One of three sacred <em>Duulgaa</em>)</td>
<td></td>
<td>Altangerel, anonymous herder, Javkhlant <em>bag</em>, Khanbogd</td>
<td>Sacred mountain, no ritual activities</td>
</tr>
<tr>
<td>13 Khachivtsiin <em>Duulgaa</em></td>
<td></td>
<td>Altangerel, anonymous herder, Javkhlant <em>bag</em>, Khanbogd</td>
<td>Sacred mountain, no ritual activities</td>
</tr>
<tr>
<td>Name of Sacred Place</td>
<td>Location</td>
<td>Information Source</td>
<td>Related Rituals, Performances, and Taboos</td>
</tr>
<tr>
<td>----------------------</td>
<td>----------</td>
<td>--------------------</td>
<td>-----------------------------------------</td>
</tr>
<tr>
<td>Dalain <em>Duulga</em></td>
<td>Javkhlan <em>bag</em>, Khanbogd soum</td>
<td>Altangerel, anonymous herder, Javkhlan <em>bag</em>, Khanbogd</td>
<td>Sacred mountain, no ritual activities</td>
</tr>
<tr>
<td>Khuren Khairkhan Ovoo</td>
<td>Khanbogd soum</td>
<td>Camel-herder, Otgoooli</td>
<td>Ovoo for members of Udaid lineage, irregular ritual schedule</td>
</tr>
<tr>
<td>Bor Khoshuunii Ovoo</td>
<td>Javkhlan <em>bag</em>, Khanbogd soum</td>
<td>Herder Lenten in Enger Bag Mod, Javkhlan <em>bag</em>, Khanbogd soum</td>
<td>Sacred cairn, no ritual activities</td>
</tr>
<tr>
<td>Tolyin Uus</td>
<td>Javkhlan <em>bag</em> Modnyi Huuvur,</td>
<td>Herder Bandia, camping in Enger Bag Mod, Javkhlan <em>bag</em>, Khanbogd soum.</td>
<td>Well-known source of water said to be used by wild horses</td>
</tr>
<tr>
<td>Yamaat Ulaanyi Cave</td>
<td>Khanbogd soum</td>
<td>Herder Batsukh, Javkhlan <em>bag</em>, Khanbogd</td>
<td>Worshipped by Bayan-Ovoo residents, including Shaabaatar</td>
</tr>
<tr>
<td>Togoo Khairkhan</td>
<td>Khanbogd soum</td>
<td>Herder Rashnyam</td>
<td>Mogoi <em>bag</em> residents worship here, with rituals</td>
</tr>
<tr>
<td>Sharkhadnyi Buuts</td>
<td>Khanbogd soum</td>
<td>Herder Rashnyam</td>
<td>Sacred place, no ritual activity</td>
</tr>
<tr>
<td>Uneged and Seruun Khairkhan</td>
<td>Khanbogd soum</td>
<td>Herder L. Bataa</td>
<td>Sacred place, no ritual activity</td>
</tr>
<tr>
<td>Tsagaan-Ovoo</td>
<td>Khanbogd soum</td>
<td>Sukhbaatar, tax official of Bayan-Ovoo soum</td>
<td>Mogoi <em>bag</em> burial ground</td>
</tr>
<tr>
<td>Shar Del</td>
<td>Khanbogd soum</td>
<td>Sukhbaatar, tax official of Bayan-Ovoo soum</td>
<td></td>
</tr>
<tr>
<td>Khadan Tsohioniyo Denj</td>
<td>Khanbogd soum</td>
<td>Sukhbaatar, tax official of Bayan-Ovoo soum</td>
<td></td>
</tr>
<tr>
<td>Zuun Toli</td>
<td>Khanbogd soum</td>
<td>Sukhbaatar, tax official of Bayan-Ovoo soum</td>
<td></td>
</tr>
<tr>
<td>Name of Sacred Place</td>
<td>Location</td>
<td>Information Source</td>
<td>Related Rituals, Performances, and Taboos</td>
</tr>
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</tr>
<tr>
<td>25 Khar-Ovoo</td>
<td>Khar Zag bag, burial ground</td>
<td>Sukhbaatar, tax official of Bayan-Ovoo soum</td>
<td></td>
</tr>
<tr>
<td>26 Ruins of Doloon Shar</td>
<td>Nalikh bag, Bayan-Ovoo soum</td>
<td>Herder L. Bataa</td>
<td></td>
</tr>
<tr>
<td>27 Ruins of Nalikh</td>
<td>Nalikh bag, Bayan-Ovoo soum</td>
<td>Herder Tseden-Ish</td>
<td></td>
</tr>
<tr>
<td>28 Shuvuun Numt Ovoo</td>
<td>Near Rashnyam’s winter camp, Khar Zag bag, Bayan-Ovoo soum</td>
<td>Herder Rashnyam, and environment officer of Bayan-Ovoo soum</td>
<td>It is said that Chinggis Khaan worshipped at this cairn to call war spirits. Rashnyam is from Mangud</td>
</tr>
<tr>
<td>29 Bukh Khairkhan</td>
<td>Nalikh bag, Bayan-Ovoo soum</td>
<td>L. Bataa</td>
<td>Sacred, but no ritual activities due to lack of proper sacred text</td>
</tr>
<tr>
<td>30 Ashig Khairkhan</td>
<td>Nalikh bag, Bayan-Ovoo soum</td>
<td>Herder Ts. Münkhbat</td>
<td>Worshipped by residents of Khar Zag bag</td>
</tr>
<tr>
<td>31 Khukh Ovoo</td>
<td>Nalikh bag, Bayan-Ovoo soum</td>
<td>Herder Ts. Münkhbat</td>
<td>Worshipped by residents of Nalikh bag</td>
</tr>
<tr>
<td>32 Ulziit Khairkhan</td>
<td>Nalikh bag, Bayan-Ovoo soum</td>
<td>Herder L. Bataa</td>
<td>Also called the “cairn for children,” it is said to have been worshipped by Ganjirvaa incarnate</td>
</tr>
</tbody>
</table>
Figure 39: Sacred places of Ömnögovi aimag: a) Zaanyi Ovoo and Shirnen Khoovon’s horse hiding place, Manlai soum; b) Maanityin Ovoo, herder Ts. Altangerel’s ancestral burial ground and ritual cairn; c: not known; d) Three duulga in Javkhlant bag, Khanbogd soum; sacred mountains; e) Shuvuun Numt Ovoo, Khar Zag bag, Bayan-Ovoo soum; f) not known g) Uneged Khairkhan, Nalikh bag, Bayan-Ovoo soum.
4.16 TRADITIONAL SACRED PLACES IN THE OT DIRECT IMPACT ZONE

Table 13 presents similar information for a portion of the OT direct impact area comprising the 10-km corridor along road and transmission line between OT and Gashuun Sukhai (GS). As opposed to the regional sacred and taboo sites in Ömnögovi aimag, which tend to be of importance to more regional social groups, the sites in this impact area are a mixture of sites important to individual familial groups and local lineages. They tend to be spots on the landscape where mythical or historic events to place, which reinforce social mores and norms. Recently, OT sponsored an ethnographic survey of the direct impact zone, which is being conducted by MASIH. Eighty-five families were interviewed and some 160 sacred and taboo locations were identified (Tserennadmid O, personal communication 2011). These are presented in Table 14 (OT-GS Road, Airport, Power Towers, and Pipeline) and Table 15 (within 15 km of the OT-GS Road and Power Towers). We suspect that more sacred and traditional sites will be identified as mine development progresses.

4.17 ASSESSING CULTURE CHANGE AND CONTINUITY IN ÖMNÖGOVI AIMAG

4.17.1 What Aspects of Intangible Heritage are Still Extant?

We have defined intangible heritage according to local resident’s perceptions in the process of interviewing them. We regard ten principal intangible heritages as critical to the people of Ömnögovi (Table 16). Our work has demonstrated that silver-smithing, shagai-playing, and shamans are all actively functioning aspects of intangible heritage in Ömnögovi, principally because they are accommodated to current social conditions and, as each of these activities includes many people, they are deliverable to the whole community. The old pattern of exclusivity has been abandoned and the crafts and activities have become more open and publically accessible. For example, silver-smithing creates craft products that are in high demand by the pastoralist community (e.g., silver bowls, saddles, and harnesses). Originally, silver-smithing existed among only a few masters; a small community of craftspeople who carefully hid their techniques. However, as we have seen, the modern silversmith, U. Batnyam learned from all the Ömnögovi schools of silver-smithing, passing on his knowledge to the public through the training of young smiths. U. Batnyam now has about 70 silver-smithing students; he is in a position to preserve the Noyon-Sevrei School’s unique silver-smithing heritage and develop it for future generations. The traditional means of transmitting silver-smithing traditions was hereditary; keeping the relevant technologies secret was the only means of maintaining an adequate market. This means of transmitting intangible heritage has changed and shifted to become more accessible to the public. In this case, the result is that silver-smithing in Ömnögovi aimag survives and is being further developed.
### Table 13: Traditional and Sacred Places 10-km Corridor along Road and Transmission Line between OT and Gashuun Sukhai (GS)

<table>
<thead>
<tr>
<th>Name of Sacred and Taboo Place</th>
<th>Type; Related Rituals, Myths, and Stories</th>
<th>Coordinates</th>
<th>Worshippers (name, lineage name, age)</th>
<th>Brigade (bag) and Winter Camp</th>
</tr>
</thead>
<tbody>
<tr>
<td>Khanbogd Khairkhan</td>
<td>Annual rituals take place here during the first month of each summer and on the first day of the Lunar New Year (Tsagaan Sar). It is associated with a taboo forbidding women from climbing this sacred mountain. Namsrajjav Bat, a herder from Toin Tsokhio winter camp in Javkhlant bag, said, &quot;We are not happy that it is climbed by many people. We heard that there are Chinese (Khujaa) people who climb it. We wish it wasn't like that.&quot; The Lady of Khanbogd Khairkhan is said to resemble &quot;A woman wearing a green deel riding a white camel, with a baby wild sheep hanging from a bag on the camel's back.&quot; A wooden tower was erected in the 1970s, but it was destroyed by a storm after only three days. Afterwards an iron tower was constructed, but recently Tsendengombo removed it.</td>
<td>N 43 q 05'19.8&quot; E 107 q 00'50.8&quot;</td>
<td>Khandsuren Tserendorj Nogoounud, Namsrajjav Bat, Taijuud and most people of Khanbogd soum</td>
<td>KhaiTsagt Aman Us and Toin Tsokhio winter camps, Javkhlant bag</td>
</tr>
<tr>
<td>Khalankhai Khairkhan</td>
<td>This is one peak in the range of hills on the west side of Khanbogd Khairkhan. It is a sacred place where it is forbidden to touch any stones or trees or camp in its vicinity.</td>
<td>N 43 q 01'05.8&quot; E 106 q 59'15.0&quot;</td>
<td>Tsendoo Dolgor of Münk-Ovoo, age 69</td>
<td>Oortsog winter camp and KhaiTsagt Us</td>
</tr>
<tr>
<td>Baga Bulag Oasis</td>
<td>Once, a family with many children resided in Baga Bulag where there was water which never froze. When the children threw a stone into the spring, there was the shout of a woman, after which the family suffered many adversities. It is said the children's stone hit the eye of Lus (the Lady of Water). Since that time Baga Bulag Oasis became severe and harsh; no families ever camp here.</td>
<td>N 43 q 09'10.1&quot; E 106 q 51'51.1&quot;</td>
<td>Tsendoo Dolgor of Münk-Ovoo, age 69</td>
<td>Oortsog winter camp and KhaiTsagt Us</td>
</tr>
<tr>
<td>Horse Racing Location, Maanit Banner and Toin Tsokhio Valley</td>
<td>During ritual festivals in Khanbogd soum, horse races are held in of Toin Tsokhio Valley with a finish-line in Maanit Banner. This horse-racing area is also called the Altangerel Basin. Three small hills here, Gurvan Saikh, are worshipped as well.</td>
<td>N 43 q 09'10.1&quot; E 106 q 51'51.1&quot;</td>
<td>Namsrajjav Bat Taijuud, age 47</td>
<td>Winter camp and water source of Toin Tsokhio</td>
</tr>
<tr>
<td>Name of Sacred and Taboo Place</td>
<td>Type; Related Rituals, Myths, and Stories</td>
<td>Coordinates</td>
<td>Worshippers (name, lineage name, age)</td>
<td>Brigade (bag) and Winter Camp</td>
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<tr>
<td>5 Wandan Mountain</td>
<td>Traditionally, this place is considered sacred and off-limits to people and their herds. However, since the Oyu-Tolgoi Project has begun to use the area, it is said to have become bleak and associated with misfortune, like the onset of mental problems suffered by an OT guard.</td>
<td>N 43°05'19.8&quot; E 107°00'50.8&quot;</td>
<td>Chinduu Bat Taijuud, wife of Khandsuren Tserendorj</td>
<td>Khaitsagt Aman Us winter camp</td>
</tr>
<tr>
<td>6 Oyut Hill</td>
<td>There is a story that Balchin Unzad took turquoise from Oyut Hill and made snuff bottle since this spot is a turquoise source.</td>
<td>Ten km east of the OT Road and 2 km northwest of Khoroot winter camp N 43°01'06.2&quot; E 106°59'15.2&quot;</td>
<td>Munkhbayar Dambaadorj, Khoroot winter camp, and Tseden-Gombo Saikhan-Gombo, Erdenejargal Dambaadorj, Ehin Huuvur winter camp</td>
<td>Khoroot and Ehin Huuvur winter camps</td>
</tr>
<tr>
<td>7 Khuren Teeg and Tsankhi</td>
<td>In pre-Revolutionary times, this was a burial ground. People say that Khuren Teeg is shaped like a rabbit while its neighboring hill, Tsankhi, resembles a sar bird. The reason this place was chosen as a burial ground is that, in resembling a rabbit, it represents stability and permanence. Khanbogd people say that burial grounds are chosen for their richness and stability in the hope that such conditions positively influence the deceased’s descendants. Approximately ten people have been buried at Tsankhi in recent times. (D. Namsrai)</td>
<td>One km east of the OT Road and 2 km northwest of Khoroot winter camp N 43°01'05.8&quot; E 106°59'15.0&quot;</td>
<td>Munkhbayar Dambaadorj and his wife, Oyunerdene Bat Khoroot (Bor Khoshuu) winter camp</td>
<td>Khoroot (Bor Khoshuu) winter camp</td>
</tr>
<tr>
<td>8 Road Ul</td>
<td>Ulin Zam is an area north of Munkhbayar’s winter camp that is perceived to have some negative power (gideltei gazar).</td>
<td>Two km east of OT road and 1 km north of Khoroot winter camp N 43°01'05.8&quot; E 106°59'15.0&quot;</td>
<td>Munkhbayar Dambaadorj and wife, Oyunerdene Bat</td>
<td>Khoroot winter camp and water source</td>
</tr>
<tr>
<td>Name of Sacred and Taboo Place</td>
<td>Type; Related Rituals, Myths, and Stories</td>
<td>Coordinates</td>
<td>Worshippers (name, lineage name, age)</td>
<td>Brigade (bag) and Winter Camp</td>
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<tr>
<td>Khul Khairkhan</td>
<td>This spot is worshipped since the Noyon Khutagt Incarnate declared that this mountain is the left-front leg of Khanbogd Khairkhan.</td>
<td>N 43°01'05.0&quot; E 106°59'14&quot;</td>
<td>Tseden-Gombo Saiikhan-Gombo, Erdenejargal Dambaadorj, Ehiin Huuvur winter camp</td>
<td>Ehiin Huuvur winter camp and water source</td>
</tr>
<tr>
<td>Ukhaa Mountain</td>
<td>Ukhaa Mountain has its own overseeing deity. Rituals and offerings are made during bad weather, resulting in improvement. The geologist, Garamjav says he always avoids this spot.</td>
<td>N 43°01'05.0&quot; E 106°59'14&quot;</td>
<td>Tseden-Gombo Saiikhan-Gombo, Erdenejargal Dambaadorj, Ehiin Huuvur winter camp</td>
<td>Ehiin Huuvur winter camp and water source</td>
</tr>
<tr>
<td>Noyon Khar Ovoo</td>
<td>The elder herder, Tsedengombo regards this as the burial of a noble person, hence its name: &quot;Black Noble Ovoo.&quot; He also assumes a connection between Noyon Khar Ovoo and Buduun Ovoo (&quot;Fat Ovoo&quot;) because there are standing stones erected deliberately that link the two spots.</td>
<td>N 43°01'05.0&quot; E 106°59'14&quot;</td>
<td>Tseden-Gombo Saiikhan-Gombo, Erdenejargal Dambaadorj, Ehiin Huuvur winter camp</td>
<td>Ehiin Huuvur winter camp and water source</td>
</tr>
<tr>
<td>Buduun Ovoo</td>
<td>Buduun Ovoo is located south of Noyon Ovoo. Tsedengombo said, &quot;The name comes from the Buddhist period of Mongolian history when there was a fat monk there.&quot; A line of standing stones links &quot;Fat Ovoo&quot; and Black Noble Ovoo.&quot;</td>
<td>N 43°01'05.0&quot; E 106°59'14&quot;</td>
<td>Tseden-Gombo Saiikhan-Gombo, Erdenejargal Dambaadorj, Ehiin Huuvur winter camp.</td>
<td>Ehiin Huuvur winter camp and water source</td>
</tr>
<tr>
<td></td>
<td>Name of Sacred and Taboo Place</td>
<td>Type; Related Rituals, Myths, and Stories</td>
<td>Coordinates</td>
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<tr>
<td>13</td>
<td>Durvuljin Ovoo</td>
<td>This is the one of the principally worshipped mountains of the people of Ehii Huuvur winter camp. It is said that if one rides a camel near this place, they will be followed by a camel; in other words, the spot has some negative power associated with it.</td>
<td>E 106°59'14&quot;</td>
<td>Tseden-Gombo Saikhan-Gombo, Erdenejargal Dambaadorj, Ehii Huuvur winter camp</td>
</tr>
<tr>
<td>14</td>
<td>Khukh Ovoo</td>
<td>Located on Three Duulga Mountain. The people of Ehii Huuvur winter camp avoid urinating in this direction.</td>
<td></td>
<td>Tseden-Gombo Saikhan-Gombo, Erdenejargal Dambaadorj, Ehii Huuvur winter camp</td>
</tr>
<tr>
<td>15</td>
<td>Chavga Agul (Bayajikh Agul)</td>
<td>This cave is called Chavga after an eponymous Buddhist Monk who meditated there. Later, a Tibetan monk came there to meditate but couldn’t stay more than three days. Tsedengombo proposes that it be renamed Bayajikh (Getting-Rich) since a hunter named Sadaga Baljir hunted successfully around this cave and changed the name to Bayajikh from Baljir.</td>
<td></td>
<td>Tseden-Gombo Saikhan-Gombo, Erdenejargal Dambaadorj, Ehii Huuvur winter camp</td>
</tr>
<tr>
<td>16</td>
<td>Khoroot Khairkhan</td>
<td>Worshipped by the Tsevegdorj Purev family of Gashuun Sukhait winter camp. On the first day of Tsagaan Sar they offer tea and food and pray for the safety of their livestock and herds in the coming year.</td>
<td></td>
<td>Tsevegdorj Purev, spouse Tsermaa, and Tuvshintugs Tsevegdorj, Munguntsoo Tsevegdorj</td>
</tr>
<tr>
<td>17</td>
<td>Tsagaan Ovoo</td>
<td>A sacred place where stones and trees may not be disturbed. Sadly, it was excavated by the OT Project and has not yet been restored.</td>
<td></td>
<td>Tsevegdorj Purev, his spouse Tsermaa, and Tuvshintugs Tsevegdorj, Munguntsoo Tsevegdorj</td>
</tr>
<tr>
<td>Name of Sacred and Taboo Place</td>
<td>Type; Related Rituals, Myths, and Stories</td>
<td>Coordinates</td>
<td>Worshippers (name, lineage name, age)</td>
<td>Brigade (bay) and Winter Camp</td>
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<tr>
<td>Turtle Rock</td>
<td>A sacred spot and the location of a pre-Revolutionary burial ground called Tsokhlot Am. Tsermaa said, “Once young spouses collected stones from this area, then their livestock was attacked by a wolf and 30 sheep were hurt.”</td>
<td></td>
<td>Tsevegдорж Purev, spouse Tsermaa, and Tuvshintugs Tsevegдорж, Mungунтsoоj Tsevegдорж</td>
<td>Gashuun Sukhail winter camp</td>
</tr>
<tr>
<td>Enger Bag Mod area</td>
<td>When the herder Lenten resided in Enger Bag Mod, he and his spouse suffered some negative consequences (the wife became sick), so they changed their residence.</td>
<td></td>
<td>Herder Lenten and family</td>
<td>Enger Bag Mod winter camp</td>
</tr>
<tr>
<td>Oyu-Tolgoi</td>
<td>The Oyu-Tolgoi area is regarded a sacred place in which one cannot herd livestock or disturb any trees or stones. But the Oyu-Tolgoi Project began working in this area and one of the OT guards went crazy.</td>
<td></td>
<td>Tsendoo Dolgor Munkh-Ovoo, age 69</td>
<td>Oortsog winter camp and Khaliv water source</td>
</tr>
<tr>
<td>Three Beauties Mountains</td>
<td>These three peaks at the eastern end of the Khanbogd Khairkhan range are thought of as the three husbands of the Lady of Khanbogd Khairkhan. It is taboo for women to climb any of these peaks.</td>
<td></td>
<td>Khandsuren Tserendorj and his spouse, Ohinduu Bat Taijuud</td>
<td>Khairtsagt Aman Uus winter camp</td>
</tr>
<tr>
<td>Khukh Khadnyi Ovoo</td>
<td>This cairn is worshipped by Demberel Dolgorsuren of Khukh Khad winter camp and Namsrai of Salaa winter camp, and their families. They ritually offer tea and food on the first day of Tsagaan Sar.</td>
<td>N 43°00'22.6&quot; E 106°56'46.0&quot;</td>
<td>Namsrai Dolgorsuren Zelme, and Demberel Dolgorsuren Zelme and their family members</td>
<td>Khukh Khad and Salaa winter camps</td>
</tr>
<tr>
<td>Khuurkhun Ovoo</td>
<td>This sacred cairn is off-limits to women. It is also taboo to touch or remove any stones or trees here. The location’s actual name cannot be said openly, so people refer to it by using nicknames like Khuurkhun Ovoo, “Sweet Hill”.</td>
<td></td>
<td>Namsrai Dolgorsuren Zelme, and Demberel Dolgorsuren Zelme and their family members</td>
<td>Khukh Khad and Salaa winter camps</td>
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<td>Name of Sacred and Taboo Place</td>
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<tr>
<td>Birth Place of Namsrai Dolgorsuren in Ulaan Tolgoi</td>
<td>Namsrai Dolgorsuren says that his birth place is located in Ulaan Tolgoi. He said, “I will be quite unhappy if my birth place is excavated and disturbed, because every year I visit my birth place and lay down there to call my spirit and increase my happiness.”</td>
<td>N 43° 00' 22.6&quot; E 106° 56' 46.0&quot;</td>
<td>Namsrai Dolgorsuren, Zelme</td>
<td>Salaa winter camp</td>
</tr>
<tr>
<td>Ovoo at Ugalz winter camp</td>
<td>There are two currently worshipped ovoos at the Ugalz winter camp of Ser-Od Uulii; one is associated with rituals held on the first day of Tsagaan Sar every year.</td>
<td>N 43° 00' 22.6&quot; E 106° 55' 46.0&quot;</td>
<td>Ser-Od Uulii, Ugalz Winter camp</td>
<td>Ugalz winter camp</td>
</tr>
<tr>
<td>Ugalz winter camp</td>
<td>This winter camp is distinctive in due to its origin. Originally, this was the winter habitation of wild sheep due to its especially warm microclimate. Ser-Od’s family inherited this camp from his ancestors and deeply respects it.</td>
<td>N 43° 00' 22.6&quot; E 106° 55' 46.0&quot;</td>
<td>Ser-Od Uulii family, Ugalz Winter camp</td>
<td>Ugalz winter camp</td>
</tr>
<tr>
<td>Bayan Baraat Khairkhan</td>
<td>Bayan Baraat is the one of the highest mountains in the area. Pastoralist households residing nearby offer tea every morning to this mountain.</td>
<td>N 43° 00' 22.6&quot; E 106° 55' 46.0&quot;</td>
<td>Ser-Od Uulii, Ugalz winter camp, and Bandi Tsedenjav, Ehen Burkhan winter camp and their families</td>
<td>Ugalz winter camp N 43 00 22 6 E 106 55 46 0 Ehen Burkhan winter camp N 42 52 49 4 E 106 58 19 4</td>
</tr>
<tr>
<td></td>
<td>Name of Sacred and Taboo Place</td>
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<tr>
<td>28</td>
<td>Ulaan Tolgoin Enger</td>
<td>There is Stone which marked the birth place of Batsugir Khorol, aunt of Ser-Od’s spouse Sunjidmaa.</td>
<td>Ser-Od Uulii family, Ugalz Winter camp</td>
<td>Ugalz winter camp</td>
</tr>
<tr>
<td>29</td>
<td>Burial in Ehen Burkhan winter camp</td>
<td>The burial camp was examined by archaeologists, but the archaeologists said they did not find anything. Local people say that nothing can be found here (no tangible evidence of the burials)</td>
<td>Ser-Od Uulii, Ugalz winter camp, and Bandi Tsedenjav, Ehen Burkhan winter camp and their families.</td>
<td>Ugalz winter camp N 43 00 22 6 E 106 55 46 0 Ehen Burkhan winter camp N 42 52 49 4 E 106 58 19 4</td>
</tr>
<tr>
<td>30</td>
<td>Tsagaan Del</td>
<td>Tsagaan Del is a long ridge that local people say is the body of giant snake; its tail reaches the rocks at the east of Ehen Burkhan winter camp. People regard Tsagaan Del as threatening and are reluctant to ride around there.</td>
<td>Ser-Od Uulii, Ugalz winter camp, and Bandi Tsedenjav, Ehen Burkhan winter camp and their families.</td>
<td>Ugalz winter camp N 43 00 22 6 E 106 55 46 0 Ehen Burkhan winter camp N 42 52 49 4 E 106 58 19 4</td>
</tr>
</tbody>
</table>
### Table 14: Traditional and Sacred Places along the OT GS Road, the New OT Airport, Power Towers, and Pipeline

<table>
<thead>
<tr>
<th>Site</th>
<th>ASSESSMENT CRITERIA</th>
<th>ASSESSMENT</th>
<th>ANALYSIS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Location and Potential Impact Risk</td>
<td>Location and Category of Place</td>
<td>Coverage of People and Significance to Whom</td>
</tr>
<tr>
<td>OT GS ROAD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Medium Risk</td>
<td>2 km away 5-10 km 10-20 km</td>
<td>Sacred, cultural and inherited</td>
</tr>
<tr>
<td></td>
<td>5 km in the east</td>
<td>Cultural Inherited place- Horse Race Place- Banner of Maanit and Valley of Toin Tsokhio</td>
<td>Khanbogd soum people</td>
</tr>
<tr>
<td>2</td>
<td>High Risk</td>
<td>2 km in the north-west of Khoroot winter camp</td>
<td>Taboo place- old funeral place and it is reviving in recent years. Huren teeg, and Tsankhi</td>
</tr>
<tr>
<td></td>
<td>5 km in the east</td>
<td>Sacred Mountain- Khol Khairkhan</td>
<td>More than 5 families around this area including Tseden-Gombo Saikhan-Gombo, Erdenejargal Dambaadorj, Ehiin Huuvur winter camp</td>
</tr>
<tr>
<td>3</td>
<td>Medium risk</td>
<td>5 km in the east</td>
<td>Sacred hill-Ukhaa Tolgoi</td>
</tr>
<tr>
<td>Site</td>
<td>Location and Potential Impact Risk</td>
<td>Name and Category of Place</td>
<td>Coverage of People and Significance to Whom</td>
</tr>
<tr>
<td>------</td>
<td>-----------------------------------</td>
<td>-----------------------------</td>
<td>--------------------------------------------</td>
</tr>
<tr>
<td>5</td>
<td>Medium risk 7 km away from OG-GS Road</td>
<td>Sacred Hill-Duruljin Ovoo</td>
<td>Families around this area</td>
</tr>
<tr>
<td>6</td>
<td>Medium risk 6 km in the east</td>
<td>Historical Sacred Cave-in Khanbogd Khairkhan</td>
<td>Khanbogd soum community and becoming famous all over Mongolia</td>
</tr>
<tr>
<td>7</td>
<td>500 m away in the west of OT-GS Road</td>
<td>Kinship based worshipped Hill-Tsagaan-White Ovoo</td>
<td>Gashuun Sukhai winter camp family</td>
</tr>
<tr>
<td>8</td>
<td>High Risk 1 km in the west</td>
<td>Kinship based worshipping caim-Khukh Khadnyi Ovoo</td>
<td>Sacred caim-worshipped by kinship families by Demberel Dolgersuren, Khukh Khad winter camp, and Namsrai of Salaa winter camp, and their families</td>
</tr>
<tr>
<td>9</td>
<td>High Risk 1 km away in the east of OT-GS road</td>
<td>Sacred Mountain-Duruvul Khairkhan</td>
<td>Kinship and territorial 5 family members worship like winter camps of Uulzvar, Budargana, Bulan Ders, and Shavag</td>
</tr>
<tr>
<td>10</td>
<td>High Risk</td>
<td>Sacred Mountain-</td>
<td>Kinship and territorial</td>
</tr>
</tbody>
</table>
### MIHT: MONGOLIAN INTERNATIONAL HERITAGE TEAM

#### ASSESSMENT CRITERIA

<table>
<thead>
<tr>
<th>Site</th>
<th>Location and Potential Impact Risk</th>
<th>Name and Category of Place</th>
<th>Coverage of People and Significance to Whom</th>
<th>Frequency of Related Ritual and Ceremony</th>
<th>Emergence and Duration of Existence</th>
<th>Other Cultural Functions</th>
<th>Analysis</th>
<th>Cultural Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>Medium Risk 7 km away in the west of OT-GS road</td>
<td>Uneged Khairkhan based community-Uulzvar, Budargana, Bulan Ders, and Shavag winter camps people</td>
<td>has certain taboo and assume deeply fierce and show profound respect and fear.</td>
<td>stories how negative power affected to people who broke the taboo</td>
<td>deeply worship.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>High Risk 1 km away in the east of OT-GS road</td>
<td>Sacred Water-Uulzvar River (the one of the key water sources around this area)</td>
<td>The territorial based families including Chuluunbaatar Huudeg Udaid and his family.</td>
<td>As it is the main source of water supply this area people deeply respect and worship with certain taboo.</td>
<td>stories how negative power affected to people who broke the taboo</td>
<td>Uulzvar River and Uulzvar open water locate from only 1 km away from OT-GS road and they are key water sources of this area people.</td>
<td>High</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>High Risk 1 km away in the east of OT-GS road</td>
<td>Sacred Water-Tsahildagtai River and Open water</td>
<td>The territorial based families including Chuluunbaatar Huudeg Udaid and his family.</td>
<td>As it is the main source of water supply this area people deeply respect and worship with certain taboo.</td>
<td>stories how negative power affected to people who broke the taboo</td>
<td>Uulzvar River and Uulzvar open water locate from only 1 km away from OT-GS road and they are key water sources of this area people.</td>
<td>High</td>
<td></td>
</tr>
</tbody>
</table>
### MIHT: MONGOLIAN INTERNATIONAL HERITAGE TEAM

#### ASSESSMENT CRITERIA

<table>
<thead>
<tr>
<th>Site</th>
<th>Location and Potential Impact Risk</th>
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<th>Cultural Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>Medium Risk 7-8 km away in the east of Ot-GS road.</td>
<td>Sacred Water Area-Ulaan Bulag (Red Spring)</td>
<td>Territorial based neighbor families-Altangarid Dashdolgor Nogoornuud and around this area families</td>
<td>It has no ritual but many taboo.</td>
<td>Pre-modern</td>
<td>There is fine story about why it became sacred.</td>
<td>The story and herdsmen concern made us to understand this place is the one of the sacred ones in this area.</td>
<td>High</td>
</tr>
<tr>
<td>15</td>
<td>3 km away in the east of Enger Bag Mof winter</td>
<td>Sacred Mount-Tsagaan Khairkhan</td>
<td>Altangarid and Boldmaa, Enger bag mod winter camp, families worship</td>
<td>No ritual but there are taboo.</td>
<td>Pre-modern</td>
<td>There is a story.</td>
<td>One of the place where strongly assumed the sacred and fierce places.</td>
<td>High</td>
</tr>
<tr>
<td>16</td>
<td>Exactly in the OT-GS road in Tsagaan Khad area</td>
<td>Sacred Place-Tsagaan Khad</td>
<td>The winter camp of Ikh Tsagaan Khad and Tsognomkh Huu family and other families around this area worship.</td>
<td>There is no ritual, but there are taboos.</td>
<td>Pre-modern</td>
<td>There are stories.</td>
<td>One of the place where strongly assumed the sacred and fierce places</td>
<td>High</td>
</tr>
<tr>
<td>17</td>
<td>Medium Risk 20 km away in the east of OT-GS road.</td>
<td>Sacred Ritual-Mountain-Nomgon Khairkhan</td>
<td>Nongon bag people and Khanbogd soum community</td>
<td>There is fairly big performative annual worshipping ritual festival.</td>
<td>Pre-modern</td>
<td>There are many different stories about the Lord of this mountain.</td>
<td>It is one the major sacred site of Khanbogd soum</td>
<td>High</td>
</tr>
<tr>
<td>18</td>
<td>High Risk 500 meter away in the east of OT-GS road</td>
<td>Sacred Mountain-Baruun Togoo Khairkhan</td>
<td>Kinship and territorial based families like Otgonduu Lantu, Khukh Khia of Zuun Zag winter camp.</td>
<td>No fixed ritual but worshipping people offer fresh tea every morning.</td>
<td>Pre-modern</td>
<td></td>
<td>One of the sacred places in Tsagaan Khad area. The point it locates quite close to the Road.</td>
<td>High</td>
</tr>
</tbody>
</table>
## ASSESSMENT CRITERIA

<table>
<thead>
<tr>
<th>Site</th>
<th>Location and Potential Impact Risk</th>
<th>Name and Category of Place</th>
<th>Coverage of People and Significance to Whom</th>
<th>Frequency of Related Ritual and Ceremony</th>
<th>Emergence and Duration of Existence</th>
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<th>Analysis</th>
<th>Cultural Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>High Risk 500 m away in the west of OT-GS road.</td>
<td>Sacred Mountain-Zuun Togoo Khairkhan</td>
<td>Kinship and territorial based families like Otgonduu Lantuuj, Khukh Khia of Zuun Zag winter camp.</td>
<td>No fixed ritual but worshipping people offer fresh tea every morning.</td>
<td>Pre-modern</td>
<td></td>
<td></td>
<td>High</td>
</tr>
<tr>
<td>20</td>
<td>High Risk 400 meter away in the west of OT-GS road.</td>
<td>Sacred River-Darvagai River</td>
<td>Kinship and territorial based families like Otgonduu Lantuuj, Khukh Khia of Zuun Zag winter camp.</td>
<td>No fixed ritual but people worshipping offer fresh tea every morning.</td>
<td>Pre-modern</td>
<td></td>
<td></td>
<td>High</td>
</tr>
<tr>
<td>21</td>
<td>Medium Risk 10 km in the west of Power Towers</td>
<td>Sacred Cairn-Khuurkhun Ovoo</td>
<td>Kinship families of Namsrai Dolgorsuren Zelme, and Demberel Dolgorsuren Zelme</td>
<td>No consistent ritual, but there is a taboo that women not allowed to climb on the top and call the genuine name.</td>
<td>Pre-revolution</td>
<td>Not recorded</td>
<td></td>
<td>High</td>
</tr>
<tr>
<td>22</td>
<td>Medium Risk In the west 4 km away from PTs</td>
<td>Kinship, long time worshipped sacred cairns-in Ugalz winter camp</td>
<td>Ugalz winter camp of Ser-Od Uulii</td>
<td>Family based Lunar New Year offering ritual</td>
<td>Not clear of the date but as Ser-Od claimed it was inherited from his ancestors</td>
<td></td>
<td></td>
<td>High</td>
</tr>
<tr>
<td>23</td>
<td>Medium Risk 10 km away</td>
<td>Sacred Mountain-Bayari Baraat</td>
<td>This area families like Ser-Od Uulii, Ugalz winter camp,</td>
<td>No performative ritual however, they offer fresh</td>
<td>At least through last 2 generations</td>
<td>No stories and myths</td>
<td></td>
<td>High</td>
</tr>
<tr>
<td>Site</td>
<td>Location and Potential Impact Risk</td>
<td>Name and Category of Place</td>
<td>Coverage of People and Significance to Whom</td>
<td>Frequency of Related Ritual and Ceremony</td>
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<td>Other Cultural Functions</td>
<td>Analysis</td>
<td>Cultural Significance</td>
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</tr>
<tr>
<td>24</td>
<td>High Risk In the east of Power Line 3 km</td>
<td>Sacred Place-Tsagaan Del-range of mountain</td>
<td>This area families like Ser-Öd Uülü, Ugalz winter camp, and Bandi Tsedenjav, Ehen Burkhan winter camp and their families</td>
<td>tea every morning of this area people</td>
<td>It has strong taboo that not allowed making sound of shooting and touching to stones and trees around it.</td>
<td>Pre-revolution</td>
<td>There is fine myth and stories.</td>
<td>This range has unique landscape and it is assumed as quite fierce among this area people.</td>
</tr>
<tr>
<td>25</td>
<td>Medium Risk 9 km away in the west from Power Towers</td>
<td>Sacred Mount-Khuren Ovoo</td>
<td>This area families including Ganbold Honikhuu, Nogoonnud, Gants Mod winter camp</td>
<td>No fixed ritual but it is assumed fierce and has certain taboo</td>
<td>Not clear the date</td>
<td></td>
<td>It was mentioned by several families around this area and highly respected</td>
<td>High</td>
</tr>
<tr>
<td>26</td>
<td>9 km away in the west of Power Towers</td>
<td>Sacred Mount-Tavan Ovoo</td>
<td>This area (Javkhlant bag center) families including Ganbold Honikhuu, Nogoonnud, Gants Mod winter camp</td>
<td>No ritual, sacred place with certain taboo</td>
<td>Not clear date</td>
<td></td>
<td>Javkhlant bag center area people worship as sacred place</td>
<td>High</td>
</tr>
<tr>
<td>27</td>
<td>3 km away in the west of Power Tower Line</td>
<td>Sacred Hill-Shaga Ovoo</td>
<td>In this area families including including Ganbold Honikhuu, Nogoonnud, Gants Mod had their winter camp</td>
<td>No ritual, considered as sacred and patron hill to families around it</td>
<td></td>
<td></td>
<td>Two family members emphasized and mentioned their high respect.</td>
<td>High</td>
</tr>
</tbody>
</table>
### ASSESSMENT CRITERIA

<table>
<thead>
<tr>
<th>Site</th>
<th>Location and Potential Impact Risk</th>
<th>Name and Category of Place</th>
<th>Coverage of People and Significance to Whom</th>
<th>Frequency of Related Ritual and Ceremony</th>
<th>Emergence and Duration of Existence</th>
<th>Other Cultural Functions</th>
<th>Analysis</th>
<th>Cultural Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>28</td>
<td>Medium Risk 10 km away in the west of OT site</td>
<td>Sacred Place-Zadgait Ulaan Tolgoi</td>
<td>Iderborgil Tsedenbaljir, Tamsag Ulaan Tolgoi winter camp, Javkhlan bag</td>
<td>No ritual, has certain taboos</td>
<td>Fine stories about wild-horse and gazelle come to water</td>
<td>Greatly beloved and sacred place.</td>
<td>High</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>High Risk 5 km away in the east of OT site</td>
<td>Historical-Inherited Place-Hideaway Ovoo of Khanan Davaa</td>
<td>Khanan Davaa winter camp area people know about this place.</td>
<td>In the beginning of 20th century</td>
<td>Fine stories</td>
<td>It is historical place that reminds place about past history.</td>
<td>High</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>High Risk 1 km away in the north-east of OT site</td>
<td>Historical Inherited place-Ulaan Hideaway</td>
<td>Tsagaan Tsarenkhuu, Khavan Shavag winter camp of Ust Bag Mod, Javkhlan bag</td>
<td>In the beginning of 20th century</td>
<td>There are related stories.</td>
<td></td>
<td>High</td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>High Risk 1.5 km away in the north-west of OT site</td>
<td>Historical Inherited place-Tsagaan Hideaway</td>
<td>Tsagaan Tsarenkhuu, Khavan Shavag winter camp of Ust Bag Mod, Javkhlan bag</td>
<td>In the beginning of 20th century</td>
<td>There are related stories.</td>
<td>As it is assumed to be a guard hideaway it is carries local history knowledge.</td>
<td>High</td>
<td></td>
</tr>
</tbody>
</table>

### NEW AIRPORT AND WATER PIPELINE AROUND SACRED AND INHERITED PLACES

28

- **Site**: Sacred Place-Zadgait Ulaan Tolgoi
- **Risk**: Medium Risk
- **Location**: 10 km away in the west of OT site
- **Name**: Iderborgil Tsedenbaljir, Tamsag Ulaan Tolgoi winter camp, Javkhlan bag
- **Coverage**: Fine stories about wild-horse and gazelle come to water
- **Significance**: Greatly beloved and sacred place.
- **Analysis**: High

29

- **Site**: Historical-Inherited Place-Hideaway Ovoo of Khanan Davaa
- **Risk**: High Risk
- **Location**: 5 km away in the east of OT site
- **Name**: Khanan Davaa winter camp area people know about this place.
- **Coverage**: In the beginning of 20th century
- **Significance**: It is historical place that reminds place about past history.
- **Analysis**: High

30

- **Site**: Historical Inherited place-Ulaan Hideaway
- **Risk**: High Risk
- **Location**: 1 km away in the north-east of OT site
- **Name**: Tsagaan Tsarenkhuu, Khavan Shavag winter camp of Ust Bag Mod, Javkhlan bag
- **Coverage**: There are related stories.
- **Significance**: As it is assumed to be a guard hideaway it is carries local history knowledge.
- **Analysis**: High

31

- **Site**: Historical Inherited place-Tsagaan Hideaway
- **Risk**: High Risk
- **Location**: 1.5 km away in the north-west of OT site
- **Name**: Tsagaan Tsarenkhuu, Khavan Shavag winter camp of Ust Bag Mod, Javkhlan bag
- **Coverage**: There are related stories.
- **Significance**: As it is assumed to be a guard hideaway it is carries local history knowledge.
- **Analysis**: High

### NEW AIRPORT AND WATER PIPELINE AROUND SACRED AND INHERITED PLACES

32

- **Site**: Sacred and Fierce Place-Khunkher
- **Risk**: High Risk
- **Location**: 6 km away in the south of Water Pipeline
- **Name**: Ukhia Zag Dund winter camp, Bayan bag area families worship that it is the most sacred and fierce place.
- **Coverage**: No ritual, there is taboo
- **Significance**: Local people assume as it the most sacred and fierce place in this area.
- **Analysis**: High
<table>
<thead>
<tr>
<th>Site</th>
<th>Location and Category of Place</th>
<th>Name and Category of Place</th>
<th>Coverage of People and Significance to Whom</th>
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</thead>
<tbody>
<tr>
<td>33</td>
<td>Medium Risk 12 km away in the south-east of Water Pipeline</td>
<td>Sacred Cairn-Uvgun Ovoo</td>
<td>Bag community</td>
<td>It has no ritual and but it is deeply respected by this bag people</td>
<td>Pre-modern</td>
<td>There are stories that Related to how it is fierce.</td>
<td>Medium</td>
<td>High</td>
</tr>
<tr>
<td>34</td>
<td>High Risk 3 km away in the north of Water Pipeline</td>
<td>Sacred Cairn-Khuren Ovoo</td>
<td>It is predominantly worshipped by Mijiddorj Ayur family, Urulbu winter camp.</td>
<td>It has annual family based ritual</td>
<td></td>
<td></td>
<td>Family based worshipping cairn</td>
<td>Medium</td>
</tr>
<tr>
<td>35</td>
<td>Medium Risk 8 km away in the north of Water Pipe-line.</td>
<td>Sacred Place-Orvog</td>
<td>Banidmaa Ichinkhorloo, Khukh Khia, age 56 Khuren Tsokhionyi Khoyor Mod winter camp, Alag Bayan bag and other neighboring families.</td>
<td>It has certain taboo and forbidden customs.</td>
<td></td>
<td></td>
<td>Territorial households based worshipping place and it assumed sacred and fierce.</td>
<td>High</td>
</tr>
<tr>
<td>36</td>
<td>High Risk 3 km from Water Pipeline.</td>
<td>Sacred Hill-Takhilgat Ovoo</td>
<td>This ovoo is worshipped by Deng winter camp around households</td>
<td></td>
<td></td>
<td></td>
<td>Territorial households based worshipping place and it assumed sacred and fierce.</td>
<td>High</td>
</tr>
<tr>
<td>37</td>
<td>Medium Risk 11 km away in the south-west</td>
<td>Sacred Area-Ulaan Tolgoi River</td>
<td>Ukhna Bud, Bag Mod, Zadgai Ulaan Tolgoi winter camp,</td>
<td>It is sacred river where we do not move any stone and tree. This</td>
<td></td>
<td></td>
<td>Territorial households based worshipping place and it assumed sacred and fierce.</td>
<td>High</td>
</tr>
<tr>
<td>Site</td>
<td>Location and Potential Impact Risk</td>
<td>Name and Category of Place</td>
<td>Coverage of People and Significance to Whom</td>
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<tr>
<td>38</td>
<td>High Risk 4 km away in the west of New Airport</td>
<td>Sacred Cairn-Dugayin Tsagaan Ovoo</td>
<td>Surenkhord E. Nogoomnuu, Khavdai Ulaan winter camp, Gaviluud bag, and around families.</td>
<td>Family based Lunar New Year ritual is performed.</td>
<td>Succeeded from their ancestors</td>
<td></td>
<td>Major worshipping ovoo</td>
<td>High</td>
</tr>
<tr>
<td>39</td>
<td>Medium Risk 6 km away in the south of Water Pipeline</td>
<td>Sacred Cairn-Tsagaan Ovoo</td>
<td>Damdinsuren Dendev, Ukhaa Zag winter camp, Alag Bayan bag and other around families worship.</td>
<td>There is no fixed ritual.</td>
<td>Since 19th century</td>
<td>There are many different stories.</td>
<td>It is quite historical and unique place which carried different stories and tradition.</td>
<td>High</td>
</tr>
<tr>
<td>40</td>
<td>High Risk 5 km away in the north-west of New Airport</td>
<td>Historical inherited place- The North Hideaway</td>
<td>This area community</td>
<td>In the beginning of 20th century</td>
<td>There are stories related.</td>
<td></td>
<td>One of the historical places in this area.</td>
<td>High</td>
</tr>
<tr>
<td>41</td>
<td>High Risk 800 meter away in the north-west of New Airport</td>
<td>Sacred and Historical Place-Tavan Tolgoi</td>
<td>Gaviluud bag people</td>
<td>There are family based ritual performed</td>
<td>In the beginning of 20th century</td>
<td>There are stories about this area.</td>
<td>One of the important places that carry knowledge and is respected among local people.</td>
<td>High</td>
</tr>
</tbody>
</table>
## Table 15. Traditional and Sacred Places within 15 km of the OT-GS Road and Power Towers

<table>
<thead>
<tr>
<th>The Name of Sacred and Taboo Place</th>
<th>Type and Related Ritual, Myth and Stories</th>
<th>GPS</th>
<th>People Who Worship (name, kinship name, and age)</th>
<th>Bag and Winter Camp</th>
</tr>
</thead>
<tbody>
<tr>
<td>Khanbogd Khairkhan</td>
<td>There is an annual ritual in the first month of the summer. Also, it is worshipped in the first day of Lunar New Year (White Moon-Tsagaan Sar). There is a taboo against women climbing the sacred mountain. As herder Namsraijev Bat said (Toin Tsokhion winter camp, Javkhlant bag), &quot;We are not happy that it is climbed by many people. We heard that there are Chinese (Khujaa) people climbed. We wish it shouldn't be like that&quot;. The Lordess of Khanbogd Khairkhan is supposed to be like &quot;A woman who is worn green del, rides white camel, and there is seen baby—wild sheep from a bag on the back of camel&quot;. A wooden tower was erected in 1970s, but that was destroyed after 3 days by a storm. Afterwards an iron tower was erected, and recently Tsedengombo removed it</td>
<td>N 43 05 19 E 107 00 50</td>
<td>Khandsuren Tserendorj Nogoonuud, Namsraijev Bat Taijuud and most of the Khanbogd people</td>
<td>Khartsagt Aman Us winter camp, and Toin Tsokhio winter camp, Javkhlant bag</td>
</tr>
<tr>
<td>Khalankhai Khairkhan</td>
<td>This is one hill of the range of hills in the left side of Khanbogd Khairkhan. It is a sacred place. No one is allowed to touch any of stones and trees and no one should reside around of it.</td>
<td>N 43 01 05 E 106 59 15</td>
<td>Tsendoo Dolgor Munkh-Ovoo, age 69</td>
<td>Oortsog winter camp and Khaliv water</td>
</tr>
<tr>
<td>Oasis in Baga Bulag Mouth</td>
<td>Once there was resided the family which had many children in Baga Bulag. There was water which never been frozen, the children threw stone to that hole of the water and there was a shout of woman. Since that occasion that family faced many troubles. It was hit the eye of Lus (Lord of Water). Also, since that time this place became severe and harsh, and never been resided any families around this place.</td>
<td></td>
<td>Tsendoo Dolgor Munkh-Ovoo, age 69</td>
<td>Oortsog winter camp and Khaliv water</td>
</tr>
<tr>
<td>№</td>
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<td>4</td>
<td>Horse Race Place-Banner of Maanit and Valley of Toin Tsokhio</td>
<td>During worshipping ritual festival of Khanbogd, there is organized horse race in Valley of Toin Tsokhio and finishes at the Banner Maanit. Also, this horse racing area is called Round of Altangerel. Three small hills of Gurvan Saikhan are worshipped as well</td>
<td>N 43 09 10 1 E 106 51 51 1</td>
<td>Namsraljav Bat Taijuud, 47</td>
</tr>
<tr>
<td>5</td>
<td>Wandan Mount</td>
<td>It is said that it is sacred place never let to touch by people and herd cattles around it. However, since Oyu-Tolgoi resided and used this area, it is getting severe and happen troubles like once there was driven crazy one guard.</td>
<td>N 43 05 19 8 E 107 00 50 8</td>
<td>Ohinduu Bat Taijuud, a wife of Khandasuren Tserendorj</td>
</tr>
<tr>
<td>6</td>
<td>Oyut Hill</td>
<td>There is a story that Balchin Unzad took oyu from Oyut Hill and made snuff-box. This place has oyu.</td>
<td>Munkhbayar Dambaadorj, Khoroot winter camp, and Tseden-Gombo Saikhan-Gombo, Erdenejargal Dambaadorj, Ehiin Huuvur winter camp</td>
<td>Munkhbayar Dambaadorj and his wife Oyunerdene Bat</td>
</tr>
<tr>
<td>7</td>
<td>Huren teeg, and Tsankhi</td>
<td>It is a pre-revolution time funeral place. People say that Khuren Teeg has shape of rabbit and the next hill Tsankhi looks like Sar bird. The reason that this place had chosen as funeral place is that it looks like rabbit then if put under arm of rabbit it can can stay stable and permanent. Khanbogd people say that funeral place is has been chosen a place of rich and stable which can influence positively to his/her descendant. There are buried around ten people in Tsankhi recent time. (Namsrai D)</td>
<td>Munkhbayar Dambaadorj and his wife Oyunerdene Bat</td>
<td>Munkhbayar Dambaadorj and his wife Oyunerdene Bat</td>
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<td>8</td>
<td>Road of Ul</td>
<td>Ulin Zam is area which has some negative power (guideltei gazar), in the north of Munkhbayar’s winter camp</td>
<td></td>
<td>Munkhbayar Dambaadorj and wife Oyunerdene Bat</td>
</tr>
<tr>
<td>9</td>
<td>Khul Khairkhan</td>
<td>It is worshipped as that the Incarnate-Noyon Khutagt said that this mount is left-front leg of Khanbogd Khairkhan.</td>
<td></td>
<td>Tseden-Gombo Saikhan-Gombo, Erdenejargal Dambaadorj, Ehii Huuvur winter camp</td>
</tr>
<tr>
<td>10</td>
<td>Ukhaa Mount</td>
<td>Ukhaa Mount has its own Lord, it has something. We make worshipping and offering ritual when weather gets bad, and it gets better. Geologist Garamjav always goes around of it and cares.</td>
<td></td>
<td>Tseden-Gombo Saikhan-Gombo, Erdenejargal Dambaadorj, Ehii Huuvur winter camp</td>
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<td>11</td>
<td>Noyon Khar Ovoo</td>
<td>Senior herder Tsedengombo assumes that it can be burial of noble person and named as black cairn of Noble. Also, he assumes that there can be connection between Noyon Khar Ovoo and Buduun Ovoo (Fat Ovoo). Because, there are range of stones which erected deliberately reached to Noyon Khar Ovoo.</td>
<td></td>
<td>Tseden-Gombo Saikhan-Gombo, Erdenejargal Dambaadorj, Ehii Huuvur winter camp</td>
</tr>
<tr>
<td>12</td>
<td>Buduun (Fat) Ovoo</td>
<td>Buduun Ovoo locates in the south of the Noyon Ovoo. Tsedengombo says “It can be from Buddhist time of Mongolia and it called like Fat Ovoo as there was a fat monk”. There is range of erected stones between Fat Ovoo and Noble Ovoo.</td>
<td></td>
<td>Tsden-Gombo Saikhan-Gombo, Erdenejargal Dambaadorj, Ehii Huuvur winter camp</td>
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<td>No.</td>
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<td>13</td>
<td>Durvuljin (Quadrate) Ovoo</td>
<td>This is the one of the main worshipping mounts of people of Ehiin Huuvur winter camp. Also, it is said that if ride camel next to this place there will be followed by camel, it has some negative power.</td>
<td><img src="image" alt="GPS" /></td>
<td>Tseden-Gombo, Saikhan-Gombo, Erdenejargal Dambaadorj, Ehiin Huuvur winter camp</td>
</tr>
<tr>
<td>14</td>
<td>Khukh (Blue) Ovoo</td>
<td>This is a place where located in 3 Daiulga Mountain. There is taboo which people of Ehiin Huuvur winter camp avoid urine towards this direction.</td>
<td><img src="image" alt="GPS" /></td>
<td>Tseden-Gombo, Saikhan-Gombo, Erdenejargal Dambaadorj, Ehiin Huuvur winter camp</td>
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<td>15</td>
<td>Cave of Chavga (Cave of Getting Rich)</td>
<td>This cave called as Chavga since there was mediated Buddhist monk Chavga in here. Later one Tibetan monk came for meditation; however, he couldn't stay more than 3 days. Tsedengombo proposes that it can be named as Bayajikh since hunter Sadaga Baljir hunted a lot in this cave around and changed to name as Bayajikh (Getting Rich) from Baljir.</td>
<td><img src="image" alt="GPS" /></td>
<td>Tseden-Gombo, Saikhan-Gombo, Erdenejargal Dambaadorj, Ehiin Huuvur winter camp</td>
</tr>
<tr>
<td>16</td>
<td>Khoroot Khairkhan</td>
<td>It is worshipped by Tsevegdorj Purev family, of Gashuun Sukhait winter camp. In the first day of Lunar New Year they offer tea and food and pray for safe livestock and herd in the coming new year.</td>
<td><img src="image" alt="GPS" /></td>
<td>Tsevegdorj Purev, spouse Tsermaa, and Tuvsinhugs Tsevegdorj, Munguntsooj Tsevegdorj</td>
</tr>
<tr>
<td>17</td>
<td>White Ovoo</td>
<td>It is sacred place which not allowed removing stones and trees around it. However, it was excavated by OT project and restored.</td>
<td><img src="image" alt="GPS" /></td>
<td>Tsevegdorj Purev, spouse Tsermaa, and Tuvsinhugs Tsevegdorj, Munguntsooj Tsevegdorj</td>
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<td>18</td>
<td>Turtle Rock</td>
<td>It is sacred place and also, there was pre-revolution funeral place in the back of the rock which called Tsokhiot Am. Tsermaa told “There is an occasion that young spouses got stones from this area, and then the livestock was attacked by wolf and hurt by 30 sheep.”</td>
<td></td>
<td>Tsevegdonj Purev, spouse Tsermaa, and Tuvshintugs Tsevgeodorj, Mungruntsooj Tsevgeodor</td>
</tr>
<tr>
<td>19</td>
<td>Enger Bag Mod area</td>
<td>Since herder Lenten resided in Enger Bag Mod he and his spouse felt some negative consequences that his wife became sick and they changed the residence.</td>
<td></td>
<td>Herder Lenten family</td>
</tr>
<tr>
<td>20</td>
<td>Oyu-Tolgoi</td>
<td>Oyu-Tolgoi around area was assumed a sacred place that cannot herd livestock and remove any tree or stones. But Oyu-Tolgoi project entered to this area and it made to get driven crazy one of the guards of OT site.</td>
<td></td>
<td>Tsendoo Dolgor Munkh-Ovoo, age 69</td>
</tr>
<tr>
<td>21</td>
<td>Three Beauty Mounts</td>
<td>The Three Mounts in the east of Khanbogd Khairkhan assumed as three husbands of Lordess of Khanbogd Khairkhan and it is forbidden to women to climb over them.</td>
<td></td>
<td>Khandsuren Tserendorj and spouse Ohinduu Bat Taijuud</td>
</tr>
<tr>
<td>22</td>
<td>Khukh Khadnyi Oboo</td>
<td>This cairn is worshipped by Demberel Dolgorsuren, Khukh Khad winter camp, and Namsrai of Salaa winter camp, and their families. They offer tea and food in the first day of Lunar New Year and make ritual.</td>
<td></td>
<td>Namsrai Dolgorsuren Zelme, and Demberel Dolgorsuren Zelme and their family members</td>
</tr>
<tr>
<td>23</td>
<td>Khurkhun Ovoo</td>
<td>This worshipped cairn is sacred and it is forbidden to women to climb. Also, it is no allowed to touch and remove any of stones and trees of it. The genuine name is not to be said openly, then people use nickname like &quot;sweet hill&quot;- Khurkhun Ovoo.</td>
<td></td>
<td>Namsrai Dolgorsuren Zelme, and Demberel Dolgorsuren Zelme and their family members</td>
</tr>
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24 | Birth Place in Ulaan Tolgoi | Namsrai Dolgorsuren told that his birth place locates in the Ulaan Tolgoi. I will be quite unhappy if my birth place is excavated and removed, because every year I visit my birth place and lay down there for calling my spirit and happiness. | | Namsrai Dolgorsuren, Zelme | Salaa winter camp
25 | Ovoo in Ugalz winter camp | There are 2 worshipping ovoo in Ugalz winter camp of Ser-Od Uulii and one of them has ritual in the 1st day of Lunar New Year. | | Ser-Od Uulii, Ugalz Winter camp | Ugalz winter camp
26 | Ugalz winter camp | This winter camp is distinctive in due to its origin. This winter camp area was camp of wild sheeps before and it is special warm place. Ser-Od family inherited his ancestors this camp and deeply respect this camp. | | Ser-Od Uulii family, Ugalz Winter camp | Ugalz winter camp
27 | Bayan Baraat Khairkhan | Bayan Baraat is the one of the high mountains around this area and households around this area offer tea every morning to this mountain. | | Ser-Od Uulii, Ugalz winter camp, and Bandi Tsedenjav, Ehen Burkhan winter camp and their families. | Ugalz winter camp
28 | Ulaan Tolgoin Enger | There is Stone which marked the birth place of Batsugir Khorol, aunt of Ser-Od's spouse Sunjidmaa. | | Ser-Od Uulii family, Ugalz Winter camp | Ugalz winter camp
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<tr>
<td>29 Burial in the Ehen Burkhan winter camp</td>
<td>This burial is identified and researched by archaeologists and they say there was not found anything. But local people say it is impossible to be found anything.</td>
<td></td>
<td>Ser-Od Uulli, Ugalz winter camp, and Bandi Tsedenjav, Ehen Burkhan winter camp and their families.</td>
<td>Ugalz winter camp N 43 00 22.6 E 106 55 46.0 Ehen Burkhan winter camp N 42 52 49.4 E 106 58 19.4</td>
</tr>
<tr>
<td>30 Tsagaan Del</td>
<td>Tsagaan Del is long ranged mount and people around this area say that this is body of giant snake. The tale of this giant snake reaches to the rocks in the east of Ehen Burkhan winter camp. People assume this Tsagaan Del is quite severe mount and people are not eager to ride around there.</td>
<td></td>
<td>Ser-Od Uulli, Ugalz winter camp, and Bandi Tsedenjav, Ehen Burkhan winter camp and their families.</td>
<td>Ugalz winter camp N 43 00 22.6 E 106 55 46.0 Ehen Burkhan winter camp N 42 52 49.4 E 106 58 19.4</td>
</tr>
<tr>
<td>31 Rock Holes in the Ehen Burkhan winter camp</td>
<td>The Children of Bandi Tsedenjav had played and erected stone ger games in the holes in rock next to Ehen Burkhan winter camp.</td>
<td></td>
<td>They are worshipped by Ehen Burkhan winter camp and their families.</td>
<td>Ehen Burkhan winter camp N 42 52 49.4 E 106 58 19.4</td>
</tr>
<tr>
<td>32 Birth Place Marked Stone</td>
<td>Enkhtuya Tsedengombo was born in Adgiin Burkhan winter camp and her birth place marked stone is locates there.</td>
<td></td>
<td>Shinebayar Bat, Nogoornuud, age 45</td>
<td>Adgiin Burkhan winter camp</td>
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<td>33</td>
<td>Kid game place in Adgiin Burkhan winter camp</td>
<td>There is a game area of the Shinebayar Bat’s children 100 meter away in the east of Adgiin Burkhan winter camp.</td>
<td>![GPS coordinates]</td>
<td>Shinebayar Bat Nogoonuud, age 45</td>
</tr>
<tr>
<td>34</td>
<td>Khuren Ovoo</td>
<td>Khuren Ovoo is mentioned and worshipped Ganbold Honikhuu, Nogoonuud. This locates in the east of Gants Mod winter camp. As Khonihuu told they make offering and worshipping ritual in the first day of Lunar New Year.</td>
<td>![GPS coordinates]</td>
<td>Ganbold Khonikhuu, Nogoonuud, age 46</td>
</tr>
<tr>
<td>35</td>
<td>Tavan Ovoo (Five Worshipping Cairns)</td>
<td>It is worshipped by Ganbold Honihuu, and it locates in the north of Gants Mod winter camp. Also, Ganbold makes ritual in the 1st day of Lunar New Year celebration.</td>
<td>![GPS coordinates]</td>
<td>Ganbold Khonikhuu, Nogoonuud, age 46</td>
</tr>
<tr>
<td>36</td>
<td>Burials in the Khuren Enger</td>
<td>There are 5 burials-khirgisuur in the Khuren Enger. They are researched by archeologists and it was heard that there was found human remain which was positioned faced to the ground. Also, they were asking the reasons of this funeral customs. Later they said there was found nothing. But it can not be like that.</td>
<td>![GPS coordinates]</td>
<td>Badamsambuu Bat Zelem, age 39</td>
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<tr>
<td>37</td>
<td>Sharga Ovoo</td>
<td>Sharga Ovoo is worshipped by Boldbayar Danakhuu, Munkh-Ovoo, and his family. There are made rituals in major celebrations of Mongolians like 1st day of Lunar New Year and during Naadam time.</td>
<td>Boldbayar Danakhuu, Munkh-Ovoo, age 44</td>
<td>Zadgai Sukhii winter camp</td>
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<td>38</td>
<td>Duvruj Khairkhan</td>
<td>&quot;We worship Durvulj Khairkhan and since it worshipped we avoid using the original name and call like Khuren Khairkhan and Khoid (Northern) Khairkhan&quot; said Khangarid Buntun, Khangud. Our ancestors had been said that this mountain patronize increase of camels. We have offering ritual in the 1st day of Lunar New Year and offer from newly prepared tea every morning. Also, it is worshipped by Budargana, Bulan Ders, Shavag, and Uulzvar winter camps families. &quot;Actually, the area from the south of the Northern Khairkhan along with Khuvur river, it is sacred place. Since our childhood taking any drop of branch and stones were not been allowed&quot; said Otgonduu, Tseveenjav, and Shirnen.</td>
<td>It is worshipped by families of Khangarid Buntun Khangud and Chuluunbaatar, Otgonduu, Tseveenjav Udaid.</td>
<td>Winter camps of Uulzvar, Budargana, Bulan Ders, and Shavag</td>
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<td>E 107 15 36 3</td>
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<td>39</td>
<td>Fierce place named &quot;Balgant&quot;</td>
<td>&quot;Balgant is fierce place that people resist of being around the area. It is place that doesn't allow to touch and being touched.&quot; Shirmen Irgel, Khavan told &quot;Balgant is very special and fierce place that once my motorbike was stuck in mud and I digged the ground a little. Then I got head scald on my body.</td>
<td>It is worshipped by families of Khangarid Buntun Khangud and Chuluunbaatar, Otgonduu, Tseveenjav Udaid.</td>
<td>Winter camps of Uulzvar, Budargana, Bulan Ders, and Shavag</td>
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<td>40</td>
<td>Birth Place in Ikh Us</td>
<td>There are birth places of Khangarid and Gerelt-Od of Buntun Khanguud and Khangarid visits his birth place during Lunar New Year. If my birth place will be excavated and removed that will be unpleasant to me. Also, birth place of Naranchimeg Buntun locates 2 km away in the north west of Budargana winter camp and 100 m away in the east of OT-GS road.</td>
<td><img src="image" alt="GPS" /></td>
<td>Khangarid Buntun Khanguud</td>
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<td>41</td>
<td>Uneged Khairkhan</td>
<td>Uneged Khairkhan is sacred place which has no any worship and offering rituals. But it is forbidden to visit the area and хайрхан нь оуч any tree and stones told Shirnen Itgel Khavan.</td>
<td><img src="image" alt="GPS" /></td>
<td>Shirnen Itgel Khavan and Shavag winter camp people worship this sacred mountain.</td>
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<tr>
<td>42</td>
<td>Ulaan Del Chain (Khyar)</td>
<td>Ulaan Delin Am is a chain which continued from Durvulj Khairkhan to the east and it locates 9 km away in the north-east of Shavag winter camp and in the east of Uulzvar winter camp 1.5 away. There taboo that no hunting and picking up trees from it. As Otgonduu told “Ulaan Delin Khyar is sacred place as a whole. There was one case that Erdenebayar once wanted to challenge it and broken one Bulls tree till the end. But, tomorrow wolf. Also, Tseveenjav added that “Ulaan Khyar is sacred and holy place for us, it was told that there was never been shot and hunt. I never been made any sound of shooting and picked any tree”.</td>
<td><img src="image" alt="GPS" /></td>
<td>Shirnen Itgel Khavan and Shavag winter camp people worship this sacred mountain.</td>
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<td>43 Stone Ger Game Areas near the Shavag and Bulan Ders winter camps</td>
<td>There are plenty of stone ger game bases which Shirnen of Shavag winter camp and Otgonduu and Tseveenjiev of Bulan Ders winter camp played when they were child.</td>
<td>Shirnen Itgel Khavan and Shavag winter camp people worship those stone ger game bases.</td>
<td>Winter camps of Uulzvar, Budargana, Bulan Ders, and Shavag N 42 55 12 4 E 107 815 1 N 42 51 16 5 E 107 12 05 9 N 42 52 16 5 E 107 12 05 9 N 42 50 36 8 E 107 15 36 3</td>
<td></td>
</tr>
<tr>
<td>44 Shar Khuurug winter camp</td>
<td>Two families in Shar Khuureg winter camp got fired in 1980s and since that endurance local people assume this area has some negative power. Otgonduu told “Especially household who has infant, that winter camp has negative power.” Before it was great and high winter camp that you can see far away the camel humps.</td>
<td>This is negative power place that people of Shavag, and Bulan Ders winter camp avoid visit and come to that area.</td>
<td></td>
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<td>45 Shandniy Am</td>
<td>Shandniy Am was pre-revolution burial place as told Otgonduu and it locates in the east of Durvulj Khairkhan in 1 km.</td>
<td></td>
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<tr>
<td>46 Uulzvar River</td>
<td>Uulzvar River and Uulzvar open water locate from only 1 km away from OT-GS road. It is a deep sacred place which forbidden to touch and pick up any piece of stone and trees. It is worshipped by Chuluunbaatar Huudeg Udaid and his family.</td>
<td>It is worshipped by Chuluunbaatar Huudeg Udaid and his family.</td>
<td>Uulzvar winter camp N 42 55 12 4 E 107 08 15 1</td>
<td></td>
</tr>
<tr>
<td>47 Tsahildagtai River</td>
<td>Tsahildagtai River and Tsahildagtai Open water locate 1 away in the east of OT-GS road. It has same taboo, and forbidden customs like Uulzvar River and Water.</td>
<td>It is worshipped by Chuluunbaatar Huudeg Udaid and his family.</td>
<td>Uulzvar winter camp N 42 55 12 4 E 107 08 15 1</td>
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### The Name of Sacred and Taboo Place

