

SECTION D: ENVIRONMENTAL AND SOCIAL CONSTRUCTION MANAGEMENT PLANS

CHAPTER D15: RESETTLEMENT ACTION PLAN

Contents

15	RESETTLEMENT ACTION PLAN	3
15.1	INTRODUCTION	3
15.1.1	Overview	3
15.1.2	Project Description	3
15.1.3	Project Proponent	4
15.1.4	Project Location	4
15.1.5	Scope	7
15.1.6	Oyu Tolgoi Definitions	7
15.1.7	Previous Resettlement Documentation	7
15.2	LEGAL AND INSTITUTIONAL FRAMEWORK	8
15.2.1	Mongolian Laws and Regulations	8
15.2.2	International Standards and Conventions	11
15.2.3	Rio Tinto Standards and Policies	12
15.2.4	Comparison of Mongolian Law and International Standards	12
15.3	BASELINE SETTING	14
15.3.1	Sources of Data	14
15.3.2	Administrative Setting	15
15.3.3	Key Demographic Features	16
15.3.4	Herder Land Use	17
15.4	IDENTIFICATION OF AFFECTED PARTIES	25
15.4.1	Project Land Requirements	26
15.4.2	Identification of Impact Zones	26
15.5	MITIGATION MEASURES	33
15.5.1	Minimisation of Land Take	33
15.5.2	Compensation and Entitlements	35
15.5.3	Physical Displacement (Impact Zone A1)	43
15.5.4	Economic Displacement (Impact Zones B-F)	50
15.5.5	Ongoing Engagement with Affected Herders	60
15.6	ASSISTANCE TO VULNERABLE PEOPLE	61
15.6.1	Identification of Vulnerable People	61
15.6.2	Types of Assistance for Vulnerable People	62
15.6.3	Process for Assisting for Vulnerable People	63
15.7	GRIEVANCE MANAGEMENT	63
15.7.1	Grievance Classification	63
15.7.2	Procedure Overview	64
15.7.3	Mediation Committee	64
15.7.4	Summary of Resettlement and Compensation-related Grievances	65
15.7.5	Grievances Related to the 2005 Resettlement Programme	65
15.8	ROLES & RESPONSIBILITIES	66
15.8.1	General	66
15.8.2	Regional Development and Social Performance Team	68
15.8.3	Khanbogd Soum Government	69
15.9	INFORMATION AND DATA MANAGEMENT	70
15.10	MONITORING AND KEY PERFORMANCE INDICATORS	70
15.10.1	Overview	70
15.10.2	Internal Monitoring	70
15.10.3	Outcome Evaluation	76

15.10.4	Completion Audit.....	79
15.11	SCHEDULE AND BUDGET	80
15.11.1	Budget.....	80
15.11.2	Schedule and Implementation Process	81
Annex A: Oyu Tolgoi Herder Relocation Agreement.....		86
Annex B: Oyu Tolgoi Land Disturbance Permit Procedure Overview		93
Annex C: Key Socio-Economic Baseline Data for Herder Households		99
Annex D: Poster explaining Displacement and Livelihood Restoration Process		105
Annex E: Detailed Entitlements Matrix.....		106
Annex F: Detailed Findings from 2010 Review of Resettled Herder Households		112
Annex G: Oyu Tolgoi Community Grievance Form and Flowchart.....		123

Figures

Figure 15.1: Project Location and Project Area of Influence.....	6
Figure 15.2: Herder Winter Shelter	17
Figure 15.3: Herder Camps and Wells North of Oyu Tolgoi.....	18
Figure 15.4: Herder Camps and Wells South of Oyu Tolgoi	18
Figure 15.5: Herder Summer Camp	19
Figure 15.6: Impact Zones and Winter Shelters (North)	30
Figure 15.7: Impact Zones and Winter Shelters (South).....	31
Figure 15.8: Relocation of Winter Camps in the Mine Site Area.....	45
Figure 15.9: Livestock Corral and Winter Shelter.....	47
Figure 15.10: Herders with new Goats and Camels	47
Figure 15.11: Communities & Social Performance Department, Oyu Tolgoi.....	67
Figure 15.12: Regional Development & Communications Department, Oyu Tolgoi	67

Tables

Table 15.1: Comparison of Mongolian Law with International Requirements.....	13
Table 15.2: Population, Khanbogd soum, 2007-2010*	16
Table 15.3: Demographic indicators from Potentially Affected Herder Survey	17
Table 15.4: Economic Activity Data for Potentially Affected Herders [#]	21
Table 15.5: Total Number of Livestock of Khanbogd Soum, 2010.....	21
Table 15.6: Herd Sizes of Potentially Affected Herders	21
Table 15.7: Income Data for Khanbogd Soum Herders, 2011	22
Table 15.8: Education data for Potentially Affected Herders, 2011 (from 84 households surveyed)	24
Table 15.9: Summary of Displacement Impacts and Impact Zones.....	27
Table 15.10: Summary of Project Affected People	32
Table 15.11: Oyu Tolgoi Project, Summary Entitlements Matrix, 2011	40
Table 15.12: Summary Issues Raised & IMMI Actions (2003-2005 Herder Relocation)	48
Table 15.13: Summary of Consultation with Economically-Displaced Herders, 2010 - 2011	57
Table 15.14: Summary Issues Raised by Economically-Displaced Herders & Oyu Tolgoi Actions	59
Table 15.15: Vulnerable Households in Directly Affected Herder Group*, 2011	62
Table 15.16: Roles & Responsibilities for the Oyu Tolgoi Resettlement Action Plan	68
Table 15.17: Matrix of Monitoring & Evaluation Procedures (M&E).....	71
Table 15.18: Monitoring Measures – Physical and Economic Displacement	73
Table 15.19: Key Performance Indicators – Physical and Economic Displacement.....	77
Table 15.20: Key Performance Indicators – Completion Audit	79
Table 15.21: Estimated Budget for Oyu Tolgoi Resettlement Action Plan.....	80
Table 15.22: Schedule and Implementation Process for Resettlement Action Plan.....	82

15 RESETTLEMENT ACTION PLAN

15.1 INTRODUCTION

15.1.1 Overview

Oyu Tolgoi LLC (“*Oyu Tolgoi*”), formerly Ivanhoe Mines Mongolia Inc. (“IMMI”) LLC, is developing the Oyu Tolgoi copper and gold deposit (“the Project”) located in the Khanbogd *soum* of Omnogovi *aimag* in the South Gobi region of Mongolia.

The Oyu Tolgoi deposit is the world's largest undeveloped copper-gold project, located 550 km south of Ulaanbaatar and 80 km north of the Chinese-Mongolian border (see *Figure 15.1*). The Oyu Tolgoi Project is included in Mining Licence 6709A, which covers an area of approximately 8,625 hectares (ha) centred at latitude 43°00'45"N, longitude 106°51'15"E.

In October 2009, Ivanhoe Mines Limited and Rio Tinto International Holdings Limited signed an Investment Agreement (IA) with the Government of Mongolia. The IA defines the fiscal and regulatory environment under which the Project will operate and brings the Government of Mongolia (GoM) into the Project as a 34% equity owner of Oyu Tolgoi (the Company) with the option to increase its equity holding by a further 16% after 30 years, provided that terms can be agreed at that time.

An integrated Environmental and Social Impact Assessment (ESIA) has been prepared for the Project and this *Resettlement Action Plan* (RAP) forms part of the overall management plans for the ESIA. The ESIA has been conducted for the major Project facilities and related activities.

The ESIA has been prepared to meet applicable international good practice as defined by the requirements of the International Finance Corporation (IFC) Performance Standards for Social and Environmental Sustainability (2006) and the European Bank for Reconstruction and Development (EBRD) Environmental and Social Policy (2008) together with the related EBRD Performance Requirements.

15.1.2 Project Description

The ESIA is based on the initial construction of an open pit copper-gold mining operation at the Southern Oyu deposit, together with an ore concentrator and infrastructure to support a processing capacity of 100,000 tonnes per day (tpd).¹ This includes further development of underground mining potential to establish block caving at the Hugo North deposit.

The planned expansion of the Project to an ore processing capacity of 160,000 tpd in the future is discussed in *Chapter C13: Cumulative Impacts*. Further expansion beyond this level is envisaged, but it is not described in this ESIA as it remains speculative at this stage.

Initial Project production will be from an open pit copper-gold mining operation at the Southern Oyu deposit, supplemented within 4 years by underground mining operations at the Hugo North deposit. With the ramp-up of underground production, an expansion to the capacity of the concentrator plant is planned. This Project expansion is currently under engineering design and evaluation and will require regulatory approval from the Mongolian authorities, including environmental approvals. Water use requirements for the Project expansion have already been discussed with the Government of Mongolia and, once additional water resource performance data from the Gunii Hooloi aquifer is compiled, the Government of Mongolia will be approached for the necessary regulatory approvals for the mine expansion (e.g. for increased water abstraction from the Gunii Hooloi aquifer).

Oyu Tolgoi is a “greenfield” mining Project in a remote location and, therefore, requires extensive infrastructure to be constructed in addition to the concentrating facilities. The principal components of the Project include:

- **Mine Licence Area:** this area contains all open pits and underground mines, and associated processing infrastructure including the 100,000 tonnes per day concentrator, a tailings storage

¹ This is the average capacity, to allow for maintenance downtime and other stoppages the maximum capacity of the concentrator plant will be 110,000 tonnes per day of ore.

facility (TSF) and waste rock dumps. The entire Mine Licence Area will be fenced and covers a total of 8,625 ha;

- **Gunii Hooloi Water Pipeline and Borefield:** water demand for ore processing will be supplied from the Gunii Hooloi (GH) basin which extends 35-75 km north of Oyu Tolgoi. Bores will be developed in the southeast and the northeast areas of the borefield with storage lagoons along the supply pipeline designed for emergency use in the event of any outage on the water supply pipe. Expansion of production capacity to 160,000 tpd will require further evaluation and approvals for the increased water demand after ramp-up (currently planned for 2017) that would follow the full-scale commissioning of underground operations;
- **Airport:** the airport will be located approximately 7 km north of the Mine Licence Area and will facilitate the transport of people and goods to the site from Ulaanbaatar and other points of departure. A temporary airport has been constructed to support the construction phase and this will be replaced by the permanent airport, which will be located on an adjacent site;
- **Oyu Tolgoi to Gashuun Sukhait Concentrate Transport Road:** the transport of bulk supplies and the delivery of copper concentrate to China will be by road to the point of sale at the Mongolian/Chinese border. Oyu Tolgoi is constructing a paved road to the border. This is an existing road which will eventually form part of the Mongolian National Road network and be operated and maintained by the Government of Mongolia;
- **Power/Transmission Line:** Initial electrical power for the Project is expected to be sourced from the Inner Mongolian Autonomous Region (IMAR), in northern China, following the use of on-site diesel generators during the pre-construction and construction phases. A transmission line will be constructed between Oyu Tolgoi and the border with China. By the fourth year, and in accordance with the terms of the Investment Agreement with the Mongolian government, power must be sourced from a power station within Mongolia; although it is not required that Oyu Tolgoi will build and operate a power station itself. Heating requirements for the Project will be met by on-site coal-fired boilers which will continue to be used throughout the Project life; and
- **Worker accommodation:** the provision of construction and operation camps for workers and the recruitment of approximately 14,800 workers at peak construction in late-2011²³ (the workforce has now reached its peak and is starting to diminish) and 3,500 workers during steady-state operations.

This Project has an estimated 27-year life, however Oyu Tolgoi has extensive resources and 27 years represents the life of mine *only* for those resources at a feasibility level of knowledge. It is likely that the Project will continue in operation well after that date. It is estimated that its resources can currently support a mine life of 60 years.

15.1.3 Project Proponent

The Project Proponent is Oyu Tolgoi, and ownership is as follows:

- Ivanhoe Mines Ltd – 66%; and
- Government of Mongolia – 34%.

Ivanhoe Mines Ltd (“Ivanhoe”) has a 66% interest in the Project. Rio Tinto has a 51% interest in Ivanhoe and is the manager of the Oyu Tolgoi Project.

15.1.4 Project Location

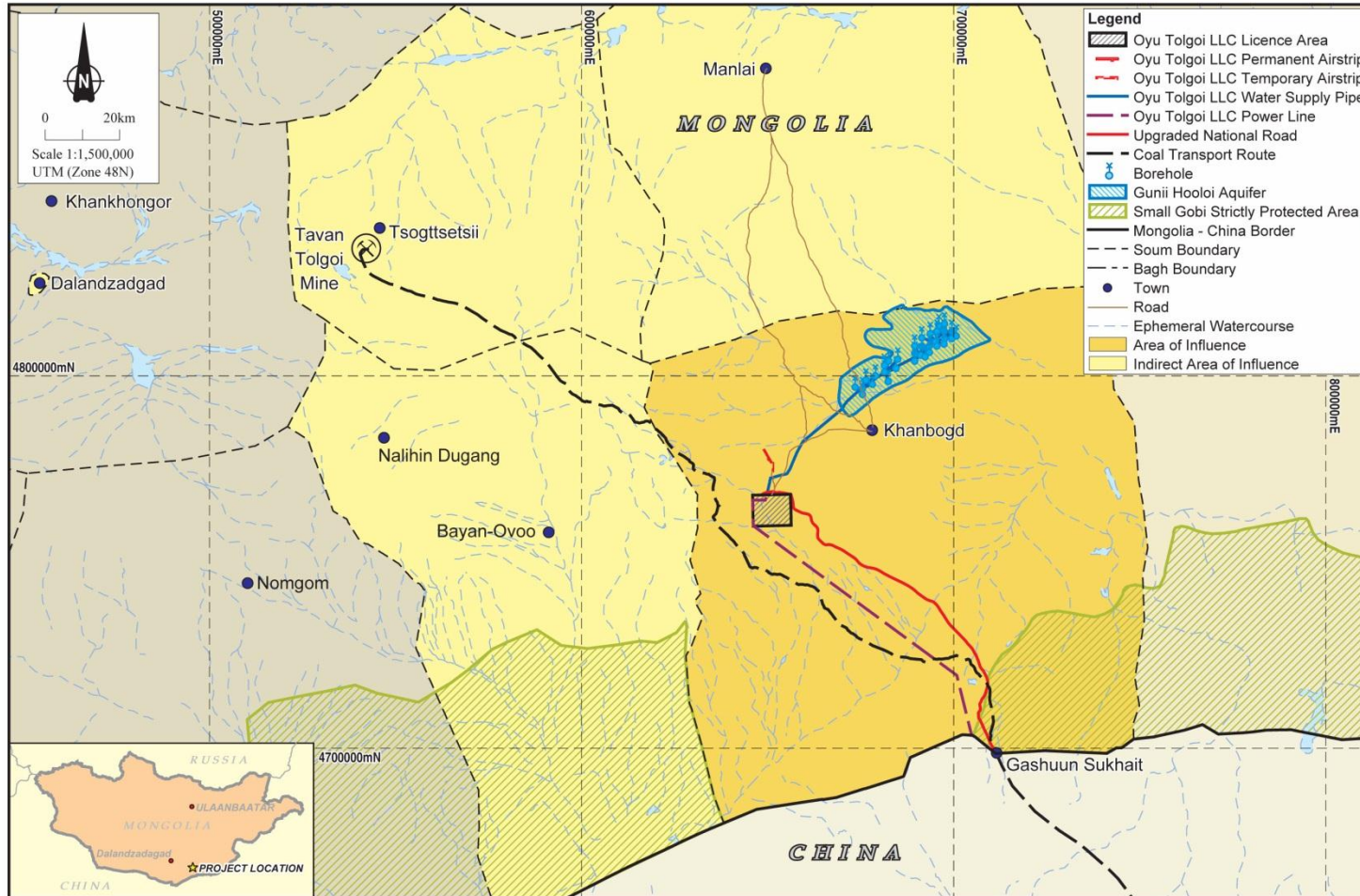
While the Project is located in a sparsely-populated rural area, it does have impacts on land, people and their livelihoods. The Mine Licence Area and the airport sites, in addition to linear features such as the Oyu Tolgoi to Gashuun Sukhait Road, the Gunii Hooloi water pipeline and transmission line from site to

² Due to worker shift and vacation patterns, there will be approximately a maximum of 12,500 workers residing in the construction camps at any one time.

³ HR monthly employment data for December 2011

the border with China, all entail land acquisition. *Figure 15.1* illustrates the Project Location and Project Area of Influence.

Figure 15.1: Project Location and Project Area of Influence



Objectives of the RAP

The objectives of the RAP are to:

- Outline the applicable standards with regards to land acquisition and resettlement;
- Identify the potential physical and economic displacement impacts of the Project;
- To identify Project Affected People (PAPs) and to indicate through a series of thematic maps where these people are located in relation to the Project;
- To describe the measures taken to minimise resettlement and displacement impacts through application of the mitigation hierarchy;
- To establish effective resettlement, compensation and livelihood restoration plans and procedures for ensuring that affected peoples' livelihoods and standards of living are improved or at least restored;
- To define the operational procedures, consultation methods, roles and responsibilities, and requirements for implementing the RAP; and
- To define monitoring and reporting procedures.

15.1.5 Scope

The *Resettlement Action Plan* was prepared between September 2010 and November 2011, by Oyu Tolgoi. It covers all activities that have the potential to result in impacts to land use and the physical and economic displacement of people living on and/or using the land required/disturbed by the Oyu Tolgoi Project in Khanbogd *soum*.

15.1.6 Oyu Tolgoi Definitions

<i>Compensation</i>	Payment in cash or in kind for loss of an asset or a resource that is acquired or affected by the Project.
<i>Displaced person or Project Affected Person (PAP)</i>	Person or enterprise experiencing either physical or economic displacement.
<i>Economic displacement</i>	Loss of assets (including land) or access to assets that leads to loss of income sources or means of livelihood as a result of project-related land acquisition or restriction of access to natural resources. People or enterprises may be economically displaced with or without experiencing physical displacement
<i>Household</i>	One person living alone or a group of people (not necessarily related) living in the same dwelling unit with common housekeeping – that is, sharing either a living room or sitting room or at least one meal a day.
<i>Mine Licence Area</i>	The Oyu Tolgoi Project is included in Mining Licence 6709A, which covers an area of approximately 8,625 hectares (ha) centred at latitude 43°00'45"N, longitude 106°51'15"E
<i>Physical displacement</i>	Loss of dwelling or shelter as a result of project-related land acquisition which requires the affected person(s) to move to another location.

15.1.7 Previous Resettlement Documentation

The key document that describes the handling and management of resettlement and compensation activities for herders resettled from the Mine Licence Area in 2005 was the *Oyu Tolgoi Project, Herder Relocation Agreement, Ivanhoe Mines, September 2004*. An agreement was concluded with each of the resettled herder households and signed by the head of each household, the Khanbogd *soum* Governor and the CEO of Ivanhoe.

Copies of these documents are maintained by Oyu Tolgoi and, as individual agreements are confidential, are not included in this report. An example (not completed) is provided in *Annex A* to the RAP. The

agreements were prepared in accordance with the then applicable Mongolian regulations and the then applicable World Bank Group policies.

15.2 LEGAL AND INSTITUTIONAL FRAMEWORK

Set out below is an outline of the applicable standards.

15.2.1 Mongolian Laws and Regulations

Overview

The laws of Mongolia that regulate tenure, allocation, expropriation and transactions associated with land and other immovable assets include the following:

- The Constitution (1992);
- The Law on Land (2002);
- The Law on Allocation of Land to Mongolian Citizens for Ownership (2003); and
- The Civil Code (2002).

The Constitution

The Constitution of Mongolia (“*Mongol State Basic Law*”, 1992) includes key principles in relation to land management (as follows):

- Article 6 states that land is deemed State property unless in private ownership, and that the State may allocate private ownership of plots of land - except pastures - to citizens of Mongolia only. Pasture land is State land and cannot be privately held;
- It also states that the State has the right to exchange land or to take it over with compensation on the grounds of special public need, and that foreigners are allowed to lease land for a specified period of time under conditions and procedures provided by law; and
- Consistent with the Universal Declaration of Human Rights, the Constitution (Article 16) affirms the right to private property (“*right to fair acquisition, possession, and inheritance of movable and immovable property*”) and State protection thereof (“*Illegal confiscation and requisitioning of the private property of citizens are prohibited*”). It provides further that “*If the State and its bodies appropriate private property on the basis of exclusive public need, they may only do so with due compensation and payment*”.

Law on Land, 2002

According to Article 3 of the Law of Mongolia on Land there are three main categories of land rights, including ownership, possession, and usage:

- *Section 3.1.2 establishes private property* of land for Mongolian citizens without time limits (comparable to “freehold”). Land allocation and the size of plots are tied to specific uses, including family needs and commercial use, and land allocation criteria must be included in land management plans of the respective administrative units. Family land for residential use is allocated once and for free; the size varies with the type of administrative unit, from 0.07 ha in the Capital City and *aimag* urban areas to 0.35 ha in *aimag* rural areas.⁴ Land for other uses may be allocated by sale or auction. Ownership rights must be registered in accordance with the Law on Registration of Property Ownership Rights and other related Rights;
- *Section 3.1.3: “to possess land”* means to be in legitimate control of the land in accordance with purpose of its use and terms and conditions specified in respective contracts (persons with this right can apply for the right of ownership). This regime is comparable to “leasehold”. In this case, the State retains ownership of the land. Possession may be limited in time (15-60 years), with possible extensions. Households, government organisations and companies and organisations

⁴ The differential size allocations were enumerated in Article 7.1 of the associated Law on Allocation of Land to Mongolian Citizens for Ownership, 2002.

may possess land and size limits apply for specific uses. Contracts for possession must be registered in the national registry; and

- *Section 3.1.4: “to use land”* means to undertake a legitimate and concrete activity to make use of some of the land’s characteristics in accordance with contracts made with owners and possessors of land. Land use rights can be given to Mongolian citizens or foreign nationals and foreign legal entities, for 5 years and are renewable for 5 years at a time.

Rights to use of land for permanent infrastructure must be granted and fees paid in accordance with the Mongolian Land Law and Land Fees Law. Land use for the Project for mine development work, including camps and roads, is currently permitted through an annual application process to the *soum* administration. By virtue of the distinction between surface and mineral rights, mining licenses do not *per se* constitute land tenure and do not exclude use of the surface, such as grazing on pasture land.

The law specifies (Section 50) that users of land will take measures at their own expense to:

- preserve land characteristics and quality;
- prevent deterioration of soil fertility;
- prevent deterioration of flora and soil erosion;
- prevent soil infertility, flooding and salinity; and
- prevent pollution from various sources.

It also specifies that:

- Land users need to restore and maintain, at their own expense, the land that would be eroded or damaged as a result of mining activities;
- Land users shall not cause an adverse impact on the environment when using the land;
- Land users shall preserve and protect land with forests, rare and endangered animals and plants, historical and cultural memorials; and
- Land users shall not undertake activities that may cause an adverse impact on land used by other people.

This law requires Oyu Tolgoi to rehabilitate the land used for the Project and to avoid causing any adverse impacts to the land. The land is also still open for use as pasture for grazing, meaning that negotiations with local *soum* governors and current land users will take place with respect to any impacts that the operation may have on grazing and generally current land use by other parties. This law also stipulates the requirement for an environmental impact assessment to be completed prior to beginning projects.

The Civil Code of Mongolia

The Civil Code of Mongolia (2002) is applicable to land acquisition by an entity such as Oyu Tolgoi insofar as it regulates transactions and contracts. As mentioned above, expropriation⁵ cannot be applied. Therefore land acquisition requires the Project sponsor and affected persons to engage (directly) with each other as “*equal and autonomous legal persons and participants in a civil legal relationship*”.

Chapter 10 of the Civil Code defines property and assets, including land and other immovable property. Chapter 11 details provisions for their possession by legal acquisition and Chapter 12 for property ownership by individuals and other legal persons. The Civil Code in Article 101 provides general terms for the possession, use and disposal of property (further elaborated in Articles 109 to 112), but refers to the subsequently enacted Land Law and Land Allocation Law with regard to land ownership and possession. A number of special provisions pertaining to common property ownership (Article 108), common property of family members (Articles 126 and 128) and easements (servitude) (Article 151) may be applicable to specific cases in the Project. Central to a negotiated agreement on transfer of land are the stipulations on contract in Chapter 15.

⁵ Or “*eminent domain*” as expropriation is known in certain countries.

Compensation and Valuation

In the event of expropriation, public bodies generally follow Cabinet Resolution 103 of 13 April 2003, which determines land valuation tariffs. Subject to negotiation, current common practice in urban areas is to pay 50% of the agreed compensation in a first instalment upon signature of the agreement between the expropriating entity and the affected owner, and to pay the rest once fences have been moved and land is vacated.

Compensation for structures follows detailed assessment and application of unit rates based on market prices of construction and services, minus depreciation, as assessed by the local Property Relations Agency (PRA). Non-titled occupants of land are typically considered illegal land users and are evicted on the basis of Article 27.4 of the Land Law, which states that '*possessing land without a valid license is prohibited*'.

Comments

The current legislation enables *soum* Governors to grant land possession contracts to herders for winter and spring shelters, however these rights do not extend explicitly to the associated pastures. The laws are not fully clear on this matter, and pasture land is constitutionally considered to be a 'common wealth' of Mongolians and therefore a State held resource which cannot be allocated for private use. Much study has been devoted to the status and implementation of these laws in the subsequent years and the apparent conclusion is that the law is only clear on the granting of possession contracts for winter/spring shelters.

[The 2002 Land Law] does not appear to explicitly either allow or preclude allocation of pastures as distinct from settlements or campsites. It also includes additional, apparently contradictory, emphasis on the need to maintain common access to pastureland, irrespective of the existence of any possession contracts, while at the same time requiring protection of winter and autumn pastures from out of season grazing.⁶

"Possession" (or lease) contracts for winter/spring shelters, for a period of up to 60 years, are generally well understood by local officials and many herders, although not all herders sought or were able to obtain such contracts. Many herders believe that possession contracts apply to pastures as well as shelters, whereas most *soum* officials are aware that the contract applies only to the 0.35 ha on which the shelter stands. Traditional access to pastures and locations is often the criterion for deciding to whom possession contracts will be granted, although 'new herders' (who took up pastoralism when the centralised state economy failed and urban jobs disappeared) have also been able to establish claims based upon having built shelters in previously unallocated areas.

The laws apply only to winter and spring shelters, as these are crucial for survival, and therefore their associated pasturelands must not be grazed in the summer or autumn. Summer and autumn pastures cannot be formally allocated, are far more flexible, and considered to be open for access.

Considering the comparatively recent institutionalization of the rights of possession and ownership in Mongolia in 2002 and 2003, respectively, some occupants of land are not yet legally recognised as possessors or owners, as they are not aware of the process of application, nor are they in a financial position to apply for formal rights. It may also be that the land they are occupying or possessing is not included in the *aimag* Land Management Plans as eligible for such rights. In principle, the law permits all of these occupants of land to apply for and be granted ownership or possession, provided that the land is designated as land for allocation by the government.

In summary:

- Mongolian law recognises private ownership under either a freehold ("ownership") or leasehold ("possession") regime. In practice, these tenure regimes are restricted to residential land, i.e. winter/spring shelters in the case of herders. Pasture land remains as State land. Private usage rights over pasture land could in theory be formally recognised, however, this is rarely the case in practice;

⁶ Upton, C., 'Living off the land: Nature and Nomadism in Mongolia', *Geoforum*, vol. 41, 2010, p. 1450.

- While all private rights upon land are expected to be registered, few actually are (outside of urban areas) due to the relatively recent legislation and lack of land users' awareness; and
- Apart from the general principles in the Constitution, there is a general lack in Mongolian law of specific provisions applying to compensation and resettlement. Expropriation for public needs exists in Mongolian law but can only be triggered by the State or public bodies. Where it is used, and although some level of negotiation usually seems to take place, neither the valuation (at depreciated value rather than replacement value) nor the treatment of informal users (evicted without compensation) follow international requirements.

15.2.2 International Standards and Conventions

IFC Performance Standards (2006) and EBRD Performance Requirements (2008)

International Finance Corporation (IFC) Performance Standard 5 (PS5) and the European Bank for Reconstruction and Development (EBRD) Performance Requirement 5 (PR5) set out requirements and recommendations for land acquisition and involuntary resettlement. Key requirements of both institutions can be summarised as follows:

- *Displacement will be avoided or minimised by exploring alternative Project designs wherever practical;*
- *The requirements apply to both “physical displacement” (loss of shelter) and “economic displacement” (loss of means of livelihood) - both physically displaced and economically displaced people are to be considered in resettlement planning;*
- *The Project shall mitigate adverse social and economic impacts from land acquisition or restrictions on affected persons' use of land by: (i) providing compensation for loss of assets at full replacement cost; and (ii) ensuring that resettlement activities are implemented with appropriate disclosure of information, consultation, and the informed participation of those affected;*
- *The Project is expected to offer displaced persons (both physically and economically displaced) and communities compensation for loss of assets at full replacement cost and other assistance to help them improve or at least restore their livelihood and standard of living and improve the living conditions of those physically displaced, including through the provision of adequate housing with security of tenure at resettlement sites;*
- *Special provisions shall apply to consultations which involve Indigenous Peoples as well as individuals belonging to vulnerable groups;*
- *Where livelihoods of displaced persons are land-based, or where land is collectively owned, the Project will seek to offer land-based compensation, where feasible;*
- *The Project is to “consult with and facilitate the informed participation of affected persons and communities, including host communities, in decision-making processes related to resettlement. Consultation will continue during implementation, monitoring, and evaluation”;*
- *The Project is expected to “establish a grievance mechanism consistent with IFC's Performance Standard 1 (or EBRD PR 10) to receive and address specific concerns about compensation and relocation that are raised by displaced persons or members of host communities, including a recourse mechanism designed to resolve disputes in an impartial manner”;* and
- *The Project is expected to “carry out a census with appropriate socio-economic baseline data to identify the persons who will be displaced by the Project, to determine who will be eligible for compensation and assistance, and to discourage inflow of people who are ineligible for these benefits. In the absence of host government procedures, the client will establish a cut-off date for eligibility. Information regarding the cut-off date will be well documented and disseminated throughout the Project area”.*

PR5 includes the following additional requirements:

- *The Project is required to “provide assistance that will offset any loss of a community's commonly held resources. This could take the form of initiatives to enhance the productivity of the*

remaining resources to which the community has access, in-kind or cash compensation for loss of access or provision of access to alternative sources of the lost resource”;

- “Where a Project involves loss of public amenities, the client shall undertake meaningful consultation, in accordance with PR10, with the locally affected community to identify and agree upon a suitable alternative where possible”; and
- With respect to public disclosure, the client shall provide “a summary of complaints and the measures taken to resolve them...to the public on a regular basis” and also “...summarise the information contained in the Livelihood Restoration Framework....to ensure that affected people understand the compensation procedures and know what to expect at the various stages of the Project ...”.