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<td>48</td>
<td>Hunting Hideaways in the Uulzvar and Tsahildagtai Rivers</td>
<td></td>
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<td></td>
<td>Uulzvar winter camp N 42 55 12 4 E 107 08 15 1</td>
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<tr>
<td>49</td>
<td>Khoroo tyin Khyar (Chain)</td>
<td>This place locates in 1.5 km away in the west of Uulzvar River and 500 meter away in the west of OT-GS road and it is considered sacred by this area people.</td>
<td></td>
<td>It is worshipped by Chuluunbaatar Huudeg Udaid and his family.</td>
<td>Uulzvar winter camp N 42 55 12 4 E 107 08 15 1</td>
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<tr>
<td>50</td>
<td>Khutul Shandnyi Khar</td>
<td>This place is in 1.5 km away in the north-west of Uulzvar winter camp and 2 km away in the west of OT-GS road. It is sacred place, however there is erected antenna on the top of it.</td>
<td></td>
<td>It is worshipped by Chuluunbaatar Huudeg Udaid and his family.</td>
<td>Uulzvar winter camp N 42 55 12 4 E 107 08 15 1</td>
</tr>
<tr>
<td>51</td>
<td>Tsagaan Ereg</td>
<td>There are 2 shores which considered being fierce and having some negative power. It is said it is not going between two of them.</td>
<td></td>
<td>Khorolsuren Osor Nogoonuud, age 34</td>
<td>Enger Ulaan winter camp N 42 53 12 9 E 107 15 29 8</td>
</tr>
<tr>
<td>52</td>
<td>Ovoo of Enger Ulaan Tolgoi winter camp</td>
<td>This ovoo locates in the 100 m in the north of the winter camp. There is worshipping and offering ritual in the 1st day of Lunar New Year.</td>
<td></td>
<td>Khorolsuren Osor Nogoonuud, age 34</td>
<td>Enger Ulaan winter camp N 42 53 12 9 E 107 15 29 8</td>
</tr>
<tr>
<td>53</td>
<td>Stone Ger Game Bases of Enger Ulaan Tolgoi winter camp people</td>
<td>The most of the members of Enger Ulaan Tolgoi winter camp people and son of Khorolsurn, Khosoo had been played by the stone ger games which locate in the north of the winter camp in 100 meter. Currently, they picked up all the stone camels (30s) and kept it at home. Khorolsuren giving meaning in his action and stone camels saying that since I have picked and kept all camels our camel herd is increasing.</td>
<td></td>
<td>Khorolsuren Osor Nogoonuud, age 34</td>
<td>Enger Ulaan winter camp N 42 53 12 9 E 107 15 29 8</td>
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## MIHT: MONGOLIAN INTERNATIONAL HERITAGE TEAM

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<td>54</td>
<td>Burials in Bituuhein Enger: There are 2-3 burials in the front side of the Bituuhein mountain and it was a funeral place.</td>
<td>![Coordinates](N 42 53 12 9 E 107 15 29 8)</td>
<td>Khorolsuren Osor Nogoonoor, age 34</td>
<td>Enger Ulaan winter camp</td>
</tr>
<tr>
<td>55</td>
<td>Ulaan Bulag (Red Spring): When were cut the trees in the two sides of Ulaan Bulag there were appeared milk and blood. It is forbidden to get tree, even hurt and damage of them are not allowed. Altangerid said “Through my life I never been touched and damaged any of trees there.”</td>
<td>![Coordinates](N 42 53 12 9 E 107 15 29 8)</td>
<td>Altangerid Dashdolgor Nogoonoor, age 26</td>
<td>Talbar winter camp</td>
</tr>
<tr>
<td>56</td>
<td>Burial of Buddhist Monk: There is a burial in 300-400 meter away in the west of Talbar winter camp which called by local people as Lamyin Sharil (Burial of Monk). Now this burial is broken and some inner construction is detected.</td>
<td>![Coordinates](N 42 53 12 9 E 107 15 29 8)</td>
<td>Altangerid Dashdolgor Nogoonoor, age 26</td>
<td>Talbar winter camp</td>
</tr>
<tr>
<td>57</td>
<td>Oyut Tolgoi: There is light gray mount in the 2km away in the north-east of Talbar winter camp and of you dig on it there can be found green stones. It was said that pre-revolution Chinese were excited there. Local man Baatarchuluun excavated for 1 meter and couldn’t find anything. Geologist Garamjav is going around of it.</td>
<td>![Coordinates](N 42 53 12 9 E 107 15 29 8)</td>
<td>Khorolsuren Osor Nogoonoor, age 34, Altangerid Dashdolgor Nogoonoor, age 26, Enger Ulaan Tolgoi winter camp</td>
<td>Talbar winter camp and Enger Ulaan winter camp</td>
</tr>
<tr>
<td>58</td>
<td>Temeen Khuren Ovoo: Temeen Khuren is sacred and fierce place which locate 1 km away in the west of Kharganat winter camp. Khorolsuren told “One local man picked up branch of wood and his camel which he rode was died soon after. Then people talk “It is good that he himself didn’t hurt and could survive”.</td>
<td>![Coordinates](N 42 53 12 9 E 107 15 29 8)</td>
<td>Enhjargal Osor Nogoonoor, Kharganat winter camp, age 32</td>
<td>Kharganat winter camp</td>
</tr>
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<td>59 Ovoo in the Undur Khukh Tolgoi winter camp</td>
<td>This is winter camp ovoo worshipped by Enkhbayar Buntun Khanguud and his family people.</td>
<td>Enkhbayar Buntun Khanguud, age 46</td>
<td>Undur Khukh Tolgoi winter camp N 42 54 27 5 E 107 21 26 3</td>
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<tr>
<td>60 Bor Khoshuu Ovoo</td>
<td>It has worship ritual in the 1st day of Lunar New Year.</td>
<td>Boldmaa Danakhuu, age 47</td>
<td>Enger Bag Mod winter camp N 42 53 04 5 E 107 22 25 5</td>
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<tr>
<td>61 Tsagaan Khairkhan</td>
<td>There is open water in the Tsagaan Khairkhan and it is not allowed to throw anything to the water and shouldn’t be dig and hurt any ground and trees around this area. Once one family washed the sheep wool in the water and their livestock herd was attacked by wolves. Also, Boldmaa told “There was one burial in the Tsagaan Khairkhan and it was excavated. Mongolians never do this action, there was one Chinese might did that. There is no one who can do that kind of action in this river area. The lord of water Lus doesn’t account on Chinese, pig and rat, I have been heard”.</td>
<td>Boldmaa Danakhuu, age 47</td>
<td>Enger Bag Mod winter camp N 42 53 04 5 E 107 22 25 5</td>
<td></td>
</tr>
<tr>
<td>62 Sacred Tree in the Shavag winter camp</td>
<td>This is burial area in pre-revolution time and there was renewed funeral. Erdenebayar said “Tsermaa’s kid was buried there, I heard”. It is 4 km away in the north of Erdenebayar winter camp”.</td>
<td>Erdenebayar Osor, Tumur, age 46</td>
<td>Bag Modnyi Salaa winter camp N 42 54 27 5 E 107 21 26 3</td>
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<tr>
<td>63 Ovoo in the Khanan Ovoo winter camp</td>
<td>It locates 100 meter in the north of the winter camp and there is worshipping and offering ritual in the 1st day of Lunar New Year.</td>
<td>Jargalsaikhan Tseden, Uvuu and his family members worship this ovoo.</td>
<td>Khanan winter camp and Tokholi River water.</td>
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<td><strong>64</strong> Tavan Ovoo Sacred Place</td>
<td>Tsend-Ayush of Saikhan-Ovoo winter camp told that “Our grand-father said our ancestors were been worshipped this ovoo and it patronize us and it was said that if you worship and respect this ovoo, your future will be good”.</td>
<td>Jargalsaikhan Tseden, Uvu and his family members. Tsend-Ayush Regzen, Dado, age 59</td>
<td>Khanan winter camp and Tokhol River water. Saikhan-Ovoo winter camp</td>
<td></td>
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<tr>
<td><strong>65</strong> Bayan-Mod Sacred Place</td>
<td>Bayan-Mod sacred place locates 200 meter away in the north-east of Khanan winter camp. It is sacred place which is forbidden to touch and pick up tree and stones over there.</td>
<td>Jargalsaikhan Tseden, Uvu and his family members</td>
<td>Khanan winter camp and Tokhol River water.</td>
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</tr>
<tr>
<td><strong>66</strong> Burial in the Khanan winter camp</td>
<td>There are 14 burials 500 meter away in the north of Khanan winter camp and it is not clear that they have been researched by archaeologists.</td>
<td>Jargalsaikhan Tseden, Uvu and his family members</td>
<td>Khanan winter camp and Tokhol River water.</td>
<td></td>
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<tr>
<td><strong>67</strong> Ovoo in the Saikhan Ovoo winter camp</td>
<td>The ovoo locates 200 meter in the north-west of winter camp and we worship and appreciate that it patronized us since our children grew up healthy and living happy.</td>
<td>Tsend-Ayush Regzen, Dado, age 59 and family members</td>
<td>Saikhan Ovoo winter camp and water.</td>
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<td>68</td>
<td>Undain River</td>
<td>Undain river is in 200 meter in the north-west of Tavan Tolgoi winter camp. Otgonjav said &quot;This river is a main water supplying our people, therefore, it should be not hurt.&quot;</td>
<td></td>
<td>Otgonjav Khaldav, Nogoonuud, age 39, and his family members worship.</td>
</tr>
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<td>69</td>
<td>Ovoo in the Atsat Khukh Ovoo winter camp</td>
<td>There is our Atsat Khukh winter camp ovoo in the 800 meter in the east, and we offer our tea and resopect every morning.</td>
<td></td>
<td>Tserennadmid Tugel, Ikh-Ulziit, age 42, and family members worship.</td>
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<td>70</td>
<td>Birth Place in the Bor Teeg mount</td>
<td>There is a birth place of Bandia Samba in the front side of the Bor Teeg.</td>
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<td>Bandia Samba, Udaid, age 72</td>
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<td>71</td>
<td>Birth Place in the Bulan Ders</td>
<td>There are birth places of Togtokh and Bud of Luvsantseren in the Bulan Ders winter camp.</td>
<td></td>
<td>Baatarchuluun Sukh, Borjigin</td>
</tr>
<tr>
<td>73</td>
<td>The Birth Place in the Shavag winter camp</td>
<td>There is birth place of younger son of Enkh-Ochir of Baatarchuluun in the Shavag winter camp of Khuuvur.</td>
<td></td>
<td>Baatarchuluun Sukh, Borjigin</td>
</tr>
<tr>
<td>74</td>
<td>Sacred Tree and Negative Power place in the Bor Khoshuu winter camp</td>
<td>There is one Bulls tree in the north-west of the Bor Khoshuu winter camp and it is not allowed to touch and remove any branches from it. Also, there is said that people see some magical light from far away.</td>
<td></td>
<td>Baatarchuluun Sukh, Borjigin</td>
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<td>75</td>
<td>Stone Ger Game Bases in the front-side of Serven mount</td>
<td>There is fine stone game base in the Serven mount. Baatarchuluun said, we do not know who built and where been played.</td>
<td></td>
<td>Baatarchuluun Sukh, Borjigin</td>
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<td>76</td>
<td>Burial in the Khar Tolgoi</td>
<td>There is a burial 5 km away in the south-east of Bulan Ders winter camp. People talk the burial can be erected 200-300 before.</td>
<td></td>
<td>Baatarchuluun Sukh, Borjigin</td>
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<td>77</td>
<td>Tomb in the Temeen Khuren Ovoo</td>
<td>Temeen Khuren locates in the 4 km away south-east of the Bulan Ders winter camp. There is burial which human body is located as sat on the knees. Also, there are appeared some bones.</td>
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<td>Baatarchuluun Sukh, Borjigin</td>
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<td>78</td>
<td>Stone Sculpture in the Bulan Ders winter camp</td>
<td>There is stone sculpture in the east of Bulan Ders winter camp near the Tsagaan Khairkhan.</td>
<td></td>
<td>Baatarchuluun Sukh, Borjigin</td>
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<td>79</td>
<td>The Ruin of the Monastery in Enger Bag Mod</td>
<td>There are remains of the bases of 2 gers and one house in the south-west of the Bulan ders winter camp and it is the ruin of Enger Bag Mod monastery.</td>
<td></td>
<td>Baatarchuluun Sukh, Borjigin</td>
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<td><strong>80</strong> The Ovoo in the Ikh Tsagaan Khad winter camp</td>
<td>This is ovoo which locates in the winter camp of Ikh Tsagaan Khad and Tsognemekh Huu, Hurottsagaan and his family members worship; the main ritual is making offering in the 1st day of Lunar New Year.</td>
<td>The winter camp of Ikh Tsagaan Khad and Tsognemekh Huu, age 43, Hurottsagaan and his family members worship.</td>
<td>The winter camp of Ikh Tsagaan Khad N 42 52 56 1 E 107 25 01 7</td>
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<tr>
<td><strong>81</strong> Tsagaan Khad Sacred Place</td>
<td>As told wife of Tsognemeh Khuu “When we were child adults always said that do not take and remove sukhai of Tsagaan Khad and we followed their words, never been hurt any of sukhai. Now, khailaas and tooori trees do no longer exist there. As the original habitants there, we would say we never been hurt and removed ny tree there”.</td>
<td>The winter camp of Ikh Tsagaan Khad and Tsognemekh Huu</td>
<td>The winter camp of Ikh Tsagaan Khad (The winter camp is removed and now the household camps in Dalan Zag winter camp) N 42 52 56 1 E 107 25 01 7</td>
<td></td>
</tr>
<tr>
<td><strong>82</strong> Stone Ger Game Base in Tsagaan Khad</td>
<td>The stone ger game base which the children of the brother of the wife of Tsognemeh, locates 3-4 km away in the west of OT-GS road in Tsagaan Khad.</td>
<td>The winter camp of Ikh Tsagaan Khad and Tsognemekh Huu</td>
<td>The winter camp of Ikh Tsagaan Khad N 42 52 56 1 E 107 25 01 7</td>
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<tr>
<td><strong>83</strong> Nomgon Khairkhan</td>
<td>Nomgon Khairkhan mountain which locates 20 km away in the east of OT-GS road, is the main sacred and worshipping place for Nomgon bag people and there takes a festival in every first month of summer. The festival includes wrestling, horse race and other contests. Also, the households around the sacred mountain, offers their fresh tea in the every morning.</td>
<td>The winter camp of Ikh Tsagaan Khad and Tsognemekh Huu</td>
<td>The winter camp of Ikh Tsagaan Khad N 42 52 56 1 E 107 25 01 7</td>
<td></td>
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<tr>
<td><strong>84</strong> The old burial place of Zurgaan Mod</td>
<td>As wife of Tsognemeh heard from her mother, 4-5 km away in the north-west of the new winter camp area of Dalan Zag, Zurgaan Mod was the old burial place. People can go around that place without any specific ban and taboo.</td>
<td>The winter camp of Ikh Tsagaan Khad and Tsognemekh Huu</td>
<td>The winter camp of Ikh Tsagaan Khad N 42 52 56 1 E 107 25 01 7</td>
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85 | Baruun Togoo Khairkhan | Darvagai Shar Chuluu and Darvagai Khoyor Mod are the sacred and worshipping places for Otgonduu Lantuu, Khukh Khia of Zuun Zag winter camp. The Baruun Togoo Khairkhan locates exactly in the middle of the two roads of Tavan Tolgoi Trans and Ot-GS. However, still the mountain is our sacred worshipping mountain, that we worship and offer our fresh tea etc. Also, in the 1st day of Lunar New Year the all men of around this area climb and offer food and say all the wishes. The women are forbidden to be climbed. Also, it is assumed that it is good for outsiders who live in this area. | | Darvagai Shar Chuluu, Darvagai Khoyor Mod, and Zuun Zag winter camps
Zuun Zag winter camp
N 42 52 56 1
E 107 25 01 7

86 | Zuun Togoo Khairkhan | Zuun Togoo Khairkhan is sacred and fierce mountain as well, which do not allow to climb on it women. There is no any fixed ritual, however, people worship and make offerings, said Otgonduu Lantuu. | | Darvagai Shar Chuluu, Darvagai Khoyor Mod, and Zuun Zag winter camps
Zuun Zag winter camp
N 42 52 56 1
E 107 25 01 7

87 | Darvagai River | The Darvagai River is sacred and fierce area which no allowed taking and removing sukhai and khais trees. The area locates 3-4 km away in the west of Darvagai Shar Chuluu winter camp. There used to be tooroi trees, however, they are no longer exist there. Badamsamuu of Tour Time TV program came and said will protect tooroi tree, however, he fired some tooroi and went away. | | Darvagai Shar Chuluu, Darvagai Khoyor Mod, and Zuun Zag winter camps
Zuun Zag winter camp
N 42 52 56 1
E 107 25 01 7
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<td>88 Negative Power or Endurance Place in Tsagaan Khad</td>
<td>There is a place where Jargals aikhan nicknamed as Khuren Shanaa, was suicide himself. Since that occasion this place got fierce and happened many different things.</td>
<td>Otgonduu Lantuuj, Khukh Khia, Darvagai Shar Chuluu, Darvagai Khoyor Mod, and Zuun Zag winter camps, age 32, and his family members</td>
<td>Darvagai Shar Chuluu, Darvagai Khoyor Mod, and Zuun Zag winter camps N 42 52 56 1 E 107 25 01 7</td>
</tr>
<tr>
<td>89 Tsulkhir Growing Area- Dalan Shar</td>
<td>There is area where Tsulhir grows is 5 km away in the west of Tsagaan Khad.</td>
<td>Otgonduu Lantuuj, Khukh Khia, Darvagai Shar Chuluu, Darvagai Khoyor Mod, and Zuun Zag winter camps, age 32, and his family members</td>
<td>Darvagai Shar Chuluu, Darvagai Khoyor Mod, and Zuun Zag winter camps N 42 52 56 1 E 107 25 01 7</td>
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<td>90 Tsagaan Khad- Darvagai River</td>
<td>Tsagaan khad is the beginning spot and area of Darvagai River, we wish, just do not excavate this area. This is supplying spot of our water and our worshipped area.</td>
<td>Otgonduu Lantuuj, Khukh Khia, Darvagai Shar Chuluu, Darvagai Khoyor Mod, and Zuun Zag winter camps, age 32, and his family members</td>
<td>Darvagai Shar Chuluu, Darvagai Khoyor Mod, and Zuun Zag winter camps N 42 52 56 1 E 107 25 01 7</td>
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<tr>
<td>91 Valley of Suul Tolgoi, Horse Race place for Nomgon bag</td>
<td>During worshipping ritual of Nomgon Khairkhan there is organized Horse Race and wrestling. The horse racing happens in the east of Nomgon Khairkhan, a place called Suul Tolgoi.</td>
<td>Ulziiburen Bud, Sonomchin, Tsagaan Khad winter camp, age 31 Erdenebileg Jargal, Sonomchin, age 51</td>
<td>Tsagaan Khad winter camp and Gun Ders winter camp N 42 52 56 1 E 107 25 01 7</td>
</tr>
<tr>
<td>92 Modot Khoshuu</td>
<td>Modot Khoshuu is a place where takes place Camel Polo which is initiated by OT project. Polos were organized in winter and spring and sometimes happened during Lunar New Year.</td>
<td>Ulziiburen Bud, Sonomchin, Tsagaan Khad winter camp, age 31 Erdenebileg Jargal, Sonomchin, age 51</td>
<td>Tsagaan Khad winter camp and Gun Ders winter camp N 42 52 56 1 E 107 25 01 7</td>
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<tr>
<td>93</td>
<td>Sacred Place in Tsagaan Khad</td>
<td>The place where Tooroi tree was grown in the Tsagaan Khad was distinctively fierce and there had many different taboos. Tooroi was harshly forbidden to take and remove, but nowadays they are no longer exist there.</td>
<td>Ulziburen Bud, Sonomchini, Tsagaan Khad winter camp, age 31. Erdenebileg Jargal, Sonomchini, age 51.</td>
<td>Tsagaan Khad winter camp and Gun Ders winter camp N 42 52 56 1 E 107 25 01 7</td>
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<tr>
<td>94</td>
<td>Hunting Niche</td>
<td>Pre-revolution time Chinese traders were been passed through this area and local people came to hide here for attacking them.</td>
<td>Demberel (35) and Namsrai (49) Dolgorsuren, Zelme</td>
<td>Khukh Khad and Salaa winter camps, Javkhlan bag</td>
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<tr>
<td>95</td>
<td>Khuurkhun Ovoo</td>
<td>It was worshipped by our ancestors and we make offering ritual on the top of ovoo. The women are not allowed to climb to it. The name is changed in recent time as “Zurkhen Ovoo”</td>
<td>Demberel (age 35) and Namsrai (age 49) Dolgorsuren, Zelme</td>
<td>Khukh Khad and Salaa winter camps, Javkhlan bag</td>
</tr>
<tr>
<td>96</td>
<td>Bor Ovoo</td>
<td>It is one of the most worshipped and respected, sacred places of this area. This place doesn’t allow hunting outsiders; since they reach here there can happen harsh snow or raining etc. Through all seasons there is open water from the sideline of the ovoo. To direct gun to the rock next to the ovoo is not allowed and forbidden. Also, this is not appreciated to drop urine etc on the top of the ovoo.</td>
<td>Demberel (age 35) and Namsrai (age 49) Dolgorsuren, Zelme</td>
<td>Khukh Khad and Salaa winter camps, Javkhlan bag</td>
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<td>97</td>
<td>Sacred Place of Zadgait Ulaan Tolgoi</td>
<td>Around this area, it is not appreciated that children dig the ground and if they dig there can be appear spots in their hands and wolves can attack to herd. Wild-horse and gazelle come and get water from here.</td>
<td>42° 58'751''</td>
<td>Iderborgil Tsedenbaljir, Tamsag, age 37</td>
<td>Ulaan Tolgoi winter camp, Javkhlant bag</td>
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<tr>
<td>98</td>
<td>Gyalaan Tsokhio Rock</td>
<td>In the south-west side of this rock there is snake nest, thus local people assume it as a Realm of Water Lords. It is not allowed to reach and touch the snakes over there. Mendbayar’s one child killed one of the snakes and later he got accident and died. Since that time the family of Mendbayar started worshipping.</td>
<td>43° 11'256''</td>
<td>Mendbayar Munkh-Ovoo, age 43</td>
<td>Gyalaanyi winter camp, Javkhlant bag</td>
</tr>
<tr>
<td>99</td>
<td>Single Khailaas Tree in the Modon winter camp</td>
<td>This is assumed shouldn’t approach to this tree and no one and no any cattles get close to it. Local people talk like there appears light midnight, people talk, and laugh, and every year there comes one crow and gets nest.</td>
<td>43° 10'846''</td>
<td>Narantsetseg Amitan, Tsakhar, age 53</td>
<td>Modon winter camp in Ädag Khaliv, Javkhlant bag</td>
</tr>
<tr>
<td>100</td>
<td>Khuduugyn Erdene Ovoo</td>
<td>In the left side of the ovoo used to be funeral place in pre-revolution time and now local people talk it has some strange appearances in the front area of the ovoo.</td>
<td>43° 9'700''</td>
<td>Purevdorj M. Borjigjin, age 45</td>
<td>Ehen Khaliv winter camp Gaviluud bag</td>
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<td>101</td>
<td>Ovoo of Khukh Khad winter camp</td>
<td>Herder D. Demberel erected ovoo in the north of his winter camp in 2004 and made offering ritual every morning. Also, he completes the main ritual in the 1st day of Mongolian Lunar New Year.</td>
<td>[42° 55'098''] [106° 55'909'']</td>
<td>Demberel D. Zelme, age 35</td>
<td>Khukh Khad winter camp, Javkhlant bag</td>
</tr>
<tr>
<td>102</td>
<td>Ovoo of Del winter camp</td>
<td>Batsukh S. began worshipping the obo which located in the east of his winter camp since 1990 and offered tea and milk every morning. Also, there is main worshipping and offering ritual in the 1st day of Lunar New Year.</td>
<td>[43° 14'33''] [106° 38'830'']</td>
<td>Batsukh Saikhan-Gombo, age 73</td>
<td>Del winter camp of Khulgaryin Us, Javkhlant bag</td>
</tr>
<tr>
<td>103</td>
<td>Ovoo of Ulaan Tolgoi winter camp</td>
<td>This is the ovoo which located in the east of Ts. Iderborgil's winter camp. He brought Buddhist monk from Dalanzadgad in 2008 and erected this ovoo and since that time they offer their ritual offerings often. In the 1st day of Lunar New Year fire scents and make offering.</td>
<td>[43° 11'748''] [106° 54'535'']</td>
<td>Iderborgil Tsedenbaljir, Tamsag, age 37</td>
<td>Ulaan Tolgoi winter camp, Javkhlant bag</td>
</tr>
<tr>
<td>104</td>
<td>The Northern Ovoo of Ulaan Ovoo winter camp</td>
<td>This is the ovoo which exists in the north of Ts. Nergui's winter camp. It was worshipped by from pre-revolution time and they make offering as well. In the 1st day of Lunar New Year fire scents and make offering.</td>
<td>[43° 11'256''] [106° 55'003'']</td>
<td>Mendbayar Munkh-Ovoo, age 43</td>
<td>Gyalaanyi winter cam, Javkhlant bag</td>
</tr>
<tr>
<td>105</td>
<td>Ovoo of Gyalaan winter camp</td>
<td>When Mendbayar was child his mother always made offering ritual to this ovoo and now Mendbayar became responsible for it. They offer fresh tea every morning. This place is assumed as fierce place thus, they make offering.</td>
<td>[43° 11'256''] [106° 55'003'']</td>
<td>Mendbayar Munkh-Ovoo, age 43</td>
<td>Gyalaanyi winter cam, Javkhlant bag</td>
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<td>106</td>
<td>Ovoo of Modon winter camp</td>
<td>This ovoo exists in the north-west of the Narantsetseg’s winter camp. It erected 3 years ago and it has permanent offering and it is the biggest ovoo around this area.</td>
<td></td>
<td>Narantsetseg Amitan, Tsakhar, age 53</td>
<td>Modon winter camp in Adag Khail, Javkhlant bag</td>
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<tr>
<td>107</td>
<td>Oroin Zaraa Ovoo in the Ergen Water</td>
<td>This the winter camp that Chuluunbat Dash’s ancestors been camped the years. There is ovoo in the west of winter camp which they make offering of fresh tea etc every morning and during major celebrations.</td>
<td></td>
<td>Chuluunbat Dash Borjigin, age 65</td>
<td>Oroin Zaraa winter camp of Ergen Us, Gaviluud bag</td>
</tr>
<tr>
<td>108</td>
<td>Buddhist Prayer Letters in the Khanan Pass</td>
<td>The rock which is inscribed by Buddhist Heart prayer 6 letters is worshipping object for Bayarsaikhan and they offer fresh tea every morning to it.</td>
<td></td>
<td>Amartuvshin Tsedennorov, Ulaan Daavuu, age 31, female</td>
<td>Khanan Davaa winter camp, Javkhlant bag</td>
</tr>
<tr>
<td>109</td>
<td>Hideaway Ovoo of Khanan Davaa</td>
<td>It is said that it erected for guarding GuoMing Dan soldiers from the south. It is told as local people were been seen through from this hideaway and attacked them.</td>
<td></td>
<td>Amartuvshin Tsedennorov, Ulaan Daavuu, age 31, female</td>
<td>Khanan Davaa winter camp, Javkhlant bag</td>
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<tr>
<td>110</td>
<td>Ulaan Hideaway</td>
<td>As local people talk it is erected as for Guard Ovoo for overviewing of coming of Chinese soldiers and makes getting back them.</td>
<td></td>
<td>Tsagaan Tserenkhuu, Khavan, age 55, female</td>
<td>Shavag winter camp of Ust Bag Mod, Javkhlant bag</td>
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<td>111</td>
<td>Tsagaan Hideaway</td>
<td>As local people talk it is erected as for Guard Ovoo for overviewing of coming of Chinese soldiers and makes getting back them.</td>
<td>43° 3'520'' 106° 48'042''</td>
<td>Tsagaan Tserenkhuu, Khavan, age 55, female</td>
<td>Shavag winter camp of Ust Bag Mod, Javkhant bag</td>
</tr>
<tr>
<td>112</td>
<td>Bulger Khongoryin Ovoo</td>
<td>It has long tradition of worshipping by local people and there is ritual of firing scent and still today this has kept. Sukheer told our family also offers fresh tea every morning to it.</td>
<td></td>
<td>Sukhee Sodnomdorj, Khukh Khai, age 68, female</td>
<td>Khulsan winter camp of Khulsan Water, Bayan bag</td>
</tr>
<tr>
<td>113</td>
<td>Zamt Khongor Ovoo</td>
<td>It has long tradition of worshipping, but it is not clean since when it became sacred cairn.</td>
<td></td>
<td>Sukhee Sodnomdorj, Khukh Khai, age 68, female</td>
<td>Khulsan winter camp of Khulsan Water, Bayan bag</td>
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<tr>
<td>114</td>
<td>Ovoo of Khulsan winter camp</td>
<td>In the east of our winter camp there is one small ovoo, we do not make special ritual, however, we offer tea in the every morning. Also, I climb on it for seeing our cattle herds.</td>
<td>43° 17'956'' 107° 16'884''</td>
<td>Sukhee Sodnomdorj, Khukh Khai, age 68, female</td>
<td>Khulsan winter camp of Khulsan Water, Bayan bag</td>
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<tr>
<td>Hollow of Altan Tevsh</td>
<td>Pre-revolution time it was burial place. There are 2 hollows and there was pillow stone in the east hollow. People talk some nights there appear light in these hollows.</td>
<td>Sukhee Sodnomdorj, Khukh Khai, age 68 , female</td>
<td>Khulsan winter camp of Khulsan Water, Bayan bag</td>
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<td></td>
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<tr>
<td>Ovoo of Ukhaa Zagyin Ehen winter camp</td>
<td>This ovoo is worshipped by only our family and only we climb on it. We worship and respect this sacred hill and offer fresh tea every morning. There is a main ritual in the Lunar New Year which offers food and other things.</td>
<td>Natsgdnorj Uziinorov, Bultsuu , age 52</td>
<td>Ukhaa Zag Ekhen winter camp, Bayan bag</td>
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<tr>
<td>Khunkher Sacred Place</td>
<td>This is the most fierce and sacred place in this area. It is not allowed to take and remove any tree from this place. There was one case which one person took tree and got sick. Also, it is not allowed to climb women. One lady once climbed on it and her husband died.</td>
<td>Byambadorj Jigmed, Munkhjin, age 40</td>
<td>Ukhaa Zag Dund winter camp, Bayan bag</td>
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<tr>
<td>Uvgun Ovoo</td>
<td>This is the main sacred cairn of Alag Bayan bag. It was worshipped by since our ancestors and one of the deeply respected ovoo. Also, it is said that it is quite fierce and sacred. There are a few tree on the back of it, it is not appreciated to take and remove them. In the first month of summer there takes place worshipping festival.</td>
<td>Tsoggerel Tsarenosdnom, Khudgan, age 35</td>
<td>Ukhaa Zagyin Adag winter camp, Alag Bayan bag</td>
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<td>Khuren Ovoo</td>
<td>It is Mijiddorj's family worshipped obo which locates in the north of his winter camp. It was said the Lord of this sacred hill was gone, however, recently it came back and we began offering. It is very fierce and sacred cairn, it is not allowed to climb any body and ride over by cars.</td>
<td>Mijiddorj Ayur, age 74</td>
<td>Urubu Water winter camp, Alag Bayan bag</td>
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<tr>
<td>Orvog Sacred Place</td>
<td>It is assumed as the most fierce and sacred place in this area. There are some sukhai trees and people do not kill cattles open available to seen to it. Recently, we castrated our male camel and he died soon after. Also, there was one occasion that Badamdorj digged a little in the sideline and he injured his leg harshly</td>
<td>Banidmaa Ichinkhorloo, Khukh Khia, age 56</td>
<td>Khuren Tsokhiinyi Khoyor Mod winter camp, Alag Bayan bag</td>
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<tr>
<td>Ikh Shireet Mountain-The Place Has Illusions</td>
<td>It is said that this mountain has some illusional visions, for example it can be seen some lights at night. We have seen the lights because, it is near in the north our winter camp.</td>
<td>Badamdorj Ravandorj Zelme, age 46</td>
<td>Ikh Shireet winter camp, Alag Bayan bag</td>
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<tr>
<td>Illusional Place of Shar Dov’s the West Hollow</td>
<td>Around this area there is some ground power and as people told at the day time people have met nacked person.</td>
<td>Bayartsogt Buujii, Shar, age 50</td>
<td>Khuuvur winter camp, Gaviluud bag</td>
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<td>123 Ovoo and Stupa for Racer Horse</td>
<td>When happens soum naadam (national holiday) all the racer horses are rounded by this stupa and ovoo. Then ensure their racing.</td>
<td>43° 14' 201'' 107° 12' 170''</td>
<td>Bayartsoogt Buujii, Shar, age 50</td>
<td>Khuuvur winter camp, Gaviluud bag</td>
</tr>
<tr>
<td>124 Incarnate Empowered Evergreen</td>
<td>The grass grown this area has treatment power and it is said that this area evergreen is empowered by Govi Fierce Incarnate. Local people really find it special as saying it is empowered by the incarnate and do not allow to throw any garbage around this area.</td>
<td>43° 16' 159'' 107° 9' 791''</td>
<td>Khad Ravdandorj, Arlaan, age 57</td>
<td>Shavag winter camp, Gaviluud bag</td>
</tr>
<tr>
<td>125 Incarnate Empowered Goyo</td>
<td>The grass grown this area has treatment power and it is said that this area Goyo is empowered by Gobi Fierce Incarnate. Local people really find it special as saying it is empowered by the incarnate and do not allow to throw any garbage around this area.</td>
<td>43° 16' 159'' 107° 9' 791''</td>
<td>Khad Ravdandorj, Arlaan, age 57</td>
<td>Shavag winter camp, Gaviluud bag</td>
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<td>126 Horse Ovoo</td>
<td>Horse trainers respect greatly the ovoo in the north of the our winter camp and for leaving to any horse race come to this ovoo and make go round their horses.</td>
<td>43° 24' 543'' 107° 1' 962''</td>
<td>Tumendelger Khab, Arlaan, age 28, female</td>
<td>Uvdug winter camp, Gaviluud bag</td>
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<td>127 Tsagaan Khoshuu-Place with Some Illusional Appearances</td>
<td>Tsagaan Khoshuu-the banner in the east of our winter camp, is assumed as a place with some illusional appearances like there can be heard different types of sound and people and cattle get feared.</td>
<td>Son of Oyunbat</td>
<td>Khundiun winter camp, Gaviluud bag</td>
<td></td>
</tr>
<tr>
<td>128 Single Khailaas in Ulaan Ereg</td>
<td>This single-headed Khailaas tree assumed as fierce, quite harsh and sacred. Even it is not allowed to break any single branches of it.</td>
<td>Bayartsogt Buujii, Shar, age 50</td>
<td>Khuuvur winter camp, Gaviluud bag</td>
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<tr>
<td>129 The Single Tooroi Tree in the Ulaan Ereg</td>
<td>This single Tooroi tree is accounted as the most fierce and sacred tree around this area. Definitely, it is not allowed to take and remove even branches of it. It was worshipped since our ancestors time and now it is getting too old and going to fall down soon.</td>
<td>Bayartsogt Buujii, Shar, age 50</td>
<td>Khuuvur winter camp, Gaviluud bag</td>
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<td>130 Yashil Tree in Khurdet</td>
<td>This tree worshipped for a long time and not allowed to take and remove it. It is one of the sacred trees.</td>
<td>Bayartsogt Buujii, Shar, age 50</td>
<td>Khuuvur winter camp, Gaviluud bag</td>
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<td>Takhilgat Ovoo</td>
<td>This ovoo is worshipped by Deng winter camp around households, but they do not have certain fixed ritual like naadam. However, during Lunar New year there is offering ritual.</td>
<td>Garam Tsogzolmaa, Garam, age 27, female</td>
<td>Deng winter camp, Alag Bayan bag</td>
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<tr>
<td>Gunyi winter camp which has illusional appearances</td>
<td>The around area of Gunyi winter camp is assumed as Guideltai or the place has some illusional appearances. Recently Maam’s family moved from there saying not fitting. The year later there was another family resided however the child who was playing in the water said that there had been shown naked person.</td>
<td>Garam Tsogzolmaa, Garam, age 27, female</td>
<td>Deng winter camp, Alag Bayan bag</td>
<td></td>
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<tr>
<td>The Sacred Single Khailaas Tree of in Zaraa</td>
<td>The single Khailaas tree in the north of Zaraa winter camp is assumed quite fierce and sacred. Once Ukharmjav took some branches from there and his camel was not riding forward. One family resided there and suddenly the husband is died. Mainbayar’s family also hurt, they got accident and the wife is died. Therefore, there is ceized to reside households there.</td>
<td>Garam Tsogzolmaa, Garam, age 27, female</td>
<td>Deng winter camp, Alag Bayan bag</td>
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<td>The River of Ulaan Tolgoi</td>
<td>The Ulaan Tolgoi River is 1-2 km away in the east of our winter camp and it is sacred river where we do not move any stone and tree. This tradition lasted long from ancestors and there is single alone Khailaas tree 1 km away in the west of our winter camp. It is forbidden to gather and approach to this tree and it is called as Orphan Tree.</td>
<td>Ukhna Bud, Bag Mod, age 74</td>
<td>Zadgait Ulaan Tolgoi winter camp, Gaviluud bag</td>
<td></td>
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<tr>
<td>Dugatyin Tsagaan Ovoo</td>
<td>This is the major worshipping ovoo for our family. This tradition came from our ancestors and we make offering ritual in Lunar New Year. It is in 4 km away in the sout-east of our summer camp.</td>
<td>Surenkhorol E. Nogoonuuud, age 42</td>
<td>Khavtga Ulaan winter camp, Gaviluud bag.</td>
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<tr>
<td>136</td>
<td>Sacred Khailaas Tree in Bumbat</td>
<td>There is one single Khailaas tree is 6 km away in the east of Zadgai Ulaan Tolgoi and it assumed quite fierce and sacred one. It is not tolerated to pick up grass and remove any stones.</td>
<td></td>
<td>Sainkhuu L, Borjigin, age 56, female.</td>
</tr>
<tr>
<td>137</td>
<td>Sacred Khavtsliyin Am</td>
<td>There is a hill gap in the north-east of Durvulj mountain 8 km away from soum center and it is told fairly fierce and sacred one. The husband of the family which was resided over that gap got sick for a long time and died.</td>
<td></td>
<td>Damdinsuren Dendev, Munkhjin age 65</td>
</tr>
<tr>
<td>138</td>
<td>Tsagaan Ovoo</td>
<td>There is one cairn which is called Tsagaan Ovoo locates in the west of Ukhaa Zag winter camp and inside of Durulj mountain. There is taboo that does not approach the door of ger to this ovoo. If you erect the ger that way it is bad for your cattle herd. When I was a child our family resided there and we have lost a plenty number of baby-camels. There is a story that Rjavaa Incarnate erected his ger there, however the ger was not stand up. Then he gave up and said I have no power to manage it.</td>
<td></td>
<td>Damdinsuren Dendev, Munkhjin age 65</td>
</tr>
<tr>
<td>139</td>
<td>The North Hideaway</td>
<td>This Hideaway erected for overseeing Chinese traders and Chinese black soldiers coming from the south and inform to local people. Also, there are a number of Guard Hideaways and they are said that for preventing to guard that Chinese soldiers pollute the Undain river water.</td>
<td></td>
<td>Binderya Tsetsegmaa, age 32</td>
</tr>
<tr>
<td>No.</td>
<td>The Name of Sacred and Taboo Place</td>
<td>Type and Related Ritual, Myth and Stories</td>
<td>GPS</td>
<td>People Who Worship (name, kinship name, and age)</td>
</tr>
<tr>
<td>-----</td>
<td>-----------------------------------</td>
<td>-------------------------------------------</td>
<td>-----</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>140</td>
<td>Elgenyi Mountain Chain</td>
<td>This is fierce and sacred place which grow some Khailaas and Buils trees and they are not allowed to move and remove. When it is wet it is never allowed to pick up grass and herb and only after mid winter it is allowed.</td>
<td>![Map Image]</td>
<td>Боржигон овогт Доржий Туя, 52 настай эмнэлэг</td>
</tr>
<tr>
<td>141</td>
<td>Sacred Mountain Kharaat Khairkhan</td>
<td>This has black direction ovoo which has to offer vodka and black tea and it is quite fierce and sacred place. It is forbidden to kill any cattle in open way directing to it. 10 years ago Garbat Sharav made red appearance and faced false accusation. Also, husband of Tuya hunted puma of Kharaat Khairkhan and died soon after. Husband of Tsempelmaa dig a well in the west of it died as well soon. Local people even refuse to call its name.</td>
<td>![Map Image]</td>
<td>Баатарчуулэн Баянмунх Ханангий, age 28</td>
</tr>
<tr>
<td>142</td>
<td>Place of Zamyin Ulaanyi Buu</td>
<td>It was said since long time ago as it has some illusions and appearances and fierce, sacred. In 2009 brother of Tsogzolmaa was going at midnight and he has seen somebody who has green del and mounted dog.</td>
<td>![Map Image]</td>
<td>Tsogzolmaa, Bultsen, age 30</td>
</tr>
<tr>
<td>143</td>
<td>Burial in the Tumurt winter camp</td>
<td>It is forbidden to excavate and touch the burial. Actually there wer 2 burials and one local man digger one of them and he got sickness for 2-3 years.</td>
<td>![Map Image]</td>
<td>Tsogzolmaa, Bultsen, age 30</td>
</tr>
</tbody>
</table>
### MIHT: MONGOLIAN INTERNATIONAL HERITAGE TEAM

<table>
<thead>
<tr>
<th>The Name of Sacred and Taboo Place</th>
<th>Type and Related Ritual, Myth and Stories</th>
<th>GPS</th>
<th>People Who Worship (name, kinship name, and age)</th>
<th>Bag and Winter Camp</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ovoo in Tumurt winter camp</td>
<td>Since his ancestors this ovoor was been worshipped and 1st and 3rd day they make offering to the ovoor during Lunar New Year. Also, make shooting sound in the north direction and it is symbolizing to go away all the bad things.</td>
<td>Tumurtogoo Tsogolmaa, Bultsen, age 30</td>
<td>Tumurt winter camp, Ehen Khaliv Water, Gaviluud bag</td>
<td></td>
</tr>
<tr>
<td>Tavan Tolgoi</td>
<td>This is worshipped by our ancestors for the years and it serves as the tower to guard and oversee around this area for herds. In the latest years they perform ritual like make offerings when they had trips to outside of this area.</td>
<td>Tumurtogoo Tsogolmaa, Bultsen, age 30</td>
<td>Tumurt winter camp, Ehen Khaliv Water, Gaviluud bag</td>
<td></td>
</tr>
</tbody>
</table>
## Table 16: Intangible Heritage of Ömnögovi Aimag

<table>
<thead>
<tr>
<th>Name of Intangible Heritage</th>
<th>People Embodying Intangible Heritage</th>
<th>Means of Transmitting Knowledge</th>
<th>Distribution (area)</th>
<th>Significance and Value of Intangible Heritage</th>
<th>Current Usage and Future Tendency</th>
<th>Significant to Whom</th>
<th>Threatened?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Metalsmithing</td>
<td>People who learned from traditional craftspeople and through training like Borkhuu in Javklant 1 b, Khanbogd soum</td>
<td>Traditional structure of inherited knowledge through kinship is not observed. Individual learning and training.</td>
<td>Inherited silver bowl and bracelets are distributed throughout the area.</td>
<td>Difficult to determine; can be people who inherited objects.</td>
<td>Metal-crafting is well developed in the area, it has market space according to demand of silver bowl, saddles, and saddle cloths.</td>
<td>Silver bowls are significant to every family and lineage and people ascribe meaning to them. Old styles of silversmithing are unfamiliar to the public, and new styles are developing.</td>
<td>Not significantly threatened. Metalworking and especially silversmithing is flourishing.</td>
</tr>
<tr>
<td>2 Other Material Culture: Snuff Bottles, Wooden Containers, Felt Carpet Making, Dugluur and Toirog, Animal Brands</td>
<td>Many herding families have inherited snuff bottles, use wooden containers and felt carpets, and Every herding family uses animal brands</td>
<td>Inherited from previous generation</td>
<td>In all four soums</td>
<td>Descendant herding families</td>
<td>High usage</td>
<td>Most of these inherited objects, including brands carry important information about ancestors and symbols</td>
<td>Not significantly threatened. Items have reappeared after the Socialist period and seem once again to be cared for.</td>
</tr>
<tr>
<td>3 Making and Living in Mongolian Gers and Ger facilities</td>
<td>Most herding families live in gers and they embody the knowledge about them.</td>
<td>People living in gers as pastoralists are carriers. However, traditional ger facilities are changing and ger making is less developed in the South Gobi.</td>
<td>In all four soums</td>
<td>All herding families</td>
<td>High usage except in a few cases</td>
<td>Living in ger as pastoral way of life is comfortable to herders. But using traditional facilities is inconvenient</td>
<td>No evidence for a significant effect. However, the drift to soum centres, and away from traditional herding poses a longer-term threat.</td>
</tr>
</tbody>
</table>
### MIHT: MONGOLIAN INTERNATIONAL HERITAGE TEAM

#### Means of Transmission of Intangible Heritage

<table>
<thead>
<tr>
<th>Name of Intangible Heritage</th>
<th>People Embodying Intangible Heritage</th>
<th>Means of Transmitting Knowledge</th>
<th>Distribution (area)</th>
<th>Coverage (people)</th>
<th>Current Usage and Future Tendency</th>
<th>Significant to Whom</th>
<th>Threatened?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>4 Religions: Buddhism and Shamanism</strong></td>
<td>Followers, believers and worshippers; official practitioners (Buddhist clergy)</td>
<td>Deity images and sutra texts are inherited from ancestors</td>
<td>In all four soums</td>
<td>Public</td>
<td>In high usage; increases community and group identity and social networking</td>
<td>Significant to public</td>
<td>Present evidence suggests Buddhism is flourishing. Buddhists may see Evangelical Christianity as a ‘threat’ but the disinterest or apathy from the socialist philosophy may be more damaging.</td>
</tr>
<tr>
<td><strong>Deity Images &amp; Ritual Objects</strong></td>
<td>Most families, adults and elders, know about them</td>
<td>Inherited from ancestors or newly worshipped</td>
<td>In all four soums</td>
<td>All households</td>
<td>High usage</td>
<td>Significant to worshippers</td>
<td>As above</td>
</tr>
<tr>
<td><strong>5 Und – Milk tea with rice and meat</strong></td>
<td>Herding families adhere to a traditional diet and herders know about und and other traditional foodstuffs</td>
<td>Growing up in a pastoralist family</td>
<td>In all four soums</td>
<td>All herding households</td>
<td>High usage in pastoral way of life. When herders move to soum center, it will change.</td>
<td>Significant to all herding families. Knowledge of herbs and plants used for food is being forgotten.</td>
<td>Threatened. Knowledge and use of traditional resources being replaced by reliance on prepared foods purchased in soum centre.</td>
</tr>
<tr>
<td><strong>Tsulkhir and Bajuun Flour</strong></td>
<td>Elders in four soums including Bataa, Rashnyan, Bunten, and Tsendeelhuu</td>
<td>Experienced in their childhood through preparation and usage</td>
<td>There are capable elders in all four soums</td>
<td>Elders and certain groups of people</td>
<td>Usage as food is reduced. Medical usage is well known.</td>
<td>People barely know it. It is an important part of Gobi peoples’ knowledge of herbs, plants and related culture.</td>
<td>Threatened, As above</td>
</tr>
</tbody>
</table>
### Means of Transmission of Intangible Heritage

<table>
<thead>
<tr>
<th>Name of Intangible Heritage</th>
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<th>Significant to Whom</th>
<th>Threatened?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>6 Kin Relationships</strong></td>
<td>Only a few people have detailed knowledge, like Sukhbaatar in Bayan-Ovoo. Each family member knows their kinship affiliation</td>
<td>Within family and kin relationship</td>
<td>In all four soums</td>
<td>Involves all families due to government policy to revive lineage names</td>
<td>It must be written in official ID; other functions not clear</td>
<td>Some kin groups have meetings and festivals</td>
<td>Revival seems firmly established.</td>
</tr>
<tr>
<td><strong>7 Urtyn duu and Blessing Poem</strong></td>
<td><em>Urtyn duu</em> singers who learned from previous singers. They include Tseenzen, Bataa, Aviraa and Byambaa</td>
<td>Learned from balladeers individually and in traditional family contexts</td>
<td>All four soums have balladeers</td>
<td>2-3 people in each soum</td>
<td>Interest is high; however, proper melodies and lyrics are lost. There is interest in singing unknown ballads.</td>
<td>Balladeers place great significance on this heritage and emphasize it will be lost soon.</td>
<td>The disinterest or hostility of socialist period has been damaging. Clearly threatened.</td>
</tr>
<tr>
<td><strong>8 Games: Stone Ger Building and Other Games such as Shagai (Ankle Bone Shooting)</strong></td>
<td>Herders older than 40 years old played Building the Stone Ger, but it is now no longer played. <em>Shagai</em> players</td>
<td>Learned as part of the pastoralist way of life. Learned from previous generations of players, individually and as a team member</td>
<td>In all four soums</td>
<td>Herders older than 40 years Distributed within players</td>
<td>Being forgotten High interest and participation since the 1990s</td>
<td>Significant to those older than 40. An important aspect of heritage relating to pastoral lifeway Significant to men; can learn traditional customs (reverence for elders, etc.)</td>
<td>Revival of Shagai but other aspects increasingly forgotten – threatened.</td>
</tr>
<tr>
<td><strong>9 Taboos of Gobi people</strong></td>
<td>Herding families maintain traditional customs and taboos</td>
<td>Learned as part of the pastoralist way of life</td>
<td>In all four soums</td>
<td>Inherited within herding families</td>
<td>Maintaining taboos increasingly uncommon. There are many different interpretations and narrations of the current situation.</td>
<td>Taboo embodies the structure, moral judgements, and meaning of culture</td>
<td>Hostility of socialist period greatly reduced knowledge. Threatened</td>
</tr>
<tr>
<td>Name of Intangible Heritage</td>
<td>People Embodying Intangible Heritage</td>
<td>Means of Transmitting Knowledge</td>
<td>Distribution (area)</td>
<td>Coverage (people)</td>
<td>Current Usage and Future Tendency</td>
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<td>Threatened?</td>
</tr>
<tr>
<td>-----------------------------</td>
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<td>---------------------------------</td>
<td>-------------------</td>
<td>------------</td>
</tr>
<tr>
<td>10 ’ét gazruud Traditional Sacred Places</td>
<td>Almost every individual in every soum will have particular connections to sacred places, via their family, lineage or soum affiliations</td>
<td>Learned within family and kin relationships and as part of soum life</td>
<td>In all four soums</td>
<td>Everyone</td>
<td>Some Sacred Places are still used frequently and others are nearly forgotten – in general the belief in and use of sacred places has survived remarkably well</td>
<td>Important to everyone (but suspect less relevant to younger generations) except incomers from distant parts of Mongolia? Not important to foreigners</td>
<td>Threatened directly by mining, infrastructure construction, and other consequential changes in land use.</td>
</tr>
</tbody>
</table>
We can conclude from this example that if knowledge of and information about intangible heritage becomes open and deliverable to the public, markets for the products of such activities may strengthen, not weaken, and the activity will survive and be further developed. For non-craft traditional activities, participation by, and enjoyment of a wider cross-section of the whole community are requisites for survival.

Beyond economic development, some social traditions are gaining in popularity as Mongolian society reacts to the lifting of restrictions placed on it during the Socialist period. For instance, *Shagai*, the ankle bone shooting game, regained popularity in the 1990s due its inclusion of many different sorts of people and its public accessibility, enabling players to meet and relate to new people. After a long period of decline, the *shagai* tradition is again alive and well.

### 4.17.2 What Aspects of Intangible Heritage Are Threatened?

A critical element of intangible heritage that has been lost is the knowledge of customs and traditions that are rarely or no longer practiced. Also, the means of transmitting knowledge to the next generation has changed. The result is that some of this knowledge is not transmitted.

To highlight this point, we can take the example of *urtyn duu* the "Longf Songs." The *urtyn duu* balladeer Tseenzen believes that the Gobi "long song" tradition is being lost. As we have demonstrated through our fieldwork, Tseenzen’s prediction is proving correct through the loss of traditional lyrics and melodies. Hereditary transmission of this tradition has diminished and fewer people desire to learn from skilled singers. The tendency in Gobi *urtyn duu* scholarship has been to publish compilations of "long song" lyrics, and has led to incorrect and misleading lyrics. There needs to be a mechanism by which lyrics are correct, but currently there is no organized means of accomplishing this goal. Without proper knowledge and information, this critical aspect of Ömnögovi intangible heritage is swiftly being lost.

Our fieldwork suggests similarly that traditional taboo-related customs are rapidly being lost to modernization. People no longer remember or follow taboo-related customs and new interpretations of older prohibitions have emerged. Therefore, it is increasingly difficult to determine if observed taboo-related customs are in fact “traditional” or newly developed. New interpretations of traditional behaviours are always a possibility. For example, four ovoos in Bayan-Ovoo soum interpreted for us by L. Bataa are ovoos whose curses are now "hidden"; they are no longer accessible for worship because their dedicatory prayers are forgotten. In other words, the ovoos are sacred, but no longer can be worshipped. As L. Bataa concludes, "if there is no clear dedicated prayer, that ovoo should not be worshipped,
even if it is still considered a sacred spot. If the proper customs specific to these resources are forgotten, the ovoos become subject to more general sacred and taboo-related customs.”

4.18 CONCLUSIONS

Ömnögovi aimag has a rich culture, firmly rooted in a nomadic way of life. Economic development will impact this culture in ways that cannot clearly be predicted. The purpose of the CHP is not to stop culture change, but to empower local communities and residents to have a voice in the direction and speed of this change, particularly on cultural elements and institutions which they value most highly, or which most directly affect their everyday lives.
5. PUBLIC PROGRAMS

J. Gerelbadrakh

The public programs component of the CHP design focuses on how to present cultural heritage to the people of Ömnögovi aimag (province) as well as to people from the outside who are interested in, visiting, or temporarily residing in the province. The public programs team emphasized three means of delivering cultural heritage information: education, museums, and tourism.

This chapter begins with the results of a literature search. Unlike the other teams, which used the available literature to establish a baseline understanding of the archaeology, anthropology, and paleontology of Ömnögovi province, the Public Programs team also used the literature search to identify historical sites that could be developed in cultural heritage locations for education and tourism. The chapter begins, then, with a discussion of historical documents that were used to identify future possible heritage sites. I then present the results of examining the available literature, meetings with local residents, officials, and public program providers, and field observations for each major subtopic: museums, education, and tourism. The current status of each public program area is described as well as the desired level of performance; gaps are identified which will be addressed in the CHP.

The data summarized in this chapter were collected during three field trips. Appendix 10 presents information on the timing and purpose of each field trip; field trip reports are presented in Appendices 11–13.

5.1 LITERATURE SEARCH

Information relating to the cultural heritage of Ömnögovi aimag (province) can be divided into three categories: (a) historical sources; (b) archival documents; and (c) bibliographic research. Such information delineates a long history including archaeological sites dating back to the Paleolithic, Mesolithic, and Neolithic periods of the Stone Age. Much of the work conducted in investigating these sites has been mentioned in the report on tangible cultural heritage, so it is unnecessary to repeat that information here.

Sites mentioned in historical sources such as the Erdeniin Tobci (known in English as The Chronicles of Sagang Sechen) written in 1662 by Tsagaan Secen; the Shar Tuuj (Yellow Story) by an unknown 17th-century author; the early 14th-century Persian Jami’ al-Tawarikh (Compendium of Chronicles) by Rashid al-Din Hamadani; and the anonymous, presumably 13th-century Mongoliin Nuuts Tovchoo (Secret History of Mongols) that are considered to be
primary sources in terms of historical research on early Mongolian history, are located within Ömnögovi aimag (Table 17). For instance, as recounted in the Secret History of the Mongols, Negun Us, a village called Didig Saha where Tooril Khan, ruler of the Khereidii Khanlig (Kerait Khanate) resided, is known to have been located in present-day Ömnögovi province (Ömnögovi falls within the southern part of what was the Kerait Khanate in the 12th- and 13th-centuries).

According to Tsagaan Secen’s Erdeniin Tobci, the Borjigin Khagan, Batumöngke Dayan Khan, spent the years 1487–1517, the period of his unification of the dispersed Mongol people, in what is now Ömnögovi province and it is thought that the place of his death was somewhere in that territory.

From the beginning of the 17th- through the early 20th-centuries, a period during which Mongolia lost its independence and was occupied by the Manchu, there existed three Qalqa Mongolian banners (administrative districts) in present-day Ömnögovi province; Tusheet Zasag and Mergen Zasag in Tusheet Khan province and Yost Zasag in Sayn Noyon Khan province.

Tusheet Zasag banner in Qalqa Tusheet Khan province included the territories of present-day Mandal-Ovoo, Tsogt-Ovoo, Tsogt Tsetsii, Nomgon, Dalanzadgad, Khanhongor, and Bayan-Ovoo soums in Ömnögovi aimag. Khanbogd soum falls within what was Mergen Zasag banner in Tusheet Khan province. Soums such as Khurmen, Bayan Dalai, Noyon, Sevrey, and Gurvan Tes (all in Ömnögovi province) fall within what was Yost Zasag banner in Qalqa Sayn Noyon Khan province.

Archival resources related to the history of these three banners have been located and are curated in the National Archives of Mongolia in Ulaanbaatar. Our research work conducted in conjunction with the Cultural Heritage Program has investigated ancient and archival resources and documents related to the history of Ömnögovi province, categorizing them by banner.

5.1.1 Tusheet Zasag banner, Tusheet Khan province

Documents relating to Tusheet Zasag banner include the following: a petition about sending soldiers given to the commander; registration of men to be sent to the army; the number of military services in the banner; registration of kings and knights who earned the degree; number of people who died of starvation; copies of documents sent from administrative units; miscellaneous documents on territorial seizures, people who stole others’ horses, border identification of the banner, registration of monks, and sealed documents given to traders.
### Table 17: Historical Source Data on Tusheet Zasag and Mergen Zasag Banners (Tusheet Khan province) and Yost Zasag banner (Sayn Noyon province), Modern Ömnögovi Aimag.

<table>
<thead>
<tr>
<th>Name of Banner</th>
<th>Number of Archived Records</th>
<th>Time-Range of Documents</th>
<th>Account of Documents</th>
<th>Modern Ömnögovi Aimag Administrative Unit (Soum) Name</th>
<th>Historical Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 North banner of the north ways east arm of Qalqa Mongolia</td>
<td>M-17</td>
<td>1731–1911</td>
<td>391</td>
<td>Mandal-Ovoo, Tsogt-Ovoo, Tsogttsestii, Nomgon, Dalanzadgad, Khanhongor, and Bayan-Ovoo soums</td>
<td>Tusheet Zasag banner, Tusheet Khan province; Gobi Tusheet Zasag banner, Tusheet Khan province</td>
</tr>
<tr>
<td>2 Middle banner of the north ways east arm of Qalqa Mongolia</td>
<td>M -16</td>
<td>1741–1911</td>
<td>236</td>
<td>Khanbogd soum</td>
<td>Mergen Zasag banner, Tusheet Khan province</td>
</tr>
<tr>
<td>3 West banner north ways east arm of Qalqa Mongolia</td>
<td>M -66</td>
<td>1815–1911</td>
<td>815</td>
<td>Khurmen, Bayandalai, Noyan, Sevrei, Gurvan Tes</td>
<td>Yost Zasag banner, Sayn Noyon province</td>
</tr>
</tbody>
</table>

#### 5.1.2 Mergen Zasag banner, Tusheet Khan province

Documents associated with Mergen Zasag banner includes the following: territory size, number of families, population of livestock, men’s registration, note of taxes imposed, men dedicated to becoming monks, men serving as slaves, documents on brands, teeth and color of draft animals of soldiers in military units, papers sent to the banners, court proceedings of territorial seizures among banners, property certification and inheritance, theft of one’s property, repayment of lost herds, providing materials with workers at monasteries and administrative units, hiring and retiring of knights and scribes, as well as folded papers sent to the terminal (post) messengers.

#### 5.1.3 Yost Zasag banner, Sayn Noyon Khan province

Documents associated with Yost Zasag banner include: court proceedings noted by the scribes and knights of the banner to communicate within or outside of the banner, notes of administrative divisions, population, numbers of livestock, men’s registration, breeding animals of Qing Dynasty emperors, awarding of titles, opening a mine, salary sheets of kings.
and knights, poverty in the banner, debt accounts paid to Chinese firms, robbery, debt and income invoices, as well as documents related to Buddhist monasteries and temples and their rituals.

Galdan, a fourth-degree nobleman as well as a famous historian of Qalqa Mongolia in the 19th-century, created his magnum opus, *History of Erden-yin Erike*, while working as an assistant to the khan of Tusheet Zasag banner in Tusheet Khan province. This work is regarded as the most important existing historical source about Qalqa Mongolia. Galdan lived in present-day Ömnögovi province.


The tradition of historiography is quite active in Mongolia. Numerous books on outstanding people in education, the arts, and cultural sectors who were born in Ömnögovi province have been published. With the help of data collected as described in the bibliography, it was possible to amass the background information needed for public program research. We identified Buddhist temples and monasteries in the present territory of Ömnögovi province, some of which could be developed for religious tourism. The religious sites are classified by soum, place name and geographical location, shown in Table 18.

In all, 46 Buddhist temples and monasteries are known in Ömnögovi province, of which the exact geographic locations of five—Galba Monastery, Demchig Monastery, Riiter Monastery, Tsagaan Tolgoi Monastery and Tsogzol Monastery—are known and indicated on the Cultural Heritage Map. The remaining sites need to be explored in greater detail within the cultural heritage programs implemented by soum-level cultural centers.
<table>
<thead>
<tr>
<th>Soum</th>
<th>Place Name</th>
<th>Geographic Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gurvan Tes soum</td>
<td>Goyot Temple</td>
<td>Sumber Mountain</td>
</tr>
<tr>
<td>Gurvan Tes soum</td>
<td>Uujim Temple</td>
<td>Tost Mountain</td>
</tr>
<tr>
<td>Sevrei soum</td>
<td>Tsagaan Suvraga Temple</td>
<td>Soum Mountain</td>
</tr>
<tr>
<td>Sevrei soum</td>
<td>Dugan Gol Temple</td>
<td>Dugan River</td>
</tr>
<tr>
<td>Noyan soum</td>
<td>Ovootiin Monastery</td>
<td>Ovoot</td>
</tr>
<tr>
<td>Noyan soum</td>
<td>Tsagaan Suvraga Temple</td>
<td>Togoo Kharaat Mountain</td>
</tr>
<tr>
<td>Noyan soum</td>
<td>Ganzagt Temple</td>
<td>Ganzagt</td>
</tr>
<tr>
<td>Bayandalai soum</td>
<td>Baishint Monastery</td>
<td>Baishint</td>
</tr>
<tr>
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### 5.2 MUSEUMS

#### 5.2.1 Museums and their functions in the direct impact area

**How many museums fall within the OT Direct Impact Zone and under what jurisdictions do they function?**

Four soums—Dalanzadgad, Bayan-Ovoo, Khanbogd, and Manlai—are located in the Direct Impact Zone of the Oyu Tolgoi (OT) Project. The museums and local studies offices in those soums have developed under a variety of different circumstances.

The local museum in Manlai soum occupies a small building associated with a library. The museum has two rooms displaying various types of exhibits to attract people’s interest. The exhibits presented in the museum are well-displayed with clear descriptions. The museum is convenient and the local librarian is responsible for it. The local studies office and museum in Manlai soum is well-organized and properly functioning in comparison with museums in neighboring Khanbogd and Bayan-Ovoo soums. This situation depends largely on how
closely the *darga* (governor) of Manlai soum, Mr. Sugir, pays attention to the work of the Cultural Center’s Principal, Mr. Otgonbat, who works for the museum.

The Galba Museum in Khanbogd soum is the ideal location for workshops on the preservation and protection of cultural heritage associated with OT (Figure 40). In 1994, the museum was located in a wooden building which it shared with a temple. In 2008, KHAAN Bank donated 10 million tögrög and built a separate building next to the cultural center. The museum contains over 600 artifacts and is considered the richest of the local museums.

Although the Galba Museum is smaller than others, it has its own building and contains many exhibits. It might be regarded a good example to follow; however, the exhibits are not well maintained and were never updated during Phase 1.

The current situation of the Galba Museum generates the following concerns:

- The building is not dedicated as a museum
- The building is too small.
- There is no special exhibit hall
- There is no staff room, so the staff must perform administrative tasks among the exhibits
- There is no financial ability to maintain or expand the exhibits
- The current museum officer is not a professional and has no training in museums or public programs

*Figure 40: Galba Museum, Khanbogd Soum*
Considering the above circumstances, the current building will never be adequate to serve a
its needed function in the OT CHP. The Galba Museum needs a new building. Before building
a new structure, the following modifications should be undertaken in advance:

- Categorize the exhibits into groups and place them in three or four galleries
- Prepare all exhibit labels in both Mongolian and English
- Inventory the exhibits
- Place protective burglar-proof screens on the windows
- Design a training program to educate the public
- Develop a professional museum staff

The Cultural Center to which the Galba Museum belongs should work actively to achieve the
goal of a modern museum. In collaborating with the National Museum of Mongolia, those
locally responsible need to be trained in research methods and public programming and to
put this knowledge into daily practice.