Performance Requirement 5 also includes specific details on the contents that will be included in a Resettlement Action Plan (RAP) and Livelihood Restoration Framework (LRF).

15.2.3 Rio Tinto Standards and Policies

The Rio Tinto “**Communities Standard**” outlines the way in which Rio Tinto exploration and mining projects must engage with communities, gather information, and formulate plans and programmes to manage social impacts. There are nine communities standards set out by Rio Tinto, and three particular standards deal with land acquisition and related impacts, these are:

- Resettlement of communities;
- Legally-binding agreements with communities; and
- Compensation payments proposed.

These communities standards include the following specific requirements that must be implemented for all Rio Tinto projects:

- **Resettlement of communities will only be undertaken:**
 - a) Using the IFC Performance Standard 5 on “Land Acquisition and Involuntary Resettlement” as a minimum;
 - b) After advice is sought from Rio Tinto communications and external relations; and
 - c) With the explicit support of the relevant product group head.
- **Legally binding agreements with communities will be:**
 - a) The subject of advice from Rio Tinto communications and external relations and the business’ legal department; and
 - b) With the support of the relevant product group head.
- **Compensation payments proposed will follow:**
 - a) Procedures that are consistent with established good practice locally;
 - b) Advice from Rio Tinto communications and external relations; and
 - c) With the explicit support of the relevant product group head.

15.2.4 Comparison of Mongolian Law and International Standards

Table 15.1 outlines the key provisions of Mongolian laws and practices applicable to land acquisition and resettlement and outlines the main gaps against international performance standards, specifically IFC PS5 (2006) and EBRD PR5 (2008) on Land Acquisition and Involuntary Resettlement.

Table 15.1: Comparison of Mongolian Law with International Requirements

Key land acquisition provisions / issues	Provisions of Mongolian Law	IFC / EBRD Policy Requirements (PS/PR5)	Gaps and Actions Required
Expropriation	Expropriation is only possible for the benefit of State agencies. Expropriation cannot be used by Oyu Tolgoi.	Expropriation can be used as one means to acquire land as long as appropriate safeguards are in place and guarantee compliance with all requirements of PS/PR5.	No gap.
Negotiated land acquisition	The Civil Code of Mongolia provides the legal basis of land transaction contracts.	International requirements encourage negotiated settlements.	No gap.
Eligibility	Only registered owners, possessors or users are recognised. If land is privately-owned, possessed or used, and such rights are formally registered, land can be acquired from its owner, possessor or user through a contractual transaction. In practice this can apply only to residential land, e.g. in the case of herders land where winter/spring shelters are located as only such land can be registered as privately owned, possessed or used. Pasture land is deemed State land and usage rights over pasture land are typically not registered.	Lack of formal legal title to land by any Project –Affected Person (PAP) is not a bar to entitlement. Titled persons who have claims to land that are recognisable under national laws, and non-titled PAPs are eligible to receive different entitlements depending on the details of their claims.	Company will provide compensation for lost land to affected <i>bona fide</i> occupants regardless of title. Company will provide compensation to <i>bona fide</i> users of affected structures regardless of title over the plot of land where such structures are located.
Compensation	Compensation usually results from a negotiated agreement. Compensation may be based on State rates for land. Compensation is at market depreciated value for structures.	Compensation will be at replacement cost based on valuation at average market value, plus transaction costs and the cost of restoration to an equivalent potential as that of the affected asset.	Company will compensate land and structures at replacement cost based on the definition in PS/PR5 and as defined in this RAP. The preferred compensation option will be in-kind (reconstruction of affected structures).
Community and public resource losses	No specific provisions.	Compensation is due for affected communal resources.	Company will seek negotiated settlements with relevant community organisations with respect to compensation for affected communal resources.
Income and livelihood rehabilitation	No specific provisions.	Assistance for livelihood restoration and social rehabilitation due to loss of land, other assets, jobs, incomes and livelihoods.	Company will provide livelihood restoration assistance wherever livelihoods are affected by the Project, as defined in this RAP.
Vulnerable people	No specific provisions with respect to differential impacts of displacement on vulnerable people.	Specific assistance to vulnerable people affected by displacement.	Company will identify vulnerable people and provide specific assistance as defined in this RAP.
Grievance procedure	The Land Law refers disputes over land to the governors of	An adequate grievance redress mechanism for	Company will establish an amicable grievance

Key land acquisition provisions / issues	Provisions of Mongolian Law	IFC / EBRD Policy Requirements (PS/PR5)	Gaps and Actions Required
	administrative units and eventually the courts (Article 60). The Civil Code and Land Allocation Law refer various types of disputes to the courts.	affected people is required.	management and resolution mechanism that is easily accessible to Project Affected People, as defined in this RAP.
Information disclosure and public consultation	No specific provisions for public consultation and information disclosure, except that land acquisition is typically based on amicable and contractual transactions.	Project Affected People are to be fully informed and closely consulted on compensation and resettlement options. Resettlement planning documentation is disclosed and consulted upon.	Company will disclose this RAP as part of the Environmental and Social Impact Assessment and include it in the general public consultation effort.
Monitoring and evaluation	Responsibility of local government and Citizen's Assemblies.	Establish procedures to monitor and evaluate the implementation of resettlement plans.	Company has established monitoring and evaluation process as defined in this RAP.

15.3 BASELINE SETTING

15.3.1 Sources of Data

In order to characterise the social setting of the Project and those impacted by land acquisition and associated activities, Oyu Tolgoi commissioned a series of in-depth studies and, more recently, conducted extensive consultation within the Project Area of Influence. A summary of key data sources is provided below:

Primary Data Collection

Key data sources include the following:

- *Oyu Tolgoi Project Environmental Impact Assessment, Volume 3 Mining and Processing, Eco-Trade LLC 2006.*⁷ In June 2003, Mongolian consultants EcoTrade conducted a census of all households within a 20km radius of the Oyu Tolgoi mine camp. Households were surveyed to obtain data on land use, land entitlements and household assets (mostly livestock). A total of 15 households (91 people) were involved;
- *Additional survey of Affected Herders, 2004-2005.* Between 2004-2005, additional data was obtained from the 10 herder households that would be resettled from the 10 km Exclusion Zone in order to develop the entitlements under the herder resettlement package;
- *Oyu Tolgoi, Water Perception Study in Khanbogd Soum, 2007.* This study was used to assess community concerns related to water issues and to develop measures for participatory water management. Wells and shelters were mapped, and livestock numbers and other key data gathered. A total of 280 herder households were interviewed and another 51 people were also involved in Focus Group Discussions based on four groupings. The Mongolian Centre for Policy Research and the Population and Training Research Centre led this work;
- *Water Use Study, 2008.* An additional water use study was conducted in Bayan *bagh* to obtain information on herders located within the Gunii Hooloi borefield area. The study entailed a small-scale exploratory survey on customary arrangements for water and involved 21 herder families;
- *Omnogovi Aimag Social, Economic and Environmental Baseline Survey in 2008.* Oyu Tolgoi commissioned the survey which was conducted by the Centre for Policy Research Mongolia, and

⁷ Eco Trade LLC (2006), Oyu Tolgoi Project Detailed Environmental Impact Assessment, Volume 3 – Report for the Oyu Tolgoi Project Mining and Processing, May 2006.

the Population Training and Research Centre. A total of 70 households in Khanbogd *soum* centre and 37 rural households were involved in the survey;

- *Pastureland Mapping and Assessment Programme, 2009 to 2010*. This programme was conducted to identify herders using pastures around the different Oyu Tolgoi Project sites. Data has been collected from 79 herder households in the Javkhlant, Gaviluud, Nomgon and Bayan *baghs*. The main goal has been to understand grazing land boundaries, pastureland management arrangements, and to identify herder families using land and other assets in and around the Project sites. Oyu Tolgoi visited each herder household, conducted semi-structured interviews and drew seasonal pastureland area boundaries on an area map with the herders;
- *Survey of Potentially Affected Herder Households (2010 to 2011)*. This survey built on the pastureland mapping and assessment programme above, to identify and gather more specific data on directly affected households. It was undertaken by Oyu Tolgoi between September 2010 and May 2011. This Survey involved detailed household visits to all affected herder families as well as other herder households in the Khanbogd *soum*. A total of 84 households were involved. The survey covered household composition, employment levels and sources of income, livestock and other assets, and other demographic data. The survey⁸ included 101 families. Altogether the survey covered 393 people (this equates to 19% of all rural herders within Khanbogd *soum*). *Annex C* shows the basic data gathered for each herder family;
- *Sustainable Pasture Management in Khanbogd Soum, 2010 to 2011*. Between September 2010 and September 2011, the Mongolian Society for Range Management (MSRM) on behalf of Oyu Tolgoi, consulted with over 400 herders (370 male; 79 female) from Khanbogd *soum* in a series of meetings, workshops and household visits. Qualitative information was gathered including herders' perception of pasture conditions and water availability, and suggestions for measures to improve pastureland management; and
- *Pastureland Health Assessment and Monitoring in Khanbogd Soum, 2010*. The MSRM research team also conducted an assessment of pastureland in the *soum*, based on 15 monitoring points established with the Oyu Tolgoi Environment Department and with the participation of herders. Pasture carrying capacity in each *soum* was estimated from the data available. Water supply and well information was also used to estimate the amount of pasture area susceptible to water shortage, e.g. due to lack of wells or non-functioning wells. The results of this work are included their first internal quarterly report to Oyu Tolgoi, *Sustainable Pasture Management in Khanbogd Soum (Sept – Dec 2010)* with further reports to follow.⁹

Secondary Data Sources

Data on the total number of herders, households per *bagh*, livestock numbers, and crop production figures for Khanbogd *soum* have also been obtained from the Statistical Office of South Gobi, the *aimag* and *soum* Governments. This data has been compiled into a database managed by Oyu Tolgoi and updated on a regular basis.

15.3.2 Administrative Setting

The Oyu Tolgoi Project sits within Omnogovi '*aimag*', which is an administrative region of Mongolia. Omnogovi is Mongolia's least-densely populated *aimag* with a population of around 50,000 people and an area of 165,380 km² (giving a population density of only 0.3/km²). The Oyu Tolgoi Project is approximately 220 km south east of Dalanzadgad, the *aimag* capital. *Aimags* are sub-divided further into smaller administrative units termed *soums* and finally *baghs*.

Khanbogd *soum* centre (the *soum* capital) is the closest permanent residential community, located 42 km to the north east of the mine site, and connected to the mine site via an unsealed road. More than half of the residents in the *soum* are rural pastoralists with the remainder living in the *soum* centre.

⁸ Oyu Tolgoi Survey of Potentially Affected Herder Households 2010-2011.

⁹ At present, this is an internal report to Oyu Tolgoi and is not reproduced in full in the ESIA.

Total land within Khanbogd *soum* is estimated at 1,496,000 ha spread across four *baghs*¹⁰:

- Gaviluud – 198,730 ha;
- Bayan – 284,001 ha; and
- Javkhlant – 530,383 ha; and
- Nomgon – 482,729 ha.

All Oyu Tolgoi Project components are located within the Khanbogd *soum*. The Oyu Tolgoi Mine Licence Area, most of the infrastructure corridor (for the Oyu Tolgoi to Gashuun Sukhait road and transmission line) and a portion of the airport sites are located in Javkhlant *bagh*. The airport sites (temporary domestic and planned permanent airports) also extend into Gaviluud *bagh* territory, while the infrastructure corridor extends into Nomgon *bagh* near the border with China. Water supply for the Project will be taken from the Gunii Hooloi basin which is in Bayan *bagh*.

15.3.3 Key Demographic Features

In 2010, Khanbogd *soum* had a population of 3,522 of which rural herders comprised 2,067 and the *soum* centre 1,455.¹¹ Of the total *soum* population, approximately 40% of people are nomadic/seasonal herders and another 18% of people have livestock but are sedentary and often live part or full time in the *soum* centre. *Table 15.2* illustrates the *soum* population.

Table 15.2: Population, Khanbogd *soum*, 2007-2010*

Key Indicators	2007	2008	2009	2010
Population size (<i>soum</i>)	2,974	3,041	3,154	3,522
Population growth rate	Not available	2.3%	3.8%	11.6%
Males	1,441	1,474	1,562	1,753
Females	1,533	1,567	1,594	1,769
Households	839	918	967	1,112
Rural herders	Not available	Not available	1,793	2,067
<i>Soum</i> centre residents	Not available	Not available	1,363	1,455
Average household size	3.54	3.31	3.26	3.17

*Source: Statistical Department of South Gobi, obtained by Oyu Tolgoi in 2011. *Note: "It appears that the population increase rate of males is marginally greater than that of females, but it has still not reached parity, so is a balancing out of a previously low sex ratio. This will require annual monitoring to see if any measures will be necessary for dealing with the impacts of a changing gender balance as the population grows. There appears to be a more rapid increase of rural herders than urban dwellers but change over one year is not reliable as a trend, but indicates that this will also need to be monitored.*

The herder population within the *soum* comprise those most likely to be affected by the Oyu Tolgoi Project, either through physical resettlement or through economic displacement.

Herders are generally grouped as 'households' which can be made up of several herder families. Of the 101 families surveyed for the Oyu Tolgoi Project, the vast majority were headed by a husband and wife, whilst 6 were headed by single males and 5 were headed by single females. The single females were mostly older women who were often living with another family, whilst the single males were younger, and mostly lived alone. As in the overall population in Khanbogd, there was an even balance of females and males within the herder population.¹²

Key demographic indicators for the *soum* herders are provided below.

¹⁰ Khanbogd *Soum* Governor's Office, Obtained by Oyu Tolgoi in 2011.

¹¹ Statistics and Treasury Officer, Khanbogd *Soum* Governor's Office, Obtained by Oyu Tolgoi in 2011.

¹² Statistics and Treasury Officer, Khanbogd *Soum* Governor's Office, Obtained by Oyu Tolgoi in 2011.

Table 15.3: Demographic indicators from Potentially Affected Herder Survey

Indicator	Number/Percent
Number of households	84
Number of families within those households	101
Number of individuals in survey	393
Average household size	4.7
Average family size	3.9
Number of single person households	11
Female	51%
Male	49%
Female headed households	11%

Source: Survey of Potentially Affected Herder Households 2010-2011

15.3.4 Herder Land Use

Oyu Tolgoi has conducted detailed investigations into how *soum* herders use grazing land. Data has been collected from herder households residing close to the different Project components.

Winter Shelters

Winter camps/shelters and corrals are established by herder households and used during colder periods to keep animals gathered together in a shelter. Winter is a sedentary season with few herder families moving at all during this time. Shelters are critical for survival – with winter temperatures averaging minus 30-40°C. Shelters are often located along the foot of hills where water will collect, vegetation is most prolific, and shallow wells are located. Livestock are kept close by, and families use fodder, hay, and wheat to supplement feed for their animals.

Winter shelters normally consist of a built up area for livestock (corral) and storage area, plus a *ger* and small wood or concrete house. A corral is reported to cost between \$800 and \$1,000 (USD) to construct using locally-available materials.¹³ Winter/spring shelters are made of natural products such as stone, wood and even scrap materials including iron and rubber tyres. They are usually maintained for years, although no precise information is available on how long winter shelters usually last. *Figure 15.2* illustrates a herder winter shelter in Khanbogd *soum*. Herders usually have a hand-dug well or borehole close to their winter shelter.

Figure 15.2: Herder Winter Shelter



Source: Citrus Partners, photo taken 2010

¹³ Ukhaa Khudag (UHG) Project, Draft Social and Environmental Impact Assessment, UHG Phase II, Energy Resources LLC, September 2009 (page 5-128).

Figure 15.3 shows herder winter camps north of Oyu Tolgoi, whilst Figure 15.4 shows the winter camps south of Oyu Tolgoi.

Figure 15.3: Herder Camps and Wells North of Oyu Tolgoi

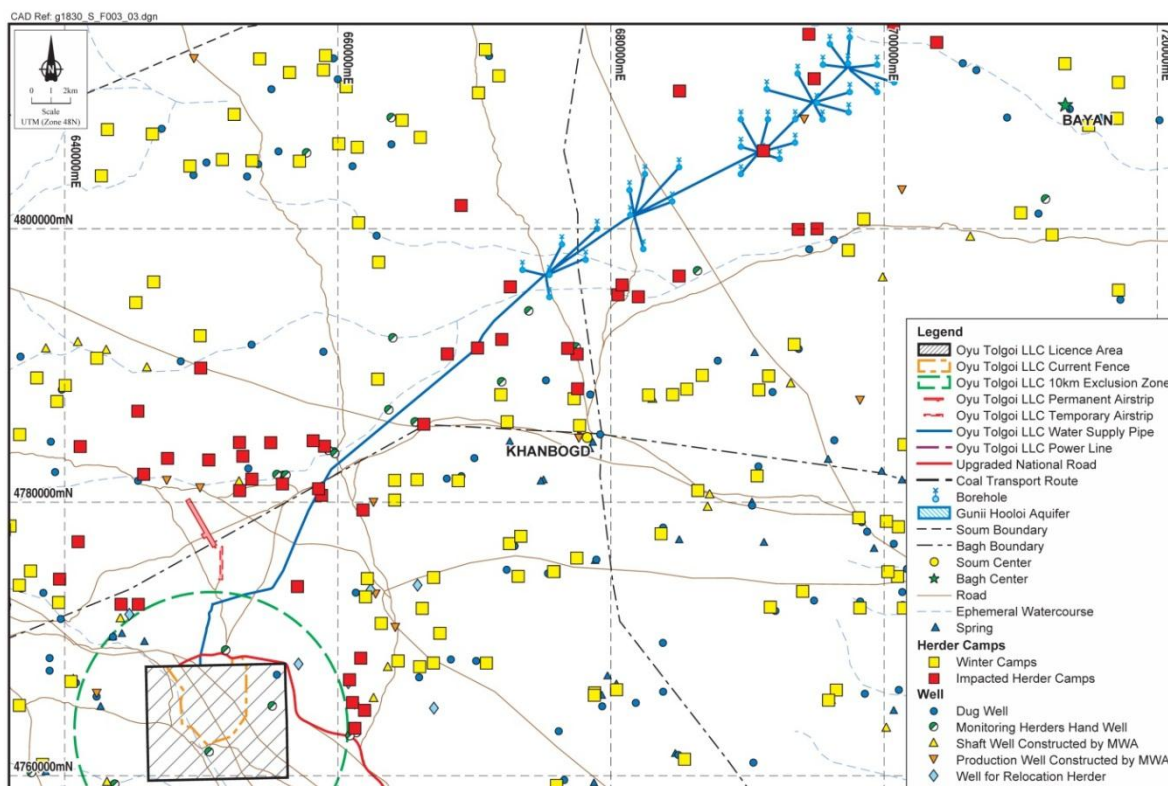
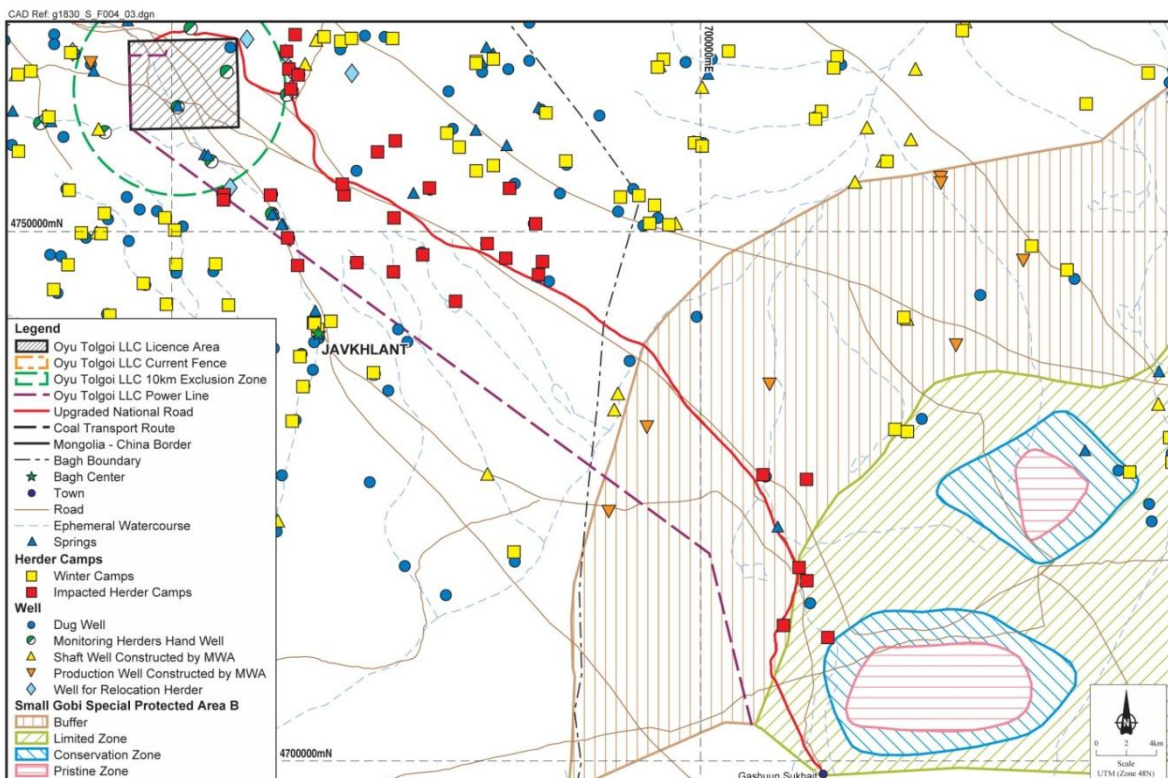


Figure 15.4: Herder Camps and Wells South of Oyu Tolgoi



Seasonal Migrations and Summer Camps

During summer and autumn when pastures grow, herders move their *gers* to a location they consider to have good pasture. These summer camps are typically located in the vicinity of hand dug shallow wells that provide water for animals and families. *Figure 15.5* shows a summer camp in Khanbogd *soum*. Summer/autumn grazing is practised to allow winter pasture time to recover and to let the livestock gain fat and strengthen.

During the *Omnogovi Baseline Survey* in 2008, 39% of herder households in Khanbogd reported that they migrate seasonally in summer and autumn, followed by slightly shorter moves in the spring. Over a year, herder households in Khanbogd migrate over distances of approximately 12-13 km. Although the average repetition of movement is estimated at 5-6 times, herders report that this depends heavily on the number of family members and livestock.¹⁴ Herders move back to winter shelters in late August. Herders report that cow and camel pastures are within 20-35 km of camps and water, and sheep and goat pastures are within 3-5 km. Herders herd their goats and sheep on a daily basis, but camels, horses and cows do not require daily herding, as they are “semi” wild.¹⁵

Herders in Khanbogd *soum* continue to migrate in customary areas, mostly within their respective *baghs*, although consultation with herders in Khanbogd *soum* identified that a number of herders do travel to Manlai *soum* to graze their livestock at some times of the year, e.g. if summer pastures are not considered good in Khanbogd.¹⁶

Figure 15.5: Herder Summer Camp



Photo taken 2010

Herder Water Use

Water is a key pastureland resource and plays a major role in the location of the seasonal camps within the *soum*. Herders take water from hand dug wells because there are no permanent, reliable sources of surface water. Herder households generally use a traditional hand dug well (5-20 m in depth), while some have drilled boreholes (deep wells). Wells in Khanbogd are used for both people and animals.

¹⁴ Oyu Tolgoi Project Social, Economic and Environmental Baseline Survey (Subset), 2009.

¹⁵ *Ibid*, Baseline Survey, 2009.

¹⁶ Sustainable Pastureland Management Programme consultation, Mongolian Society for Range Management, 2010.

Springs and hand dug wells are fed by shallow gravel aquifers that are recharged from periodic rainfall events. The average distance to water sources for herders is about 2.5 km, within the range of daily grazing of small stock (3-5 km).¹⁷ When there is no water available from snow, ephemeral springs, access to wells is a critical factor for livestock production and human consumption.

There are a total of 314 wells in Khanbogd *soum* the majority of which are hand dug. A total of 83 wells were reported to be used by herders during the survey of potentially affected households. Of those who provided data on well use, two thirds (65%) used one well, just over a third (31%) had access to two wells and 4% had access to three wells.

The majority (90%) of herders in Khanbogd *soum* share their wells with neighbours, who are often family members. The family that “owns” the well is responsible for fixing the well, motor, sink, cleaning the wall of the well, and so on. If the well is owned by several families (neighbours), they collectively protect their well. It is reported that herder families with the greatest number of livestock are expected to contribute the most towards well maintenance in the case of several families sharing a well.¹⁸

According to Mongolian law, water sources are common assets and considered to be owned by the government. Individuals can own pumps and this has occasionally caused conflict when someone locks up their pump, thereby denying others access to the water source. Usually this is resolved with the assistance of the local Governor as necessary, but enforcement can be difficult. This is something that may need to be dealt with through civic education as part of the Sustainable Pastureland Management and Participatory Environmental Monitoring programmes (see also *Chapter B10: Land Use Baseline Assessment* and *Chapter C10: Land Use and Displacement Impact Assessment*).

Herders in Khanbogd were surveyed about water quality and availability during the *Water Perception Survey* (280 herder households), and although over 60% of herders interviewed indicated that the overall water availability is good, they indicated that there are sometimes shortages in the warmer summer and autumn seasons when usage peaks.¹⁹ Moreover, comments from the consultation process with Oyu Tolgoi in recent years, implies that droughts over the last years have caused water levels to lower, and have led to a reduction of the growth of indigenous pasture grasses.

Economic Activity and Income

For the majority of herders, livestock remains the sole source of income, however many have supplementary incomes to herding, e.g. from commercial activities such as operating shops or participating in seasonal waged labour. Despite this recent trend, livestock still contributes 93.6% of net production for the area. Small contributions are made from industry (3.5%), communications (2.6%) and minimal contributions from crop production and transport (both 0.2%). These figures do not take into account recent contributions from Oyu Tolgoi activities.²⁰

The number of unemployed or underemployed citizens registered with the Labour and Social Welfare Office in Khanbogd *soum* was 471 (of an estimated 1,871 economically active adults between 18 and 65 years) as at March 2010.²¹ It is expected that this figure is now much lower since employment associated with the Oyu Tolgoi Project has increased significantly in the *soum* in the last year, from 579 in September 2010 to 890 in September 2011.

The *Potentially Affected Herders Survey* recorded 16 people (or 9%) as unemployed. Two thirds were recorded as herders (or wives of herders) and 25% of the adults as employed in sectors other than herding (*Table 15.4*). Of those employed outside of herding, these included people who were self-

¹⁷ Oyu Tolgoi Project Social, Economic and Environmental Baseline Survey (Subset), 2009.

¹⁸ Oyu Tolgoi, Water Perception Study in Khanbogd *Soum*, August 2007.

¹⁹ Oyu Tolgoi Project Social, Economic and Environmental Baseline Survey (Subset), 2009.

²⁰ Oyu Tolgoi Project Social, Economic and Environmental Baseline Survey (Subset), 2009.

²¹ This figure represents the total number of people registering as unemployed or underemployed. This registration process was managed by the *soum* government to help identify the potential labour pool for the Oyu Tolgoi Project and thus likely flushed out people who might not otherwise have been actively seeking work, thereby increasing the total. This list of unemployed or underemployed people includes both *soum* centre residents as well as some herder households seeking additional or new employment, although a breakdown by herder or *soum* centre resident is not available.

employed, soldiers, an accountant, a doctor, a fireman and people who are employed with Catering International Services (CIS), who provide catering services to the Project.

Table 15.4: Economic Activity Data for Potentially Affected Herders[#]

Economic Activity	Number/Persons	Percentage
Herders	132	66%
Number of people employed/economically active in areas other than herding	45	25%
Unemployed*	16	9%
Total with employment data	177	100%

Source: Survey on Potentially Affected Herders, Oyu Tolgoi, 2011.

[#] This is for the economically active, between 18 and 65 years (who are not studying or retired)

* Number unemployed is those between 18 and 65 years who reported themselves as unemployed during the survey

Livestock Production

Goats, camels and sheep are the main animals raised in Khanbogd *soum*. Around 54% of livestock in the *soum* are goats, 26% are sheep, 14% are camels and the remainder horses (4%) and cows (2%). All types of livestock grew steadily in number during the period between 2003 and 2009, with total herd size increasing from 53,000 to 116,000 head. These figures and the distribution of animals within the *soum* are shown in Table 15.5. Many herders lost livestock during the harsh winter and *dzud* of 2009-2010.