As a first step, Galba Museum staff and those responsible for Khanbogd cultural heritage
should study the museum activities of neighboring Manlai soum and adopt those that are
appropriate. The next step would be to raise its standards as a museum and its staff. Only
then can public activities, especially training for school children, be organized.

At the same time, the issue of how to construct a new building to house the Galba Museum
needs to be resolved at soum and aimag administrative levels. Support from mining
companies, which undertake their activities in the soum, should be included in these
discussions.

The museum in Bayan-Ovoo soum was located in a wooden building that burned in 2002;
there are no remaining exhibits. Now, the local studies office occupies the clothes-changing
room in the soum cultural center. The principal of the cultural center, Mr. B. Jurmeddorj is
planning to collect items for new exhibits from local people, but store them until a new
building is constructed. The soum receptionist is working as a museum staff member in the
meantime.

The museums and local studies offices located in the Direct Impact Zone of the OT Project
are functioning at the same levels as museums in other soums in Ömnögovi province. With
no dedicated budget, these museums cannot organize public and cultural activities. Needless
to say, they are financially incapable of buying and constructing new exhibits. The museum
staffs are not professional trained and they are required to undertake other soum tasks
simultaneously.
If through the CHP, the local and provincial governments are able to build museums in the soums located in the mine’s Direct Impact Zone, we suggest that they start with Bayan-Ovoo and Manlai soums where there are currently no venues for museum displays. Next, they can move forward to Khanbogd soum. Before building new structures, there are several problems to be solved, such as constructing publically attractive and informative exhibits, adhering to international museum standards, organizing and publicizing community-based programs, improving the museum staffs’ knowledge of museology and local historiography, as well as building cultural heritage capacity and infrastructure in the soums.

Finally, financial support is needed to acquire well-designed technical equipment for the exhibits in these museums. It is extremely important that the provincial Department of Education and Culture develops cooperative relationships between museums and local studies offices in soums and the National Museum of Mongolia in Ulaanbaatar to organize professional training workshops and to transfer professional and methodological advice on museum and cultural center programs.

5.3 CULTURAL CENTERS IN THE OT DIRECT IMPACT ZONE

The cultural centers of soums located in the OT Project’s Direct Impact Zone potentially play an even more important role than local museums in preserving, protecting and disseminating information about cultural heritage. It is not possible to implement a CHP fully without direct support of the soum cultural centers’ activities. Such efforts would not only be connected with public programs, but also the tangible and intangible cultural heritage research work that is part of the overall Cultural Heritage Plan. Below we describe the condition and status of the cultural centers in the soums of the OT Direct Impact Zone.

_Bayan-Ovoo:_ The manager of the Bayan-Ovoo soum cultural center, B. Jurmeddorj works in a simple stone building that was built around 1960. It is uncomfortable to convene cultural activities in the winter since the building is unheated. There are five employees including the manager, a dance teacher, music teacher, librarian, and receptionist (who is also responsible for the local study office).

There is an entertainment hall capable of seating 250 people. Five kinds of social groups convene their activities in the cultural center, including a _morin khuur_ fiddle club, keyboard instrument club, dance club, and blessing and hymn of praise clubs. Thirty-six children attend such activities at present. Eight tangible cultural monuments fall under the protection of the soum _darga_ (governor); six people tasked with carrying out intangible cultural heritage work are registered in the cultural center.

In Bayan-Ovoo soum, the work that still needs to be accomplished includes video recording of traditional ballads, _morin khuur_ fiddle performances, and hymns of praise sung by local...
people as well as photographically documenting tangible cultural heritage. Copies of such videos and photographs will be curated in the soum cultural center as invaluable resources for use in cultural training and the club-based social activities described above.

*Khanbogd:* In Khanbogd soum, Mr. Narangerel is the manager of the local cultural center. Five others are employed, including music and dance teachers, a librarian and a receptionist. Several music and dance clubs are functioning, including one dedicated to playing the *morin khuur* fiddle; 40 young pupils now participate in such activities. The soum cultural center has a seating capacity of 200 people. In 2008, construction of a new cultural center was initiated which would seat 500, but the project remains uncompleted.

The Khanbogd soum cultural center is responsible for protecting and managing 32 tangible cultural heritage sites by order of the soum’s *darga* (Figure 41). It is noteworthy and laudable that on Mr. Narangerel’s initiative, 2.8 million tögrög was received from OT which were used to construct 33 parking spaces, 24 signs, and 12 stone enclosures to protect tangible cultural heritage sites.

*Manlai:* Mr. D. Otgonbat is manager of the Manlai soum cultural center. The center has five employees, like its neighboring soums. Manlai’s cultural center consists of two buildings, one an entertainment hall with 152 seats. The library of the local studies office occupies the second building. At present, 20 pupils take part in cultural center clubs devoted to playing the *morin khuur* fiddle, folk music, keyboard instruments, and dance. Twenty tangible cultural heritage sites fall under the soum’s protection and 23 people who carry intangible cultural heritage studies have been registered with the Manlai cultural center.

*Figure 41: Cultural Center, Khanbogd soum*
In all these soums, the danger of damaged and irreparably destroyed tangible cultural heritage and forgotten intangible cultural heritage is real and apparent. For example, the number of people who can sing the special traditional songs of praise for female camels and sheep that allow their own and other’s offspring to suckle them has been steadily decreasing; these songs should be videotaped and digitally recorded immediately before this resource is lost forever. Examples such as this reinforce the necessity of equipping soum cultural centers with basic equipment such as audio and video recording equipment, digital cameras, GPS devices, notebooks, and projectors to record and preserve both tangible and intangible aspects of cultural heritage.

Cultural centers in the OT Direct Impact Zone generally include five government-appointed employees including a manager, dance and music teacher, a librarian, and a receptionist (who is also responsible for the local studies office). This organizational structure is principally responsible for the soum’s cultural activities. The cultural center depends on the Department of Education and Culture for its professional activity and on the soum dzarg’s office for financial support.

Cultural centers have registered tangible cultural heritage sites under each soum’s protection as well as a staff that carries out tangible cultural heritage studies and who organize a variety of activities. But, additional work must be done, including the creation of video, audio and digital photographic records of traditional activities, like songs, to preserve and record these aspects of Mongolian intangible heritage. Such work can be curated in the soum cultural centers and used in cultural training and by extant clubs. We encourage those in the private sector, including OT, to supply the necessary technology to accomplish this goal.

Preserving cultural heritage is beneficial to a variety of goals. Soum cultural centers are the main venues for training and advertisement. Handbooks, books, training books, video records, and other visual materials might be produced with the help of professional organizations who might help print and distribute such resources. The soum cultural centers simply do not have sufficient finances or the technical and managerial skills to successfully undertake such work by themselves.

5.3.1 Resources and financial support for soum cultural centers

Critical resources for Ömnögovi aimag’s soum-level cultural centers in the OT Direct Impact Zone can be divided into a) material support and b) financial support.

Information about the people responsible for preserving and protecting the tangible and intangible cultural heritage of Khanbogd, Bayan-Ovoo, and Manlai soums, all located in the OT Direct Impact Zone, should be aggregated and organized. Such activities might include the documenting of resources videographically and photographically, linked with Geographic
Information Systems (GIS) maps designed to identify and locate geographical points where significant resources occur. To accomplish this task, when developed, the CHP will recommend that OT and other private sector companies provide necessary technical equipment including, but not restricted to, digital cameras and audio recorders, high definition (HD) video cameras, GPS devices, projectors, ruggedized computers, and televisions.

The CHP will have provisions that encourage OT to define and fence, or at least make obvious through appropriate signage, areas that are off-limits to vehicular travel and visitation by foot, lest such activity negatively impact the area’s natural and cultural resources. These concerns are especially great in the Direct Impact Zone in Khanbogd, Bayan-Ovoo, and Manlai soums.

The CHP will also recommend that OT and other mining companies either through annual cultural heritage fees or other direct expenditures sponsor the construction of museum facilities in soums located in the mining operation’s Direct Impact Zone, preferably beginning in Bayan-Ovoo and Manlai soums where there are no current exhibit facilities, and then including Khanbogd soum. Samples yielded by mineral explorations undertaken during the mining process should be exhibited in the aimag museum in Dalanzadgad and in the soum museums located in the Direct Impact Zone.

Additional support requested from the OT and the private sector in the CHP will include, in addition to the audio-visual equipment described above intended for purposes of documentation, traditional Mongolian musical instruments that can be placed in soum cultural centers to augment inadequate library resources. With respect to direct financial support, OT and other private sector companies will be asked to sponsor traditional cultural heritage events, competitions and sporting matches organized at the soum level, including:

- annual camel races with prizes awarded to age groups (baby camels, 3–5 year-old males, gelded camels 5 years or older, adult male camels) that preserve traditional camel husbandry and increase the use of camels for riding.
- traditional clothing competitions—events designed to preserve the household-level production of traditional Mongolian clothing (deels, hats, short, sleeveless jackets, boots, etc.).

A variety of traditional sporting competitions and matches ranging from wrestling (bökh) to archery must be preserved as critical aspects of traditional Mongolian cultural heritage. People are encouraged to become active. We suspect that public interest will increase if inter-soum competitions are sponsored among craftsmen who make morin khuur (horse-headed fiddles), bridles, horse-hobbles, and halters and, at the national level, among such artisans as well as balladeers, morin khuur-players and folk dancers. Again, OT and the private sector will be needed for financial assistance with these activities precisely because
the budgets of the aimag Governor’s Office and the soum cultural centers do not include funds for such purposes.

5.3.2 Presentation of museums in Ömnögovi

How many museums are in Ömnögovi province? How are they presented?

Ömnögovi aimag is subdivided into 15 soums or counties and each soum has a museum or local studies office. The provincial museum is located in the capital, Dalanzadgad. This central museum consists of three small sections including the main museum, a camel exhibition, and a local museum in the Yol Valley in Gurvan Saihan National Park. The main museum contains four divisions – paleontology, history and archaeology, ethnography, and religion, with over 2,500 objects. The museum is currently housed in an old building which is in disrepair and poorly maintained. However, a draft proposal requiring three billion tögrög has been forwarded for a new building. The land issue for this museum has already been solved. Funding for building construction is being discussed.

The natural history museum in the Yol Valley in Gurvan Saihan National Park contains diverse exhibits of local fauna and flora. Large numbers of tourists visit the museum. The provincial museum is responsible for organizing traveling exhibitions in soums, but due to financial constraints, such exhibits have been suspended. The annual budget to buy new exhibits is 4.5 million tögrög.

The condition and operation of the provincial museum in Dalanzadgad is similar to that of provincial museums in other aimag capitals (Figure 42). Recognizing the rapid growth of the mining industry in Ömnögovi Aimag, the museum is critically important to protecting the province’s cultural heritage and teaching the public about it. There is still a lot of progress to be made, but there are hopeful signs. With the help of the provincial administration and the support of the private sector, the museum organized a “Camel Exhibition” on October 22, 2010. We would like to emphasize that this was a very important local event.

Although it might be suitable to display exhibits in the museum in three sections, such as camels, natural resources, and paleontology, this configuration is rather restricted. Other portions of the province’s cultural heritage are left out. We suggest that a different exhibition plan might allow for more information to be presented to the public.
The soums in Ömnögov province have no buildings specifically designed and serving as museums. One or two rooms in soum-level cultural centers are functioning as museums or local studies offices. There is no budget for museum staff, so receptionists or librarians double as museum staff. This circumstance negatively influences the activities of museums and local studies offices. Also, museums and local studies offices in soums have no funds to buy new exhibits, so it is virtually impossible for them to increase the number of exhibits on display.

In general, museums are not only places where exhibits are curated and displayed, but also where programs are organized for the benefit and education of the public. Museums should be the centers of research on topics of local interest. Museums in Ömnögov aimag currently are not performing these functions. Soum-level museums and local studies offices have no special funds to organize workshops, exhibitions, and other cultural events. This is true not only of Ömnögov aimag; all the museums and local studies offices in other provinces of Mongolia commonly face such difficulties.

### 5.3.3 Requirements for a new Ömnögov museum

The CHP will ask OT to cooperate with other mining ventures such as Tavan Tolgoi LLC and Energy Resource LLC in financing a new museum facility to be constructed in Dalanzadgad City (Figure 43). Paleontological finds (e.g., dinosaur eggs and fossils; trackways) and mineral specimens likely to be found during mining operations can be transferred to provincial museums and local studies offices of soums located in the Direct Impact Zone.
5.4 EDUCATION

5.4.1 Integration of cultural heritage into education

How are issues of cultural heritage integrated into the education system?

A chief objective of the CHP design is to determine the most appropriate ways to provide a better understanding and deeper knowledge of traditional cultural heritage through public education (Figure 44). To achieve this goal, two type of education training are needed: (1) public schools, particularly focused on secondary schools; and (2) an informal adult education system.

It is absolutely necessary that the “Civil Education” curriculum taught at the secondary school level integrates traditional tangible and intangible cultural heritage with an introduction to the natural, environmental, historical and cultural significance of the soums where the children attend school. Instructors currently lack basic instructional materials, textbooks, and handouts, making it extremely difficult to manage course content. Also, while it is possible to include optional topics related to cultural heritage in the main subject that are taught, there is a lack of technical teaching equipment. It is inadequate to only deliver information orally on cultural heritage. Instead, teaching materials such as photographs and videos should be used to capture children’s interest.

The CHP should include plans to modernize the Geography and History offices at each soum school in Ömnögovi province. The Geography unit can display exhibits on environment, natural resources, flora and fauna of the soum, while the History office contains information on the tangible cultural heritage—paleontological, historical, cultural and religious sites—as well as intangible cultural heritage—traditional customs, items of animal husbandry, tools, songs, musical instruments, and games. By integrating the information in the two offices, children will be able to obtain a profound knowledge of Gobi cultural heritage in the Gobi and also learn how to love and respect their local region.
Figure 44: Schools in Ömnögovi aimag

We suggest that OT consider assisting in the modernization of the geography and history curricula at schools located in the Direct Impact Zone. The goal would be to create a learning environment in which children acquire knowledge and possess the skills to appreciate and enjoy all the historical and cultural places in their surroundings as well as the soil, animals, and plants of their soum.

The State provides general curricular guidelines on what to teach in the course “Civil Education” in Grades 1–11, but the content is still not obvious. Thus, each school designs a syllabus for the course on three different levels—elementary, secondary and high school. If the Ministry of Education, Culture and Science does not dictate the content of the “Civil Education” course, cultural heritage will not be treated equally at each school. This issue should be identified and solved at the aimag level.

Thus, the CHP will strongly suggest that the Ministry of Education, Culture and Science formulate policy for certain units to cover how to recognize, appreciate, and respect nomadic culture, clothes, food, traditions and customs, historical and cultural monuments, and the natural history of the soum as well as of Mongolia in general in future iterations of the syllabus for “Civil Education.” The course syllabus should be designed in accordance with the age differences of elementary, secondary and high school students.

As part of re-establishing and modernizing the “Palace of Customs” and “Cultural Heritage Office” in kindergartens and schools located in the Direct Impact Zone, we need to make kindergartens and schools a child-friendly environment. Children need to learn about traditional cultural heritage and where various public programs promoting cultural heritage are conducted. In this regard, an important part of the CHP must be a plan to support schools and kindergartens in Ömnögovi soums by providing traditional musical instruments and traditional Mongolian games. Cultural heritage education cannot be completed solely through classroom teaching in schools. It is extremely important for museums and local studies offices at the soum level in Ömnögovi to cooperate with schools in designing special programs that can be integrated in geography and history lessons.
5.4.2 Adults and cultural heritage education

How can cultural heritage education be provided to adults?

Another important aspect of cultural heritage education is adult education. Pastoralists need to be included in cultural heritage educational programs. Herders present a special problem because they sparsely populate the countryside, making it impossible to use classroom settings effectively.

The best opportunity to organize cultural heritage training among herders and young people from the countryside is when they gather for their bag’s (bag = brigade, a small administrative and work unit under the jurisdiction of larger soums) annual meeting and for State Control of Auto-Technical Service. Our research indicates that soum-level experts are well positioned to present informal workshops and other public sessions on how to respect tangible and intangible cultural heritage among pastoralists.

As part of the CHP, we suggest that curriculum be developed with the help of local experts for “Informal Training on Cultural Heritage”. Cultural heritage education should be regularly provided to people of all ages. To implement the curriculum at schools in soums located in the Direct Impact Zone of the Oyu Tolgoi Project, the provincial Department of Education and Culture and the Oyu Tolgoi Project should work cooperatively with clear common objectives. In addition, leaders and rangers in the center of the province should develop cultural heritage workshops and training sessions. These individuals can provide distance learning on cultural heritage to herders and young people who live in the countryside. The Ömnögovi Department of Education and Culture in Dalanzadgad should be responsible for the distance learning program.

Organizing informal and distance learning among adults is the most effective way to provide systematic education on cultural heritage given current circumstances. It is hoped that OT and other private sector sources will support the organization of such training by providing technical equipment and preparing teaching materials and handouts.

5.4.3 Capacity building

The need to train museum and school staff

Most of the staff members working in museums and local studies offices in Ömnögovi soums are not museum or cultural heritage professionals, improving their professional skills is one of the most pressing problems facing the public programs component of the CHP. Provisions should be made within the CHP for staff members to attend the annual training programs designed for museum staff in Ulaanbaatar. Moreover, a one-week training course for museum staff should be organized in Dalanzadgad, in which museum professionals provide lectures tailored to issues relevant to Ömnögovi province as well as detailed assistance on defining the role and functions of museum staff.
Regular trainings organized by the Department of Education and Culture (DEC) should be developed. By offering trainings, DEC will be in a better position to evaluate their effectiveness. DEC should take steps to assign professionals to museums and local studies offices and build cultural centers in each soum. We also need to guard against having those who work at cultural centers simultaneously being employed as a museum officer. The federal government needs to ensure that local budgets are adequate to one or more positions dedicated to museum staff. In the interim, it is preferable to have the local librarian assigned duties as a museum officer than a receptionist as is now the general practice.

As mentioned above, a curriculum for a "Cultural Heritage Education" course which can accommodate the age differences and learning capabilities of elementary, secondary and high school children should be designed. Geography and history teachers, including nonprofessional teachers such as elders or other experts in local culture, need to be re-trained in cultural heritage education. These teachers can then be teacher-trainers, who are responsible for training sessions and providing guidance on issues of cultural heritage. In particular, teacher-trainers should be able to organize and deliver cultural heritage trainings for herders and young people from the countryside which should take place alongside their annual bag meetings.

The provincial DEC should organize annual training for officers of cultural centers and rangers of each soum. To organize such training, it will first be necessary to establish a "Classroom for Orientation and Dissemination of Workshops on Cultural Heritage" at the provincial DEC where meetings and discussions can be held. The classroom is the principal venue where cultural heritage policies of Ömnögovi province are implemented and discussed. We suggest that as part of the CHP, such classrooms are established and maintained.

If the private and public sectors in Ömnögovi province do not support the CHP, the federal government will not likely promulgate policies on cultural issues. For example, the Ömnögovi provincial DEC, which is the implementing agency of the Mongolian government, has 15 officers. Of these, 13 are educational specialists, whereas only one is employed as a cultural specialist. Not surprisingly, DEC pays great attention to educational issues, especially to teaching and learning. If a single student fails a final exam in mathematics or social science, it raises serious questions. Similarly, if DEC paid attention to the promotion and protection of historical and cultural monuments and heritage in Ömnögovi province, Ömnögovi cultural heritage would be well protected and the need for its care transmitted to future generations.

Unfortunately, cultural heritage is not a priority of the administration of Ömnögovi province. The guidelines promulgated by the Cultural Heritage Center of the Ministry of Education, Culture and Science of Mongolia’s Sub-Committee on Cultural Heritage Protection, for instance, should have been set up so that the local governor and the head of DEC worked as co-chairs. In fact, the committee was organized to different ends, consisting of nine members led by the cultural specialist of the provincial DEC. If the sub-committee is
reconstituted following general guidelines given by the Ministry of Education, Culture and Science of Mongolia, it can actively function and will be able to garner support from the local administrative center.

5.5 TOURISM

5.5.1 Tourist attractions in the direct impact area

What are the principal tourist attractions located in the Direct Impact Zone of the Oyu Tolgoi Project?

Tourism is a special industry which has the potential for both highlighting and disturbing cultural heritage. Here, we discuss locations of touristic value in Khanbogd soum, which is one of the three districts located in the Direct Impact Zone of OT.

The Galba Gobi, one of the most famous of the 33 stony deserts ("gobi") in Mongolia, falls within the territory of Khanbogd soum. Here, it is possible to see the Mongolian wild ass (khulan, *Equus hemionus*), one of the most endangered species of larger mammals in the world, zag (saxaul, *Haloxylon* spp.) forests, and taste the Gobi’s unique fruit—red wolfberries (goji berries, *Lycium* spp.). It is possible to organize tours focusing on this attractive place.

There are also many places in Khanbogd soum that can become the focus of spiritually-oriented tours. Demchig Monastery, called the World Energy Center, as well as other monasteries—Tsagaan Tolgoi, Riiteryn, Bayan and Tsogzol, which are associated with the Red Hat Sects of Tibetan Buddhism—can be included in such a tour program.

There is an opportunity to organize cultural tours to introduce visitors to traditional nomadic lifestyles in Khanbogd soum (Figure 45). Horse, cattle, camel and small animal farms are organized in several *bags* (brigades) of Khanbogd soum, including Gabiluud, Nomgon, Javkhlan and Bayan. Herders’ families provide the opportunity for tourists to encounter real nomadic lifestyles, ride horses and camels, take photographs, and taste traditional Mongolian “white food” (dairy products).

Additionally, there are several tangible cultural heritage sites in neighboring Bayan-Ovoo and Manlai soums, including Shar Tsav where well-preserved 75-million-year-old footprints of Cretaceous dinosaurs have been found.
It is also possible to organize special tours including performances and visits to historical and cultural places such as Chinggis Khan’s hook hole, dinosaur trackways, the Bayajikh Grave (famous for its alleged magical ability to impart wealth to visitors), Umai Rock where one can be purified, anthropomorphic rocks of both a man and a woman, and the ruins of the theater where the 19th-century poet and dramatist, Duldutyyn Danzanravjaa first performed his famous month-long epic operetta, *Saran Khukhuhu (The Story of Moon Cuckoo).*

### 5.5.2 Tourist attractions in Ömnögovi

**What tourist attractions are there in Ömnögovi province?**

In accordance with the “Principles of Tourism Development” promulgated by the Government of Mongolia, tourism is developing rapidly in Ömnögovi province. Since 1963, the paleontology and scenic wonders of the Gobi Desert have been the main focus of the tourist industry in Ömnögovi province.

Ömnögovi aimag has nine identified historical, natural and cultural wonders:

1. Zulganai, Zuun Mod, and Khermen Tsav in Gurvan Tes soum
2. Chono Shurguul, Sevree Khairkhan, and the Khongor Sand Dunes in Sevrey soum
3. Saran Valley, Toli Rock, and Noyon Bogd Khairkhan in Noyon soum
4. Torgon Road, Togrogyn Shiree, and Bayan Zag in Bulgan soum
5. Shat Valley, Toson Valley, Dungenee Valley, Mukhar Shivert, and the Eagle Valley in Khanhongor soum
6. Algui Flaming Cliff in Mandal-Ovoo soum
7. Galba Gobi, Demchig Monastery, and the Dinosaur Trackway in Manlai and Khanbogd soums

8. Historical silver artifacts from Sevrey and Noyon soums

The most spectacular natural places in Ömnögovi province include Gurvan Saikhan National Park, Eagle Valley, Dunganee Valley, the Khongor Sand Dunes, Bayan Zag (popularly known as Shabarakh Usu or the "Flaming Cliffs") and Khermen Tsav where most tourists travel to experience the beauty of the Gobi and ride Bactrian camels.

Paleontological remains are the second-most important attraction in Ömnögovi for tourists to enjoy. The world famous Bayan Zag site, known for its rich dinosaur fossil deposits in red sandstone cliffs, is a good example. Nearly 90 percent of tourists who visit Bayan Zag report having enjoyed the experience, suggesting the locality is an internationally important site.

On the initiative of the provincial administrative center, a “Dinosaur Park” and “Paleontological Research Institute” are being built in Bulgan soum, the closest administrative center to Bayan Zag. We asked Mr. Erdenebat, director of the “Gobi Tour” tourist camp, about the “Dinosaur Park.” He said a survey conducted among tourists who visited Bayan Zag suggested that they would not be interested in such an attraction. Instead, they indicated it would be much better to mark the exact places where dinosaur remains (including nests of eggs) have been found.

Tourists often visit these extraordinary places and others not mentioned here; every soum in Ömnögovi province has natural and tangible cultural heritage which can be used for promoting appropriate tourist activities. We suggest that it is important for such places to be discovered and advertised as a way of expanding new opportunities for the tourist industry.

5.5.3 Developing cultural heritage tourism around Oyu Tolgoi

Advantages and disadvantages of developing cultural heritage tourism around Oyu Tolgoi

The advantages and disadvantages of developing cultural heritage tourism in the Direct Impact Zone of OT must be understood. The advantages of improving cultural heritage tourism in Bayan-Ovoo, Khandogd and Manlai soums include:

- There are sufficient attractive places to improve eco-tourism
- There are remains of monasteries and temples to improve spiritual tourism
- Ancient sites can be developed to promote archaeological, historical and cultural tourism
Acquaintance with traditional Mongolian animal husbandry can be promoted

Mining tourism could be developed

In Khanbogd soum one recent approach to improving tourism has been the identification of Demchig Monastery as a World Energy Center which was financed and renovated through support from OT (Figure 46 and Figure 47).

The principal disadvantages of developing cultural heritage tourism in Bayan-Ovoo, Khanbogd and Manlai soums include:

- expensive transportation costs due to the region’s remoteness
- lack of improved roads and highways discourages tourists
- hotel capacity and service need dramatic improvement with respect to world standards
- at present there are no trained, qualified guides to facilitate tourists’ visits

Figure 46: Buddhist Shrine, Demchig Monastery
In the three banners located in the Direct Impact Zone, there is only one tourist camp, the World Energy Center, located in Khanbogd soum, six kilometers southwest of the soum center. This is an insufficient resource for tourists who visit Khanbogd. The camp has ten felt yurts or gers, a restaurant and other facilities, but a capacity of only 40 guests. Since the camp is seasonal, it operates in only during the warmer months.

It is important to know the capacity of existing tourist facilities, including hotels, to clarify the possibilities that exist for developing tourism in the OT Direct Impact Zone, particularly in Khanbogd soum which will be most profoundly impacted by the Oyu Tolgoi Project. There are currently three hotels in the Khanbogd soum center: the Erkhes Hotel belonging to “Uujim od” LLC, the Bayan Erdene of “DTM” LLC and a hotel operated by Khanbogd soum itself, which is under the management of “Khan Diesel” LLC.

The two-storey Erkhes Hotel is located in Gabiluud brigade (or bag) and has two deluxe suites, two semi-luxe suites, two standard rooms, and 16 additional beds, total. Each room has its own toilet and bathing facility. The hotel is heated by means of a central boiler room and there is a restaurant and car park available for guests. In 2010, hotel rooms cost the following:

- A deluxe suite costs 45,000 Mongolian tögrög (two beds, TV, a toilet and a shower room)
- A semi-deluxe suite costs 30,000 Mongolian tögrög (two beds, TV, a toilet and shower room)
- A standard room costs 40,000 Mongolian tögrög (four beds, TV, a toilet and shower room)
Foreign tourists usually stay at this hotel. Unfortunately, room cleaning and other services remain sub-standard.

The Bayan Erdene Hotel belongs to Khanbogd soum’s Bayan brigade and is a two-storey red brick building with one deluxe suite, five standard rooms, a public restroom and car park with rooms available at the following prices (2010):

- Standard room (8,000 Mongolian tögrög in summer and 10,000 tögrög in winter)
- Deluxe suite (8,000 Mongolian tögrög in summer and 10,000 tögrög in winter)

Domestic Mongolian travelers usually stay in this hotel.

A hotel originally under the management of the Khanbogd soum governor’s office has been transferred to the control of the “Khan Diesel” LLC energy company. This hotel is also a two-storey building and is the only hotel with its own kitchen. There are a total of six rooms and 25 beds plus a public restroom. The rooms are heated by means of a low-pressure stove with rooms costing 10,000–15,000 Mongolian tögrög per person (2010). For the most part, Mongolian travelers stay in this hotel.

There are two ger or yurt camps in Khanbogd soum, one of which is operated by the Bayan Erdene Hotel with gers available for 15,000 tögrög per month. The second tourist camp is a private concern, and has five beds costing 8,000 tögrög per person, per night.

It is clear that the hotel capacity of Khanbogd soum is not sufficient considering the steadily increasing number of tourists and work-related travelers who visit the soum. Special attention must be paid to the hotels’ service standards and sanitary conditions. Hotels must not merely receive guests and then forget about them; they must offer a range of reliable services that comply with international standards of cleanliness and efficiency in every possible way.

Our study suggests insufficient capacity and poor levels of service constitute a distinct hurdle that must be overcome in developing tourism in Khanbogd soum. According to a master plan developed by the Ömnögovi provincial Department of Environment, Nature, and Tourism, the aimag is divided into three sub-regions: central, eastern and western. Manlai, Khanbogd and Tsogt Tsetsii soums are included in the eastern region and the OT mining project will impact this area directly. In the central region, including Bulgan, Khurmen, Khanhongor, Bayandalai, Nomgon, Mandal-Ovoo, Tsogt Tsetsii and Tsogt-Ovoo soums, economic development focuses only on tourism (NOTE: the central region is divided into 1st and 2nd sub-regions). In the western region—Noyon, Sevrey, and Gurvan Tes soums—tourism and mining are slated to be developed.
While tourist facilities are improving in the western and central regions of Ömnögovi aimag due to features such as Gobi Gurvan Saikhan National Park, the Khongor Sand Dunes, Bayan Zag, and Kermen Tsav, the eastern region of the aimag is comparatively underdeveloped. The eastern Ömnögovi soums of Manlai, Tsogt Tsetsii, and Khanbogd soums should be included in mining utilization and limitation plans to allow for the short-term improvement of facilities and access to natural and cultural attractions that will draw tourists to the region.

In recent years in South America and Australia, where mining development is intense, mining tourism has been developed to take direct advantage of such operations and their products. A similar approach might be gainfully employed in the OT Direct Impact Zone and such a plan should be developed by the OT itself. Our study suggests that it is possible to not only improve mining-related tourism but also ecological, historical and cultural tourism in the three least-developed soums in the OT Direct Impact Zone.

5.5.4 Improving cultural heritage tourism in Ömnögovi

Advantages and disadvantages of improving cultural heritage tourism in Ömnögovi aimag

Ömnögovi province’s many years of experience with tourism is an advantage when it comes to improving the tourist economy. Ömnögovi ranks at or near the top of Mongolia’s tourist industry on many key characteristics. Since 1963, tourism and related activities have been developed in areas like Eagle Valley and the Khongor Sand Dunes of Gurvan Saihan National Park. There are approximately 22 tourist camps currently operating in the aimag and their activities are a good index of the aimag’s success in comparison to other regions of Mongolia. Table 19 provides summary data on tourist camps in Ömnögovi aimag accumulated during field studies undertaken by the Public Programs team (Figure 48).
### Table 19: Tourist Camps in Ömnögovi Aimag

<table>
<thead>
<tr>
<th>№</th>
<th>Soum Location (All Ömnögovi Aimag)</th>
<th>Name of Camp</th>
<th>Name of Managing Company</th>
<th>Geographical Location</th>
<th>Phone, Fax</th>
<th># of Gers</th>
<th># of Beds</th>
<th>Cost (in 2010 $USD)</th>
<th>Rating (Flower)</th>
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<td>&quot;Juulchin Gobi&quot; LLC</td>
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<td>2.</td>
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<td>New Tuvshin</td>
<td>&quot;New Tuvshin&quot; LLC</td>
<td>600 km from UB, 37 km northwest of Dalanzadgad soum</td>
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<td>30</td>
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<td>3.</td>
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<td>Three Gobi Camels</td>
<td>&quot;Three Gobi Camels&quot; LLC</td>
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<td>&quot;Mongol Baigal&quot; LLC</td>
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<td><a href="mailto:monbaigal@gmail.com">monbaigal@gmail.com</a></td>
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<td>5.</td>
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<td><a href="mailto:baynzag@yahoo.com">baynzag@yahoo.com</a></td>
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<td>19.</td>
<td>Sevrei soum Gobi Discovery-II</td>
<td>&quot;Gobi Discovery&quot; LLC</td>
<td>230 km from Dalanzadgad, 48 km from Sevrei soum</td>
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<td>20.</td>
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## MIHT: MONGOLIAN INTERNATIONAL HERITAGE TEAM

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<th>Name of Managing Company</th>
<th>Geographical Location</th>
<th>Phone, Fax</th>
<th># of Gers</th>
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<th>Cost (in 2010 $USD)</th>
<th>Rating (Flower)</th>
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Figure 48: Tourist Camps, Ömnögovi aimag

The tourist camps have the combined capacity to accommodate 1,557 tourists. There are 11 hotels in the Dalanzadgad soum center (the capital of Ömnögovi aimag) with a combined ability to house 154 guests simultaneously. In addition to these hotels, there are 18 camps with 212 beds in the vicinity of picturesque places in Bulgan, Sevrey, and Khanhongor soums, where low prices usually attract mostly domestic tourists.

One distinct advantage of the region is the Gobi’s combination of beautiful places with paleontological fossil localities. Combined, these characteristics are the basis of tourism in Ömnögovi aimag; a situation that has been true since 1963. This “Desert and Dinosaur” combination is an effective means of improving tourism in Ömnögovi.

The principal points for attention are catering to tourists’ comfort and safety without negatively impacting the region’s tangible and intangible cultural heritage. In a 2010 ranking of hotels and tourist camps, Ömnögovi’s tourist camps received good evaluations for their meals, toilets and shower rooms with all of them achieving first and second place rankings. This is one of the advantages of improving tourism in Ömnögovi province; these operating camps have already achieved laudable standards of service and comfort.

5.5.5 Disadvantages of improving tourism in Ömnögovi aimag

Although the “Desert and Dinosaur” combination is demonstrably attractive to tourists and worth continuing to pursue, it is in-and-of itself insufficient to improve tourism in the aimag. Along with this traditional approach, new types of tourism recognizing the needs and expectations of the international market should be developed, including activities based upon exposure to traditional Mongolian lifeways, cultural heritage, holidays and other ceremonial events.
Special attention should be paid to the currently underutilized aspects of Mongolia’s tangible cultural heritage as well as historical and cultural monuments. We suggest that the Ömnögovi Department of Environment, Nature, and Tourism plan new directions for tourist activities including, especially, unique remains of world interest such as Stone Age archaeological sites, the Chinggis embankment, rock art, and Buddhist temple remains.

Ömnögovi’s tourism policy essentially neglects the ever-increasing number of domestic Mongolian tourists who visit the region each year. While most tourism policies and plans are geared towards foreign visitors, alternative pricing plans and special tour programs should also be developed for domestic travelers. The chronic neglect of domestic Mongolian tourists is the single largest weak point, not only in Ömnögovi’s tourism plan, but also with respect to the country as a whole.

While levels of tourist activity in general are good in Ömnögovi aimag, cultural heritage tourism which is the focus of our program, is not developed to a suitable degree. Nature tourism (so-called “eco-tourism”) dominates the province’s tourist industry. To improve the neglected realm of cultural heritage tourism, the following steps might be taken:

- It is vitally important to improve both the services for and opportunities of the tourist market in order to attract interest from previously under-exploited quarters. One prime example is the burgeoning industry of spiritual tourism, especially among practitioners of Tibetan Buddhism for whom Tibet remains either off-limits or difficult of access.

- In southern Mongolia, tours of renovated Buddhist temples and monasteries, religious chanting activities, the Tsam dance at Sangyn Dalai monastery and the World Energy Center all provide prime examples of these underutilized resources which may be considered tangible cultural heritage on the one hand and intangible cultural heritage on the other. New products and services for the tourist market can be developed in accordance with these opportunities.

- Ömnögovi’s abundant historical tangible cultural relics should be further developed within the realm of tourist access. Historically important localities such as the world famous Stone Age quarry-workshops in Tsahiurtyn Khondii (“Flint Valley”) in Bulgan soum, and the Khavtsgait petroglyphs 20 kilometers southwest of Bulgan soum, the Chinggis embankment-A in southern Noyon, Bayandalai, and Khurmen soums, and the Chinggis embankment-B in the southern Borzon Gobi region of Nomgon soum should be developed with tourists’ interests in mind and included in specially guided tours. Many additional such sites can be identified through additional reconnaissance and survey.
Activities should be included in tourist programs to acquaint visitors with Mongolia’s traditional nomadic livelihood: gers or yurts, emblematic of the nomadic way of life; horseback and camelback riding; and small-scale summer Naadam festivals highlighting intangible cultural heritage will attract tourists’ interest and should be developed as part of a comprehensive tourism plan.

There are, of course, deleterious effects to the rapid development of tourism that must always be borne in mind, especially the negative ecological impacts of tourist camps and their immediate environs such as accumulations of garbage, sewage treatment and disposal problems, and the proliferation of vehicle tacks in formerly pristine desert and steppe ecosystems. Since both natural resources and the intangible and tangible aspects of Mongolia’s cultural heritage will be impacted by tourism development, it is critical to study and calculate the degree to which tourism will negatively impact the south Gobi region’s fragile ecosystem and the cultural heritage of the people who inhabit the area.

to minimize the impact of off-road vehicular travel, it is crucial to establish systems of signage on improved roads to discourage off-road use in order to protect both natural and cultural resources ranging from plants and soil to historical and cultural monuments. This critical activity must be an integral part of all efforts to protect tangible cultural heritage as well as the historical and cultural localities of Ömnögovi province before they are exposed to increased tourist visitation, especially dinosaur and other fossil remains and both prehistoric and historic archeological sites. If tourism is expanded without adequate protection for such resources in place, Mongolia’s unique heritage—including its world-renowned dinosaur trackways and rich fossil deposits—are in danger of rapid destruction. To this end, we suggest making standard road sign posts with clear directions and place-names, signs posting forbidden-to-enter zones, information boards, established rather than informal car parks, and fences to cordon off restricted-entry areas where natural and tangible cultural heritage sites are most likely to be negatively impacted by tourist visitations.

5.6 THE IMPORTANCE OF LOCAL COMMUNITY INVOLVEMENT IN THE CHP

Local community involvement is vitally important to the successful implementation and long-term success of the OT CHP. In this chapter, we have highlighted the ideas and needs of local people, teachers and employees of schools and cultural organizations that were gathered during the first six months of field research work. We close with some thoughts on the current status of public programs in Ömnögovi province and how cultural heritage can be supported.
5.6.1 Current public programs

Corporate support, including that of mining companies, is needed to implement public programs in Ömnögovi aimag. Current programs include cultural heritage activities such as the “morin khuur and traditional ballad,” “traditional folk dancing,” “Mongolian khöömii (throat-singing),” and two special national programs, “Preserving and digitizing national cultural heritage information,” and “Protecting and reconstructing a national program of historical, cultural and immovable monuments.”

Because of financial constraints, such programs have not been the focus of attention; it is difficult to organize local events that require extra financial resources from the soum and aimag levels. For example, there are no funds available to purchase needed computers and other equipment to create a cultural heritage database for the “National program to preserve and digitize national cultural heritage information.”

Policies of the aimag Department of Education and Culture concerning cultural activities can be divided into (a) tangible cultural heritage, and (b) intangible cultural heritage; special measures should be undertaken for each, building on current requirements at both the aimag and national levels.

While tangible cultural heritage is gaining attention among local and national authorities, much less attention is paid to the intangible aspects of cultural heritage, such as traditional customs, clothing, language, banqueting, khöömii (throat-singing), songs, and musical instruments. Annual or biannual competitions in these areas should be organized by the aimag Education and Cultural Center and supported by the Governor’s office to encourage the maintenance of traditional balads, khöömii singing, morin khuur fiddle-playing, national dances, national clothing, and folk handicrafts.

Only residents of Ömnögovi province should be invited to participate in such competitions. Without an explicitly local focus, professional performers and craftspeople living in Ulaanbaatar and other aimags might take most of the awards; this happened during the traditional “Gobi Shankh” style ballad competition held last August. The main purpose of these competitions is to protect, preserve and advertise traditional intangible cultural heritage among the indigenous inhabitants of Ömnögovi aimag.

5.6.2 Program to be implemented in future

It is important to promulgate a program encouraging the wearing of traditional Mongolian clothing nationwide since fewer and fewer Mongols choose to wear the national costumes.
that encapsulate Mongolia’s cultural heritage. Although an annual Day of Mongolian Costume is celebrated in some soums, it is insufficient.

The increasing number of soum residents and pastoralists in the countryside that preferentially choose to wear miner’s work clothes demonstrates the imminent danger of losing national costume as an integral part of Mongolian cultural heritage. In Manlai soum, wearing traditional garb has become a tradition we believe should be introduced and encouraged in other soums in the OT Direct Impact Zone. We suggest that OT organize a regular competition of everyday national costume (hat; short, sleeveless jacket; *deel*; and boots) in each of the three soums located in the Direct Impact Zone, not configured as a model exposition of clothes but rather focusing on the quality of household-level manufacture and adherence to traditional patterns. Independently, the Ömnögovi Department of Education and Culture should organize and sponsor national costume festivals and days of national costume with support from mining companies.

### 5.7 A FINAL NOTE ON PUBLIC PROGRAMS

During the meeting of local work brigades (*bags*), held in Khanbogd soum in August 2010, we introduced the concept that local people must play a basic role in preserving and protecting their traditional cultural heritage. This presentation should also take place in Bayan-Ovoo and Manlai soums through *bag* leaders called brigadiers as well as through locals with special knowledge of cultural heritage.

At the end of each year, four-party meetings including representatives of Ömnögovi province’s local administrative organization, cultural specialists, soum citizens’ representatives, and mining authorities should discuss the results of the previous year’s work concerning preservation, protection and dissemination of knowledge about cultural heritage and also determine the following year’s work plan. This meeting will be an important part of the CHP’s activities, especially with respect to the development of sustainable policies concerning cultural heritage. Obviously, it will be critical to gain local participation in this process to determine and refine cultural heritage policy and implementation best practices.
6. CONSULTATION OF LOCAL CITIZENS AND STAKEHOLDERS

B. Gunchinsuren and Ch. Amartuvshin

One of the main objectives of the CHP is to reflect the views of local residents on the importance of cultural heritage and the best means to protect it. Part and parcel of this process is to promote local involvement in the CHP design and implementation. From the start, our team met with local residents to gather their opinions about the impact of Oyu Tolgoi and other mining projects on the tangible and intangible cultural heritage of Ömnögovi aimag. We began by preparing a fact sheet for the public and OT (Appendix 14). Next, we organized three separate meetings with local residents of Khanbogd, Manlai, Bayan-Ovoo and Dalanzadgad soums during the six months of Phase 1. Local involvement, however, was not restricted to the organized meetings. We also have met with local residents as part of our field surveys and basic research.

One of the most important series of meetings with stakeholders was held in conjunction with the specialists meeting of the MIHT, which was held in September 2010. Once these meetings were completed, we were in a position to establish an Advisory Board for the CHP that was composed of the major stakeholders of cultural heritage in Ömnögovi aimag. The Advisory Board’s first meeting was in November 2010. This and all other stakeholder meetings are summarized below.

6.1 STAKEHOLDER MEETINGS

The organized meetings for local residents are described below (Table 20).

6.1.1 Introductory meetings in Khanbogd

Meeting under the topic of “What is cultural heritage” and “What should we do to preserve and transmit it to future generations”

J. Gerelbadrakh and S. Chuluun, who head the Public Programs and Intangible Resources teams, respectively, participated in a meeting of the 4 bags of Khanbogd soum organized by Oyu Tolgoi LLC held August 1–4, 2010. They made a brief presentation on “What is cultural heritage?” and “What should we do to preserve and transmit it to future generations?”. We also conducted a preliminary survey on the local community’s ideas and proposals for the CHP design program. Team members met with the governors of “Khanbogd” soum and administrators of the Oyu Tolgoi project on August 5–8, 2010, at which time they presented a detailed introduction to the CHP design project.


### Table 20: Meetings with Local Residents and Officials during Phase 1

<table>
<thead>
<tr>
<th>No</th>
<th>Meeting Topic</th>
<th>Name of The Team and Researchers</th>
<th>Area</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>&quot;What is cultural heritage&quot;, &quot;What should we do to preserve and transmit to future generations&quot; meeting</td>
<td>J.Gerelbadrakh, S.Chuluun</td>
<td>The governors and citizens of Bayan, Nomgon, Javkhlan and Gaviluu</td>
<td>2010-08-01-08-04</td>
</tr>
<tr>
<td>2</td>
<td>Meeting with local citizens who are interested in the research work of local historical and cultural properties</td>
<td>B.Gunchinsuren, Ch.Amartuvshin</td>
<td>Khanbogd, Dalanzadgad, Bayan-Ovoo, Manlai soums</td>
<td>2010-08-18-08-27</td>
</tr>
<tr>
<td>3</td>
<td>Meeting of MIHT</td>
<td>B.Gunchinsuren, J.Gerelbadrakh, S.Chuluun, Kh.Tsogtbaatar</td>
<td>Dalanzadgad, Khanbogd, Bayan-Ovoo, Manlai</td>
<td>2010-09-20-09-27</td>
</tr>
</tbody>
</table>

#### 6.1.2 Meeting with Citizens Interested in Historical and Cultural Research

From August 18–27, 2010, MIHT members met with governors, cultural inspectors and historical and cultural researchers from Khanbogd, Dalanzadgad, Bayan-Ovoo and Manlai soums, which lie in the direct impact zone of the Oyu Tolgoi mining project.

We met with Bat-Ulzii, a citizen of Dalanzadgad of Ömnögovi aimag, on August 19, 2010. He currently is the head of the Veteran’s Council of Ömnögovi aimag. He strongly believes that historical and cultural values need to be preserved and transmitted to future generations. To this end, he has implemented several programs. With the financial support of the Governor’s office of the province and in close cooperation with Kh. Lkhagvasuren, a director of “Chinggis Khaan” College, and Baljinnyam, a local researcher, he organized an expedition to develop an inventory of historical and cultural properties within the province in 2009. The Veteran’s Council played an important role in organizing this expedition.

Also on August 19, 2010, we met with A. Tsooj, a native of Sevrei soum of Ömnögovi aimag, in the office of Oyu Tolgoi LLC. A. Tsooj has printed many publications related to the conservation of historical and cultural properties and local history and environment.

We met with Ulambadrakh, head of Gaviluu bag/administration subdivision of Khanbogd soum, Ömnögovi aimag at his home August 23, 2010. During the meeting, he provided information about the fundamental issues that face the region and its historical and cultural properties. On the same day, we also met with Tsogtgerel, vice governor of Khanbogd soum of Ömnögovi aimag. We introduced the CHP design project. He expressed his support for this project and asked us to keep in touch.
We met with Batbold, Governor of Bayan-Ovoo soum of Ömnögovi aimag. We introduced the CHP design project and he shared his ideas and opinion. He also expressed his support for this project and introduced Sukhbaatar, a tax inspector, and Jurmeddorj, head of the Cultural center. They shared their opinion about the importance of protecting historical and cultural properties.

We met with Sugir, Governor of Manlai soum of Ömnögovi aimag, and introduced the CHP design project. He already knew of the project and was able to provide us with important information on local cultural heritage. Manlai soum has paleontological remains, such as dinosaur fossils and the remains of sea animals, which are in urgent need of conservation. He also stated that a railroad has been proposed in an area with significant paleontological remains and requested us to take measures to protect them.

6.1.3 Meetings with Local Organizations

On August 20, 2010, we visited to the Museum of Dalanzadgad, guided by D. Bayarmaa, the museum officer in charge of the registration and information fund and B. Jargal, another museum officer. Although the museum is fully functional, the information on historical and cultural properties is deficient. The main causes of the museum current state are the lack of a permanent building exclusively devoted to the museum, financial constraints, lack of cooperation with cultural officers of the province, and no contact with research organizations. Museum officers are actively moving forward with plans to construct a new museum in Dalanzadgad. However, there is no positive progress on this initiative and maintaining and updating the current museum displays has been stopped due to infighting among state organizations.

We visited to the Central Library of Ömnögovi aimag on August 20-21, 2010. Although, the library has its own building, its reading room is very small. One of the library’s more pressing needs is the conservation of ancient rare books. For example, the library has the only extant copy in Mongolia of the manuscript, "Khukh sudar." It was written with black ink on papyrus and currently is not being properly conserved. Other rare unique books are preserved in the Central Library but all are in poor condition and badly deteriorating; some pages are broken because of ill advised preservation techniques.

On August 22, 2010, we visited the “Galba museum” of Khanbogd soum of Ömnögovi aimag. Buyandelger, head of the museum, provided a guided tour of the facility. With the support of Khaan bank, the museum was built as an extension to the cultural center. The construction of the museum was recently completed and the displays have not yet been finished. The museum collects and displays items as they are donated; they are not routinely updated, however.
We visited to the cultural center, library, and museum of Manlai soum of Ömnögovi aimag on August 26, 2010. The museum and library are in good working order and the displays have been updated. There also is a map of locations of immovable tangible resources in the soum. The museum has a compelling need to enrich the information on the soum’s tangible heritage and to maintain the old museum displays and build new ones.

6.1.4 Specialists Meeting of Mongolian International Heritage Team (MIHT)

The first face-to-face meeting of the MIHT took place on September 19, 2010. Mongolian team leaders made brief presentations on their activities. They also described the current state of Mongolian history, archaeology, ethnology, and paleontology and summarized the research projects previously conducted in and around Oyu Tolgoi.

During the following week, the MIHT visited Dalanzadgad, soums, and heritage sites in eastern Ömnögovi aimag. They also met with local residents, elected officials, and mining officials. Below is the list of organized meetings:

- On September 21, 2010, foreign researchers of the MIHT met with Sanjdorj. S, vice-president of Oyu Tolgoi LLC. Sanjdorj. S provided information on the mine and answered questions. MIHT members then toured the mining site. The entire team then traveled to Khanbogd soum and met with the officials, including Dendevsamba. L, governor of Khanbogd soum; Myagmarjav. M, Myagmar. A, Shirnen. N, and Ulam-Undrakh, governors of Bayan, Nomgon, Javkhlan and Galivluud sub-soums; Narangerel, chief of the cultural center of Khanbogd soum; and Sandagsuren, a managing member of a NGO ‘Shine Khanbogd’. The MIHT introduced the CHP design project. Narangerel and Sandagsuren expressed their willingness to cooperate. Next, the researchers were introduced to the activities of soum museum ‘Galba’ and a Buddhist temple.

- On September 22, 2010, the researchers met with Sugir. Kh, governor of Manlai soum as well as the Chairman of Civil Representative Board, Vice-governor, State Inspector of environment, Chief of the cultural center, and Principal of the school. The MIHT introduced the CHP design project. Sugir. Kh provided a guided tour for the researchers of the soum museum. The museum is well organized and maintained. When asked to participate in the Advisory Board, Sugir. Kh accepted.

- On September 23, 2010, the researchers met with Batbold. Kh, governor of Bayan-Ovoo soum, Sukhbaatar, a senior tax inspector, Jurmeddorj, chief of cultural center, and the State Inspector of environment. The MIHT introduced the project. When asked if he would participate in the Advisory Board, Batbold.Kh willingly accepted.
On September 24, 2010, the last meeting of the planned series of meetings was conducted at the Local Governance Palace in Dalanzadgad. The following people were involved in the meeting: Tuvshinbayar. B, governor of Ömnögovi aimag, Ulamtsetseg, local administration officer in charge of cultural issues, Burmaasuren, state inspector of professional inspection authority in charge of cultural issues, Otgontuya. Ts, provincial museum curator, Tuvshinjargal, staff of provincial library, Bat-Ulzii, chief of Elders’ Council of aimag, and Dargakhuu. N, head of environmental associations of Ömnögovi aimag. During the meeting, each team leader made a comprehensive introduction on their specific cultural heritage topic, ways to study and protect cultural heritage, and exchanged opinions with the local attendees. After the meeting, MIHT members visited the local museum and library.

On September 26, 2010, according to a request from Bat-Ulzii, chief of Elders’ Council of the aimag, members of the intangible resource team met with elders and teachers of history, Luvsantsersen and Batnyam. They were informed about two aspects of cultural heritage that are important to local groups in Ömnögovi aimag.

After the field trip, the MIHT reached a consensus on the remaining research issues and identified further activities for each research team. On September 28, 2010, the MIHT organized a meeting with OT and Rio Tinto representatives and reported on the outcome of the specialists meeting.

6.1.5 Advisory Board Meeting

The OT CHP Advisory Board was designed to provide the MIHT and OT with insight to the interests and concerns of key stakeholders regarding design of the OT CHP. Advisory board members were selected based on their ability to shed light on heritage resources that affected communities at all levels—soum, aimag, national, and scholarly—deem important. The Advisory Board will also play a critical role in the design and implementation of the CHP. The Terms of Reference for the Advisory Board are included in Appendix 15.

The Advisory Board is composed of 15 members (Table 21). Many represent local and provincial governments, whereas others represent regional and national level non governmental organizations (NGOs). Still others represent the scientific community. Together, they represent the major stakeholders of cultural heritage in Ömnögovi aimag.
## Table 21: CHP Advisory Board Membership

<table>
<thead>
<tr>
<th>№</th>
<th>Name, Surname</th>
<th>Position</th>
<th>Constituent Groups and Specialized Expertise</th>
</tr>
</thead>
</table>
| 1  | Artag, B.              | Member of Ömnögovi aimag council in UB. Vice Director of UB Social Insurance Agency. | - Ömnögovi aimag citizens who are living in UB for the project.  
- To connect the local governors with the project team.                                                                                                                                  |
| 2  | Barsbold, P.           | Head of Paleontological Center of MAS, academician.                       | - Scientific community  
- To consult and provide methodological advise as well as guidelines for paleontological team of CHP.                                                                                                                                 |
| 3  | Bat-Ulzii, Ts.         | Head of Ömnögovi aimag elders group.                                     | - Traditional knowledge specialists and elders  
- To support the intangible team. He has made a lot of important findings and collections over many years. In addition, he is the head of the elders group and he can be the bridge between elders who know their tradition as well as region and the team. |
| 4  | Batbold, Kh.           | Governor of Bayan-Ovoo soum, Ömnögovi aimag.                            | - Bayan-Ovoo soum residents  
- He will advise for all components of project team and will do suggestions on field work guidelines and database establishment.                                                                 |
| 5  | Galbaatar, T.          | Deputy Head of MAS, academician.                                         | - Scientific community  
- He will provide advise on legal framework part and policy relevant changes or suggestions.                                                                                                                                               |
| 6  | Dendevsamba, B.        | Governor of Khanbogd soum, Ömnögovi aimag.                              | - Khanbogd soum residents  
- He will support all components of the project team and will do suggestions on field work guidelines and database establishment in that certain soum.                                                                 |
| 7  | Kulanda, Ch.           | Vice Minister of Ministry of Education, Culture and Science.             | - National government  
- She will provide advice on legal framework part and policy relevant changes or suggestions which released based on the project result.                                                                                                                  |
| 8  | Otgontuya, Ts.         | Director of Ömnögovi aimag museum                                       | - Museum and culture centers in Ömnögovi aimag  
- She will support public program of the project.                                                                                                                                                                                                 |
| 9  | Sandagsuren            | Leading member of "New Khanbogd" NGO, Khanbogd soum, Ömnögovi aimag.   | - Khanbogd soum residents  
- She will support all components of the project.                                                                                                                                                                                                 |
| 10 | Saruulbuyan, J.        | Director of Mongolian National Museum.                                  | - National museum  
- He will support tangible team and public programs.                                                                                                                                                                                                 |
The OT CHP Advisory Board met for the first time on December 16, 2010 in Ulaanbaatar. The Advisory Board consists of the following members. The meeting began with presentation from the MIHT on the purpose of the CHP, the expectation of the Advisory Board and Advisory Board members, and summaries from each team. The meeting concluded with discussions of the legal framework surrounding cultural heritage as well as the modifications to the framework proposed by the MIHT.

Throughout the meeting, Advisory Board members asked various questions and raised a number of issues (Appendix 16). In closed session, members chose Mr. Tuvshinbayar as the Chairperson, and Ms. Otgontuya as Secretary of the Advisory Board.

The second meeting of the Advisory Board was held at Khanbogd on March 22, 2011. The main purpose of the meeting was to receive the AB’s comments on the draft of the Phase 1 report and to discuss the elements of the CHP. The AB was generally pleased with the Phase 1 report. Detailed comments were provided for all three CHP programs (see Appendix 16).
7. THE LEGAL FRAMEWORK OF MONGOLIAN CULTURAL HERITAGE

Ch. Amartuvshin, B. Gunchinsuren, and Jeffrey H. Altschul

Central to designing a CHP is that the plan fits within a country’s legal framework protecting cultural heritage. It follows that a good understanding of this framework is critical. We need to know why it has taken its current shape; what parts of it work; what parts of it do not work; and what we must do to modify the legal framework to establish a successful compliance structure.

In this chapter, we summarize current Mongolian laws and key international conventions protecting the cultural heritage of Mongolia. Next, we describe the current situation and why it is failing to meet protect cultural heritage. We close by proposing a new cultural heritage framework which we believe will meet the needs of the Mongolian people and the mining industry.

7.1 SUMMARY OF MONGOLIAN LAWS ON CULTURAL HERITAGE

In accordance with Article 1.7 of the Constitution of Mongolia, items of historical and cultural value as well as those of scientific and intellectual importance to the Mongolian people shall enjoy the protection of the State. Further, Article 6.17.10 of the Law on the Protection of Cultural Properties of the Mongolian People’s Republic Mongolia (Law) states that:

Prior to allowing land to be used in the construction of buildings, hydroelectric stations, industrial mines, and infrastructural improvements, a feasibility study will be conducted by authorized historical and archaeological organizations. Expenditures related to the feasibility study shall be covered by the organization in charge of such activities. If historical and archaeological properties are discovered during construction, owners shall stop their activity and notify the governors of the soum and district, police, and authorized research organizations in charge of such activity. In case of breach of this article, the guilty party shall be fined 200.000–250.000 MNT, their activities stopped, and any illegal income confiscated.

Article 2.3 and 2.4 of the Procedure for the Survey, Excavation, and Research of Archaeological and Paleontological Sites in Mongolia, issued by Ministry of Education, Culture and Science of Mongolia, further states that to comply with the Law:
organizations engaged in activities associated with the construction of buildings, hydroelectric stations, industrial mines, and infrastructural improvements shall submit such notification to the professional council prior to the start of its activity. The professional council shall designate specialized experts who will conduct a reconnaissance of the historical and archaeological properties likely to be preserved within the impact area and make an evaluation. Expenditure related to the reconnaissance, excavation and rescue of historical and/or archaeological materials shall be covered by the organization in charge of activities as stated in Article 2.4 of this procedure.

7.2 UNESCO CONVENTIONS ON THE CULTURAL HERITAGE SIGNED BY MONGOLIA

Mongolia is a state party to several conventions developed under the auspices of the United National Educational, Scientific, and Cultural Organization (UNESCO). As such Mongolia has agreed to abide by the terms of these conventions, including the protection and management of tangible and intangible cultural heritage.

In 1990, Mongolia began to open up to the outside world. The country became a state party to international treaties and conventions and actively worked toward their effective implementation. The first convention Mongolia signed was the 1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict. In 1990, Mongolia became a state party to the UNESCO Convention Concerning the Protection of the World Cultural and Natural Heritage. In 1991, the country signed the UNESCO Convention on the Means of Prohibiting and Preventing the Illicit Import, Export and Transfer of Ownership of Cultural Property. In the first year of its passage in 2005, Mongolia became a state party to the UNESCO International Convention for The Safeguarding the Intangible Cultural Heritage and then in 2007 joined the Convention on the Protection and Promotion of the Diversity of Cultural Expressions. Mongolia began to work toward implementing these conventions by introducing their values, basic principles and requirements into national laws governing the protection of cultural heritage; thus, reinforcing the legal framework for the protection of cultural heritage in Mongolia.

Within the framework of these conventions, UNESCO strives to protect heritage of outstanding and universal value by registering them on the world heritage list, the representative list of intangible cultural heritage of humanity, or the list of intangible cultural heritage in need of urgent safeguarding. Moreover, since 1990, UNESCO has promoted the concept of world heritage education for the purpose of transmitting cultural heritage to future generations, to raise youth awareness to respect of cultural heritage, and to train young people to protect cultural heritage.
In Mongolia, the Uvs Nuur Basin and the Orkhon Valley have been placed on the World Heritage List. The former is listed for its unique biotic environment as closed saline lake system. The Orkhon Valley Cultural Landscape, in contrast, is listed for association with nomadic culture. In particular, UNESCO recognizes that the Orkhon Valley “demonstrates how a strong and persistent nomadic culture led to the development of extensive trade networks and the creation of large administrative, commercial, military and religious centres” (http://whc.unesco.org/en/list/1081).

Mongolia has been very active in listing intangible cultural resources. On the List of Intangible Cultural Heritage of Humanity, Mongolia has placed “Traditional musical art of Morin Khuur,” “Urtiin duu: Mongolian Long Song,” “Mongolian art of Khuumei,” “Naadam: Mongolian Traditional Festival” and “Falconry festival.” “Mongol Tuuli: Mongolian epic,” “Bii Biyelgee: On the List of Intangible Cultural Heritage in need of Urgent Safeguarding. Mongolia has placed “traditional dancing” and “Traditional musical art of the Tsuur.”

7.3 CURRENT LEGAL STATUS OF CULTURAL HERITAGE

Mongolians have an ancient tradition of protecting cultural heritage which is transmitted from generation to generation. Although many still observe this tradition, some of Mongolia’s heritage has disappeared or has been forgotten. To remedy this problem, Mongolia has established a legal framework to protect cultural heritage.

The first law involving cultural heritage was, “The Rule of Preserving Ancient Monuments”, adopted on August 7, 1924. This law was very important in setting a framework for the examination, study, and preservation of ancient historical and cultural values. This rule applied not only to Mongolians, but also influenced scientific agreements established with foreign countries. In accordance with the articles of this law, all ancient monuments preserved in Mongolia were considered state heritage. The term “ancient monuments” is defined as grave markers with and without inscriptions or images related to ancient history, stone markers with and without inscriptions or images, documents, letters of certificate, stone cards, poles, burials of stone mounds in enclosures, ruins of ancient cities, sacrificial objects and related decorations. This law also includes articles concerning the excavation and study of above and below ground archaeological sites under the supervision of and permission by the Institute of Books and Treatises and passing sentence on people who break the law. The articles find their legal and moral basis in the strictures of international modern scientific standards. The main underlying notion of the Ancient Monuments Rule reflects another law passed that same year, the “History of the Institute of Books and Treatises”. The objective of the Books and Treatises Rule was to develop science in Mongolia and to extend its reach. The law put forth a variety of proposals, among them is the following: “…[the] Institute of Books and Treatises should have a department of
archaeology, which will study, among other items, ancient graves and monuments. The department of archaeology should have a laboratory and storage facilities…"

The Law on the Protection of Cultural Properties of the Mongolian People’s Republic, adopted in 1970, was the first Mongolian law to regulate a wide range of activities involving the classification, protection, utilization, study and promotion of cultural heritage as well as to provide penalties for those who breached the law. The subsequent establishment of the Department of the Restoration of Historical and Cultural Heritage and the Bureau of the Study of Historical and Cultural Properties were significant achievements to meet the goals of preservation, study, promotion, and restoration of historical and cultural heritage.

The transition of Mongolia to a market-based economy in the late 1980s and early 1990s at first led to increased poverty. Individuals began to sell inherited items of historical and cultural value, to illegally export such items, to copy ancient rare sutras and other documents without permission, to make audio and videos of intangible cultural heritage without authorization, and to rob ancient graves. Subsequently, the identification, protection, and restoration of historical and cultural properties have intensified and the legal framework has improved as reflected in the following legal acts: The Mongolian State Cultural Policy (1996) has been established based on the Constitution of Mongolia” (1992), Mongolian National Security Concept (2010) and Mongolian Foreign Policy Concept (1994).

By these laws, Mongolian historical and cultural items are considered national heritage which enjoy state protection. Implementation measures include support of the preservation of cultural values and the study of historical and cultural properties by any organization, company, and individuals which will return historical and cultural properties from abroad. Mongolia will cooperate with international organizations, like UNESCO, and interested countries in order to preserve, restore, and publicize historical and cultural properties and unique natural environments.

In 1994, the “Law on Protecting Historical and Cultural Properties of Mongolia” was renewed. This law defines historical and cultural properties in reference to science, art, and legislation. It coordinates a wide range of activities involved in the exploration, registration, classification, excavation, study, promotion, preservation, restoration, possession, utilization, and exportation of historical and cultural properties. Because of the lack of articles on intangible cultural heritage, the Law was again renewed in 2001.

As part of the implementation of the law, the state registration and information database was created. Additionally, the law requires historical and cultural properties to be classified, archaeological survey and excavation are to be conducted by the state central administration in charge of science, and local governors are to control the protection of cultural heritage in their jurisdiction. The basic legal framework was tied to Mongolian
common laws, such as Criminal Law, Customs Law, Law on Special Protected Areas, Law on Treasury Funds, and the Law on the Official State Language.

Figure 49 shows that the offices and officers in charge of historical and cultural matters are attached to all state institutions, although only those shaded in gray have archaeologists on staff. If one only considers the laws and regulations adopted in accordance with cultural heritage issues, the organizational structure makes good sense. In practice, however, it has not worked well. Below, we describe the major organizations with critical roles in implementing cultural heritage laws.

Figure 49: Organisation Chart for Implementing Cultural Heritage Laws in Mongolia
Cultural Heritage Center – The Cultural Heritage Center is part of the Department of Culture and Art affiliated to the Ministry of Education, Culture and Science of Mongolia. Most of its staffs are art conservators, including restorers, painters, and artists. There is one archaeologist in the Center.

National Historical Museum – The National Historical Museum is affiliated with the Department of Culture and Art under the Ministry of Education, Culture and Science of Mongolia. It has research status and implements joint archaeological projects with foreign countries. Its professional staff includes historians and ethnologists. These researchers have been trained in archaeological survey and excavation procedures. Some staff members have established non-governmental organizations (NGOs) designed to protect cultural heritage. Unfortunately, these NGOs have largely been unsuccessful.

Archaeological and Anthropological Cabinet of the National University of Mongolia – The cabinet is affiliated with the Department of Higher Education for Ministry of Education, Culture and Science of Mongolia. The cabinet contains experienced archaeologists who work at the Institute of Archaeology and lecture at the university. It also contains anthropologists who teach at the university. The cabinet has ample qualified members. However, it cannot have a permanent conservation role due to its status as an organization for specialized training. As with the National Historical Museum, some cabinet members have established NGOs designed to protect cultural heritage. These NGOs, too, have largely been unsuccessful.

Institute of Archaeology, Mongolian Academy of Sciences – In accordance with Resolution No. 159 approved by the Government of Mongolia on the August 9, 2002, the Institute of Archaeology was established by extending the Center of Archaeology of Mongolian Academy of Sciences. Professor D. Tseveendorj was appointed as the first director and Doctor B. Gunchinsuren was appointed scholar-secretary; both are still working at these positions. The Institute of Archaeology consists of such units as Stone Age, Bronze Age, Early Iron Age, Hunnu Period, Middle Age, Anthropology, Conservation, Laboratory of Archaeology-Anthropology, Museum, Library, and Storeroom of Manuscripts. Under the Institute of Archaeology, a NGO named “Union of Mongolian Archaeologists” was established, which is very active in promoting Mongolian archaeology. The Union performs compliance work on Mongolian roadways.

7.4 MEASURES TAKEN BY THE GOVERNMENT OF MONGOLIA TO PROTECT CULTURAL HERITAGE

Although various procedures have been implemented to protect cultural heritage, these are generally short lived and have not led to sustained efforts with long lasting effects. For example, when a valuable ancient object is lost or a well-known monument is looted there
may be a press conference to ease public concern. During parliamentarian elections, which are held every four years, candidates often secure votes by promising actions to protect cultural heritage and preserve historical tradition. It is not uncommon for members of parliament to collect information and proposals from specialized organizations and researchers and present these to public as their own initiative, but then not follow through.

Although the Government of Mongolia solved the legal hurdles involved with financing the registration of cultural tangible heritage in 2007, the funds provided were not sufficient to perform surveys that covered all of Mongolia, a huge country rich in ancient monuments. In addition, the registration of cultural heritage remains stalled because no organization or agency has been selected to do this work. The main problem is the lack of staff with proper training and experience at the Cultural Heritage Center. Although its name, Cultural Heritage Center, makes it appear that it is the appropriate organization to implement this activity, the center actually only specializes in the reconstruction of monasteries and art works; it only has one professional archaeologist on staff.

The presidents of Mongolia have all been strong supporters of the protection of cultural heritage and historical monuments. The president of Mongolia, however, has no direct authority with regard to funding or legislation. These issues are the responsibility of Parliament and the administrative government agencies which issue decrees and regulations.

The Ministry of Education, Culture and Science is in charge of the protection of Mongolian cultural heritage. Within the Ministry, the Department of Culture and Art is solely responsible for issuing regulations and policies to protect cultural heritage. Unfortunately, the department only has one specialist in charge of the cultural heritage protection and that person works solely on issues related to museums.

The protection of tangible cultural heritage is supervised by three organizations: the Institute of Archaeology, Mongolian Academy of Sciences; the Cabinet of Archaeology-Anthropology, National University of Mongolia; and the Mongolian National Historical Museum. Among them, the Institute of Archaeology is the most active. Approximately 80 percent of all 30 Mongolian archaeologists work for the Institute. Almost all Mongolian archaeologists who work at other organizations are linked to the Institute, either working on projects through the Institute or as students of one or more of the Institute’s senior archaeologists. In 2010, the Institute established its “Conservation Sector” in response to the mining industry’s need to comply with Mongolian cultural heritage laws, which has led to a dramatic increase in archaeological survey and excavation.

**Public awareness of cultural heritage.** Mongolians have a deep understanding of cultural heritage and an ancient tradition to protect it. Nomads have long used oral history
as a means of transmitting their traditions and culture from one generation to the next. Over time, the stories and songs are altered, enriched, and embellished. Traditionally, nomads have protected archaeological monuments. Many worship the mountains and rivers where sites are located and they believe those who vandalize the ancestral sites will be unsuccessful in life and their health and that of their families will suffer. Other traditions hold that graves and caves are dangerous because they have been rigged with bobby traps by those who built them. These overlapping traditions have been a major factor in the protection of the cultural and natural heritage of Mongolia.

Although many still follow nomadic traditions, in recent years unemployment and poverty have led some people to rob graves and vandalize sites for financial gain. In Figure 50 we outline the major reasons that have led to an increase in vandalism. Although many mining companies comply with the articles of the Law on Protecting Cultural Heritage in Mongolia, the sheer increase in mining has provided greater opportunity to discover and then vandalize archaeological sites. By far and away, the greatest source of vandalism is grave robbing and looting to find objects for the antiquities market. The punishment for illegal excavation is a relatively small fine, which does little to stop people who expect large profits from selling antiquities. Criminal law does not cover the robbing of ancient graves, although it does cover the desecration of modern graves. Local environmental inspectors and administrators agree that the situation is deteriorating, but in general they do not pursue violators.

The two major crimes in Ömnögovi aimag are livestock rustling and illegal logging and these are pursued vigorously by local law enforcement. Livestock is private property and is strongly protected. Illegal logging, much like vandalism of archaeological monuments, was ignored for many years until organizations responsible for environmental conservation forced changes to strengthen the law. The result has been a decrease in illegal logging. Using illegal logging as a model, we should pursue government support for laws and regulations protecting cultural and historical monuments by engaging the public and stressing the importance of cultural heritage and the current situation. In this endeavor, we need to have public and private organizations devoted to heritage work closely with all types of mass media to craft a message that will resonate with the public.

7.5 PROPOSED CULTURAL HERITAGE STRUCTURE

We propose that a new compliance structure be established to protect Mongolian cultural heritage (Figure 51). As a first step, we recommend separating the regulation of cultural heritage compliance from its implementation. In short, the same organization should not decide what is required for compliance, conduct those studies, and approve the results. Our plan uses the current compliance structure that places cultural heritage regulation under the
Ministry of Education, Culture, and Science in the Department of Culture and Art (DCA). We suggest empowering the DCA by creating a cultural heritage office or division with the responsibility of formulating for the ministry cultural heritage policy and regulating licenses and permits.

Figure 50: Major causes of archaeological vandalism

- Mining and construction
- Illegal excavation and grave robbing with the intention to sell antiquities for profit
- Artisanal gold miners who vandalize monuments while pursuing minerals illegally
- Some herders vandalize monuments near their winter, spring, and summer dwellings. Some are simply collecting curios, but most seek to profit through the sale of artifacts

*Figure 50: Major causes of vandalism to archaeological monuments*
Figure 51: Proposed compliance structure for Cultural Heritage protection
To obtain a license to explore or mine mineral resources, the Mineral Resource Authority would send a license application to the DCA, which would check it for adequacy, approve it, and assess an appropriate cultural heritage fee (CHF). CHFs would be assessed annually and paid to the Department of Government Administration, passed through the Department of Science and Technology, and ultimately be received by the Mongolian Academy of Sciences (MAS). MAS in turn would establish a Center of Gobi Studies (presumably in Dalandzadgad) which would consist of three offices. The Office of History would be in charge of an on-going oral history project and keep the list of protected Üvt Gazruud sites (places of traditional activities or spiritual association). The Office of Archaeology and Paleontology would be charged with conducted heritage studies throughout the South Gobi province. The third office would be a repository for those scientific collections from the South Gobi which are not curated in Ulaanbaatar. We anticipate that large mines will require so much compliance work that MAS will have to establish satellite or project offices on-site. These project offices will be staffed by one or more professionally trained archaeologist/paleontologist that has the authority to make on-site decisions regarding the significance of heritage resources and appropriate treatments (e.g., excavation) as well as non-professionals that have passed certification courses. MAS also will fund through the CHF the South Gobi Museum in Dalandzadgad to perform public programs (e.g., museum displays, educational materials, festivals, etc.) at the capital and in the soums.

Because the OT CHP focuses on the mining industry, we have emphasized compliance by the Ministry of Mineral Resources and Energy. It is important to point out, however, that other ministries could use this same compliance framework and that this framework could be extended to other provinces throughout Mongolia.

To make the framework outlined above a reality will require changes in Mongolian law. We will need to embed the principle of cultural heritage consent in the country’s cultural heritage law as well as refer to that principle in other relevant legislation that require permits or licenses. It will be very important to regulate the financial aspect of cultural heritage consent so that the CHF is not diverted for other governmental purposes. The Mongolian Law of Cultural Heritage also needs to be amended to increase fines and other penalties for illegal excavation and trade in antiquities and fossils to conform with international principles. Finally, Mongolia should be urged to sign the UNESCO Convention on the Means of Prohibiting and Preventing the Illicit Import, Export, and Transfer of Ownership of Cultural Properties (1970) and/or the UNIDROIT Convention on Stolen or Illegally Exported Cultural Objects (1995).
8. STANDARDS OF ACCEPTABLE CULTURE CHANGE AND RISK ANALYSIS

Jeffrey H. Altschul

The basic goals of Phase 1 of the CHP were to assess for Ömnögovi aimag:

- What is cultural heritage?
- What is the range of cultural heritage?
- What do we know about cultural heritage?
- What is the condition of cultural heritage?
- What are the concerns of stakeholders about cultural heritage?
- What are the laws protecting cultural heritage?
- How are the laws protecting cultural heritage implemented?

Previously in this report, we have summarized the results of our work to address these issues. Armed with this information, we are now in a position to identify the threats to the cultural heritage of Ömnögovi aimag as well as the opportunities for enhancing the region’s cultural heritage presented by industrial mining. This analysis will lead directly to the formulation of management actions to minimize or mitigate potential harmful affects and maximize prospects to protect and encourage the cultural heritage of Ömnögovi aimag. In this endeavor, we will use two separate, but related, processes that will be conducted during Phase 2 of the CHP design. The overarching framework is termed Standards of Acceptable Culture Change (SACC), which is modeled on the Limits of Acceptable Change framework (Stankey et al. 1984; Stankey et al. 1985; McCool 1996). SACC is an iterative, comprehensive approach to management that will last the life of the CHP. The second process is more focused on ensuring that the program starts in the right direction. It is a form of risk analysis adapted from the Rio Tinto Risk Process (Rio Tinto 2009) as outlined in Risk Analysis Update – Oyu Tolgoi Project (Serena 2009) and adapted in the Oyu Tolgoi: Influx Risk Assessment (Barclay & Associates 2007).

The balance of this chapter is devoted to describing the SACC framework and how it will be integrated in the CHP design. We end the chapter with a description of the risk analysis workshop that took place in Khanbogd on March 23, 2011.
8.1 STANDARDS OF ACCEPTABLE CULTURE CHANGE

In 1964, the United States Congress passed the Wilderness Act, which was designed to protect the natural flora and fauna of designated areas. Throughout the 1970s, managers attempted to meet the wilderness mandate by applying the concept of a “carrying capacity” to limit visitation and recreation to an amount that would not damage the natural environment. By the early 1980s, it was clear that policies based on carrying capacity were failing. Why? Because they were asking the wrong question: how many is too many? Carrying capacity leads to a quantitative solution (i.e., what is the right number of people who can visit without degrading the environment?) when in fact the problem is not the number of people, but their behavior. The discussion that ensued ultimately led to the development of a new management framework termed Limits of Acceptable Change (LAC), which is designed to answer a very different question: “what resource and social conditions are appropriate (or acceptable), and how do we attain those conditions?” (McCool 1996:2).

LAC was formally introduced in a series of papers in the early 1980s (Stankey et al. 1984; Stankey et al. 1985). The framework has four components: (1) the definition of acceptable and achievable resource and social conditions, which can be measured; (2) the establishment of baseline conditions and determining the relationship between those conditions and those deemed acceptable; (3) the specification of management actions needed to achieve the desired conditions; and (4) the establishment of a monitoring program to evaluate the efficacy of on-going management actions. These four components are then divided into a nine-step program.

In the last decade, the LAC framework has been adopted by UNESCO and ICOMOS for managing cultural heritage (Pedersen 2002; UNESCO-EIIHCAP 2007). In Asia, UNESCO’s Local Effort and Preservation (LEAP) program selected 12 heritage sites as case studies, which managed preservation and tourism activities through an LAC framework (Schipani 2008; UNESCO 2001, 2004, 2007; Hoi An Centre for Monuments Managements and Preservation 2008, Save the Ifugao Terraces Movement 2008). The LAC framework, established for the limited purpose of managing natural preserves, now describes a process that has been applied to all aspects of cultural heritage management. Although it has remained close to the original description of the process, the framework has been more appropriately renamed Standards of Acceptable Culture Change (SACC). We present the SACC framework for the CHP in Table 22; each of the nine steps is described below.
### Table 22: Standards of Acceptable Culture Change Framework for the OT CHP

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Identify values, issues, and concerns for Umnogobi province</td>
<td>Identify the values, issues and concerns associated with tangible and intangible heritage resources in Ömnögovi aimag</td>
<td>Meet with stakeholders to identify the values, issues and concerns of tangible and intangible heritage resources in Ömnögovi aimag.</td>
</tr>
<tr>
<td>2. Define and describe land classes</td>
<td>Define the environmental characteristics and types of activities appropriate for different areas within Ömnögovi aimag (development of heritage tourism, casual recreation, construction of housing tracts, support infrastructure, conservation areas, etc.). Describe the types of management actions needed.</td>
<td>Analyze environments, existing use, projected development, and locations of cultural heritage resources for Ömnögovi aimag. Classify province into a manageable number of land classes.</td>
</tr>
<tr>
<td>3. Select indicators of resource and social conditions</td>
<td>Identify specific attributes or indicators that signify the condition of heritage resources for the OT and surrounding area. (e.g. erosion, pot hunting, loss of traditional practices, and values -- and replacement of these with non-traditional practices)</td>
<td>Define clear and measureable proxy variables that reflect overall environmental conditions and social activities. Associate values with management actions.</td>
</tr>
<tr>
<td>4. Inventory resource and social conditions</td>
<td>Inventory the existing condition of tangible and intangible heritage resources in Ömnögovi aimag. As possible, switch from comprehensive baseline surveys to surveys of key indicators.</td>
<td>Conduct field evaluations of tangible heritage resources and assess their condition/integrity and document the results in GIS database; assess and summarize the condition of traditional cultural practices in each land class.</td>
</tr>
<tr>
<td>5. Specify standards for resource and social indicators</td>
<td>Specify standards for each indicator (identified in Step 3); these standards provide measures against which current conditions can be judged acceptable or not.</td>
<td>Meet with stakeholders and experts to set standards for evaluating the condition of tangible and intangible heritage resources. Develop a document that describes these standards.</td>
</tr>
<tr>
<td>6. Identify alternative land classes and/or land class distributions</td>
<td>Identify different alternatives for managing the resources in Ömnögovi aimag (e.g. manage for heritage tourism, manage for resource protection; manage for economic development, etc.);</td>
<td>Meet with stakeholders to identify different alternatives for managing the different types of resources in different areas; define additional land classes and/or re-evaluate distribution of land classes in Ömnögovi aimag.</td>
</tr>
<tr>
<td>7. Identify management actions for alternative land class distributions</td>
<td>Identify the management actions that would need to be taken to achieve the conditions required in each alternative (identified in Step 6). Identify the differences between the current conditions of an area and those deemed acceptable (Step 5). Management actions to remedy those differences must be considered where existing conditions are close to or below acceptable standards</td>
<td>Meet with stakeholders and experts to identify management actions needed to achieve Step 6. Evaluate resources identified in Step 4 relative to the standards set in Step 5, and for resources below the standard determine management actions required to change the conditions to an acceptable standard.</td>
</tr>
<tr>
<td>8. Evaluate and select a preferred alternative</td>
<td>Conduct a cost benefit analysis of each alternative and select the preferred option</td>
<td>Work with stakeholders and experts to conduct a cost benefit analysis of different alternatives.</td>
</tr>
<tr>
<td>9. Implement management actions and monitor conditions</td>
<td>Implement preferred option with a monitoring program established to assess the effectiveness of management actions in meeting desired goals.</td>
<td>Implement the CHP and M&amp;E plan</td>
</tr>
</tbody>
</table>
Step 1: Identify Values, Issues and Concerns for the Region

The first step is to identify the region in question: for the CHP, Ömnögovi aimag. We then assemble the managers and stakeholders involved or concerned with cultural heritage and ask two important questions: What makes Ömnögovi aimag distinct and valuable? And, how do the different parts of the province relate to each other? In these discussions, the group defines the outstanding scientific, ecological, recreational, educational, and historic characteristics of the province as well as conservation and economic development opportunities.

Step 1 is designed to highlight the diversity of resources and social conditions throughout the region. Part of the process will be to demonstrate that certain values are incompatible with each other. For instance, sites with dinosaur footprints are prize tourist destinations. Such sites, however, are so fragile that unrestricted access to them will certainly destroy them. Conservation and tourism, in this case, collide.

Step 2: Define and Describe Land Classes

As originally defined, Step 2 of the LAC framework involved the definition of opportunity classes for a particular wilderness area (Stankey et al. 1985:6). Opportunity class is a term specific to the United States Forest Service (USFS), which refers to the kinds of resources and social conditions that are acceptable in a particular part of a wilderness area as well as the type and intensity of appropriate management actions. For example, the USFS uses the terms “primitive” to refer to a relatively large area that is essentially unmodified, where interaction between people is very low, and where there is very little evidence of human use. Management of such an area should be largely “hands-off” so there is little indication of human use; for example, motorized use of such an area is prohibited. Other opportunity classes in the USFS system include semi-primitive non-motorized, semi-primitive motorized, roaded natural, rural, and urban.

While the term opportunity class works for wilderness areas managed by the USFS, the classes do not describe the condition or use of land in Ömnögovi aimag. Instead of borrowing the term, opportunity class, as UNESCO has done, we suggest simplifying Step 2 to terms that stakeholders in Mongolia will recognize. As a start, we suggest substituting “land class” for “opportunity class”, and offering the following land classes as a start for stakeholder discussions: protected areas; national parks; pasture/undeveloped land; mining districts; and villages and towns. These land classes fall on a continuum from protected areas where the environment is nearly pristine and human impacts are minimal to the built environments of villages (soum centers) and towns (Dalanzadgad).

For each land classification, stakeholders need to specify the types of activities that are permissible as well as the consequent impacts social conditions and cultural heritage. As an example, the stakeholders might consider national parks as largely unmodified, where
human interactions are low, but still open to herders. Parks are accessed through unimproved roads and have outstanding natural and cultural features which could be support enhanced tourism. Based on this analysis the group will then describe the types of management actions that will be needed to protect both the social relationships and events (intangible resources) and the places and objects of cultural value (tangible resources) for each land class in Umnogovi province. Returning to parks for an example, the stakeholders might agree that management for most park areas should be minimal, although for tourist opportunities to be realized, improvement in roads, facilities, interpretive infrastructure will need to be enhanced. As tourism increases, active management, including park personnel trained in cultural heritage, may be required.

**Step 3: Select Indicators of Resource and Social Conditions**

In Step 3 we move from a discussion of general conditions to establishing specific measures of cultural heritage. These measures should be proxies of the overall prevailing cultural conditions. That is, we want to measures that are unambiguous and clearly defined which are reflective of larger social processes. For example, stakeholders are likely to identify the rich paleontological heritage as one of the key characteristics that distinguishes Ömnögovi aimag from other areas of Mongolia. Maintaining the integrity of this heritage is important to the people of the province. At the same time, local residents want to use these resources as opportunities to attract tourists.

To balance these two competing objectives, managers need to establish the relationship between the amount and intensity of visitation to paleontological sites and their overall integrity. Because of the remoteness of the paleontological sites in Ömnögovi aimag, it would be prohibitively expensive to monitor these sites on a continual basis with professional paleontologists. Instead, a better approach would be to hire local herders to make observations. Instead of training these herders to identify paleontological remains, which would likely lead to significant differences in the quality of observations and make it very difficult to compare results, we could ask them to make simpler observations, such as “the number of plastic water bottles in a 20-by-20-m area.” Based on changes in these measures, managers should be able to judge the effectiveness of management practices (see Step 5).

Different types of indicators would be needed for intangible resources. Deriving unambiguous indicators of changes in social conditions is not only extremely difficult, but we need to recognize that different stakeholders have different ideas of what the desired outcome should be. For instance, some stakeholders may view increased numbers of people attending Naadam events as an indicator of increased appreciation of culture, whereas others will view such increases as alarm that the cultural importance of the event has been hijacked by those focused on increasing tourism, no matter the cost. Numbers alone are
unlikely to provide managers with a clear indication of underlying social conditions. Measures, such as ethnic dress, the number of languages spoken, and/or the amount and types of food and drink consumed, may be much better indicators of culture change and provide clearer guidance on what actions need to be taken to maintain the desired cultural experience.

**Step 4: Inventory Existing Resource and Social Conditions**

Step 4 of the LAC is to inventory the existing conditions using the indicators selected in the previous step. Such an inventory works well in such places as public lands in the United States, where compliance surveys already provide ample information on baseline conditions. Resource inventories do not exist, however, for Ömnögovi aimag. We do not know, for example, the full range of archaeological sites, the varying densities of sites over the landscape, or the probable locations of archaeological sites. Similarly, there are many areas in the province for which paleontological surveys have not yet been conducted and we know little of the nature and density of fossil remains. The situation is even worse for intangible resources, which have not only been left undocumented, but also suppressed for much of the 20th century.

For the CHP, baseline surveys were required as part of Phase 1. For archaeological sites, we first compiled a comprehensive list of known sites from various soum and aimag sources and created a predictive model of site location (see Predictive Modeling of Archaeological Site Location). The baseline archaeological inventory then consisted of testing the model. For paleontological resources, which have been better studied than any other cultural resource, inventories (to be conducted in early 2011) will focus on basic documentation of known sites: their size and condition.

Intangible resources are much more difficult to inventory. The UNESCO convention on safeguarding intangible resources was only adopted in 2003, and the agency has chosen not to issue guidelines for inventory. As Proschan (2007:23), a program specialist in UNESCO's intangible cultural heritage section, states:

> Where, you might ask, are UNESCO's instructions and forms for inventorying? A number of Member States regularly pose that question to us. I am not simply being evasive when I say that we do not—and will not in the future—have such binding guidelines, instructions or formats for how an inventory should be accomplished. Indeed, because it is for each State Party to draw up one or more inventories, in a manner geared to its own situation, UNESCO cannot provide instructions to States how they should go about accomplishing their task.

The literature review produced precious little published or unpublished documentation on the society and culture of Ömnögovi aimag; hence, our decision to perform basic ethnographic research and documentation during the course of the CHP design. To some
extent, this course means that we will design cultural heritage programs for intangible resources without knowing the full range of such resources. In this regard, it is important to remember that the SACC framework is an iterative process that lasts the life of the CHP. We do not “finish” the process by establishing a monitoring program (Step 9), but instead use the results of the monitoring program to reevaluate our basic objectives, issues, and concerns (Step 1). Thus, we expect to re-visit the issue of social and resource indicators in the next iteration as well as perform follow-up inventories as needed.

**Step 5: Specify Standards for Resource and Social Indicators for Each Land Class**

In a traditional LAC framework, once the stakeholders and managers have determined the indicators that will be used to monitor the resource conditions and have a reasonable inventory of baseline conditions, they turn to specifying the standards that will be use in the monitoring program. As with many other steps in the LAC process for Ömnögovi aimag, Step 5 will be achieved through a trial-and-error process that will require several iterations to complete.

In general, tangible heritage resources are treated in a “zero tolerance” manner. Parties do not tolerate destruction, desecration, or vandalism to any degree. For example, a standard that defines “adequate protection” as less than five percent of a site being disturbed by vandalism is probably unacceptable to government agencies in countries where vandalism is illegal. Yet, vandalism does occur and specifying a standard of “no vandalism” will lead to management programs that cannot succeed.

In considering standards, stakeholders and managers need to be cognizant that the objective is to evaluate management practices, not to legitimize illegal or undesired behavior. In mining districts, where large concentrations of workers exist, a five percent vandalism rate may be the best we can achieve even with an intensive monitoring and policing program. In contrast, a zero tolerance standard may be reached in protected areas and national parks without any monitoring program. Because we only have anecdotal evidence that paleontological and archaeological objects are being looted, it may be that stakeholders begin with “desired” standards for resource and social indicators for tangible resources in Ömnögovi aimag and then modify them as monitoring establishes more realistic targets.

Specifying standards for intangible resources is likely to be much more contentious than for tangible resources. Almost everyone will agree that looting archaeological and paleontological sites should be stopped. Not everyone, however, will agree that the Naadam festival in Khanbogd soum should be kept small and traditional. Tour group operators, restaurant owners, community leaders may want to encourage outside participation and visitation even if it changes the festival’s character. Fundamental culture change will be even harder to
agree on much less manageable. Most stakeholders want Mongolian nomadic culture to remain viable. Yet at the same time, there is a desire for the residents of Ömnögovi aimag to prosper either by taking jobs in the mining industry or in supporting industries (e.g., road construction, digital communication, etc.). How many residents need to remain nomadic herdsmen to sustain their lifestyle? Answering this key question and then specifying indicators and standards to manage nomadism is central to the preserving the cultural heritage of Ömnögovi aimag.

**Step 6: Identify Alternative Land Classes and/or Land Class Distributions**

The LAC process anticipates that the goals and desires articulated in Step 1 will be incompatible with the resource and social conditions found on the ground in Step 4. Step 6 is the time at which desires and existing conditions are reconciled. To pick up on the discussion of nomadism above, we may find that in mining districts some stakeholders want paved roads so that truck traffic from the mines to the Chinese border can be increased. Others, in contrast, will want nomads to have free access to all pastures with herds free to roam over roads at their own pace.

Managers can respond to these issues in a variety of ways. They can change the land classes to reflect reality. For example, mining districts could be divided into two classes: mining districts with unrestricted access and mining districts with restricted access. In the former, herdsmen would be allowed free access to land and management would specify indicators and standards that restrict improvements. In contrast, in the latter land class, modern development would be allowed with fewer restrictions.

Another response is to change the distribution of land classes. Mining districts can be increased or decreased in size. One portion of the Ömnögovi aimag previously classified as pasture can be designated a park so it can be managed for heritage tourism opportunities.

At the end of Step 6, we may have several different maps of the Ömnögovi aimag, each showing a different distribution of land classes based on a particular desired outcome such as increasing tourism, maximizing economic development, or maintaining nomadism. It is important to point out that there may be cases in which the land class allows for the degradation of cultural heritage. SACC is structured to achieve a particular set of desired outcomes for the entire province, and doing so may require the cultural heritage in certain areas to be destroyed, disturbed, or fundamentally changed.

**Step 7: Identify Management Actions for Alternative Land Class Distributions**

In Step 7 the stakeholders and managers identify the difference, if any, between the current social and resource conditions identified in the inventory (Step 4) with the standards that the group specified (Step 5). For land classes in which current conditions are below or exceed the standards, management actions will be needed. For example, if the number of
tourists to paleontological sites in national parks exceeds the desired number, then managers could take one or more of the following actions:

1. Decrease the number of tourist camps
2. Fence the site and charge admission
3. Allow access only to guided tour groups
4. Close fragile portions of the site

In situations in which the conditions exceed the standards, no management action is necessary. Indeed, there may be cases in which it is possible to relax current management actions.

Each management plan has an associated cost. As part of this step, overall costs need to be considered. It is possible that management procedures need to be phased to match budget levels.

**Step 8: Evaluation and Selection of a Preferred Alternative**

At some point the stakeholders and management need to settle on a set of desired outcomes that leads to specific management practices. Often, this step is the most contentious as different stakeholders lobby for their particular perspective. Those guiding the process need to take precautions that there are not “winners and losers;” for example, economic development is favored over traditional herding. It also is imperative that management actions not exceed the means to implement them. In Ömnögovi aimag, for instance, there are not sufficient numbers of trained archaeologists or paleontologists to implement a monitoring plan. One approach to monitoring would be to have trained personnel from Ulaanbaatar to visit sites in the region. Implementing such a plan would be expensive and could only focus on the most important sites of the region. Another approach would be to train locals and to find a mechanism to pay them for their time.

**Step 9: Implement Management Actions and Monitor Conditions**

The last step in the LAC framework is to implement the management actions selected in Step 8 through a monitoring program that evaluates the effectiveness of management actions and practices. Periodically, stakeholders and managers need to meet and evaluate the results. Based on these results they will start the process all over, beginning with revisiting the desired goals and objectives that stakeholders want to achieve. Ideally, LAC does not end until management of the region ends.
8.2 MOVING FROM LAC TO SACC

The LAC was developed by the USFS to manage a particular type of public land. The developers recognized both the limitations and the potential of LAC. In particular, they realized that there was no “right” way to complete the process and that the framework needed to be tailored to the specific situation. What differentiated LAC from what came before was the framework’s emphasis on public participation. As Stankey et al. (1984:28) stated at the very beginning of establishing LAC,

...the integral role of public participation in developing the LAC process, coupled with the specificity of the conditions that managers and citizens identify as desirable, should help provide a level of accountability often lacing in previous plans.

In essence, LAC is designed to have stakeholders take ownership of the goals and the means of managing resources. It matters less that all the steps are followed in exactly the way prescribed then that the public believes the process by which decisions were reached was honest and transparent. This lesson is key for the CHP to be successful.

8.3 CHP ADVISORY BOARD

The first step in establishing a SACC framework for the CHP is selecting a group of stakeholders that can represent all parties with interests in the cultural heritage of Ömnögovi aimag. To this end, a CHP advisory board (AB) was established, which consists of 15 members. AB members are listed in Table 21. It should be noted that while Table 21 provides the specialized duties of each member, all members will participate in all phases of the SACC framework.

The first meeting of the AB was on December 16, 2010. The meeting was largely held largely for members to get to know each other and members of the MIHT. The goals and objectives of the project were outlined in a series of presentations, followed by question-and-answer sessions (see Chapter 6). The second meeting of the AB took place in Khanbogd on March 22, 2011. The meeting included a tour of the OT site and a discussion of the draft Phase 1 report. It was followed the next day by the CHP risk analysis workshop.

8.4 RISK ANALYSIS

The CHP risk analysis workshop was designed to identify actual impacts and potential risks to cultural heritage as well as actions or mechanisms that government and/or OT management can implement to stop or mitigate the impacts and minimize the risks. Rio Tinto has developed a consultative process in which representatives of stakeholders are invited to a workshop where they are guided through a matrix in which they sequentially (a) identify potential impacts and risk of the project on cultural heritage; (b) determine the
A risk analysis is a useful means of identifying the diversity of concerns among stakeholders and providing different stakeholders with the views of others. The result can be enlightening for the group and help build a bond that can lead to a consensus about the management of heritage resources. A risk analysis, therefore, should not be an end in-and-of itself, but instead part of a larger process in which stakeholders have a formal role in advising and assisting professional heritage managers. Thus, it is an ideal mechanism to work into a SACC framework.

The risk analysis workshop took place on March 23, 2011. Participants included members of the AB along with representatives of the mining and tourism industry.

The workshop was led by Ch. Amartuvshin and J. Gerelbadrakh; other MIHT members present included B. Gunchinsuren, J. Altschul, A. Sexton, and P. Lkhagvasuren. The workshop began with an overview of risk analysis and its place in the SACC framework. Following Rio Tinto’s guidance, risk was defined as “an uncertain event or condition that if it occurs will affect achievement of one or more objectives” (Rio Tinto 2009:10). Risks with negative consequences are termed “threats,” whereas those with positive consequences are termed “opportunities.” We informed the participants that the workshop would consist of completing two matrices, one for threats and one for opportunities to cultural heritage due to impending development (Tables 23 and 24). These developments are largely related to the mining industry, but not exclusively.

The participants first worked on the threat matrix. Each participant was provided pen and paper and was asked to write down the threats to cultural heritage in Ömnögovi aimag. The facilitators compiled the lists and the group prioritized the top 10 threats and discussed the various topics in the matrix. A similar exercise was then conducted for the opportunities matrix. Due to time constraints, the participants were unable to complete the cells of each matrices. Based on detailed notes of the discussion, the facilitators completed the matrices in Ulaanbaatar. Copies of the completed matrices were then sent to each participant to ensure that the results were consistent with their understanding. Seven participants returned comments. Of these, three replied that the matrices were fine. Four individuals–Sugarmaa Z. (Energy Resources, LLC), Bat-Ulzii, Tz. (Ömnögovi aimag elders group), Tsoog, A (“Bayan Tuukh or Rich History” NGO), and Sugir Kh (Governor of Manlai soum)–provided comments which are incorporated in the matrices and/or the discussion below. Additionally, Basbold, P. (Head of MAS Institute of Paleontology), an AB member who was unable to attend the workshop, provided general comments about risk analysis, which were addressed by B. Gunchinsuren.
### Table 23: Threats Matrix

<table>
<thead>
<tr>
<th>Risk Title</th>
<th>Causes/Triggers/Indicators</th>
<th>Nature</th>
<th>Geographic Scope</th>
<th>Duration</th>
<th>Likelihood</th>
<th>Consequence</th>
<th>Consequence Rating</th>
<th>Risk Class</th>
<th>Risk Owner</th>
<th>Activities to be Implemented</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Loss of nomadic culture and traditional customs</td>
<td>Frequency of pasture movement will decrease. Khanbogd will become urbanized and transform from nomadic culture to sedentary lifestyle. Industrialization will intensify.</td>
<td>Direct &amp; Indirect</td>
<td>Direct impact soums</td>
<td>Intense during the Oyu Tolgoi mining operation; some loss permanent</td>
<td>Highly likely</td>
<td>Nomadic lifestyle, traditional housing-Ger and traditional means of transportation will disappear or diminish</td>
<td>High</td>
<td>IV</td>
<td>-Government -Parliament -Local administration -Mining Industry -Community</td>
</tr>
<tr>
<td>2</td>
<td>Increase in damage and/or destruction of historical, paleontological, archaeological, and cultural properties</td>
<td>Construction of infrastructure and mining facilities; Increase in illegal archaeological and paleontological excavation and robbery</td>
<td>Direct &amp; Indirect</td>
<td>1. Mining Areas 2. Direct impact soums</td>
<td>Permanent and irrespective of mining development</td>
<td>Highly likely</td>
<td>Loss of elders and ancestors information; loss of natural and historical records and sites; loss of national pride</td>
<td>High</td>
<td>IV</td>
<td>-Government -Parliament -Local administration -Mining Industry -Citizen</td>
</tr>
<tr>
<td>Risk #</td>
<td>Risk Title</td>
<td>Causes/Triggers/Indicators</td>
<td>Nature</td>
<td>Geographic Scope</td>
<td>Duration</td>
<td>Likelihood</td>
<td>Consequence</td>
<td>Consequence Rating</td>
<td>Risk Class</td>
<td>Risk Owner</td>
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<tr>
<td>3</td>
<td>Loss of custom and ritual by the people of the Gobi</td>
<td>Local dialect, unique culture and helpful and hospitable behavior will disappear due to an increase in foreigners</td>
<td>Direct</td>
<td>Direct impact soums</td>
<td>Intense during the Oyu Tolgoi mining operation; some loss permanent</td>
<td>Probable</td>
<td>Family traditions will disappear; traditional lifestyles will be changed, traditional customs will be lost, and traditional clothing styles will change</td>
<td>Moder ate</td>
<td>III</td>
<td>&lt;community -non-governmental organization -Citizen</td>
</tr>
<tr>
<td>4</td>
<td>Negative impact on the traditional familial social order</td>
<td>Traditional family custom will break down; partner break ups and divorce will increase</td>
<td>Direct &amp; Indirect</td>
<td>Direct impact soums</td>
<td>During the Oyu Tolgoi mining operation</td>
<td>Probable</td>
<td>Many children will orphaned; children will act out with inappropriate behavior</td>
<td>Moder ate</td>
<td>III</td>
<td>&lt;Government -Parliament -Local administration -Mining Industry -Citizen</td>
</tr>
<tr>
<td>5</td>
<td>Loss/decrease of traditional animal husbandry</td>
<td>The work force will move toward high paying mining jobs instead of animal husbandry and a number of herding family will decrease</td>
<td>Direct</td>
<td>Direct impact soums</td>
<td>During the Oyu Tolgoi mining operation</td>
<td>Probable</td>
<td>Livestock herds will decrease in size; wild animals will increase, while there will be fewer horses</td>
<td>Moder ate</td>
<td>III</td>
<td>&lt;Government -Parliament -Local administration -Mining Industry -Citizen</td>
</tr>
<tr>
<td>Risk Title</td>
<td>Causes/Triggers/Indicators</td>
<td>Nature</td>
<td>Geographic Scope</td>
<td>Duration</td>
<td>Likelihood</td>
<td>Consequence</td>
<td>Consequence Rating</td>
<td>Risk Class</td>
<td>Risk Owner</td>
<td>Activities to be Implemented</td>
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<tr>
<td>6 Loss of continuity for intangible cultural heritage</td>
<td>As bearers of intangible cultural heritage die, they will not be replaced due to urbanization.</td>
<td>Direct &amp; Indirect</td>
<td>Direct impact soums</td>
<td>Intense during the Oyu Tolgoi mining operation; some loss permanent</td>
<td>Probable</td>
<td>Traditional crafts, musical instruments and songs, national food, clothes, and family behavior will disappear and transmission of traditional knowledge and culture will be reduced.</td>
<td>Moderate</td>
<td>II - Community - NGO - Citizen</td>
<td>- Conduct study of intangible cultural heritage - Create an inventory of intangible cultural heritage - Conduct training of intangible cultural heritage - Constantly organize various kinds of competitions among intangible heritage bearers - Develop disciple-oriented program of intangible cultural heritage bearers and secure funding - Record and document in books, CDs, and DVDs</td>
<td></td>
</tr>
<tr>
<td>7 Traditional methods and customs for the natural conservation will disappear</td>
<td>Natural conservation will deteriorate due to urbanization and population increase.</td>
<td>Direct &amp; Indirect</td>
<td>Direct impact soums</td>
<td>Intense during the Oyu Tolgoi mining operation; some loss permanent</td>
<td>Probable</td>
<td>Traditional customs to preserve nature and pasture will be forgotten</td>
<td>Moderate</td>
<td>II - Community - NGO - Citizen</td>
<td>- Organize training to raise ecological awareness of citizens - Develop additional curriculum on the natural conservation - Study and promote traditional knowledge on natural conservation - Train natural protectors</td>
<td></td>
</tr>
<tr>
<td>8 Increase in crime against cultural heritage</td>
<td>Stealing, destroying and purchasing of cultural heritage will rapidly increase. Illegal export of antiques will increase.</td>
<td>Direct &amp; Indirect</td>
<td>Direct impact soums</td>
<td>Permanent - illegal activities will occur before, during, and after the Oyu Tolgoi</td>
<td>Probable</td>
<td>Articles will be lost; illegal excavation will increase with increasing damage to</td>
<td>Moderate</td>
<td>II - Government - Parliament - Local administration - Mining Industry - Citizen</td>
<td>- Establish database of cultural heritage inventory and documentation - Place important heritage sites on state, aimag, and soum lists of specially protected areas</td>
<td></td>
</tr>
<tr>
<td>No.</td>
<td>Priorities for Preservation</td>
<td>Risk Title</td>
<td>Cause/Trigger/Indicators</td>
<td>Nature</td>
<td>Geographic Scope</td>
<td>Duration</td>
<td>Likelihood</td>
<td>Consequence</td>
<td>Consequence Rating</td>
<td>Risk Class</td>
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<tr>
<td>9</td>
<td>Changes in population distribution will alter socio-political balance in South Gobi province</td>
<td>Population migration will increase and residents of non mining administration units will decrease.</td>
<td>Direct &amp; Indirect, 1. Direct impact soums, 2. Province</td>
<td>During the Oyu Tolgoi mining operation</td>
<td>Probable</td>
<td>Smaller soums will be at risk of losing political importance and influence</td>
<td>Moderate</td>
<td>II</td>
<td>-Government -Parliament -Local administration -Mining Industry -NGO</td>
<td>-Improve infrastructure of direct impact area -Create economic opportunities in Khanbogd and surrounding soums (e.g., meat, vegetable, or dairy suppliers to OT) -Improve social services in direct impact area -Develop demographic and family policy for the a) province, b) soums and c) mining companies.</td>
</tr>
<tr>
<td>10</td>
<td>Conservation of natural protected areas will be more difficult</td>
<td>Great Gobi desert land which is a world biosphere reserve will be in danger. Road and other infrastructure will be constructed which will have unintended consequences detrimental to the natural environment</td>
<td>Direct &amp; Indirect, Direct impact soums</td>
<td>During the Oyu Tolgoi mining operation</td>
<td>Probable</td>
<td>Rare animals of protected areas will disappear. Vulnerable soil and plants will be destroyed.</td>
<td>Moderate</td>
<td>II</td>
<td>-Government -Parliament -Local administration -Mining Industry -NGO</td>
<td>-Develop concept of natural tourism for natural protected areas -Promote natural protected areas -Train natural conservators</td>
</tr>
</tbody>
</table>
Table 24: Opportunities Matrix

<table>
<thead>
<tr>
<th>Opportunity</th>
<th>Nature</th>
<th>Geographic Scope</th>
<th>Duration</th>
<th>Likelihood</th>
<th>Consequence</th>
<th>Consequence Rating</th>
<th>Risk Class</th>
<th>Risk Owner</th>
<th>Activities to Be Implemented</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Establishment of cultural heritage registration and information database</td>
<td>Direct</td>
<td>1. Direct impact soums 2. Province</td>
<td>During the OT mining operation</td>
<td>Highly likely</td>
<td>Comprehensive database of tangible and intangible cultural heritage will be created.</td>
<td>High IV</td>
<td>-Government - Local administration - Mining - Community</td>
<td>-Create registration and video recording of Intangible cultural heritage bearers -Conduct various kinds of trainings on cultural heritage</td>
<td></td>
</tr>
<tr>
<td>2. Improve detailed research on cultural heritage of the South Gobi</td>
<td>Direct</td>
<td>Direct impact soums</td>
<td>During the OT mining operation</td>
<td>High likely</td>
<td>Survey in direct impact zones will increase.</td>
<td>High IV</td>
<td>-Mongolian Academy of Sciences - Mining Industry - Local administration -Community</td>
<td>-Conduct systematic survey of archaeology, paleontology and ethnography in direct impact zone</td>
<td></td>
</tr>
<tr>
<td>3. Placement of unique cultural and natural heritage of the Gobi on the World Heritage List and Intangible list(s)</td>
<td>Indirect</td>
<td>Province</td>
<td>During the OT mining operation</td>
<td>Highly likely</td>
<td>Knowledge and interest in the Gobi will increase throughout the world.</td>
<td>High IV</td>
<td>-Government - Local administration - Mining Industry - Mongolian Academy of Sciences</td>
<td>-Prepare the nomination dossier of Bayanzag, Gurvansaikhan Mountain, Gobi small protected area and Camel festival for the inscription of World Heritage List and either one of the lists for intangible resources</td>
<td></td>
</tr>
<tr>
<td>4. Construct new South Gobi Museum and strengthen museum programs</td>
<td>Direct &amp; Indirect</td>
<td>1. Dalanzadgad 2. Direct impact soums</td>
<td>Some permanent; others likely during the OT mining operation</td>
<td>Highly likely</td>
<td>A museum which meets international standards will be built. Soum museums will be maintained.</td>
<td>High III</td>
<td>-Government - Local administration - Mining Industry</td>
<td>-Build new museum in Dalanzadgad - Construct museums in the three soums of direct impact zone -Enrich exhibits</td>
<td></td>
</tr>
<tr>
<td>No.</td>
<td>Activities to Be Implemented</td>
<td>Risk Title</td>
<td>Causes/Triggers/Indicators</td>
<td>Nature</td>
<td>Geographic Scope</td>
<td>Duration</td>
<td>Likelihood</td>
<td>Consequence</td>
<td>Consequence Rating</td>
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<tr>
<td>5.</td>
<td>Increase the number of tourists and increase tourism intensity</td>
<td>Increase tourism intensity</td>
<td>Cultural heritage tourism will increase, especially for intangible cultural heritage.</td>
<td>Direct &amp; Indirect</td>
<td>1. Direct impact soums 2. Province</td>
<td>Intense during the OT mining operation; permanent</td>
<td>Probable</td>
<td>Intangible cultural heritage will become a tourist attraction.</td>
<td>Moderate</td>
</tr>
<tr>
<td>6.</td>
<td>Increase knowledge and awareness on cultural heritage</td>
<td>Increase knowledge and awareness</td>
<td>Cultural heritage education of students will be strengthened. Distance training will be conducted.</td>
<td>Direct</td>
<td>Direct impact soums</td>
<td>During the OT mining operation</td>
<td>Probable</td>
<td>Knowledge of all people in the direct impact soums on cultural heritage will be improved.</td>
<td>Moderate</td>
</tr>
<tr>
<td>7.</td>
<td>Improve infrastructure and increase the standard of living</td>
<td>Improve infrastructure and living standards</td>
<td>Electricity, communication, transportation will be enhanced and living quality of mining workers will improve.</td>
<td>Direct</td>
<td>Direct impact soums</td>
<td>Intense during the OT mining operation; some permanent</td>
<td>Probable</td>
<td>Constant electricity access will be built.</td>
<td>Moderate</td>
</tr>
<tr>
<td>8.</td>
<td>Develop cultural heritage tourism</td>
<td>Develop cultural heritage tourism</td>
<td>Cultural heritage tourism will increase, especially for intangible cultural heritage.</td>
<td>Direct &amp; Indirect</td>
<td>1. Direct impact soums 2. Province</td>
<td>Intense during the OT mining operation; permanent</td>
<td>Probable</td>
<td>Intangible cultural heritage will become a tourist attraction.</td>
<td>Moderate</td>
</tr>
<tr>
<td>9.</td>
<td>Enhance capacity of the cultural centers</td>
<td>Enhance capacity of the cultural centers</td>
<td>Equipment and technology of the cultural center will be improved.</td>
<td>Direct</td>
<td>Direct impact soums</td>
<td>During the OT mining operation</td>
<td>Highly likely</td>
<td>Cultural center will become a main place to implement cultural policies</td>
<td>Moderate</td>
</tr>
</tbody>
</table>

**Activities to Be Implemented**

- Provide soum cultural center with needed equipments
- Conduct cultural heritage training at soum cultural centers
- Organize competitions on cultural heritage at the soum cultural centers
- Enhance hotels and restaurants facilities
- Promote animal husbandry based tourism
- Improve primary school cultural heritage education
- Organize cultural heritage distance and non-formal training for adults.
- Promote cultural heritage tourism
- Take steps to protect intangible cultural heritage
- Stop robbing, destroying and illegally purchasing of cultural heritage
- Build protection zone, fence, signage and parking for tangible cultural heritage
- Built asphalt roads
- Install power lines
- Introduce new communication technology
<table>
<thead>
<tr>
<th>Priority:</th>
<th>Risk Title</th>
<th>Cause/Trigger/Indicators</th>
<th>Nature</th>
<th>Geographic Scope</th>
<th>Duration</th>
<th>Likelihood</th>
<th>Consequence</th>
<th>Consequence Rating</th>
<th>Risk Class</th>
<th>Risk Owner</th>
<th>Activities to Be Implemented</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.</td>
<td>Create model of coexistence of mining and nomadic lifestyle</td>
<td>A policy to promote nomadic pastoralism will be pursued and animal and dairy products will be purchased.</td>
<td>Direct</td>
<td>Direct impact soums</td>
<td>During the OT mining operation</td>
<td>Probable</td>
<td>Program for promoting nomadic pastoralism will be developed.</td>
<td>Moderate</td>
<td>II</td>
<td>Government, local administration, private entities, community, NGOs</td>
<td>Establish small and medium enterprise for meat production in all direct impact soums. - Establish small and medium enterprise for dairy products in all direct impact soums.</td>
</tr>
</tbody>
</table>
The top threats to cultural heritage in Ömnögovi aimag are the potential loss of nomadism and related culture and the increasing disturbance, if not outright destruction, or historical and scientific sites. Representatives of the mining industry felt that destruction of tangible resources—archaeological, paleontological, historical, and cultural sites—represent the greatest threats, whereas the other participants focused more on intangible resources. It is important to point out, however, that all participants place threats to nomadic culture and tangible resources in Rio Tinto’s Risk Class IV, meaning that the threats exceed acceptable levels and need urgent attention. In essence, all participants viewed these threats as ongoing, likely to increase, with the consequence that the culture and people of the Gobi will be diminished.

The loss of nomadic culture and tangible properties of cultural importance is primarily the result of mining activities and are mostly limited to areas of Ömnögovi aimag subject to intense mining development. The participants cited other causes, such as immigration and infrastructure development, which result in cultural losses that are only indirectly related to mining. The participants believe that cultural losses will be most intense during the operation of the OT mine; some of these losses may be recoverable but many will be permanent. All participants suggested that government at all levels needs to take responsibility for these losses. Laws need to be changed and protections improved. The participants also pointed out, however, that mining companies and communities are key to any actions to mitigate these losses. The participants devised a series of management actions ranging from developing local markets for nomadic products to establishing a centralized database of cultural properties. These management actions will be incorporated into the compliance and public programs of the CHP.

The other eight threats are largely variations or derivatives of the top two major threats. For example, loss of social order (No. 4) will occur because traditional customs (associated with nomadic culture) and sacred places will be lost. It is clear from the types of threats listed that the participants were largely concerned about the effects of the loss of cultural heritage on social welfare. The breakdown of traditional familial and community ties along with increased crime loomed large in the discussions.

The opportunities envisioned by the risk workshop participants parallel the threats. The loss of nomadic culture was countered by the opportunity to identify and register bearers of intangible heritage. The threat to tangible heritage presented by mining was offset somewhat by the opportunity to conduct more detailed scientific research on the archaeology, paleontology, ethnography, and history of the South Gobi. The participants also noted that mining provided the opportunity to list sites of great importance on the World Heritage List.
The participants listed public program opportunities further down the priority list. The construction of the South Gobi Museum, enhancing the capacity of the soum cultural centers, and incorporating cultural heritage in primary education we listed as opportunities 4 through 6. Heritage tourism was found near the end the opportunity matrix, suggesting that prior to focusing on the development of cultural tourists critical investments in infrastructure are needed.

What was particularly surprising about the risk analysis workshop was the unanimity among the participants in the identification of the key threats and opportunities. Most viewed the threats are real and ominous, whereas the opportunities seemed more theoretical (that is, they might occur but they were not imminent and could easily not materialize). All viewed cultural heritage as critical, both for the people of the Gobi and for the continued operation of the mines.
9. SUMMARY AND CONCLUSIONS

Jeffrey H. Altschul, B. Gunchinsuren, and John W. Olsen

Phase 1 was designed to provide sufficient information from which the CHP for Ömnögovi aimag could be developed. To this end, the MIHT completed a literature review of the scientific literature for archaeology, paleontology, anthropology, and history of the Gobi Desert, focusing primarily on the south Gobi. We also compiled information on Mongolian standards and practices at the national, provincial, and soum levels on education, museums and cultural centers, and tourism. As part of this work, we created a GIS database, which contains descriptive and locational information on all heritage sites documented at national, provincial, and soum levels of government. We used these data to create a predictive model of archaeological site locations for Ömnögovi aimag. This model represents the first time this modeling technique, common in the rest of the world, has ever been used in Mongolia.

From the documented information, we were able to identify gaps in the current knowledge about cultural heritage of Ömnögovi aimag. These gaps formed the basis for a strategic set of short field visits to Ömnögovi aimag. In all, we visited the province seven times during Phase 1. The tangible team undertook two field trips; the public programs and intangible teams, both separately and together, went on four field trips. The entire MIHT, including international specialists, participated in one field trip. One trip scheduled for the paleontological team could not be held during Phase 1 due to unfavorable weather conditions.

Everywhere we went in Ömnögovi aimag, we learned of the region’s rich and varied past as well as of its proud and vibrant culture. We heard about the current and potential threats to cultural heritage—illegal excavation of archaeological objects and paleontological fossils, the loss of songs, the replacement of traditional dress by commercial cloths, and the breakdown in traditional transmission of silver- and blacksmithing, among others. We also learned about the need for investment in primary education, for culture centers to actively promote cultural heritage activities, and for basic infrastructure to help the fledgling eco- and adventure tourism industry. We heard from everyone—government officials, NGOs, and local residents—that saving their culture lay in the thoughtful and successful development of the mining industry.

Mining companies currently have to comply with the Mongolian Law on the Protection of Cultural Properties as well as other regulations that require them to sponsor surveys and excavations to ensure that cultural heritage is not destroyed by their activities. Unfortunately, the compliance process is only partially working. At this time, only three percent of companies obtaining licenses to operate mines have complied with the law. The
reasons for this failure are varied, but all point to the need to re-structure the compliance process so that regulatory responsibilities are clear and funding for all aspects of cultural heritage protection is secure.

In Phase 1, we gathered a great deal of information on past and present cultural heritage which has been presented in this report. We know what we need to protect. Now, we must define a system that will protect it. It is now time to develop the CHP.
October 7, 2010

To: Tserennadmid Osorpurev, Cultural Heritage Program Coordinator, Oyu Tolgoi, LLC

From: Dr. Jeff Altschul, MIHT co-principal investigator
       Dr. B. Gunchinsuren, MIHT co-principal investigator
       Dr. John Olsen, MIHT co-principal investigator

RE: Gap Analysis

The purpose of this memo is to summarize the gap analysis for the Oyu Tolgoi (OT) cultural heritage program (CHP). Much of this information is summarized from the presentation made to OT on September 28, 2010, entitled “Cultural Heritage Plan for Umnugovi Aimag and Oyu Tolgoi.” A copy of the PowerPoint accompanying this presentation has already been provided to your office.

We begin the memo with an overview of the current state and projected direction of cultural heritage protection and preservation in Umnugovi (South Gobi) Aimag (province). Next, we discuss a structural plan to change the trajectory in a positive direction. We end with our current assessment of the three CHP elements—for tangible resources, intangible resources, and public programs—and gaps in our knowledge that must be filled to develop the CHP.

The Current Situation

The South Gobi is rich in culture, both living and past. But this cultural heritage is in danger. Rapid development, particularly in the mining sector, is destroying untold numbers of archaeological and paleontological sites. Increased inmigration has led to increased vandalism, with cultural artifacts and dinosaur bones being illegally excavated and sold. As herders are attracted to jobs in the mines and immigrants flood into the region, the nomadic
culture of the South Gobi is changing in ways that are untenable to the local people. Yet these people feel ill prepared and unable to defend themselves against the onslaught. We heard these concerns at every soum and province meeting we attended. It became clear that the problem was not simply a lack of interest, but a compliance framework that is not working. Although the Mongolian Law of Cultural Heritage requires mining companies to protect heritage resources, currently, only 3.7 percent of all companies obtaining mining licenses have been required to conduct cultural heritage studies. Yet, Mongolia is a signatory to several international conventions, including the World Heritage Convention (1971), the Ramsar Convention on Wetlands of International Significance (1971), and the UNESCO Convention for the Safeguarding of Intangible Cultural Heritage (2003). As such, Mongolia has pledged to protect heritage resources and engage local communities in that effort. This lack of compliance needs to be rectified.

Proposed Cultural Heritage Structure

We propose that a new compliance structure be established to protect Mongolian cultural heritage (Attachment 1). As a first step, we recommend separating the regulation of cultural heritage compliance from its implementation. In short, the same organization should not decide what is required for compliance, conduct those studies, and approve the results. Our plan uses the current compliance structure that places cultural heritage regulation under the Ministry of Education, Culture, and Science in the Department of Culture and Art (DCA). We suggest empowering the DCA by creating a cultural heritage office or division with the explicit responsibility of formulating cultural heritage policy and regulating licenses and permits.

To obtain a license to explore or mine mineral resources, the Mineral Resource Authority would send a license application to the DCA, which would check it for adequacy, approve it, and assess an appropriate cultural heritage fee (CHF). CHFs would be assessed annually and paid to the Department of Government Administration, passed through the Department of Science and Technology, and ultimately be received by the Mongolian Academy of Sciences (MAS). MAS in turn would establish a Center of Gobi Studies (perhaps in Dalandzadgad) which would consist of three offices. The Office of History would be in charge of an on-going oral history project and keep the list of protected Úvt’ Gazruud sites (places of traditional activities or spiritual association). The Office of Archaeology and Paleontology would be responsible for ensuring that tangible resources in the South Gobi potentially affected by mining (and perhaps other development) activities were adequately identified, evaluated, and treated. The third office would be a repository for those scientific collections from the South Gobi which are not curated in Ulaanbaatar. We anticipate that large mines will require so much compliance work that MAS will have to establish satellite or project offices on-site. These project offices will be staffed by one or more professionally trained archaeologists/
paleontologists authorized to make on-site decisions regarding the significance of heritage resources and appropriate treatments (e.g., excavation) as well as nonprofessionals that have passed certification courses. MAS also will fund through the CHF the South Gobi Museum in Dalandzadgad to perform public programs (e.g., museum displays, educational materials, festivals, etc.) at the capital and in the soums.

Because the OT CHP focuses on the mining industry, we have emphasized compliance by the Ministry of Mineral Resources and Energy. It is important to point out, however, that other ministries could employ this same compliance framework and that this framework should be extended to other aimags throughout Mongolia.

To make the framework outlined above a reality will require changes in Mongolian law. We will need to embed the principle of cultural heritage consent in the country’s cultural heritage law as well as refer to that principle in other relevant legislation that require permits or licenses. It will be very important to regulate the financial aspect of cultural heritage consent so that the CHF is not diverted for other governmental purposes. The Mongolian Law of Cultural Heritage also needs to be amended to increase fines and other penalties for illegal excavation and trade in antiquities and fossils to conform with international principles. Finally, the Mongolian government should be urged to sign the UNESCO Convention on the Means of Prohibiting and Preventing the Illicit Import, Export, and Transfer of Ownership of Cultural Properties (1970) and/or the UNIDROIT Convention on Stolen or Illegally Exported Cultural Objects (1995).

Legal changes will only occur if there is a change in attitude about the importance of cultural heritage compliance. The central issue is the balance between encouraging mining activities and protecting the cultural heritage in Mongolia. Although both are important, as evidence by the low level of compliance with standing law protecting cultural heritage, mining interests currently prevail. Yet, at least in the South Gobi, local officials, NGOs, museum and cultural center directors, and members of the general public are very concerned and told us that the balance needs to be shifted. It is possible, therefore, for OT, MAS, and others to develop a provincial solution that could serve as a model for the country and pave the way for the legal changes outlined above.

Regardless of how the change occurs, if it is to occur at all many more heritage professionals will be needed in Mongolia. Training at all levels—archaeologists, paleontologists, curators, public program staff, etc.—is a critical requirement. In addition to professionals, a cadre of South Gobi residents certified in one or more fields will be gainfully employed serving the heritage needs of the mining industry.
Cultural Heritage Elements

Tangible Resources: Of the three classes of tangible resources—archaeological sites, paleontological resources, and standing architecture—only the first two appear to be of relevance to the South Gobi or OT. The built environments in the soums or the provincial capital of Dalandzadgad do not meet the criteria for outstanding architecture or historical importance. The most impressive architectural facilities in the South Gobi are the modern mine complexes, which are too recent to be of historical value, although may meet those criteria in the future.

More than 600 archaeological sites have been identified in the South Gobi, mostly as the result of investigations associated with the modern mining industry. About 120 sites have been identified on lands within the OT leasehold alone. Archaeological site types identified in the South Gobi include among others, burials, ancient mines, rock art, artifact scatters, rock cairns and shrines, and hunting and herding camps. These sites range in date from the Paleolithic era until historical times.

Using these data along with their experience in the South Gobi, Drs. Gunchinsuren, Amartuvshin, and Olsen developed an “expert” model for the prediction of archaeological site locations. We are in the process of compiling the logical statements into a model using geographic information systems (GIS) technology. This model will compared with a sensitivity model based solely on site and survey locations.

We expect these models to be relatively weak because of “gaps” in the database. Identified gaps include:

A very low proportion of the South Gobi has been inventoried for archaeological sites

- Archaeological investigations have been conducted primarily in the eastern part of South Gobi aimag where modern mining operations are planned or active. Little archaeology has been performed west of Dalandzadgad.

- Archaeological survey has targeted sites that can be detected from the surface; no subsurface archaeological probing based on geomorphic land surfaces has been performed.

To begin to rectify these gaps, we propose limited archaeological field work in areas that will strengthen the model. In general, survey areas will consist of linear transects placed in areas to cover a diversity of environmental settings in western Umnugovi aimag. We will also spot check areas likely to contain buried sites such as footslopes of alluvial fans, toeslopes of alluvial stream terraces, and sand dune deposits.
MIHT MONGOLIAN INTERNATIONAL HERITAGE TEAM

The South Gobi has been studied by paleontologists since the early 20th century. The region is well known for dinosaur fossils. Recent finds on OT have shown that these fossils also exist within the leasehold. Because of the focus on dinosaurs, other paleontological resources have either been ignored or only superficially studied. Such resources include microfossils and macrofossils in all formations and Mesozoic fauna. Quaternary geology, in general, has not been extensively studied in favor of Mesozoic (particularly, Cretaceous period) geology.

There are gaps in our knowledge of the paleontology of the South Gobi. However, additional limited fieldwork is not likely to alter the situation. Instead, we suggest concentrating on field and recording standards. In general, paleontology lags far behind archaeology in terms of compliance processes. Paleontological remains are often chance-find discoveries and not the result of planned scientific surveys. Thus, many finds go unreported and there is a tremendous loss of information. In the CHP we plan to address this situation by specifying standards for survey, site recording, site excavation, analysis, and reporting based on best practices developed in other countries and by professional paleontological societies.

Intangible Resources: The literature review and initial field studies performed in support of the CHP indentified six topics of general importance to the intangible heritage of the South Gobi. These topics, which are manifestations of more general anthropological themes, are used by local communities as subjective measures of the rate of change in their society. These topics are:

- Toponyms or natural locations on the landscape that have cultural meaning or significance
- Úvt’ Gazruud sites (places of traditional activities or spiritual association)
- Local arts and crafts
- Language and dialect
- Oral history
- Songs and stories.

Although some information has been gathered on all six topics, gaps in our knowledge exist which need to be rectified prior to the design of the CHP. We propose two approaches to fill these gaps. First, we intend to “map” locations of intangible heritage. We will create baseline maps of toponyms and Úvt’ Gazruud sites as well as to plot the distribution of production locales of arts and crafts within the four soums directly affected by OT. Second, we will begin a documentation program that will become an integral part of the CHP. The documentation program will include the collection of oral histories and songs and stories in
addition to the documentation of languages and dialects of the South Gobi. Fieldwork will be
designed to identify intangible cultural elements important to local communities as well as to
national and international interested parties; to evaluate the direction and magnitude of
culture change; and devise treatments for protecting and preserving those elements
deemed important.

Public Programs: We divided public programs between museum studies and heritage
tourism. Public awareness and education are embedded in each theme.

Museums and culture centers exist at the soum and aimag levels in the South Gobi. This
infrastructure is extremely useful and strengthening existing institutions, as opposed to
building a new framework, will be to transform knowledge on tangible and intangible culture
into forms of public involvement; a cornerstone of the public programs component of the
CHP. Although the institutions exist, they suffer from a lack of resources and funding. As
importantly, the soum and aimag museums reflect a “top down” approach to the museum
experience in which the content of information that is presented to the public is determined
solely by the museum staff often at the direction of national and provincial museums.
Displays tend to be static and dogmatic as opposed to interactive and experiential.

We need to shift the focus from museums as the authority of culture, history, and tradition
to centers where people engage with the past and present of theirs and others cultures
through their own experience. To do so, we need to transform knowledge on tangible and
intangible culture into forms of public involvement.

This transformation requires:

- Professionals in museum research, conservation, public education, and management
- Enrichment of the collections (tangible and intangible)
- Gallery, exhibition, and interactive displays
- Publications and lectures
- Public festivals and cultural events.

Training and continuing professional development is required at all levels of the museum
infrastructure in Mongolia. In addition to developing training programs in-country, building
partnerships with museums in developed nations will be essential to incorporating the latest
technology and approaches to public involvement. In the latter vein, it is critical that
museums recognize that the people of the South Gobi know their culture the best and must
strive to include this knowledge in any exhibit, display, or public event. Reaching out to the
public also means matching museum displays to school curriculums, promoting popular lectures and publications, and creating products for local television and other media.

Although we are confident in our structural analysis of the soum and aimag museums and culture centers of the South Gobi, there are still gaps in our understanding of current practices that need to be filled prior to preparing the CHP. In particular, we need to survey extant South Gobi museums and culture centers to:

- Assess the expertise and qualifications of the staff
- Assess current collections and exhibitions
- Identify existing public programs, if any
- Recognize the type and direction of future public programs
- Determine the type and extent of existing coordination between South Gobi museums and culture centers.

Heritage tourism is in its infancy in the South Gobi. The lack of roads, infrastructure, and attractions limits tourism to those seeking “adventure.” Tourism is expected to increase, however. There will be an influx of residents staffing the mines and associated industry. Roads, airports, hotels and other infrastructure will improve in no small part also due to the mining industry. Finally, the standard of living in Mongolia and the South Gobi is likely to rise (also due at least in part to the mining industry). Managing this growth in tourism so as to maintain the environmental health of the Gobi Desert and not to unduly impact the people or culture of the Gobi is a huge task.

There are strengths, weaknesses, opportunities, and threats associated with heritage tourism. The strengths are obvious: pristine desert, dinosaur fossils, camels and camel culture, and historical and archaeological sites. The weaknesses are equally apparent: harsh climate, short tourist season, lack of infrastructure, and long distances between attractions. Because the tourism industry has not matured, there is a tremendous opportunity to influence the industry’s direction and magnitude. Establishing a process by which communities are involved in deciding how much change is acceptable is appropriate and needed to ensure that the opportunity provided by tourism does not turn into a threat to people’s livelihoods or life ways.

In the near term, partnerships between community groups, tour operators, hotel and visitor camp operators, travel agents, heritage professionals, and government officials need to be established to ensure that tourism is developed in a planned and coordinated manner. Support for projects popular with local communities should be encouraged, although such projects need to meet international site conservation standards. In the long term, however,
it must be recognized that the South Gobi is only a small part of Mongolia and that the country as a whole needs to adopt a holistic approach to managing tourism. In short, Mongolia needs a national tourism master plan.

Heritage tourism may evolve into a significant economic sector in the South Gobi, but it certainly will not be a major force anytime soon. The CHP can assist with the development and planning of this sector. To do so, we need to fill the following gaps:

- Identify potential heritage sites and attractions
- Develop a model for assessing tourism potential
- Establish a “limits of acceptable change” process

We appreciate the opportunity to present you with the results of our work to date as well as the gaps in our knowledge that we need to fill in order to complete the CHP. Please do not hesitate to contact us with any questions or comments.
Attachment 1: Proposed structure
11. **APPENDIX 2: BIBLIOGRAPHY**

Археологии

1. **ЕРӨНХИЙ БҮТЭЭЛҮҮД**


Орос Зөвлөлтүүн эрдэмтэд монгол орны археологийн дурсгалыг хэдий үеэс судалсан хийгээд монгол оронд археологийн судалгаа үүсч хөгжихэд зөвлөлтүүн эрдэмдийн оруулсан хувь нэмрийн талаар өгүүлжээ.


1969 оны Монголд явуулсан археологийн судалгааны ажлын талаар өгүүлжээ.


Монгол улсын нутаг дэвсгэр дээр хүн амх нутаглах болсон уеийг Дуңдгөө аймгийн Гурвансайхан сумын нутаг Ярх уулын чуллуун зэвсгийн дурсгалтай холбон тайлбарласан байна.


МЗТСХЭ-ийн хийж гүйцэтгэсэн ажлын үр дүн, ач холбогдол, цаащдын зорилтын талаар өгүүлжээ.


Монголд хүү усэх уеийн эртний байгал газар зүйн нөхцөл байдлын талаар өгүүлээн.


Энэ өгүүлэлд Монголын археологийн дурсгалуудыг он цагийн өргөх хүрээлэнд хамруулан дэлгэрэнгүй авч үзлэн байна.