Table 15.5: Total Number of Livestock of Khanbogd Soum, 2010

Baghs	Camel	Horse	Cow	Sheep	Goat	Total
Nomgon	2,881	771	1,012	5,574	12,205	22,443
Gaviluud	3,500	1,837	407	12,382	19,472	37,598
Javkhlant	3,389	668	599	6,684	17,051	28,391
Bayan	6,594	1,315	263	5,736	13,943	27,851
Total number in soum	16,364	4,591	2,281	30,376	62,671	116,283

Source: Statistical Department of South Gobi, obtained by Oyu Tolgoi, 2010.

The Survey of Potentially Affected Herder Households in 2010 and 2011 identified that there is a wide range of herd sizes amongst *soum* herders. As shown in Table 15.6, the average herd size is 274 but over half (51%) of all families have smaller herd sizes up to 199 (with a high proportion of goats). A significant number (15%) have large herds of over 400 animals (see also Annex C for individual and total herd sizes for the affected herder group).

Herd size varies for a wide range of reasons, for example some have low numbers of animals because they have other income sources such as a job with Oyu Tolgoi, while others have fewer livestock due to low income or because they are a single person household. The lowest number of animals recorded for a household was 3, and the highest recorded was 909.

Table 15.6: Herd Sizes of Potentially Affected Herders

Livestock levels	Number and percentage
Average no. of livestock per household	274
Percentage of families with 0-99 livestock	24%
Percentage of families with 100-199 livestock	27%
Percentage of families with 200-299 livestock	27%
Percentage of families with 300-399 livestock	7%
Percentage of families with 400+ livestock	15%

Source: Survey on Potentially Affected Herders, Oyu Tolgoi, 2011.

Consultation with herders identified that a herd of about 400 animals was considered desirable to comfortably support a family of 4-5 people²², although they indicated that herd quality is more important than total head count. Although herders are interested in all livestock breeds, the preference is to keep goats, camels and sheep as compared to horses and cattle – because they bring more income, particularly goats from cashmere sales.

Income

Khanbogd residents²³ had an average household monthly income of 574,837 Tugrugs (US\$383)²⁴ in 2008 according to the *Omnogovi Baseline Survey*. This was above the *aimag* average of 523,406 Tugrugs (US\$349). The actual monetary income was recorded at 458,200 Tugrugs (US\$305). Wages and salaries were the largest component, followed by income from livestock/animal husbandry and then income from other household businesses.

Although the main employment opportunities in the countryside are husbandry activities, those who worked in the mining industry had much higher salaries. Individuals who worked in mining in Khanbogd earned on average (267,000 Tugrugs/month), double the amount of those who worked in husbandry, forestry and fishing (132,000 Tugrugs/month) (see *Table 15.7*).

It is important to note, that the annual income of the herder households surveyed varies considerably, with the lowest household income recorded at 1,000,000 Tugrugs (\$666 USD) and the highest with 20,000,000 Tugrugs (\$13,300 USD). The lowest incomes were recorded for people receiving a pension, and the highest incomes were generally recorded for households with one or more people in wage employment as well as a large herd size. As this data is derived from a household survey it is based on what herders reported, which may mean that some income goes unreported or underreported.

An average of 46% of total herder incomes are derived from cashmere, followed by 25% from salary or pension, 20% from wool, 6% from meat and 3% from milk. Cashmere and wool are the most important income sources for herder families. Of the 101 surveyed, nearly all (97%) reported to derive some portion of their income from cashmere, 81% from wool, 37% from salary or pension, 29% from meat, and 24% from milk.

Table 15.7: Income Data for Khanbogd Soum Herders, 2011

Category	Amount MNT (&USD)	Unit	% of total
Annual Income (household)*			
Average	5,900,000 (\$3,933)	MNT	–
Highest	20,000,000 (\$13,333)	MNT	–
Lowest	1,000,000 (\$666)	MNT	–
Annual Levels of Income (household)¹			
Up to 2,000,000	13	HH	18%
2,000,001 to 5,000,000	27	HH	38%
5,000,001 plus	32	HH	44%
All incomes	72	HH	100%
Income Sources (average)			
Cashmere	46	%	–
Wool	20	%	–
Milk	3	%	–
Meat	6	%	–

²² Oyu Tolgoi Project Social, Economic and Environmental Baseline Survey (Subset), 2009.

²³ This data includes Khanbogd *soum* centre and herder residents.

²⁴ Exchange rate is estimated at 1,500 Tugrugs per \$USD.

Category	Amount MNT (&USD)	Unit	% of total
Other (salary/pension)	25	%	–

Source: Survey on Potentially Affected Herders, Oyu Tolgoi, 2011.

Notes: HH = Household. A total of 72 households out of 84 households surveyed provided income data.

Expenditure

On average in Khanbogd the total monthly expenditure was 146,000 Tugrugs (\$97 USD). People spent around 44% of their monthly expenditure on food. Small proportions were spent on durable goods (4.3% of monthly income) and heating and housing (2.4%), and the remaining 49% was spent on other non-food items.²⁵

Many people from Khanbogd (93%) buy goods from local markets. A third (33%) buy their goods from border points and 8% buy goods from China. Herders in the Khanbogd buy goods at border trade points considerably more frequently than the *aimag* average.

Small Businesses and Trade

According to the findings of the *Omnogovi Baseline Survey*, small businesses contribute greatly to household livelihoods and on average across the *aimag*, 12% of residents in *soum* centres and 7% of herders were found to generate their income from small scale businesses. No additional data from affected herder households was gathered specifically on small businesses and trade, but data on other income sources will be included in future surveys planned with affected households by Oyu Tolgoi.

The Oyu Tolgoi *Local Business and Economic Development* programme has successfully assisted in the establishment of over 50 local businesses in August 2011 (see also *Chapter C9: Employment Impact Assessment*). Of those 50, 49 obtained business expansion loans from two local banks, XAC and Khaan, in partnership with Oyu Tolgoi to guarantee access to loans for community businesses. The loan amount totalled 364,720,000 MNT in 2011.

Herders have more investment potential than *soum* centre citizens because of livestock assets (they can sell livestock to obtain capital for new business venture, e.g. an additional *ger* to use as a seasonal café). Some herders in the *soum* also sell goods at roadside stalls and run seasonal tea houses/restaurants, such as those found at the Javkhlant *bagh* truck stop. Many Khanbogd *soum* residents conduct border trading at Gashuun Sukhait or travel across the border into China to purchase construction materials or goods to sell on their return to Mongolia.

The Oyu Tolgoi *Herding Business Development* component of the *Local Business and Economic Development* programme assisted in the organisation of “Baby Camel Hair Auction” in Dundgobi Aimag whereby herder representatives from Khanbogd and Manlai participated and sold camel wool to a national processor without any middle-man. In addition, Khanbogd herders have been provided training on dairy, product hygiene, handling and packaging and a feasibility study of a camel milk processing plant in Khanbogd has been undertaken and business plan is developed with the plant proposed to be operating by June 2012.

Waste and Sanitation

Herder households have no special site for waste, although specific data was not obtained on this. Rural herder households do not have latrines.

Electricity and Heating

There is no reliable electricity or centralised heating supply in the *soum*. However, nearly half (49%) of herder households in Khanbogd *soum* have electricity, mainly using solar and wind generators. These are mostly 12 W capacity and used for telephone charging, lighting and television. A few households use gasoline generators for higher watt supplies.²⁶

²⁵ Oyu Tolgoi Project Social, Economic and Environmental Baseline Survey (Subset), 2009.

²⁶ Ibid.

Nearly all households (96%) rely on traditional stoves for heating in their homes. People use wood (82.6%) and coal (60.6%) as fuel, and also dung (34%). Many households use different fuels at different times of year, depending upon price and availability fluctuations (hence the total is not 100%). Wood is gathered from the countryside and also purchased in the town, supplied from external sources.

Education

Despite their itinerant life style, most herder families send their children to stay with relatives in the *soum* centres during term-time so that they can attend school. In Khanbogd *soum* 98% of people are literate in Cyrillic, 28% in Old Mongolian script and 53% in Latin. According to the *Omnogovi Baseline Survey*, a total of 11% of people had no education in the *soum*, and 24% had only received primary education.

The number of young people in the potentially affected herder population is shown in *Table 15.8*. This data shows that there are 4 children between the ages of 6 and 17 years that are not at school, out of a total of 81 children in that age range. It also shows that a third of young adults aged 18 to 24 years, are currently studying (22 out of a total of 65 people).

Table 15.8: Education data for Potentially Affected Herders, 2011 (from 84 households surveyed)

Number of children/young people	
No. of children aged 0-5	34
No. of children aged 6-9	17
No. of children aged 10-17	69
No. of young people aged 18-24	65
No. of children aged 6-17 at school	77
No. of children aged 6-17 not at school	4*
Students aged 18-24	22
Young people at Technical Vocational Education and Training (TVET)	6

* Information not recorded for two further children.

Source: Survey on potentially affected herders, Oyu Tolgoi, 2011.

Health

Health differences between herders and *soum* residents are not apparent to local staff, but herders generally have further to travel to facilities. Mortality causes and rates correlate fairly closely with those of the *aimag* as a whole.²⁷ The most prevalent illnesses in Khanbogd *soum* are respiratory diseases, digestive systems diseases, genital-urinary system diseases and circulatory system diseases. These were the same top four illnesses for the *aimag* as a whole and correlate closely with the wider regional pattern.

The reported rate of infectious disease in Khanbogd *soum* shows an increasing trend over time. The rate per 10,000 people was 11 in 2005, 21 in 2006, 11 again in 2007, 20 in 2008 and 22 in 2009. Data is not available on herders versus *soum* centre residents.

Maternal and Child Health²⁸

Maternal health care services are reported to be good for Khanbogd.²⁹ Antenatal care was noted by health practitioners to be good in the *soum* with the proportion of pregnant women receiving antenatal care at 96%, compared to the *aimag* average of 85%. Family planning advice as well as free contraception is available from the *soum* hospital. Contraceptive medicine is also available over the counter through private pharmacies. Around 55% of women in the 15-40 age group within the *soum* are reported to use contraception.

²⁷ Health Department, Omnogovi *Aimag*, 2007; Note: Khanbogd data is based on small numbers.

²⁸ Oyu Tolgoi Community Health Safety and Security Impact Assessment, 2011

²⁹ Health Resources Review, 2010.

Data on infant mortality can vary dramatically from year to year in the small populations of rural districts, as evidenced in the data for Khanbogd, which varies between zero and 80 deaths per 1,000 live births, and Tsogtsetsii's for comparison, which varies between 20 and 83. This is because there are so few births that even a small number can sound like a high proportion when placed on the denominator of 1000. For example, in Khanbogd, there are between 50 and 75 births per year on average, so a rate of 80 per 1,000 would equal about 5 deaths in a year and 32.7 would equal 2 deaths, not such a difference in absolute numbers. This is still a serious issue, but statistics need to be viewed with caution in small survey samples.³⁰ The main causes of stillbirth are reported to be prenatal pathologies, congenital malformations and birth complications. See *Chapter B13: Community Health, Safety & Security* for further data and information.

Child immunisation is excellent in Khanbogd *soum* with 100% coverage for BCG, poliomyelitis, the Pentavaccine and measles. However, child health is still a concern for the *soum* health authorities with the Khanbogd child mortality rate in 2007 over 14% in the 0-5 age group (three times the *aimag* average).

Khanbogd Hospital and Other Clinics

Khanbogd *soum* is served by the Khanbogd *Soum* Hospital which is a Government, primary care, level two hospital in the *soum* centre, equipped with 9 beds (serving a population of around 3,500). The Hospital was built in 1978 and renovated in 2004 (inpatients) and 2010 (outpatients) with support from Oyu Tolgoi. There is also an obstetrics and gynaecology clinic, and a dental clinic (established with support from Oyu Tolgoi) located in Khanbogd *soum* centre, and an SOS medical emergency response service based at Oyu Tolgoi mine site. There are no medical facilities or staff located in the rural areas. Rural households are on average 15 km away from any medical facility (i.e. the *soum* centre).

Religion

Khanbogd has the highest percentage of religious followers in the *aimag*. The majority of respondents in the *Omnogovi Baseline Survey* (86%) recorded themselves as Buddhist. A small number, nearly 2%, were Christian and nearly 12% did not follow a religion.³¹

Communication

79% of households in Khanbogd *soum* have mobile phones whilst 15% have both landlines and mobiles. Only 6% do not have a telephone.³² No specific data on herder mobile phone ownership was captured in the recent surveys, however anecdotal evidence suggests that all herder households have at least one mobile phone. Both MobiCom and Mongolia Telecommunications Company mobile phone companies operate in the *soum*.

Most rural and herder households rely on radios, and some on televisions to obtain information from regional and national channels. In addition, Khanbogd has the highest participation rates in *bagh* Khurals in the *aimag* with 44% of households attending four times a year or more, twice the *aimag* average. *Bagh* meetings are held quarterly for all rural residents in each *bagh*. Oyu Tolgoi attends all of the *bagh* meetings in Khanbogd *soum* to meet with herder households.

15.4 IDENTIFICATION OF AFFECTED PARTIES

Within the overall *soum* population, it is the seasonal herders who are most likely to be affected by either physical resettlement needs or economic displacement. In the case of physical resettlement, the only affected households have been within the Mine Licence Area. For this area, affected herders have been identified and relocation activities completed (see below). The remainder of this section describes the actual and potential land take for the various Oyu Tolgoi Project elements.

³⁰ Health Department, Omnogovi *Aimag*, 2007 (data from 2005 – 2007). Cited in Oyu Tolgoi Social Impact Assessment, 2008.

³¹ Oyu Tolgoi Project Social, Economic and Environmental Baseline Survey (Subset), 2009.

³² Ibid.

15.4.1 Project Land Requirements

Oyu Tolgoi requires approximately 10,500 hectares (ha) of land for the construction and operation of the mine site and ancillary facilities. This includes land for the Mine Licence Area that was granted in 2009, the new domestic airport and planned permanent airport, the Gunii Hooloi borefield and water pipeline, and the transport/infrastructure corridor between Oyu Tolgoi and Gashuun Sukhait at the Chinese border.

Land is also being temporarily disturbed during the construction phase for activities such as the installation of worker construction camps, excavation of borrow pits and soil stripping of the water pipeline and transmission line corridors.

15.4.2 Identification of Impact Zones

Within the overall Project 'footprint' as described above, the company has been able to identify and map a series of different "impact zones" which describe the relationship between the Project land take and the affected parties; these zones have now been agreed through community consensus and have been used to determine community and household-level entitlements for livelihood restoration and other assistance.³³

Impact zones for each of the Oyu Tolgoi Project components are described in *Table 15.9* and illustrated in *Figure 15.6* and *Figure 15.7* respectively. For the Gunii Hooloi Borefield and pipeline, the impact has been categorised into two phases to differentiate between the extent of the relative impacts to the herders and to define appropriate impact zones for each phase. The Water Pipeline Phase 1 requires land disturbance from a single pipeline, whereas Water Pipeline Phase 2 requires more intensive ground disturbance with supplementary pipelines from each borehole, pumps stations and water storage lagoons. *Table 15.9* describes the different impact zones together with a definition of the type of displacement impact. Project Affected People (PAP) are identified in *Table 15.4*.

³³ Note: the impact zone for the Mine Licence Area and exclusion zone had already been defined by the earlier resettlement process completed in 2004 and 2005.

Table 15.9: Summary of Displacement Impacts and Impact Zones

Project Site / Facility / Area	Source of Impacts	Displacement Impact / Loss of Resource	Impact Zones
A. Mine Licence Area ³⁴	<ul style="list-style-type: none"> The Mine Licence Area requires large open pit mine, shafts, construction camps and administrative areas and will be permanently fenced off, with herder access to grazing land prohibited due to safety hazards. In addition, the 10 km Exclusion Zone is established around Mine Licence Area to prohibit winter camps, but grazing and summer camps remain permitted. 	<p>Physical displacement/resettlement (A1):</p> <ul style="list-style-type: none"> Resettlement outside of the Mine Site Area of all herder households having winter camps therein. Loss of 8,625 ha of pasture land located inside the fence of the Mine Licence Area. 	<p>A1 All herder households with winter shelters in the Mine Licence Area as at the officially notified cut-off date, 28 January 2004.</p>
B. Airport Sites	<ul style="list-style-type: none"> Earthworks and associated activities will cause noise and dust during construction. The Airport Sites require airstrip and associated buildings and will be permanently fenced off, and herder access to grazing land prohibited due to safety hazards. Air traffic may cause some noise during operations. 	<p>Economic displacement: loss of summer pastures (B1, B2):</p> <ul style="list-style-type: none"> Temporary disturbance of 46 ha of pasture land for temporary airport; rehabilitated afterwards. Loss of 230 ha of pasture land located inside the fence of the permanent Airport Site. Economic displacement due to partial loss/reduction of access to summer grazing land. Minor noise impacts due to operation of airports. 	<p>B1 All herder households with winter³⁵ shelters within 5 km of the Airport Sites and with traditional grazing land rights in the area.</p> <p>B2 All herder households with winter shelters within 5-11 km of the Airport Sites and with traditional grazing land rights in the area.</p>
C. Oyu Tolgoi to Gashuun Sukhait Road Corridor	<ul style="list-style-type: none"> Topsoil stripping and presence of people and equipment will disturb pasture land. Earthworks and associated activities will cause noise and dust during construction. Heavy vehicle traffic presents permanent hazard to livestock and people crossing road. 	<p>Division of permanent pastures (C1):</p> <ul style="list-style-type: none"> Loss of approximately 220 ha of pasture land for the road construction/upgrade. Severe noise and dust during construction and hazards from equipment and people. Division of permanent pastures as a result of operation of the road (and increased traffic). 	<p>C1 All herder households with winter shelters within 500 m either side of the Oyu Tolgoi to Gashuun Sukhait Road.</p>

³⁴ The Mine Site Area includes the Mine Licence Area and the 10 km residential Exclusion Zone.

³⁵ Both winter and spring shelters provide a legal basis for obtaining a certificate for land. Most herders have winter shelters or camps, only a few have spring shelters. As no dwellings were being lost due to the mine's construction activities, and there was therefore no reason for replacing spring shelters, the compensation working group and affected herders agreed during compensation consultations that winter shelters would be used as the basis for determining eligibility in a compensation category.

Project Site / Facility / Area	Source of Impacts	Displacement Impact / Loss of Resource	Impact Zones
	<ul style="list-style-type: none"> Road shoulders and road may present barrier to animals crossing road. 	<ul style="list-style-type: none"> Severe disturbance due increasing traffic on road and associated safety hazards. 	
		<p>Disruption to herding practices (C2):</p> <ul style="list-style-type: none"> Changes to migration patterns to avoid road; potential overgrazing of some areas/conflicts with neighbours. Minor to moderate noise and dust during construction. Potential ongoing noise and safety issues during operation of road due to traffic. 	<p>C2 All herder households with winter shelters within 500 m – 6.5 km either side of the Oyu Tolgoi to Gashuun Sukhait Road.</p>
D. Gunii Hooloi Water Pipeline and Transmission Line from China*	<ul style="list-style-type: none"> Topsoil stripping, open trench for pipeline / borefield and presence of people and equipment will disturb pasture land. Topsoil stripping for transmission line and presence of people and equipment will disturb pasture land. Earthworks and associated activities will cause noise and dust. Boreholes/pumps, transmission tower foundation pads, single track maintenance route of approx. 3.5 m width along each facility. 	<p>Division of permanent pastures (D1):</p> <ul style="list-style-type: none"> Temporary disturbance of pasture land due to topsoil stripping and related construction activities. Division of pastures as a result of open trench and heavy equipment. Severe noise and dust during construction and hazards from equipment and people. 	<p>D1 All herder households that have winter shelters within:</p> <ul style="list-style-type: none"> 1 km either side of the Water Pipeline Phase 1 OR Transmission Line 3 km either side of the Water Pipeline Phase 2. #
		<p>Disruption to herding practices (D2):</p> <ul style="list-style-type: none"> Disruption to herding practices, greater time tending herd to avoid hazards. Minor to moderate noise and dust during construction. 	<p>D2 All herder households that have winter shelters within:</p> <ul style="list-style-type: none"> 1 km-2 km either side of the Water Pipeline Phase 1 OR the Transmission Line 3-7 km either side the Water Pipeline Phase 2.
E. Summer Grazing in Khanbogd Soum	<ul style="list-style-type: none"> Fencing off of the Mine Licence Area, Airport Sites. Construction and operation of Oyu Tolgoi to Gashuun Sukhait Road, GH Water Pipeline and Borefield, and Transmission Line. 	<p>Communal grazing land loss(E1):</p> <ul style="list-style-type: none"> Loss of up to approx. 10,500 ha for Oyu Tolgoi Project facilities, including temporary disturbance of land during construction. Local herders no longer have access to this land; thus increasing competition for grazing resources, potential conflicts, overgrazing, etc. 	<p>E1 All seasonal herder households with traditional grazing use rights in Khanbogd <i>soum</i>.</p>
F. Unoccupied Winter Shelters (All Impact)	<ul style="list-style-type: none"> Construction activities in all areas could restrict access to unoccupied winter shelters (if herders now residing in <i>soum</i>) 	<p>Non-resident winter shelter owners affected by cumulative impacts (F1)</p> <ul style="list-style-type: none"> Non-resident winter shelter owners, who relocated out of the 	<p>F1 Oyu Tolgoi to Gashuun Sukhait Road Impact Zone in vicinity of Tsagaan Khad.</p>

Project Site / Facility / Area	Source of Impacts	Displacement Impact / Loss of Resource	Impact Zones
Zones)	centre visit).	<p>impact zone due to cumulative impacts of Tsagaan Khad truck stop.</p> <p>Disruption to herding practices (F2):</p> <ul style="list-style-type: none"> Unoccupied winter shelters unlikely to experience direct disruption, but Oyu Tolgoi recognise they have property rights and may be affected by construction when they visit their shelters. 	F2 All herder households with unoccupied winter shelters in one of the agreed impact zones.
Additional impacts** (All Impact Zones)	<ul style="list-style-type: none"> Construction activities and location of permanent facilities, e.g. road will restrict access to wells for some herders. Double impacts (households in overlapping impact zones). 	<p>Additional impacts to already affected herders:</p> <ul style="list-style-type: none"> Loss of/restricted access to wells during construction and/or operations. Seven households are affected by impacts from more than one impact zone so will receive additional compensation. 	All seasonal herder households affected by well/water impacts. All households affected by more than one category of impact.

Note: *Phase 1* of the Gunii Hooloi Water Pipeline and Borefield refers to the linear Pipeline route from the mine site to the Borefield. *Phase 2* refers to the Borefield, including supplementary pipelines coming from the main pipeline to each borehole (see Figure 15.2).

These definitions have been derived from consultation with herders residing/grazing in the vicinity of the Pipeline and Borefield area in 2011 (they do not relate to the construction process). During consultation it was identified that pipeline and wells/pump stations/lagoons in the Borefield area (Phase 2) would result in different land disturbance and disruption to herders than construction of the linear pipeline (Phase 1). Therefore, these impact zones are different in order to align with the actual displacement impacts to herders.

* The transmission line and water pipeline and borefield HHs were grouped as they are impacted in a similar way (i.e. construction phase disturbance and small permanent on ground features).

** Households are already enumerated in other impact categories.

Figure 15.6: Impact Zones and Winter Shelters (North)

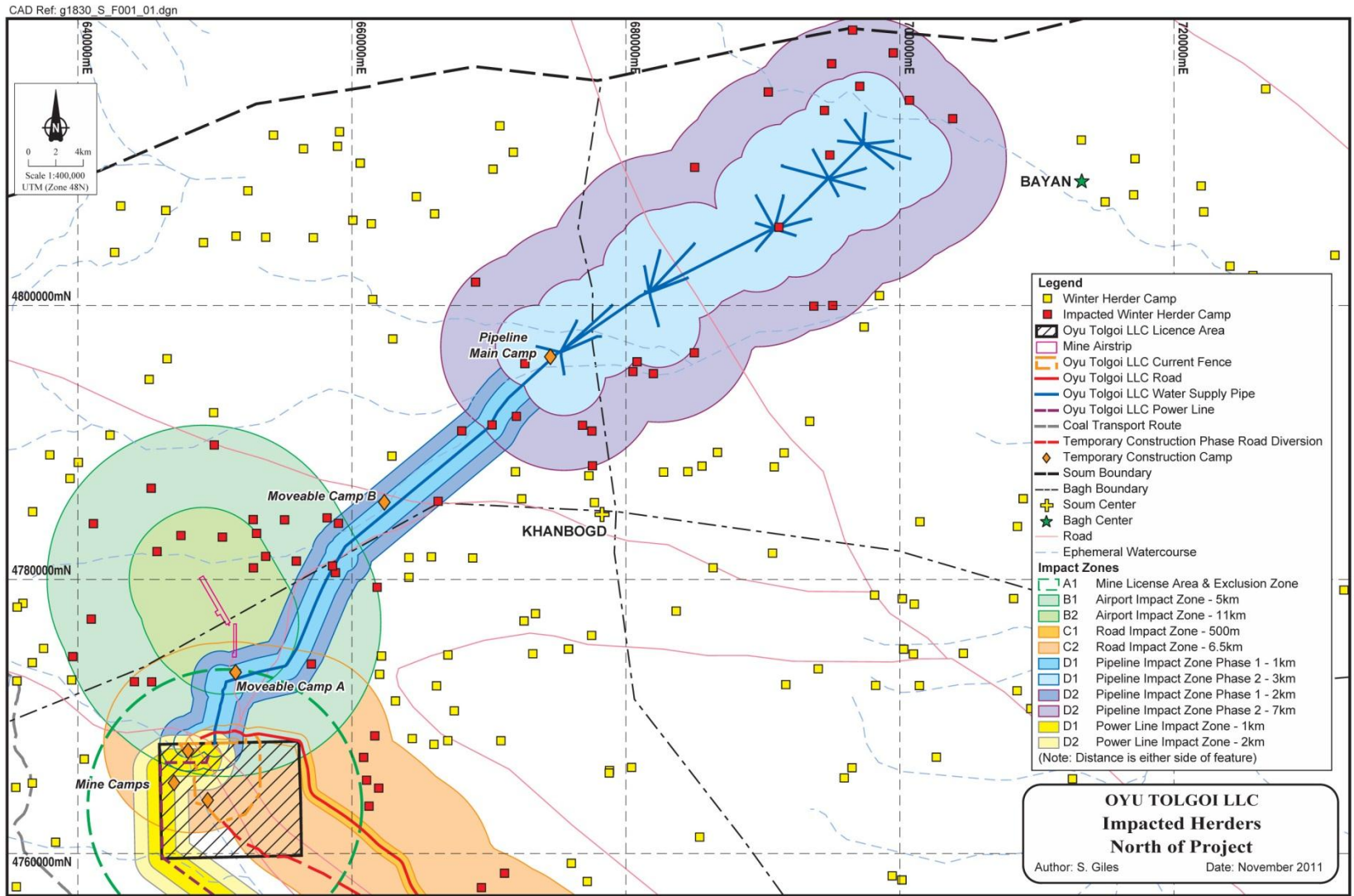
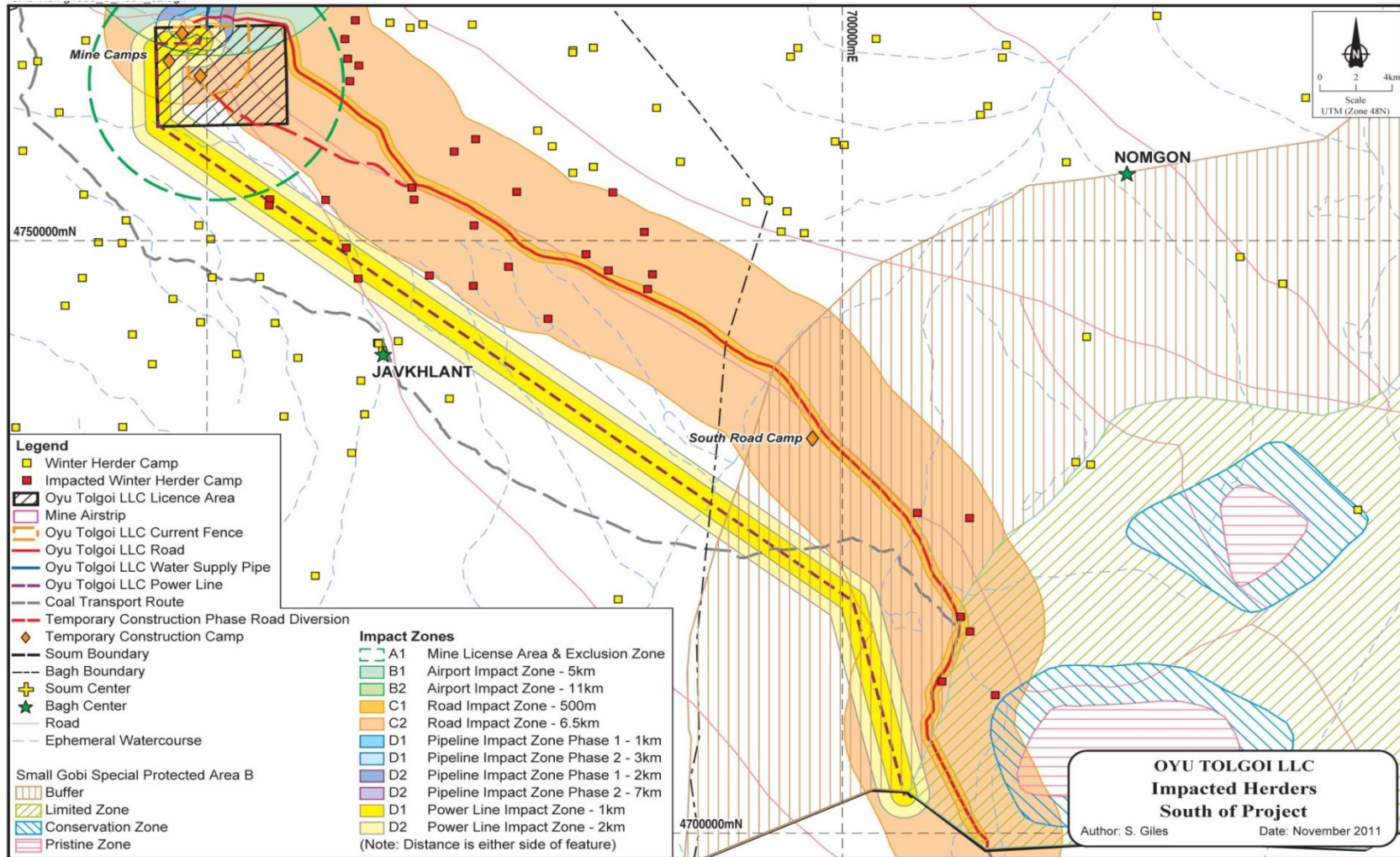


Figure 15.7: Impact Zones and Winter Shelters (South)



Note: Due to scale these figures are illustrative only. Some of the winter shelters that appear on or very close to infrastructure are actually several hundred metres or more than 1km away on the ground.