МЗТСХЭ-ийн хийж гүйцэтгэээн ажлын тухай өгүүлээн.


Монголын нуудалчдын түүхий судалах асуудлыг хөндөн тавьсан байна.


Дэрвэлжин булуу, түрэг (VI-VIII зуун) болон монголын уеийн булшлаас олдсон шинэ олдворуудыг тодорхойлон нийтэлжээн.


Монголын археологийн дурсгалуудын тухай шинжээг ухааны хялбаршуулсан товхимол.


Монголын археологийн төв тойм.
17. Наваан Д. Эртний монголын түүхийн дүрстэлүүд. - УБ., 1980.

Монголын эртний түүхийн дүрстэлүүдийн тухай шинжлэх ухааны хялбаршуулсан ном.


Археологийн судалгаа гардаг ард нийгэмлүүн бүхий гурван жолдог уламжлал болсонд цэргийн зэвсгэг уйлдвэрлэх шатанда ахиц гарчээ гэж үзсэн байна.


Монголын археологийн дүрстэлүүдийн он цагийн хамаарлын асуудлыг хэндэн авч үзэжээ.


МЗТСХЭ-ийн Монголын чүүлэн зэвсэг, хадны зүрхийн дүрстэлүүдийн судалгын ажлын талаар эгчдэлжээ.


1960 онд Монгол-Зэвэлттийн хамтарсан археологийн экспедицийн хийж гуйцэтгэээн хэрэгшэн шинжилгээнээний ажлын тухай өгүүлжээ.


Монгол улсын нутагт оршдох зарим хот балгадын судалгааны ажлын талаар эгчдэлжээ.


Археологийн хайгуул судалгааны явцад монгол орны хангай, говиос олдсон ширмэн здэлэл түүн дотроос ширмэн тогтооны талаар эгчдэлжээ байна.

Рашаан хадандаа дүрсэлсэн эртний тамгадыг нийтэлж, тэдгээрийг монголчуудын бoloод бусад олон овог ястны овгийн тамга, малын тамга зөмөддөгтэй харьцуулаан дүйлэж нэгтгэн дүгнэсэн нэгэн сэдэт суурийн бутэл.


Археологийн олдвор хэрэглэгдэхүүн, баримт, сурвалж бичгийн мэдээ баримт, овгийн нэр, тамга, сусэг бишрэлээр нь монголчуудын эртний овог дээдсийг судлан олж тогтоож бөлөн тухайн өгүлжээ.


Овгийн тамга зөмөддөгтэй талаар өгүлжээ байна.


Монголын ард түүний металл боловсруулах арга ажиллагааны талаар археологийн хэрэглэгдэхүүн, сурвалж бичгийн мэдээ үндэслэн өгүлжээ.


Монголын археологийн дурсгалуудын тоймыг үеийлэн авч үзэжээ.


1960 онд явуулсан археологийн хэрэгтэй шинжилгээний ажлын тухайн өгүлжээ.


Монголын археологийн судалгааны товч тойм.


Монголын археологичид 1967 онд шинээр олдсон дурсгалуудын талаар товч өгүлжээ.

1960 он хурээлэн Монголын археологийн судалгаанны тухай дэлгэрэнгүй өгүүлээ.


Монголын археологийн судалгааны ажлын ур дунгийн талаар өгүүлээ.


Монголын археологийн судалгааны товч тойм.


Монголын эртний түүхийн тойм.


Археологийн судалгааны тухайн уеийн ополт амжилт, тулгамдсан асуудлын тухай өгүүлэн байна.


Түүхийн хүрээлэнгээс эрхлэн гаргах гэж байсан Монголын түүхийн таван бот зохиолтой холбогдуулан монголын эртний түүхийн зарим чухал тулгамдсан асуудлыг хөндөн тавьсан байна.


Монголын чулуун зэвсэг, хүрэл зэвсгийн үеүүдийн товч тойм.


41. Цэвэээндорж Д. Нэгэн үед хамаардмааргүй археологийн дүрсгал // ШУА. 1977, 6. – тал 70-75.

Дервэлжин хашлага дугуй хүрээтэй зосон зураг, буган чулуун хешеэ, дервэлжин булуны нэгэн үед хобогох эсэх талаарх асуудлыг хөндөн тавьжээ.
42. Цэвэндорж Д. Библиографии по археологии МНР // SA. т VII. f.4. - УБ., 1977. – тал 68-95.

Монголын археологийн 1942-1975 оны ном зүй.


Археологийн дурсгалууд дахь амьтнын загварчлан урлах арга барилын тухай өгүүлжээ.


Хадны зургийн хэрэглээд хууны дэр тулгуурлан мал аж ахуйн гарал ууслийн он цагийг тогтоож болох талаар өгүүлжээ.

45. Цэвэндорж Д. Монгол ордонд темерлэг болохшуурал эхэлсэн он цагийн тухай асуудал // ДДС. - 1989. 1. – тал 119-123.

Баянхонгор аймгийн Баянлиг сумын Зоог, Зуухаас олдсон худэр хайлуулож байсан зуухын талаар нийтэлжээ.

46. Цэвэндорж Д. Овгийн зарим тамгын гарал ууслийн тухайд // ШУАМ. -1989. 2. – тал 33-37.

Судалгааны ажлын үр дүнгээс узээх эцэст анхинд малдчдын амьдралд амьтын мөр их урэтгээс байсаны дурдаад зарим амьтдын мөрний дурсиг таамга болсон овгий байгууллын хөгжлийн явцад хэрэглэж байсан гэжээ.


Монголын археологийн судалгааны тойм.


Урлаг анх үүсэн дээд палеолитийн үеэс Төв Азийн нуудалчидийн дунд ахны төр улс байгуулагдсан МЭО III зууны хүртэлх үеийн Монголын эртний урлагийн түүхийг хадны зураг, буган хөвөө, чимээлэх урлагийн дурсгалд тулгуурлан судалсан судалгааны нэгэн сэдэвт зохиол. 


Монгол улсын нутгаас олддог эртний эсийн ухамлаад, эсийн худэр хайлтуулын байсан зуух, тэдгээрийн ойр орчмоос олддог чулуу узвис гавиан талаар өгүүлжээ.


Дорноговь аймгийн Эрдэнэ сумын нутаг Дулааны говийн археологийн дургалуудын судалсан хийгээд уг нутгийг геологийн талаас нь судлан байгалтын антай таатай нөхцөлтэй унгар мезолитын суул гео олон зууны түрш хумуус амьдарч байсныг баталсан байна.

56. Эндрюс Р.Ч. Эртний хүний мереер (Монголд хийсэн аялал). Улаанбаатар, 2010

57. Эрдэнэбаатар Д., Амартүвшин Ч. Монголчуудын ашгийн малт мал эрэл элэлтийн тухх - УБ., 1999.

Монголчуудын ашгийн малт мал эрэл элэлтийн туххийг археологийн дургалууд дээр түлгүүрлэн үчлилэн авч үзжээ.


Сүүлийн жилүүдээд Монгол нутгаас олдсон хүрэл элэлтийн бүтцэд хийсэн физик химийн шинжилгээнд түлгүүрлэн бусад хэрэгзээдэх орноодас олдсон хүрэл элэлтийн бүтцэд найрлагттай харьцлагын судалсан судалгааныхаа талаар өгүүлжээ.


60. Andrews R.Ch. Politics and Paleontology //Asia. 1922. vol. 22. № 5
61. Andrews R.Ch. Setting out for the buried treasures of Asia. //Asia. 1923 vol. 23, № 4
62. Andrews R.Ch. Winter cooled order for fossil. //Asia. 1923. №11
63. Andrews R.Ch. Where the Winter cooled order for fossil. //Asia. 1923. № 11
64. Andrews R.Ch. Where the dinosaur Hid ist eggs. //Asia. 1924. vol. 24. № 6
65. Andrews R.Ch. On the trail of ancient man. N. Y.; L., 1926
69. Fairservis W.A. Archaeology of the Southern Gobi of Mongolia. Durham, 1993
70. Osborn H.F. Proving Asia the mother of continents. //Asia. 1922. vol. 22, № 9
72. Third asiats expedition in Mongolia. //Asia. 1922. № 11

2. ЧУЛУУН ЗЭВСГИЙН ЯЕ
75. Гунчинсурэн Б. Деревдэгч галааын дээд уейин Монгол орны эртний газар зуй // SA. т. (I) ХХI. УБ., 2003

76. Дөрөн А.П., Дорж Д., Васильевский Р.С., Ларичев В.Е., Петрин В.Т., Девяткин Е.В., Малаева Е.М. Палеолит и неолит Монгольского Алтая. Новосибирск, 1990

77. Дөрөн А.П., Олсен Д., Цэвэндорж Д., Петрин В.Т, Зенин А.Н., Кривошапкин А.И., Ривс Р.У., Девяткин Е.В, Мильников В.П. Археологические исследования Российско-Монгольско-Американской экспедиции в Монголии в 1995 г. Новосибирск, 1996;

78. Дөрөн А.П., Олсен Д., Цэвэндорж Д., Петрин В.Т, Зенин А.Н., Кривошапкин А.И., Ривс Р.У., Николаев С.В., Мильников В.П, Гунчинсурэн Б., Цээндагва Я. Археологические исследования Российско-Монгольско-Американской экспедиции в Монголии в 1996 г. Новосибирск, 1998;

79. Дөрөн А.П., Петрин В.Т., Цэвэндорж Д., Васильевский Р.С., Ларичев В.Е., Девяткин Е.В., Зенин А.Н., Гладышев С.А. Палеолит и неолит Северного побережья Долины Озер. Новосибирск, 2000

80. Дөрөн А.П., Кривошапкин А.И., Петрин В.Т, Ларичев В.Е. Палеолит хребта Арц-Богдо. – Новосибирск, 2000

81. Дөрөн А.П., Зенин А.Н., Олсен Д., Петрин В.Т., Цэвэндорж Д. Палеолитические комплексы Кремневой долины (Гобийский Алтай). Новосибирск, 2002

82. Дөрөн А.П., Олсен Ж., Цэвэндорж Д., Петрин В.Т. Периодизация и хронология палеолита в Монголии // SA. т XVIII. f.2. - УБ., 1998. – тал 8-18.

Монгол орны нутгаас олдсон палеолитын дурсгалуудыг уечлэн, он цагийн нарийн хамаарлыг авч узээн байна.


Зохиогчийн тодорхойллоо Монгол нутагт хүн аях нутгалж ирсэн тухай асуудлыг шийдвэрлэхэд Дундговь аймагийн Ярх уулас олдсон доод палеолитын уейин дархны газар чухал ач холбоодот болсон байна. Эндээс олдсон хөглямрийн багах зэвсэг болох гилбэр зэвсгүүд нь Монголийн түүхийн он цагийг 300 мяанжан жил болгосон тедийгүй Монгол орны чуллуу зэвсгийн уейин соёл баагах зэвсгийн хэв загвар нь бусад палеолитын уейин соёл иргэнхэлээ хоцроогуй байсныг гэрчилж байна хэмэн ужээ.
84. Дорж Д. Нижний палеолит Монголии и его место в древнем каменном веке Центральной Азии // ОУМЭ-ийн III их хурал. - УБ., 1976.

Монгольн гоо дүүрэн эцэгийн Тэвээсийн чулууны зэвсэгийн усны дурсгалуудын дотор зэлэх байр суурийг авч ужээ.


Монгольн дүүрэн палеолитын төрөлөн хөгжилтэй асуудлыг тухайн жилүүдэд шинээр олдсон суурин гудамж олдвор хэрэглэгчдээс гурвалжсан авч ужээ.

86. Дорж Д. Мезолит Монголии и проблема этнической общенности Центральной и Северной Азии. // ОУМЭ-ийн IV их хурал. - УБ., 1985.

Монгольн мезолитын усны асуулдыг хөндөн тавьжээ.


Монгольн палеолитын судалгааны тойм.


Археологийн судалгаа шинжилгээ, хайгуулын ажлын хэрэглэгчдэхүүн дээр түлхүрлэн бичсэн нэгэн сэдээт зохиол. Монгольн палеолитын усны соёлын усны шаттай хөгжилтүүг Ярх уул, Озон маньт, Цахиурт, Орог нуур, Шивэр уул, Буянт Ухаа, Сонгино, Харганын ам, Арц Богд, Мойлтын ам зэрэг газруулаас олдсон палеолитын усны олдворуудад тушин гэлэн харуулжээ.

89. Доржсүрэн Ц. БНМАУ-ын нутаг дахь чулууны зэвсгэг судалгын байдлыг. – УБ., 1957.

Энэхүү товхимолд чулуун зэвсэн усны дурсгалыг палеолит, мезолит, неолит гэсэн 3 ангилалд хамруулан авч ужуу.

90. Доржсүрэн Ц. Улсын Төвлүү Музейд байгаа чулууны зэвсгийн зүйлс. - УБ., 1959.


Монгол нутгаас олдсон доод болон дунд палеолит, неолитын усны дурсгалуудын талаар огүүлжээ. Монгольн чулууны зэвсэн усны нэгэн онцлог нь хөгжилт нэг шатнаас негээ шатанд зүүхүүн дэвшилд орсон явдал гэсэн байна.


Энэ огүүлээд 1971-1972 онд Дүндговь, Өмнөговь аймгийн нутгаас олдсон чулуун зэвсгийн уед холбогдох хэдэн бууц сүүлгүүдийн он цагийг тогтоожээ.

94. Олсен Ж., Ривс Р., Цэвэндорж Д. Деревянко А. П. 1995 онд Монголд хийсэн палеолитын судалгааны ажлын тайлан (англи хэлээр) // СА. т 16. ф.2. - УБ., 1996. – тал 11-14

1995 онд Монгол-Орос-Америкийн хамтарсан чулуун зэвсгийн судалгааны ангийн хийж гуйцэтгээн ажлын талаар огүүлжээ.

95. Сэр-Одхав Н. К вопросу периодизации палеолита Монголии. – УБ 1963.

Монгол-Зэвлэлтийн археологчидийн олж ирүүлсэн олдовр хэрэглэдэхүүн дээр түлгуурлан зохиогч Монголын палеолитын уеййн дурсгалуудын нэгдсэн уечлэлийг гаргасан байна.


Монголын неолитийн уеййн судалгааны товч тойм.


Хийсэн арга барил, хэв шинжээр нь чулуун сүхий зохиогч хагалах арга барилаар болон холтчийн майгаар хийсэн гэж 2 ангиллан авч үзжээ.


Өмнөговь аймгийн Оцен маань, Эрдэнээуушийн орчмоос олдсон палеолитын, Баянзаг болон Туул голын хэндийн неолитын уеййн болон Туул голын сав дагуух Их Алаг, Дервелжин, Их тэнгэрийн амны хадны зүргийн дурсгалыг тоймлон нийтлэжээ.


Дунд палеолитоос дээд палеолитод шилжээн шилжилтийн асуудлыг авч үзжээ.
100. Цэрэндагва Я. Монголын палеолитын судалгаанд соёлт давхарга бухий дурсгалуудын гүйцэтгэх уурыг // Хар сүлд. 1. - УБ., 2002. – тал 45-56.
Монголын палеолитын судалгаанд соёлт давхарга бухий дурсгалуудын гүйцэтгэх уурыгийн талаар авч үзжээ.

Монгол нутгаас олдсон палеолитын дурсгалуудын вөрөөц онцлогийн асуудлыг хэд хэдэн томоохон дурсгалын жишээн дээр тайлбарласан байна.
А.П.Деревяяко, А.Н.Зенин, Д.Олсен, В.Т.Петрин, Д.Цэвээндорж. Палеолитические комплексы Керемневой Долины (Говийский Алтая). // Каменный век Монголии. Новосибирск, 2002

3. ХҮРЭЛ БА ТӨМӨР ЗЭВСГИЙН ТҮРҮҮ ЯЕ


Буган чуллуун хөдөөсөн дээр тулгуурлан хурлийн үеийн хумуссийн зураг дурсгалэлэйг авч үзэн, тэр үеийн хумуссийн сэтгэхүй, хийсэргэлэл эхий “тэнгэр шүтээгэй” холбон тайлбарлажээ.

Хүрэл болон төмөр зэвсгийн түрүү үеийн олдовр хэрэглээдэхүүний ангилал, түүхэн тойм зэргийг огосон нэгэн сэдэт зохиол.

Монголын хурэл зэвсгийн үеийн түүх соёлын тойм. Зохиогч Монголын түрүү үеийн болон хохуу хурэл зэвсгийн үеийн дурсгалуудыг англиан ялгаж, Монголын өрөөсүү хэлбэрэн соёл нь дөрөлжин бүлшээ соёллоо солигдсон хэмээн үзсэн байна.


Аргалийн толгойн дурс бууий барийлттай хурэл хүтгийг тодорхойлсон бичих түүнийг МЭӨ ХІІ-Х зууны үед хамруусан байна.


Монгол улсын хурэл болон темер зэвсгийн түрүү үеийн түүхийн онолын чиглэлийн хэд хэдэн асуулдлыг хэнэн авч узээ.


Монгол нутгаас олдсон Буган хөшөөний талаархи нэгэн сэдэвт зохиол.


Улаанбатар хотын Төө музейд хадгалдаж байгаа 68 сумны хурэл зэвийг тодорхойлон ангилжээ.


Энэ өгүүлэлд дөрөлжин бүлш, буган хөшөө, хадны зургийн ангилал ор цагийн хамарлын асуудлыг авч үзэйн зэрэгцээ тэдгээрэй Монголын хурэл зэвсгийн үеийн түүхэнд ээлэх байд суурийг хэнэн тавьжээ.


Дорнод аймагийн ОНС музейд хадгалдаж байгаа хурэл олдворуудыг нийтэлжээ.


Энэ өгүүлэлд Монголын хурлийн үеийн соёлын хэд хэдэн үндээн шинжийг тодорхойлсон Монголын хурлийн үеийн овгүүд эдийн болон оюун санааны ололтоороо Төө Азийн соёл иргэншлив нэгжилд уламж хувь нэмрээ оруулжээ гэж дугнэсэн байна.
114. Наваан Д. Дорнот монголын хүрлүүн үе. - УБ. 1975.

Хүрлүүн үед холбоогоо дурсгалуул болон дөрөвөн булшны судалгааанд түлгүүрлэн
Дорнод Монголын хүрэл зэвсгийн үеийн оршин сууцдын эдийн болон оюун санааны
амдрылны асүүлдэг тусгасан нэгэн сэдэвт зохиол.

115. Новгородова Э.А. К вопросу о древних связах Монголии и Сибири // SA. t. IV.

Шавар ваар сав, хутга, зуулт зээрэй олдворуудад хийсэн дугнэлтээд туушлагаан чүлүүг
зэвсгийн үед Монгол Сибирь хөрөнгө хооронд бүрэлдсэн харилцага холбоо нь хүрэл
зэвсгийн үед улам бэлжээн зуаарчээ өгж үзсэн байна.

116. Сэр-Оджав Н, Долгосурзэн Д. Дундговь аймаг хүрлүүн үед // SA. t.IV. f. 9. -

Дундговь аймгийн музейд хадгалагдаж байгаа хүрэлээдлүүдийг дэлгэнэгүй
тодорхойлон ангилал хийж он цагийг нь тотгоожээ.

117. Пэрлээ Х. Өмнөгөв-Өвөхэнгай аймгуудын говь талын нутгаар эртний
     судаллын
     хайгуул хийсэн нь. Эртний судаллагуаас түүн бутэл. УБ.,1963.

118. Эрдэнэбаатар Д. Origin of the Mongolian Saving “Breaking a Flint Over One’s
     Head” (Толгой дэрэ цахиур хагалах хэмээхийн уичир) // Corea Mongol symposium. -

Хүрлүүн үеийн дөрөвөн булшны оршуулгын зэн үйлд багтах тогойн хахууд цахиур
чүлүү дагалдуулал ёсны тухай өгүүлжээ.

119. Эрдэнэбаатар Д. Монголын Үндэсний Түүхийн Музейд хадгалагдаж буй хүрэл

МҮМ-д хадгалагдаж буй хүрэл хутга, сух, оолийг холбогдоо зүрүүн хамт тодорхойлон
нийтэлжээ.

120. Эрдэнэбаатар Д. Монгол нутаг дахь дөрөвөн булш хиригсүүрийн соёл. УБ.,
     2002.

121. Эрдэнэбаатар Д., Доржханд С. Монголын нүүдэлчдийн хүрлүүн үеийн
     темперлэг боловсруулах арга, ажиллагааны тухайд // SA. t 17. f.6. - УБ., 1997. – тал
     73-81.
4. ЭРТНИЙ УЛСҮҮД

122. Амартувшин Ч., Гантулга Ж., Гарамжав Д. Мангасын хүрээ хэмээх нэгэн шороон хэрмийн тухай. АН. т. Х. ф.5. УБ., 2005.


Энэ өгүүлэлд Умард Хүннүгийн түүхэнд холбогдох зарим он цагийг тодруулан хүннүгийн түүхийг хүннү их гүрний үе, хүннү улсын үе гэж заалгаж үзэх үндэстэйг дурдсан байна.


Энэ өгүүлэлд Дорнод Хүннүгийн түүхийн зарим асуудлыг хэвдэн тавьсан байна.


Хүннүгийн археологийн дурсгалыг судалсан байдлыг товч дүгнээд, 1988 онд Ховд аймагийн Манхан сумдад малтсан Хүннүгийн язгууртны буيلةас гарсан эд өлгийн зүйлсийн талаар өгүүлжээ.

133. **Төрбэт Ц.** Эртний нүүдэлчдийн оршуулгын зэн үйлдэл судлах арга зүйн асуудал (хүнү булшны жишээн дзэр) // Түүхий сэтгэул. t. 3. f. 18. - УБ., 2002. – тал 7-15.


Эртний монголчуудын оршуулгын дурсгалын зүг чигийн талаар огүүлжээ.


5. **ЭРТНИЙ УЛСУУД**


Монголын төв нутагт бүх хүн чүлээд дэлхийд бүт пийдээн байсан нэгэн сэдэвт зохиол


Түрэгийн археологийн дурсгал, түүхэн тойм, урчлэлд хэрэгтэй талаар огүүлсэн нэгэн сэдэвт зохиол.

6. **ЭРТНИЙ МОНГОЛЧУУД**


Дээрээ тамгын уусэл хувирлын археологийн биеэ олдворуудтай харьцуулах үзэг.


141. Баяр Д., Эрдэнэбат У. Монголын зэнт гүрний үед холбогдох нэгэн ховор

Өмнөгөвч аймагийн Нөөн сумын нутаг Цагаан ханангийн агуйгаас олдсон XIII-XIV зууны
үед холбогдох хадны оршуулааг үлдэж хоцорсон зарим нэгэн эд ёлгийн дүрсгалыг
нийтээжээ.


Өмнөгөвч аймагийн Манлай сумын нутаг Хар аргалант хэмээх газарт малтсан XIV-XVI
zuуны уеийн булуны олдовр харэглэгээгүй нийтэлсэн байна.

143. Лхагвасурэн Х. Дүндэд зууны (XIII-XIV) монголчуудын оршуулын зарим

Энэ огүүлэлд МЭХСЭ-ийн Монгол орны нутгаас үрд өмнө мэдээлээгүй 60 гаруй
оршуулын цогцолборууд олны дүрд аад зээр дүрсгалууд нь XIII-XIV зуунд хамаарч
байгаа талаар бичжээ.

144. Лхагвасурэн Х. Шинээр олдсон XII-XIII зууны монголчуудын булшууд //
ШУАМ. ¹11. - УБ., 1989. – тал 68-76.

Энэ огүүлэлд монгол орноос олдсон монголын үед холбогдох зарим булшуудыг
тодорхойлсон байна.

– тал 87-94.

Монгол булуны судалгааны байдлыг бичсэн байна.


Монгол нутгаас олдсон тэмдэгийн түрүү үе болон хүннүгийн уеийн тогоог харьцуулаан
судлаж, хүннүгийн уеийн тогоо XIII-XIV зууны монголчуудад уламжлалганд иржээ өгсэн
дүгнэлтэд хүрчээ.

147. Тербат Ц. Батсайхан З. Эртний монголчуудын археологийн дүрсгалыг судлах
7. ӨРТНІЙ ХОТУУД

Энэ өгүүлдэд Хүннүгийн уеийₜ хот сүүрүнү хөгжилт, барилгын конструкцын хөгжлийн зарим асуудлыг археологийн материалд түлгүрлэн бичсэн байна.

Зохиогч бичигийн бөлөн археологийн мэдээ баримтад түшиглэн Монголд эрт дээр үзэс еөрйн гэсэн евэрмөц барилгын ухаан хөгжих байсныг батлан харуулаад зогсоогуй нууддлыгд эөрйн гэсэн уран барилгага, хот байгуулах арга ухаан байгаагүй гэсэн онолыг няцааасан байна.

150. Пэрлээ Х. Монголын сөөсөн хот сүүрүнү түүхийн асуудал. - УБ., 1956. 9 хуудастай.

151. Пэрлээ Х. Хүн нарьын гүрван хэрмийн ёлдэц. - УБ., 1957.
Зохиогчийн 1952 онд мэтгэн шинжилгээ Гуа дов, Бурхий держөлжин, Тэрөлжийн держөлжингийн олдовр хэрэглээдхүүнийг нийтээсэн байна.

Нэээн садээд зохиол. Монгол орны нутаг дэвсгэрээс олдох мэдээгдээд байгаа хот сүүрүнү үлдэгдлэйг зохиогч хүнний, түрэнг, кидан, эртний монгол, феодалын бутралын гэсэн үеэдээ хуваан авч усны зэрэгээ тэдгээрийн үсэг хөгжлийн түүхийг авч усэн Монгол дахь феодалын харилцаанд хот сүүрний голлого үүрэг гүйцэтгэж байсан хэмээн дүтгэн байна. Археологийн бөлөн түүхийн сурвалжид түлгүрлэн монголчууд зөвхөн нүүдэлчнүү байсан гэдэг онолыг бүрэн няцааасан байна.

153. Пэрлээ Х. Өмнөгөв, Өвөрхангай аймгуудад эртний судалын хайлгуул хийсэн нь // SA. t. II. f. 2. - УБ., 1963. – тал 27-35.
Нэр бүхий аймгуудын нутаг дэвсгэрээс олдсон эртний хотуудын тухай өгүүлжээ.

1990 онд Өмнөговь аймгуий Номгон сүүгүү оршоо Баянбулагийн түүрүүг малтахад гарсан олдовор тодорхойлоо нийтэлж, үг хотын тухыр ын суравалжид бичигдсэн байдаг Жао Сын бэлгэс байж магадгүй өгч үзэс байна.

8. ХАДНЫ ЗУРАГ

156. Гарамжав Д. Хан уулны хадны зураг // SA. t.11. f. 7. - УБ., 1986. – тал 72-84.
Өмнөговь аймгуий Ханхонгор сүүгүү нутаг Хан уулны хадны зүрүгий нийтэлжээ.

Монгол орноос олдсон хадны зүрүгий ангиал болон урд өмнө олдсон ханы зүрүгийн хамаараах он цагийн асүрдлэг дахин тодруулан авч узэжээ.

МЭӨ 1200-1000 оны үед холбогдох Их Тэнгэр ам, Гачуурт, Талж голоос олдсон хадны зургийг нийтэлж холбогдох он цагийн хамаарлыг хугтана зургаар тодруулжээ. Зохиолчийн өгүлснээр энэ төрлийн хадны зураг нь Монголоос Байгал болон Байгалийн чанадад дамжин тархжээ.

159. Дорж Д. Новгородова Э.А. Петроглифы Монголии. - УБ. 1975, ч. 1. 231 хуудастай.
Нэгэн сэдвэл зохиол. Монголын хадны зүрүгийн судалгааны тойм, ангиал, улссэлээлгийн талаар өгүлжээ.

Өмнөговь аймгуий Ноён сүүгүү Ихэр гашууны хадны зүрүгийн тухай өгүлж, тэр дотроос тэмэнэний зүргэнд тодорхойлол өгч дүгнэлт хийжээ.

Энэ егуулэлд МЗТСХЭ-ийн хээрийн судалгааны ажил нуцлагдал олж илрүүлэн эрэгий тэрэгийн зурийг тухайн егуулын зүйл, он цагийн хамаарлын асуудлыг хэвээн тавьсан байна.


163. Цэвэндэрж Д. Хадны сийлмэл зургийн шинэ дурсгалууд // SE. t.5. f.5. УБ., 1977. – тал 73-118.


Өмнөговь аймагийн Ханбогд сумын нутаг Жавхлан хайрханы хадны зургийг бухэлд нь тодорхойлн нийтэлэн нэгэн сэдвэл зохиол.


9. БИЧГИЙН ДУРСГАЛУУД


Энэ егуулэлд Монгол нутгаас олдсон турэг бичээсүүдийг нийтэлж Монголын нутаг дээгүүрээвхэн монголчуудын соёлын елгий төдийгүйТөө Азийн бусад нууцлалдийн елгий хэмээн дугнаасан байна.


10. ТЭМДЭГЛЭЛ БА ШҮҮМЖ


11. ТАЙЛАН, ЭХ ХЭРЭГЛЭГДЭХҮҮН

170. Амартувшин нар, 2006 – Амартувшин Ч., Гүнчүнсүрэн. “Айвэнхуу Майнз
Монголия Инк” компанийн Өмнөговь аймгийн Хангбогд сумын нутаг дахь Оюу толгоод
шинээр баригдах нисэх онгоцны буудлын талбайд хийсэн археологийн хэвлэл
судалгааны ажлын тайлант. АХГБСХ. Улаанбаатар.

171. Батсайхан - 1990 - Батсайхан З. Өмнөговь аймгийн Монголия Инк
тээвэр төлөх түүхий тайлант. АХГБСХ. Улаанбаатар.

172. Гантулга нар, 2007 – Гантулга Ж., Аладармэнг П. Өмнөговь аймгийн Хангбогд
сумын
нутаг Оюу толгоод “Айвэнхуу Майнз Монголия Инк” ХХК-ны “Heruga” ашиглалтын
талбайд хийсэн хэвлэл судалгаа. АХГБСХ. Улаанбаатар.

173. Ерөөл-Эрдэнэ нар, 2005 – Ерөөл-Эрдэнэ Ч., Гантулга Ж. Өмнөговь аймгийн
Ханбогд сумын нутаг Оюу толгоод “Айвэнхуу Майнз Монголия Инк” ХХК-ны
ашиглалтын талбайд хийсэн хэвлэл судалгаа. АХГБСХ. Улаанбаатар.

174. Гүнчүнсүрэн нар, 2002 – Гүнчүнсүрэн Б., Цэрэндагва Я., Амартувшин Ч.
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тайлан. АХГБСХ. Улаанбаатар.

175. Гүнчүнсүрэн нар, 2005 – Гүнчүнсүрэн Б., Амартувшин Ч., Ерөөл-Эрдэнэ Ч.,
Гантулга Ж. Өмнөговь аймгийн Хангбогд сумын нутаг дахь “Айвэнхуу Майнз Монголия
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ажлын тайлант. АХГБСХ. Улаанбаатар.

176. Хүрэлсүх нар, 2005 – Хүрэлсүх С., Мөнхтүлгэ Р. Өмнөговь аймгийн Хангбогд
сумын
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177. Цэвээндорж нар, 2001 – Цэвээндорж Д., Гүнчимсүрэн Б., Цэрэндагва Я.

Өмнөгөвч аймгийн Ханбогд сумын нутаг Оюу толгой дахь “Айвенхуу Майнз Монголия Инк” ХХК-ны ашигалтын талбайд хийсэн хайгуул судалгаа. АХГБСХ. Улаанбаатар.

178. Цэвээндорж нар, 2003 – Цэвээндорж Д., Гүнчимсүрэн Б., Цэрэндагва Я.

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179. Цэвээндорж нар, 2003 б – Цэвээндорж Д., Гүнчимсүрэн Б., Цогтбаатар Б., Амартуувч Ч. Өмнөгөвч аймгийн Манлай сумын нутаг “Айвенхуу Майнз Монголия инк” компаниийн ашигалтын талбай Хармагтай гүйцэтгэсэн археологийн малтлага судалгааны тайлан. АХГБСХ. Улаанбаатар.

180. Цэвээндорж нар, 2005 – Цэвээндорж Д., Гүнчимсүрэн Б., Амартуувч Ч., Цогтбаатар Б. Өмнөгөвч аймгийн Ханбогд сумын нутаг дахь “Айвенхуу Майнз Монголия инк” компаниийн ашигалтын талбайд хийсэн археологийн малтлага судалгааны ажлын тайлан. АХГБСХ. Улаанбаатар.

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183. Өмнөгөвч аймгийн Архивын албаны тавин жилд. Даланзадгад, 2007
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Товчилсон угийн жагсаалт

АХГБСХ-Археологийн хүрээлэнгийн гар бичмэлийн сан хөмрөг

ДДС-Доржо дахины судпал (сэтгүүл)

ДУ-Дурслэх урлаг (сэтгүүл)

М- Монгolia (журнал)

МУ-Монгол улс (сэтгүүл)

МСХЭШС-Монгол Солонгосын хамтарсан эрдэм шинжилгээний симпозиум

ОУМУ- Орчин угийн монгол улс (сэтгүүл).

СМ- Современняя Монгolia (сэтгүүл)

ТХ- Туухийн хүрээлэн

ХЭ-Хэл зохиол (сэтгүүл)

ХЭС-Хэл зохиол судпал (сэтгүүл)

ШУ-Шинжлэх ухаан (сэтгүүл)

ШУА-Шинжлэх ухаан амьдрал (сэтгүүл)
ШУАМ- Шинжлэх ухааны академийн мэдээ (сэтгүүл)
ШУТ- Шинжлэх ухаан техник (сэтгүүл)
ШУХБ- Шинжлэх ухааны хүрээлэнгийн бутээл.
ШУХХ- Шинжлэх ухааны хүрээлэнгийн хэвлэл
ЭШБ- Эрдээм шинжилгээний бутээл.

CSM- CORPUS SCRIPTORUM MONGOLORU
SA- STUDIA ARCHAEOLOGICA (Археологийн судал)
SE -STUDIA ETHNOGRAPHICA (Этнографийн судал)
SM- STUDIA MONGOLICA (Монгол судал)
SH -STUDIA HISTORICA (Түүхийн судал)
t.-tomus (боть)
f.-fasciculus (дэвтэр)
12. APPENDIX 3: GEOARCHAEOLOGICAL MODEL OF BURIED SITE PROBABILITY IN THE SOUTH GOBI OF MONGOLIA

Jeffrey A. Homburg

Geologic processes may cause archaeological sites to become buried. Examples of these geologic processes include: (1) deposition of sediments caused by flooding along streams; (2) formation of sand dunes; and (3) accumulation of sediment in the lower parts of hillslopes caused by gravity. Unconsolidated materials deposited by floods, the wind, and gravity are known as alluvial, aeolian, and colluvial deposits, respectively. Colluvial deposition can be caused by a variety of processes, such as sheetwash, soil creep, and landslides. In some cases modern development projects can bury archaeological sites, such as when sediment is bulldozed from one place and then transported and dumped in another place to bury a pre-existing surface. Because archaeological sites can be buried by these processes, it is important to consider the probability of such buried sites when a predictive archaeological model is constructed. As assessment of the distribution of places where archaeological sites may be buried is conducted in tandem with predictions of surficial archaeological sites based on archaeological survey and environmental and topographic data. Cultural heritage plans and predictive archaeological models are increasingly taking the potential for buried archaeological sites into consideration.

In doing so, a geoarchaeologist typically creates a buried site probability map, often based on previously published detailed geologic and/or soil maps and field investigations. Unfortunately, high resolution geologic and soil maps suitable for creating a detailed buried site probability map are not available for the Oyu Tolgoi project area. (Geologic maps are available, but they concentrate on the bedrock geology and do not delineate the Quaternary geology in sufficient detail; no local soil maps are available, although a country-wide soil survey report by Bespalov [1964] is available). After a buried site probability map is produced by a geoarchaeologist, the next step usually involves testing the preliminary model with subsurface testing (e.g., trenching, coring) and by dating the deposits through techniques such as radiocarbon dating, optically stimulated luminescence, and other methods. A buried site probability map produced in this way can then serve a variety of purposes. For example, a buried site probability map help in decision-making for determining where archaeological testing and/or monitoring is warranted in places where earth-moving activities are planned that can damage buried sites. It can be time-consuming to produce a buried site probability map, especially at a scale comparable to the one that was created for predicting the distribution of surficial sites for the Omnogov aimag in the south Gobi Desert of Mongolia. Producing such a map would be more time-consuming that...
usual due to the lack of high resolution geological and/or soil maps. Consequently, producing a buried site probability map is a task that beyond the scope of the present investigation.

Instead, a general conceptual model of the probability of buried archaeological sites was created for the project area. This model is based primarily on a reconnaissance made by a geoarchaeologist, Dr. Jeffrey Homburg, along with other scholars on the Oyu Tolgoi Cultural Heritage team during their visit to the Oyu Tolgoi project area and neighboring parts of Ömnögov. Overall, the geoarchaeological assessment made during this reconnaissance indicates that the project area is dominated by geomorphically stable landforms that have a low to no probability for buried archaeological sites. Most of the project is characterized by broad and relatively undissected basins divided by low to occasionally high mountains. Landforms, however, do exist where archaeological sites may be buried, and these are briefly review below.

Buried site probability is limited to Quaternary landforms, mainly those dating to the Holocene to the mid Pleistocene. Landforms dating to the last half-million years or so are the most relevant in terms of their potential for associated buried archaeological sites. Given the scarcity of potable water sources (modern, seasonal, and relict sources such as springs, wells, and lakes) in the Gobi, it is not surprising that Quaternary landforms near such water sources have the highest potential for buried sites.

Landforms where buried archaeological sites may exist are limited primarily to lower landscape positions. Examples of such landforms documented by the reconnaissance of the project area include: (1) alluvial terraces formed by flooding and downcutting (Figure 3.1, Figure 3.2, Figure 3.3); (2) alluvial fans (Figure 3.4); (3) areas covered by sand dunes (Figure 3.5, Figure 3.6, Figure 3.7); and (4) pockets of colluviums on footslopes. Strandlines (or beach berms) associated with modern or relict seasonal lakes (called nuur in Mongolian) are another type of landform where buried sites may be found, although no such lacustrine landforms were observed during our reconnaissance.
Figure 3.1: Alluvial terraces formed by flooding and downcutting (1)

Figure 3.2: Alluvial terraces formed by flooding and downcutting (2)
Figure 3.3: Alluvial terraces formed by flooding and downcutting (3)

Figure 3.4: Alluvial fans
Figure 3.5: Areas covered by sand dunes (1)

Figure 3.6: Areas covered by sand dunes (2)
Figure 3.8 shows a slope classification model that is pertinent for identifying landscape positions where archaeological sites may be buried. This slope classification model is based on Ruhe’s (1975) descriptive slope elements: summits, shoulder slopes, backslopes, footslopes, and toeslopes. Because these slope elements in lower landscape positions are associated with geomorphic processes that may cause sites to be buried, they are useful for predicting where such sites may be preserved. The dominant geomorphic processes for each slope element are as follows: (1) summits – water infiltration and soil formation; (2) shoulder slopes – erosion; (3) backslope – transportation of eroded sediment; (4) footslope – deposition of colluvial and slopewash sediments; and (5) toeslope – deposition of alluvial sediment (Table 3.1). Buried archaeological sites are likely to be confined to the fill deposits of footslopes and toeslopes. By contrast, surficial sites can occur on any landform, but they are likely concentrated on summits and shoulder slopes, as well as on footslopes and toeslopes (alluvial terraces) that have the highest geomorphic stability (that is, places that are not subject to rapid burial or erosion).
Figure 3.8: Slope classification model

Table 3.1: Dominant Geomorphic Processes and Expected Probability of Buried Archaeological Sites for Different Slope Elements

<table>
<thead>
<tr>
<th>Slope Element</th>
<th>Dominant Geomorphic Processes</th>
<th>Probability of Buried Archaeological Sites, Expected Site Integrity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summit</td>
<td>Sheetwash erosion</td>
<td>High artifact visibility Patchy intact deposits Sites and artifacts concentrated on the surface</td>
</tr>
<tr>
<td></td>
<td>Seepage</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pedogenesis</td>
<td></td>
</tr>
<tr>
<td>Shoulder</td>
<td>Heavy sheetwash erosion</td>
<td>Moderate to high artifact density Artifact and sites concentrated on the surface Artifacts subject to erosion and may be left as lag deposits on the surface</td>
</tr>
<tr>
<td></td>
<td>Soil creep</td>
<td></td>
</tr>
<tr>
<td>Backslope</td>
<td>Sediment transport</td>
<td>Low artifact density Sites and artifacts concentrated on the surface Artifacts subject to erosion and transport</td>
</tr>
<tr>
<td></td>
<td>Mass movement by flow, slide,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>slump, creep</td>
<td></td>
</tr>
<tr>
<td>Footslope</td>
<td>Colluvial deposition</td>
<td>Sites likely to be buried, but may occur on the surface Moderate to high artifact density and integrity</td>
</tr>
<tr>
<td></td>
<td>Redeposition by mass movement and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>slopewash</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pedogenesis</td>
<td></td>
</tr>
<tr>
<td>Toeslope</td>
<td>Alluvial deposition</td>
<td>Moderate to low artifact density Sites and artifacts subject commonly buried, though they may also occur on the surface</td>
</tr>
</tbody>
</table>

Figure 8: Idealized valley cross section showing Ruhe’s slope elements (after Schoenberger et al. 2002).
High probability areas for containing buried archaeological sites include the toeslopes of floodplains and alluvial terraces and alluvial fans, especially those landforms near active or relict potable water sources. Medium probability areas include the juncture of footslopes and toeslopes in valley margin positions (mainly colluvial footslopes) and more recent alluvial terraces. Sand dunes are considered to be medium probability areas, except where they occur near active or relict potable water sources (in which case they are considered high probability). Low probability areas consist of the elevated landforms of summits, shoulder slopes, and backslopes, places where archaeological deposits are most likely surficial and eroded. Small pockets of colluvium may occur in the medium and low probability areas. Before making a final assessment regarding areas in need of archaeological testing or monitoring, it is important that these areas be assessed during a site-specific reconnaissance by a qualified geoarchaeologist before ground-disturbing activities are undertaken.
References


List of Figures

Figure 3.1. Ephemeral wash west of Oyu Tolgui mine camp, with low terraces flanking the stream channel. A dry washes is known as sair in Mongolian.

Figure 3.2. Typical wash in the south Gobi during a flood event.

Figure 3.3. Stratified alluvium in the terrace fill exposed by downcutting next to wash in the south Gobi.

Figure 3.4. Coelescing alluvial fans (or bajada) below a hill in the south Gobi. As noted by Gunchinsuren, et al. (2010), archaeological sites are often concentrated near active or relict springs on alluvial fans. Similarly, Quaternary alluvial fans with such springs have a high probability for containing buried archaeological sites.

Figure 3.5. Coppice dunes and sand sheet in the south Gobi.

Figure 3.6. Hummocky coppice dunes, with climbing dunes on the hillslopes in the background.
Figure 3.7. Khongoryn Els sand dunes, with coppice dunes in the foreground. Barchan (or crescent-shaped) dunes such as this are rare in the Gobi, but they have a high potential to bury archaeological sites in localized areas.

Figure 3.8. Idealised cross section showing Ruhe’s slope elements (after Schoenberger et al. 2002).
13. **APPENDIX 4: TANGIBLE HERITAGE NOVEMBER FIELD WORK REPORT**

Activity report of the tangible heritage team of “Cultural Heritage Conservation Programme” of Oyu Tolgoi project

(11–20 November 2010)

**Doctor, professor B. Gunchinsuren**

**Doctor, associate professor Ch. Amartuvshin**

**Preface**

Within the framework of the project of Cultural heritage programme (CHP) design, the impact areas were classified as three categories. At this time, we have conducted a research work on the third impact zone, covering some western soums of the province. The purposes of the survey determined as following:

- In conformity with the Terms of Reference of Oyu Tolgoi CHP tender (dated 16 November 2009) which puts forward Khanbogd, Bayan-Ovoo, Manlai, Dalanzadgad soums and Umnugobi province as an impact areas, an activity to determine the risk of the rest 11 soums of Umnugobi province is included to our team’s action plan.

- Some attempts have been systematically made towards the preservation and protection of historical and cultural properties in Mongolia and the establishment of the registration and information data. Unfortunately, it is still poor within the territory
of Umnugobi province. The fact is available at the reports of the source analysis and GIS map reconnaissance – the first phase of our project.

- Next round of the systematic survey is to form predictive model of locations of historical and cultural properties based on the draft design prepared by ourselves and to conduct field survey in order to investigate on site. However, it doesn't depend on Oyu Tolgoi, it is vital significant to minimizing risks during other mining and construction work.

- Members of the tangible heritage team has prepared the outline of the design based on 10 factors which were developed during the survey of Gobi region. This design option includes the toponyms of extinct spring, lake basin and active river, lake basin, place served as a jewel deposit, surrounding high mountains and places.

- Although it seems like the properties densely spread out eastern part of the province as seen from the tentative cultural heritage registration—outline, it is not too much in fact. Obviously, there has been the constant and balanced occupation of human being in the Gobi region since ancient times and there are a lot of historical and cultural properties in the western part of Umnugobi province.

- We will focus on re-examining our design and documenting larger properties, however it is impossible to register properties with large numbers due to tight time of field survey.

- We will also collect information related to cultural heritage by meeting with local administrators and citizens of some soums and introducing our project.

**Current process of the field survey**

The field survey was conducted by two groups, consisted of 8 members in total. First group included B. Gunchinsuren, Ts. Bolorbat, B. Erdene and driver, while the second group—Ch. Amartuvshin, G. Galdan, Ts. Amgalantugs and driver. Main causes of separating two groups are a) the research area is very large covering the western region of Umnugobi province, consists of such soums not included to the first impact zone and also there are preserved a lot of properties in Umbugovi province; b) An urgent issue of CHP design team is to meet local members of Advisory Board and to take their official consents. The first group will be responsible this task; c) Because of the vast territory of Umnugobi province and the wide distance between soums and sites, one car and few people will lose time in order to cross a distance.
11 November (Day 1) Two groups, led by B. Gunchinsuren and Ch. Amartuvshin departed from Ulaanbaatar. First group traveled by the routine of Choir–Manlai–Khanbogd–Bayan-Ovoo to the east of Ulaanbaatar. At the same day, they arrived in Manlai soum, met with local members of Advisory board and take their consents. They passed the night in Khanbogd soum. The second team departed to the south-west of Ulaanbaatar and stayed in Tsogt-Ovoo soum of Umnugobi province crossing the territory of Dundgobi province.

12 November (Day 2) Taking the consents of local member of the Advisory board at Khanbogd soum, the first group departed to Bayan-Ovoo soum where met with local members of Advisory board and take their consents and then to Dalanzadgad city. The second group registered 4 newly discovered properties at the Takhilgat Tolgoi which is located at 35–36 km from Tsogt-Ovoo soum. Then, they continued their travel to Khan mountain located to the north-east of Dalanzadgad soum and registered 45 properties around there.

13 November (Day 3) The first group met with local members of Dalanzadgad city and take their consents. But the second group conducted an exploration around the Zuun Saikhan mountain located to the south of Dalanzadgad soum. They discovered other 10 properties.
14 November (Day 4) The first group conducted an exploration around the Zuun Saikhan mountain and discovered 7 properties. The second group continued the exploration around Baruun Saikhan mountain and discovered 9 properties.

15 November (Day 5). Two groups departed from Dalanzadgad city by separate routine. The first group will travel through the southern soums of Umnugobi province. Today they directed to Nomgon soum and examine Kharaat mountain there. Late evening, they stayed in Dalanzadgad city. But second group will cover the Mandal-Ovoo, Bulgan, Sevrei and Gurvantes soums. The second team have to travel through the northern soums of Umnugovi province and departed to Mandal-Ovoo soum. In Mandal-Ovoo soum, 111,111 properties were discovered in total. They went to Bulgan soum to the south-west of Mandal-Ovoo soum.

16 November (Day 6). The first group departed from Dalanzadgad city and traveled through the territory of Bayan-Dalai and Khurmen soums. They revealed 1 monument. The second group departed from Bulgan soum. They examined the stone age monuments at
Tsakhiurt khundii, Bayanzag and Eeregiin kholes. They found one new monument near the Khurmen dulaan mountain and then departed to Sevrei soum.

**17 November (Day 7).** The first group departed from Nomgon soum to Noyon soum and stayed there. On the way, they revealed new 12 monuments. The second group conducted the research around the Sevrei soum for two days. They discovered 8 monuments at Takhilgat, Uizen and Khongor els/sand.

**Annex 1: Geographical Coordinates of the Sites to Be Examined by the Field Survey**

<table>
<thead>
<tr>
<th>№</th>
<th>Site Name</th>
<th>Coordinates</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Takhilga mountain</td>
<td>10-12 km to the south-west from Noyon soum</td>
</tr>
<tr>
<td>2</td>
<td>Takhilga mountain</td>
<td>30 km to the east from Noyon soum</td>
</tr>
<tr>
<td>3</td>
<td>Takhilga mountain</td>
<td>10 km to the north of Khankhongor soum</td>
</tr>
<tr>
<td>4</td>
<td>Takhilga hill</td>
<td>34-36 km to the south of Tsogt-Ovoo soum</td>
</tr>
<tr>
<td>5</td>
<td>Takhilga mountain</td>
<td>18 km to the south-west of Gurvantes soum</td>
</tr>
<tr>
<td>6</td>
<td>Takhilga mountain</td>
<td>13-15 km to the west of Sevrei soum</td>
</tr>
<tr>
<td>7</td>
<td>Khalbas mountain</td>
<td>35-38 km from Noyon soum</td>
</tr>
<tr>
<td>8</td>
<td>Atgar</td>
<td>90 km to the south of Bayandalai soum</td>
</tr>
<tr>
<td>9</td>
<td>Kharat</td>
<td>42-44 km to the south-west of Nomgon soum</td>
</tr>
<tr>
<td>10</td>
<td>Baga Argalant</td>
<td>22-24 km to the south of Khurmen soum</td>
</tr>
<tr>
<td>11</td>
<td>Ikh argalant</td>
<td>32-33 km to the south-west of Khurmen soum</td>
</tr>
</tbody>
</table>

**18 November (Day 8).** After examining the Takhilgat mountain and Khalbas in Noyon soum, the first group departed to Gurgantes soum. They revealed 33 monuments. The second group departed from Sevrei soum to Gurgantes soum. On the way they revealed 1 monument. Other 3 monuments were revealed at Takhilgat mountain at 18 km to the south-west of Gurgantes soum.

**19 November (Day 9).** Two groups conducted an exploration at the northern part of Gurgantes soum and departed to Arvaikheer soum of Uvurkhangai province.

**20 November (Day 10).** Departed from Arvaikheer to Ulaanbaatar and concluded the fieldwork.
Archaeological exploration

1-1. A grave enclosed with round-shaped cover having no any stone in the middle at the south-western slope of the Gurvansaikhan mountain range. Size 2.0 meter.

1-2. A grave enclosed with round-shaped cover having no any stone in the middle. North-eastern part of its cover has broken. Size 2.2 meter.

1-3. The cover stone of this monument has lost its shape due to movement. Size 3.6 x 3.0 meter.

1-4. A round-shaped grave with big stone cover. Stones of cover has spread out to the north-eastern part a bit. Size 2.4 meter.

1-5. A grave enclosed with round-shaped cover having no any stone in the middle. Size 2.3 meter.

1-6. Round-shaped grave with big stone cover. Small stones were put in series into east part of the cover. Size 1.9 meter.

1-7. Some cover stones of this monument have disappeared. Diameter of the existing part is 2.7 meter.

1-8. A round-shaped grave with small stone cover. Cover stones has spread out into the west. Size 1.9 meter.

1-9. A round-shaped grave with small stone cover having no stone in the middle. It is observed that the cover stone was touched. Size 2.0 meter.

1-10. Low mountains to the west from the center of Bayandalai soum. There is a pebble ground in the middle of these mountains. A grave with round-shaped cover having no stone in the middle is located at the western slope of the low mountain in the east of the pebble ground. Some pieces of the stone cover was taken and collapsed consequently. Size 3 meter.

1-11. A round-shaped grave with cover made of many big stones is located at 2.5 km far from the previous monument. It have might be robbed because its cover stones was replaced. Size 6.3 meter.

1-12. It is located at 0.9 km far from the previous monument. A round-shaped enclosure was made of big stones and smaller stones were piled up. Size 3.0 meter.

1-13. Square fence was made of oval-shaped stones and smaller stones were piled up the inside. Size 4.0x3.0 meter.
1-14. A square-shaped grave with square enclosure by installing big flat stones in series and covered by smaller stones is located at 4 meter far from the previous monument. Front and right side part of its enclosure was disappeared. Size 2.0 x 1.3 meter.

1-15. A square-shaped grave with enclosure made of oval stones and covered by smaller stones inside. Back side of its enclosure was disappeared and a big stone was installed at the middle of the left enclosure. Size 4.3 x 3.8 meter.

1-16. A round-shaped grave is located at 1.8 meter far from the previous monument. Some of its cover stones were replaced to the back side and its center was hollow. Size 2.2 meter.

1-17. An oval-shaped grave with big stone covers is located at 4 km far from the previous monument. Size 1.5 x 0.9 meter.

1-18. A grave with round-shaped cover is located to the west near the previous monument. Size 1.1 meter.

1-19. A round-shaped grave with big stone cover at the south-western part of a small hill which is located to the east margin of pebble ground among the low mountains of Noyon soum. Size 2.1 meter.

1-20. A big grave with round cover having no stone in the middle is located in the north-western part of the high square mountain named as Khalbas to the south of Soum’s center. There is a gateway with size of 1.5 meter in front of this property. Size 10.5 meter.

**Predictive model based on GIS**

- Possible sites to be found property
1-21. A square-shaped grave with square enclosure by installing large flat stones in series and piled up smaller stones is located at the small hill to the south from Takhilga mountain. Right and front part of its enclosure was disappeared and outside cover stones was spread out a lot. Size 4.3 x 2.8 meter.

1-22. A egg-shaped grave with large flat cover is located to the south of the previous monument. Size 1.4 x 0.8 meter.

1-23. Rock art. There found some petroglyphs from a mountain topped by brown smooth rocks to the south of Takhilga mountain.

1-24. A square-shaped grave with square enclosure by installing large flat stones in series and covered by long oval stones inside is located at the southern slope of the mountain with petroglyphs. Center of this monument was hollow. Size 2.9 x 2.6 meter.

1-25. Square-shaped grave with square enclosure by installing large flat stones in series and covered by small stones inside is located to the east of the previous monument. Enclosures of its four sides was fallen down. Size 3.3 x 3.2 meter.

1-26. A square-shaped grave, located to the north-east of the previous monument was hugely damaged and its front enclosure has almost broken.

1-27. A square-shaped grave at 2 km to the south of the electric pole to the south-west of Noyon soum. Its enclosure and cover stones was replaced to the front and it might have caused by the electric pole installation.

1-28. A round-shaped grave covered by large flat stones is located near the previous monument and to the south-east of the electric line. Size 2.1 meter.

1-29. A round-shaped grave covered by large stones of which center was hollow a bit is located at a small hill near the previous monument. Inside cover stones were thrown to outside. Size 1.7 meter.

1-30. At the edge of the dry pebble ground, there are 16 balbal stones. Intervals between these balbal stones are unequal and total length is about 60 meter.

1-31. A grave with round-shaped cover having no stone in the middle is located at the small hill to the west of the previous monument. Size 1.7 meter.

1-32. A grave with round-shaped cover having no stone in the middle is located tot the west of the previous monument. Some of its cover stones were taken. Size 1.6 meter.
1-33. A egg-shaped grave having no stone in the middle is located to the west of the previous monument. Size 2.1 x 1.6 meter.

1-34. Smaller grave with big stone cover. Size 0.9 meter.

1-35. Oval-shaped small grave with large stone cover. Size 1.2 x 0.9 meter.

1-36. An egg-shaped grave with large cover is near to the east of the previous monument. Size 1.2 x 0.9 meter.

1-37. A monument which looks like gurvaljin because some of its cover stones disappeared is located at 3 m far from the previous monument.

1-38. A grave with round-shaped cover having no stone in the middle is located at 8 m far from the south-western of the previous monument. Size 5.8 meter.

1-39. There are gathered several monuments. Those were numbered starting from the left side. A) A grave with round-shaped cover having no stone inside. Some of its cover stones were piled up to the left side of the monument. Size 3.6 meter. B) A grave with round-shaped cover having no stone inside is attached the west side of the previous monument. Size 2.4 meter. C) A grave with round-shaped cover having no stone inside is attached the west side of the previous monument. Size 1.5 meter. I) A grave with round-shaped cover having no stone inside is attached the west side of the previous monument. Size 4.0 meter.
1-40. Petroglyphs

1-41. Egg-shaped grave with large stone cover is located to the south-east of the mountain with petroglyphs. Size 1.3 x 1.0 meter.

1-42. A grave with round cover and having big stones at the back and front sides. Size 2.9 meter.

1-43. A grave with round-shaped cover having no stone inside is located at 3 m far from the west of the previous monument. Size 2.0 meter.

1-44. A grave with round-shaped cover and having one bigger stone than others at its north-east part. Size 3.0 meter.

1-45. A grave with large stone cover having no stone inside is near to the west of the previous monument. Its shape has lost because some of its cover stones were taken outside.

1-46. A grave with square enclosure by installing large flat stones in series and filled small stones inside. All parts of its enclosure, except the backside were disappeared and 2 ibex, dear followed by hind and unclear figure were engraved in the flattened area. Size 4.8 x 3.2 meter.

1-47. Square grave to the north of the previous monument. It is robbed by digging inside with area of 1.8 x 0.8 meter and in depth of 90 cm.

1-48. Square grave located to the east of the previous monument. Its enclosed stones were taken and it became impossible to measure.

1-49. Rock art.

1-50. Round-shaped grave with large stone covers. Some of its covers were thrown to its south-west side. Size 1.6 meter.

1-51. A round-shaped grave with large stone covers is near to the south-west of the previous monument. It looks like oval due to thrown some of its cover stones. Size 3.2 x 2.4 meter.

1-52. A grave with square-shaped cover and having large stones each four sides and center is located to the backside of Mountain with ovoo to the north-west along the way to Gurvantes soum from Noyon soum.

2-1. Round-shaped grave is located at the south slope of the Takhilt mountain to the south from Tsogt-Ovoo soum. Diameter 450 cm.
2-2. Square-shaped grave is located at the south slope of Takhilt hill of Tsogt-Ovoo soum. Size 550 x 300 cm.

2-3. Two graves to the south-west of Takhilt hill of Tsogt-Ovoo soum. Cover size of the first grave is 300 x 200 cm, while second one - 600 cm.

2-4. A round-shaped grave is located at the rocky mountain slope to the south of Takhilt hill of Tsogt-Ovoo soum.

2-5. There are three small hills located in series to the west side of the mountain with smooth large top named as Khan Uul to the north-east of the Dalanzadgad soum. Local people called these hills as shovgor. The mountain is surrounded by many kinds of stone structures and some petroglyphs were also drawn on the top of the mountain.

2-6. A grave located in the edge of the canyon to the south-west of Khan mountain.

2-7. A grave located at the slope of the Mountain at the north-west end of Gurvansaikhan mountain range in the south-west from Dalanzadgad city.

2-9. Another grave near the previous monument.

2-10. Square-shaped stone structure at the north edge of the dry pebble ground.

2-11. Four small stone structures with big stone covers are located in the northern slope of Gurvansaikahn mountain range. The size of the first structure is 400 cm, second 250 x 400 cm, third 350 cm and fourth 650 cm.

2-12. A khirgisuur, enclosed with square border measuring 18 x 20 m and round cover with diameter of 12 m, is located in the north-eastern slope of Gurvansaikhan mountain range. 6 big structures are attached to its northern part and 7 small structures to the west.

2-13. There are a lot of structures having stone covers at the left side of the narrow mouth in the western slope where the khirgisuur was placed.

2-14. Two round graves also located there. The size of the first grave is 800 x 400 cm, while the diameter of the second grave was 350 cm.

2-15. A khirgisuur near the previous monument. It was enclosed with round border which is pushed by the river dam. Diameter of its border is 12 cm and river dam 9.5 meter.

2-16. A grave with diameter of 500 cm and enclosed by round border.

2-17. A grave with round border and having no stone inside. Its diameter 200 cm.
2-18. A stone structure with diameter of 180 cm at the southern slope of the mountain.

2-19. Ruins of the temple at the southern slope of Gürvansaikhan mountain range at 14 km far from the Khurmen soum. This temple was built by the yellow airbricks.

2-20. Zel stone located along the latitude between two low mountains. Length of this zel stone is 120 cm. It enclosed with round stone structure in front and other square structure at left side.

2-21. A grave measuring 200 x 300 cm on way to Mandal-Ovoo soum from south.

2-22. There are a lot of ancient graves at the southern slope of Khurmen dulaan mountain at 50 km far from Bulgan soum. It includes round bordered khirgisuur, rock art, grave with circle stone cover and having no stone inside, stone structure etc.

2-23. A grave with round border at the southern part of Khongor sand at the slope of Zuulun range at the east part of Sevrei soum.

2-24. A grave located at the southern slope of Takhilgat mountain to the west of Sevrei soum.

2-25. An oval-shaped grave in front of the low hill to the south of Takhilgat mountain.

2-26. A square-shaped grave near the previous grave.

2-27. A grave with round border and having no stone inside at the slope of low hill to the south of Takhilgat mountain. Diameter of the grave is 200 cm.

2-28. A grave with big stone border and having no stone inside at the south slope of the low hill.

2-29. There are found a lot of rock arts at the small rocky hill named as Uizen.

2-30. A petroglyph with figure of many people on horses at the small rock of Takhilgat mountain. Local people call it as “Image of three heros”.

2-31. Square-shaped grave with enclosure of big traps at the right side of the road to Noyon soum from Sevrei soum.

2-32. Zel chuluu with length 350 m to the south-west of the previous monument. Zel stone is made of traps.

2-33. Square-shaped grave at the slope of the mountain to the east of Gürvantes soum.

2-34. A grave at the slope to the south-east of Takhilt mountain from Gürvantes soum.
2-35. Two large graves with round border at the northern bank of the canyon to the north of Gurvantes soum. This grave has no stone inside, but hollow.

2-36. Neolith stone age settlement of Bayanzag in Bulgan soum.

2-37. Neolith stone age settlement named as Tsahiurt valley in Bulgan soum.

2-38. Neolith stone age settlement named as Eregiin hooloi in Bulgan soum.

2-39. Three stone structures are located in series along the latitude at the southern slope of the low hills at over 20 m from the previous monument. Total length of the stone structures 700 cm and width 350 cm. Another stone structure is also located near the previous monument. It has round cover and have few stones inside. Its size is 250 x 200 cm. Enclosure made of bright smooth rock taken from the nearest mountain. At 20 km from the previous monument, a round stone structure with stone cover is located. Its size is 260 x 350 c. A grave with square enclosure is also at the mountain slope. Although its cover stone has broken, it’s shape is clear found. Size 270 x 250 cm.

Annex 2: Brief on the Monuments Discovered by the First Group

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<th>Numer</th>
<th>Coordinates</th>
<th>Shape</th>
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Annex 3: Brief on Monuments Discovered by the Second Group

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</table>

**Conclusion**

During this field survey, 146 monuments were newly discovered from the territory of 9 soums, including Tsogt-Ovoo, Dalanzadgad, Khankhongor, Khurmen, Bayandalai, Bulgan, Sevrei, Noyon and Gurvantes. These monuments are located at the east ending part of Gobi Altai mountain range, includes Gurvansaikhan mountain range which covered the area of Bulgan, Bayandalai, Dalanzadgad and Khurmen soums, Zuulun mountain range located in Sevrei and Bayandalai soum, Toson bumba range and Erdene range located in Noyon and Gurvantes soum and Nemelt mountain range in Gurantes soum. It fits in some ways with our predictive model. We observed that mountains named Takhilgat and Takhilga are found at 5 soums of above 9 soums and of which 4 has many archaeological monuments. Due to weather situation, we couldn’t examine Takhilga mountain in Khankhongor soum.
Our exploration work was late a bit in terms of duration and there were heavy snow in mountainous areas. Thus, it was impossible to examine in detail. In addition, duration of the field survey was very tight. So, we have conducted the exploration by very simple methodology, car investigation. However, the result of the survey was satisfied.

Based on our predictive model and field survey, we have found that archaeological monuments are sparsely distributed in the Gobi region because of its geographical condition and most of the monuments were located near the high mountains, hill, active and extinct rivers, lakes and water. There are several monuments to be taken under the soum and province’s protection. It includes the monuments dated back to the Bronze age near Khan mountain in Dalanzadgad soum, the memorial complexes of khirgisuur dated back to the Bronze age at the south-east of Gurvansaikhan mountain range, the rock arts of Uizen or Takhilt of Sevrei soum and the rock arts near Takhilt of Noyon soum. [Figure 1-23, 1-40, 1-49, 2-29, 2-30-1, 2-30-2]. Although petroglyphs were spread out a lot in Gobi region, the petroglyphs, revealed during the field survey are very similar with the petroglyphs at Western Altai region.

The most attractive one of the monuments, we have registered is the memorial complex of khirgisuur in Gurvansaikhan mountain range. [Figure 2-15]. This monument dates back to I AD from the mid of II AD and spread throughout the south Siberia, Altai mountain and central territory of Mongolia.

Researchers consider that the residents of Gobi region don’t experience as khirgisuur, thus it might be occupied by another tribes at that time. Having similar monument with khirgisuur which is commonly found in other regions in terms of its appearance in Gurvansaikhan mountain range, it extended the distribution of this monument to the south.
Annex 4: Photos of the monuments discovered by the first group
Annex 5: Photos of the monuments discovered by the second group
Stone age settlement of Bayanzag

Stone age settlement of Eregiin Khoorloi
[No text content available in the image provided]
14. APPENDIX 5: CULTURAL HERITAGE CHANCE FINDS PROCEDURE

Oyu Tolgoi LLC recognizes and respects the significance of cultural heritage, in particular the cultural heritage of local communities that have traditional ownership of, historical connections to, and cultural traditions associated with the land on which the Oyu Tolgoi project will be developed.

Oyu Tolgoi LLC is committed to the maintenance and conservation of cultural heritage sites and values during all phases of the mine construction and operation processes in order to continue to foster enduring relationships with local communities and other stakeholders, and to comply with all applicable laws and regulations.

Therefore, the company is developing and implementing a comprehensive Cultural Heritage Management System (CHMS) that includes an internal management structure as well as community programs for assessing and protecting cultural heritage. This Chance Finds procedure is a component of the Oyu Tolgoi LLC CHMS.

1. Purpose

To ensure any previously unrecorded significant cultural heritage objects, especially archaeological and paleontological resources, encountered during Oyu Tolgoi project construction and operation activities are not damaged and are properly managed, including complying with all legal requirements.