Table 15.10 below shows the households impacted by land acquisition, land use, or disturbance in each of the impact zones. A total of 10 households (**16 families, 61 people**) have already been **physically resettled**, and a total of **84 families** are being and/or will be **economically displaced**. A total of **94 HHs** are considered to be directly affected by the Project.

Table 15.10: Summary of Project Affected People

Component [#]	Physically Displaced	Economically Displaced or Disrupted by Project Activities
A. Mine Site Area (Mine Licence Area & Exclusion zone)	A1. 10 HHs (16 herder families, 61 people) affected by displacement of winter shelters in Mine Licence Area were relocated in 2005.	Captured in Category E1.
B. Airport Sites	None.	B1. 7 HHs with winter shelters within 5 km of airport who will experience partial loss/reduction of access to summer grazing land. B2. 15 HHs with winter shelters within 5-11 km of airport who will experience minor reduction/reduced choice of summer pastures.
C. Oyu Tolgoi – Gashuun Sukhait Road Corridor	None.	C1. 4 HHs with winter shelters within 500 m either side of Oyu Tolgoi to Gashuun Sukhait road who will be divided from pastures and impacted by construction and operation of the road. C2. 14 HHs with winter shelters between 500 m and 6.5 km either side of the Oyu Tolgoi to Gashuun Sukhait road that will have their migration routes/herding practices disrupted by construction and road activities.
D. Gunii Hooloi Pipeline & Transmission Line from China	None.	D1. 11 HHs with winter shelters within 1km either side of the Water Pipeline Phase 1 or Transmission Line, and 3 km from the Water Pipeline Phase 2, that will have their pastureland temporarily divided by the pipeline trench and have their migration routes/herding practices disrupted by construction activities. D2. 11 HHs with winter shelters within 1km to 2km either side of the Water Pipeline Phase 1 or Transmission Line, and 3-7 km from the Water Pipeline Phase 2, that will have their migration routes/herding practices disrupted by construction activities.
E. Summer Grazing in Khanbogd Soum	None.	E1. All seasonal herders (an estimated 399 households) in Khanbogd <i>soum</i> could be affected by an overall reduction in the availability of pastureland.**
F. Other* (All Impact Zones)	None.	F1. 4 HHs (non-resident winter shelter owners), who relocated out of the impact zone due to cumulative impacts of Tsagaan Khad truck stop. F2. 18 HHs (non-resident winter shelter owners), who reside in the <i>soum</i> centre but have winter shelters in one of the above impact zones, who may experience restrictions in access or nuisance dust, noise impacts if they access their shelters during

Component [#]	Physically Displaced	Economically Displaced or Disrupted by Project Activities
		the construction phase.
Total	10 HHs	84 HHs

HH = Household; [#] Category letters refer to the identifiers given in the Summary of Displacement Impacts and Impact Zones.

* There are four households affected by loss or restriction of access to water; these households are affected in other categories so are not specifically noted in the table. All impacted water supplies will be restored (see also Chapter C10: Land Use & Displacement Impacts for description of these wells and their location).

** Oyu Tolgoi recognises that seasonal herders in the soum could potentially be affected by a reduction of grazing land – this is a communal or shared loss. This is not the same as economic displacement of individual herders, but recognition by Oyu Tolgoi that reduced overall land could increase competition for grazing resources, create potential conflicts, and/or result in overgrazing which could affect seasonal herders (see also Chapter C10: Land Use & Displacement Impacts).

Impact Categories B2, C2, and D2: For the outer impact zones for the Airport (B2), Oyu Tolgoi to Gashuun Sukhait Road (C2) and Water Pipeline Phase 2 (D2), Oyu Tolgoi created several sub-categories through recent negotiations with herders and an independent legal advisor (these sub-categories are addressed fully through the Entitlements Matrix (Annex E) and are as follows: B2 (A) 5 – 8 km; B2 (B) 8 – 11 km; C2 (A) 500m – 3.5 km; C2 (B) 3.5 – 6.5 km; D2 (A) 3 – 5 km; D2 (B) 5 – 7 km. For the purposes of the affected people summary table, only the top level category is included.

Establishment of the exact number of economically-displaced people has been difficult due to the nomadic nature of the seasonal pastureland users. Whilst Oyu Tolgoi has attempted to enumerate the people in the lost summer grazing category, and in the course of discussions with community members, it became evident that the number was shifting and non-verifiable.

15.5 MITIGATION MEASURES

EBRD's Performance Requirement (PR10) on Information Disclosure and Stakeholder Engagement (2008) defines stakeholders as those who are (i) are affected or likely to be affected (directly or indirectly) by the Project ("affected parties"), or (ii) may have an interest in the Project ("other interested parties").

Following this definition, the two principal groups of affected parties in the Project are as follows³⁶:

- Herders who have been physically displaced from their properties through the establishment of the Mine Licence Area and the 10 km Exclusion Zone; and
- Herders who have been economically-displaced through the loss of access to wells, physical disturbance from air or noise emissions and/or reduced access to summer grazing land or winter camps.

Mitigation measures for the avoidance and minimisation of land-based impacts are discussed in the following sections. Mitigation is presented, in accordance with the mitigation hierarchy, in terms of:

- Avoidance and minimisation of impacts;
- Application of mitigation measures; and
- Application of compensation measures.

Thematic maps are provided throughout to illustrate the potential displacement impacts.

15.5.1 Minimisation of Land Take

All components of the Oyu Tolgoi Project are located in a sparsely-populated rural area however some land disturbance has been inevitable. Oyu Tolgoi has avoided, as far as practically possible, resettlement of herder winter shelters, and economic displacement through the minimisation of land take in the Project design. Efforts to minimise land take, and thus avoid displacement, are summarised below.

Mine Site Area

Planning for resettlement from the Mine Licence Area began in March 2003 when the Project established a residential *Exclusion Zone* around the main Project (centred on the middle of the Mine Licence Area) site to minimise the impacts of increased noise, dust, and other environmental impacts resulting from present and future activities.

³⁶ Stakeholders in the Oyu Tolgoi Project are effectively the Project Affected People (PAPs).

An initial 10 km Exclusion Zone was proposed based on extensive consultation and predictions of environmental impacts conducted through the DEIA process. The Exclusion Zone was initially suggested as 20 km by the *soum* authorities, but was later requested as 10km by Oyu Tolgoi in order to minimise the number of herders resettled as a result of the Project and to reflect the risk profile. 10 km was concluded to be a reasonable distance to exclude herder winter camps (but not temporary summer grazing).

Fence Extension Area

The initial area required for the mine site was fenced in 2005 (approximately 5 km²) and the public was then excluded for safety reasons from inside the fence. However, in order to minimise economic displacement and thus impacts to herders, grazing land has remained open to public access.

The Mine Licence Area will be fully fenced during 2012 (approx. 8,625 ha) which will preclude summer grazing. Consultation in early 2011 for the fence extension process identified that a previously resettled herder household was continuing to use a well on the border of the Mine Licence Area for summer grazing. This is a hand dug well that had been replaced by a deep well closer to the resettled household's new winter shelter. After the fenceline extension this well would have been inaccessible to the herder family.

Even though the well had been replaced by Oyu Tolgoi, after consultation with the herder family, the community relations staff negotiated an alteration to the fence extension to allow this well to remain in place for use by the family.

Oyu Tolgoi - Gashuun Sukhait Infrastructure Corridor

Initial Project planning investigated several transport and power supply options, and preferred routes were identified within the Oyu Tolgoi to Gashuun Sukhait infrastructure corridor. The infrastructure corridor contained two road transport options and a power line transmission option for the connection of Oyu Tolgoi to the Inner Mongolian power grid.

The option of using the Hangi border crossing, further east of Gashuun Sukhait, was dismissed due to the distance of road requiring construction within Mongolia, and because the Wuyuan rail head in China is easier to access (with good roads) and closer from Gashuun Sukhait. The preferred option to Gashuun Sukhait requires the upgrading and eventual reconstruction of approximately 100 km of road as opposed to over 300 km of new road construction required to use the Hangi border crossing. The construction of a road from Oyu Tolgoi to Hangi would also have resulted in three times the land disturbance and resulting disruption to grazing activities than the Gashuun Sukhait crossing option.³⁷

The route adopted for the road to Gashuun Sukhait has also been developed to minimise any further resettlement. Mongolian law requires that the easement be such that there should be a distance of at least 50 m from winter shelters for any national road. A minimum distance of 250 m has in fact been maintained by the Project to avoid any unnecessary resettlement of herder winter shelters, and minimise disruption to herding practices of those closest to the road route.

In addition, the southern 23 km of the road will use the Right of Way of the former road used by coal trucks from Tsogtsetsii *soum*³⁸, in order to minimise land disturbance (the road will not disturb new land for this portion of the route). Oyu Tolgoi has an agreement with the *soum* government that no new land for winter shelters will be allocated within 250m of the Oyu Tolgoi to Gashuun Sukhait Road. Local roads are not under control of Oyu Tolgoi and therefore any easements to be maintained are determined solely by government.

Airport Sites

As part of the development of the Project, it was necessary to relocate the original airstrip at Oyu Tolgoi as this was located over the area of the proposed open pit. A number of different options were considered for the Airport Sites.

³⁷ Oyu Tolgoi Project Environmental Impact Assessment, Volume I Report of Oyu Tolgoi to Gashuun Sukhait Road and Infrastructure Corridor, Environmental Protection Plan and Environmental Monitoring Plan, Eco-Trade LLC, 2004.

³⁸ When the coal transportation route was upgraded in 2010/11 a revised route was approved by the Government of Mongolia.

The selected location for both the Temporary and Permanent Airport³⁹ is approximately 7 km north of the Mine Licence Area, and is located on a gravel plain used for summer pasture grazing, but containing no herder winter shelters. This site was chosen because of the need for a relatively flat area in close proximity to the Oyu Tolgoi site, and the requirements of international and national aviation safety. It was the only feasible site that did not require significant ground disturbance for construction, or have any herder winter shelters in close proximity to the site (the nearest herder shelter is over 3 km from the sites).

Gunii Hooloi Borefield and Pipeline

The Oyu Tolgoi Project will be supplied with water via a 70 km pipeline from the Gunii Hooloi borefield. A number of options for the pipeline alignment were examined. As pipelines will be buried and the surface cover will be revegetated, disturbance to summer pasture areas will be limited to the relatively short period of pipeline installation.

The Gunii Hooloi borefield is located in an area with little or no near-surface aquifers suitable for herder wells. As a result, there are limited herder winter camps in the immediate borefield area (14 winter camps within 5 km radius). The pipeline route has been aligned to avoid any resettlement of herder winter camps.

Other Areas

Land disturbance procedures are in place for all activities conducted by the Project, which requires steps to be taken by Oyu Tolgoi and contractors before any land disturbance can occur in Project areas.

The Land Disturbance Permit procedure is managed by the Oyu Tolgoi Environment Department in coordination with the Regional Development & Social Performance team. The procedure includes steps for notifying *soum* authorities, obtaining appropriate permits, and consulting with herder communities prior to any activities on the ground. These procedures also require any land disturbance to be minimised wherever possible. A summary of the Land Disturbance Permit procedure is attached as *Annex B*.

Oyu Tolgoi will also implement transport management plans which include measures such as traffic monitors and signage to eliminate off-road driving, and therefore minimise disturbance to pastureland and herding activities. Drivers will also be given specialist training. See *Chapter D11: Transport Management Plan*.

15.5.2 Compensation and Entitlements

Overall Approach

Where it has not been possible to avoid physical and economic displacement impacts, Oyu Tolgoi is committed to the application of compensation for the affected parties.

The acquisition of land and other assets and resettlement of persons as a result of the Oyu Tolgoi Project will be minimised as much as possible by Oyu Tolgoi. The key principles committed to by Oyu Tolgoi for managing physical and economic displacement and providing compensation and livelihood restoration assistance in this Resettlement Action Plan are as follows:

- *Oyu Tolgoi will follow all applicable requirements* for resettlement and compensation of Project affected persons in compliance with applicable Mongolian laws and IFC PS5/ EBRD PR5. Where Mongolian legal requirements are less favourable to affected people than PS5/PR5 requirements, the latter shall apply. Oyu Tolgoi shall ensure that compliance with PS5/PR5 requirements is reached. Oyu Tolgoi will use its best endeavours to reach compliance with PS5/PR5 in situations where certain steps of the land acquisition process may need to be implemented by the Government of Mongolia;
- *Both physical and economic displacement are addressed*, and impacts from permanent and temporary land acquisition on assets and livelihoods will be mitigated for both physical and economic displacement;

³⁹ The Temporary and Permanent Airports are located adjacent to one another.

- *All people residing or using land in the Project affected areas (“impact zones”) are entitled to compensation and livelihood restoration, measures sufficient to assist them to improve or at least restore their pre-Project standards of living;*
- *Livelihood restoration is a priority. It is the intention of Oyu Tolgoi that affected livelihoods will be improved or at least restored for any persons displaced by the Project;*
- *Compensation will be delivered directly to affected herder households or individuals;*
- *Affected households (and communities) will be offered land-based livelihood restoration assistance (e.g. Sustainable Pastureland Management Programme). Affected herder households and communities will be offered assistance to ensure that they can maintain their standard of living from herding livestock if they choose;*
- *Oyu Tolgoi will assist affected households in restoring their affected livelihoods, and will closely monitor livelihood restoration and provide transitional assistance as necessary if it is observed that livelihoods are not restored to their previous or improved levels;*
- *Temporary and permanent disruptions to herding activities will be compensated for by Oyu Tolgoi, including nuisance caused by dust and noise and loss of amenity during construction activities, as these activities have been identified to disrupt herding practices and potentially result in economic loss to herders;*
- *Land acquisition and resettlement implementation and outcomes will be monitored and evaluated as part of a transparent process involving affected families, soum authorities and independent parties;*
- *A community grievance mechanism will be implemented and available to affected households (and other local residents) and will be independently audited at regular intervals; and*
- *Affected persons and communities will be engaged, informed and consulted during the whole course of resettlement and livelihood restoration planning, implementation and evaluation.*

Eligibility

Project affected persons / households / communities are eligible under this *Resettlement Action Plan* if they have residential structures, other assets (e.g. wells) and/or traditional usage rights to grazing land in the Project affected areas (termed “impact zones” by Oyu Tolgoi) at the time of the specified Cut-Off Date.

Eligible Project affected persons include:

- Those who have formal legal rights to land or other assets in the impact zones;
- Those who do not have formal legal rights to land or other assets but have a claim to legal rights based upon the laws of Mongolia, upon the possession of documents such as land certificates or upon permission of local authorities to occupy or use the affected land; and
- Those who have recognisable traditional claim to the grazing land they are using as identified by local authorities and by community consensus.

Persons who encroach on the affected areas/impact zones after the Cut-Off Dates are not entitled to compensation or other forms of resettlement or livelihood restoration assistance.

Entitlements

The Oyu Tolgoi Entitlements Matrix describes eligibility and compensation principles for each agreed impact zone and the associated category of affected herders.

The headings of the columns have the following meaning:

- *Affected category:* corresponds with the classification of eligibility described in the eligibility table above for defined Project areas;
- *Type of loss/category:* describes the type of loss or impact for which compensation, assistance or other support measures will be provided by Oyu Tolgoi;
- *Eligible entity:* describes to whom the given entitlement will be delivered;

- *Eligibility conditions*: describes the conditions that the asset or the right holder must meet for the entitlement to be delivered;
- *Entitlements*: describes the compensation and/or livelihood restoration to be delivered by Oyu Tolgoi if the interested asset or person/community is affected by Oyu Tolgoi Project activities; and
- *Households*: Number of affected households in each category.

The *Entitlement Matrix* provides a summary description of each of the above, with further details on entitlements provided in the relevant sections of this document.

Cut-Off Dates

Mine Licence Area and Exclusion Zone: The Cut-Off Date for the Mine Site Area was 28 January 2004, as officially notified to affected persons and communities by the *soum* authorities. No residential structure, associated assets or grazing land rights established in the Mine Site Area, including the Mine Licence Area and exclusion zone after this date are eligible for compensation.

All Other Project Areas: The Cut-Off Date for all other Project areas was May 2011. The *Entitlements Matrix* including criteria for eligibility in this *Resettlement Action Plan* due to economic displacement impacts was agreed between affected herders, the *soum* authorities and Oyu Tolgoi at this time. This date was notified to local communities. No persons occupying the land for grazing or other purposes after this date are eligible for compensation, livelihood restoration assistance or other measures.

Compensation for Future Displacement

It is possible that future expansion activities of the Oyu Tolgoi Project and its associated infrastructure may cause physical or economic displacement to residents in the Project's Area of Influence. Likely examples will be the Undai River diversion, Khanbogd *soum* centre water supply, residential facilities for the permanent Project workforce and the industrial hub for the suppliers to the Project and other industries. A power plant facility is required by the Investment Agreement and may also cause displacement to citizens.

In the event that any future displacement is caused by Oyu Tolgoi Project activity, Oyu Tolgoi will follow the same principles and processes elucidated at the beginning of this section to ensure that those affected by the Project activity will be fairly compensated for loss, will have their living standards and livelihoods restored to the pre-impact level or even improved and that the living conditions of anyone physically resettled will be improved.

These principles and commitments are summarised in the following table.

Statement of Oyu Tolgoi Principles for Managing Future Displacement

<i>Oyu Tolgoi will follow all applicable requirements for resettlement and compensation of Project affected persons in compliance with Mongolian laws and IFC PS5/ EBRD PR5.</i>
<i>Both physical and economic displacement will be addressed.</i>
<i>All people residing or using land in the Project affected areas are entitled to compensation and livelihood restoration measures sufficient to assist them to improve or at least restore their pre-Project standards of living.</i>
<i>Compensation will be delivered directly to affected herder households or individuals.</i>
<i>Affected households (and communities) will be offered land-based livelihood restoration.</i>
<i>Oyu Tolgoi will assist vulnerable people insofar as they are affected by the displacement and resettlement process. Assistance will take various forms, depending upon the requests and needs of each vulnerable person/household and the context of the effects from economic displacement for the Project (as identified in Section 15.7.2).</i>
<i>Temporary and permanent disruptions to herding activities will be compensated for by Oyu Tolgoi.</i>
<i>Land acquisition and resettlement implementation and outcomes will be monitored and evaluated as part of a transparent process involving affected families, <i>soum</i> authorities and independent parties.</i>
<i>A community grievance mechanism will be implemented and available to affected households (and other local residents) and will be independently audited at regular intervals.</i>
<i>Affected persons and communities will be engaged, informed and consulted during the whole course</i>

of resettlement and livelihood restoration planning, implementation and evaluation.

As required, third party assistance will be provided for the identification of suitable replacement permanent winter shelters, water wells and summer/winter grazing land. Assistance may involve Soum government officials, Soum environmental officers and land managers, legal support etc.

The following table describes the step-by-step process that will be followed by Oyu Tolgoi in case of future economic or physical displacement caused by Project activities.

Step-by-Step Displacement Compensation Process Table

Step	Actions	Responsibility
1. Identification of impact areas	As early as possible, prepare maps of Project activity footprint & description. Describe expected impacts and locations.	Oyu Tolgoi
2. Consult communities	Meetings with <i>soum</i> and <i>bagh</i> governors, <i>bagh khurals</i> and neighbouring communities. Reach consensus on boundaries of impact areas and understanding of impacts.	Oyu Tolgoi
3. Identify impacted households	Consultations with local authorities, visits to households	Oyu Tolgoi and local government
4. Mapping of households	GPS location of winter shelters and wells	Oyu Tolgoi
5. Census of households	Listing of family members and livestock	Oyu Tolgoi
6. Preparation of register of affected households	Compilation of affected households in each impact area and assessment of compensation requirements.	Oyu Tolgoi
7. Draft entitlement matrix	Describe impacts in each zone, describe compensation options	Oyu Tolgoi
8. Establish Working Group (WG)	Tripartite committee to determine parameters and procedures of compensation program	Oyu Tolgoi, community representatives and local government
9. Discuss options with most-affected households	Detailed discussions with most-affected households to determine degree of compensation needed	Oyu Tolgoi and affected households
10. Finalise entitlement matrix	Using external inputs, from WG and households, finalise the matrix details	Oyu Tolgoi
11. Verify that Household register is complete	Revisit all impact areas and groundtruth and check location of all impacted households	Oyu Tolgoi
12. Verification meeting with Working group	Review and approve final eligibility and entitlement matrix and compensation procedure.	Oyu Tolgoi, community representatives and local government
13. Disclose entitlements to all eligible households	Visit each affected household, either singly or in small groups, and disclose and explain the eligibility and entitlement matrix.	Oyu Tolgoi
14. Draft compensation contract	Draft a contract for compensation measures for each affected household and have Oyu Tolgoi Legal approve it.	Oyu Tolgoi
15. Agree and sign contract with each affected household	Visit each affected household and reach agreement on the terms of their compensation contract. Sign and verify the contract and provide copies to each party.	Oyu Tolgoi
16. Implement compensation program	Enrol people in training courses, livelihood programs, deliver scholarships and other	Oyu Tolgoi, community representatives and local

Step	Actions	Responsibility
	benefits	government
17. Monitor implementation of the compensation program	At least quarterly, visit all affected households and write a brief monitoring report on success of compensation measures or problems observed.	Oyu Tolgoi community representatives and local government
18. Evaluate success of the compensation program.	At least annually, measure the achievement of the compensation program against verifiable indicators and for community satisfaction.	External third-party reviewer
19. Share Monitoring & Evaluation results with stakeholders	Distribute monitoring reports to WG, local government, citizens' <i>Khurals</i> and affected households.	Oyu Tolgoi

Table 15.11: Oyu Tolgoi Project, Summary Entitlements Matrix, 2011

Type of Displacement Impact / Loss	Impact Source (& Category)	Eligibility Conditions	Entitlements
Physical displacement	Development of open pits and other mine site facilities in the Mine Site Area, including the 10 km residential exclusion zone ⁴⁰ (<i>Impact Category A1</i>)	Winter shelter in agreed Impact Zone	Resettlement package , including: <ul style="list-style-type: none"> A new winter shelter, barn, stockyard fence and land certificate; One permanent job for one family member, tertiary scholarships; New well, 15 goats, 15 sheep, 2 camels, 2 tertiary scholarships, animal feed; and Training programs, e.g. pasture management, business development etc.
Economic displacement (loss of summer pastures)	Construction and operation of the Airport Area (<i>Impact Categories B1, B2</i>)	Winter shelter in agreed Impact Zone ⁴¹	Permanent herder job (one per household) (these are jobs (such as environmental and pastureland monitoring) that herders can undertake while still carrying out their existing herding activities, and were designed in consultation with herders). AND Compensation package for livelihood restoration , partnership and investment in establishing a new and/or improved livelihood, e.g. capital purchases, improved livestock, business development, training, ongoing support etc. AND, IF ELIGIBLE [#] Education assistance : Tertiary scholarship for student (one for full course); and Materials & equipment support for school students (all students once per year). Short term training (1 time, short term up to 45 days in Mongolia).
Division of permanent pastures	Construction and operation of the Oyu Tolgoi to Gashuun Sukhait Road and GH Pipeline & Borefield and Transmission Line (<i>Impact Categories C1, D1</i>)	Winter shelter in agreed Impact Zone	Permanent herder job (one per household) (these are jobs (such as environmental and pastureland monitoring) that herders can undertake while still carrying out their existing herding activities, and were designed in consultation with herders). AND Compensation package for livelihood restoration , partnership and investment in establishing a new and/or improved livelihood, e.g. capital purchases, improved

⁴⁰ The Mine Site Area includes the Mine Licence Area and 10 km residential Exclusion Zone.

⁴¹ Both winter and spring shelters bring the possibility of possession rights. All households have winter shelters but only a few have spring shelters, so winter shelters were decided upon by consensus to be the defining point for compensation eligibility.

Type of Displacement Impact / Loss	Impact Source (& Category)	Eligibility Conditions	Entitlements
			livestock, business development, training, ongoing support etc. AND Education assistance: Tertiary scholarship for student (one); and Materials & equipment support for school students (all students once per year) ⁴² AND, IF ELIGIBLE# Short term training (1 time, short term up to 45 days in Mongolia).
Disruption to herding practices	Construction and operation of the Oyu Tolgoi to Gashuun Sukhait Road and GH Pipeline & Borefield and Transmission Line <i>(Impact Categories C2, D2)</i> Cumulative impacts resulting from Tsagaan Khad area <i>(Impact Category F1)</i>	Winter shelter in agreed Impact Zone	Permanent herder job (one per household) (these are jobs (such as environmental and pastureland monitoring) that herders can undertake while still carrying out their existing herding activities, and were designed in consultation with herders). AND Compensation package for livelihood restoration , partnership and investment in establishing a new and/or improved livelihood, e.g. capital purchases, improved livestock, business development, training, ongoing support etc. AND, IF ELIGIBLE Education assistance: Tertiary scholarship for student (one for full course); OR Materials & equipment support for school students (all students once per year). OR Short term training (1 time, short term up to 45 days in Mongolia).
Access issues/disruption to unoccupied winter shelters	Construction activities in any areas that cause access issues/impediments to unoccupied winter shelters <i>(Impact Category F2)</i>	Unoccupied winter shelter in agreed Impact Zone	Permanent herder job (one per household) (these are jobs (such as environmental and pastureland monitoring) that herders can undertake while still carrying out their existing herding activities, and were designed in consultation with herders). OR Education assistance: Tertiary scholarship for student (one for full course); OR Materials & equipment support for school students (all students once per year). OR Short term training (1 time, short term up to 45 days in Mongolia).

⁴² Note: As agreed with herder households, all families have a student now or in the future, so the category of those without students is not reported to exist. However, if a case arises where this is not satisfactory for a family/individual with no students, then Oyu Tolgoi will negotiate an equivalent entitlement.

Type of Displacement Impact / Loss	Impact Source (& Category)	Eligibility Conditions	Entitlements
Water access restrictions/loss	Construction activities in any areas that cause loss or access issues to herder wells	Winter shelter or water well in agreed Impact Zone	Replacement/reconstructed well , or equivalent as agreed with affected herder family to guarantee water supply.
Communal grazing land loss	Overall loss of grazing land to mining use in Khanbogd <i>soum</i> (Impact Category E1)	Seasonal Herders in Khanbogd <i>soum</i>	Sustainable Pastureland Management Programme , including a revolving fund for Pasture User Groups and participation in benefits to be developed and implemented under this programme for herders. Substantial community compensation delivered through this programme exclusively in-kind (e.g. communal fodder growing enclosures and storage facilities, building materials, road works, well works, etc).
Households Affected in more than one impact zone / category	Herders affected in Impact Categories A to D above.	As per eligibility for categories A to D above.	Additional compensation payment. An additional payment or equivalent contribution to livelihood restoration packages will be provided to those herders affected in more than one category.

The entitlements package differs slightly for households in different Impact Zones, as agreed in consultation with affected herders. See the main Entitlements Matrix in Annex E for full details. All directly affected herders are eligible for livelihood restoration assistance, either in the form of a job and/or herder business development support. All herder households in Khanbogd are eligible for inclusion in the Sustainable Pastureland Management Programme.

15.5.3 Physical Displacement (Impact Zone A1)

Sources of Impact

Environmental studies conducted as part of the EIA process to quantify potential environmental impacts indicated that shallow water resources at the Oyu Tolgoi site could be affected outside the Mine Licence Area from the draining of the open pits during the life of the mine (i.e. leading to some impacts to the herders which depended on the shallow well network). Predictions of dust emissions from the tailings facility also showed potential wind-blown dust extending beyond the mine boundary.

Increased activity in and around the Oyu Tolgoi Project site from 2002 onwards led to the emergence of minor issues that were indicative of potential future conflicts, e.g. increasing non-herder settlements within and surrounding the Oyu Tolgoi Project Area that were impacting the livelihood of local herders with increased rubbish, traffic, and pastureland and water use. As a result of these issues, Oyu Tolgoi commenced an extensive consultation programme to determine how to manage human occupation of land directly and indirectly impacted by the Project, and to minimise impacts to neighbouring herders as a result of mining activities and influx.

In June 2003, Mongolian consultants EcoTrade conducted a census of all households within a 20 km radius of the Oyu Tolgoi mine exploration camp⁴³. Households were surveyed to obtain data on land use, land entitlements and household assets (mostly livestock). A total of 15 households (91 people) were involved in this survey.

Consultation was conducted with 3 non-herding families that had moved near to the Oyu Tolgoi camp seeking work at the site. Through discussions with these families, local government and IMMI, it was explained that under IMMI's recruitment procedures, there would be no job opportunities for people waiting near the camp but that recruitment would only take place in district or provincial centres. The families agreed to relocate to the *soum* centre in accordance with this advice.

Initial studies were undertaken between 2004 and 2006 to assess the potential impact of the pit and underground mine on the groundwater, using limited hydrological data available, to provide Oyu Tolgoi with an assessment of the worst case water inflows to the pit and to assess the area of influence. The modelling used a number of scenarios, which took into account of the possibility of subsidence around the underground block caving which could cause the surficial groundwater to flow into the block caving. These models, which used conservative assumptions (e.g. no internal flow barriers and just four modelled units – alluvial, soil, weathered bedrock and bedrock), predicted an ellipsoid cone of depression which was approximately 10 km by 8 km for the 1 m drawdown contour. The 1 m contour was, given the conservative nature of the model, taken as equivalent to the zero drawdown contour as it was considered to overestimate the extent of any zone of influence of the pit dewatering. This initial information along with other factors, such as anticipated dust emissions, was used to define the 10 km Exclusion Zone designated for herder relocation (from herder winter camps but not temporary summer grazing⁴⁴ which is transient and the location of which cannot be directly controlled by the Project).

Since the initial modeling, there have been a significant number of additional boreholes drilled, which has provided a better appreciation of the layering of the sediments and their relative hydraulic conductivities. The regional model update will be completed once regional piezometer drilling and monitoring is completed in 2012. As an interim step the original simplistic model has been revisited and re-run using more realistic (lower) hydraulic conductivities based on recent data gathered from the Mine Licence Area. This re-run of the model predicted a smaller cone of depression, with the 1 m drawdown contour being approximately 5 km from the mine at the end of the open pit mining extending beneath the WRD and a section of the Undai and its diversion, and the majority of the TSF. The 1 m drawdown contour in the interim model is also used as an approximation to the maximum drawdown contour as the data used in this model is insufficient to refine the outer edge of the groundwater area with greater confidence. Within

⁴³ Ibid.

⁴⁴ It is important to note that summer grazing is conducted by about 40% of herders for about 4 months of the year, and usually includes around 5-6 moves (see *Chapter B10: Land Use Baseline Assessment*). Therefore the amount of time any herder family might spend in or near the exclusion zone for summer grazing would be limited, as compared to being a permanent resident.

this area there are no other groundwater users such as herders or springs (other than the Bor Ovoo) or any groundwater dependent flora (see *Chapter B7: Biodiversity Baseline*).

It is anticipated that when further layers are put in the model in 2012, together with more representative hydraulic conductivities, the modelled cone of depression will be smaller in extent and irregular in shape and therefore will better reflect the local geology and structures in the Mine Licence Area. This will provide Oyu Tolgoi with a model with a higher degree of confidence on which to evaluate the potential impacts of the drawdown on the different aquifers.

Importantly the revised groundwater model in 2012 will enable Oyu Tolgoi to review critically the area of influence of the cone of depression and verify that impacts will not extend to any of the herders around the Mine Licence Area; Oyu Tolgoi will present this data to the herding community through the various forums such as the participatory environmental monitoring programme.

Identification of Affected Herders

From the above-mentioned studies, physical relocation was found to affect **10 Herder Households (HHs)** (or 61 people). These herders are within impact zone A1 (see *Table 15.10*).

Herder Relocation Programme

The Exclusion Zone resulted in relocation in 2005 of **10 herder households (16 families or 61 people and approximately 1,880 head of livestock)** whose winter camps were located in the 10 km Exclusion Zone. These herder households were physically displaced by loss of their winter camp site but were also economically displaced due to loss of permanent pastureland at the winter camping area, loss of water well/s and disruption to their herding practices as a result of moving locations.

Only five of the 10 herder households had actually built winter shelters at their winter camps. The other households did not have fixed shelters or corrals but had established winter sheltering places where they set up their *gers* on a semi-permanent basis. Nonetheless, Oyu Tolgoi and the other affected households agreed that the Project would provide all 10 of the households with new winter shelters and other assistance measures. None of the households had spring shelters that needed to be replaced.

IMMI launched the *Herder Relocation Programme* in April 2003 in accordance with World Bank Group OD 4.30 on Involuntary Resettlement⁴⁵ (one of the World Bank Group Safeguard Policies, which were at the time used as a guide to good international industry practice). The programme included identification of compensation and livelihood restoration measures, as well as cost estimates and procedures for implementation, management, and monitoring.

Detailed negotiations with affected herders were conducted from the end 2003 to develop comprehensive resettlement and compensation packages with affected people. Key meetings were:

- Household visits to herder families during 11 - 13 January 2004. Nine household visits were held with families around Oyu Tolgoi;
- Government meetings during 11 - 16 January 2004 in Oyu Tolgoi, Khanbogd, Bayan Ovoo, Tsogstsetsii, and Dalanzadgad;
- Community meetings with households in Javkhlant *bagh* as well as the Khanbogd *soum* authorities, 28 - 29 January 2004 (including participation in the regular *Bagh* meeting);
- Household visits to all 11 winter camps within 10 km from Oyu Tolgoi site (affected population) during 19 - 20 April; and
- Meetings with the Khanbogd *Soum* Governor, Bayan Ovoo *soum* Governor, and Land Officer of Khanbogd *soum* and non-herding families near Oyu Tolgoi, 20 - 21 May 2004.

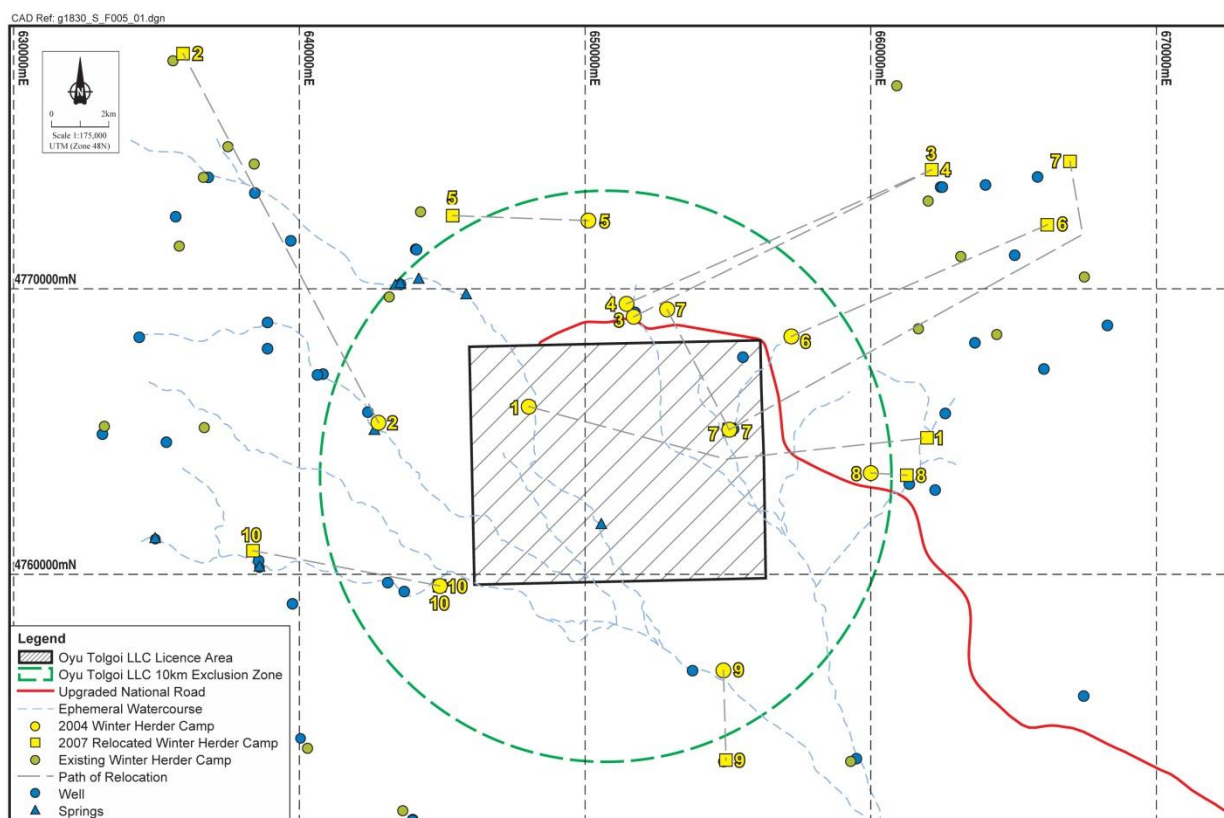
Khanbogd *soum*'s environmental officer and land manager provided assistance in identifying existing as well as potential summer and winter grazing pastures, permanent winter shelter areas, and water well sites. The programme included an investigation by the local government environmental officer and land manager in consultation with the herder families of the potential new areas to ensure they were capable of supporting the herder families and their animals and did not impede neighbouring herders.

⁴⁵ The World Bank Group Safeguard Policies were the main point of reference at the time.

Neighbouring herders were also involved in the consultation and provided feedback as to where shelters could best be placed to minimise any potential conflicts or overgrazing issues. The proposed new sites were visited by all herder families on several occasions to ensure suitability. The condition of the herders' winter shelters and water wells were documented to ensure that their new shelters and wells would be of similar or better quality. In addition IMMI committed to building summer storage houses for each family which they did not currently have.

Figure 15.8 below shows the location of the herder camps and their new location after resettlement, which was agreed with households and surrounding residents. Suitable replacement land within close proximity to their previous winter sites was identified.

Figure 15.8: Relocation of Winter Camps in the Mine Site Area



By the end of 2005 all families had been successfully relocated according to the programme and provided with a comprehensive *Herder Relocation Package*, including replacement assets, compensation and livelihood restoration assistance (see *Entitlements Matrix*).

Replacement of Winter Shelters

A replacement residential site for a new winter shelter was identified by affected herder families, *soum* authorities and their neighbours. A standard compensation package was agreed for each resettled household, whether or not they each had the same standards of facilities to start with. This was decided upon by the affected households themselves, as they felt that this was more culturally appropriate than compensation being offered differently to each household according to their existing assets, for example, as a percentage of their herds. Such an approach would have resulted in some households receiving vastly greater compensation than others, as there was a wide range of herd size and asset standard between the ten households. Instead, each household received the following:

- A livestock winter shelter constructed according to a standard architectural drawing and budget using logs and sawn materials. This design and these materials were selected because wooden shelters were preferred by herders at the time, as wood is fairly rare in the Gobi, so wooden structures seemed special (see *Figure 15.9*). It may seem that wood is less solid than stone, but the stone shelters are usually made of stacked stones, with many interstitial gaps enabling wind

to penetrate. The wooden shelters were constructed to ensure a tight fit and good wind-proofing qualities. All shelters were of equivalent or better standards than those being replaced;

- A stockyard fence;
- A small animal barn; and
- A well, either deep or shallow, depending upon water availability at the new site (all were eventually provided with deep wells).

All households obtained like for like replacement (or better) of grazing lands and permanent winter camp sites by the construction of permanent shelters and deep wells. The construction of wells in new places is what opens up previously ungrazed areas and makes them accessible for grazing of livestock. The construction of shelters, barns and stockyards was undertaken by eighteen members of the resettling families, employed and paid by IMMI for the task.

Of the 10 herding households resettling from the Oyu Tolgoi area, five already had a contract of land possession according to the Land Law of Mongolia. These five had contracts due to expire in 2007 (three households) and one each in 2027 and 2037. The remaining households had not obtained possession certificates for the land on which they sheltered at the time of the resettlement. All resettled households were assisted by Oyu Tolgoi to obtain land use certificates for their new shelter sites from the *soum* government. This fulfils the IFC PS5 requirement to improve living conditions through providing security of tenure and improved housing. As the herders already had their own housing, in the form of transportable *gers*, the improved buildings were the livestock barns, storage sheds and winter shelters.

Compensation for Loss of Customary Grazing Rights

As grazing land is communal property in Mongolia, it is not possible to provide cash compensation to individual households for loss of pastures, but in-kind compensation for loss of customary grazing rights can be given. Oyu Tolgoi provided a number of in-kind compensation measures to each affected household as a part of the *Herder Relocation Package* including:

- Fifteen goats and fifteen sheep and two camels (see *Figure 15.10*);
- A total of twenty tonnes of “horgoljin” animal feed (hay); and
- Two tertiary scholarships, including travel, accommodation, supplies and fees.

Resettled households were provided with stock feed to ensure that their herds were able to survive the first year, until they had settled into their new places. Tertiary scholarships were provided because they were the preferred compensation option for all herder families, as they identified education as a long-term investment in improved household living standards. As of end 2010, four students from resettled families were studying at university. A further 19 children under 18 years of age of resettled families are eligible for tertiary scholarships from Oyu Tolgoi.

Livelihood Support and Other Measures

One permanent job per household was offered by Oyu Tolgoi as an immediate income improvement option. Jobs (and livestock) were identified by affected households as the preferred option to increase income generation.

A total of 12 people in all were initially employed (two households were identified to have several families in them and thus additional jobs were offered). As of 2011, a total of 14 people from resettled families were employed by the Project. These workers are employed as forklift drivers, rubbish collectors, assistants to the Community Relations Officers, kitchen hands, carpenters and cleaners etc. These jobs in most cases also offer on-the-job training and experience which is expected to expand these people's employment potential.

In addition to the tangible aspects of the *Herder Relocation Package*, a series of training programmes were arranged for the resettled households, each of which was able to send at least one person of their choice to the following training sessions:

- *July, December 2004, January 2005*: Three English language training programs were organised for herders and their children. The classes were held two times a week continuing for one month each;

- *February 19-21, 2005:* Conducted a three-day business workshop titled “*Business opportunities, how to begin a business?*” Total of 15 persons from 10 households participated in the workshop;
- *May 2005:* Conducted a three-day workshop on “*Methods of sorting cashmere and quality breeding*” for resettled herder households; and
- *June 2005:* Organised a three-day workshop on “*Pasture management*” for all resettled herder families.

The language training was provided by Peace Corp Volunteers and each of the workshops was provided in collaboration with the *Gobi Regional Economic Development Initiative* (a regional NGO). This training was implemented in 2005. This training has contributed to all families reporting in 2010 that their standard of living was at least equal to what they had before resettlement and a majority of them reporting an improved standard of living. Specifically, there were 9 families reporting higher incomes, 13 families having larger herd size, 7 families reporting better herd quality, and 4 families reporting better pasture access in 2010 compared to before resettlement.

All households were provided with transportation assistance to move their livestock and possessions from their winter camp/shelter to their new winter shelter.

Figure 15.9: Livestock Corral and Winter Shelter



Figure 15.10: Herders with new Goats and Camels



The *Herder Relocation Agreement* allowed for a period of one year to complete physical resettlement and provide livelihood and other support measures for each herder family. Methods of livelihood restoration and other support measures were determined in consultation with affected. **By the end of 2005, all families had been successfully relocated according to the plan.**

Consultation and Follow-Up Measures

In August 2004, a community-led team consisting of members of herder households living in the Oyu Tolgoi Project exploration area and other herders selected from Khanbogd *soum* was set up to ensure

that community concerns were fully addressed in the resettlement planning process. Views of the community group were used to shape the agreements between the displaced herders and IMMI. By the end of September 2004, tripartite agreements had been negotiated and signed between each of the physically displaced households, the Khanbogd *soum* government, and IMMI.

A summary of key issues raised from consultation with physically displaced herders is provided in *Table 15.2*, together with the actions taken by IMMI.

Table 15.12: Summary Issues Raised & IMMI Actions (2003-2005 Herder Relocation)

Issue	Aspect/Concern	IMMI Response/Actions
Resettlement	The <i>soum</i> Government and affected herders agreed that relocation would be an effective measure to avoid environmental, health and safety impacts.	A standard package for compensation and livelihood restoration was developed for each household including winter shelters, stockyard fence, animal barn, well, livestock, tertiary scholarships, employment, and other training and development support. These are detailed in the <i>Herder Relocation Agreement</i> .
Livelihood Restoration	Herders requested that improved winter shelters be constructed for resettled families, water points be drilled, their business initiatives supported and that they have access to jobs with the Project.	IMMI developed a full compensation package for the affected herders as detailed in the <i>Herder Relocation Agreement</i> . All herders were provided with wooden winter shelters as this was the preferred construction material requested by herders. All households were provided with wells.
Influx Management	Some uncontrolled settlement occurred from early 2003 around the Oyu Tolgoi exploration camp (several non-herding families from other <i>soums</i> had come to the area seeking work, as well as a few transient individuals). <i>Soum</i> authorities and community members were aware of non-herder families moving near to the site, and identified that there would be an impact on local herders regarding the use of pastures and water if the migrants were to remain.	In-migrant families and individuals were consulted by Oyu Tolgoi and supported through the <i>soum</i> authorities to move to the <i>soum</i> centre and apply for employment with the Company. IMMI implemented a policy that designated <i>soum</i> centres as the only points of hire. IMMI notified local communities and in-migrants of the recruitment procedures, and that no jobs would be offered to those who moved near to the Oyu Tolgoi camp in search of employment.
Additional Families	Some local community members requested that three additional herder families be included in the relocation effort due to hardship and their association with the area in the past (even though those families were not resident in the Exclusion Zone).	IMMI agreed to provide winter shelters, barns and stockyards for three non-resident herder families as requested by the local community.

The resettled families have been monitored by Oyu Tolgoi through household visits at least annually and follow-up assistance provided as requested where possible, although not in a very systematic or formalised manner, but more in support of the continuing relationship between the mine and these families. An initial review of the relocation programme was conducted in 2006.

On 15 December 2006, a joint meeting was conducted with resettled households, local authorities and the Project, to review, assess and plan the next steps of the Herder Relocation Programme. The meeting was attended by family members of all resettled households, Khanbogd *Soum* Governor, Deputy Governor, *Bagh* Governor, Land Officer and nine members of the community relations team.

The meeting concluded not only with participants expressing satisfaction with IMMI's conduct in fulfilling its contract obligations, but also with a high level of appreciation from the herders and local government representatives. In addition, it was decided that new wells would be established for several households that experienced difficulties with access to water. This commitment was fulfilled in March 2007.

In the following three years, the small Oyu Tolgoi community relations team maintained regular contact with the resettled families, especially in implementing the scholarship support for two students from each household to study at the desired university in the capital city and in providing school supplies and uniforms for two high school students from each family. In addition to meetings to deliver necessary

school supplies and fees, meetings were held with each household to monitor progress of scholars and the families in general. Although no formal monitoring program was undertaken, relationships were maintained with the resettled families and additional support provided as needed and requested.

Evaluation of Resettled Herder Families in 2010

Oyu Tolgoi⁴⁶ conducted a follow-up consultation with the resettled households in October 2010 to determine whether the resettlement process had achieved its goals, i.e. ensuring that the households had *at least* maintained their livelihoods and improved their standard of living.

A total of 15 families were surveyed.⁴⁷ The survey was led by a Mongolian member of the Oyu Tolgoi Communities & Social Performance team, who is a doctoral candidate in rural sociology (focussing on herders).

The survey consisted of an asset and income survey questionnaire, casting back to 2004, prior to the resettlement, until 2010. In addition, a series of opinion questions were asked, to ascertain whether people were satisfied with their restored living standards. The results of this survey are set out below.

Overwhelmingly, the responses of the resettled families demonstrated that they have improved their standard of living since resettlement. Key findings can be summarised as follows:

- All families reported their standard of living, income, herd quality, and access to pasture, to be at least as good as, or better than, before they were resettled. This is a clear indication that their livelihoods had been restored and often improved, in fulfilment of PS/PR5;
- The average percentage of wage income for families in 2004 was 64%, and by 2010 this had risen to over 80%. There were no families entirely dependent on wages in 2004, and by 2010 one family was entirely dependent on wage income;
- A total of 13 families had increased their herd size since 2004, with some families doubling and tripling their herd size. With respect to the 2 families who reported less livestock, in both cases this is due to the family moving to the soum centre and taking on other economic activities. Again, this indicates an improved standard of living and the successful restoration of livelihoods;
- A total of 7 out of 15 families surveyed now reside in the soum centre. All households retain their rural places and herds, but employ relatives or others to mind their herds. This is a clear indication of improved economic status, being able to choose between staying in the town or countryside;
- There was a steady accumulation of consumer durables. The number of mobile phones rose from 2 in 2004 to 16 in 2010. The other major items acquired are televisions and satellite dishes, which were owned by 13 of 15 families by 2010, whereas only 5 families had satellite dishes and 8 televisions in 2004. A total of 2 extra cars and one additional motorcycle were acquired over the period; and
- Three families reported less access to water. The issue of access to water relates to well repair/servicing issues, and Oyu Tolgoi is providing well maintenance.

Six families reported that their standard of living was better than before resettlement and the other nine said that their standard of living was the same. None reported that their standard of living had deteriorated since resettlement. Even though many indicators including income and assets point towards improved living standards for most households, Oyu Tolgoi will follow up to understand why the other 9 families feel that their standards of living have still not improved. As described above (see *Section 15.2*), it is Company policy and a requirement of PS/PR5 to improve or at least restore the standards of living of physically displaced households. Oyu Tolgoi will determine if additional support or assistance is required for these families.

After further consultation in 2011, four of the resettled families have been identified as vulnerable and as needing additional assistance, due to employment problems, infirmity due to age or other disability.

⁴⁶ Oyu Tolgoi was previously referred to as IMMI. For consultation from 2008 onwards, Oyu Tolgoi is used.

⁴⁷ Due to death one family no longer exists and the household has become a single family unit which is why only 15 not 16 families were surveyed in the 2010 study.

Specific measures have been undertaken with each of these families to find alternative means of increasing income and support for improved job retention.

No herders have moved back to winter shelters. Some resettled herders do however use the old winter shelters for summer grazing purposes from time to time. During consultation for the fence extension for the Mine Licence Area, one resettled herder requested that an old well which is located right at the edge of the Mine Licence Area, be left in place for their ongoing use. This was agreed to by Oyu Tolgoi and the fence was modified. This well was actually replaced with a deep well, at the edge of the 10 km exclusion zone, as part of the overall resettlement programme, however the herder still uses the old well from time to time during seasonal migrations. No wells have been provided in the license area. These wells in question are being actively monitored by the Environment Department. This same herder has had some maintenance issues with their deep well, and Oyu Tolgoi has worked with them to fix these issues.

Full results showing the socio-economic status and progress of resettled herders families between 2004 and 2010 are provided in *Annex F*.

15.5.4 Economic Displacement (Impact Zones B-F)

Sources of Impact

The Oyu Tolgoi Project will result in a number of different economic displacement impacts as follows:

- Economic displacement of herders affected by reduced access to and/or loss of summer pastures due to land take for the airport sites (impact zones B1 and B2);
- Division of pastures caused by the construction of linear Project components (including the Oyu Tolgoi to Gashuun Sukhait Road and the water supply pipeline) (impact zone C1 and D1);
- Disruption to herding activities (impact zone C2 and D2);
- Loss of wells and other impacts to water availability/quality (e.g. impeded access to wells) (impact zones C and D);
- Overall reduction of pastureland in Khanbogd soum leading to increased competition for grazing and over use of remaining grazing land (impact zone E1); and
- Impact zone F1 represents a cumulative impact of the above.

Identification of Affected Herders

Since 2007 Oyu Tolgoi has undertaken a series of studies and consultation rounds to identify economic displacement impacts and to clarify the affected herders. A summary of work undertaken is outlined below:

- *Initial herder land use and water studies:* Between 2007 and 2008 Oyu Tolgoi conducted several investigations into herder land use and water use in the *soum*. These included a *Water Perception Study in Khanbogd Soum (2007)* with 280 herder households, where wells and shelters were mapped, and livestock numbers and other key data gathered; a *Water Use Study, 2008* with 21 herder families around the Gunii Hooloi borefield area, and various other herder well monitoring and mapping activities being undertaken by the Environment Department;
- *Pastureland mapping and assessment:* Oyu Tolgoi initiated a programme to build on the initial investigations and specifically identify herders using pastures around the different Oyu Tolgoi Project sites. The main goal was to understand grazing land boundaries, pastureland management arrangements, and to identify herder families. Oyu Tolgoi visited each herder household, conducted semi-structured interviews and drew seasonal pastureland area boundaries on an area map with the herders;
- *Detailed consultation with all potentially affected herder households:* In mid-2010, Oyu Tolgoi began detailed consultation with potentially-affected herders. A number of meetings were held with herder communities in each *bagh* to discuss potential economic displacement impacts and possible livelihood restoration and assistance measures for affected herders. Household visits with selected herders were also conducted to discuss land disturbance and related impacts in each area;

- *Survey of Potentially Affected Herder Households, 2010 to 2011:* This survey was undertaken by Oyu Tolgoi between September 2010 and May 2011. This survey involved detailed household visits to all potentially affected herder families. A total of 84 households were involved in this consultation and survey programme to gather data on socio-economic data consult people about the potential impacts to their pastures, wells and herding practices in each area; and
- *Establishment of the Compensation Working Group:* In March 2011, it was agreed with the *soum* authorities that a working group of potentially affected herders, *soum* authorities and Oyu Tolgoi would be established to facilitate consultation with herders and agree the impact zones for each Project facility and the proposed entitlements for the different displacement impacts.

Results from these investigations and consultation identified that there is considerable variation between herder households in terms of their migration patterns, herd size, family size and overall standards of living. It also highlighted that there are no clear boundaries for summer and autumn grazing areas, and that these vary from year to year, and from household to household, making it difficult to be firm about where infrastructure can best be placed to minimise inconvenience and disruption to herding practices. Herders agreed that whilst grazing land is communal property, there are specific households that will be directly impacted by land acquisition and Project activities.

The above-mentioned studies led to the identification of some **84 HHs** who could be affected by economic displacement impacts (i.e. within impact zones B-F). Within this group, there are a total of **14 HHs**, or 74 people identified as vulnerable.

Negotiations on the “impact zones” for economic displacement have been ongoing with the Compensation Working Group and affected herder households since May 2011. Initial zones were agreed during a meeting of the Compensation Working Group on 5 May 2011. Since that time, further meetings of the Compensation Working Group, as well as individual negotiations with affected households have resulted in some minor revisions to these zones. The proposed revision of the impact zones was raised at the 21 September 2011 meeting of the Working Group, and a final decision was reached on the impact zones in the 17 October 2011 meeting.

Herder Livelihood Improvement Programme

A *Herder Livelihood Improvement Programme* has been developed in collaboration with affected herders, *soum* government and Oyu Tolgoi. The process identified the following compensation and livelihood improvement measures preferred by affected herders:

- Job creation;
- Education assistance;
- Training and skills development for herders;
- Business development and income diversification;
- Pastureland improvement and management; and
- Well creation/rehabilitation.

The *Herder Livelihood Improvement Programme* was largely agreed with herders in early 2011. However, in response to a suggestion by the Khanbogd Governor, and in order to ensure that all affected households felt confident that they understood the compensation process and the measures they were agreeing to, an independent lawyer was engaged to advise the herders. The lawyer consulted each of the affected families to their satisfaction, and counselled Oyu Tolgoi to increase the total amount of compensation being offered to each household and to allow households located close to the impact zone boundaries to be included in the compensation process, in order to preserve community harmony. Oyu Tolgoi agreed to these expansion measures and final signature of the compensation agreements is expected in Q4 2012 (as at May 2012, 74 agreements have been signed and 10 remain to be signed) (see also *Section 15.4* above).

Each of the key components of the programme is described in the following sections including the status of design and implementation. Implementation of measures began in late 2010 (e.g. disbursements of tertiary scholarships etc) and continued into 2011. All measures will be implemented in 2012 (although some will be ongoing beyond this period). The measures described below are being implemented with affected households based on their eligibility as described in the *Entitlements Matrix*.

All measures are being developed in a participatory manner with full engagement of affected families, and facilitated through the Compensation Working Group (see *Direct Employment* and *Local Business and Economic Development* below). The Communities & Social Performance team is implementing the programme with several NGO and government partners.

Education Assistance for Children

Education assistance for children has been identified by all herder families as a preferred assistance measure. It not only provides herder children with greater access to a range of education opportunities, but also provides a significant contribution to household living expenses.⁴⁸

Education support and scholarships are being offered as assistance measures for temporary construction impacts to pastures and herding activities as well as for loss of customary grazing rights (see *Entitlements Matrix*). Households that may not have students now or in the future, can negotiate alternative compensation to an equivalent amount.

Payments towards education assistance are paid by transfer to a nominated bank account for the eligible herder household.

Tertiary Scholarships

Oyu Tolgoi provides tertiary scholarships at a recognised Mongolian tertiary institution, to one student from each of the eligible herder families. Scholarships are calculated on a case by case basis, but all include tuition fees, travel and board for each student for the duration of the college course, subject to satisfactory performance of each student.

In the 2010 – 2011 academic year, 15 students were provided with scholarships by Oyu Tolgoi. The local NGO “*Javkhlant Nutag*” is in-charge of administering the scholarship program.

Equipment and Materials Support for School Students

This assistance is being provided in the form of materials, equipment, uniforms etc., to an agreed amount. All primary/secondary school students in each eligible family are provided with this support by Oyu Tolgoi for 5 years.