2. Scope

This procedure applies to all Oyu Tolgoi projects involving ground disturbing activities. This includes, the mining site ("within the fence") and all other off site infrastructure facilities, including but not limited to:

- Water pipeline and supporting facilities
- Roads
- Power transmission line
- Airport
- Exploration

This procedure is to be adhered to by all employees and contractors.
3. Cultural heritage (CH) types likely to be present, and where likely to be found

More than 100 archaeological sites have been found in the OT project area. These sites can be classified into 7 site types, as follows:

1. Stone age artifacts
2. Stone sculptures
3. Rock alignments and enclosures (square, rectangular, round, etc.)
4. Scatters of broken pottery
5. Unusual concentrations of broken stones, especially smooth, shiny rock-types like jasper and agate that are broken in concentrated areas
6. Rock cairns (obo)
7. Upright slabs of stone, inscribed or uninscribed

Archaeological sites are often found in areas with access to water, including river channels, stream confluences, and springs. Sites also are found along the margins of small lakes (Nuur or Hyyp), which are often seasonal and ephemeral. Areas of high quality cryptocrystalline rock (such as agate, flint, or jasper) were often used as quarries or resource procurement areas by prehistoric people. Finally, isolated or unusual topographic features (inselbergs, peculiarly-colored rock outcrops, caves and rockshelters, etc.) are often important to Mongolians. Rock cairns, called ovoo or obo, are commonly constructed to mark such locations and are held as important places of power by Buddhists and those practicing shamanism.

Paleontological remains are commonly found in the OT project area. The fossil bearing beds in this area are bluish white to yellowish brown sandstone and gray mudstone layers that form small hills and low cliffs. The total thickness of the section in the area is about 20-50 m. The fossil bearing beds are interbedded with other geologic units, characteristic of point bar deposits that are fluvial, or riverine, in origin. Articulated and isolated bones of dinosaur and other vertebrates are buried in these geologic units. Some sandstone layers include aggregation of isolated bones of variable vertebrate taxa such as dinosaurs and turtles as bone beds.

The vertebrate fauna from this area is characterized by existence of peculiar dinosaur taxa (e.g., Segnosauria, Hadrosauroid, Ankylosaur, and an Ornithomimid). Fragments of dinosaur eggshells, crocodile scutes, and turtle shells were also found from this region. The vertebrate
and invertebrate fauna from these localities are characterized by their primitiveness, especially invertebrate ones.

Faunal assemblages of vertebrates that are expected in the OT project area include:

- **Ornithopoda** - A derived hadrosauroid
  - Segnosauria (*Enigmosaurus mongoliensis*, *Erlikosaurus andrewsi*, *Segnosaurus galbinensis*)
- **Dromaeosaurid** (*Achillobator giganticus*)
- **Ornithomimid** (*Garudimimus brevipes*)
- **Sauropoda** - fam.gen.et sp. Indet and *Quaesitosaurus orientalis*
- **Ankylosauria** (*Talarurus plicatospineus*)
- Dinosaur eggs and nests (*Elongatoolithid oomorph*, *Dictyoolithid oomorph*)

The lower Cretaceous site yielding rich vertebrate, invertebrate, and plant fossils is situated about 6 km NE of Manlai soum. There are abundant fossil specimens of bird feathers, insects, phyllopods, fish, and plants. Fish fossils were well preserved, and the outline of the soft-part of their bodies is also well presented on the shale bedding plane. Dinosaur footprints are abundant and variable size and shape with a wide range of preserving condition in the area.

### 4. Potential sources of impacts

Potential impacts to archaeological sites and paleontological remains include all ground disturbing activities. Such activities include, but are not limited to, surface grading/dozing/excavation for the mine and any infrastructure built to support the mine (e.g., office or living quarters, roads, railroads, waterlines, sewage treatment plants and sewer lines and transmission lines); maintenance of infrastructure; excavation of borrow pits, geological drilling, groundwater drilling, shaft sinking, water bore sinking, open pit waste removal and storage (e.g., rock piles or tailings areas); exploration activities including drilling, trenching, and excavation; and incidental activities such as surface driving or parking.

### 5. Relevant legislation, regulations and other requirements

This procedure is the part of the Oyu Tolgoi CHMS and is set in compliance of the following national and international legal requirements.
6. Accountabilities

This procedure is developed and implemented as part of the CHMS by the Community Relations and Sustainable Development (CRSD) department and recognized as a standard practice for the management of unrecorded cultural heritage items within the confines of the Oyu Tolgoi Project.

The Senior Manager of the CRSD department is responsible for the implementation of CHMS that includes this procedure.

The Chief Executive Officer of OT LLC is responsible for approving this procedure and ensuring that all employees and contractors working on the Oyu Tolgoi project understand their obligations under this procedure.

The Project Management Team (PMT) is responsible for ensuring that all the employees and contractors working on site at Oyu Tolgoi understand their obligations under this procedure, and for charging the CRSD with its administration and enforcement.

The on-ground implementation of actions outlined in this procedure will be managed and completed by the Cultural Heritage Program Coordinator of the CRSD department.

7. Training for staff and contractors

All personnel should receive basic training in the laws protecting cultural heritage and possible penalties for violating the Chance Finds procedure. Specific training on cultural heritage item identification and usage of this procedure should be given to the following project staff and contractors in addition to the CR induction:
1. All personnel and supervisors involved in or overseeing earth moving or land disturbing activities.

2. CRSD and Environmental officers

This training will include:

- Recognition of CH items and places
- Use of Chance Finds procedure
- Explanation of laws covering CH and penalties associated with their removal.

8. **If a Chance Find is made:**

- Earth moving personnel should cease the work and report to their direct supervisor in the vicinity of the Chance Find immediately

- The supervisor notifies the Oyu Tolgoi Environmental supervisor (S. Dorjderem) and CHP coordinator (O. Tserennadmid) from the CRSD department within 24 hours. Information to be provided includes:
  - CH site type (description and photograph(s))
  - Location (description and GPS coordinates)
  - Date, time and details of person reporting find
  - Nature of works that led to exposure/locating of the find

- Delegated Environmental officer and CHP coordinator delineate a ‘no-go’ area of 30 metres around the Chance Find.

- No machinery to enter the area. Personnel are only to enter the area for the purposes of implementing this procedure.

- Leave ‘no-go’ area undisturbed until competent CH Specialist assesses the site.

- CHP coordinator to notify CRSD Senior Manager and Project Management Team by email after the site visit. Also notify Local Administration, Police Unit and call Specialist from the Professional institute within a day by telephone and by official notification letter within 1-2 work days.
9. Areas of High cultural heritage sensitivity

For project areas identified as having a high or medium potential for sub-surface significant cultural heritage, Oyu Tolgoi LLC will ensure that a qualified archaeologist and/or palaeontologist will monitor ground disturbing activities. The monitor will be authorised to initiate the Chance Finds procedure, including the cessation of ground disturbing activities in areas that contain cultural resources or are suspected to contain cultural resources.

10. Burials, Human Remains, and Funerary Items

Human remains will be treated with the utmost respect. Every attempt will be made to identify affiliated living descendants. If such are found, they will be provided the opportunity to view the remains prior to removal, if possible. Descendants will be consulted regarding the final disposition of the remains and associated funerary items. If no descendants are found with 5 days, the remains will be excavated and stored in a secure location at OT. If no descendants are found within 30 days or it is determined that the remains can be securely dated to a prehistoric period (i.e., bronze age), the remains and associated funerary items will be treated in accordance to standard set by the Mongolian Academy of Sciences, Institute of Archaeology (MASIA).

11. Penalties

The penalties for non-compliance with this Chance Finds Procedure are:

Individuals:

First offence – official warning

Second offence – Removal from the work force for one week

Third offence – Dismissal

If at any time, an individual is caught trafficking in antiquities (archaeological or paleontological), they will be dismissed immediately and turned over to the proper authorities for possible criminal and civil legal action.

Contractors:

First offence – official warning

Second offence – $5,000 USD penalty

Third offence – Termination of contract with cause
15. APPENDIX 6: REPORT OF THE PALEONTOLOGICAL FIELD TRIP

By the scope of the project of Oyu Tolgoi Cultural Heritage Program designation, we organized the paleontological fieldwork of the tangible heritage research. Members of the research team is as follows: Dr. Tsogtbaatar, Kh. (Head of laboratory, Paleontological Center, Mongolian Academy of Sciences), MS. Chinzorig, Ts. (researcher), Mainbayar, B. (driver), and Bayardorj (driver). The paleontological survey was conducted for two weeks from April 22, 2011 until May 05, 2011 in the territory of Khanbogd, Bayan Ovoo, Manlai and Bulgan soums of Omnogovi aimag as the direct and indirect impact zones of the Oyu Tolgoi Project.

Survey of Khanbogd region:

The fossil locality of Paleontology is included into the areas of special protection of historical and cultural immovable heritages of Mongolia. Baishin Tsav, Khuurai Tsav, Urlibe, Amtgai, and Shar Tsav have been registered into State, Aimak (provincial), and Capital City level Special Protection Areas of Historical and Cultural Immovable Heritages in accordance with Governmental Resolution No.175 in 2008 (Figure 6.1).

The Paleontological localities have several peculiarities. The localities are mostly spread out wide-range areas to compare with archaeological sites, it has more probability to find specimens year by years, if the specimen wouldn’t find this time, it can be taken out next time by the exposure of natural erosion of the fossiliferous beds. Due to dip and strike of beds, fossil bearing layers are close or deeper in the land surface. Such features demand more time for paleontological repeat prospecting and investigation in the same areas.
A – Urlibe; B – Bayshin Tsav & Khuurai Tsav; C – Shar Tsav; D – Amtgai; E – paleocurrent direction; open circles with number are GPS waypoints of the fragments of bone; black bone shaped marks shows the well-preserved specimen point,

The Urulbe locality and surrounding outcrops were investigated at this time. This is one of the nearest localities of the Oyu Tolgoi Project site. During the prospecting in all outcrops of the sedimentary rocks at this region we found some fossilized specimens (Figures 6.2 and 6.3).
Figure 6.2: Partial skeleton of small carnivorous dinosaur found in Urulbe locality.

Figure 6.3: Isolated bones of the herbivorous dinosaur found from new outcrop of nearby Urlibe Khudak locality
During the short-term surface investigation some specimens of basal hadrosaurid (hadrosauroid), flesh eating dinosaur-Alectrosaur, also partial skull of the ancient crocodile were found, it suggested a high possibilities of the revealing more specimens in the future. Moreover, number of exposed specimens are increased as compared to previous years.

According to the map of the water supply pipe-line of the infrastructure of OT obtained from Cultural heritage staffs, this locality is involved into the area of planning to construct pump station and easternmost borehole of underground water supply line. This affected locality is involved into area of paleontological immovable monuments as registered into state special protection areas.

The boundary coordinate points of the protection zone for Urlibe and nearby outcrops were determined as follows:

- NE point: N 43° 30' 39.82" E 107° 22' 42.70"
- N point: N 43° 30' 49.99" E 107° 24' 29.28"
- E point: N 43° 30' 6.75" E 107° 26' 51.82"
- SE point: N 43° 27' 28.82" E 107° 29' 12.51"
- S point: N 43° 25' 59.98" E 107° 24' 49.50"
- SW point: N 43° 26' 35.87" E 107° 22' 40.57"
- W point: N 43° 28' 5.18" E 107° 20' 12.91"
Baishin Tsav

In this locality, we prospected repeatedly and examined in newly revealed specimens and established the boundary points of the protection zone (Figure 6.5). Ornithomimosaurs and Hadrosauroid specimens were found from there. And, we buried them back, after put a hardener several time.

Figure 6.4: The protection zone for Urlibe dinosaur fossil locality.
The boundary points of the protection zone for Baishin Tsav locality were established as follows:

**Baishin Tsav**

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**Figure 6.5: Geography and paleocurrent direction on Upper Cretaceous beds in Baishin Tsav with sub localities BTs-I, BTs-II, BTs-III, BTs-IV and BTs-V**

The boundary points of the protection zone for Baishin Tsav locality were established as follows:

**Baishin Tsav**
Khuurai Tsav

This locality is situated not far from the above mentioned locality – Bayshin Tsav. By prospecting on this locality, we analyzed recent situations of the Khuurai Tsav and its surrounding areas. Although several specimens of the main representatives of the dinosaur were found from here, we put a hardener and buried them back (Figure 6.7).

The boundary points of the protection zone for Khuurai Tsav locality were established as follows:
Shar Tsav
This site is boasted with main footprint area of dinosaurs. Since its first discovery in 1995, it has been destroyed and depreciated a lot by human and natural factors due to failure of in situ protection. For some time, residents of neighboring settlement areas used to visit a lot. The local administration made a resolution to prevent from various visits, but the area is still a place of permanent visit of various guests.

Figure 6.7: The protection borderline of Khuurai Tsav locality

Figure 6.8: Geography of Shar Tsav locality. 1- Main footprint area. 2- Area of Avimimus dinosaur
The boundary points of the protection zone for Shar Tsav locality were established as follows:

- **N point:** N 43° 34' 41,43" E 107° 46 '53,10"
- **E point:** N 43° 34' 16,72" E 107° 47' 44,81"
- **SE point:** N 43° 33' 56,21" E 107° 47' 21,63"
- **S point:** N 43° 33' 44.55 " E 107° 46' 48.58"
- **SW point:** N 43° 33' 47.83" E 107° 45' 32.46"
- **W point:** N 43° 34' 11.63" E 107° 44' 54.26"

**Figure 6.9: Figure on protection borderline of Shar Tsav site**
Amtgai

The boundary points of the protection zone for Amtgai locality were established as follows:

- N point: N 43° 39’ 3.87” E 107° 50’ 3.92”
- NE point: N 43° 37’ 9.75” E 107° 54’ 34.18”
- E point: N 43° 34’ 53.51” E 107° 55’ 24.38”
- SE point: N 43° 32’ 29.05” E 107° 57’ 0.88”
- S point: N 43° 32’ 16.05” E 107° 55’ 0.84”
- W point: N 43° 34’ 43.05” E 107° 51’ 30.02”
- NW point: N 43° 36’ 58.10” E 107° 50’ 9.39”

Figure 6.10: Geography of Amtgai locality
Figure 6.11: Image of Protection Area of Amtgai locality

**Ikh Shunkhat**

This locality is younger than other adjacent locality in this region. Comparing to other localities, fossil findings of the locality is very poor, but previous findings were very important and interesting taxonomically. The similar dinosaur taxa from the Western Gobi Desert have been found from this locality.
Protection borderlines of this locality could be set as follows in accordance with our survey:

Figure 6.12: Geography of Ikh Shunkht locality. Open circle with number is GPS waypoint.
Research and exploration activities at Oyu Tolgoi neighborhood

Paleontological exploration and research activities have been conducted around present fence of Oyu Tolgoi site. We have accidentally revealed fossils of ancient animals from red and reddish brown sediments for dam of waste process area. While turning around the dam, we stopped on an accidental point to make exploration activities. As a result, we have revealed two fossil remains of ancient animals from the dam soil cracks transported from the OT site by heavy machinery operations.
Figure 6.14: View of dam terrace with dinosaur fossil bones

Figure 6.15: Found fragments of fossilized bones
The fossil finding was collected by making plaster jacket using Gyptape. Showing the process of the making a Plaster jacket below (Figure 6.17).

The preparation work of this specimen that to be removed the original sediments was held by Paleontological laboratory of Mongolian Academy of Sciences during 5 days (Figure 6.18).

This finding is determined as the distal end of the metatarsals, digits and unguals of the small carnivorous dinosaur by pre-examination after the preparation work was done. It is necessary to examine a comparative study accurately in the future. The occurrences of dinosaur fossils are highly possibilities to be found from the red and red, brownish colored sediments under 1–19 meters of the Ouy Tolgoi site.

Figure 6.16: Piece of sediments with articulated pes of small dinosaur

The fossil finding was collected by making plaster jacket using Gyptape. Showing the process of the making a Plaster jacket below (Figure 6.17).

The preparation work of this specimen that to be removed the original sediments was held by Paleontological laboratory of Mongolian Academy of Sciences during 5 days (Figure 6.18).

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Figure 6.17: A process of plaster jacket on the specimen.
Figure 6.18: The fossilized specimen after the preparation work done in laboratory. A-ventral view; B-lateral view; and C-dorsal view.
Petrified wood locality at Nalikh of Bayan-Obo soum

During the prospecting a petrified wood locality near Nalikh, the party determinate large-sized petrified woods preserved in several places. This interesting locality seems to fully potential to searching petrified forest and subject to detailed exploration (Figure 6.19).

Nalikh

This is a coordinate of exhibited giant petrified wood at the center of Bayan-Ovoo:

Original geographical location of huge petrified wood displayed front of Local Government Office at Bayan-Obo soum:

The boundary points of the protection zone of petrified wood locality were established as follows:
Prospecting in Bayn Dzak and Tugrikin Shire

According to survey on these localities repeatedly, the party determined boundary points of main and surrounding outcrops. During this work we have discovered several dinosaur fossils and some of them were excavated in order to protect from illegal diggers. The results of prospecting at Bayn Dzak locality, we found the skull and postcranial skeleton of Protoceratops (primitive horned dinosaur) in Khuren Tsav sub-locality. The skull of adult Protoceratops (Figure 6.20) and associated skeleton of juvenile Protoceratops (Figure 6.21) were collected by Plaster jacket.

We met an administrative people of Bulgan and some tour company’s people that are organized camp activities in Bayn Dzak. The purpose of the meeting was to get information and their desire for developing a scientific tour of paleontology based on the Bayn Dzak locality (Figure 6.22).
Figure 6.20: Skull and pelvis of protoceratops.

Figure 6.21: Skeleton of infant protoceratops.
The boundary points of the protection zone of the Late Cretaceous Djadokhtian age locality – Bayn Dzak were determined as follows:

**Bayanzag**

![Figure 6.22: Protection area of Bayanzag site](image)

The boundary points of the protection zone of the Late Cretaceous Djadokhtian age locality – Bayn Dzak were determined as follows:

**Bayanzag**

![Figure 6.22: Protection area of Bayanzag site](image)
Tugrikin Shire and Alag Teg localities

Tugrikin Shire and Alag Teg are situated in the NW of Bayn Dzak about 30 kilometers and related to Bayn Dzak by their sediments, paleo-environments, and assemblage of fossil findings (Figure 6.23).

Through short term exploration at Tugrikin Shiree locality, we have discovered dinosaur fossil bones from two points, one of which might contain complete skeleton of the dinosaur. (Figure 6.24). Top of protoceratops’ skull was erected and according to the further exploration, the whole skeleton might be reserved; therefore, we have buried back upon fixation of the specimen.

Figure 6.23: Map of Tugikin Shire and Alag Teg
There is another locality named Alag Teeg at 3-4km on the north from Tugrikin Shire locality. The locality is dated back to same time, but their paleoenvironment and assemblage of fauna are different and both localities close to each others; therefore, we have set protection zone limits to these two localities together.

Protection border points of Tugrikin Shire and Alag Teeg localities are as follows:

North point:  N 44° 16' 33.36” E 103° 17' 30.60”
NE point:  N 44° 16' 9.64” E 103° 19' 16.93”
SE point:  N 44° 13' 59.70” E 103° 19' 38.33”
S point:  N 44° 13' 23.24” E 103° 17' 35.79”
SW point:  N 44° 13' 42.72” E 103° 15' 38.72”
W point:  N 44° 15' 19.01” E 103° 14' 58.54”

Figure 6.24: The beak part of the Protoceratops skull found in Tugrikin Shire
Summary

According to the results of the field research work it is obviously necessary to protect the locality of paleontology, especially dinosaur locality at direct and indirect impact zone of Oyu Tolgoi from the public interference, save to use some of the immovable heritage of paleontology as like dinosaur footprint site and petrified wood locality for tourism purposes under special policy, and to grant these sites for official protection responsibility of someone.

Within the framework of the Cultural Heritage Protection program of Oyu Tolgoi project, the following long-term paleontological activities should be done:

1. The fossiliferous beds of the Upper Cretaceous localities and outcrops in Khanbogd region that were affected in direct impact zone have been yielded the most base of the fossil findings of the Baynshirenian age (Pre-Campanian, probably Cenomanian) of the early Late Cretaceous of the Mongolia. This period occupies an important place in ancient ecosystem research of Central Asia; therefore, it is necessary to
create classic system of protection for these localities as paleontological immovable monument in Mongolia.

2. To establish Geo park with restoration of ancient natural and ecosystem of Pre-Campanian age of Later Cretaceous period of Mongolia

3. By the organizing exploration, research, and survey works of professional organizations on petrified wood reservation at Nalikh in the territory of Bayan-Obo soum, to create natural exhibition of petrified wood at site in order to make tourist attraction camp.

4. To create a on-site museum on basis of footprints and track ways of dinosaur in the border of Manlai and Khanbogd soums for promotion of tourism

Report is made by: Dr. Tsogtbaatar Kh., a senior research worker at Paleontological Center, MAS
16. **APPENDIX 7: DOCUMENTATION FOR THE INTANGIBLE HERITAGE TEAM**

**STORIES, LEGENDS & ORAL HISTORY**

(All stories and legends are recorded and transcribed; some of them in Mongolian)

- Story of Geser Gelen and three *urtyn duu* ballads of Gobi-Shankh
- Stories about Suntag the metalsmith
- Stories about Undur Luvsan the metalsmith
- Stories about Ganjirvaa incarnation
- Story of Khachig Mountain
- Stories of Nalikh and Togoo Khairkhan
- Story of Uneged Khairkhan
- Story of Zovkhi Baldandorj
- Story about Dorj the metalsmith
- Story of Bukh Khairkhan

**RECORDED URTYN DUU “LONG SONG” BALLADS**

1. *Urtyn duu* sung by Aviraa, Khanbogd soum
   a. “Ereglengiin Deeguur”
   b. “Guidel Sait Ureen Zeerd”
   c. “Shar Talyin Tsetseg”
   d. “Jambal Guai”
2. *Urtyn duu* sung by L. Bataa, Bayan-Ovoo soum

   a. “Ar Huvch”
   
   b. “Turiin Tovchoo”
   
   c. “Goviin Undur”
   
   d. “Shavi Khurliin Magnai”
   
   e. “Undriin Uvs”

3. Blessing Poem by Batsukh Saikhan-Gombo about the people of Khanbogd soum

### Intangible Heritage Project Participants

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<th>Profession and affiliation</th>
<th>Location</th>
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<th>Source of Intangible Heritage</th>
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<td>Manlai soum center</td>
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<td>Herder</td>
<td>Uguumur <strong>bag</strong>, Manlai soum</td>
<td>Grandson of last Chinggisid noble in this banner. Inherited his grandfather’s snuff bottle.</td>
<td>Mother and uncles told him stories and he read historical books</td>
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<tr>
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<td>Herder</td>
<td>Uguumur, Manlai soum</td>
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<td>Tax official, Manlai soum</td>
<td>Khar Zag <strong>bag</strong>, Bayan-Ovoo soum center</td>
<td>Knows stories, history and lineages of Manlai people and curates old manuscript on <em>urtyn duu</em> ballads and history</td>
<td>He has noble roots and learned from elders. Autodidact.</td>
</tr>
<tr>
<td>Name</td>
<td>Age</td>
<td>Profession and affiliation</td>
<td>Location</td>
<td>Contributed Intangible Heritage</td>
<td>Source of Intangible Heritage</td>
</tr>
<tr>
<td>----------------</td>
<td>-----</td>
<td>----------------------------</td>
<td>----------------------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Bunten</td>
<td>65</td>
<td>Herder</td>
<td>Javkhlant bag, Khanbogd</td>
<td>Knows history and stories of the Undain Uus area and Khanbogd soum and people</td>
<td>He was bag darga (brigade governor) for more than 20 years</td>
</tr>
<tr>
<td>Bandia</td>
<td>70</td>
<td>Herder</td>
<td>Javkhlant bag, Khanbogd</td>
<td>Shargai player and has extensive knowledge of Khanbogd area and environment</td>
<td>He was environment officer of Khanbogd soum</td>
</tr>
<tr>
<td>S. Batsukh</td>
<td>72</td>
<td>Herder</td>
<td>Javkhlant bag, Khanbogd</td>
<td>Composed a Blessing Poem dedicated to Khanbogd people and curates silver bowl made by Uran Bazar and lock made by Suntag</td>
<td></td>
</tr>
<tr>
<td>Ts. Altangerel</td>
<td>31</td>
<td>Herder</td>
<td>Javkhlant bag, Khanbogd</td>
<td>Wears silver bracelet made by Undur Luvsan</td>
<td>Mother presented him the bracelet when he was seven years old</td>
</tr>
<tr>
<td>Tseenzen</td>
<td>78</td>
<td>Herder</td>
<td>Kharzag bag, Bayan-Ovoo soum</td>
<td>He is a urtyn duu singer and knows many Gobi Shankh “long songs.” His sons craft traditional wooden and metal puzzles.</td>
<td>Hereditary; his brothers are great singers and play the morin khuur fiddle</td>
</tr>
<tr>
<td>Rashnyam</td>
<td>72</td>
<td>Herder and environment officer</td>
<td>Khar Zag bag, Bayan-Ovoo soum</td>
<td>He knows land and waters of Bayan-Ovoo soum and curates tools of the metalsmith, Suntag</td>
<td>Hereditary; he is a grandson of Sun tag</td>
</tr>
<tr>
<td>Sukhee</td>
<td>61</td>
<td>Wife of herder Rashnyam</td>
<td>Khar Zag bag, Bayan-Ovoo soum</td>
<td>Named Outstanding Border Guard and has knowledge about trace investigation.</td>
<td>Auto-didact</td>
</tr>
<tr>
<td>L. Bataa</td>
<td>78</td>
<td>Herder</td>
<td>Nalikh bag, Bayan-Ovoo soum</td>
<td>Knows many stories about Doloon Shar Zag Monastery, great monks of this area and urtyn duu lyrics</td>
<td>Studied in monastery and learned from his uncle</td>
</tr>
<tr>
<td>Tseden-Ish</td>
<td>74</td>
<td>Herder</td>
<td>Nalikh bag, Bayan-Ovoo soum</td>
<td>He studied at Nalikh Monastery and knows about this monastery and bajuun flour</td>
<td>Learned from herding way of life and other people</td>
</tr>
<tr>
<td>Name</td>
<td>Age</td>
<td>Profession and affiliation</td>
<td>Location</td>
<td>Contributed Intangible Heritage</td>
<td>Source of Intangible Heritage</td>
</tr>
<tr>
<td>-----------</td>
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<td>-----------------------------------------------------</td>
<td>---------------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>D. Byambaa</td>
<td>72</td>
<td>Pensioner, teacher of urtyn duu training course at Dalanzadgad 3rd School</td>
<td>Dalanzadgad soum</td>
<td>He knows about urtyn duu ballads of this area and their unique features</td>
<td>He learned from urtyn duu singers of previous generations</td>
</tr>
<tr>
<td>U. Batnyam</td>
<td>71</td>
<td>Pensioner, teacher of metalsmithing training course in Dalanzadgad</td>
<td>Dalanzadgad soum</td>
<td>He is a smith and knows stories and myths of the Noyon-Sevrei School of metalsmithing</td>
<td>Hereditary knowledge and self-study</td>
</tr>
<tr>
<td>Tumurtogoo</td>
<td>68</td>
<td>Pensioner</td>
<td>Dalanzadgad soum</td>
<td>He curates wooden chess pieces and knows the metal-crafting of this area</td>
<td>Learned from various people</td>
</tr>
<tr>
<td>Borkhuu</td>
<td>57</td>
<td>Herder</td>
<td>Javkhlan t bag, Khanbogd</td>
<td>He is a silversmith and knows about crafting silver bowls</td>
<td>Learned from various people</td>
</tr>
<tr>
<td>Aviraa</td>
<td>64</td>
<td>Pensioner</td>
<td>Khanbogd soum center</td>
<td>Urtyn duu singer; knows “long song” balladeers of Khanbogd soum</td>
<td>Learned from urtyn duu singers in Khanbogd soum</td>
</tr>
</tbody>
</table>
17. APPENDIX 8: INTANGIBLE HERITAGE REPORT ON KHANBOGD

(from 31 July to 9 August 2010)

Research Area: The research on intangible heritage is done in Khanbogd and Manlai soums, Umnugobi aimag under the Cultural Heritage Program by Oyu Tolgoi Project. The soums are influence areas of the mine Oyu Tolgoi.

Research team members: PhD, Associate professor S. Chuluun, PhD, Associate professor J Gerelbadrakh, and driver Dorj worked in the team. Dr. S. Chuluun worked on the intangible heritage (folk songs, stories, legends, tales, religions, cairn-worship, vision of their culture, oral histories), range utilization (livestock-herdsman-pasture), kins relations (reviving family names, family structure, family generatic reports) and structure of families (duties of family members, daily and seasonal labour management), Dr. J. Gerelbadrakh studied tourism and museums and collected related research materials.

Duration: Duration of the research was 10 days (80 work hours) between 31 July and 9 August 2010. During the time the team members worked in Bayan, Nomgon, Javkhalant and Gavil bags (rural sub-district), Khanbogd soum. It means about 2 days in a bag.

Aim of the research: To collect research materials on traditional ways to tend livestock, environmental and cultural changes, traditional family relationship, family system, tradition, relation, and cultural differences between areas. Therefore we had a goal to introduce Cultural Heritage Program to local people, to gain information, to study cultural heritage and relationship between the mine Oyu Tolgoi and local communities.

Research:

The team left Ulaanbaatar early morning on 31 July and arrived in Khanbogd soum center at 20 pm the same day. We spent over night in the hotel called “Erkhes” and developed our work plan which was starting on 1 August. We planned to participate in the meeting in Bayan sub district and introduce Cultural Heritage Program. As we contacted and agreed with Khurlee, Head of the Governor Office on the phone, Bat-Erdene, specialist of local department, Oyu Tolgoi Project gave us company in the meeting According to the team plan I have done the followings:

- To introduce Cultural Heritage Program to the community of the 4th sub district, Khanbogd soum, to get their feedback and to determine the community approach to the program,
MIHT MONGOLIAN INTERNATIONAL HERITAGE TEAM

- To interview at least 3 herds family members from each bag, a custodier of a bag center and chairmen of bag assembly of citizens representatives or governors.

- To determine features of cattle raising of the area if there is any

- To organize preliminary survey on problems faced local herders, comprehension about Oyu tolgoi, and relationship with the mine

- To meet people who carry special characters of history, culture and custom

Bayan bag: After we worked in the soum center until 11 a.m the team left to Bayan bag.

The sub-district locates in front of Alag bayan mountain, 56 km from the soum center. On the way to Bayan we visited Sukhee, 58 years old herdswoman who settles in Huuvriin hooloi. She lives with her grandson and youngest daughter. Sukhee has been a head of the household since her husband died untimely in 2001 and she let her youngest daughter left school after 8th grade. Rest of her children live in the soum center and Ulaanbaatar. The woman particularly talked about one of her daughter who’s a hairdresser in the soum center. She tends more than 200 camels that belong to her and her children and she conversed about camel productivity. As Sukhee said Bayan bag has the most camels in the soum and called “land of camels”. Herders of the bag used to settle down in Huuvriin hooloi and Baruu, Zuun Bogd in summer and in Alag Bayan mountain in winter. But there used to be almost no cows in the bag. Comparing to each of the 4 bags, Khanbogd soum has hunbandy that specific features. Well is one of range utilization problems. Local people explain that lack of water resource relates to Oyu tolgoi. Monitoring pipes to determine water resource level by Oyu tolgoi was shown during the trip. The well on the photo is a manual (non-electrical) well in Zagiin hooloi. Herders are suspicious about the monitoring pipes by the wells and said such things for example”all our water is going to be taken”, “we might left with not water” “who knows”.

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To get familiarize with situation of families that raises camels well, we visited Tsoggerel, one of herders who has the highest amount of camels at about 16 pm. The family has about 40 camel calves were tied at tethering line and his children that study at school were on holiday and helping their parents. As the householder said the family has over 200 camels, 60 of them are calves and they tied them when there’s a favourable condition. The mother of his wife lives with them. They use camel meat for meal and produce dairy products such as “airag”, “aaruul”, “tsagaa” and “bojmog”. Trading camel milk in soum center or other town centers is increasing because it is popularly used for medical reason. In spring 6-8 kg wool is taken from each camel and sold. Tsoggerel said "it’s the same as herders who raise goats sell cashmere and supply needs for a year with it". Camel wool is main income they get only once in a year and spent for “improving life condition”, “discharging debts in banks” and “paying children’s tuition fees”. Therefore there has been much migration in the area. Few examples of local intangible heritage (drawling folk songs, stories, legends, tales, religions, cairn-worship, vision of their culture, oral histories) in the bag can be mentioned. Used to there were many people who sang drawling songs and even now local people want to sing “Tumen ikh” and other drawling songs but almost no one knows the songs in the area. Just few local stories about places and repression were told.

If we stayed longer we surely can get more information. The biggest problem with range utilization is water. Herders settle in neighbourhood because of the nearest water resource. It’s clear in their speech that well water resource effects number of animals and number of families in neighborhood.

Governor of the bag and Sukhee, a herder who guided us told there are not many women that lead their household on their own and "no families that don’t know how to live”. When people started reviving family names “Some people had already known”, "some found out that time", "some get wrong family names that time and going to change them".

Eventhough the governor gave information on how to make a family generatic report to herders earleir, it seems there’s no one who has it.

Generally housewives are responsible on family finance and household work and for husbands it’s important to pay attention to their livestock and outdoor works. Bayan bag community worship Alag bayan mountain. They worship a hell on the highest place of the mountain in June every year to have rain or happy future of the area.

This time structure of families (duties of family members, daily and seasonal labour management) wasn’t studied particularly because of time limit.
The soum authorities have Alag bayan temple under their protection to protect cultural heritage.

**Nomgon bag:** The research team worked in Nomgon bag on 2 August. The bag locates in 76 km east and south east of the soum center. We concentrated on labour management, range utilization and religion when we worked there. The team visited Bumtsend, a herder to get information on range utilization, reviving family name, similarities and worship. The bag is the biggest in the soum and locates in Galbiin Gobi. Herders say with pride about it “land that proud of” and “the most beautiful”. Due to migration since 1990 population of the area has decreased. As herders in the meeting said the bag meeting usually starts at about 7pm because of few reasons such as “we come from far after watering and tending grazing livestock”, “after the meeting we stay over night around, we use to it”, “we have meetings next morning because there are concerts and dance in the evenings sometimes”. We arrived at 19.20 in Nomgon bag center where the meeting was starting. After introduction by Sanjdorj, Sugar from Oyu tolgoi on relationship between Oyu tolgoi constructions and local communities, planned works and listenning herders’ opinion for about 45 minutes at the begining of the meeting I introduced “Cultural Heritage Program”. Community members were pleased to know about the program but there were only few questions such as “Are you coming frequently, it’s very important to pay attenton on cultural heritage”.

The bag community worship “Nomgon khan” mountain which is in the south of Galbiin Gobi. The mountain is worshiped by not only the community but also celebrities who were born there. Herders were all agreed that they have worshiped Galbiin Gobi and Nomgon Khan for generations and will protect them. They said life of the people who mine gold around the mountain get worse.

Thanks to less number of herder families, there is not a big problem with range utilization. In winter time herders settle around Khasar mountain and in autumn they settle in Galbiin Gobi. The team did observation in few winter and autumn quarters to study livestock
management. Winter quarters are circle and made of mountain stones. Inside of the yard for stocks are made of tamped down dung to keep their stock warmer. Height of the stockyards is about 1-1.5m and no doors are made just left them open. Average number of livestock in a family is 300-700. Here are the families that have the largest amount of livestock: Ts.Saikhandelger family has 70 camels, 20 horses, 80 cattle, 198 sheeps, 634 goats, Z.Tsog owns 50 camels, 71 horse, 52 cattles, 79 sheeps, 444 goats and I.Namsraijav owns 121 camels, 17 horses, 36 cows, 129 sheeps, 367 goats. The numbers show us the herders tried to raise their goats like in many other areas last years. Explanation was goat helps to supply their needs, number of goat increases quickly, easy to take care. Herders didn’t say anything about range utilization problem related to goat.

Culture of drawling song and morin huur could be inherited more than in other areas. Feasts start with drawling songs and there were 3-4 people who sang drawling songs couples of years ago as herders said.

**Javkhalant bag:** The team worked in Javkhalant bag on 3 August. The bag locates in south west of the soum center in 60 km. It is the most affected area by “Tavan tolgoi” and Oyu tolgoi LLCs. Roads for the two company activities pass through the bag. This seems a source of a quite big argument between the mine and herders. Explanation of the mine representatives is “the 105km long paved road connects Oyu tolgoi with Gashuun sukhait, border port. Direction of the road was not decided by Oyu tolgoi it’s decided by the Ministry of Environment. (showed us). It is not possible to have one road with Tavan tolgoi. We studied well to build the road. If you have any questions we’ll convey.” And community members argued “the area is destroyed and the community wishes are regardless. You must order the direction of the road. Otherwise how the ministry people know where the road goes. We won’t decline to build the road. But you should have asked where the road would go before you build it. You don’t discuss with us before you start and tell us when you started already. Stop doing it.”

Herders of the bag mainly got goats and camels. This is the most beautiful area in the soum and the community is proud of “Umdain gol” where elmen forest grows. Umdain gol is “a river which is used to run for 1 month in rainy years and herders settled near the river in summer. Today the river and the elm forest are destroyed because of the road.” said everyone in the meeting. Generally the interviews show there are conflicts between Oyu tolgoi and Javkhalant bag community. The team visited in Shirnen’s family to collect materials on farming, Family labour management. Shirnen is a head of the bag.
Gabiluud: The team worked on 4 August in Gaviluud bag. A mountain in North West of the soum is called Gaviluud. But there was no one who can say what Gaviluud exactly means. It was definite that Gaviluud area is a land of sheep and horses. When we arrived there at about 16 pm most of men had gone to see a horserace. The Head of the bag introduced us the area. He used to be an Army officer and has been a head since he was elected by the community members in 2006. Comparing to other bag Gaviluud looks more comfortable.

He said collects stories about the area and showed a scripture. We were interested in the worshiped places and collected materials. The community worship Munkh tolgoi which locates 10 km from Gaviluut center. All members of the community contributed from 1000 to 40.000 tugrug 360000 in total and brought few goats, airag and curds from cairn worship. It means they build and implement one kind of collective belief.

Therefore one of interesting social phenomena in the area is shamanism/local people said it’s religion/ Last 3 years about 14 people became shamans. As people told us it’s because there was no monk in the area, when they have difficult times there was no one can reply, a woman became a shaman and said to people should receive their muses.

I visited a local temple and a cultural center in the soum to get to know their activities, interviewed Tegshbayar, bishop of the temple and observed religious activities. I also interviewed one of the oldest men in the soum, talked and recorded about his childhood, feature of life and culture of the area and stories of his life.

Conclusion:

The followings are recommended as a result of research on ethnology and social-cultural anthropology in Khanbogd, Umnugobi, from 31 July till 9 August 2010.

- To compare similar culture of other areas and determine their features and differences to research intangible heritage in Khanbogd soum
- To describe a structure of triangle relationship livestock-herder-pasture in Khanbogd soum
- To study changes in relations in Khanbogd soum
Therefore the team collected materials to revise the research on reasons of differences between understanding of Khanbogd soum community about the mine and constructions and understanding of the mine staffs about herders and their conflicts. Also materials on relationship of family members, kins relations and family members’ labor management are collected to verify. All can be the main materials for implementing the regional cultural heritage program.
18. **APPENDIX 9: REPORT ON INTANGIBLE HERITAGE FIELDWORK, OCTOBER 2010**

Chuluun Sampildondov (PhD) and Lham Purevjav (PhD Candidate), Intangible Heritage specialists.

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REPORT ON OCTOBER INTANGIBLE HERITAGE FIELDWORK, CULTURAL HERITAGE PROGRAM, OYU-TOLGOI PROJECT

There was conducted fieldwork which designed to collect field data for developing the cultural heritage program in due to protection, preserving and transmitting the cultural heritage of the direct and indirect area of Oyu-Tolgoi project. The fieldwork held in Manlai, Khanbogd, Bayan-Ovoo and Dalanzadgad soums of South-Gobi province, Mongolia in October 23-30, 2010.

Purpose and Methodology of the Fieldwork

The first part of purpose was to implement the tasks which identified through the September fieldwork collaborated with international scholars like:

   Toponym Map

   List of Inherited Places.

The 3rd task was to identify the framework of Intangible Heritages in this area that can comprise to the CHP.

We examine the concept of Framework of Intangible Heritage on the following way:

1. The knowledge, customs and rituals which are alive now and the changes happening with them,

2. The Intangible heritages which coming to be left behind with no alive functioning

3. What kind of intangible heritage in the interest are and consideration of local officials and people.

The methodological approach is to base on the local perception (not to push previously determined approach and perspectives) and identify intangible heritage, knowledge and practice which are alive among people, which they give importance and significance. The reason and circumstances of their perception, perspective, and meaning will be interpreted and analysed through the anthropological perspectives.
Target Area and Households

To conduct and implement the fieldwork purposes we have met three groups of local people.

1. Local governor office officials, and staff who are responsible for local cultural heritage.

2. The people who recognized among community as "key figures" on local history, heritage, and culture.

3. The households and people who have no any specification (random visit)

The intangible specialist worked in the first 2 groups of people of Khanbogd in July-September and this time we have chosen third group of people of Hoovryin Gol and Khulgaryin Water area households in Javkhant bag. The second group was the focus in Manlai, Bayan-Ovoo and Dalanzadgad soums.

According to the fieldwork we identified preliminarily:

1. Intangible Heritage Framework in the target area

2. List of Inherited Places

3. Map of Toponym

4. Records of Stories and Myths

1. IDENTIFICATION THE FRAMEWORK OF INTANGIBLE HERITAGE

According to the social and cultural anthropology perspectives production, social network (kinship) and belief system come into as fundamental order and other elements function as constitute parts of those orders. Theoretically, we assume that the pastoral herding is the fundamental order of Mongolian culture and society. The different elements and structure and functions of Mongolian society raise from this pastoral herding way of life and base on it. Due to socialist modernization and modern administrative system building, the structure and functions kinship relationship is reduced. However, according to the baseline survey findings and our fieldwork investigation there are revealed the kinship festive and kinship obo (cairn) worship ritual. These facts can lead as to re-assume the kinship relationship functions. Therefore, we concerned the pastoral herding way of life in the 3 part of the report. We would like to say again that the 15 category of intangible heritage which we identified in the 2nd part of the paper is completely based on the fieldwork findings. They are
not pre-determined, we met and interviewed with local people and identified the intangible heritage which local people consider important and significant to them.

1.1 Categorization of Intangible Heritage

The intangible heritage which identified through our fieldwork can be categorized like knowledge and technique, technology, customs, and cultural objectives. This categorization based on one of the main approaches to the indentification of intangible heritage that focus on transmission and usage of heritage. Without knowledge transmission structure and real usage, intangible heritage cannot survive. Also, to study just about the knowledge is not our purposes of developing cultural heritage program. The transmission ways of knowledge, customs, and objects are different. We will talk on this in the 8th part of the report, Assessment of Intangible Heritage.

Knowledge, Technique and Technology

1. Smith-Crafting: smith-crafting, wood crafting, silver crafting
2. Preparation of Tsulkhir, Bajuun flour
3. Culture of Caravan
4. Ankle Bone Shooting
5. Gobi People Food and Food Diet
6. Gobi Long Songs

Customs

7. Gobi Taboo: Camel meat is not pure, don’t make fire by buils, don’t leave stone games in the old camp, three taboo of smith-craftman, the horn of orongo harmful to pregnant mare, and don’t hunt wild sheep and goats when they are shifting from one mountain to another.
8. Song for Mare
9. Things in the Worship-Ritual Bag (Dallaganyi Uut)
10. Curse Words
11. Gobi Dinstintive Vocabulary and Dialect
Cultural Objects

12. Cattle Stamps

13. Mongol Deel Making

14. Crafting of Felt Carpet like Dugluur and Toirog

15. Stone and Other Games

1.2 Intangible Heritage Assessment and Measurements

The intangible heritages that assigned through our fieldwork and research can be made assessment in the following measurements: (The Intangible Heritage Assessment is made in the 8th part of the report).

I. THE STRUCTURE AND WAYS OF TRANSMISSION INTANGIBLE HERITAGE

1. Intangible Heritage Carried People

2. Source of Intangible Heritage Knowledge (Through family structure, kinship, community, and social institutions like school and trainings)

II. SIGNIFICANCE AND VALUE OF INTANGIBLE HERITAGE

3. Distribution (Area)

4. Coverage (People)

5. Current Usage and Future Tendency

6. Significance and Value (Significant to Whom)
<table>
<thead>
<tr>
<th>Measurements</th>
<th>Degree of Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transmission of Intangible Heritage</td>
<td>High</td>
</tr>
<tr>
<td>Carried People</td>
<td>Traditional (family and kinship)</td>
</tr>
<tr>
<td>Ways of Transmission</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Significance and Value of Intangible Heritage</th>
<th>Distribution</th>
<th>Direct Impact Area</th>
<th>Indirect Impact Area</th>
<th>Whole Southgobi province</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coverage</td>
<td>4 Soum community and kinship network</td>
<td>Direct Impact Area</td>
<td>Whole Southgobi province</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Current Usage and Future Usage</th>
<th>Alive Usage</th>
<th>It is coming to be forgotten</th>
<th>No usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Significance and Value</td>
<td>High</td>
<td>Medium</td>
<td>Low</td>
</tr>
</tbody>
</table>

2. Intangible heritage

2.1 Smith-Crafting

South-Gobi is famous its smith-crafting which is called Noyon-Sevrei school and there are branch schools named by the smith-craftmen. (Noyon and Sevrei are the soums locate in the West-South of the province).

We have identified smith-crafting tradition of 3 generations and their works.

The I–II generations cover from the end of 19th century to the 1970s and there were well-known smith, wood and silver craftsmen people like Suntag, Tall Luvsan, Uran Nyam, Bazar and Dorj. Uran Nyam had duty to craft silver can and cattle shaped statue for prize for “Champion Herders”. There was a rank system for smithcraftsmen and Uran Sanj was awarded by a title of “Merited Craftsman of Mongolia” fron this area. Fat Darjaa was famous his thin silver crafting, Jamyandorj had skill and specificness of decoration that use silver thread pattern for silver bowl. Also, there were other great craftsmen like Suntag, Uran Bazar, Perenlei, Silver Chimid, Uran-Bugtut-Gorgeous Osor, six fingers Banzragch, Gunjaa Nyam, and Tumur from Ugalzyin Hets.

Tseden-Ish, Bayan-Ovoo soum, has over 40 years long aged metal locker which made by Suntag and Rashnyam, a grand-son of Suntag keeps his crafting tools.
"Suntag craftsman was a person from the junction of Nomgon and Khurmen soums, and he had box-blower. He was the great craftsman who could develop steel in high quality. There is a story about him that one person asked him to make a knife for cutting camel wool. When the knife was ready customer clarified that should it be sharpen or not. He answered that for 2 years it will be ok. Exactly in the 3rd year the knife had no steel for cutting wool. How it happened was that he set up high quality steel in the ordinary metal and when the metal had set back the steel was dropped out. Also, he made knives just exactly dedicated to wood and metal. For example, the knife for metal could cut scissor for fire like wood cutting. There is another story that there was going to build hospital in the soum center. The woods were old ones which used before with many metal parts. He brought whole bag of crafting tools and fixed wood as new one cutting all the parts with the metal. When other carpenters have seen his tools the edges was normal no any break."14

Herder Rashnyam, Khar Zag bag, Bayan-Ovoo, a grand-son of Suntag smith-craftsman, who keeps crafting tools of his grand-father

14 From the talk of craftsman U. Batnyam, Dalanzadgad soum. 28 October, 2010. Dalanzadgad.
Tseden-Ish is using locker which made by Suntag smith-craftsman over 40 year. Nalikh bag, Bayan-Ovoo soum.

Batsukh, Khulgaryin Water, Javkhlan bag, Khanbogd soum, keeps locker made by Suntag, and silver bowl of Uran Bazar and traditional Mongolian stove-tulga.

S. Batsukh, Khulgaryin Water, Javkhlan bag, Khanbogd soum.

III generation belongs to after 70s who inherited the technique and technology and style of previous generations, representated by Jargalsaikhan, Javkhlan bag, Khanbogd, Borkhuu, Batnyam, Dalanzadgad soum, and disciples of Sharkhuu like Altangerel, Battur, Batbyan in Manlai.

2.1.1 Features of the School of Noyon-Sevrei Silver-Crafting

U. Batnyam of Dalanzadgad lauched training course on Gobi smith-crafting and prepared around 70 people on smith, wood and silver crafting. Batnyam specifies the Noyon-Sevrei school:
"Noyon-Sevrei school is distinctive its plenty of silver percentage the crafting and it enables to use transmitting from generation to generation. Also, when making silver bowl, use special technology without any link. When cover the bowl by silver there is no connection, just one whole plate of silver will be used. Why this kind of specific crafting is developed in the South-Gobi area has a story to explain the reason. Before, this area people had trading to Xinjiang Uigur. Traders went through Shivee Khuren border port, Ezenee and travelled 500-600 km long to the west along with border line. Then they reach to Bar-Khul and Baruun Zuu town, Kharlag Tag of Tianshan mountain. That town had a big silver mining. The inhabitants of that town had lack of food and cattle-skin. On the way the traders cross the raien mountain where grown full of raisen. The horses could not step out there and people of that area use raisen to thicken houses by cattle-waste mixing with dust. My uncle was talking to me when I was child. At that time traders went there secretly, it is kind of contraband of modern time. When uncle comes back from caravan he brought us raisen and told that don’t let to know other people and without dropping to the ground. Then that mining workers received their salary by silver and caravan people bought cheap silver by exchanging wool and cattleskins. Therefore, South-Gobi people had a plenty of silver and there was developed high level smith-silver-crafting and were born the greatest craftsmen. It should be time of 1800. There were a lot of smith-silver craftsmen in Gurvan Tes. The great painter D. Manibadar was from this area. He learnt from D. Gendensamba. Also, there was a famous craftsman Uranmanibadar. Craftsman Sanj, Tuvden, and Bazar. As it is considered there are 4 main schools of crafting in Khalkh (Mongolia) like Dalai Choinkhor Wan on metal crafting, Borijin, Batnorov of Hentii and Dariganga. Noyon-Sevrei can compete with them and there can be Zasagt Khan crafting in Khovd and Zavkhan provinces.”
2.1.2 Smith-Crafting Blower

U. Batnyam clarified on the what kind of tools were been used by the South-Gobi smith-silver craftsmen.

Skinbag-Blower—it is made by goat-skin and it will be filled out by air and tie out and blow the silver and metal.

Woden Box-Blower— it is made by wood and there is skin cover which can be open letting to fill by air and blow.

Wind-Blower— It is most powerful one. The shape is like loudspeaker plate. Choose the appropriate hill and put the plate to the opposite side of wind and there will be placed silver or metal on the other side. The wind plate will be turned according to wind course; if the wind is strong it should be turned along with wind course. If there is mild wind it can work perfect.
2.1.3 Saddlecloth, Bridle and Trap

Saddlecloth: Noyon-Sevrei saddlecloth is thick thus it is possible to return by another side. The different parts are well matched with each other. Also, it is sewed through both sides and put another layer. Therefore, when the pattern is disappeared still you can see the pattern well. Also, there are made high nose of leather protected from everyday usage.

Bridle: The bridle is decorated by silver mount, and ring and the link plate is made no any links.

Jiijuu Trap: A trap which had pattern set by guuli.

Silver-Bowl: The edge of the bowl is linked by silver thread and there will be put lotus pattern in the low part the bowl. Noyon-Sevrei’s the biggest silver-bowl is made by 18 liang. The significance is you can use it for all your life and further.

2.1.4 Technology of Making Birch- Holder Knife

U. Batnyam emphasized the firmness of the knife which the holder is made by birch-. He said “The knife which has this type of holder is quite firm, can last long, our smith-craftsmen did it. Cut the birch- like thread and make it wet, then circle the holder. Press the wet birch often and dry out. Now, it is difficult to find this type of knife. Never get back and break. Thus the uniqueness of Noyon-Sevrei school of smith-silver crafting is last long for the generations.”

Herder and silver-craftsman Borkhuu, Javkhlant bag, Khanbogd soum talked:

"Usually one silver-bowl lasts for 3 generations. But the silver-bowls I made can last for 4 generations. For example, it happens often that children bite and fall down the silver-bowl and it can be broken and no good color. But, my silver-bowl is very tick by silver therefore, never let it been bite and broken."

The specificness of Borkhuu’s silver-crafting is the bowl is put into the whole thick silver shape without any miss-matching and there is no any space between bowl and silver. Then make the lotus pattern in the bottom of the bowl. There should be insert thick silver in the bottom. In the latest time some craftsmen insert between bowl and silver metal, sand and copper. To check it should put the silver-bowl into the gound and knock the bottom, there will be empty type of sound.
2.1.5 Technology of Smith-Crafting Glue

“People of Bayan-Ovoo soum could prepare 5 different types of glue like yellow, black, brown etc. They are differ by that work in the human skin or not. They are prepared by different cattle-skins and bones. First, all cattle-skin and bones should be removed by their meat and fat and keep in spring wind for 3–7 weeks. Then all they should be cut by small pieces and should be boiled in the big kettle in the top of the windy hill. It takes 24–36 hours and when it becomes some color like black or yellow should try sticking something. If it is working it should be removed from the kettle for drying. When it is dried it can be packed in the bag. The most important thing is water. The water should be the best water without salt. The best water can be mountain water. Khachig mountain and Delgeer Suuj, Khukh-tolgoi has good water.”15

2.1.6 Silver Jewelry

The silver bracelet made by Tall Luvsan is used by people of Khanbogd and Bayan-Ovoo through generations.

During our fieldwork we have met the people who were worn this bracelet were a wife of Bandia and herder Altangerel in Bayan-Ovoo and other several people in Bayan-Ovoo. This bracelet was inherited from their parents and grand-parents. For-example, when Altangerel reached 7 years old his mother gave him this silver-bracelet. Also, he began wearing 2 silver rings when he was 20s and now they became thin for the years. Therefore, the smith-silver-crafting is famous by its long aged usage and fininess carrying the knowledge from their ancestors and culture.

15 Told by Sukhbaatar, Bayan-Ovoo soum in October 27, 2010.
Young herder Altangerel, Red Head Water, Javkhlan bag, Khanbogd soum, is wearing the silver bracelet made by Tall Luvsan since his 7 years old through his mother’s presentation.

2.1.7 Three Taboo of Smith-Craftman

“Smith-Craftman doesn’t want to make knife, locker and cattle stamp. Because, knife can be used for bad actions like hurt animal and people; locker expresses jealous mind of people that hiding from people; cattle-stamp carries negative mind of protecting from people as well. Therefore making cattle-stamp was a fairly expensive like one horse, or camel. And when a smith-craftsman makes locker accompanies with locker huurai.”

“There happened notorious bank robbery in South-Gobi province in 1970s. The very first suspicion went to one of leading smith-craftsmen of that time Uran Sanj. However, there was no enough evidence and the robber has not been known for 10 years. Later it became clear that robber was former intelligence agency officer, Angarag, from Tsogt-Ovoo soum. The many people assumed that the quite big and high quality metal locker can be melted by only the Uran Sanj.”

We can assume that South-Gobi traditional smith-silver crafting knowledge is well developing today seeing from that Batnyam has smith-silver-crafting training course and already have trained 70s disciples and this area people are using previous smith-silver craftsmen’s works through generations. Definitely, it means that it has market and it can be kept further. The transmission way of smith-crafting was descendancy from father’s to son within family and kinship. However, now this traditional structure is changed. There appeared smith-craftsmen who learnt from good craftsmen. The weakness of traditional

16 Told by Borkhuu, Javkhlan bag, Khanbogd soum in October 26, 2010
17 Told by Sukhbaatar, Bayan-Ovoo soum center in October 27, 2010
structure of knowledge transmission of smith-crafting, if somebody won’t inherit from his family or kinship that knowledge can be forgotten completely. For example the grand-son of the famous Suntag, Rashnyam couldn’t talk detailed knowledge about his grandfather’s smith-crafting except showing a few tools. Because he is not inherited craftsman, though he is not carrying the knowledge, then Suntag’s knowledge and skill does no longer exist. However, the old generation can not recognize “new or learnt”, “not inherited” smith-craftsmen like Borkhuu, Javkhlanl, Khanbogd. 83 years old L. Bataa told about Borkhuu “I do not know about him, I just herad that he was coming to people and was asking about the smith-crafting.”

2.1.8 Snuff-Box Inherited through Generations

Carry and use the the cultural objects through generation is one of the culture of Mongolians. Especially, the thing which was used by famous political, cultural figures and ancestors, for example using inherited snuff-box is significant heritage of for Mongolian men. Mongolian men greet to guest giving snuff-box and tell related story and history of it is a real pride for them. According to with this inherited objects there are carried knowledge, stories and history. This conversation gives impression and image about the owner. If it is inherited object it brings to the owner certain social status and respect. For example, elder-herder Shagdarsuren who is a descendant of Chinggis Khaan and grand-daughter of the last banner governor is carrying historical snuff-box of his grand-father. During socialism he needed to hide his descendency, though had little knowledge about his ancestors, just has read some ideas from books. However, he has the main inherited and cultural object which carry enormous history and heritage.

Snuff-Box of Borkhuu, Javkhlanl, Khanbogd soum
Snuff-Box of L. Bataa, Nalikh bag, Bayan-Ovoo soum
L. Bataa talked “My snuff-box was taken by Dandar. People say the stone is ice which laid in the bottom of ocean for 1000 years and it is called “Hesuujin.” It has coral head. In our land there is a plenty of Gartaam in east side of Khavch. People make snuff-box, ring, and bracelet.”

2.2 Long Song and Blessing Poem

We have talked about the long songs of this area with Sukhbaatar, Tseenzen, Bayan-Ovoo, Byambaa, Dalanzadgad soums. Sukhbaatar has noble root and he inherited from his ancestor a compilation of long songs. He talked “It included the long song lyrics which were been forbidden during socialism in due to the topics religion, not known to public. Also, it can be line to check some misguided songs deliberately and indeliberately.”

Tseenzen and his 2 brothers are long song singers, one of the Tserendorj is State Great Morin Khuuruch (Mongolian violin). Tseenzen attended and was awarded by 3rd place prize from the contest “The Three Long Songs Gobi-Shankh” last September which is organized by Energy Resourse Co., Ltd in Tsogt-Tsetsii soum, South-Gobi province. He clarified on the distinctiveness of Gobi-Shankh long songs. “These three songs are composed by the Geser Lama (Buddhist monk), “Undryin Saikhan” (High Beatiful), “Hulch Bor” (Light-Brown Horse), and “Khurdan Saikhan” (Beautiful Racer). Today, nobody can sing Undriin Saikhan properly. In the eve of the contest there was preparation and all attendants are involved. I have sang the Undriin Saikhan. Some very quick-minded young singers recorded my performance and repeated. However, nobody could find proper melody and techniques. I think, it seems, that Gobi long song tradition is going to be lost.” Then he told a story how these songs are composed.

"There was lived a rich man who named Geser Gelen in Shavkhdai, Ar Shiree of Shankh. He has a very fast horse. Once Geser Gelen had argument with one person in Sangyin Dalai and blamed as he murdered that person. He caught his fast horse and could reach Bogdyin Khuree (current Ulaanbaatar) on that day. Then he arrested there while he was attacking to Chinese traders, he assumed like that day he was in Ikh Khuree cannot murder a person there. Then he survived by paying back what he robbed from Chinese traders. Then there were composed 3 songs about that horse.”

L. Bataa learnt long song singing through very interesting way. When he was a child his grand-father asked him to recite lyrics of the long songs and checked him constatntly. Later when he visits to festive he could acquire the melody quickly since he knew the lyrics. He collected the long song lyrics in this area of your own free will and expressed us his interest to publish it. He became a blind last 20 years. He likes to make people write down the lyrics

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18 The lyrics of long songs are in the Appendix.
and asked me write down some lyrics. We wrote down the lyrics of the long songs "Tumnii Eh," "Undriin Uvs," "Hulch Mori," "Shavi Khurlin Magnai," "Shashin Turiiin Duu," "Turiin Tovchoo," "Yurtuntsyin Gurvan Zavkhai" and told related stories. (His compilation has his grand-daughter Otgontsetseg and her phone number is 88308219).

Another long song singer in Dalanzadgad, D. Byambaa attended that contest as well. Now he is working as a long song song teacher at the 3rd school of Dalanzadgad. He said the Gobi long song tradition is going to be lost, then I decided to train children. He said there were great singer Khanshin, and Tavanjin, Zurgaanjin. Today there are long song singers Banzragch, Bat-Ulzii

Aviraa learnt long song singing when she came to Khanbogd from Khankhongor in 1964. Also, she has unique skill and knowledge of voice fluting (khooloin tsuur). She agreed to record her singing and voice fluting.

"I have learnt long song singing from Maljig in the very beginning, then it is possible to say that I have learnt from this area people. Maljig taught me long song of "Ereglengiin Deeguur" which composed by Danzanravjaa. I was learnt "Guidel Sait Ureen Zeerd" from my mother-in-law, Ijihuu. Then "Shar Talyin Tsetseg" was taught by Ulzan. These songs are not singing in other places. One of my singing is recorded in Mongolian radio, sometimes, I hear my own singing (she smiled). That time I was young. Danzanravjaa's songs
are assumed as Eastern-Gobi’s. I know 2 chores of “Ereglengiin Deeguur” song. There was a person who knew the whole lyrics, who named Nadmis, unfortunately, he is passed away recently. Also, he had compilation of long song lyrics. He always said me that you should write down, I am like “Wolf is peaceful in his hood.”

Also it was said that Tsedengombo and Idertsog of Khanbogd are good on Blessing Poem (Yeruul) and S. Batsukh, Javkhlant, Khabogd composed a blessing poem dedicated to Khanbogd people.

Tseden-Ish gatherers and prepares Tsulkhir flour, Nalikh bag, Bayan-Ovoo soum.

2.3 Preparing Tsulkhir and Bajuun Flours

Tsulkhir is a plant which grows in gobi area and gobi people gatherers and use for food and as medical treatment. Gobi people used tsulkhir as rice and flour during the Second World War time. Also, tsulkhir is famous its medical characteristics for healing inner temperature and cleaning inner 5 organs.

Grand-mother of Altangerel, and his wife Nasan-Ulzii, Tsendeehuu of Khanbogd, Javkhlant bag, Bataa and Rashnyam of Bayan-Ovoo soum have told us about Tsulkhir rice and flour preparation technology and its usage. (The detailed information on where Tsulkhir grows, how to develop rice and flour and medical characteristics are described in Mongolian version. It will be translated into Semifinal report)

\[19\] The lyrics of long songs are available to see from the Appendix.

\[20\] Blessing Poem is put in the Appendix.
2.4 Cattle-Stamp Culture

Cattle-stamps of herding families mainly inherited through generations. Today herding households use cattle-stamps. Through our fieldwork herder Batsukh has fish stamp with eyes and mouth. Herder Rashnyam has stamp shaped like Π. His wife ancestor used single moon stamp. The main cattle-stamps in this area are Builan, Uilan, Moon, and Tri-angle. (details will be translated in the semifinal report)

Fish with eye and mouth, cattle-stamp of Batsukh, Khanbogd, Javkhlant bag.

Cattle-stamp of Rashnyam which shaped like Π

2.5 Living and Making Mongol Ger

The main body of the herders of the area lives in ger and purchase the gers mainly from Ulaanbaatar and Uyanga soum, Uvurkhangai province. Ger making and crafting is not developed in this area because of lack of wood. However, there are people like Sugir, Manlai soum center, and makes ger according to request of people. As clarified herder Lenten, Javkhlant bag, Khanbogd soum, on that why people choose Uyanga ger is, it is a strong, gorgeous, and spacious.

It is quite rare to make and use the ger which has “khuruut toono” (finger toono-wooden top of the ger is connected to uni-roof sticks) and nobody is making this type of ger. We have met young herder in Gun Khar water, Khar Zaq bag, Bayan-Ovoo, who inherited from grandparents. The advantage of this type of ger is it can last life-long.
2.6 Usage of Traditional Herding Facilities

Wooden container for fermenting mare milk drink still used and made by as traditional way. Sugir, a wood-craftsman in Manlai soum center makes wooden herding facilities and there is demand and supply.

2.7 Ger Furniture and Facilities

As we mentioned above the most of the herding families live in ger. Galaa, an young herder of Manlai soum was built a house in his winter camping-buuts last year. The ger interior and furniture kept its traditional structure that it is divided the main 3 parts, as like the khoimor-north area is dedicated to a host-husband, the right side is for guests and the left is for wife and children. Then there are located beds and wooden clothbox with intricate pattern is located in the very north. On the wooden clothbox or in the wall there is placed deities and worshipping objects etc. The most of the herding households had black and white TV set, 14 inches and solar accumulator. From this fall satellite antenn service requied fee and it is expensive for them, herders talked. It is not rare that the herding households have motobike and Korean Excel car.
2.8 Making Felt Carpet- Dugluu and Toirog

Elder Juulkhuu who lives in Manlai soum center makes traditional Mongolian felt carpet- dugluur and toirog. It is made by hand though cannot produce for market, just they receive people’s order and produce a few numbers.
D. Byambaa, Dalanzadgad told us about felt carpet “Before people made dugluur and toirog with Tumennast, coin, and wall-set patterns. Then it was made red-brown cloth which called odonchuu and this is quite firm. Felt should be the Akharyin (early)”.

2.9 Deities

During socialist modernization of Mongolia, atheist ideology was strong and Mongolians couldn’t worship their deities and all families forced to quit the deities. Though people hide them and after 1990s they could put in the worshipping area of the ger-Khoimor. The most families of the area were been worshipped Buddhist Altangerel, Dorjzod, Dorjjavd sutras and Vajrapani deity. It is interesting that the deities are mainly inherited from the ancestors, could survive through socialist anti-religion ideology.
2.10 Food and Food Diet

Und (үнд) is the one of the main (day time) food of South-Gobi people which prepared by putting meat or dried meat (borts) and rice into milk tea. Once wife of herder Enkhbayasgalan, Byambasuren said us “without having und, a day barely passes” and laughed. How to prepare und?

"First, fairly dense green tea should be prepared. If the tea is the not grease it cannot be good und, it will be like hyaram. Then boiled tea should be put in the different pan for a while. Now fat and rice should be fried. If rice is well fried, und will be delicious. The prepared will be out into the fried rice and tea will be milked. If the milk is put earlier tea will be red, though should be put later. And finally, small cut meat will be put into the tea and boil for 20–25 minutes.”
In due to recent intensive information and promotion on healthy eating and vegetarian food, some local people worry about that it can influence to Und culture that blaming its mix of milk and meat. However, according to our fieldwork findings, the herding families are apart from this idea and are in traditional food diet. In the morning herding families have milk tea with fritter-cookie and at lunch they have und. Sometimes the lunch was und, people do not have meat meal in the evening summer time. The main body of the food consists of meat, flour and rice and prepare und, noodle soup, tsuivan, buuz, and khuushuur.

2.11 Revival of Kinship Name and Kinship Relations

Kinship relations was one of the fundamental orders of Mongolian nomadic society. After 1990s there was government initiated campaign to revive kinship name and today every citizen of Mongolia uses kinship name in addition to father’s name. Therefore, investigation on kinship name and kinship relations of this area can be a good source to understand pre-modern social network and its traces or new functions. Sukhbaatar, who has noble root, of Bayan-Ovoo told us “Through my account there are the main 3 kinship roots like Ulaan Daavuu, Undur Manuul (Borjigin), and Yokhchuud (which has Turkic root) in Bayan-Ovoo soum, however, there are 120-130 names at the moment. I won’t say that kinship name re-identification process was wrong. However, the investigation and identification process of kinship name is misled. This can be dangerous to national safety. Kinship name identification purpose was right, however, it happened wring way. Another example is Erdenedalai soum, Dund-Gobi province. There are again the main 5 kinship roots. But, people recognized themselves more than these five. It is one of the fundamental taboo that to marry with somebody from kinship whithin 3 generations. Those people are called alag maria people
and people are reluctant to visit those families within first 3 days of Lunar New Year celebration.” According to our research there is identified that herdsmen Otgooloi and Bandia are uriankhai people (one of the ethnic group of Mongolia) of Udaid kinship and they have kinship worshipped obo. This fact can show the kinship consistence of this area.