Job Readiness and Other Training

Oyu Tolgoi offers training opportunities to eligible households to improve their vocational and/or business development skills and long-term income generation prospects. These training opportunities are offered as assistance measures for temporary construction impacts, or as part of a larger package of livelihood restoration for those most severely economically displaced by the Project (see *Entitlements Matrix*).

Short-Term Training

Affected herder households have identified non-mining training as an assistance measure that will help them to establish new and/or improved livelihoods. Some affected herders have identified short-term training courses as an assistance measure for minor impacts from temporary construction.

Short-term vocational training has been offered to eligible households for an agreed amount and period of time (one training course of up to 45 days in Mongolia).

Job Readiness Training

For affected people interested in employment with Oyu Tolgoi or contractors, they are being prioritised for bridging/job-readiness training packages to support them to obtain and maintain employment. Oyu Tolgoi has been working with Rio Tinto to develop a range of bridging/job-readiness training packages and this was implemented in 2011 and is to be expanded in 2012. The first six-month training course for 120 students commenced in August 2011. Of the 114 students who continued onto the second half of the course, 79% were female.

Training opportunities for local residents will be especially effective when the *Khanbogd Technical and Vocational Education Centre* is built by Oyu Tolgoi in 2012. This centre will be owned and operated by

⁴⁸ Remote herder families often spend a large proportion of their household income on student education and boarding fees.

Oyu Tolgoi which will enable the Company to ensure local residents, including affected herders and their families, can access local training opportunities. This is particularly important for herders, because state-run Technical and Vocational Education and Training (TVET) programs usually require a minimum of secondary school education for entry (which most herders do not have).

The Oyu Tolgoi run centre will be able to implement bridging courses and other procedures to ensure herders can also access vocational training. Vocational training at the Khanbogd Centre will likely include, but not be limited to carpentry, electrics, mechanics, tailoring, catering etc. All affected herder households interested in vocational training who are able to meet applicable criteria will be prioritised for vocational training at the Khanbogd centre when it opens.

Prior to the opening of the centre in Khanbogd, training will be offered at the Oyu Tolgoi site and elsewhere in Mongolia.

Direct Employment

Eligible herder households have been given preference for employment with the Project. One permanent job for one member of each eligible household has been offered. Permanent employment is offered as a livelihood restoration measure to all households economically displaced by the Project (see *Entitlements Matrix*). Required training to support employment is also being provided (e.g. job readiness, technical training).

During consultation, many of these affected herders expressed an interest in waged labour, but not necessarily in mining related jobs or at the Oyu Tolgoi site. As a result, Oyu Tolgoi has identified a number of opportunities for herders to be employed by the Company outside of the mine site, in casual roles in environmental maintenance and management, such as site cleaning around the airport perimeter and along the road from site to the border with China.

As at October 2011, a total of 69 people from households economically displaced by Project infrastructure developments had been employed by Oyu Tolgoi to supervise and maintain the cleanliness and condition of the airport perimeter area/road route and other areas impacted by the construction of Project infrastructure. There are no set hours for this job, so it fits in well with the continuation of other herder duties. Instead, performance standards are maintained by weekly visits from a Community Relations Officers from the Khanbogd office. The salary is equivalent to that of other unskilled employees who work at the mine, so the herders are satisfied as they can earn an income while remaining close to their land and livestock.

Local Business and Economic Development

Individual business guidance and livelihood support packages are being provided for eligible herder households. These substantial support packages are being offered to those economically displaced by the Project (see *Entitlements Matrix*). Packages for these households are being individually tailored to meet the livelihood improvement needs of each specific household and include a wide variety of investment options. As described in Annex D, the level of contribution for these packages has been agreed with herders based on the impact zones/categories. In other words, the amount of the contribution that is provided for these livelihood support package is higher for those in households closest to Project facilities.

Oyu Tolgoi is providing substantial investment in establishing a new and/or improved livelihood, which will include capital purchases, improved livestock, business development, mentoring and ongoing support, equipment upgrade etc. These packages are in development with eligible households began implementation in 2011 and is ongoing in 2012.

Development and implementation of these packages utilises partnerships already established through the *Local Business and Economic Development (LBED) Programme*, including those with NGOs experienced in herder business development, local banks and technical training partners, to provide comprehensive and ongoing support to these households in their new or improved business ventures.

Oyu Tolgoi is working with a local NGO (*Amjiltiin Tomiyo*) from Dalanzadgad to specifically help herders to improve their levels of income from livestock production (e.g. camel milk processing, cashmere production etc.). For households not interested in land based business development, Oyu Tolgoi is working with another NGO (Development Solutions) on other business development and training opportunities (e.g. bakery, restaurant, carpentry, auto vehicle repair etc).

All Project-affected herder households are given priority access to microfinance loans. Herders affected by land acquisition and displacement and vulnerable people (e.g. women headed households) are also receiving additional support from Oyu Tolgoi to be involved in the programme, such as the coverage of the initial loan amount, etc. The programme is also available to all Khanbogd *soum* residents. Further details on these projects are provided in *Chapter C9: Employment Impacts*.

Water Rehabilitation/Creation of Replacement Wells

Oyu Tolgoi guarantees water supply for all affected households. Each affected herder household has been provided with a replacement/rehabilitated water supply, by:

- Oyu Tolgoi will provide new or reconstructed wells, or equivalent, for any households affected by loss or restrictions of access to water as a result of the Project;
- Wells will be replaced in-kind and water source locations will be as agreed in consultation with affected herders; and
- Replacement well locations will be in alignment with pastureland management plans that are developed by the Pasture User Group in the area (see also *Section 15.5*).

The Oyu Tolgoi Environment Department has a comprehensive water monitoring programme throughout Khanbogd *soum*, including monitoring of 94 herder wells and is in regular contact with all herders with wells close to Project facilities.

The monitoring of herder wells forms part of the wider Participatory Environmental Monitoring (PEM) programme that is being implemented with herders and other residents to ensure that environmental monitoring is conducted in a transparent manner that builds trust between the Project and local herders. The Environment Department uses this regular consultation, plus the monitoring programme, to identify if any further water access/availability issues arise as a result of the Project.

Community Compensation

Community compensation is intended to offset permanent loss of land, deemed to be a community resource, regardless of compensation to individuals for individual or family level land use rights and regardless of land replacement and livelihood restoration activities.

Pastureland mapping and a survey of herder families that fall into category E1 (Non-resident but lost grazing) was conducted in May to June 2009, and consultation with affected herder families has been ongoing. Surveys of households grazing livestock in the lease area outside the fence over the past two summers has revealed that the area is used by a varied and shifting population, sometimes three households, sometimes up to ten, and not the same households at the beginning and end of the summer. When the most recent data are combined with the 2007 survey conducted as part of the Water Perception Survey, it becomes apparent that there is no fixed set of herder families using the area currently planned to be fenced. Consequently, the fairest method of compensation would be a replacement grazing area or fodder growing area to be managed by either the *bagh* or *soum* government, in co-ordination with Pasture Users Groups and guidance and support from experts such as the MSRM. This would therefore constitute community compensation rather than individual. Such a program will be launched once consensus is reached between *soum/bagh* government, Company and herders.

Through extensive consultations that have led to the current compensation agreement, the community, local government and Oyu Tolgoi agreed that the unverifiable summer grazing category would best be compensated for by contributions to improving pastures throughout the *soum*.

The Javkhlant and Gaviluud *bagh* communities have lost land permanently to the Project and are therefore entitled to community compensation. However, Oyu Tolgoi recognise that as grazing land is a community resource, overall land loss and changes will affect all Khanbogd *soum* herders. This does not imply that each and every herder household in Khanbogd *soum* is eligible for an individual compensation package but rather that all herders in the *soum* may benefit from programmes designed to benefit the whole district. Therefore, any community compensation will be implemented to benefit all Khanbogd *soum* herder households, with a focus on Javkhlant and Gaviluud *baghs*.

Community compensation is exclusively in-kind, in the form of permanent improvements to pastures, herding infrastructure such as wells, animal dips etc, or inputs to other community infrastructure (access roads, community buildings etc.).

Oyu Tolgoi is delivering this compensation to Khanbogd *soum* herders through the ongoing *Sustainable Pastureland Management Programme* to an amount agreed with herders and *soum* authorities.

Sustainable Pastureland Management Programme

During various consultations herders have requested help from Oyu Tolgoi to improve pastureland management and herding practices. The *Sustainable Pastureland Management Programme* has been designed to preserve or improve the normal state of pastures, develop the livestock husbandry sector in a stable manner, reduce pasture deterioration and implement measures to help herders to use and protect the pastures within the Khanbogd *soum*.

The *Sustainable Pastureland Management Programme* has been developed as community-based compensation to offset permanent loss of community land, regardless of compensation to individuals for individual or family level land use rights and regardless of land replacement and livelihood restoration activities.

The MSRM is implementing this programme with Oyu Tolgoi and Khanbogd *soum* herders (see also *Section 15.5.5*). The design phase of this work began in September 2010. The first phase of the work was completed at the end of 2010, with the following results:

- A study on pastureland health in the *soum*, including analysis of vegetation and pasture conditions at 33 sites across the four *baghs*;
- Establishment of 15 long-term vegetation monitoring sites;
- Establishment of a Rangeland Health Monitoring database for Khanbogd *soum*, developed by Jornada Experimental Range (USA);
- Assessment of the current carrying capacity of Khanbogd *soum*; and
- Establishment of a Community Based Organisation (CBO) of Pasture Users in Khanbogd *soum* and 14 Pasture User Groups (PUGs) comprising almost 400 neighbouring herder households.

Each Pasture User Group has been preparing a pasture management plan for their traditional grazing land, with support from the MSRM, funded by Oyu Tolgoi. These plans are intended to identify measures to improve pasture management and will be approved by local government units to ensure broad adherence to them. Oyu Tolgoi will support specific measures proposed to an agreed amount, as community compensation for loss of overall grazing land in Khanbogd. Proposed measures are likely to include:

- Well rehabilitation and creation;
- Pasture rehabilitation and revegetation programs;
- Improved veterinary services, animal vaccinations, animal dips;
- Training in improved animal health care; and
- Support to enhance subsistence and marketable production of animal products.

All herders in the *soum* are eligible to participate in the *Sustainable Pastureland Management Programme*. The focus of the programme is on seasonal/rural herders, not those living in the *soum* centre with livestock.

In addition to this budget, Oyu Tolgoi also contributes to a “Revolving Fund” for each Pasture User Group, which is a contribution per household, to be used to earn interest and be available for future use by participating herders.

In 2011, achievements of the continuing *Sustainable Pastureland Management Programme* have focused on herder capacity building and the restoration of existing wells. Activities included

- inaugural annual study tour to neighbouring Dundgovi province for herders to learn about co-operatives for dairy, fibre and agricultural production;
- participation for PUG members in a national Pasture Users Group conference in northern Mongolia to establish networks with other PUGs and learn from their experiences;
- women herders attended a ‘businesswomen and female herders’ workshop in Dalanzadgad to build their business capacity; and

- completion of the herder hand well restoration programme.

For 2012 and beyond, Oyu Tolgoi has recruited a full-time Pastureland Management Programme officer, who will be responsible to:

- Coordinate Sustainable Pastureland Management Programme implementation with consultants, contractors and related local groups;
- Motivate and support local stakeholder initiatives (Pasture Users Groups) on pastureland management and herder income diversification and generation;
- Organize pastureland mapping survey of local herders and analyse their traditional pasture use and movement trends;
- Arrange consultation on pastureland management issues with the relevant community groups and local administration bodies;
- Document and data management of the SPMP activities; and
- Collaboration with the Oyu Tolgoi Environmental Department Biodiversity team to ensure co-ordination of rangeland programmes and approach.

Specific measures for improvements to pasture management and herding practices will be developed in 2013, to ensure that assistance for Khanbogd herders is delivered in a timely manner and can offset any adverse impacts that may occur as a result of loss of grazing land in the *soum*. A particular focus of the new Pastureland Management Programme officer will be to continue and enhance the co-operation between the Communities & Social Performance team and the biodiversity officers in the Environment Team to ensure that herder needs are included in plans for managing rangelands for the protection of wildlife. Future plans for the *Sustainable Pastureland Management Programme* are focused on increasing the pool of professional advisers to work towards integrating the Oyu Tolgoi programme with broader national rangeland management strategies.

Additional Compensation for Most Affected Households

During ongoing consultation in late 2011, and with the help of the independent lawyer arranged by Oyu Tolgoi, it was agreed that any households identified within more than one impact category would be given an additional compensation. An additional payment or contribution to their livelihood restoration packages is being provided to these households to compensate for the double impact to their herding activities.

Consultation with Economically-Displaced Herders (2010-2011)

The Social Impact Assessment⁴⁹ (SIA) process commissioned by Oyu Tolgoi, identified that additional herders could potentially be economically-displaced by the Project (i.e. through the loss of access to camps or grazing land or reduced access to water supplies). As a result, Oyu Tolgoi initiated further consultation with herder households and also a pastureland assessment programme, and then a survey of economically displaced households (as described in *Section 15.6* above).

After the initial consultation with potentially affected herders, Oyu Tolgoi began detailed negotiations with herders directly affected by Project activities to identify the different types of displacement impacts from Project activities and agree on suitable compensation and assistance measures.

Table 15.3 below shows a summary of recent consultation with herders affected by economic displacement and disruption due to Project activities. Annex D shows an example poster describing the key steps of the displacement and compensation/livelihood restoration process for affected households (Mongolian).

⁴⁹ Oyu Tolgoi Social Impact Assessment, Final Report, Centre for Policy Research and Population Training and Research Centre, Ulaanbaatar, Mongolia. September 2009.

Table 15.13: Summary of Consultation with Economically-Displaced Herders, 2010 - 2011

Public Consultations / meetings	Date	Persons in attendance	Main Topics
Oyu Tolgoi to Gashuun Sukhait Road: road upgrade works.	Jun 30, 2010	150	How to manage impact of road construction.
Airport construction: proposed design and plan of work	Jun 28, 2010	100	How to manage impact of airport construction.
Household visits: regarding Oyu Tolgoi to Gashuun Sukhait Road information	Jul 23 – 24, 2010	31	Follow up of public consultation on road route and potential impacts (permits, route, traffic signs, water and dust).
Animal crossing points along Oyu Tolgoi to Gashuun Sukhait Road.	Aug, 2010	12	Identified animal crossing points with herders along Oyu Tolgoi to Gashuun Sukhait road.
<i>Bagh</i> citizen <i>khural</i> : update on Project progress (4 <i>baghs</i>)	Sept, 2010	240	Provided Project information and obtained feedback and community concerns, e.g. on water and environmental impacts.
Discussions on community safety and security with local authorities and ways of collaboration with Oyu Tolgoi.	Sept 13, 2010	8	Risks of construction period and proposed mitigation measures.
Seed rehabilitation project	Sept 25, 2010	80	Inception meeting to explain seed collection, procedures, guidelines and implementation
Consultation with herders about procurement of agricultural products	Sept 28, 2010	25	Needs assessment of vegetable growers, cattle, milk, wool and cashmere products
Sustainable Pasture Management Programme <ul style="list-style-type: none"> ▪ Design ▪ Inception 	Sept – Dec, 2010	34 83	Series of consultations design and inception of pasture management project.
Oyu Tolgoi fence extension: local road route	Dec 20, 2010	55	Obtained community input into detouring of local road around Oyu Tolgoi fence line.
Oyu Tolgoi to Gashuun Sukhait road: borehole use by Oyu Tolgoi contractors	Jan 3, 2011	10	Information delivered, water expert provided detailed data on Oyu Tolgoi water use and obtained input and feedback from herders.
Oyu Tolgoi to Gashuun Sukhait road impact management: agreed workers and contractual details	Feb 02, 2011	20	Follow up on earlier Oyu Tolgoi to Gashuun Sukhait road consultation on impact management and compensation for most affected herders. Agreed herders to be employed by Oyu Tolgoi.
Sustainable Pasture Management Programme	Mar 3-8, 2011	70	Training on project documentation, procedures, management and monitoring
Open Days	Mar 9 – 12, 2011	350	Provided information regarding Project progress and obtained community feedback (in KB, DZ, ML, BO).
<i>Bagh</i> citizen <i>khural</i> : updates on Project progress (4 <i>baghs</i>)	Mar 23 – 26, 2011	240	Provided project information and obtained feedback and community concerns.
Water discussions: <ul style="list-style-type: none"> ▪ Herders ▪ Individuals ▪ NGOs 	Mar 23 - 31, 2011	8	Provided additional information on Oyu Tolgoi water use and obtained feedback and concerns.
Project impact management: types of impact, impacted zones, criteria, possible mitigation measures,	Mar 24, 2011	10	As follow up of Open Day meeting, the compensation Working Group was established and a series of more in-depth meetings were started.

Public Consultations / meetings	Date	Persons in attendance	Main Topics
compensation, cut-off date, etc			
Participatory Water Monitoring action & design: <ul style="list-style-type: none"> Herders Teachers/Students 	Apr 1 – May 25, 2011	55	Introduced monitoring project documentation and obtained feedback.
Ground Breaking Ceremony: Airport	Apr 2, 2011	21	Organised to show respect to local households near airport site.
Impact management: types of displacement and compensation package discussions	May 5, 2011	11	Working Group and other herders discussed and agreed displacement categories (Entitlements Matrix).
Group meetings on compensation packages for affected households	May 18, 2011	80	Herders discussed the proposed entitlements with each other and Oyu Tolgoi, for: <ul style="list-style-type: none"> Oyu Tolgoi to Gashuun Sukhait road Airport GH pipeline T-Line Un-occupied shelters Other
Local NGO: assisting in developing business proposals/livelihood support under compensation packages	May 6, 2011; Jun 4-5, 2011	15	Local NGO was hired to assist the herders to develop their business plans for livelihood support. First meeting with most impacted households was conducted.
Impact management: compensation package discussions	May 25, 2011	10	Working Group and other herders discussed categories of impact and proposed compensation (<i>Entitlements Matrix</i>).
Discussions on water: <ul style="list-style-type: none"> Working Group Plus other herders 	May 7, 2011	5	Provided information on Oyu Tolgoi water use and obtained feedback and concerns. Conducted participatory monitoring with herders.
Sustainable Pasture Management Programme	May 30, 2011	10	Training for heads of Pasture User Groups: how to manage groups, pasture mapping, best practices.
<i>Bagh</i> citizen <i>khural</i> : updates on Project progress (4 <i>baghs</i>)	Jun 10 – 13, 2011	120	Finalised <i>Entitlements Matrix</i> , implementation procedures, and households to be covered.

Source: Oyu Tolgoi, May 2011.

At the larger meetings about road and airport construction impacts and their management, and at the *bagh khurals*, issues of major concern to herders such as potential loss of access to water and pasture were consistently raised. Subsequently, targeted meetings on the more specific details of mitigating any potential water and grazing impacts were held with those who felt they were likely to be impacted. Consultations were also held on the Oyu Tolgoi to Gashuun Sukhait road in November 2010 in relation to the minor changes to alignment and were completed by Oyu Tolgoi and EcoTrade (Mongolian environmental consultants). The road alignment considered the prevention of situations where herder camps could be cut off from water supply wells.

Among other issues raised by the herders were dust emissions from the road, access to wells for livestock, road safety and road crossings together with the interaction between livestock/wildlife and construction traffic. Issues raised for the transmission line and GH borefield pipeline corridor also included dust emissions from construction, as well as access to pastures and potential impacts to water supplies. The key issues raised through the consultations with herders are summarised in *Table 15.14* below, together with Oyu Tolgoi actions.

Table 15.14: Summary Issues Raised by Economically-Displaced Herders & Oyu Tolgoi Actions

Issue	Aspect/Concern	Oyu Tolgoi actions/response
Employment and business development	Herders would like more employment opportunities, not just at the mine site.	Permanent jobs being offered to eligible herders, tailored to their situation, so they can maintain their herds and herding practices. As at May 2012, 69 herders along the Oyu Tolgoi to Gashuun Sukhait road and around airport had been employed by Oyu Tolgoi as “site cleaners”. These are casual but permanent positions with Oyu Tolgoi.
Maintaining herder livelihoods	Herders raised concerns about degrading pastures and maintaining their livelihoods and incomes in the long-term. Many have also expressed the desire for business opportunities rather than solely employment.	Small & Medium Enterprise (SME) development projects have been specifically tailored for affected herder families in 2011 under the <i>Herder Livelihood Improvement Programme</i> Business development and other training programmes are being offered to herders to help commercialise their activities.
Pastureland loss, division of pastures, disruption to herding practices	Herders request compensation/mitigation for loss of access to summer pastures, including help with education of their children, managing their herding activities, and water supply. Herders request animal crossings along water pipeline route and also for Oyu Tolgoi to Gashuun Sukhait road.	Implementation of the <i>Herder Livelihood Improvement Programme</i> and livelihood restoration and other assistance measures described therein for affected herders. Implementation of the <i>Sustainable Pastureland Management Programme</i> . First phase initiated in mid-2010. Fourteen Pasture User Groups and a local pastureland community-based organisation established in the <i>soum</i> to facilitate implementation of the programme. Support being given to each group to prepare own pasture management plans. Oyu Tolgoi providing revolving fund for each group. Disbursements of tertiary scholarships has commenced for eligible students, more than 14 students had received scholarships in 2010/2011 academic year. Oyu Tolgoi has made 8 animal crossing points along water pipeline route with herders, removed waste rock from these areas and installed stop signs. A further 8 animal crossings will be installed along other sections of the pipeline as construction moves along the route. 10 animal crossings have been identified by herders along the Oyu Tolgoi to Gashuun Sukhait road and these are discussions are ongoing with herders about the best measures to establish crossing points.
Air quality	There are concerns about increasing dust emissions due to the construction and operation of airport, roads, transmission line and GH borefield and pipeline.	Water trucks are spraying every day during construction in areas of earthworks where herders are nearby. Oyu Tolgoi is obtaining more water trucks to increase frequency and locations of watering as construction activities peak. Implementation of Air Quality Management Plan This plans includes Oyu Tolgoi's commitment to the control of construction-related dust e.g. from construction activities and the movement of goods and vehicles. Construction on upgrading/sealing Oyu Tolgoi to Gashuun Sukhait road began in mid-2011.

Issue	Aspect/Concern	Oyu Tolgoi actions/response
Access to Project information	Local communities would like to receive more updates and information about the Project and be fully involved in designing support measures for displacement impacts	<p>Local Advisory Groups (LAGs) established in 2010 in each <i>soum</i>, to facilitate better engagement between communities and Project.</p> <p>Compensation Working Group was established with herders in early 2011 to facilitate implementation of livelihood restoration and other assistance measures.</p> <p>Oyu Tolgoi has assigned a Community Relations Officer (CRO) to every affected household (about 12 households per CRO) and all families are in regular contact through visits from the CRO and other meetings.</p> <p>Poster on physical and economic displacement and livelihood restoration process disclosed to herders in June 2011.</p>

15.5.5 Ongoing Engagement with Affected Herders

Oyu Tolgoi has developed a *Stakeholder Engagement Plan (Chapter D14)*, the goal of which is to build on existing Oyu Tolgoi engagement activities and relationships with Project affected people and other interested stakeholders.

Oyu Tolgoi uses the following methods to engage with affected herders and communities related to land acquisition, compensation and livelihood restoration:

- Compensation Working Group;
- Household visits by Oyu Tolgoi Community Relations Officers;
- Pasture NGO and Pasture User Groups; and
- Disclosure of this *Resettlement Action Plan*.

Each of these key methods of engagement with physically and economically displaced households are summarised below, with further details provided in *Chapter D14: Stakeholder Engagement Plan*.

Compensation Working Group

The Khanbogd Governor established a Compensation Working Group in early 2011 with members from Oyu Tolgoi, affected herder household representatives, and *bagh* Governors, to define economic displacement impacts and negotiate compensation and livelihood support measures. The group consists of both men and women from affected households, and includes herders of different ages and different socio-economic status. The Working Group has been meeting as required (a total of 5 meetings between May to October 2011).

As compensation and livelihood support packages are implemented with affected households, the Working Group is facilitating this process. The group also mediates any disputes related to eligibility and entitlements or the implementation process that may arise.

The Communities & Social Performance team is responsible for facilitating the Working Group, recording the consultation conducted, and providing feedback on the Oyu Tolgoi response to any outcomes from the engagement process.

Households Visits

Oyu Tolgoi has a team of Community Relations Officers (CRO) who make regular household visits to economically and physically displaced herder households in Khanbogd *soum* as part of maintaining relationships as well as monitoring people's welfare. Household visits are a preferred method of consultation for herder families, who are often located far away from the mine site or the *soum* centre and it is important for good relations that visits are not only conducted when the company has an explicit need to consult. Each household is visited at least once a month and more often if there are particular matters to discuss.

Each CRO in Khanbogd *soum* has been assigned approximately 8-12 affected herder households who they are responsible for maintaining regular contact with. All CRO are required to maintain records of their consultation with households and keep the Community Relations Superintendent informed of consultation progress and any issues raised.

Household visits will be the key method used to monitor implementation of compensation and livelihood restoration measures, and also used wherever sensitive information needs to be discussed face to face with individuals or families.

Pasture NGO and Pasture User Groups

The Mongolian Society for Range Management on behalf of Oyu Tolgoi facilitated the establishment of Pasture User Groups by herder communities in Khanbogd *soum* in 2011. The MSRM is a national organisation with extensive experience implementing pasture management programmes and herder business development initiatives in Mongolia. This was part of the initial phase of the *Sustainable Pastureland Management Programme* being implemented by Oyu Tolgoi in the *soum*.

The aim of these Pasture User Groups is to mobilise groups of herders within different *khot ail* (herder communities) to work collaboratively on pastureland management and preservation. A total of 14 groups have been established. The MSRM experts are helping each Pasture User Group to develop their own pasture management plans.

The MSRM has also facilitated establishment of a Pasture NGO in Khanbogd *soum*. The Pasture NGO is Oyu Tolgoi's implementing partner for pasture management support measures offered to affected herders.

These groups have been established in collaboration with affected communities to ensure that there is transparency in the compensation and livelihood improvement programme and that the required technical expertise is available to implement the measures with herders. The *Sustainable Pastureland Management Programme* is being implemented through these groups.

Disclosure of Resettlement Action Plan

This *Resettlement Action Plan* will be released to the public in the Project Area and elsewhere in Mongolia, as a part of the ESIA disclosure process. This will include:

- Translating the Resettlement Action Plan into Mongolian;
- Distributing a non-Technical summary to Khanbogd *soum* communities and affected herder households, along with details explaining where the full document is available for review;
- Disclosing specific parts of the Resettlement Action Plan to affected communities and households and hosting information sessions with local communities to discuss the content;
- Providing the non-Technical summary and full document at Oyu Tolgoi branch offices in the Khanbogd *soum* (at the mine site in and the *soum* centre); and
- Disclosing the summary and full *Resettlement Action Plan* on the Oyu Tolgoi website.

Further information on the disclosure process for the full suite of ESIA documentation is provided in *Chapter D14: Stakeholder Engagement Plan*.

15.6 ASSISTANCE TO VULNERABLE PEOPLE

15.6.1 Identification of Vulnerable People

From mid-2010, Oyu Tolgoi commenced identifying vulnerable people within Khanbogd *soum*, through the help of the Labour and Social Welfare Office. The main criteria for vulnerability used by the Mongolian government and Oyu Tolgoi are:

- a) Single headed households;
- b) Family member requiring full time carer;
- c) With many children;
- d) Unemployed; and

e) Low income per person (total income divided by family members).

A total of 55 households have been identified as vulnerable within the total population of Khanbogd *soum*, by the Labour & Welfare Office. Of these 55 households, there are a total of 14 households, 74 people, identified as vulnerable within the directly affected herder group. *Table 15.15* shows the vulnerable people identified within the Oyu Tolgoi directly affected group.

Table 15.15: Vulnerable Households in Directly Affected Herder Group*, 2011

Vulnerable category /Impact category/	a. Single headed	b. Disabled	c. Many children	d. Unemployed	e. Low income	Total
A1. Oyu Tolgoi Mine Site Area	3	1	2	3	4	4
B1. Airport	0	0	1	1	1	1
B2. Airport	0	0	1	0	1	1
C1. Oyu Tolgoi to Gashuun Sukhait Road	0	0	0	0	0	0
C2. Oyu Tolgoi to Gashuun Sukhait Road	0	0	0	0	0	0
D1. GH Pipeline/T-Line	0	0	0	1	1	1
D2. GH Pipeline/T-Line	0	0	0	0	0	0
E1. Summer Grazing in Khanbogd	0	0	0	0	0	0
F1. Unoccupied shelters	2	2	0	2	3	3
F2. Unoccupied shelters	2	0	1	4	4	4
TOTAL HHs	7	3	5	11	14	14

Note: some HHs qualify in more than one category of vulnerability so row totals exceed HH total numbers.

* The Oyu Tolgoi Project Directly Affected Herder Group refers to the 84 herder HHs identified as physically and economically displaced by the Project.

15.6.2 Types of Assistance for Vulnerable People

Oyu Tolgoi is committed to assist vulnerable people insofar as they are affected by the displacement and resettlement process. Assistance will take various forms, depending upon the requests and needs of each vulnerable person/household and the context of the effects from economic displacement for the Project. Assistance may include:

- Inclusion of vulnerable people in general and day-to-day consultation activities in accordance with the Stakeholder Engagement Plan (SEP) (see *Chapter D14: Stakeholder Engagement Plan*) and in accordance with the principles of informed participation;
- Assistance regarding understanding any compensation measures, e.g. explaining the process and procedures and making sure documents are well understood;
- Assistance to obtain training and access employment opportunities either directly or indirectly with Oyu Tolgoi, contractors or suppliers;
- Help to make sure their opportunities for assistance are well understood and in accordance with what they need for improving their livelihoods;
- Counselling and support in matters such as family, health, money management, and livelihood restoration; and
- Health care if required at critical periods, particularly any transition periods, e.g. during intensive construction activities when herding practices and incomes could be affected.