Sukhbaatar concludes that Bayan-Ovoo soum people consists of 3 main kinships, and it is not that 120-130 as people identified themselves.

Camel-herder Otgooloi is Udaid kinship person and he admists there is obo which Udaid people worship.

2.12 Building Stone Ger and Other Games

Building Stone Ger game is one of the precious intangible heritages of Mongolians as it carries knowledge and dramatic practice of ethics and morality of Mongol household, respecting guests and greeting culture. Mainly, teenagers play this game acting like as one family, husband and wife representing greeting, respect to men and entertaining guests etc. Therefore, while our visits to herding households in the area we investigated about stone game and its current practice among teenagers. Bandia and Bunten, herdsmen of Javkhlan bag, Khanbogd soum and Tseden-Ish Bayan-Ovoo Nalikh bag have kept places where their children built their stone gers. They say “Now children are no longer play stone ger building game, it was alive to 1960-70s.”
Long song singer Tseenzen sons can make wooden and metal puzzles and they were been played by them. Also, every herding family has ankle bone game, a traditional game of Mongolian herders. However, the herders admit that ankle bone games are no longer popular among their children. Daughters of herder Enkhbayasgalan of Manlai soum said that they know and play ankle bone games of horse race and catch the ankle bone etc.
Daughters of herder Enkhbayasgalan, Manlai soum are playing through ankle bones. The wooden and metal puzzles which were made by sons of Tseenzen, Khar Zab bag, Bayan-Ovoo.

2.13 Ankle Bone Shooting

Interestingly, the ankle bone shooting game became quite popular among Mongolian men after 1990s as one type of sport. It is interesting since during socialism everything connected to Mongolian tradition assumed as backward and undeveloped and it was not popular and well known by people. It became 4th type of National Holiday of Mongolia-Naadam, it was one supportive reason, and however, it is still interesting why it became so popular today. This was well disseminated and well developed in Khanbogd and other target area soums. Herder Bandia is a champion member of Khanbogd team and he has many students now. The Ankle Bone Shooting game players say that it brings to players characteristics of respect to elders, take solid discipline and being patient.
2.14 Taboo Customs of South-Gobi people

Taboo system of culture is a part of that carries ethics, meaning and symbolism of that culture, though it will be important to develop cultural heritage system and for understanding of this area meaning and structure. Research of taboo customs of South-Gobi people will be continued through further fieldwork and research. Through this fieldwork we have explored taboo related to camel meat (it is not appropriate to bring camel meat in the front of deity), stone ger building game’s stones shouldn’t be left in the old camp, don’t carry horn of orongo in the camel, it can hurt pregnant mare. Also, buils tree is not preferred to be made fire etc.

Bandia, a herder of Javkhlant bag, Khanbogd soum, told that once Dolio Myatav of Manlai soum left his son’s 2 camel stones of the game at the old camp. Then the son became invalid. Camel meat was assumed as impure and people refuse to visit a family which uses camel meat. South-Gobi people assume that camel is focal point of South-Gobi culture, however camel meat is seen as impure is interesting. We need to investigate the circumstances of this camel meat taboo when it appeared what is meaning.

There are other taboos like sheep head should be put in the knee when it is going to be killed; no urine in the top of the hills and mountain; and don’t hunt wild-sheep and gazelle when they are transferring from one mountain to the next.
2.15 Religions and Shamans

Same with other parts of Mongolia there were many Buddhist monasteries in this area which founded 18–20 centuries. Now, Demchig, Puntsagtegchilen and Ulgii monasteries revived their religious activities and in the area. According to stories and memoirs told by Bayan-Ovoo and Manlai elders, it is observed that Shankh monastery in Tsogt-tsetsii was one of the key centers for ritual and festivities for this area people. Also there were been mentioned Urtyn, and Ehen Zagiin monasteries of Nomgon soum. Though these monasteries structured one Buddhist cultural area pre-revolution time. Bayan-Ovoo soum elders carry precious stories on history and tradition on Nalikh and Doloon Shag Zag monasteries in this area. L. Bataa and Tseden-Ish were been learning in Nalikh and Doloon Shar Zag monasteries in their childhood. As L. Bataa carries religious knowledge about this area gave reference on the owhrsipped obos of Bayan-Ovoo soum. He said the original and dedicated praying is forgotten though it is not possible to revive the ritual of the some of the obos of Bayan-Ovoo soum. If the ritual praying is forgotten it shouldn’t be made any worshipping ritual.

Three main oboos of 3 bags of Bayan-Ovoo are the places where curses are buried made by one of the leading monks of Doloon Sha Zag monastery when he argued with the banner governor.

There are around 20 shamans in Khanbogd soum and they conduct constant shamanistic ritual like calling spirit-ongod duudakh. They are the shamans from outside and identified from Khanbogd as well. There was an obo in Manlai soun which was said that it was erected by Khanbogd shamans. We asked permission to meet shaman Ochir in Khanbogd, however he refused that it is not appreciable to meet people from different area and staying for a while. We will study more on the shamans’ interpretation and narratives on this area.

Monastery in Khanbogd soum center
3. LIVING IN NOMADIC HERDING WAY OF LIFE

3.1 Choice of Herding Way of Life

As we acknowledged in the 1st section that pastoral herding way of life is fundamental order and core structure of Mongolian culture. If this fundamental order’s structure changes all other culture will be changed and broken drastically. Therefore, who and under what condition choose herding way of life and their behavior were our focus interest. First of all we are interested in changes in pastoral herding way of life and difficulties herders are facing.

To continue pastoral herding way of life there are the following changes and difficulties to herders; pasture degradation, lack of long travel pasture availability, veteran service is not guaranteed, cattle reproduction policy and regulation is limited and being connected to the market etc.

However, except the years experienced herders there are young herding families which see herding way of life as potential resource and beneficial way of life. Therefore, it is becoming popular to publish and distribute books on guidance to herding way of life dedicated to these new and young herders.

New herders cannot inherit winter camp, though they can use others. Herders who have herding ancestors inherit winter camp-buuts is important advantage for them. At the moment new and young herders’ appearance is limited in this area because new building of winter camp is limited in due to pasture usage. It is very good condition to intangible heritage in this area. This current structure is supportive to experienced an inherited herders not new herders.

According to our fieldwork the new herders were can be poor families of the soum centers. They are not decided to herd livestock for a long time. We call them as “mobile herder” who lives in herding way of life for certain period of time, not permanently. In terms of intangible heritage account they do not carry herding knowledge and tradition. On the other hand in due to their lack of knowledge of herding way of life they are eager to change and try something inexperienced or inherited. These mobile herders can be people who are potential to hurt and change structure and heritage of herding culture.

One interesting change in herding family is living separated in due to look after children in school one of parents come together with them to soum center, especially child is in first grade.
Also, young herding family has less children than before. As Altangerel and his wife of Manlai soum, told us “We are not interested in to have many children. We do not want to waste all our life looking after children and becoming backward from quick development and changes.” Some young herding household chooses to live in soum center when they lose cattle in harsh winter.

Young herder Galaa built house in his winter camp last year and he thinks that herding way of life is possible way to life wealthy and happy.

![Herder Altangerel and his wife, Manlai soum](image1.jpg)

Herder Galaa built house in his winter camp-buuts.

### 3.2 Knowledge on Pasture and Water

Adya is an elder who carried thorough knowledge on pasture and waters of Manlai soum. (His detailed talk on pasture is recorded in video recording)

"Before this area had rich zag (Gobi tree). Zag was in the between of river and valley. Unfortunately it is finished now while people used for fire making. I wish there should be a lot of zag in the south of our land. There is a water of Khangai, and Toliin Khudag which is explored by wild-horse. Our pasture consists mainly of khargana and bushes. There is area in the south-west where has shavag and ground is soft and dusty. In spring and autumn this area is quite dusty. Taana and borig are main grasses for cattle-feed.”

![Herder Altangerel](image2.jpg)

![Herder Altangerel](image3.jpg)
3.3 Herding Knowledge and Ways

During socialist time the 4 bags of Khanbog soum were identified the area for 4 cattle like camel, sheep, horse and goat bags. This organization is no longer survived today. Elder-herder of Javkhlan bag, Khanbogd soum, told “Gaviluud became for sheep and horse area in 1962. Also, exactly this time artificial insemination started.”

Herder Rashnyam is sorry about that “a male-camel should be replaced in every 5 years. Unfortunately, this regulation is coming to be lost in recent years”.

Gobi plant zasgal is a real appropriate plant to feed goat. Especially if you feed goats in spring they will die in any harsh spring. Also, Red Bush-Ulaan Budargana is is the best harsh winter cattle-feed. Any time and through any wind it survives alone in gobi.

3.4 Cattle Fence and Cattle Waste Use

Cattle-fences of herders in the area are erected mainly by stone and cattle-waste (khur, khurzun). The last year khur is used for making fire, herder Gendensuren Enkhbayasgalan, Manlai soum, removed the old waste of winter camp for making fire. Herders talked this year the quality of hur became low due to Chinese cattle-feed which used last year’s harsh winter. Since cattle have fed by that cattle-feed their waste deteriorated.
Shepherd dogs are inseparable part of Mongolian herding way of life. They are guard for livestock protecting attacks of wolves and inform guests are approaching to the gers. South-gobi herders have as people name “real Mongolian dogs” which are big and their barking is husky. Historically this real Mongolian shepherd brought from Tibet according to trading road. So these kinds of dogs are popular in southern area of Mongolia. We have seen that shepherds kept features of these Mongolian dogs. Also, there were dogs mixed with different types. However, herders still prefer “Mongolian shepherd.”
Shepherd of herder
Enkhbayasgalan, Manlai soum

Shepherd of herder
Lenten, Javkhlant bag, Khanbogd soum

Shepherd of herder Tseenzen,
Khar Zag bag, Bayan-Ovoo soum

Shepherd of Rashnyam, Khar Zag bag, Bayan-Ovoo soum

Dog in Manlai soum center
# LIST OF INHERITED PLACES

<table>
<thead>
<tr>
<th>Name of Inherited Place</th>
<th>Location</th>
<th>Information Source</th>
<th>Related Ritual, Performance and Taboo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undur Bogd Uul</td>
<td></td>
<td>Vice governor of Manlai soum Uulii, herders Altangerel and Galaa</td>
<td>Sacred mountain</td>
</tr>
<tr>
<td>Khankhoryin Obo</td>
<td></td>
<td>Herder Galaa</td>
<td>Worshipped by shamans of Khanbogd soum</td>
</tr>
<tr>
<td>Zaanyi Obo</td>
<td></td>
<td>Herder Enkhbayasgalan</td>
<td>No worshipping ritual</td>
</tr>
<tr>
<td>Javkhlant Uul</td>
<td></td>
<td>Herders Bunten and Bandia</td>
<td>It has ritual in every 2 years.</td>
</tr>
<tr>
<td>Khanbogd Mountain</td>
<td></td>
<td>Herders Bunten and Bandia</td>
<td>There is worshipping ritual is performed in every 2 years.</td>
</tr>
<tr>
<td>Nomgon Mountain</td>
<td></td>
<td>Herders Bunten and Bandia</td>
<td>It has worshipping ritual. The last year, Bayasgalan and Saikhandelger sponsored the ritual.</td>
</tr>
<tr>
<td>Gyalaintoirom</td>
<td></td>
<td>Sukhbaatar, tax officer in soum center</td>
<td>Burial place dedicated to public</td>
</tr>
<tr>
<td>Ikh Ulziit</td>
<td></td>
<td>Herders Altangerel and Galaa, Manlai soum</td>
<td></td>
</tr>
<tr>
<td>Ikh Ovoot</td>
<td></td>
<td>Herders Altangerel and Galaa</td>
<td>Sacred mountain</td>
</tr>
<tr>
<td>Maanityin Obo</td>
<td></td>
<td>Herder Altangerel, Javkhlant bag, Khanbogd soum</td>
<td>Burial and sacred place dedicated to ancestor</td>
</tr>
<tr>
<td>Alag Deliin Obo</td>
<td></td>
<td>Herder Altangerel, Javkhlant bag, Khanbogd soum</td>
<td>Sacred place, no ritual</td>
</tr>
<tr>
<td>Shavgiin Duulga</td>
<td></td>
<td>Altangerel, a herder, Javkhlant bag, Khanbogd</td>
<td>Sacred mountain, no ritual</td>
</tr>
<tr>
<td>Khachivtsiin Duulga</td>
<td></td>
<td>Altangerel, a herder, Javkhlant bag, Khanbogd</td>
<td>Sacred mountain, no ritual</td>
</tr>
<tr>
<td>Dalain Duulga</td>
<td></td>
<td>Altangerel, a herder, Javkhlant bag, Khanbogd</td>
<td>Sacred mountain, no ritual</td>
</tr>
<tr>
<td>Name of Inherited Place</td>
<td>Location</td>
<td>Information Source</td>
<td>Related Ritual, Performance and Taboo</td>
</tr>
<tr>
<td>------------------------</td>
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</tr>
<tr>
<td>Khuren Khairkhan Obo</td>
<td></td>
<td>Camel-herder Otgooloi</td>
<td>It is obo for kinship members of Udaid, has ritual but it has no fixed term</td>
</tr>
<tr>
<td>Bor Khoshuunii Obo</td>
<td></td>
<td>Herder Lenten in Enger Bag Mod, Javkhlant bag, Khanbogd soum</td>
<td>Sacred cairn, no ritual</td>
</tr>
<tr>
<td>Tolyin Us</td>
<td></td>
<td>Herder Bandia, camping in Enger Bag Modnyi Huuvur, Javkhlant bag, Khanbogd soum</td>
<td>It is well known water which is said that it is explored by wild-horse.</td>
</tr>
<tr>
<td>Yamaat Ulaanyi Cave</td>
<td></td>
<td>Herder Batsukh, Javkhlant bag, Khanbogd</td>
<td>It is worshipped by Bayan-Ovoo people such as Shaabaatar</td>
</tr>
<tr>
<td>Togoo Khairkhan</td>
<td></td>
<td>Herder Rashnyam</td>
<td>Mogoibag worships, it has ritual.</td>
</tr>
<tr>
<td>Sharkhadnyi Buuts</td>
<td></td>
<td>Herder Rashnyam</td>
<td>Sacred place, no ritual</td>
</tr>
<tr>
<td>Uneged and Seruun Khairkhan</td>
<td></td>
<td>Herder L. Bataa</td>
<td>Sacred, no ritual</td>
</tr>
<tr>
<td>Tsagaan-Ovoo</td>
<td></td>
<td>Sukhbaatar, tax officer of Bayan-Ovoo soum</td>
<td>Burial place of Mogoibag</td>
</tr>
<tr>
<td>Shar Del</td>
<td></td>
<td>Sukhbaatar, tax officer of Bayan-Ovoo soum</td>
<td></td>
</tr>
<tr>
<td>Khadan Tsohionyi Denj</td>
<td></td>
<td>Sukhbaatar, tax officer of Bayan-Ovoo soum</td>
<td></td>
</tr>
<tr>
<td>Zuun Toli</td>
<td></td>
<td>Sukhbaatar, tax officer of Bayan-Ovoo soum</td>
<td></td>
</tr>
<tr>
<td>Khar-Ovoo</td>
<td></td>
<td>Sukhbaatar, tax officer of Bayan-Ovoo soum</td>
<td></td>
</tr>
<tr>
<td>Ruin and trace of Doloon Shar Zag monastery</td>
<td></td>
<td>Herder L. Bataa</td>
<td></td>
</tr>
<tr>
<td>Ruin and trace of Nalikh monastery</td>
<td></td>
<td>Herder Tseden-Ish</td>
<td></td>
</tr>
<tr>
<td>Name of Inherited Place</td>
<td>Location</td>
<td>Information Source</td>
<td>Related Ritual, Performance and Taboo</td>
</tr>
<tr>
<td>------------------------</td>
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<td>--------------------------------------</td>
</tr>
<tr>
<td>Shuvuun Numt Ovoo</td>
<td></td>
<td>Rashnyam, herder and environment officer of Bayan-Ovoo soum</td>
<td>It is said that cairn worshipped by Chinggis Khaan for calling war-spirit. Rashnyam is himself a person of Mangud.</td>
</tr>
<tr>
<td>Bukh Khairkhan</td>
<td></td>
<td>L. Bataa</td>
<td>Sacred, but no ritual due to not finding proper praying book.</td>
</tr>
<tr>
<td>Ashig Khairkhan</td>
<td></td>
<td>Herder Ts. Munkhbat</td>
<td>It is worshipped by Khar Zag bag</td>
</tr>
<tr>
<td>Khukh Ovoo</td>
<td></td>
<td>Herder Ts. Munkhbat</td>
<td>It is worshipped by Nalikh bag</td>
</tr>
<tr>
<td>Ulziit Khairkhan</td>
<td></td>
<td>Herder L. Bataa</td>
<td>It was said that it was worshipped by Ganjirvaar incarnate. Also, it is called cairn for children.</td>
</tr>
</tbody>
</table>
Zaanyi Ovoo and Shirnen Khoovon’s horse hiding place, Manlai soum

Maantryin Obo, herder Ts. Altangerel’s ancestral burial place and worshipping cairn.

Three Duulga in Javkhlan bag, Khanbogd soum, sacred mountains.

Shuvuun Numt Ovoo, Khar Zag bag, Bayan-Ovoo soum
LIST OF THE PEOPLE WHO CARRIED INTANGIBLE HERITAGE

<table>
<thead>
<tr>
<th></th>
<th>Name</th>
<th>Age</th>
<th>Profession and Affiliation</th>
<th>Location</th>
<th>Intangible Heritage Carried By</th>
<th>Source of Intangible Heritage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Enkhbayasgalan and Byambasuren</td>
<td>39, 32</td>
<td>Herders (spouses)</td>
<td>Manlai soum</td>
<td>Zaanyi Obo and Khoovon Shirmen’s place to hide horses</td>
<td>From father and neighbor families and people</td>
</tr>
<tr>
<td>2</td>
<td>Sugir</td>
<td>67</td>
<td>Smith</td>
<td>Manlai soum center</td>
<td>Craft wooden facilities</td>
<td>Hereditary knowledge</td>
</tr>
<tr>
<td>3</td>
<td>Juulkhuu</td>
<td>70</td>
<td>Pensioner</td>
<td>Manlai soum center</td>
<td>Makes felt carpet-dugluur and toirog</td>
<td>Hereditary and partly learnt</td>
</tr>
<tr>
<td>4</td>
<td>Uulii</td>
<td>57</td>
<td>Vice governor of Manlai soum</td>
<td>Center of Manlai soum</td>
<td>Knows stories about Manlai soum environment and history</td>
<td>Learnt from elders of Manlai soum</td>
</tr>
<tr>
<td>5</td>
<td>Shagdarsuren</td>
<td>60</td>
<td>Herder</td>
<td>Uguumur bag, Manlai soum</td>
<td>The grand-son of last Chinggisid noble of the banner. He inherited grand-father’s snuff-box.</td>
<td>His mother and uncles told him and learnt from historical books</td>
</tr>
<tr>
<td>6</td>
<td>Galaa</td>
<td>42</td>
<td>Herder</td>
<td>Uguumur, Manlai soum</td>
<td>Knows about Khonkhor Obo which locates near his winter camp</td>
<td>He is inherited his winter camp from his parents</td>
</tr>
<tr>
<td>7</td>
<td>Sukhbaatar</td>
<td>64</td>
<td>Tax officer of Manlai soum</td>
<td>Khar Zag bag, Bayan-Ovoo soum center.</td>
<td>Knows stories, history and lineage of Manlai people and carries old manuscript on long song and history.</td>
<td>He has noble root and learnt from elders and researched himself.</td>
</tr>
<tr>
<td>Name</td>
<td>Age</td>
<td>Profession and Affiliation</td>
<td>Location</td>
<td>Intangible Heritage Carried By</td>
<td>Source of Intangible Heritage</td>
<td></td>
</tr>
<tr>
<td>----------</td>
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<td>------------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Bunten</td>
<td>65</td>
<td>Herder</td>
<td>Javkhant bag, Khanbogd</td>
<td>Knows history and stories on Undain Water area and Khanbogd soum and people</td>
<td>He was a bag governor over 20 years.</td>
<td></td>
</tr>
<tr>
<td>Bandia</td>
<td>70</td>
<td>Herder</td>
<td>Javkhant bag, Khanbogd</td>
<td>He is a ankle bone shooter, though carries knowledge on this area and Khanbogd environment.</td>
<td>He was environment officer of Khanbogd.</td>
<td></td>
</tr>
<tr>
<td>S. Batsukh</td>
<td>72</td>
<td>Herder</td>
<td>Javkhant bag, Khanbogd</td>
<td>He composed Blessing Poem dedicated to Khanbogd people and keeps silver bowl made by Uran Bazar and locker made by Suntag smith.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ts. Altangerel</td>
<td>31</td>
<td>Herder</td>
<td>Javkhant bag, Khanbogd</td>
<td>He wears silver bracelet made by Undur Luvsan smith.</td>
<td>When he was 7 his mother presented him that bracelet.</td>
<td></td>
</tr>
<tr>
<td>Tseenzen</td>
<td>78</td>
<td>Herder</td>
<td>Kharzag bag, Bayan-Ovoo soum</td>
<td>He is a long song singer and knows features of Gobi Shankh long songs. His sons craft wooden and metal puzzles.</td>
<td>Hereditary, his bothers are great singers and play morin khuur.</td>
<td></td>
</tr>
<tr>
<td>Rashnyam</td>
<td>72</td>
<td>Herder, and environment officer</td>
<td>Khar Zag bag, Bayan-Ovoo soum</td>
<td>He knows places and waters of Bayan-Ovoo soum and keeps tools of smith Suntag.</td>
<td>Hereditary, he is a grand-son of Suntag smith.</td>
<td></td>
</tr>
<tr>
<td>Suhee</td>
<td>61</td>
<td>Herder, Rashnyam’s wife</td>
<td>Khar Zag bag, Bayan-Ovoo soum</td>
<td>The Best Border-Guard and has knowledge about trace investigation.</td>
<td>Learnt by herself.</td>
<td></td>
</tr>
<tr>
<td>L. Bataa</td>
<td>78</td>
<td>Herder</td>
<td>Nalikh bag, Bayan-Ovoo soum</td>
<td>He knows many stories about Doloon Shar Zag monastery, great monks of this area and lyrics of old long songs.</td>
<td>He was learning in the monastery and learnt from his uncle.</td>
<td></td>
</tr>
<tr>
<td>Tseden-Ish</td>
<td>74</td>
<td>Herder</td>
<td>Nalikh bag, Bayan-Ovoo soum</td>
<td>He was learning in Nalikh monastery and knows about this monastery and Bajuun flour.</td>
<td>Learnt from herding way of life and people.</td>
<td></td>
</tr>
</tbody>
</table>
# MIHT MONGOLIAN INTERNATIONAL HERITAGE TEAM

<table>
<thead>
<tr>
<th>#</th>
<th>Name</th>
<th>Age</th>
<th>Profession and Affiliation</th>
<th>Location</th>
<th>Intangible Heritage Carried By</th>
<th>Source of Intangible Heritage</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>D. Byamba</td>
<td>72</td>
<td>Pensioner and teacher for long song training course at the 3rd school of Dalanzadgad</td>
<td>Dalanzadgad soum</td>
<td>He knows about long song of this area and features of it.</td>
<td>He learnt from long song singers of previous generation.</td>
</tr>
<tr>
<td>18</td>
<td>U. Batnyam</td>
<td>71</td>
<td>Pensioner and teacher for smith-crafting training in Dalanzadgad</td>
<td>Dalanzadgad soum</td>
<td>He is a smith and knows what if Noyon-Sevrei school of smith and related stories and myths.</td>
<td>Hereditary and learnt by himself.</td>
</tr>
<tr>
<td>19</td>
<td>Tumurtogoo</td>
<td>68</td>
<td>Pensioner</td>
<td>Dalanzadgad soum</td>
<td>He keeps wooden chess and knows smith-crafting of this area.</td>
<td>Learnt from people.</td>
</tr>
<tr>
<td>20</td>
<td>Borkhuu</td>
<td>57</td>
<td>Herder</td>
<td>Javkhlant bag, Khanbogd</td>
<td>He is a silver smith and knows about silver bowl</td>
<td>Learnt from smith people</td>
</tr>
<tr>
<td>21</td>
<td>Aviraa</td>
<td>64</td>
<td>Pensioner</td>
<td>Khanbogd soum center</td>
<td>Long song singer and knows long song singers of Khanbogd soum.</td>
<td>Learnt from long song singers of Khanbogd</td>
</tr>
</tbody>
</table>

## TOPONYM

The changed toponyms along area of Tavan-Tolgoi Trans road.

- Deliin Buuts-Choiigiin Tokhao
- Zamyin Huuvur-Shine Dund
- Khar-Tolgoi- Huuchin Dund
- Khukh Uzuur – Suljeenii Guanz
STORIES, LEGENDS AND ORAL HISTORY

(All stories and legends are recorded and transcribed some of them in Mongolian)

- Story of Geser Gelen and three long songs of Gobi-Shankh
- Stories on Suntag smith
- Stories on Undur Luvsan smith
- Stories of Ganjirvaa incarnate
- Story of Khachig mountain
- Stories of Nalikh and Togoo Khairkhan
- Story of Uneged Khairkhan
- Story on Zovkhi Baldandorj
- Story of smith Dorj
- Story of Bukh Khairkhan

FINDINGS AND RESULTS OF FIELDWORK

7.1 Assessment of Intangible Heritage

7.2 The Structure and Functions of Living Intangible Heritages

7.3 What Kind of Intangible Heritage Is Leaving Behind?

7.4 What Transmission Ways Are Functioning?
## RESULTS AND CONCLUSION OF FIELDWORK

### 8.1 Intangible Heritage Assessment

<table>
<thead>
<tr>
<th>Name of Intangible Heritage (IH)</th>
<th>Transmission ways of Intangible Heritage</th>
<th>Ways of Transmission Knowledge</th>
<th>Distribution (area)</th>
<th>Coverage (people)</th>
<th>Current Usage and Future Tendency</th>
<th>Significant to Whom</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Smith-Silver-Crafting</td>
<td>People who learnt from inherited craftsmen and through training like Borkhuu, Javkhlan, Khanbogd soum</td>
<td>Inherited structure of inherited through kinship is not observed. Individual learning and training</td>
<td>Inherited silver bowl and bracelets are distributed through the area.</td>
<td>Difficult to examine, can be people who inherited objects</td>
<td>Smith-crafting is well developing in the area, it has market space according to demand of silver bowl, saddle, and saddlecloth</td>
<td>For example silver bowl can be significant to every family and kinship and people give meaning to it. The old styles of silver-crafting are not familiar to public, and new ways are coming.</td>
</tr>
<tr>
<td>2 Long Song and Blessing Poem</td>
<td>A few long song singers who learnt from previous singers. They are Tseenenzen, Bataa, Aviraa and Byambaa</td>
<td>Learnt from long song singers individually and family tradition</td>
<td>4 soum have long song singers</td>
<td>2-3 people in one soum</td>
<td>Interest became high; however, proper melody and lyrics are lost. There is an interest to sing unknown long songs.</td>
<td>Long song singers give high significance this heritage and emphasize it is going to be lost.</td>
</tr>
<tr>
<td>3 Tsulkhir and Bajuun Flour</td>
<td>The elders in 4 soums like Bataa, Rashnyan, Bunten, and Tsendeehuu</td>
<td>Experienced in their childhood through preparation and usage.</td>
<td>There are elders all 4 soums.</td>
<td>Elders and certain group of people</td>
<td>As food usage is reduced. Medical usage is well known.</td>
<td>People barely know. It is important part of Gobi people's knowledge of herb, plants and related culture.</td>
</tr>
<tr>
<td>4 Cattle-Stamp</td>
<td>Every herding family uses cattle-stamp which inherited from ancestor.</td>
<td>Inherited from previous generation.</td>
<td>Distributed in 4 soums</td>
<td>Descendant herding families</td>
<td>High usage</td>
<td>It carries important knowledge on ancestor and symbolization</td>
</tr>
</tbody>
</table>

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CULTURAL HERITAGE PROGRAM – PHASE 1 REPORT
February 2011

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## Transmission ways of Intangible Heritage

<table>
<thead>
<tr>
<th>Name of Intangible Heritage (IH)</th>
<th>Ways of Transmission Knowledge</th>
<th>Distribution (area)</th>
<th>Coverage (people)</th>
<th>Current Usage and Future Tendency</th>
<th>Significant to Whom</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>5 Living and making Mongolian Ger and Ger facilities</strong></td>
<td>The most of the herding families live in ger and they carry the knowledge about ger. People living in ger as herders are carriers. However, ger traditional facilities are changing and ger making is less developed in the area.</td>
<td>Distributed in 4 soums</td>
<td>Covered all herding families</td>
<td>Except few cases herders have high usage of ger</td>
<td>Living in ger as herding way of life is comfortable to herders. But to use traditional facilities are not in high usage.</td>
</tr>
<tr>
<td><strong>6 Deities and Worshipping Objects</strong></td>
<td>Most of the families and adults and elders carry knowledge about them. Inherited from ancestors and newly worshipped.</td>
<td>In 4 soums</td>
<td>All households</td>
<td>High usage</td>
<td>Significant to worshippers</td>
</tr>
<tr>
<td><strong>7 Food and Food Diet</strong></td>
<td>Herding families have traditional food diet and herders carry knowledge about Und and other food. Since grew up in herding family</td>
<td>In 4 soums.</td>
<td>All herding households.</td>
<td>High usage in herding way of life. When they come to soum center it can be changed.</td>
<td>Significant to all herding families. Some knowledge about herb and plants which were been used for food are coming to be forgotten.</td>
</tr>
<tr>
<td><strong>8 Kinship Relationship</strong></td>
<td>Very in detail level a few people carry the knowledge like Sukhbaatar, Bayan-Ovoo. Each family members know their kinship affiliation. Within family and kinship relationship</td>
<td>In 4 soums</td>
<td>It covered all families due to government policy to revive kinship name</td>
<td>It should be written in ID and it is not clear other functions</td>
<td>Some kinships have kinship meeting and festive. It should have certain function.</td>
</tr>
<tr>
<td></td>
<td>Name of Intangible Heritage (IH)</td>
<td>Transmission ways of Intangible Heritage</td>
<td>Significance and Value of Intangible Heritage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---------------------------------</td>
<td>-----------------------------------------</td>
<td>---------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>People Carried IH</td>
<td>Ways of Transmission Knowledge</td>
<td>Distribution (area)</td>
<td>Coverage (people)</td>
<td>Current Usage and Future Tendency</td>
</tr>
<tr>
<td>9</td>
<td>Stone Ger and Other Games</td>
<td>Herders of above 40 year old played stone ger game and now it is no longer in use.</td>
<td>Learnt in herding way of life.</td>
<td>In 4 soums</td>
<td>Herders above 40 years old</td>
</tr>
<tr>
<td>10</td>
<td>Ankle-Bone Shooting</td>
<td>Ankle bone shooting game players</td>
<td>Learnt from previous generation players individually and as a team as well.</td>
<td>In 4 soums</td>
<td>Distributed within players</td>
</tr>
<tr>
<td>11</td>
<td>Taboo of Gobi people</td>
<td>Herding families carry traditional customs and taboo</td>
<td>Learn within herding way of life</td>
<td>In 4 soums</td>
<td>Inherited herding families</td>
</tr>
<tr>
<td>12</td>
<td>Religion and Shamanism</td>
<td>Follower, believers and worshippers and religious monks</td>
<td>Deities and sutras are inherited from ancestors</td>
<td>In 4 soums</td>
<td>Public of this area</td>
</tr>
</tbody>
</table>
8.2 What Kind of Intangible Heritage is Functioning?

As we mentioned above we have identified Intangible Heritage according to local people perception in the process interviewing with them. Above assessed 12 intangible heritages, as we consider they are the front line intangible heritages local people practice and want keep further. Assessing the intangible heritage which identified through local people perceptions through the developed measurements we have found out that silver-smith, ankle bone game and shamans are in active functioning. The main features of them are they well adjusted to current social condition as they comprise many people and deliverable to whole community. They left old structure of functioning among a few people and became accessible and open to public. For example silver-smith has its own market in due to crafting facilities demanded by herding community such as silver bowl, saddlecloth and harness. As have seen in above silver-smith existed among a few smiths and small community hiding their techniques. However, as we have seen modern smith U. Batnyam learnt from all schools of Shouth-Gobi smith-crafting and giving those knowledge to public through training young smiths. Now U. Batnym has around 70 students on silver-smith and he could preserve Noyon-Sevrei unique school of silver-smith and developed further. The way of transmission of smith-crafting hereditary and to hide technology was the only way to keep the market. This transmission of intangible heritage is changed and shifted to available and accessible to public. Then this case it is surviving and developing further.

Concluding from this case if the knowledge and information about the intangible heritage become open and deliverable to public there appears market, usage and it will be condition of preservation, surviving and development.

Ankle Bone Shooting game became popular in due its comprising as possible as many people and accessible to public, enabling to meet and relate people. Therefore it is developing further.

8.3 What Kind of Intangible Heritage Is Left Behind?

As you observed above taboo related customs and long song singing are left behind through our fieldwork findings. People do not know taboo related customs and not following them or there are appeared new interpretations. Therefore, it is difficult to say that traditional taboo related customs or new ones. They are always carry new interpretations. For example 4 obos in Bayan-Ovoo soum interpreted by L. Bataa they obos that curses are hiden, they are no longer available to be worshipped because their dedicated praying are forgotten. They are not worshipped but they are sacred. As he assumes if there is not clear the dedicated praying is found that obo shouldn't be worshipped, they should be sacred otherwise. If the proper customs are forgotten they are becoming sacred and taboo related customs.
Therefore, the intangible heritage which left behind or less practiced are 1st, the related knowledge and information are disappeared and 2nd, the transmission structure is changed and no more transmitting to people.

Also, long song singer Tseenzen thinks that Gobi long song tradition is going to be lost. As we have found through our fieldwork it was in due to loss of proper lyrics, and proper melody. Tendency in Gobi long song was to publish compilation of long song lyrics, and misled lyrics should be corrected. Also, hereditary transmission became less and people want to learn skilled singers. But there is no contact regulation and organization. Therefore, without proper knowledge and information, transmission way intangible heritage is coming to be lost.
19. APPENDIX 10: PURPOSE OF PUBLIC PROGRAM FIELD WORK

J. Gerelbadrakh

The Public Programs team conducted three field sessions during Phase 1 of the OT CHP Design. Below we summarize the purpose of each field trip.

7 to 17 July 2010

The research team included J. Gerelbadrakh, Public Programs Team leader for the OT CHP and Professor, Department of Mongolian History, Mongolian State University of Education; research assistant Sh. Erdenebat, Researcher, National Archives of Mongolia; and G. Dorj, driver. The objective of this fieldwork focused on the celebration of the Naadam festival throughout Ömnögovi aimag, comparing Naadam festival specifically with the one sponsored by OT. We wanted to examine the OT Naadam festival with respect to restorations and changes that could be attributed to the impact of the development of the OT mine site (increased numbers of foreigners, increased commercial products, etc) on this traditional Mongolian holiday. The following themes were the subject of the fieldwork:

- The preservation of traditional Naadam festivals based on wrestling (bökh), horse racing, traditional clothing worn by participants in the Naadam festival, and other cultural events.

- Comparison of the Naadam festival with other holidays and traditional ceremonial activities to draw conclusions about the holiday’s current practice and significance.

- Preparation of a bilingual (Mongolian-English) research report about the provincial Naadam festival and the large mining projects’ Naadam festival.

31 July to 9 August 2010

The research team included J. Gerelbadrakh; Sh. Chuluun, Researcher, Intangible Resources Team Leader and Director of the Institute of History, Mongolian Academy of Sciences; and G. Dorj, driver.

The objective of this field visit was to explain the purpose and methods of the CHP design project as part of participating in brigade (bag) meetings in Gavilyyd, Bayan, Javkhlant, and Nomgon. We also examined the possibility of developing tourism focusing on natural resources and historical monuments in the territories of each soum. Ideas were also exchanged concerning cultural heritage policy and activities after becoming acquainted with
the Galba Museum and soum cultural center. A bilingual (Mongolian-English) report of this research activity was prepared.

**21 to 28 November 2010**

The research team included J. Gerelbadrakh; research assistant Sh. Erdenebat, Researcher, National Archives of Mongolia; and T. Boldbaatar, driver.

The main purpose of this research effort was to learn which policies have been and are being followed by local administrative offices regarding the protection and preservation of traditional cultural heritage in the Gobi region when so many large mining operations are being initiated with an eye toward getting feedback on how local organizations might implement public programs. The following specific activities were undertaken:

- Became acquainted with the activities of Musical Drama Theater, cultural center and local study center of Ömnögovi aimag.

- Became acquainted with the tourism work of the Department of Environment, Nature and Tourism of the local government and investigated the province’s present tourism conditions.

- Met with school principals and teachers in Khanbogd, Manlai and Bayan-Ovoo soums and exchanged ideas about local cultural heritage public programs.

- Became acquainted with the cultural heritage work of the Education and Cultural Bureau within the aimag Governor’s office and drew conclusions based on those meetings.

- Completed first stage of proposal and conclusions about ways to improve existing and create new forms of tourism in Khanbogd soum (e.g., natural, World Energy Center, animal husbandry/pastoralism, history and culture, etc.).

- Completed initial research about numbers of hotels, their capacities and service quality, tourist camp capacities, seasons of operation, and the use of small hotels in four brigades (bags) to determine possibilities for developing tourism.

- Attended and observed the “Thousand Baby Camel Festival” held in Bayan brigade, Khanbogd soum.

- A bilingual (Mongolian-English) report of this research activity was prepared.
20. **APPENDIX 11: INTERIM REPORT ON NAADAM FIELDWORK**

**Report on intangible cultural heritage research in Dalanzadgad and Khanbogd districts of South Gobi province of the “Oyu Tolgoi” project**

**July 16, 2010 Ulaanbaatar**

The aim of this research was to observe and collect information about the traditional summer festival of Mongols, “Naadam”, on the examples of South Gobi province and Oyu Tolgoi’s Naadams, and document the changes that occur on the festivals due to exploitation of big mines in the Gobi regions of Mongolia.

The research team “Cultural Heritage Program” of the “Oyu Tolgoi” project was led by Professor J.Gerelbardrakh from the Pedagogical University of Mongolia, and also included Sh.Erdenebat from the Central National Archive and driver G.Dorj. The field research lasted for 6 days or between 8-13 of July, 2010.

Following factors were observed in details and used as categories for the possible change of the summer festivals in the province.

- The South Gobi province Naadam was organized almost at the same level as other province summer festivals (except the number of racing horses), with 128 wrestlers (and 32 young wrestlers), 36 knuckle bone shooters (6 teams each with 6 shooters), 27 archers (14 adult: 8 male, 6 female; 13 children: 9 boys and 4 girls) and 313 racing horses.

- The “Oyu Tolgoi” summer festival included 3 different competitions, wrestling with 64 wrestlers, knuckle bone shooting with 28 shooters divided by 7 shooters in 4 teams, and archery competition with 35 male and 7 female archers, and lasted for 10 hours or between 10 am to 5 pm. The number of arrows used in the archery competition seems very few (8 arrow rather than 40 arrows divided into 20 wall and 20 chip arrows). The absence of horse racing is probably related to the short amount of time of the festival and in this way it makes the Oyu Tolgoi Naadam different than others. Otherwise, the Oyu Tolgoi festival was organized almost at the district Naadam level.

- It was not possible to find the exact number of people coming from other districts and provinces at the South gobi province Naadam, but most of the local people were saying that it is the same as previous years. But this year’s Oyu
Tolgoi Naadam included around 2,500 participants from 20 countries, which can be related to the number of Oyu Tolgoi workers and residents of the Khanbogd district coming to see and participate in this event. Counted were in total 163 vehicles, which makes it bigger than the number of all vehicles at Khanbogd district Naadam. Bringing so many vehicles into this small area can be harmful for the region’s poor vegetation.

- Competition prizes of South Gobi province Naadam and the Oyu Tolgoi Naadam are almost the same as other province and district summer festivals, respectively. If the prizes for wrestlers and knuckle bone shooters at the Oyu Tolgoi Naadam included medals and certain amount of money, the prizes for archers included only envelopes with money, which creates a feeling of singling out one of the traditional competitions from others.

- If the South Gobi province Naadam was sponsored from the province budget, then other cultural events, such as the “Evening show” (July 9), “Songs of my Homeland” concert (July 10), were sponsored by “Tavantolgoi” company. The Oyu Tolgoi Naadam was completely sponsored and very good organized by Oyu Tolgoi with sufficient supply of food, drinks and services. They also brought for their services the “Modern nomads” restaurant from Ulaanbaatar. The Oyu Tolgoi Naadam with no alcohol can be used as a good example for future district and province Naadams. In future, if Oyu Tolgoi start to include in their Naadam program different other smaller competitions and concerts, then this Naadam might become even more interesting and worth seeing.

- The “Oyu Tolgoi” Naadam seems to be one of the hoped-for events for local children. We suggest that if Oyu Tolgoi starts organizing interesting and different competitions and entertainment, then it might useful for these children to understand Naadam not only as a festival where people come just to eat and drink.

- Disturbing is the small number of people with traditional dresses on South Gobi province (49 people in 300) and Oyu Tolgoi Naadams. Especially the absence of Mongols with traditional dresses among Oyu Tolgoi workers and the big number of foreigners with traditional Mongolian shirts make us to think about the meaning of Naadam.

- Seemed like big amount of people go to visit spiritual places like Bayajikiin Cave at Khanbogd Mountain, Ekhiin Umai rock and Demchig’s monastery. Embarrassing was the amount of vodka and other drinks that people were
bringing at these places, followed by littering and polluting the environment. Seems like reminding boards should be built up at these places.

Seems like the Naadams of South Gobi province and Oyu Tolgoi both carry lots of characteristics of Naadams at other places, just except small details and the absence of horse racing at Oyu Tolgoi Naadam.

Report written by

Prof. J. Gerelbadrakh
APPENDIX 12: NAADAM REPORT

Interim narrative report of the research work on a heritage of mental culture conducted by the research team for “Cultural heritage program” of “Oyutolgoi” project in Khanbogd soum, Umnugovi aimag

15 August 2010

During last years bigger deposits of minerals have been discovered in govi and desert areas of Mongolia. In connection with the discovery, traditional cultural heritages or non-material cultural heritages of the Mongols have been changed, innovated and some of them have been forgotten. However local authorities and some of mining companies pay attention to preserve the cultural heritage of local people. For instance “Oyutolgoi mine” LLC funds “Cultural heritage program”. In keeping with the program the research team conducted the research work in Khanbogd sum of Umnugovi province. In general, the small research was aimed at demonstrating of National Naadam festival and its’ history and innovation based on the Naadam event celebrated in Umnugovi aimag and in “Oyutolgoi” project.

Dr. J. Gerelbadrakh (researcher of the research team) an associate professor of the Department of Mongolian History, Mongolian State University of Education, Mr. Sh. Erdenebat (assistant researcher) researcher of the National Central Archive and Mr. G. Dorj (driver) worked in Khanbogd and Dalanzadgad sums of Umnugovi province on 8–13 July, 2010.

A. Naadam Festival of Umnugovi Province

Inhabitants of Umnugovi province annually celebrate the Naadam festival on 9-10 July, not on 11–12 July. This year, the Naadam festival, 804th Anniversary of Great Mongol Empire, 89th Anniversary of People's revolution and 79th Anniversary of Umnugovi province were celebrated in the 2 days (9–10 July).

The Naadam ceremony opened at 10am, 9 July 2010 with official speech by Mr. J. Badraa, the governor of Umnugovi province and the anthem of Mongolia. The governor was standing on a small arena and giving a speech. 10 outstanding workers, students and staffs raised the state flag. After that 40 minute ceremonial concert was held in the stadium by actors of Opera theatre of Umnugovi province. The concert program consisted of performances including Morin khuur quartet, Zakhchin folk dance, Eulogy of the Altai, songs “Amar jargalant”, “Bi mongol er..."
khun (I’m a Mongol man)“and “Uulen bor,” performance of Morin khuur suit by secondary school students and etc. Wrestlers and archers circled and showed their respect towards the state flag which is situated on wrestling ground. We noticed that very few people were wearing traditional dresses among the Naadam participants. We conducted survey among 350 people sitting left wing of the stadium and counted the number of people wearing national costume. There were 49 people who wore traditional dress and most of them were elderly people. 16 people were wearing Mongolian jacket and most of them were ladies. It means for the Mongols the wearing of traditional dress has been decreasing influenced by the modernization and globalization. Even during the Naadam festival many people don’t wear national dress.

National wrestling. After the concert first round of national wrestling started. 256 wrestlers participated in the Naadam and, 4 wrestlers came from Uvurkhangai, Arkhangai and Dundgovi provinces and others were local wrestlers and army troops. In first day first and second rounds held and finished at 6 pm. At second day of the Naadam 3–7th rounds held.

Prizes and awards for wrestlers:

Winners of 1st round – 5000 MNT (1.5 water boiler)

Winners of 2nd round – 10000 MNT (2.5 l potato roaster)

Winners of 3rd round – 20000 MNT

Winners of 4th round – 40000 MNT

Winners of 5th round – 60000 MNT

Winners of 6th round – 100000 MNT

Runner up – 150000 ₮

Winner of the Naadam – 200000 MNT. Winners of 1-6th rounds got non-monetary prizes. 32 junior boys wrestled and got following prizes:

Winners of 1st round - 3000 MNT

Winners of 2nd round - 5000 MNT

Winners of 3rd round -10000 MNT

Runner up or winner of 4th round - 40000 MNT

Winner of the Naadam - 50000 MNT.
Winners of the Naadam got golden medal, diploma, certificate and badge of title. Runners up or semifinalists got silver medal, diploma, certificate and badge of title. Quarter-finalists got bronze medal and diploma.

Light athletics competition (400 meter and 800 meter running) was organized in the first day of the Naadam and winners got prizes of 9000, 7000 and 5000 MNT. Prize fund was 200000MNT. Prize fund for chess competition was 150000MNT.

National archery. There is an archery ground in the east side of the aimag stadium. Male and female adult archers shot 20 wall targets and 20 elimination targets (total 40 targets) and junior archers shot 20 wall targets and 12 elimination targets (total 32 targets) in two days of the Naadam. Male adult archers shoot in 75 meter distance and female adult archers shoot in 65 meter distance. Kids or junior archers shoot in 35–65 meter distance depending on their age. (6–9 years old 35 meters 9–12 years old 45 meters, 12–16 years old 55 meters, 16–18 years old 65 meters).

All of archers participating in the Naadam were wearing national dress (deel) and hats. It proves that archers preserve Mongol custom and national tradition very well.

Wall targets consist of 60 targets put in 3 layers and elimination targets consist of 32 targets put in 2 layers. Crease-lines are drawn in front of and behind the wall targets (in 2,5 meter distance). If an arrow falls inside of the crease-line then it is considered the arrow managed to hit the mark or the target. A scorer stands near the target and calls out the results of each shot in a traditional melody: overshoot, fall short, go wide or bounce before the target and pass over it. An arrow which passes between to cylinders still scores. 8 male adult archers, 6 female adult archers and 13 kids (9 boys and 4 girls) participated in the archery. Some of archers had gone to the capital city to participate in the state Naadam. Two boys drew and “shot tovkh.” “Tovkh shooting” is organized among two contestants who drew in final. Two archers go backward by one step and shoot once towards targets with 16–18 targets. If both archers hit targets then they retreat again by one step and shoot once again. The winners of the contest were granted the titles of "province marksman” and "province markswoman," golden medal, diploma, 150000MNT. Archers gained second place of the contest were granted silver medal, diploma and 100000MNT. Archers gained third place were granted bronze medal, diploma and 80000MNT. Kids gained first, second and third places were granted golden, silver and bronze medals and 20000MNT, 15000MNT and 10000MNT. All of archers ought to get some money by their scores. However members of archery contest commission have granted equal amounts of money to all of archers (This year 80000MNT were budgeted as score money “onoony mungu”). Also the “score money” is nicknamed as “earth money (shoroony mungu).”
Horse racing. There were not so many horses at the Naadam because of summer draught in western sums (county) of Umnugovi province. Horse race finishing line and horse racing committee situated in the north-west side of the province center or just the behind of tree-breeding station. Along two sides of horse race finishing line, limestone was dumped, small wooden poles were erected and these poles were tied by copes. It enabled people to see horse racing very well and also pedestrians, horsemen and cars couldn’t messily enter into finishing line. The point of departure of horse racing was in the west side and the starting point was equipped by special equipments that prevents from any confusion and muddles during the departure of horses.

Horse racing of stallions and adult horses held in the morning of first day of the Naadam or on 9 July. In the afternoon of same day the racing of fourth-year and third-year horses held. In the morning of second day of the Naadam the races of fifth-year and second-year horses were organized. Following ages and numbers of horses competed:

<table>
<thead>
<tr>
<th>Ages</th>
<th>Number</th>
<th>Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stallions -</td>
<td>47</td>
<td>23km</td>
</tr>
<tr>
<td>Adult horses</td>
<td>51</td>
<td>26km</td>
</tr>
<tr>
<td>Fourth year horses</td>
<td>50</td>
<td>18km</td>
</tr>
<tr>
<td>Third year horses</td>
<td>68</td>
<td>14km</td>
</tr>
<tr>
<td>Fifth year horses</td>
<td>55</td>
<td>23km</td>
</tr>
<tr>
<td>Second year horses</td>
<td>42</td>
<td>21km</td>
</tr>
</tbody>
</table>

We noticed that most of herders and race-horse trainers were using synthetic and artistic ropes, bridles and hobbles and we almost didn’t see herders using leather ropes, bridles and hobbles. We registered 68 third year horses and only 20 of them had traditional Mongolian saddles and others were saddled by “Jokey” saddles. Jokey saddle is European style saddle without saddle-bows and with handle in front of the seat. It shows that foreign culture exerts some influence on gears of horse racing. Most of (2/3 horsemen) race-horses wore
bridles made of artificial silk. Also girth-strap, hobbles, halters, reins and most of gears were made of artificial materials. Some horse-trainers taped their horse forelocks by rubber tapes. Perhaps, traditional methods processing of cattle skin and making of leather ropes have been lost among the herders.

We asked someone “Why did you make the hobble by artificial silk?” and he answered “Because leather rope or leather hobble is not so suitable to use. Dampened rope is very slow to desiccate. After getting dry it becomes very tough.” Actually it isn’t so big issue. There was a traditional method to spread animal fat on hardened leather rope. Also the method enables the rope keep it’s elasticity and firmness. Not only in Umnugovi province but also throughout of the country, herders are using artificial gears of horses. We had seen such artificial gears in Bayan-Agt sum of Bulgan province and in Tariat sum of Arkhangai province.

Traditional methods to process cattle skin and making leather ropes have been forgotten day by day. Usage of leather ropes has been decreasing as well. However, to some extent, the tradition has been kept among local and country people. For instance, in Adaatsag sum, Dundgovi province, leather ropes made of full skin of cattle were priced as young horse. A fathom length leather rope was priced 2000MNT. Many herders had bought leather ropes. There is a Mongolian saying “Good horse, saddle and bridle beautify a man”. But the saying has lost its’ meaning day by day. In early times many Mongolians had saddle and bridle decorated by silver. But there were very few people having silver-decorated saddles and bridles. Perhaps, last times they ceased to use silver-decorated horse gears or silver-decorated horse gears might be on sale because of their higher price.

Awards and prizes of race-horses (thousand MNT):

<table>
<thead>
<tr>
<th></th>
<th>The 1st horse in</th>
<th>Runner up 3rd place</th>
<th>4th place</th>
<th>5th place</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stallion</td>
<td>220.0</td>
<td>170.0</td>
<td>120.0</td>
<td>120.0</td>
</tr>
<tr>
<td>Adult horse</td>
<td>220.0</td>
<td>170.0</td>
<td>120.0</td>
<td>120.0</td>
</tr>
<tr>
<td>5th year horse</td>
<td>220.0</td>
<td>170.0</td>
<td>120.0</td>
<td>120.0</td>
</tr>
<tr>
<td>4th year horse</td>
<td>170.0</td>
<td>120.0</td>
<td>70.0</td>
<td>70.0</td>
</tr>
<tr>
<td>3rd year horse</td>
<td>170.0</td>
<td>120.0</td>
<td>70.0</td>
<td>70.0</td>
</tr>
<tr>
<td>2nd year horse</td>
<td>170.0</td>
<td>120.0</td>
<td>70.0</td>
<td>70.0</td>
</tr>
<tr>
<td>Last horse</td>
<td>30.0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
6 horses were awarded as last horses from each age of race-horses. Traditionally last colt had been awarded as last horse or bayan khoodood (bayan khodood – full stomach). Horses of 1st, 2nd, 3rd, 4th and 5th places were awarded by medals and red brow-protector. First horses in were awarded by golden medal, runners up were awarded by silver medal and horses taking 3rd, 4th and 5th places were awarded by bronze medals.

Each age of horses taking 6–10th places were awarded by 30000MNT and horses taking 10–20th places were awarded by 5000MNT. Some of them got silver scarf (khadag) and radio. (An interview and recording with Mr. Tsogbadrakh, the secretary of Race-horse committee of Umnugovi province is appended below). Bad habit to chase (follow) race-horses by cars has maintained still now. 17 cars were chasing 3rd year horse race.

Ankle-bone shooting. A game played by two opponents or two teams and consisting in flicking small bullets (sum) at a number of ankle-bones arranged in a row. Apart from ankle-bones other targets (khasaa) may be used. The ankle-bone shooting contest was held in two big marquees (cloth tent without walls) in the east side of province stadium.

Participants contested in two types of shooting: team shooting and individual shooting. 6 teams (6 members in each team and 1 extra member for a substitute) participated in the contest. Other 3 teams of ankle-bone shooting had gone to Ulaanbaatar to participate in the State naadam. Participants shoot 15 ankle-bones (targets) from 4.70 meter or 9 cubit distance using small bullets. Small bullets are made of root parts of antlers. The goal is to hit a target piece. Four members from two teams (2 members from each 2 teams) sit together. Each member shoots 4 bullets in a turn. Members of two teams shoot 15 targets of their team and 15 targets of other team until finishing.

Second day of the Naadam individual shooting was held. Young players were using shooting-board to shoot bullets, whereas elderly people were using small bow and arrow with cross, because the strength of their arms, hands and fingers have gone off to some extent. We would like to appreciate that the most of archers and ankle-bone players had worn Mongolian deel (dress) or jacket. We had got an interview from old man called Yerinpel.
Awards and prizes of ankle bone shooting of Umnugovi province Naadam:

Team shooting:
I. 210000 MNT (30.0 x 7 person), medal and diploma
II 140000 MNT (20.0 x 7 person) medal and diploma
III 70000 MNT (10.0 x 7 person) medal and diploma

Individual shooting:
I. 1 person 30000 MNT, medal, diploma
II 1 person 20000 MNT medal, diploma
III 1 person 10000 MNT medal, diploma

Also 2 players were awarded by special awards. They got 15000 MNT each.

During last 10 years not only in Umnugovi province but also throughout of the country the Mongols have celebrated “Manly four games” not “Manly three games”. The fourth category of Mongol naadam is ankle-bone shooting. Because of the change of Naadam program the ankle-bone shooting become fourth category of Manly games.

Other cultural events. Cultural events were widely organized during the Naadam festival of Umnugovi province. At 7–9pm of 9 July, a contest was held among couple singers or singers singing in pairs. After that or at 10 pm music show and other amusements for the public was started at main square named after T. Bor, a hero of Mongolia. The show continued until 1am of 10 July and fireworks were set off. During the night show we noticed that the stage decoration, stage lighting, musical equipments and amplifiers were very well. It was said that Mr. Ulambayar, the director of coal mining company “Tavan tolgoi” (Five hills) sponsored the show and covered all of the costs related with the show.

A performance by Opera theatre was held at 8–10pm of 10 July. In 11 July ceremonial concert “Songs of my Mongolia” was organized in the theatre. I had never seen four cultural events in same time before. Other provinces don’t organize so many cultural events during only one Naadam. So it was very impressive to see cultural events organized in Umnugovi province. Especially musicians, singers and dancers were professionally very skillful and their preparedness was fairly good.
B. Naadam festival of “Oyu tolgoi” project

In 11 July 2010, the naadam festival of “Oyu tolgoi” project was held in places called Oortsogin khundiin khoid tsokhio (North cliff of Oortsog valley) and Aman usny baruun khoid tsokhio (North-West cliff of Mouth water) which are located 27 km distances from Khanbogd sum Umnugovi province. The Naadam started at 11am. Staffs, workers and miners of the “Oyutolgoi” project had to work in 12 July, so the Naadam had to finish at 5pm of 11 July.

3 years ago or in 2007, “Oyutolgoi” project set up 28 gers with 5 wall-sections, a ger with 8 wall sections and a ger with 12 wall-sections. That is why the name of the place was changed and the name of the place has become “Arvan khoyor khanat” (12 wall-sections). We asked the original name of the place from the Naadam participants but most of them didn’t know. Some of them told us that the south valley is called Oortsog valley. It proves that names of certain places have changed under the influence of mining development. That is why the Mongols should take care on maintaining original names of places and landmarks. We got an interview related with original name of the place from Mr. Munkhhuu, a local old man. (See appended interview and recording)

Staffs and workers of “Oyu tolgoi” project and other collaborating companies and local people of Khanbogd sum of Umnugovi aimag were attended in the Naadam.

We counted flags of foreign countries raised on wrestling ground and there were 21 flags of different countries. It means representatives from 21 countries were attended in the Naadam and the Naadam became very special and unique Naadam. Most of foreign specialists attended in the Naadam as audience however some foreigners participated in archery shooting.

Three types of manly games were organized there: National wrestling, archery shooting and ankle-bone shooting. Horse racing contest is not organized here, because here the Naadam is held in a day. I think, since they are celebrating traditional Naadam, the organizers should carry out at least colt racing contest, if they were not able to organize a contest of 6 year categories of horses.
The Naadam started at 10.55 am and staffs and workers did ceremonial parade. 12–15 representatives of the project “Oyu tolgoi” and 12 collaborating companies carried their flags and lined up in the center of the square. Companies are:

- Oyu tolgoi
- "Bambai" security
- Fluor
- Red path Mongolia
- Khasu megawatt
- Geomandal (Geo-sphere)
- Major drilling
- Monnis international
- Toyota
- Khaanzaa
- MEK
- "Barilga" (construction) corporation.

After the ceremonial parade Mr. S. Garsia, the executive vice-president of the project “Oyutolgoi” and Mr Sanjdorj, the vice-president of the project delivered a speech opening the Naadam, 804th Anniversary of Great Mongol Empire and 89th Anniversary of Peoples’ revolution. After being played a stanza of the National anthem, folk singers sang a long song “Erdene zasgiin unaga (foal).” After that, the first round of National wrestling started. (see video recording).

Three grounds were prepared there: Biggest one was for National wrestling, second one was for archery and smallest one was for ankle-bone shooting. Around the grounds marquees were set up and put chairs for Naadam spectators. In every marquee, waiters were serving Naadam participants by kumis and foods. The “Oyu tolgoi” project administration specially appointed organizers who were in charge to engage contests.

At the end of the Naadam Mr. Sanjdorj, vice-president of the project handed over prizes and awards for winners of wrestling contest and horse racing. The Naadam of the project “Oyutolgoi” finished at 4.45 pm. Service people cleaned trashes of the Naadam ground.

National wrestling. 64 wrestlers participated in the wrestling, among which were Mr. Sh. Tsedev, a zaan (zaan means elephant, title given to a wrestler who wins in the seventh or eighth round) of aimag (province) and Mr. Z. Naranbaatar, a zaan of aimag. Most of wrestlers were young workers of “Oyutolgoi” and other collaborating companies, among which were a wrestler having province wrestling title and 4 wrestlers having sum title. Some wrestlers arrived late from Khanbogd sum, so they weren’t able to wrestle.

Some wrestlers didn’t wear wrestler’s jacket and briefs. I would like to appreciate that, the wrestling commission had frequently been insisting wrestlers to wear wrestler’s jacket and
briefs. Also I would like to suggest that, relevant officials should issue rules to wear wrestler’s jacket and briefs during wrestling contest and starting next year wrestlers should follow the rule. It might be helpful for wrestlers to follow Mongol wrestling discipline.

Awards and prizes of wrestlers of Oyutolgoi project Naadam were:

Winners of 1st round – 5000 MNT
Winners of 2nd round – 10000 MNT
Winners of 3rd round – 15000 MNT
Winners of 4th round – 20000 MNT (2 wrestlers of semi-final got 50000MNT)
Runner up – 160000 MNT
Winner of the Naadam – 200000 MNT.

I think that prizes and awards for wrestlers were modest-sized. If award money increased, then original meaning of the Naadam would be lost and for wrestlers it might become a sort of competition to struggle for earning money. The winner of the Naadam wrestling was Mr. Erkhemzorig, a nachin (nachin means falcon, title given to a wrestler who wins in the fifth or sixth round) of Umnugovi aimag. The runner up of the wrestling was Mr. Naranbaatar, a zaan of Khentii aimag.

Ankle-bone shooting. Participants contested in two types of shooting: team shooting and individual shooting. 28 people of 4 teams (6 members in each team and 1 extra member for a substitute) participated in the contest. 3 teams come from Khanbogd sum and a team belongs to the “Oyutolgoi” project. There were two players titled “Gots mergen” (Outstanding marksman) and they had become winners of ankle-bone shooting contests of Umnugovi aimag for several times. We got an interview from one of them.

Awards and prizes of ankle bone shooting of Oyutolgoi project Naadam:

Team shooting:

I. 140000 MNT (20000 x 7 person), golden medal and diploma (A team of Khanbogd)
II 105000 MNT (15000 x 7 person) silver medal and diploma (Oyutolgoi project team)
III 70000 MNT (10000 x 7 person) bronze medal and diploma (A team of Khanbogd)
Individual shooting:
I. 1 person 30000 MNT, medal, diploma
II 1 person 20000 MNT medal, diploma
III 1 person 10000 MNT medal, diploma

Some players of ankle-bone shooting had worn traditional Mongol dress, jacket and hat. However some of them had worn modern and European style dresses. Since the ankle-bone shooting is a category of National sports or games, participants have to wear Mongol costumes. Starting next year the rule to wear National costume during ankle-bone shooting has to be followed.

National archery. Many people applied to participate in the archery contest of Oyutolgoi project. However 35 male archers and 7 female archers participated in the archery, because they had registered earlier than others. Most of them came from Oyutolgoi. As tradition male archers shot targets from 75 meter distance and female archers shot targets from 65 meter distance. Because of time limits, each archer shot 8 times or shot 8 arrows. As a rule an archer is able to shoot 20 arrows to wall target and 20 arrows to elimination targets. During the Naadam of last year each archer shot 12 arrows.

I would like to recommend that next year archery contest can start in the early morning and complete both wall-target shooting and elimination-target shooting as traditional rule. It will be an evidence of paying attention to traditional culture. We got an interview from Mr. Jargal, the secretary of Archers’ Association of Khanbogd sum. At the Naadam he was working as a judge of archery contest (please see appended recordings). Male archers contesting for third place and female archers competing for third place drew and “shot tovkh”. As an archery rule, archers must go backward to shoot tovkh. But this time they were staying in same place to shoot tovkh.

The winner of male archery was a worker of Oyutolgoi project and the winner of female archery was a local woman of Khanbogd sum. Male and female archers won in archery contest got following awards:

1. Diploma, 30000 MNT
2. Diploma, 20000 MNT
3. Diploma, 10000 MNT
I would like to say again that many archers didn’t wear National costumes. Some of participants wore shorts and T-shirt. I think it means they don’t respect National Naadam and furthermore National culture. Since the archery is a Mongolian National sport, archers wearing National costume must be allowed to participate in archery contest. The archery is not amusement or a joy. It's the National naadam that symbolizes Mongolia’s independence.

Second thing is winners of wrestling and ankle-bone shooting got medals, diploma and money, whereas winners of archery contest got only diploma and money. It seemed a sort of discrimination for archery—a category of National sports. Next time, relevant officials ought to correct the mistake to discriminate categories of National sports.

Third thing is, for the archery and ankle-bone shooting organizers haven’t to scamp. To shoot 8 arrows instead of shooting of 40 arrows is a sort of doing a slapdash job, I think. At fourth, the Oyutolgoi project should order and buy at least 15 bows and 75 arrows. For instance, Mr Khuderchuluun, a state marksman, makes good quality of bows and arrows. (Tel: 99192800) We noticed that many people were using few bows and arrows in turns and wasted time. Not only Mongolian archers but also foreign specialists were interested in archery. It means the number of Mongolian and foreign archers are increasing next year. Therefore, relevant officials and Naadam organizers ought to pay attention to archery and keeping its’ National peculiarity. Also should pay attention to spend some money for it.

Naadam services. Local people of Khanbogd sum, staffs and workers of the project “Oyutolgoi” attended in the Oyutolgoi project Naadam. For convenience of audiences a ger with 12 wall-sections was set up and there was working a karaoke.

Also there were put chesses, beds for temporary relaxing, tables and chairs. Anyone can visit to the ger and relax a little while. This year “Modern nomads” restaurant network was working there and served people by free khuushuur (pasty). For the Mongol Naadam, khuushuur has been a special food. It’s difficult to imagine Mongol naadam without Khuushuur. So the Oyutolgoi project paid special attention on serving by khuushuurs. For people there was no need to buy foods at the Naadam ground, because the Oyutolgoi project covered all costs of foods.
Workers of the company CIS were preparing meals such as fried sausages, roasted chicken and boiled sheep meat. They were distributing meals to the public. Also the project Oyutolgoi or the Naadam organizers had provided all services for people’s convenience: fountain, tents, ger for relaxing, clean water, candies, foods, kumiss, toilet, dustbin (rubbish-bucket) and cleaning.

There were 163 cars and vehicles including 22 Russian jeeps (UAZ-469), 59 motorcycles, 15 buses and 67 jeeps. The gathering of numerous cars and vehicles in a place might damage vulnerable soil and pasture of govi and desert area. So next time the Naadam organizers should pay attention on the issues. The Naadam by the Oyutolgoi project has celebrated during last 5 years. Workers of Oyutolgoi project and local people said that from next year the Naadam is going to be organized only among the people of Oyutolgoi and other collaborating companies. According to speech a worker of the company “Khasu megavit”, the number of workers has been increasing, that is why from next year the Naadam is being organized among company people. No idea about falsity or truth of the talk and no matter to organize the Naadam with or without local residents. However I think it’s very important to follow and keep traditional rule and custom of Mongol national Naadam.

After finishing the Naadam, some people reached to certain places such as Bayajikh (get rich) cave, Ekhii umai (mother’s womb) of Khanbogd khairkhan mountain to relax and drink. They devastated the land by leaving the number of bottles of vodka, beer, drink and juice and discarding left-over of foods. Originally, Bayajikh cave and Ekhii umai are sacred sites worshipped by local inhabitants. We cleaned the place, gathered various bottles of vodka and water, put them into a bag with capacity of 50 kg flour, brought them to Ulaanbaatar and sold.