15.6.3 Process for Assisting for Vulnerable People

Oyu Tolgoi is committed to work with *soum* authorities and affected herders to prepare specific assistance measures for vulnerable people, as needed. The outline of the process is as follows:

- Use the Compensation Working Group to handle issues related with vulnerable persons;
- Identification by the working group of vulnerable persons requiring assistance through those applications by the vulnerable persons themselves and through identification by social networks in the *baghs*; and
- Identification of assistance measures on a case-by-case basis, with the following process:
 - Review of each case by Communities & Social Performance team specialist with one working group member, including a visit at home and a detailed interview;
 - Discussion on required assistance measures between the two individuals above and the vulnerable person;
 - Report to the working group on proposed assistance measures;
 - Review and decision by the sub-committee;
 - Implementation of assistance measures; and
 - Monitoring and evaluation.

Oyu Tolgoi has allocated a specific budget for assistance to vulnerable persons identified within the directly affected herder group, and within Khanbogd *soum*. The above process was initiated in early 2011 for 4 vulnerable households within the affected herder group, and Oyu Tolgoi is designing specific livelihood restoration packages for these people. For example, the son of an elderly widow household head, who has difficulty retaining employment has been found a new job and is being mentored on a weekly basis to help him maintain this essential source of family income. Assistance to all identified vulnerable people within the Project affected herder population is being implemented in 2012.

15.7 GRIEVANCE MANAGEMENT

In March 2011, Oyu Tolgoi implemented a comprehensive Community Grievance Procedure for the Project. This is described fully in *Chapter D14: Stakeholder Engagement Plan*. A summary of the procedure is provided below, with further details on the procedure provided in *Chapter D14: Stakeholder Engagement Plan*, together with a summary of the type of grievances received to date. The full procedure is maintained by the Communities & Social Performance team.

15.7.1 Grievance Classification

As part of the community grievance process, grievances are required to be categorised, so that the type of complaint being reported can be readily identified. Complainants/Aggrieved Persons or Oyu Tolgoi may complete the classification of grievances. These categories are:

- Culturally significant, religious or heritage sites;
- Resettlement/economic displacement/compensation;
- Human Rights;
- Recruitment procedures;
- Staff/contractor/supplier behaviour;
- Environmental;
- Community health and safety;
- Donation-related;
- Security personnel;
- Multiple complaints; and
- Other.

Each category of grievance has been further categorised to facilitate easier identification of the grievance, and their explanations are presented in detail in the full procedure. Grievance categories shall be recorded on the Community Grievance Form and in the OASIS⁵⁰ database.

15.7.2 Procedure Overview

As a general policy, Oyu Tolgoi works actively to prevent grievances through implementation of impact mitigation measures and community relations activities that enable the Company to anticipate and address potential issues before they become grievances.

When public grievances are reported, the Community Grievance Procedure shall be invoked to ensure containment and resolution of grievances. Oyu Tolgoi welcomes and encourages feedback from the community, recognising the value of having incidents reported to help prevent additional grievances or a major event.

The Grievance Procedure is a six-step process which is shown in the procedure flowchart shown in Annex G. The six steps of the procedure are summarised as follows:

- **Step 1 – Receive Grievance:** A CRO/Communities & Social Performance staff member shall receive the grievance and forward it to the Communities & Social Performance Manager. The staff member receiving the grievance is responsible for documenting and recording the grievance and providing to the CRO for incorporation in the OASIS database. The type of grievance is identified per the categorisation above.
- **Step 2 - Preliminary Assessment:** An initial assessment of the grievance will be conducted by the CRO to assign the grievance level as shown in full Procedure.
- **Step 3 – Respond to Grievance:** Written communication by the CRO or Communities & Social Performance Manager to the Aggrieved Person to acknowledge the grievance and provide information as to expected steps and time for resolution of the grievance. This communication is to be provided within seven (7) working days of receipt of grievance.
- **Step 4 – Investigate and Resolve:** This procedure investigates the underlying cause(s) of the grievance and develops actions needed to prevent recurrence of a similar grievance. To determine the methodology and team membership to complete the investigation as shown in full Procedure. An Incident and Corrective Action report will be completed no later than one (1) month from the start of the grievance investigation, which begins on the date the grievance was entered in the consultation database. The Communities & Social Performance Manager shall coordinate conflict resolution activities required to contain and resolve actual or potential conflicts. The Communities & Social Performance Manager and CRO shall follow the Incident Reporting and Investigation Procedure in developing recommendations and reporting to ensure the grievance does not reoccur.
- **Step 5 – Close-out:** Following close out of the grievance by the CRO or Communities & Social Performance Manager shall seek sign-off from the Aggrieved Person that the grievance has been resolved. Lessons learned shall be shared.
- **Step 6 – Follow-up:** The CRO and/or Communities & Social Performance Manager will monitor the satisfaction of Aggrieved Person with the way that the grievance was resolved and initiate further investigation into any grievances not been signed-off by the Aggrieved Person to determine what further action may be taken.

Detailed actions required for each step are outlined in the full procedure, together with the key responsibilities for each step in the community grievance process.

15.7.3 Mediation Committee

To facilitate the resolution of complaints and resolve potential future conflicts between the Oyu Tolgoi Project and local residents in Khanbogd *soum*, Oyu Tolgoi will establish a Mediation Committee. This

⁵⁰ OASIS is a localised version of 'Borealis', a widely used stakeholder management tool. See *Chapter D14: Stakeholder Engagement Plan* for further details.

Committee will be established in 2013⁵¹, as part of the community grievance process. This committee will report on the grievance process to the community through the Khanbogd *soum* government and Citizen's Khural at regular intervals, to be determined by the committee.

The Mediation Committee will include representatives of those directly affected by physical and economic displacement, as well as other residents of Khanbogd *soum*, and local government. The Mediation Committee will meet as needed, depending on registered complaints and disputes (for further information see *Chapter D14: Stakeholder Engagement Plan*).

15.7.4 Summary of Resettlement and Compensation-related Grievances

This is described fully in *Chapter D14: Stakeholder Engagement Plan*. As noted above, one of the categories of complaint included in the Community Grievance Procedure is Resettlement/Economic Displacement/Compensation. The table below summarises all complaints received in this category since the formal procedure was implemented, a total of 17 cases, all of which had been satisfactorily resolved at 31 December 2011.

The majority of complaints received concerned requests for clarification about eligibility for the compensation package, often requests for the complainant's household to be included in the list of eligible households. The other major grouping of complaints in this category consist of claims for compensation for damage to the environment or livestock. The dual meaning of compensation in this case leads to some ambiguity that may need to be clarified in the OASIS database structure in future.

Summary of Resettlement/ Economic Displacement/ Compensation -related Complaints, Project to Date 31 December 2011

Case Numbers	Description	Resolution	Status
90, 91, 94, 95, 97, 99, 103, 104 (8 cases)	Requests for clarification about entitlement to compensation package	Oyu Tolgoi CROs explained about eligibility criteria.	Resolved/closed
79, 85, 86, 89, 98 (5 cases)	Claims for compensation for animal deaths caused by drill holes or road (1)	Claims investigated and compensation paid. Contractors made to backfill holes.	Resolved/closed
73, 48, 81 (3 cases)	Complaints about truck disturbance, dust in well, and borrow pit.	Oyu Tolgoi provided well protection, backfilled borrow pit, trained drivers in better behaviour and installed GPS in trucks.	Resolved/closed
66 (1 case)	Complaint about not receiving job as compensation.	Job created.	Closed.
Total 17 (23% of cases)			

15.7.5 Grievances Related to the 2005 Resettlement Programme

Oyu Tolgoi has not received any formal complaints related to the 2005 resettlement program in the past five years. That is why none have been captured in the OASIS Grievance database. As described in *Section 15.6.3* above, a formal post-resettlement meeting was held in 2006, including all resettled households and local government representatives, as well as Oyu Tolgoi's community relations officers. The meeting consensus was that the resettlement was complete and satisfactory. Several complaints with respect to water supply at the new locations were recorded, with the result that Oyu Tolgoi agreed to provide deep wells to all resettled households, not just those who had previously had deep wells replaced, as originally agreed. The construction of all deep wells was completed in 2007.

⁵¹ The Mediation Committee has not been established (this is expected in 2013). Until 2013, the Compensation Working Group will fulfil this role.

In 2010, Oyu Tolgoi conducted a follow-up survey with the resettled households (15 out of the original 16 families, constituting ten households), as detailed in *Section 15.6.3* above, and with full results reported in Annex F. Although part of the survey process was to ask people for their views about whether their lives had changed for better or worse since their resettlement, none chose to complain about the resettlement process and outcomes.

The survey identified that three out of 15 families reported less adequate water supplies than previously, due to wells in need of repair and maintenance. These wells have since been repaired by Oyu Tolgoi and the water supply restored. The survey team also identified that four of the 15 families were in a vulnerable state due to employment retention problems and the age and infirmity of the household heads. These families have now been included in a vulnerability support program being implemented jointly by Oyu Tolgoi and the Khanbogd local government. The support comprises employment mentoring to ensure increased income and assistance to alleviate disability-related problems.

It is important to note that, although the Oyu Tolgoi survey team classified these families as vulnerable, none of them reported themselves as being less well-off than prior to resettlement. The resettled families varied widely in their pre-resettlement standards of living, with herds varying between 33 and 378 animals. Although all have improved their standards, with herd sizes having increased to 55 to 773, some of them are still not prospering and Oyu Tolgoi has recognised this and will continue to support these four families until such time as they are no longer considered vulnerable.

Since the commencement of community consultations about compensation for the construction and operations stages of the Oyu Tolgoi Project, people have been discussing what they would expect of a compensation entitlement package in 2011 and onward, the best part of a decade later than the original process. Resettled families have commented to Oyu Tolgoi CROs that, although they have no specific complaints about the company's conduct concerning the 2004-5 resettlement, they have higher expectations now. For example, although the wooden winter shelters were constructed at the request of the resettled households in 2005, some people have said that they would not prefer wooden shelters if they were to be resettled in future, and Oyu Tolgoi has taken note of this. Oyu Tolgoi has never received a complaint or grievance about the wooden shelters built for the 2005 resettlement.

15.8 ROLES & RESPONSIBILITIES

15.8.1 General

Overall responsibility for the implementation of this *Resettlement Action Plan* shall rest with the Oyu Tolgoi Vice-President Regional Development & Social Performance. Specifically the Communities & Social Performance Manager who shall report on progress to the Vice-President Regional Development & Social Performance is responsible for implementing all aspects of this plan (see *Figure 15.12*). The Community Relations Superintendent reports directly to the Communities & Social Performance Manager and is responsible for day to day implementation of displacement and compensation activities.

Figure 15.11: Communities & Social Performance Department, Oyu Tolgoi

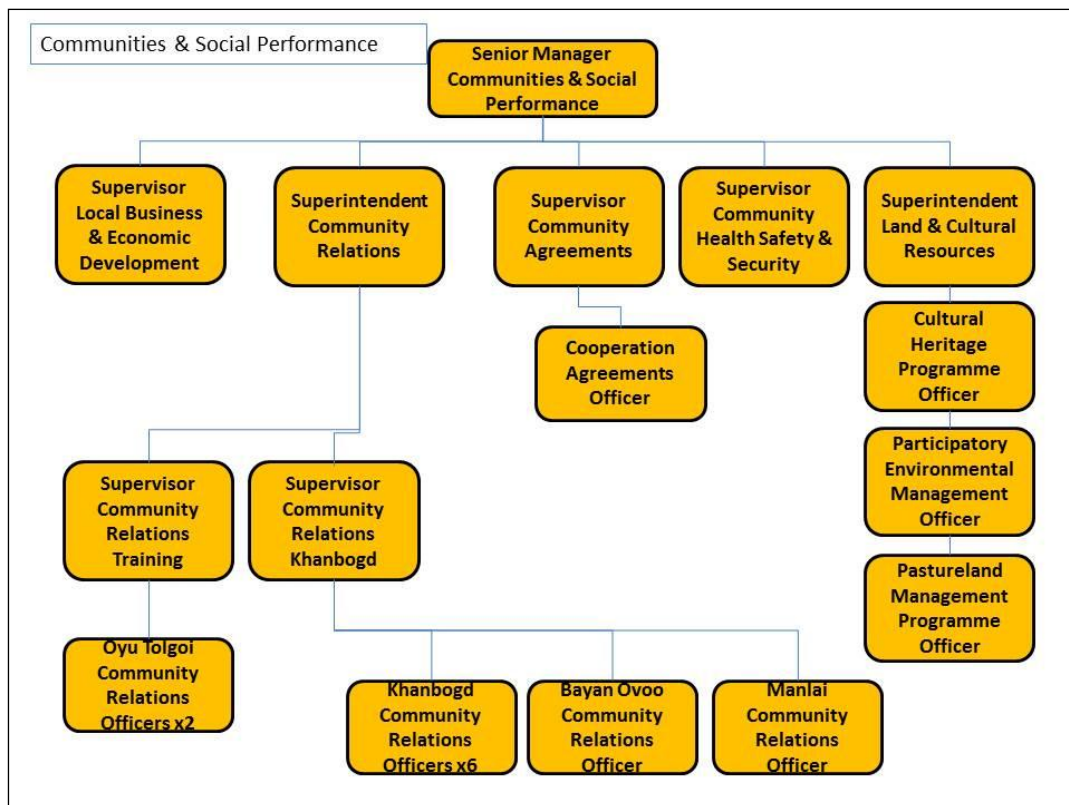
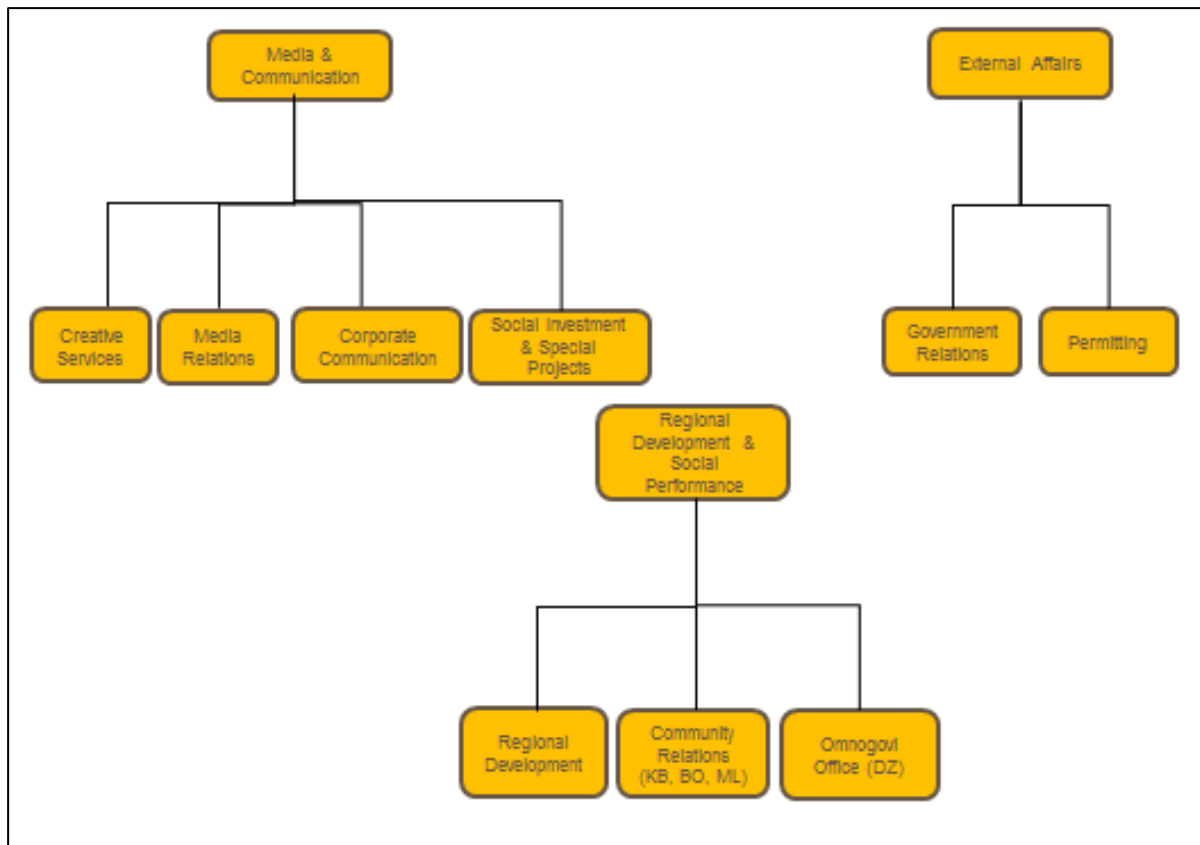


Figure 15.12: Regional Development & Communications Department, Oyu Tolgoi



Source: Oyu Tolgoi, May 2012

15.8.2 Regional Development and Social Performance Team

The Regional Development & Social Performance team is responsible for managing all social impacts and related activities, including displacement and compensation. The Regional Development & Social Performance team has over 30 full time staff, as well as contractors and interns. This team contains the key personnel that are responsible for compensation, community relations and land management programs for affected herder households, including:

- Community Relations Superintendent; and
- Land & Cultural Resources Superintendent.

Between them these superintendents have a series of programme coordinators, community relations officers and assistants that help to implement the *Herder Livelihood Improvement Programme*. The team is spread throughout the head office in Ulaanbaatar, branch offices in Khanbogd, Bayan Ovoo, Manlai and Dalanzadgad, as well as the Oyu Tolgoi mine site.

Table 15.16 shows the key Oyu Tolgoi Project team members and their corresponding roles and responsibilities related to implementing this plan.

Table 15.16: Roles & Responsibilities for the Oyu Tolgoi Resettlement Action Plan

Accountability	Responsibilities
Community Relations Superintendent	<ul style="list-style-type: none"> ▪ Lead the design and implementation of the Resettlement Action Plan ▪ Ensure all aspects of the displacement and livelihood restoration process are negotiated effectively with affected herder households ▪ Conduct social surveys and studies to obtain key socio-economic and other data on affected households ▪ Manage resettlement, land acquisition, land disturbance related grievances on behalf of Oyu Tolgoi ▪ Establish and maintain a detailed database of directly affected households, assets and their socio-economic characteristics ▪ Monitor implementation of this Resettlement Action Plan and support the Communities & Social Performance Manager with external monitoring and evaluation ▪ Design and implement livelihood restoration and other supports
Land & Cultural Resources Superintendent	<ul style="list-style-type: none"> ▪ Design and implement the Sustainable Pastureland Management Programme ▪ Coordinate the Pasture NGO and Pasture User Groups in activities related to Oyu Tolgoi and pasture management ▪ Liaise with the construction and environment teams on land management issues that affect herders in Khanbogd <i>soum</i>
Community Relations Officers	<ul style="list-style-type: none"> ▪ Inform affected households about the community grievance procedure and regularly keep them informed about its existence and procedures ▪ Help displaced households raise complaints about the resettlement, compensation or the livelihood restoration process as required ▪ Respond to easily answered complaints and document ▪ Facilitate operation of the Compensation Working Group ▪ Monitor and report on stakeholder perceptions regarding physical and economic displacement and the livelihood restoration process ▪ Act as liaisons between the affected households and the Community Relations Superintendent ▪ Coordinate all meetings, disclosure materials and other engagement with affected herder households
Communities & Social Performance Manager	<ul style="list-style-type: none"> ▪ Oversee implementation of the Resettlement Action Plan ▪ Ensure all affected people are identified and that livelihood restoration and other supports are adequate and agreed with affected population ▪ Sign off on the Entitlements Matrix and ensure that the Legal department is involved in all agreements with affected households/individuals

Accountability	Responsibilities
	<ul style="list-style-type: none"> ▪ Ensure livelihood restoration and other assistance measures implemented in timely manner and in accordance with this plan ▪ Write reports for internal and external distribution ▪ Keep the Director informed about updates to the resettlement, compensation and livelihood restoration process ▪ Monitor and evaluate the Resettlement Action Plan ▪ Adjust procedures, compensation and other assistance as needed
Communities & Social Performance team	<ul style="list-style-type: none"> ▪ Provide support to the Community Relations Superintendent to implement applicable sub-projects for the Resettlement Action Plan ▪ Provide technical input into areas such as herder business and economic development, local worker training, education assistance etc
Vice-President Regional Development and Social Performance	<ul style="list-style-type: none"> ▪ Put in place applicable controls to ensure adequate communication between Construction department and Communities & Social Performance team ▪ Approve Resettlement Action Plan and budget ▪ Support Communities & Social Performance Manager to resolve any persistent or serious displacement related grievances
Mediation Committee	<ul style="list-style-type: none"> ▪ Communicate community concerns, queries and follow-up actions needed to Community Relations Superintendent ▪ Participate in proper functioning of community grievance procedure ▪ Ensure communities are well informed about displacement and other Project impacts and developments
Compensation Working Group	<ul style="list-style-type: none"> ▪ In March 2011, it was agreed that a working group of the potentially affected, <i>soum</i> authorities and Oyu Tolgoi would be established to facilitate consultation with herders and agree the impact zones for each Project facility and the proposed entitlements for the different displacement impacts ▪ The Working Group will continue to assist Oyu Tolgoi with entitlements arrangements
All Project staff	<ul style="list-style-type: none"> ▪ Receive any issue, concern, problem or claim from an individual or community and address the issue to the Communities & Social Performance team ▪ Notify Communities & Social Performance team of intent to work in a new area
Construction teams	<ul style="list-style-type: none"> ▪ Notify the Communities & Social Performance team of intent to work in a new area ▪ Provide Communities & Social Performance Manager updates on construction schedule ▪ Obtain applicable permits for land disturbance and any other work that creates ground disturbance prior to beginning activity

15.8.3 Khanbogd *Soum* Government

The Khanbogd *soum* government is the local authority involved with the resettlement and livelihood restoration programme with Oyu Tolgoi. The *soum* and *bagh* governors are involved in all aspects of preparation and implementation of compensation and livelihood assistance measures that involve affected households and communities. Specifically, representatives involved from Khanbogd *soum* are:

- Khanbogd *soum* Governor and Deputy Governor;
- Javkhiant, Gaviluud, Bayan and Nomgon *bagh* Governors;
- Labour and Social Welfare Officer;
- Land Officer; and
- Various other *soum* officials to support development of programmes and projects being implemented in the *soum* (e.g. *Agricultural Officer for Sustainable Pastureland Management Programme*).

The *bagh* and *soum* governors are part of the Compensation Working Group (see also *Section 15.5.5*) with affected herder representatives and Oyu Tolgoi. Key other roles of Khanbogd *soum* officials include:

- *Bagh and soum governors*: Consultation with herder households and communities to identify affected people in collaboration with Oyu Tolgoi, and help manage any disputes between the local community members and the Company;
- *Land Officer*: Provision of permits and the approvals process for land disturbance and support to develop and implement the Sustainable Pastureland Management Programme; and
- *Labour and Social Welfare Officer*: Support for the Oyu Tolgoi employment process for local people and help to identify and develop measures for vulnerable herder households.

15.9 INFORMATION AND DATA MANAGEMENT

Oyu Tolgoi has numerous inventories on herders, winter shelters, wells, pastures, livestock and related data on directly affected households, as well as other herders within Khanbogd *soum*.

Oyu Tolgoi will maintain a comprehensive database of directly affected herders including all physically and economically displaced herder families, their assets and other baseline data, entitlements and compensation payments, livelihood restoration measures, grievance handling, and vulnerable people. This database will form the basis for long-term monitoring of affected households and this Resettlement Action Plan.

15.10 MONITORING AND KEY PERFORMANCE INDICATORS

15.10.1 Overview

The monitoring and evaluation process for this *Resettlement Action Plan* for the Oyu Tolgoi Project will include the following components:

- *Internal monitoring*: will be conducted by Oyu Tolgoi to look at progress against inputs and commitments of the resettlement, compensation and livelihood restoration process, and at specific situations of economic or social difficulties arising from the implementation of this programme;
- *Outcome evaluation*: will be conducted by external parties, to look mainly at outcomes (or results) of the resettlement and livelihood restoration process, through an assessment of the mid- and long- term impacts on affected households and their incomes, standard of living⁵², local capacities and so on; and
- *Completion audit*: will constitute a final check on whether the primary commitments made in the *Resettlement Action Plan* have been met with respect to livelihood restoration and improving standards of living for affected herder households. It will be conducted for Oyu Tolgoi by an external auditor.

Each of these activities is described below. Because the resettlement of herder families from the Mine Site Area was completed in 2004, a number of internal monitoring and evaluation activities have already been undertaken by Oyu Tolgoi (see *Section 15.5.3* above).

15.10.2 Internal Monitoring

Internal monitoring in the context of this RAP is the ongoing, methodical data gathering and analysis of resettlement mitigation and development activities which provides the Project with early and ongoing indicators of progress and goal achievement. This ongoing monitoring process will allow Oyu Tolgoi to design additional or alternative mitigation measures if resettlement or livelihood restoration commitments or goals are not being met.

⁵² Indicators of standard of living could include indicators such as level of income, ownership of consumer goods, land tenure/real estate status, livestock size and type, access to health care, education and so on (see also Annex F for an example of indicators reviewed as part of the 2010 evaluation of resettled herders).

Internal monitoring will take place against the activities, entitlements, time frame and budget set out in this document. The monitoring process will check the progress against established indicators and expected short-term results and will report the data every six months.

Monitoring will continue throughout the life of the Project, after the period of displacement and, as international convention recommends, at least until a successful Completion Audit has been conducted.

The internal monitoring process that will be implemented by Oyu Tolgoi will comprise a **semi-annual monitoring report** and **annual household survey**, to be conducted by the Communities & Social Performance team.

Semi-annual Monitoring Report

A semi-annual monitoring report on key resettlement/livelihood restoration inputs will be conducted. The monitoring exercise will be led by the Communities & Social Performance team's internal monitoring and evaluation specialist and will focus on the Mine Site Area, Oyu Tolgoi to Gashuun Sukhait Road, Airport Sites, Gunii Hooloi Pipeline and Borefield and Transmission Line.

The monitoring process will be structured to consider the following categories of Project-affected people (not all categories are present in all Project areas, nor are the categories discrete):

- those who have lost housing/structures and associated assets (i.e. owners or occupiers of winter shelters and corrals);
- those who have been displaced from pastoral land;
- those who have lost wells, or whose wells have been impacted;
- those who have been economically displaced or whose livelihoods have been impacted due to Project activities; and
- neighbouring herder communities affected by overall loss of grazing land and alterations to seasonal migrations and herding practices within the area.

The Project will maintain records on all aspects to be monitored including grievances, compensation, land acquisition, livelihood improvement programs implemented, consultation, pastureland management etc. The data gathered will be checked against commitments made in this Resettlement Action Plan. *Table 15.18* below shows the monitoring measures for the resettlement and livelihood restoration process.

Annual Survey of Project Affected People

The annual survey of Project affected people, will include a valid sampling of Project affected households and individuals. A sample of about 60% of the total number of affected households will be surveyed (about 20% is typical but given low numbers of affected households, Oyu Tolgoi will aim for surveying at least 60%). The Communities & Social Performance team will conduct the household survey to identify changes to the baseline data and to assess whether the Project outputs (or short-term results) are as projected. See also *Section 15.10.3* below that describes the types of indicators that will be included in the survey.