There were 2 kgs of plastic bottles (1000MNT) and 12 bottles of vodka (400MNT). Also in previous place lots of rubbish has left, it might be more than 4 times the rubbish we cleaned.

C. Conclusion

By conducting survey research on tradition and innovation of State Naadam festival celebration based on Umnugovi province Naadam and Oyutolgoi project Naadam data we are doing following conclusions:

- The scope of the Naadam is comparatively closer to the scope of Naadams of other provinces: 256 wrestlers and 32 junior wrestlers, 36 ankle-bone players (6 teams with 6 members each team), 27 archers (adult male archers-8, adult female archers-6, junior male archers-9, junior female archers-4), 313 race-horses (stallions - 47,
adult horses-51, fourth year horses-50, third year horses-68, fifth year horses-55, second year horses-42)

- The Naadam of the project “Oyutolgoi” started at 10:00 am and finished at 17 pm. Because of urgent program of the Naadam, horse racing contest wasn’t organized and the Naadam was held under the program of 64 wrestlers’ wrestling, ankle-bone shooting (28 players of 4 teams) and National archery (35 male archers and 7 female archers). I think, since they are celebrating traditional Naadam, the organizers should carry out at least colt (second year horse racing) racing contest, if they were not able to organize a contest of 6-year categories of horses. It will be a good example for other mining companies to preserve traditional custom of Mongol Naadam. Because in the Middle of August of this year, the company “Energy resource” organized a Naadam. During the Naadam only National wrestling was organized. Horse racing, archery and ankle-bone shooting weren’t organized there. I think to change the wrong attitude and keep traditional custom the Naadam organized by the Oyutolgoi project should become a good example furthermore.

- We couldn’t count the exact number of people attended in the Umnugovi Naadam. However local people said that the number of people was same as last years. 2,500 people from 20 countries participated in the Naadam of Oyutolgoi project. Besides staffs and workers of the Oyutolgoi project, local residents of Khanbogd sum attended in the Naadam that is why, the number of people was higher than last years.

- Referring to Oyutolgoi project Naadam, 163 cars and vehicles came there. It means the number of cars and vehicles are much higher than Umnugovi province Naadam. The gathering of numerous cars and vehicles in a place might damage vulnerable soil and pasture of govi and desert area. So next time the Naadam organizers should pay attention on the issues.

- Prizes and awards of Umnugovi Naadam were modest-sized, by their size they closer or equal to prizes of Naadams of other provinces. Prizes and awards of Oyutolgoi project were quite similar to prizes of sum (county) Naadams.

- During the Naadam of the Oyutolgoi project, winners of wrestling and ankle-bone shooting got medals, diploma and money, whereas winners of archery contest got only diploma and money. It seemed a sort of discrimination for archery - a category of National sports. Next time, relevant officials ought to correct the mistake to discriminate categories of National sports.

- Many archers and ankle-bone players of Oyutolgoi project Naadam didn’t wear National costumes. Some of participants wore shorts and T-shirt. I think it means
they don’t respect National Naadam and furthermore National culture. Since the archery is a Mongolian National sport, archers wearing National costume must be allowed to participate in archery contest. Someone may think that wearing of National costume is a small matter or a matter of formalism. However it’s an inseparable part of the National Naadam which enhances the meaning of the Naadam.

- I would like to recommend that archery contest must be organized as complete as possible and must engage both wall-target shooting and elimination-target shooting according to traditional rules. Shooting of 8 arrows for wall targets was quite few for the archery contest. According to National archery rule, 20 arrows for wall targets and 20 arrows for elimination targets had to be fired. At least 20 arrows should be fired for wall-targets. For that, as above suggested, the “Oyutolgoi” project can order own bows and arrows for Naadam festival and other National events.

- By penetrating ankle-bone shooting and female archery to Naadam program, the understanding of Mongolian traditional “Three manly games” has changed. Umnugovi province Naadam was organized by four categories and Oyutolgoi project Naadam was organized by 3 categories. Thus both Naadams didn’t become “Manly three games” (Eriin 3 Naadam), they became “An Ordinary Naadam” (Jiriin naadam).

- Most of expenditures of Umnugovi province Naadam was covered by province budget. All of cultural events such as Night music show of 9 July, ceremonial concert “Songs of my country” and etc. were sponsored by “Tavan tolgoi” company.

- Oyutolgoi project covered all of the costs of Oyutolgoi project Naadam. The project Oyutolgoi or the Naadam organizers had provided all services for people’s convenience: fountain, tents, ger for relaxing, clean water, candies, foods, kumiss, toilet, dustbin (rubbish-bucket) and cleaning. Even the project had brought a restaurant of “Modern nomads” restaurant network.

- The Oyutolgoi project organized a Naadam without vodka. It will be very good example for Naadams of other aimags and sums. I think it will be more interesting if the organizers engage cultural events and performances among people.

- It was precise to see that the Naadam of Oyutolgoi project was aspiring event for kids and children of Khanbogd sum. Conducting next year Naadam, organizers should think about organizing of lively games, competitions, wrestling contests and etc. among children.

- We paid attention on climate change, desertification, land degradation and other environmental issues and didn’t see a remarkable climate change there. It means the
mining activity doesn’t exert considerable influence on the environment. Because of global climate change, local inhabitants passed extremely cold winter. However when we were there they were spending grassy, humid and pleasant summer season.

- We noticed that very few people had worn traditional dresses among the Naadam participants of Umnugovi province (Only 49 people were wearing traditional dress from more than 300 people). At the Naadam of Oyutolgoi project as well. Very few people had worn traditional costume. Whereas many of foreigners had worn Mongolian jacket and deel. It implies that we, the Mongols have to think about reviving our National custom and tradition.

- After the end of the Naadam, many people reached to sacred places such as Bayajikh (get rich) cave, Ekhii umai (mother’s womb) of Khanbogd khairkhan mountain and Demchig lamasery, devastated the sacred and worshipped place by leaving the number of bottles of vodka, beer, drink and juice and discarding left-over of foods. It is extremely wrong and bad action and such kind of action is not common in other aimags and sums. In order to preserve the sacred places, local authorities and residents have to pay attention on cleaning of the places. Also people should change their attitude towards the environment. Local administrative and non-governmental organizations should erect special boards with inscriptions to warn and forbid discarding of rubbish, left-over and bottles. Also the board inscription must be precise, clear, brief and understandable for the public such as: “By devastating the sacred place you are doing extremely sinful deed that can harm or damage not only the environment but also your lives!” and etc.

The Umnugovi province Naadam and Oyutolgoi project Naadam (Besides of absence of horse racing) have been Mongolian traditional Naadams which maintain main styles of Mongolian traditional Naadam. Furthermore relevant authorities and officials should pay attention on issues warned and suggested before.

Reported by J. Gerelbadrakh
22. APPENDIX 13: PUBLIC PROGRAM FIELDWORK REPORT

"Interim narrative report of the research work on a heritage of mental culture conducted by the research team for “Cultural heritage program” of “Oyu tolgoi” project in Umnugobi province

2010.12.4 Ulaanbaatar

Research goal: The survey was aimed at to get acquainted with activities of the office on Education and Culture at Governor’s office of Umnugobi aimag, to attend in the “Celebration for 1,000 camel-calves” held in Khanbogd sum, to meet principals and teachers of secondary schools in Bayan-Ovoo, Khanbogd and Manlai sums and discuss with them about “Cultural heritage program”. As results we proposed to analyze and draw preliminary conclusions on the program.

Research team members: Dr., professor J. Gerelbadrakh, a researcher on public program of the research team on Cultural heritage program of “Oyu tolgoi” project, Mr Sh. Erdenebat, an assistant researcher of the project and Mr T. Boldbaatar, a driver of “Toyota land cruiser” car worked for the survey.

Duration date of the research work: First stage of the research or fieldwork was conducted from 21 November, 2010 to 28 November, 2010 (8 days) in Umnugobi province. Second stage of the research or working out of fieldwork necessities and writing of research reports had been done from 29 November, 2010 to 5 December, 2010 in Ulaanbaatar.

Work meeting: In keeping with the program we met some officials of the Office on Education and Culture of the aimag including Ch.Buyanchuulgan, executive chair of the Office and O.Ulamtsetseg, a specialist on culture. We got to know about the structure and activities of the office and policies on conservation and restoration of cultural heritages. Also we shared ideas on Cultural heritage program of “Oyu tolgoi” project and asked their suggestions for cultural heritage program of “Oyu tolgoi” project.
They said “There is only specialist on cultural affairs in the office of Education and Culture, whereas there 13 specialists on educational affairs are in the office. Cultural matters have been abandoned and underrepresented because of everything is focused on education. That is why it will be very good if establish “a chamber for training and introducing of cultural heritages” at the office of Education and Culture. If we have such chamber then we can organize meetings and conferences in the room. State and aimag budgets don’t have enough money to spend for founding the chamber. We will be happy if “Oyu tolgoi” project gives support on founding the chamber by bearing some amounts of expenses”.

In accordance with the instruction by the “Cultural heritage centre,” the Governor’s office of the province had to establish a “Branch council (sub-council) for Cultural heritage conservation,” and its head had to be the chair of the office on Education and Culture. Nevertheless, the Umnugobi aimag officials established such council as a formally. They organized the council with 9 members and the specialist on cultural affairs works as the head of the council. The situation must be corrected. Also local TV channels of Umnugobi aimag such as “Altan gobi (Golden gobi)” TV channel, “21-r suvag (21st channel)” and etc. had been broadcasting a program “Historical heritage and culture” once a month and the office of Education and Culture prepared the program. To revive and continue the TV program the office on Education and Culture can ask financial support from “Oyu tolgoi” project. Relevant officials should offer suggestions to “Oyu tolgoi” project on organizing annual trainings and workshops on cultural heritages for workers and staffs of cultural centers of sums.

In connection with objectives of “Morin khuur and long song national program,” “Mongol throat-singing national program,” “The program for digitalization and conservation of National cultural heritage information” and “National program for conservation and restoration of historical and cultural fixed-relics,” promotions and supports by mining companies are required for implementation of the national programs. In local budgets extra money to implement the national program is not estimated because of local financial shortage.

We met D. Oyunchuluun, the principal of 1st secondary school of Dalanzadgad sum and exchanged opinions on the Public program of the Cultural Heritage program. The school is implementing a program entitled “A person is known from his childhood and a trotter from the foal” (Khun bolokh bagaasa, Khuleg bolokh ungaganaasa - How a man will turn out (begins) when he is a child. How a steed will turn out (begins) when it is a colt). The program is aimed at introducing of historical and cultural monuments and relics of the locality to school children and conserving these monuments. The principal suggested that it would be useful if the local museum worked out special teaching programs on history and geography and delivered some lectures for secondary school children on disciplines of history and geography. Also the principal told that it would be useful if founded and organized sport clubs (archery, wrestling, ankle-bone shooting and etc.) among school children.
He/she suggested that in keeping with the cultural heritage program cabinets of history and geography of all schools should be equipped and furnished well. It seemed a right idea. Because, a cabinet (classroom) for geography can be fixed up by minerals, plants and animals (taxidermy) of the locality and nature and environment related visual materials. A cabinet of history can be fixed up by physical and visual teaching aids related with paleontological, historical, cultural and religious sites of the locality. Also those visual and physical teaching aids can be material items related with national culture, economy and Mongol customs: musical instruments, toys, articles used for animal husbandry and etc. Thanks to cabinets of history and geography school children can acquire certain knowledge about historical and cultural heritages of the gobi. By acquiring such knowledge the children will love their motherland, conserve surrounding environment and cultural heritages.

Also secondary schools (general educational schools) of Umnugobi aimag should establish “Palaces for Mongol traditional custom” to introduce and disseminate traditional cultural heritages for young generations. It will contribute to keep and conserve cultural heritages for next generation.

We visited to 3rd secondary school and met L. Enkh-Unur, a training manager of the school to discuss about the “Public program”. The school engages advanced training on natural and social sciences. He/she told that the content of the subject “Civic education” has still been unclear. We receive very tentative instruction about the content of the subject. Even though, all of students have to study the subject every year. That is why we ourselves work out 3 level (primary, middle and high) curriculums and teach the subject. Sometimes the school teachers teach about cultural heritages. If the Ministry of Education, Culture and Science won’t make a concrete decision on the content of Civic education course every school will have been teaching the course in various contents.

We met O. Badarch, the chair of the office on Environment and Tourism and N. Burmaa, a specialist of the office to exchange opinions on current situations and attitudes of tourism of Umnugobi aimag and got acquainted activities and policy of the office. The office has 23 staffs including gamekeepers. Umnugobi aimag has run tourism activities comparatively earlier or since 1963 and opened tourist camps. The aimag has worked out a Master plan to develop tourism sector in 2007–2021. By 2008 there were 23 tourist bases (camps), by 2009 there were 22 tourist camps and in 2010 total 19 tourist camps are running tour activities. In 2009 lots of French tourists traveled through Umnugobi aimag territory. Also tourists from Italy travel frequently.
In 2010 tourist camps and hotels were evaluated by criteria of hygiene, service, conform and etc. Hotels and tourist bases (camps) of Umnugobi aimag received higher grades if compare to hotels and tourist camps of other aimags. Also tourist camps were granted by 1 and 2 flowers (similar to star). The office published aimag tourist map and they are planning to organize trip along the state border and negotiated with relevant officials. They are intending to organize trips “Tooroin ayalal (trip through Populus diversifolia rosh)”, “Adventurous journey (trip)” and the plan is in discussion stage.

Umnugobi province was divided into several zones of tourism: Central, East and West zones. Central zone is divided into 2 sub-zones. East zone includes Manlai, Khanbogd and Tsogttsetsii sums. In the area mining industries have been developing. Central zone includes Bulgan, Khurmen, Khankhongor, Bayandalai, Nomgon, Mandal-Ovoo, Tsogttsetsii and Tsogt-Ovoo sums. The zone is much suitable to develop tourism. West zone includes Noyon, Sevrei and Gurvantses sums. Both tourism and mining industries will be developed in the zone. The intention was reflected in the Master plan.

Umnugobi aimag has nominated its 9 wonders of history and culture as follows:

1. Khermen tsav, Zuun mod, Zulzanai in Gurvantes sum
2. Khongoryn els (sand), Sevrei khairkhan, Chono shurguul in Sevrei sum
3. Noyon bogd kairkhan, Toli khad (mirror scale), Saran khundii (moon valley) in Noyon sum.
4. Bayanzag, Tugrugiin shiree, Torgony zam (silk road) in Bulgan sum
5. Yolyn am, Mukhar shivert, Dungeneegiin am, Tosongiin am and Shatyn am in Khankhongor sum
6. Algui ulaan tsav in Mandal-Ovoo sum
7. Sangiin dalai lamasery in Nomgon sum
8. Dinosaur footprints, Demchig lamasery and Galbyn gobi in Khanbogd sum
9. Silver articles made by silversmiths from Noyon and Sevrei sums.

The most of the places are areas of outstanding natural beauty. However lots of historical and cultural sites are omitted. To focus only on natural tourism (ecotourism) is deficient. Besides natural tourism relevant officials should add other types of tourism. For Umnugobi aimag a product of tourism is paleontological relics. Members of the Meeting of Citizen’s (denizen’s) representatives have initiated to found “Dinosaurs’ park” and “Paleontological
research institute” at a landmark called Bayanzag in Bulgan sum and they are preparing to do it. We met D. Erdenebat, the director of tourist camp “Gobi tour” to hear his opinions. The director told us that foreign tourists aren’t interested in Bayanzag or research institute or a park. Tourists’ interests are different. They are interested in seeing of exhibits, findings, museums.

In November 23, 2010 we met B. Batsaruul, the director of the Central library of Umnugobi province and A. Odonchimeg, a staff of the library. The library has 10 staffs and 5 units: Children’s reading room, Public reading room, Development information and training centre and Book stock. There are 84,000 books in the library. It opens weekdays. The library was established in 1944 that is why the building of the library has gone off. Also there is no space to store the number of books, shelves of books have deteriorated. Therefore new condensed shelves are required to be bought. Further new building is required to be built. It has been planned to be built library building by aimag however they haven’t decided yet.

In 2000-2006, local residents of sums of Umnugobi aimag were served by “Mobile library” (books in Russian van) supported by the Soros foundation. It enabled local people to read interesting books. The library worked a week in each sum. It was very fruitful for local people. But the Russian van has broken down. It will be very good if mining companies provide a financial support to revive and continue the activity. By refreshing the activity the “Mobile (“migrant library”) library” can serve for not only local people of sums but also workers of mining companies.

We got acquainted with activities of Musical and Dramatic theatre of Umnugobi aimag and talked with D. Gombosuren, the chair of the theatre. The theatre was established in 1959. It has 52 staffs. It has several units including Musical band (brigade), Dancing band and Administrative unit. Besides planned performances they perform on anniversaries and celebrities of sums, organizations, companies and etc. They perform at least once or twice per a year in every sum. There’s no special program for children however they conduct pupil-training for morin khuur, dancing, piano and dulcimer.
In order to promote and introduce traditional art they established folk art band “Yol” (bearded vulture) with 8 members. They have started to make dresses of 16 ethnic groups in Mongolia and musical instruments. Also they are intending to revive Tsam dance canons existed in Sangiin dalai lamasery in Nomgon sum. They worked out a project proposal and submitted the proposal to “Oyu tolgoi” project (approximately 20 million MNTs are estimated). They are preparing models and designs of Tsam masks, dresses and articles. From the spring of 2011, new building of theatre with 1,000 seats is going to be built in new Dalanzadgad and total 5.1 milliard tugrigs are budgeted for the construction.

In November 23, 2010 we talked with Mrs Orgontuya, the head of aimag museum. They museum has 9 staffs. In prospective plan the museum is expecting to enrich its’ exhibits by exhibits related with camels, minerals and paleontological findings. The museum has 3 branches including the Main museum, Camel exhibition and Natural museum in Yolyn am. The Main museum has 4 main rooms (Paleontology, History, Ethnography and Religion) and about 2500 exhibits. Since the current building has deteriorated, the museum has planned to be built new building for the museum. Architectural plan and design have already been drawn and land related issues have been resolved. All expenditures will be 3 billion tugrigs.

Camel exhibition was opened in October 22 of the year. The Natural museum in Yolyn am of Zuun Saikhan uul (East Saikhan mountain) has variety of exhibits of animal and plant species. Tourists are eager to visit to the museum site. It’s possible to organize mobile exhibition through countryside however it’s very expensive to do it. The museum has 4.5 million tugrigs budget to buy new exhibits every year.

As she suggested (Mrs Otgontuya) it will be good if improve conservation and keeping of museum exhibits, connect tourism routes with museums and include museum exhibits in tour programs. It’s required to organize professional training or workshops for museum staffs. Mining companies should contribute samples of their findings to museums. Also she offered that it will be good if mining companies support our activities to co-organize mobile exhibitions with museums of sums.

In November 24, 2010 we worked in Bayan-Ovoo sum. We got acquainted with activities of the Cultural centre of the sum and met Mr. B. Jurmeddorj, the head of the centre to exchange opinions about the Public program of Cultural heritage program. The cultural centre has 250 seats and 5 staffs including the head, a dance teacher, a librarian, and a
The cashier is in charge of exhibit cabinet. They are running 5 clubs on morin khuur, music, dance, benediction and eulogy and long song. 36 children are studying in there.

He told that there are 8 historical and cultural sites registered in special preservation of the sum. There are 6 persons registered as bearers of intellectual cultural heritages. Songs, melodies and eulogies by the people must be recorded in audio and video cassettes. If do this the audio and video records can be used for training students. Since the Cultural centre of a sum is a main place for training and introduction of cultural heritages, it will be useful to prepare books, brochures, video-records, visual materials, textbooks and photographs with the assistance of professional organizations and disseminate them to public. He also told that they have intentions to do above mentioned things however because of lacking of money and professional skills they are unable to do.

Local museum of Bayan-Ovoo sum lodged in blockhouse (timber house) until 2002 and burnt, so the most of exhibits vanished. Since the museum hasn’t got a house they have opened a cabinet for exploring the community (periphery) in costume changing room of the Cultural centre of the sum. If the museum has its’ house then museum can collect exhibits and findings from local people. There was a stone statue in the southeast end of Khoerkh mountain range or in bordering areas of Bayan-Ovoo and Nomgon sum. Even though, several years ago the stone statue has disappeared because of flood. If we had got money we could search it. It will be good if anyone or any company give us financial support to find it.

We visited to Middle school named after B. Dorj and met Ts. Narantuya, the principal of the school and O. Nandintsetseg, a training manager of the school to talk about the Public program of the Cultural heritage program. The school has 12 teachers, 8 classes (primary 5, middle 3) and 204 children.

The subject of civic education should include contents about the nature and environment, historical and cultural sites. Since there are no enough textbooks and visual aids it’s difficult to teach the subject. During hours of “project work” cultural heritage issues can be taught to students. Because of lacking of classroom facilities and equipments teachers teach orally or give oral lecture. But it’s deficient to teach orally in case of teaching about cultural heritages. That is why it would be useful for training and introducing of traditional cultural heritages to students if establish well equipped “classrooms for cultural heritages”. At first school teachers should be trained as trainers for training cultural heritages. After that the trainers can teach about cultural heritages to children. Teaching aids for the training can be photographs, video records, films.
and other visual materials. Such visual teaching aids will be interesting for children. Also cultural heritage education needs rural young herders who live close to cultural heritages. During bag (an administrative unit) meeting or during any other event rural guys can regularly be trained. Teachers for official education can organize training for local young herders on cultural heritages and how to conserve the cultural heritages. Heads of bags and gamekeepers should be trained as well.

In November 25, 2010 we worked in Khanbogd sum. We attended in “the Celebration for 1,000 camel-calves” in Bayan bag centre. In 1984 the Bayan bag celebrated such celebration for the first time. In 2008 they celebrated for the second time and this year they are celebrating to occasion for the third time. This year the bag has reared 1,331 camel-calves. For a bag it’s quite big success to rear more than 1,000 camel-calves. The organizing committee for the celebration consisted of 8 members. The celebration was sponsored by “Ajnai” corporation and its’ president Bat-Erdene. He and his corporation donated 7.9 million tugrigs for organizing the festival. Also herder households and families brought dairy products, milk, kumis, cooked meat, fritters and buns. Recently, the bag residents put down a mark for new house of cultural centre. Total costs to build the house will be 50 million tugrigs and a Chinese oil company which is scouting naphtha will cover 35 million tugrigs or 70 percent of the cost.

There were more than 50 cars, 300 people and more than 100 camels at the celebration for 1,000 camel-calves. The festival started at 8:30 am by camel-race and finished around at 7 pm by closing reception. Following events were organized: camel-race, a competition to select the best camel-stallion, best male camels in the fourth, fifth and sixth years, the much milky camel cow, yearling camel race, competition to select the best camel gelding, competition to select the best camel cow, competition to select beautiful couples riding catchy camels and etc. Camels raced in 10 km distance, yearling camels raced in 6 km distance. To select the best camel-stallion, best male camels in the fourth, fifth and sixth years and the best camel gelding the organizing committee took into account their height and body shape. To select the much milky camel cows milked the camel cows. Much milky camel-cows gave 2,100 mg, 2,000 mg and 1,600 mg milk.
Prizes and awards of the competitions are:

Best camel stallions:

1. Golden medal, diploma, 130000MNT, silk-scarf (khadag)
2. Silver medal, diploma, 110000MNT, silk-scarf (khadag)
3. Bronze medal, diploma, 80000MNT, silk-scarf (khadag)

Best male camels in the fourth or fifth or sixth years:

1. Golden medal, diploma, 130000MNT, silk-scarf (khadag)
2. Silver medal, diploma, 110000MNT, silk-scarf (khadag)
3. Bronze medal, diploma, 80000MNT, silk-scarf (khadag)

Best camel-cows:

1. Golden medal, diploma, 130000MNT, silk-scarf (khadag)
2. Silver medal, diploma, 110000MNT, silk-scarf (khadag)
3. Bronze medal, diploma, 80000MNT, silk-scarf (khadag)

Much milky camel-cows:

1. Golden medal, diploma, 130000MNT, silk-scarf (khadag)
2. Silver medal, diploma, 110000MNT, silk-scarf (khadag)
3. Bronze medal, diploma, 80000MNT, silk-scarf (khadag)

Winners of camel race:

1. Golden medal, diploma, 230000MNT, silk-scarf (khadag)
2. Silver medal, diploma, 180000MNT, silk-scarf (khadag)
3. Silver medal, diploma, 130000MNT, silk-scarf (khadag)
4. Bronze medal, diploma, 110000MNT, silk-scarf (khadag)
5. Bronze medal, diploma, 80000MNT, silk-scarf (khadag)
Winners of yearling camel race:

1. Golden medal, diploma, 230000MNT, silk-scarf (khadag)
2. Silver medal, diploma, 180000MNT, silk-scarf (khadag)
3. Silver medal, diploma, 130000MNT, silk-scarf (khadag)
4. Bronze medal, diploma, 110000MNT, silk-scarf (khadag)
5. Bronze medal, diploma, 80000MNT, silk-scarf (khadag)

Best camel geldings:

1. Golden medal, diploma, 130000MNT, silk-scarf (khadag)
2. Silver medal, diploma, 110000MNT, silk-scarf (khadag)
3. Bronze medal, diploma, 80000MNT, silk-scarf (khadag)

Beautiful couples riding catchy camels:

1. Golden medal, diploma, 130000MNT, silk-scarf (khadag)
2. Silver medal, diploma, 110000MNT, silk-scarf (khadag)
3. Bronze medal, diploma, 80000MNT, silk-scarf (khadag)

Issuing awards to “winner-camels”, organizers were binding medals in halter of the camels. Receiving other (diploma, khadag and money) awards the owners were kneeling on a red rug and tasting kumis in a cup, because of their respect of camels. Also the behavior relates with Mongol custom. The Mongols don’t drink kumis in standing position.

Three camel-hands were awarded by the Diploma of Honor of the Ministry of Food and Agriculture and G. Myagmarjav, the governor of Bayan bag handed over the Diploma of Honor. “Oyu tolgoi” project managers attended in the celebration to support and issue awards for young camel-men. 3 junior camel-men received special awards (a camel-man received diploma, silver cup, 200000MNT and two camel-men received diploma,
silver cup and 100000MNT each). It was a good deal for encouraging young herders working hard. The company CIS donated technical equipments to the centre of Bayan bag. “Shine Khanbogd” NGO gave its’ grant to the bag. The cultural centre performed a concert for the celebration and it lasted 2 hours.

The celebration for 1,000 camel-calves is not only organized in Khanbogd sum but also in the most sums of Umnugobi aimag. The most of sums of Umnugobi aimag organize “Camel celebration”. In March 01 of every year the “Camel celebration” is held in Bayan-Ovoo and Manlai sums or in two sums which are located under direct impact of “Oyu tolgoi” project. During bag meeting the celebration is organized. During last several years Umnugobi aimag has been organizing “Camel polo” competition for sum, aimag and state levels. In October 23 of the year Umnugobi aimag celebrated the Camel festival in Dalanzadgad.

For the residents of gobi area, both the Camel celebration and the Celebration for 1,000 camel-calves are very specific festivals related with “camel culture”, that is why further should support the unique culture. The festivals have been celebrated since 1980s. Policies to support camel-men and grow camels can be engaged based on the celebrations. I think, next year during the Camel festival of Manlai and Bayan-Ovoo sum the “Oyu tolgoi” project should give same awards as given at the festival for 1000 camel calves in Khanbogd sum.

In November 26, 2010 we met Narangerel, the head of the cultural centre of Khanbogd sum to share ideas on activities of the cultural centre, preservation and conservation of cultural heritages and training of the centre. The cultural centre has 5 staffs including the head, a dance teacher, a librarian, and a museum curator (also she works as a cashier). They are running 3 clubs on morin khuur, dance and music. 40 children are studying in there. The cultural centre has 200 seats. In 2008 new building of cultural centre was built, however due to bad work quality of executive construction company it hasn’t been commissioned still now. The museum has over 600 exhibits. In 1994, the museum and lamasery were built in same place. In 2008 the museum had got a separated building.

According to the ordinance by governor of the sum, there are 34 special protected sites including remains and ruins of lamaseries such as Demchig, Riiter, Tsagaan tolgoi, Tsogzol, Baga mod, Bayan, Aguin and etc. The cultural centre got 2.8 million tugrigs from the “Oyu tolgoi” project and has done 33 car stops, 24 boards and 12 stone circles. It’s required to improve the conservation of cultural and historical relics. We saw 28 archaeological tombs. The tombs had illegally been excavated. 108 hills with white stones on mountains Khanbogd khairkhan and Galba were erupted by dynamite.
Narangerel, the head of the cultural centre told us that sum residents took part in the illegal offence to dynamite the hills. Cultural and historical sites can be protected based on herders’ community by giving any encouragement or a support. There are no a few people who take well care on cultural and historical sites. We would like to suggest that local authorities or mining and other companies can give seasonal salary to the people or can support them financially. As like as other sums the Khanbogd sum hasn’t got voice-recorders (Dictaphone), video-cameras, camcorders, GPS and etc.

We met D. Ganbat, the principal of the complete middle school of general education in Khanbogd sum and B. Tumurbaatar, a training manager of the school to exchange opinions on the Public program of the Cultural heritage program. The complete middle school has 736 students and over 50 teachers and staffs. In 2004 the “Oyu tolgoi” project gave a Russian van (Furgon), erected fence around the school building and donated 6 computers to teachers’ development centre.

He suggested that in keeping with the subject of “Civic education” should give preliminary understandings on historical and cultural sites to children. There are not enough materials and handbooks on cultural heritages that is why teachers should be trained on cultural heritages through training and workshop.

We have done preliminary survey on hotels at the centre of Khanbogd sum. There are 3 hotels (hostel, lodge) in Khanbogd town centre: “Erkhes” hotel of “Uujim od” company, “Bayan-Erdene” hotel of “DTM” Co. Ltd., the hotel of Khanbogd sum owned by “Khan diesel” Co. Ltd. There were no enough beds for tourists, businessmen and visitors.

We met S. Sandagsuren, a leading member of governing council of “New Khanbogd” NGO. The head or the chair of governing council of the NGO is B. Erdene-Ochir. The NGO was founded in 2006 as a society oriented NGO. The main goals of the NGO are to originate responsible mining sector in Mongolia and develop the Khanbogd sum. The governing council of the NGO has 11 members, 3 of which live in UB, 1 member lives in Dalanzadgad and remained members live in Khanbogd sum. One of its activities is an activity on cultural heritages. Two years ago the NGO visited to historical and cultural sites of Khanbogd sum and submitted (gave) the fieldwork report to the Cultural centre of the sum. The NGO is planning to contribute to teaching and training of the subject of Civic education and intending to work out curriculums for every grades of complete school of general education. The curriculums will cover contents on history, culture, religion, traditional customs and etc. They are intending to teach the course from December 01. However it will be extra-
curricular activity for school children. Besides the NGO “New Khanbogd”, NGOs called “Javkhlan nutag”, “Water protection of Great gobi” are conducting their activities.

In November 27, 2010 we worked in Manlai sum to get acquainted with activities of the Cultural centre and the Local museum of the sum. We met D. Otgonbat, the chair of the cultural centre and talked about the Public program of the Cultural heritage program. There are 5 staffs and 152 seats for audience in the cultural centre of the Manlai sum. Local library and local museum locate in two separated houses. There are morin khuur, folk musical, keyboarded musical and dance clubs at the cultural centre.

More than 20 children are studying in there. 17 non-material (intellectual) cultural heritages are under special preservation of the sum and 23 people have been registered as cultural heritage bearers. It’s sad some of cultural heritages have been disappearing. People who call a camel by calling khoös khoös and people who soothe a sheep by calling toig toig toig have been becoming fewer. That is why talks and songs of the people should be recorded to Audio and Video cameras and kept. The cultural center hasn’t got voice recorders, video cameras, photo cameras, GPS, notebooks, computers, LCD projectors and other equipments.

As D. Otgonbat told us Manlai sum organized “Camel polo” competition for the first time in 2002. Since then the Manlai sum has participated in state championship and taken first places for 3 times. There are 85,000 camels in Umnugobi aimag. It means the aimag takes first place by the number of camels. An aimag takes second place by the number of camels has 26,000 camels. In order to preserve “Camel culture” (camel related culture, traditions and customs) should organize the “Camel polo” competition every year. All ages of camels (yearling camels, camels of the fourth, fifth and sixth years, camel geldings and camel stallions) should be involved in the completion and also prizes and awards must be higher amounted. It encourages camel-men or herders to break and use their camels.
An issue on wearing national costumes is a big challenge for local people. The most of country people, as well as residents of Manlai sum wear Europeanized dresses. A good habit to wear national costume every Monday has been emerged and fixed among the inhabitants of Manlai sum. In order to promote the good convention through a concrete policy should take some steps. For instance, competitions on national costumes (cup, hat, deel (dress), khantaaz (waistcoat), khürem (short outer jacket), shoes and etc.) can be organized annually and prizes and awards can be covered by mining companies. Competitions and contests are good steps to keep, preserve, publicize and disseminate Mongolian traditional culture. If organize contests among musicians playing on morin khuur, long-song singers, biyelgee dancers (a type of static folk dance) and giving prizes and awards those people will encourage well. Also competitions can be organized among people who make bridle, fetter, halter, morin khuur and etc. However the Cultural centre and the Governor’s office of the sum have no money to organize such competitions.

We visited to the complete school for general education named after D. Nanzad hero and met Ts. Gankhuleg, the principal of the school, to exchange opinions on public program of the cultural heritage program. The school has 42 teachers and staffs and 396 children. The course of Civic education is taught an hour per a week. Many classes unprofitably spend the hour of the course. Courses and subjects on Mongolian history, culture and customs should be taught completely. Children’s language, clothes, behavior, interests and attitudes have been changing and modernizing. People who know about Mongol culture have been becoming fewer.

Because of job opportunities in mining companies and other reasons many people have been migrating to Umnugobi aimag, as well as the sum. Due to the migration, local people have been forgetting native dialect and peculiar accents. Children should acquire the knowledge about cultural heritages and the awareness to be proud of national culture since their very early ages. It will be fruitful for children if establish “palaces for traditional customs” at kindergartens and schools to give them basic knowledge and understandings on traditional customs, history and culture. There are some programs and projects on cultural heritages, however in reality they aren’t realized well. Ts. Gankhuyag told that they have worked out a project to establish a “palace for traditional customs” and total 8 million tugrigs are required to found the palace. Areas of outstanding natural beauty, historical and
cultural sites can be conserved based on local community and activities of herders by promoting them by financial encouragements.

Local denizens and herders don’t have enough information on cultural heritages, so training workshops on cultural heritages ought to be organized among the local people. By organizing such workshops and trainings local inhabitants will obtain certain understanding and knowledge on cultural heritages. Financial problems encounter to preserve and publicize cultural heritages. For kindergarten kids traditional Mongolian toys or wooden toys will be useful simultaneously other toys. Mongolian wooden toys or locked toys develop children’s thought very well. Also wooden toys improve children’s feelings to symphatize the motherland. Also should take into account that there are not enough traditional musical instruments in schools.

We met Sugir, the governor of Manlai sum and D. Uulii, an executive governor of the sum (also he is a cultural heritage bearer) and exchanged opinions. They suggested that it will be cognitively important for children if take photographs of all species of bush, plants and trees grow in Manlai sum territory, categorize and use them for training. According to traditional medicine secretion which exudes from the occiput of a rutting camel stallion (orson buuryn bokhi) is good treatment for women’s womb. Relevant organizations and specialists should examine and test the secretion and use it for medical and treatment purposes.

Their main suggestions are to preserve historical and cultural sites based on local community and to give them economical and financial encouragements. Also they told us that there was a huge caldron in Süüm and Suwarga mountains (Two Bogd mountain) as a tent of five wall sections by its size but the caldron was covered by dirt and disappeared. It will be cognitively and practically important if “Oyu tolgoi” project give financial support to discover, excavate and put it to research use.

As results of the research we are putting forward following conclusion and suggestions:

- At the end of every year governing and administrative organizations of Umnugobi aimag, specialists on cultural affairs, representatives of citizens (denizens) of all sums and mining companies should permanently organize a discussion or a meeting of the 4 sides. During the meeting or discussion they should introduce about annual works and activities on preservation, conservation and dissemination of cultural heritages, evaluate the works and activities and plan activities of next year. The regularization of the annual meeting of the 4 sides will be an important part of policies and activities on cultural heritages.

- On behalf of the Public program of the Cultural heritage program of “Oyu tolgoi” project we would like to recommend to the Ministry of Education, Culture and
Science to insert contents related with the Nature and Environment of Mongolia, historical and cultural monuments, traditional customs, foods, dresses, culture related with nomadic animal husbandry and etc. into the course syllabus of “Civic education” taught for primary, middle and high schools adjusting to children’s age peculiarity. By inserting the issues to the course content of civic education school children can obtain capacious knowledge on cultural heritages and natural environment and the children can become people who respect, symphatize and conserve them. So the Ministry of Education, Culture and Science should assign the issue as a special policy and get followed by schools throughout the country.

- It’s important to work out “National program for Mongol costume” and get followed by throughout of the country looks from Umnugobi’s case. For the province to extents of developing of mining industries people’s attitude to wear national costume has been decreasing. Residents of Manlai sum, locates under direct impact of “Oyu tolgoi” project wear national costume every Monday is a good habit (tradition) to disseminate in other sums such as Khanbogd, Bayan-Ovoo and other sums.

- In general educational schools children wear national costume once per a year is not enough and during “the Day to wear National costume” many children don’t wear the National costume. We would like recommend relevant people to organize a competition of national costume annually (excluding fashioned or modernized deels) in three sums directly impacted by the “Oyu tolgoi” project. It’s important to support to organize National costume festival and “a Day to wear National costume” in Umnugobi aimag annually.

- It’s required to initiate a complete database of material and intellectual cultural heritages and records of their bearers registered and preserved by Khanbogd, Manlai and Bayan-Ovoo sums locate under direct impact of “Oyu tolgoi” project. The database can include audio and video tapes, records, photographs, films and information on locations of historical and cultural sites. It will be fruitful if the “Oyu tolgoi” project organize and promote the activity by supplying of technical equipments including voice recorders, video cameras, digital cameras, GPS, LCD projector, computer, TV and etc.

- We would like to recommend that not only in all sums locate under direct impact of “Oyu tolgoi” project but also throughout if Umnugobi province should permanently organize annual competitions among long song singers, morin khuur players, biyelgee-dancers, craftsmen who make morin khuur instrument, wooden basket and fork (arag-savar), thong bridle, fetter and halter. These competitions will best approaches to contribute to preserve, conserve and publicize traditional cultural heritages for the public and next generation.
- At general educational schools and kindergartens in sums locate under the impact of "Oyu tolgoi" project should establish “Palaces for Mongol traditional custom” to introduce and disseminate traditional cultural heritages. Also it’s required to establish cabinets of history and geography in general educational schools in sums locate under the impact of “Oyu tolgoi” project and equip them well. Cabinets (classroom) for geography can be fixed up by minerals, plants and animals (taxidermy) of the locality and nature and environment related visual materials. Cabinet of history can be fixed up by physical and visual teaching aids related with paleontological, historical, cultural and religious sites of the locality. Also those visual and physical teaching aids can be material items related with national culture, economy and Mongol customs: musical instruments, toys, articles used for animal husbandry and etc. Thanks to cabinets of history and geography school children can acquire certain knowledge about historical and cultural heritages of the gobi.

- It’s deficient to give cultural heritage education through classroom teaching. Finally we would like to recommend that trainers and teachers of unofficial education can engage extra-curricular activities and distance learning on cultural heritages for rural community.

Written by: J. Gerelbadrakh
FACT SHEET 1
Oyu Tolgoi Cultural Heritage Plan
Preserving Umnugovi’s Past To Guide Umnugovi’s Future

For millions of years the Gobi Desert has teemed with life. Although it may be hard to believe, the desert was once a great inland sea surrounded by swamps. Dinosaurs ruled the region from about 200 to 60 million years ago. The Gobi is famous for their fossils ranging from tiny eggs to massive bones.

For most of human history, men and women lived in small family groups, hunting animals and gathering plants for food. Dramatic changes occurred when humans domesticates wild animals around 10,000 years ago, allowing the development of a nomadic way of life. Groups were now able to cover vast areas in a single year, coming together and splitting apart with relative ease. This flexible social structure was an essential element in the establishment of the Mongol empire, the largest empire ever controlled by one man, Chinggis Khan.

In more recent times, the nomadic way of life has been challenged by the modern state. For much of the 20th century, Mongolians were restricted from practicing many of their customs, rituals, religion, and economic practices. Now we are free to do so, but face other challenges. Economic development will provide the residents of the Gobi with new opportunities. Unless development is balanced with preservation, we stand to lose our most precious possession: our heritage.

WHAT IS HERITAGE?
Heritage can be places that link us with the past
- Archaeological Sites
- Historic Buildings
- Paleontological Fossil Remains

Heritage include both concrete objects and structures as well as intangible connections we hold in common and define us as a people
- Language
- Customs
- Festivals
- Spiritual Places
- Nomadic way of life.
WHY IS HERITAGE IMPORTANT?

We use heritage to define ourselves as a people. Heritage links us to our past, provides us a mean of making sense of the present, and guides decisions about the future. Losing one’s heritage leaves a group groundless. The young drift away; the elderly have no role. Traditional ethics and norms that govern behavior are put aside; crime, alcoholism, and social decay become pervasive.

Guarding our heritage does not mean that society and the economy become fossilized. Our modern world continues to develop. The rich mineral wealth of the Gobi Desert will be the catalyst that brings economic growth and social change to Mongolia. New people will come to the region with their own customs, languages, and religions.

Maintaining Mongolian culture in the face of fast moving changes becomes, arguably, the greatest challenge of our time.

WHAT CAN WE DO?

We need a structured plan of action. Specifically, we need a Cultural Heritage Plan (CHP) that balances foreseeable development with preserving places and values of local, regional, and national importance. The Mongolian International Heritage Team (MIHT) have been engaged by OT to develop just such a plan. We have divided the task into three elements: tangible resources, intangible resources, and public programs. The first two categories refer to the constituent parts of heritage: concrete places and objects as well as rituals and customs which leave no lasting physical presence. The third element involves the transmission of heritage through schools and museums as well as opportunities to use heritage as a means of providing economic benefits through increased tourism.

WHO ARE WE?

The MIHT is a combination of Mongolian and international cultural heritage specialists specifically brought together to develop the CHP. We are lead by Dr. B. Gunchinsuren, the Deputy Director of the Mongolian Academy of Sciences, Institute of Archaeology (MASIA). Each of the three elements is headed by a Mongolian scholar: Dr. Ch. Amartuvshin (Tangible Resources), Dr. S. Chuluun (Intangible Resources), and Dr. J. Gereibiadragch (Public Programs).

WHAT CAN YOU DO?

We need your help. After all, it is your heritage. Only you can tell us what parts of the past you value enough to save, what rituals and traditions are important to preserve, and how best to teach your children. The CHP is designed to be completed in July 2011. Before then, we will be holding various meetings throughout Umgovai, attend a meeting, make your voice heard, become involved!

For more information, please contact: Fuje: 88004423
APPENDIX 15: TERMS OF REFERENCE FOR THE CHP ADVISORY BOARD

1.0 PURPOSE:

1.1 The Advisory Board will allow key stakeholders to participate in and provide oversight of the design of the Oyu Tolgoi LLC (OT) Cultural Heritage Program (CHP).

1.2 The Advisory Board will contribute towards protecting the rights and aspirations of local people, of parties participating in the promotion of cultural heritage preservation and of other participants by evaluating the CHP design and by consulting with and providing information to the public.

2.0 RIGHTS AND DUTIES

2.1 The Advisory Board has three main duties; namely, evaluating the CHP design, providing advice to the CHP design consultant team (Mongolian International Heritage Team [MIHT]), and by communicating with and providing information to the public.

   a) Evaluating the CHP Design:

       – Independently evaluate the design options for the CHP. Evaluation should be based on international standards and local community values.

       – Ensure that design options include adequate attention to the sustainability of proposed programs or project intervention, with clear identification of institutional responsibilities and arrangements.

       – Evaluate the sources of financing for all proposed interventions and ensure that appropriate agencies and funding sources have indicated their willingness to support the program. The Advisory Board should ensure that any agreements required for the institutional and financial sustainability of the program and projects are reached prior to completion of the CHP, or are clearly incorporated into the Terms of Reference/Scopes of Work for the implementation phase.

       – Evaluate the measures for monitoring the preservation and protection of cultural heritage (CH) in the OT impact area.

   b) Advice to the Consultant Team:

       – Advise on tangible and intangible cultural heritage in cooperation with the consultant team.
Advise on public programs in cooperation with the consultant team.

If necessary, make suggestions to the consultant team about the methods, aims and content of the study.

c) Providing information to the public:

Serve as an important means of disseminating study related information: 1) to the local people of Umnugobi aimag and other participants through them; 2) at the national and international level.

When required, assist in forming beneficial partnerships, especially in liaising between the private sector, state organizations, civil society and organizations competent in collaborating on cultural heritage.

3.0 MEMBERSHIP

3.1 The Advisory Board shall be an independent, competent body, the structure of which shall be dependent on its capability to realize its goal and perform its duties. The membership of the Advisory Board shall include professional heritage management professionals, local people of Umnugobi aimag, and representatives of state and civil society organizations. The membership shall be composed primarily of Mongolian citizens.

3.2 The membership shall be on a voluntary basis and each member shall have a right to resign from the Advisory Board. The Advisory Board may also be disbanded by a majority vote of all members.

3.3 The number of Advisory Board members shall not exceed 15. Representatives of government agencies and national research institutions shall be invited to become Advisory Board members. Representatives from other organizations and local communities also will be approached to ensure a complete and well-balanced Advisory Board:

3.4 The authority of the Advisory Board Chair shall be valid until the completion of the final report of the study, which also may be extended by the vote of all members of the Advisory Board if required by OT.

3.5 The Chair of the Advisory Board may voluntarily resign during their representative term of office.

3.6 In case an Advisory Board member fails to attend Advisory Board meetings without first notifying the Chair of the Advisory Board, the Chair of the Advisory Board may
MIHT MONGOLIAN INTERNATIONAL HERITAGE TEAM

decide to cancel the membership of such member at the suggestion of other members and to appoint another willing individual instead.

3.7 Besides the Advisory Board members, outside professionals may be invited to the Advisory Board meetings to participate in decision-making processes on certain matters.

3.8 The Consultant team shall be responsible for organizing the Advisory Board meetings, ensuring cooperation and promptly reporting the Advisory Board’s activities to the Chair and members of the Advisory Board.

3.9 The Advisory Board shall select a Secretary who will be responsible for the communications and documentation of the Advisory Board.

3.10 Advisory Board membership is voluntary; however each Advisory Board member will sign a contract of participation based on clear Terms of Reference and a remuneration schedule.

4.0 ADMINISTRATION OF THE ADVISORY BOARD

4.1 The Advisory Board shall be administered by the consulting team, which shall have the following responsibilities:

- Invite and engage desired members to be part of the Advisory Board.
- Organize the Advisory Board meetings, prepare required data and information, deliver them to the Advisory Board Chair and members, report the results of meetings, be in charge of matters assigned by the Advisory Board
- Draw up an agenda of the Advisory Board meetings and take minutes
- Ensure that the expected outcomes for the formal Advisory Board meetings are clear to the Chair and other members
- Disseminate Advisory Board meeting minutes to all members after each meeting in a timely manner.

5.0 MEETINGS

5.1 There will be three formal Advisory Board meetings, which shall include all members of the Advisory Board, the consulting team and OT. The first meeting shall be held in late 2010. The second meeting shall be held in early 2011. The third and final meeting shall be held prior to the completion of the CHP design.
5.2 In addition to the three formal meetings, advisory board members can request the chair to call for a meeting or call for a meeting themselves.

5.3 The Advisory Board Chair may request outside assistance and participation in meetings to discuss some matters.

5.4 Advisory Board members participation is not limited to formal meetings only. Advisory board business may take place outside of meetings, as necessary.

5.5 The Advisory Board members shall keep confidential any information presented to the Advisory Board or any issues discussed at the Advisory Board meetings, and shall not disclose them without prior written approval of a 2/3 of majority vote of the Advisory Board.

5.6 Detailed minutes of each formal Advisory Board meeting will be recorded and archived with OT, and may be made publicly available upon a majority decision by Advisory Board members and with OT’s agreement.

6.0 DECISION MAKING

6.1 Each Advisory Board member shall have equal rights and shall be vested with equal rights to express their opinions, and to be duly and fully heard by all other Advisory Board members.

6.2 The Advisory Board, although with no rights to ultimately or formally direct the consulting team of the study regarding the execution of any certain task, shall have rights to make suggestions, offer feedback and give advice. All such feedback (including recommendations, questions, criticisms, etc.) shall be duly and fully recorded in the minutes, formally communicated to the consulting team and responded to by the consulting team within 15 days of the meeting.

6.3 A final report of all Advisory Board meetings, recommendations, endorsements and/or concerns and criticisms, shall be produced by the MIHT in both English and Mongolian languages and made available to the general public through OT.

7.0 ORGANIZATION

7.1 Meeting dates for the Advisory Board shall be set by the consulting team, who shall notify all members about the date, agenda, programme and other related information of the meeting.

7.2 Advisory Board meetings shall be conducted either in Ulaanbaatar or Umnugobi aimag.
7.3 If considered necessary, and upon agreement of the Advisory Board members, an outside participant may take part in special meetings.

7.4 The programme of an Advisory Board meeting shall not exceed two working days.
25. APPENDIX 16: OT CHP ADVISORY BOARD MEETING MINUTES
# CHP Advisory Board Meeting

**Meeting Date:** 16\(^{th}\) December 2010  
**Venue:** Oyu Tolgoi office, 6\(^{th}\) Floor, Monnis Tower, Ulaanbaatar

**Present:**  
Artag Advisory Board  
Barsbold Advisory Board  
Bat-Ulzii Advisory Board  
Batbold Advisory Board  
Galbaatar Advisory Board  
Dendevsamba Advisory Board  
Otgontuya Advisory Board  
Gunchinsuren MIHT  
Amartuvshin MIHT  
Tsogtbaatar MIHT  
Chuluun MIHT  
Gerelbadrakh MIHT  
Sandagsuren Advisory Board  
Saruulbuyan Advisory Board  
Sugir Advisory Board  
Urtnasan Advisory Board  
Tsooj Advisory Board  
Tseveendorj Advisory Board  
Tuvshinbayar Advisory Board  
Puje MIHT  
Amy MIHT  
Tserennadmid OT  
Batzorig OT  
Nergui OT  
Facilitator

**Apologies:** Kulanda (Advisory Board)

**Minutes:**

<table>
<thead>
<tr>
<th>Agenda Item</th>
<th>Description</th>
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| 1. | A welcome was given by OT  
Introductions of all participants |
| 2. | “What is the CHP?” (Presentation – Gunchinsuren)  
a) Introduction to the OT site and project  
b) Cultural Heritage Program design project objectives  
People’s opinions on the OT CHP and expectations on the cultural heritage current situation in Mongolia |
| 3. | Expectations of the Advisory Board (Presentation – Gunchinsuren)  
Advisory Board role and objective, Terms of Reference presented |
| 4. | CHP Project overview (Presentation – Gunchinsuren)  
Components to the CHP design project |
| 5. | Progress on Tangible Heritage work stream  
- Main points on Archaeology (Presentation – Amartuvshin)  
  - Legal articles indicated cultural heritage protection  
  - Mining licenses given in Mongolia versus archaeological surveys done in those license areas  
  - What we need to do in order to protect the cultural heritages?  
  - Rescue studies done at OT in 2003 to 2010  
  - What we are doing so far in terms of CHP design? Literature review, gap analysis, field studies, mapping etc  
- Main points from Palaeontology (Presentation – Tsogtbaatar)  
  - OT main impact zones  
  - Paleontological main sites near OT |
6. Q&A for sessions 2-5 (Facilitator – Nergui)

**Discussion points**

- How to translate “Advisory Board” into Mongolian language?
  - Agreed on “Зөвлөх хөрөө” (zovlokh khoroo) for the Advisory Board
  - Agreed on “Зөвлөх баг” (zovlokh bag) for the MIH Team
- Impact zones versus Impact soums: This should be presented clearly and consistently across the whole CHP (palaeontology refers to impact zones, archaeology refers to impact soums)
- The OT Project classifies it’s ‘direct impact areas’ as the four soums: Khanbogd, Manlai, Bayan-Ovoo and Dalanzadgad. So, according to the TOR for the CHP, the team is studying: (1) these four direct impact soums, (2) Umnugobi province and (3) Mongolia.
- There should be a third pillar in protecting cultural heritage: (1) public awareness; (2) force of law and (3) Advisory Board members suggested there should be 3rd one, but they haven’t indicated what it should be.
- Discussion on representation from all soums of Umnugobi province: OT indicated 4 soums as their main impact areas, so MIHT proposed representatives from those soums only to sit on the Advisory Board. Consultation outside the Board forum is wider.

Explanation on heritage site registration and the level of Government at which sites are registered (soum, aimag or national): During field visits, a generic survey is undertaken and findings are registered in MIHTeam CHP design database. When exploration licences are amended to become operation licenses, those found tangible heritage sites need to be excavated; this is one of the recommendations which MIHT will include in CHP design.

7. Progress on Intangible Heritage work stream (Presentation – Chuluun)

- Intangible Heritage main study areas(intangible heritage identification, uvt gazar list, maps and pasture relevant traditions)
- Intangible Heritage study methodology
  - Locals identified main intangible heritages

8. Q&A for session 7 (Facilitator – Nergui)

**Discussion points**

- The following items of intangible heritage should be clearly considered: Handcrafts, musical instruments, not only long song also folk songs, fairytales.
- The 13 broad categories for intangible heritage incorporates these suggestions.
- It was recognised that intangible heritage study is new for Mongolia; Board members agreed that the MIHT study is going in right direction in terms of intangible study.
- Methodology for intangible study was discussed. It was confirmed by MIHT that anthropological study requires the investigator to listen to interviewees without prejudice or leading or cutting short their responses.

Local place names are changing, especially by mining operations. When companies receive licenses to operate in that certain areas, they have given the area the name they wanted, which sometimes is not relevant or different to that given by local people. Consideration of a legal article specifying that place names cannot be changed was suggested.
<table>
<thead>
<tr>
<th>Agenda Item</th>
<th>Progress on Public Programs work stream (Presentation – Gerelbadrakh)</th>
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<tbody>
<tr>
<td>9.</td>
<td>OT CHP public program progress and some results</td>
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<td>Local community concerns regarding OT project negative and positive impacts on cultural heritages</td>
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<td>Visits on museums, cultural centres and tourism authority</td>
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<td>Field studies</td>
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<td>10.</td>
<td>Q&amp;A for session 9 (Facilitator – Nergui)</td>
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<td><strong>Discussion points</strong></td>
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<td>It was queried whether Gobi A and B Special Protected Areas are included in the impact soums; Gobi SPA Part B, located in the southern part of Khanbogd soum, is included in the impact area.</td>
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<tr>
<td>11.</td>
<td>Teabreak</td>
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<td>12.</td>
<td>Current Legal framework for Cultural Heritage (Presentation – Gunchinsuren)</td>
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<td>Cultural Heritage Legal Framework</td>
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<td>International Conventions of which Mongolia is a signatory</td>
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<td>Required changes for Mongolian Laws regarding cultural heritage protection and preservation</td>
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<tr>
<td>13.</td>
<td>A New Structure for Mongolian Cultural Heritage (Presentation – Gunchinsuren)</td>
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<td>MIHT proposal for a new cultural heritage legal framework</td>
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<td>14.</td>
<td>Q&amp;A for sessions 12-13 (Facilitator – Nergui)</td>
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<td><strong>Discussion points:</strong></td>
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<td>It was strongly suggested that the proposed structure will not work in Mongolia, because:</td>
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<td>a. It requires too many approval and permissions from different organizations;</td>
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<td>b. New projects / developments will take a lot of time to start because of the many bureaucratic requirements proposed</td>
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<td>Lack of compliance in the current system is an issue: The Minerals Law requires that of company license payments, 50% has to go to state budget, 25% has to go to province budget and the remaining 25% has to stay in the soum budget.</td>
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<td>Unfortunately in reality it’s not working as the law requires—there is low compliance. If the law could be enforced, then requirements could include, for example, that a certain percentage of the soum’s 25% has to be spent on cultural heritage protection and preservation.</td>
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<td>15.</td>
<td>Deliberations by Advisory Board</td>
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<td>Note: MIHT and OT were not present for deliberations.</td>
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<tr>
<td>16.</td>
<td>Report back from Board to MIHT and OT (Facilitator – Nergui)</td>
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<td><strong>Discussion points:</strong></td>
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<td>The Advisory Board members chose Mr. Tuvshinbayar as the Chairperson, and Ms. Otgontuya as Secretary.</td>
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<td>There Board will consider all issues as a group; there will be no sub-committees.</td>
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<td>17.</td>
<td>Next steps (Facilitator – Nergui)</td>
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<td>MIHT next steps are:</td>
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<td>i. Working on the Phase 1 Report</td>
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|             | ii. Making amendments as a result of this meeting and further comments. This includes: the legal framework improvement diagram is a draft proposal by the team; any suggestions should
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|   | be provided to the team for consideration.  
|   | • Final comments and questions from the Board:  
|   |   i. Confirmation of the time frame of the CHP design was sought,  
|   |     e.g. whether the design of the CHP is for 5 years or 10 years or  
|   |     whole of the OT operation period. It was suggested that the  
|   |     design should be something which consists of a 1 year action  
|   |     plan and a 5 year CH protection and preservation plan. Plus, the  
|   |     program itself should be flexible.  
|   | A site visit was requested by Board members. The next meeting will held in  
|   |     Khanbogd, during February 2011. A site visit will be confirmed by OT.  
| 18. | Close. |
**CHP Advisory Board Second Meeting**

**MINUTES**

**Meeting Date:** 21st March 2011  
**Venue:** Khanbogd soum, Umnugobi province

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<th>Present:</th>
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<tr>
<td>Artag</td>
<td>Advisory Board</td>
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<td>Bat-Ulzii</td>
<td>Advisory Board</td>
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<td>Batbold</td>
<td>Advisory Board</td>
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<tr>
<td>Oyunchuluun</td>
<td>Advisory Board</td>
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<tr>
<td>Dendevsamba</td>
<td>(in his place, acting deputy governor) Advisory Board</td>
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<td>Tseveendorj</td>
<td>Advisory Board</td>
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<tr>
<td>Otgentuya</td>
<td>Advisory Board</td>
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<tr>
<td>Gunchinsuren</td>
<td>MIHT</td>
</tr>
<tr>
<td>Amartuvshin</td>
<td>MIHT</td>
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<tr>
<td>Tsogbaatar</td>
<td>MIHT</td>
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<tr>
<td>Chuluun</td>
<td>MIHT</td>
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<tr>
<td>Gerelbadrakh</td>
<td>MIHT</td>
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<tr>
<td>Purevdulam</td>
<td>MIHT</td>
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<tr>
<td>Amy Sexton</td>
<td>MIHT</td>
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<tr>
<td>Tserennadmid</td>
<td>OT</td>
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<td>Batzorig</td>
<td>OT</td>
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| Apologies:       | Kulanda, Galbaatar and Barsbold (Advisory Board) |

**Minutes:**

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<th>Agenda Item</th>
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<tr>
<td>1.</td>
<td>Research team leader B. Gunchinsuren welcomed the Board Members and thanked them for participating in the second Cultural Heritage Program’s Advisory Board meeting, and delivered the opening speech to all participants. During the opening speech B. Gunchinsuren introduced some of the new participants, Mr Jeff Altschul, international research team leader; Oyunchuluu, who is replacing Advisory Board member Batbold; Bayan-Ovoo soum’s Governor and Khanbogd soum’s deputy Governor, who is replacing Mr. Dendevsamba. In the opening session he delivered a brief presentation about the CHP main objectives, key achievements during Phase 1, and upcoming activities.</td>
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<td>2.</td>
<td>B. Gunchinsuren introduced the main purposes of the meeting: a) Improve the Phase-I report quality by consolidating comments and recommendations of the Advisory Board members and current cultural heritage situational analysis findings. b) Receive feedback on the prioritization of the planned activities, expected to be implemented in the short, mid and long run by the tangible, intangible and public program research groups. c) Introduce the CHP activity framework and its elements for further comments and discussion</td>
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<td>3.</td>
<td>Within the scope of the meeting objectives, the research team leader B. Gunchinsuren presented the following brief reports: a) He introduced the short, mid and long term activity planning for each</td>
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### MIHT MONGOLIAN INTERNATIONAL HERITAGE TEAM

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<tr>
<th>Agenda Item</th>
<th>Research group and highlighted the immediate future activity plan for each group. For short and mid-term activity areas, it included discussion of: reasons to enforce a corresponding law amendment; time constraints on program development; need-based cultural center establishment in the aimag; urgency of educating and qualifying cultural heritage experts; professional qualification supports by government agencies; study of OT operational compliance with existing Mongolian cultural heritage law and regulations; and provision of cultural heritage guidelines to OT managers towards building culture heritage friendly operational practices.</th>
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<td>b) In the long run it is planned to enforce and monitor law implementation, and develop operational guidelines and rules for mining and other related activities that could impact the cultural heritage wellbeing. The immediate need and proposal of continuing archeological and paleontological study in other poorly studied soums of Umnugobi aimag, and the urgency of developing and implementing a holistic cultural heritage program that aims to strengthen and develop intangible cultural heritage elements is also key.</td>
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<td>c) Discussion on regularisation of the public educational and awareness programs and activities.</td>
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<td>d) Discussion on cultural heritage program for children and adults.</td>
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<td>e) Development of cultural heritage-based tourism.</td>
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<td>f) Gunchinsuren introduced 7 elements of the activity plan that are proposed to be implemented within cultural heritage program. His presentation covered: all spheres around state policy related to cultural heritage; structural framework of financing cultural heritage program; implementation of cultural heritage related legitimate acts and international conventions on the cultural heritage center operations; continuation of tangible heritage study; development of the integrated cultural heritage database for improving tangible and intangible heritage sustainability; educational and awareness program for the children and adults; multi-stakeholders participation and networking and local community capacity building.</td>
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<td>4.</td>
<td>Each research group delivered a brief presentation on the CHP Phase 1 report.</td>
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<td>a) Public program research presentation by team leader J. Gerelbadrakh. It included preliminary research activity results, future priorities and plans, age-sensitive educational and awareness building programs and activities, partnership and networking of the stakeholders, investment needed areas, human resource capacity building and other related training programs.</td>
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<td>b) Intangible research presentation by team leader S.Chuluun. This addressed the last half year’s activity report, key achievements and a list of newly recorded and renewed intangible heritage.</td>
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<td>c) Tangible research group presentation by the principal researcher B. Gunchinsuren. It addressed activity process and progress, key achievements, operational methods and methodologies, future priorities and recommendations.</td>
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<tr>
<td>5.</td>
<td>Comments and recommendations related to the public program team presentation:</td>
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<td>• Involvement and mobilization of the elder people in this research work will bring more ideas and results. The elder people can provide more ancient and authentic invaluable historical, traditional and cultural information and knowledge. In total there are 14 Elder people’s gatherings in 14 soums. The elder people’s organization can produce more values and contributions on this</td>
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Agenda Item

- Secondary school teachers’ capacity building is very important. In parallel, education and qualifications of museum guides and librarians, and selection of appropriate personnel, is also critical. This is because these organizations can play important roles towards educating and changing mindsets and behaviors around cultural heritage.
- Nature protectors and bagh leaders have very poor knowledge and experiences about cultural heritage. Capacity building programs needs to be planned, as they are very useful in educating the public.
- Collaboration of museums and schools is very important and mechanisms for securing a balanced and effective cooperation between these two is required. Also distance learning is an applicable training method for local communities.
- Elder people’s contribution should be maximized to implement such an approach in the nearest future.
- Special attention should be paid to intangible heritage, which will disappear along with people from the area. A migration baseline study is required for future planning and influx change. Questions include: Are there any trainers in the local community? How can modern technological advancements can favor and support cultural heritage elements continuity and ownership, while working to improve people’s quality of life?
- Many people are attracted to work in the mining sector. There are only few young people to stay in herding and follow traditional nomadic way of life. The aimag museum is very powerful agent to sustain cultural heritage in the long run.
- It is urged to establish model museums in the OT impact soums. Also capacity building is one of the urgent issues to be addressed in the short term. The local government’s tactical and staged presence and participation should be deeply considered.
- Budget limitation are being faced today. Independent financing of the cultural heritage program is near impossible in today's practice.

Exposure trips to international best practices and lessons learnt, international partnering and networking and collaboration are important to our people towards building cultural heritage foundation. For example: Inner Mongolia, Khalmag and so on.

6. Comments and recommendations on the intangible heritage research group presentation:
- Further detailed study required about future potential intangible heritage programs based on the existing research work.
- Government interaction is immediate to the intangible heritage protection. Intangible heritage program implementation can be supported and strengthened by the structured government policy and legitimacy. Also economic and financial mechanisms of cultural heritage production can be introduced by the appropriate state policy and procedures.
- It is very good idea to include cultural heritage educational packages into the secondary school education program, approved by the Ministry of Education.
- 30-40% of extended family names on the citizen’s cards are wrong. It needs to correct all these wrong names. In coming years it will introduce electronic ID cards, so we can fix the problem.
It is very relevant and timely activity to teach young herders about the pastureland vegetation. It is true that majority of the young herders have no knowledge and experiences about plants growing in the area.

We have to cooperate with elder people’s organizations to do quality research work.

It is very helpful to burn intangible heritage elements into CDs and DVDs. As the intangible heritages flow from person to person, trainee-centered teaching methods are recommended.

Comments and recommendations on the tangible heritage research group presentation

- Fully agree with the proposal of having Culture Research Center. The management of this center can be under aimag government office for future long term sustainability.
- Local government involvement is really important on the cultural heritage protection program.
- Multi-stakeholders participation in CHP is really important. But specifications of each party’s roles and responsibilities should be detailed and negotiated.
- Each soum should have tangible, intangible heritage scientific research centers, museums and qualified personnel.
- Field work took 1/3 of whole research work. So it is a considerable time to do realistic analysis.
- There are numbers of natural heritage that can be recommended into the world heritage book; further attention can be directed to that task.
- Creative heritage industry initiatives can be regulated and developed by the central and local government.
- It will take much money, time and resources to develop and implement CHP in all soums of the aimag. For the time being we should focus more on model CHP development and implementation in our 4 soums.
- CHP implementation is not only OT’s job. Integration of all local government, non government, other mining companies, other companies and citizens is important to bring good impacts.
- It is hard to imagine the South Gobi without the camel. So camel breeding incentives and promotional competitions and campaigns can be introduced by the mining companies, operating in the aimag. For example: the best milk producer camel competition; milk processing small or mid-scale businesses can be supported, then the local herders can supply camel milk to mining company’s food consumption.
- Today renaming of the specific locations and areas in mining license provision practices is common. Legal regulation is required to ensure traditional naming practices are not contradicted by mine development names.
- This project was funded by OT to enable detailed research in 4 soums. In future, local government in other mining impacted soums could propose bigger mining companies to do such research in a systematic and integrated way to ensure coverage and non-duplication.
- Completion of the research work is one thing. Implementation of the program is another and the most important task. So we need to think seriously about how to fill that gap.
| Agenda Item | The research team leader B. Gunchinsuren delivered a closing speech and gave brief information about the coming Cultural Heritage Risk Assessment workshop. |