Table 15.17: Matrix of Monitoring & Evaluation Procedures (M&E)

M&E Action	Topic	Report Frequency	Timing	Internal/External
Ongoing monitoring	Agreements, complaints	Monthly	Already commenced.	Internal
	Vulnerable people, training, jobs, businesses, livestock	Quarterly	Will continue for Life of Mine and Post-Closure	
	Construction impacts, wells, pastureland programme, consultation with displaced households.	Semi-annual		
	Education, pastureland health status, community satisfaction.	Annual		
Outcome evaluation	RAP programmes, especially livelihood restoration	Every two to five years	Interim at end 2013, then 2015 or 2017, depending upon results of	External

M&E Action	Topic	Report Frequency	Timing	Internal/External
			annual monitoring	
Completion audit	2005 resettlement	Once	2012	External
	2011-2012 Displacement	Once, when restoration programmes final	2015 or 2017, depending upon results of outcome evaluations	External

Table 15.18: Monitoring Measures – Physical and Economic Displacement

ID	Topic/Aspect	Monitoring Measure	Periodicity	Location/Group
RA01	Additional assistance to resettled households	<ul style="list-style-type: none"> ▪ Any additional assistance provided to resettled families. ▪ Number of resettled people employed with the Project. ▪ Number outstanding tertiary scholarships to be provided, by when. ▪ Total budget expended on resettlement programme and budget outstanding. 	Semi-annually (until Completion Audit)	Resettled households
RA02	Agreements with economically displaced	<ul style="list-style-type: none"> ▪ Number of contracts finalised between economically displaced households and Oyu Tolgoi. 	Monthly	Economically displaced families
RA03	Consultation and negotiation with affected households	<ul style="list-style-type: none"> ▪ Number of meetings of the Compensation Working Group. ▪ Number of meetings with affected households/communities. ▪ Materials on resettlement and livelihood restoration process disclosed to affected herders. ▪ Disclosure of this Resettlement Action Plan to affected households, <i>soum</i> authorities and local communities. ▪ Number of meetings of Pasture User Groups and Pasture NGO. 	Semi-annually	All affected herder households
RA04	Sustainable Pastureland Management Programme	<ul style="list-style-type: none"> ▪ Number of community projects identified and implemented for affected herders through pastureland management programme. ▪ Budget spent on programme per period. ▪ Types of pastureland/herding improvement projects implemented and planned. ▪ Number herders participating in pastureland management programme. ▪ Number Pasture User Groups implementing their own projects, and type of those projects. ▪ Total amount expended for Revolving Fund per period. 	Semi-annually	All <i>soum</i> /herders
RA05	Assistance for vulnerable people	<ul style="list-style-type: none"> ▪ Number of vulnerable people being assisted and how. ▪ Number of vulnerable people, change since last report. ▪ Number of people no longer vulnerable. 	Quarterly	Vulnerable people in affected herder group
RA06	Education assistance	<ul style="list-style-type: none"> ▪ Number of scholarships disbursed and number remaining. ▪ Number of education support packages disbursed and number remaining. ▪ Total cost of scholarships and education assistance per period. 	Annually	All eligible herder households

ID	Topic/Aspect	Monitoring Measure	Periodicity	Location/Group
		<ul style="list-style-type: none"> Number of students from affected households in tertiary studies. Number of students employed after tertiary studies. 		
RA07	Short-Term and Vocational Training	<ul style="list-style-type: none"> Number of people provided training courses per period. Types of training/courses being taken. Training days/hours per period for affected people. Total cost of training provision per period. Ensure training positions available to affected herder households at the new Khanbogd Technical and Vocational Training Centre when completed. 	Quarterly	All eligible herder households
RA08	Job creation	<ul style="list-style-type: none"> Number of jobs to eligible and interested herders. Total number of affected people employed by the Project. Types of jobs obtained by affected people. Salary levels of affected people employed by Project and evolution since started. Job-readiness and other on-the-job training implemented with affected people. 	Quarterly	All eligible herder households
RA09	Herder business development support	<ul style="list-style-type: none"> Number and type of business development projects implemented for displaced herders. Total cost of business development support per period. Total number of affected people involved in business development initiatives. 	Quarterly	All eligible herder households
RA10	Pastureland carrying capacity and health monitoring	<ul style="list-style-type: none"> Oyu Tolgoi Environment Department conducting annual pastureland health monitoring. Annual pastureland carrying capacity in Khanbogd <i>soum</i> will be assessed by Mongolian Society of Range Management. Other environmental monitoring. 	Annually	All Project Areas
RA11	Animal crossings and division of pastures	<ul style="list-style-type: none"> Number of livestock incidents due to Project. Number of herder/animal crossings in place and operational (cumulative). Types of road signage and other traffic safety measures along road. 	Quarterly	Herders affected by division of pastures
RA12	Community grievance procedure	<ul style="list-style-type: none"> Number of outstanding grievances and evolution since Project start (graphic presentation) – resettlement/displacement. Number of outstanding resettlement/displacement related grievances opened in the month. Number of resettlement/displacement grievances closed in the month. 	Monthly	All affected herder households

ID	Topic/Aspect	Monitoring Measure	Periodicity	Location/Group
RA13	Herder wells	<ul style="list-style-type: none"> ▪ Number of new or reconstructed wells for households affected by loss or restrictions of access to water. ▪ Number affected herders participating in Participatory Environmental Monitoring programme for herder wells. ▪ Any herder wells monitoring results identified that indicate decreased water quality or availability per period. 	Semi-annually	Herder households affected by impacts to wells
RA14	Temporary disturbance/disruption due to construction phase	<ul style="list-style-type: none"> ▪ Amount of land disturbed in each area during construction. ▪ Duration of land disturbance during construction in each area. ▪ Amount of land rehabilitated after construction in each area. ▪ Amount of seed used and cost of rehabilitation in each area. 	Semi-annually	All affected herder households
RA15	Satisfaction of affected herder households with programme	<ul style="list-style-type: none"> ▪ Satisfaction survey of affected households with livelihood restoration and other assistance provided by Oyu Tolgoi. ▪ Affected households will be surveyed on a range of indicators including income levels, livestock, assets, equipment and possessions, income sources, access to water, health, education etc. Disaggregated by gender wherever possible. 	Annually	All affected households/all areas

Monitoring Reports

Results from the semi-annual monitoring and annual survey process will be summarised in a short report which will include results from key indicators and a comparison against the socio-economic baseline, and will recommend changes to mitigation plans if gaps are identified. It will also summarise grievances and actions taken.

The Communities & Social Performance team will present the findings to the Vice-President Regional Development & Social Performance, the Oyu Tolgoi Managing Director, the *soum* authorities, affected people and relevant working groups/partners. The finalised reports will be released to lending institutions and to the independent evaluator(s).

15.10.3 Outcome Evaluation

Evaluation is generally concerned with longer-term displacement and livelihood restoration outcomes or the outcomes at specific Project benchmarks. The goal of evaluation is to identify which resettlement activities have had the desired impact, or created the desired outcomes, and if not, why not.

Evaluation Process

Outcome evaluation will use indirect indicators. Such indicators will be used in situations where people may be reluctant to divulge their actual income, and can include nutritional status, school attendance, or the purchase of items such as motorbikes, generators or televisions. Evaluation will also look at processes in terms of fairness and efficiency.

The reference documents for evaluation are the following:

- This Resettlement Action Plan;
- The Socio-Economic Baseline within the ESIA;
- Mongolian laws as they are described in this document; and
- IFC PS5/EBRD PR5 on Involuntary Resettlement and Land Acquisition.

Project affected people/communities will be involved through a number of mechanisms, which will include but not be limited to the following:

- Focus groups/interviews with affected people (gender and age specific);
- Focus groups and key stakeholder interviews with community leaders;
- Focus groups/interviews with vulnerable people; and
- Focus groups/interviews with local NGOs and community based organisations.

An Outcome Evaluation of herder families *physically displaced* from winter camps in the Mine Site Area was conducted by Oyu Tolgoi in 2010 (see *Section 15.5.3* above). A Completion Audit will be the next evaluation to be undertaken in 2012 (see *Section 15.10.4*).

An Outcome Evaluation will take place for those *economically displaced* by the Project. This will occur after the different Project components have been constructed (i.e. displacement has occurred) and livelihood restoration and other assistance measures are being implemented. The livelihood restoration measures will take approximately two to five years to implement with affected herders, and therefore an initial (interim) outcome evaluation may be scheduled for the end of 2013. Depending on results, an additional evaluation may also be scheduled for 2015 to evaluate the success of livelihood improvement programmes prior to a Completion Audit (see *Section 15.10.4* below).

Objectives and Aspects Evaluated

The objective of the Outcome Evaluation is to measure the medium and long-term outcomes of the implementation of resettlement plans and mitigation activities. Where monitoring focused on the inputs – for example the number of houses constructed, the evaluation process focuses on whether the implementation of the RAP has had the desired results.

The primary overall objective of the RAP is to ensure that the livelihoods and living standards of all projected affected people are “improved or at least restored” (in accordance with PR/PS5) as a result of the resettlement mitigation activities. The outcome evaluation will examine the following aspects:

- Evaluation of the impact of the compensation and resettlement program on incomes;
- Standards of living, including income levels and satisfaction with lifestyle, with an emphasis on the “improved or at least restored” requirement; and
- Identification of any corrective actions necessary to mitigate the negative impacts of the program, if any, and to ensure compliance and enhance its positive impacts.

Outcome Evaluation Indicators

The evaluation will focus on the data and information gathered from the monitoring process described above, with the focus on the results from the annual household survey. Indicators that will be included are shown in *Table 15.19*.

Table 15.19: Key Performance Indicators – Physical and Economic Displacement

ID	KPI	Proposed Target Areas [#]	Target	Monitoring Measure
RAKPI1	Education	Number of children enrolled in primary, secondary and above, total number of children enrolled	<ul style="list-style-type: none"> ▪ 100% enrolment by 2017. ▪ 10% increase in numbers enrolled, year on year. 	<ul style="list-style-type: none"> ▪ Annual survey of affected households
RAKPI2	Health	Infant mortality for under 5, maternal mortality rates, incidence of disease among affected persons	<ul style="list-style-type: none"> ▪ Rates 10% lower than national rates by 2017. 	<ul style="list-style-type: none"> ▪ Annual survey of affected households
RAKPI3	Income	Household income disaggregated by gender, # in household employed, # employed by Project (type of employment), new sources of income, livestock numbers	<ul style="list-style-type: none"> ▪ Incomes to increase at higher rate than CPI (inflation rate) ▪ 10% increase in women’s share of household income year on year until parity reached. ▪ Employment rate to be maintained at higher than provincial/national rates. ▪ Sustainable herd sizes by 2017, taking into account pasture status and herd composition (this may mean fewer or more animals, and/or better distribution). ▪ 50% increase in small business start-ups year on year for first 5 years, to 2017. 	<ul style="list-style-type: none"> ▪ Annual survey of affected households
RAKPI4	Equipment and possessions	Number of households with radios, bicycles, motorbikes, cars	<ul style="list-style-type: none"> ▪ 10% average increase in households with each category of possession each year until 20% higher than national/provincial level by 2017. 	<ul style="list-style-type: none"> ▪ Annual survey of affected households
RAKPI5	Utilities and water	Number of households with access to reliable potable water, Number of households with access to electricity	<ul style="list-style-type: none"> ▪ All apartments/houses in Khanbogd connected to power and water by 2017. ▪ 75% of <i>gers</i> within 1 	<ul style="list-style-type: none"> ▪ Annual survey of affected households

ID	KPI	Proposed Target Areas [#]	Target	Monitoring Measure
			km of water supply by 2017.	
RAKPI6	Social Ills	Number of cases of petty crime reported, Number of cases of domestic violence	<ul style="list-style-type: none"> 10% reduction in cases year on year, to a rate lower than the national/provincial rates by 2017. 	<ul style="list-style-type: none"> Annual survey of affected households
RAKPI7	Local economy	Cost of basic food, e.g. livestock and milk prices, cost of agricultural goods, e.g. onions, cucumber, garlic; rental cost of house in Khanbogd <i>soum</i> ; average daily unskilled labour rate (not Project salary); Number of immigrants to Khanbogd <i>soum</i>	<ul style="list-style-type: none"> Costs of living increases not to exceed CPI (inflation) year on year. Review trend to assess need for mitigation for vulnerable households at end of each financial year. Migrant numbers not to exceed rate of dwelling construction annually. 	<ul style="list-style-type: none"> Annual survey of affected households, economic survey, interviews with local Governors and other officials (re in-migration)
RAKPI8	Employment	% of unskilled Project labour that are affected persons, % of semi- and skilled Project labour that are affected persons, Number of jobs created by Project by category	<ul style="list-style-type: none"> 10% increase in affected persons employed year by year until all possible employed, by 2017. 5% annual increase of higher skilled category jobs for affected persons by 2017. 	<ul style="list-style-type: none"> Workforce database and employment logs
RAKPI9	Physical and economic displacement grievances	Number of grievances filed by category, number of grievances outstanding, average time for closure of grievance, % of grievances resolved by mutual agreement	<ul style="list-style-type: none"> Reduction of average resolution time of grievances to less than 30 days by end 2013. All construction/economic displacement/resettlement grievances to be resolved or referred to mediation by 2015. 	<ul style="list-style-type: none"> Complaints Log/Database
RAKPI10	Pastureland management	Improved productivity of grazing land (increased yield per hectare) and herds (increased return per head of livestock sold)	<ul style="list-style-type: none"> 5% annual increase of pasture yield and animal prices year on year. Sustainable herd sizes by 2017, taking into account pasture status and herd composition (this may mean fewer or more animals, and/or better distribution). 	<ul style="list-style-type: none"> Annual MSRM and Agriculture Ministry reports on <ul style="list-style-type: none"> Animal sale prices Pasture yield measurements

[#] Note: The first outcome evaluation for economically displaced households is not scheduled until 2013; Oyu Tolgoi will develop a detailed series of measurable targets for the outcome evaluation in advance of such activities.

Outcome Evaluation Reporting

The Outcome Evaluation will produce a report (e.g. 10 to 15 pages) organised by Project impact and progress meeting desired outcomes. The report will also include an evaluation of Oyu Tolgoi resources, budget, stakeholder engagement (related to physical/economic displacement activities) and grievance procedure. The outcome evaluation report will be translated in Mongolian and English.

15.10.4 Completion Audit

Objectives and Scope

The Completion Audit has the objectives of determining whether the implementation of RAP activities has resulted in the desired outcomes including whether Project affected people's livelihoods have been fully restored. This is an "audit", rather than an evaluation, and therefore it looks at whether the commitments and activities in the RAP were followed appropriately. This assumes that the lenders have accepted the RAP and commitments in it as compliant with performance standards/policies.

The following commitments and mitigation measures must have been accomplished before a Completion Audit can be implemented:

- Compensation process completed;
- Land has been replaced and/or improvement programs in place;
- Livelihood restoration complete (Project affected people are no worse off than before the Project displacement impacts);
- Housing construction and resettlement complete; and
- Grievances related to physical and economic displacement are closed.

A successful Completion Audit will signal that the Project is in compliance with this RAP and other regulatory laws and guidelines.

Resettlement from Mine Site Area

Oyu Tolgoi intends to conduct a Completion Audit for *physical displacement* from the Mine Site Area in 2012. The 2010 evaluation of resettled households indicated that livelihood restoration measures are complete (see *Section 15.5.3*). With the exception of three households that reported less access to water, results indicated that resettled families have been able to at least restore, and in many cases improve their standards of living. Oyu Tolgoi is working with herders who indicated that they need additional support with income improvement and water access/availability and expects these issues to be rapidly resolved.

Economic Displacement in other Project Areas

Oyu Tolgoi will conduct a Completion Audit for *economically displaced households* as a result of other Project facilities outside the Mine Site Area, once all compensation requirements have been met and livelihood restoration and other assistance programmes have been adequately implemented. The livelihood restoration programmes will take longer to fully demonstrate results, so the Completion Audit is scheduled for 2015 at the earliest, but may more effectively be scheduled for 2017, allowing five years for programs to reach fruition. Outcome evaluations will occur in the years preceding the completion audit. Outcome evaluations are scheduled for 2013 (and 2015 depending on results from the first one conducted). Oyu Tolgoi has agreed that both the Outcome Evaluation(s) and Completion Audits will be conducted by external parties.

Completion Audit Indicators

In addition to the indicators examined in the Outcome Evaluation, the Completion Audit will include an assessment of the following input and output indicators as shown in *Table 15.20*.

Table 15.20: Key Performance Indicators – Completion Audit

ID	KPI	Target	Means of verification
RAKPI11	Incomplete mitigation measures	No incomplete compensation or livelihood support measures	<ul style="list-style-type: none"> ▪ Interviews with affected households ▪ Outcome evaluation reports, monitoring reports ▪ Annual household survey
RAKPI12	Number of grievances resolved within one month	Target of 90%	<ul style="list-style-type: none"> ▪ Complaints Log/Database ▪ Six-monthly monitoring reports
RAKPI13	Compliance with commitments,	All commitments met In compliance with	<ul style="list-style-type: none"> ▪ Interviews with local Governors and other officials

ID	KPI	Target	Means of verification
	Performance Standards and Mongolian law	PR/PS5 and Mongolian law	<ul style="list-style-type: none"> Annual household survey
RAKPI14	Number of people compensated/assisted	All affected persons	<ul style="list-style-type: none"> Records of compensation and assistance provided Interviews with affected households
RAKPI15	Number of winter shelters constructed and people moved	All winter shelters affected	<ul style="list-style-type: none"> Records of winter shelters constructed Observation of shelters and interviews with affected households Outcome evaluation reports
RAKPI16	Number of livelihoods restored	All affected persons have restored or improved income levels	<ul style="list-style-type: none"> Records of livelihood restoration measures implemented Interviews with affected households Outcome evaluation reports, monitoring reports Annual household survey

Completion Audit Reporting

The Completion Audits will produce a report outlining (eg. 15 to 20 pages) Project compliance and any outstanding issues and recommended resolutions. The reports will be public documents available in Mongolian and English.

15.11 SCHEDULE AND BUDGET

15.11.1 Budget

The budget for implementation of this *RAP* exclusive of human resources costs is shown in *Table 15.21* below. It is broken down by physical and economic displacement, showing key budget areas. Detailed budgets are confidential and maintained by the Communities & Social Performance team.

The total budget for the previous *resettlement* of herder families from the Mine Licence Area and exclusion zone is **USD 220,000**. This budget has already been spent (with the exception of outstanding student scholarship fees).

The total budget for *economic displacement* is estimated at **USD 1.40M** over the next 5 years. The majority of the budget for compensation and livelihood restoration measures for economically displaced herder households will be spent between 2011 and 2015.

Table 15.21: Estimated Budget for Oyu Tolgoi Resettlement Action Plan

Type of Assistance/Item	USD
COMPENSATION FOR PHYSICAL DISPLACEMENT	
Herder Relocation Package	
<ul style="list-style-type: none"> Resettlement of affected families and herder relocation package/livelihood restoration assistance 	220,000*
COMPENSATION FOR ECONOMIC DISPLACEMENT	
Permanent Jobs	
<ul style="list-style-type: none"> One per eligible household, up to 5 years 	(1,250,000)**
Education Assistance for Children	
<ul style="list-style-type: none"> Tertiary Scholarships (fees, accommodation, travel allowance) Secondary School materials and equipment 	130,000
Employment and Income Generation	
<ul style="list-style-type: none"> Livelihood restoration packages for affected households (packages tailored to affected households) Training and capacity building support for affected herders, e.g. short-term 	610,000

Type of Assistance/Item	USD
vocational training, business development and financial training	
Water Rehabilitation/Creation	
<ul style="list-style-type: none"> ▪ Well replacement/maintenance 	120,000
Sustainable Pastureland Management Programme	500,000
<ul style="list-style-type: none"> ▪ Community compensation for Khanbogd herders, e.g. well improvements, veterinary services, fodder enclosures etc) ▪ Revolving Fund for Pasture User Groups 	
Additional Compensation	45,000
<ul style="list-style-type: none"> ▪ Additional payment to households affected in more than one impact category/zone. 	

* This is exclusive of the cost of employment of resettled herders.

** Not included in total as employment costs are operational costs.

15.11.2 Schedule and Implementation Process

The RAP is being implemented by Oyu Tolgoi with affected households using the following the activities shown in *Table 15.22*. This is an indicative short-term schedule for identified priority activities. Monitoring and evaluation is ongoing since resettlement was first initiated in 2004. Oyu Tolgoi will update internal schedules and plans as required to implement all requirements of this *Resettlement Action Plan*.

Table 15.22: Schedule and Implementation Process for Resettlement Action Plan

ID	Topic/Aspect	Applicability/Activity	Action/Measure Description	Responsible Parties	Timescale
R01	Evaluation of resettled herder households	Resettled herder families	Follow up with resettled herder families that reported to be less well off in terms of access to water from 2010 evaluation. Follow up with resettled herder families that reported standards of living same as before resettlement from 2010 evaluation. Provide corrective measures/additional assistance as required.	Communities and Social Performance team	Complete
R02	Identifying economically affected herders	Economically displaced families	Finalise census/inventory of herder households economically displaced by Project components. Ensure completed inventory for each impact area identified in the RAP. Agree displacement impacts and finalise Entitlements Matrix. Prepare contracts between affected households and Oyu Tolgoi	Communities and Social Performance team	Complete Complete Complete
R03	Consultation and negotiation with affected households	All affected herder households	Disclose key elements of resettlement and livelihood restoration process to affected herders. Disclose this Resettlement Action Plan to affected households, <i>soum</i> authorities and local communities. Convene Compensation Working Group as required. Participate in Pasture User Group and Pasture NGO meetings and activities related to pasture management and livelihood restoration.	Communities and Social Performance team	Ongoing
R04	Sustainable Pastureland Management Programme	All <i>soum</i> herders	Establish Pasture User Groups and Pasture NGO. Finalise initial study and design of programme. Implement first phase of pastureland management programme including development of pasture management plans. Establish Revolving Fund for Pasture User Groups. Deliver specific community projects/assistance for overall loss of grazing land to Khanbogd <i>soum</i> herders. Undertake rangeland assessment and health monitoring of Khanbogd <i>soum</i> .	Communities and Social Performance team Mongolian Society for Range Management	Complete End 2012 ongoing Mid 2013 and then ongoing 2013
R05	Assistance for vulnerable people	Vulnerable people in affected herder group	Identify vulnerable people within affected herder group. Conduct specific consultation with vulnerable people/groups. Utilise Compensation Working Group to devise measures and programs. Implement specific measures and assistance with vulnerable people in	Communities and Social Performance Team	Identification Complete mid-2011. Consultation and

ID	Topic/Aspect	Applicability/Activity	Action/Measure Description	Responsible Parties	Timescale
			Khanbogd <i>soum</i> .		assistance commenced and ongoing.
R06	Education and Training	All eligible people	Implement educational support and scholarship support programme. Construct Khanbogd Technical and Vocational Education Centre in 2012.	Communities & Social Performance team Oyu Tolgoi Operations Department	ongoing operational in June 2012
R07	Education assistance	All eligible herder households	Provide scholarships and education assistance to eligible herder households.	Communities & Social Performance team Javkhlant Nutag	Ongoing
R08	Short-Term and Vocational Training	All eligible herder households	Identify and agree type of training desired by eligible herder households and schedule for implementation. Ensure training positions available to affected herder households as needed.	Communities and Social Performance team Training Department	End 2012 2012
R09	Job creation	All eligible herder households	Provide jobs to eligible and interested herders. Ensure job-readiness and other on-the-job training is implemented. Monitor and provide assistance to affected herders employed by Project.	Communities and Social Performance team HR Department	End 2011 and now ongoing commenced in 2011, expanding 2012-13 Ongoing
R10	Herder business development support	All eligible herder households	Implement long-term economic and business development projects for displaced herders, e.g. SME development, micro-credit schemes etc. Finalise Terms of Reference and hire team. Develop specific proposals for income generation projects for affected herder households.	Social Performance team Amjiltiin Tomiyo	Mid 2012 completed Ongoing

ID	Topic/Aspect	Applicability/Activity	Action/Measure Description	Responsible Parties	Timescale
			Implement tailored programmes with households.		
R11	Economic Support	Vulnerable People	Implement Herder Livelihood Improvement Programme. Continue vulnerable people support programme including allocation of budget for 2011/2012.	Communities and Social Performance Team	2012-2013
R12	Animal crossings and division of pastures	Herders affected by division of pastures	Develop compensation procedure for potential animal loss on Project road (e.g. replacement livestock). Discuss with relevant herders. Implement road signage and other traffic safety measures in consultation with local government /police and herders along road. Ensure agreed crossing points and appropriate measures in place at all project sites for safe passage of herders and livestock.	Communities and Social Performance team Construction team	Complete Complete Complete
R13	Community grievance procedure	All affected herder households	Roll out formal Community Grievance Procedure, firstly to displaced herder households, then wider community. Establish Mediation Committee as part of the roll out.	Communities and Social Performance team	Complete ongoing
R14	Herder wells	Herder households affected by impacts to wells	Provide new or reconstructed wells for households affected by loss or restrictions of access to water. Ensure Project affected herder households are involved in Participatory Environmental Monitoring programme to monitor water quality and quantity in herder wells Monitor selected relevant herder wells throughout Khanbogd <i>soum</i> . Further mitigation is provided in <i>Chapter D7: Water Resources Management Plan, WR06 and Appendix 3</i> .	Communities and Social Performance team Environment Department	complete Ongoing Ongoing
R15	Temporary disturbance/disruption due to construction phase	All affected herder households	Oyu Tolgoi will regularly monitor and assess the status, progress and safety of construction activities at sites directly associated with the Project Consult known nearby neighbours before creating new work site/area.	Oyu Tolgoi Environmental Department Oyu Tolgoi CSP and PMC Construction team	Ongoing
R16	Disturbance/disruption from mine activities	Dust	Implementation of <i>Atmospheric Emissions Management Plan (Chapter D2)</i> This plan includes Oyu Tolgoi's commitment to the control of construction-related dust e.g. from construction activities and the movement of goods and vehicles.	Oyu Tolgoi Environmental Department	Ongoing

ID	Topic/Aspect	Applicability/Activity	Action/Measure Description	Responsible Parties	Timescale
R17	Affected herder database	All affected herder households	Periodically revise and update Project databases for physical and economic displacement. Ensure all available socio-economic data included. Ensure entitlements and provision of assistance measures is recorded and tracked. Update Project databases for physical and economic displacement at least annually, including with progress on herder socio-economic status.	Communities and Social Performance team	ongoing Ongoing Ongoing
R18	Monitoring and evaluation	All entitled	Internal monitoring: will be conducted by Oyu Tolgoi to look at progress against inputs and commitments of the resettlement, compensation and livelihood restoration process, and at specific situations of economic or social difficulties arising from the implementation of this programme; Outcome evaluation: will be conducted by appropriate external parties, to review outcomes of the resettlement and livelihood restoration process, through an assessment of the mid- and long- term impacts on affected households and their incomes, standard of living , local capacities and so on; and Oyu Tolgoi will conduct a completion audit in order to check whether the primary commitments made in the Resettlement Action Plan have been met with respect to livelihood restoration and improving standards of living for affected herder households. It will be conducted for Oyu Tolgoi by an external auditor.	Oyu Tolgoi CSP	Completion audit by end 2012. Outcome evaluations in 2013 and 2015.
R19	Monitoring and evaluation	Physically and economically displaced households	Conduct Completion Audit for resettled herder households Conduct half yearly internal monitoring of economically displaced households Conduct outcome evaluation of economically displaced households Completion Audit for economically displaced households	Communities and Social Performance team External auditor	End 2012 Ongoing Mid 2013 earliest End 2017 latest
R20	Complaints	Affected Households	Provide simple summary leaflet of Oyu Tolgoi Grievance Procedure for local communities. Educate residents in use of Oyu Tolgoi Grievance Procedure. Ensure Oyu Tolgoi Grievance Procedure forms available in public locations in Khanbogd <i>soum</i> and in appropriate language and format.	Oyu Tolgoi CSP	Ongoing

Annex A: Oyu Tolgoi Herder Relocation Agreement



OYU TOLGOI PROJECT

HERDER RELOCATION
AGREEMENT

SEPTEMBER 2004

CONTENTS

FORMAL AGREEMENT	3
BACKGROUND INFORMATION	3
RECITALS	4
1.0 LICENSE TERMINATION AND RELOCATION	4
2.0 COMPENSATION	5
3.0 THIRD PARTY BENEFICIARIES	5
4.0 LIMITATION OF LIABILITY	6
5.0 PARTIES REPRESENTATIVE	6
6.0 CORRESPONDENCE	6
7.0 MISCELLANEOUS PROVISIONS	7
8.0 ACKNOWLEDGMENT	9

ANNEXURES

1.0	Appendix 1	Licensee's Family
2.0	Appendix 2 Part 1	Relocation Assistance (shelter, water, transportation)
	Part 2	Benefits (livestock, employment, education)
3.0	Appendix 3	Oyu Tolgoi Project Area
4.0	Appendix 4	License Description

FORMAL AGREEMENT

This Relocation Agreement (**hereinafter called the “Agreement”**) is made effective with a Commencement Date of 29th day of September, 2004.

BETWEEN

(*INSERT LICENSEE’s NAMES*), located at, Khanbogd Soum, South Gobi Aimag, Mongolia. (**hereinafter called “The Licensee”**).

AND

KHANBOGD SOUM, South Gobi Aimag, Mongolia. (**hereinafter called “The Soum”**).

AND

IVANHOE MINES MONGOLIA INC Co. Ltd. (Mongolian Registration Number 2657457), a company with its office at Olympic Street 6, Sukhbaatar District, Ulaanbaatar, Mongolia (**hereinafter called “The Company”**).

BACKGROUND INFORMATION

The Company, subject to obtaining necessary permits and approvals from the Government of Mongolia, intends to develop and operate open pit and underground mines and mineral processing facilities and to dispose of mine and mill wastes on and surrounding the recently issued Oyu Tolgoi Mining Licenses. In preparation for the construction, development and impending operations of these facilities, the Company recognises that a number of Families reside and raise livestock within or adjacent to the Mining Licenses that may be affected by the construction, development, and operation of the Company’s Project.

After extensive discussions between the Company and the affected Families, and local government representatives responsible for issuing surface land use permits, including grazing rights and water usage, the Families lying within a ten kilometre radius of the Centre of the Oyu Tolgoi Mining Licenses shall relocate to new locations for the purposes of residing, grazing and maintaining their domestic animals in conditions that are equivalent or better than where they have left. Timing of this relocation shall be mutually agreed upon by all parties, recognising that certain periods of the year are more favourable for the relocation of livestock, but shall not exceed a period of one year from the commencement of this Agreement, unless otherwise agreed upon.

RECITALS

WHEREAS the Company is developing the Oyu Tolgoi gold and copper mining Project in the south Gobi region of Mongolia (the “Project Area”), defined in **Appendix 3**, attached hereto and by this reference incorporated herein; and

WHEREAS the Licensee, pursuant to Chapter 5 of the Mongolian Land Law, holds a license to certain real property defined in **Appendix 4**, attached hereto and by this reference incorporated herein (the “License”); and

WHEREAS the Company’s development activities within the Project Area may affect the Licensee in his/her use and enjoyment of the License area; and

WHEREAS the Licensee is willing to give up the License and relocate to another location beyond a ten kilometre radius from the geographical centre of Company’s mining lease (“**Project Area**”) in exchange for compensation from the Company; and

WHEREAS the Company is willing to provide such compensation to the Licensee, as defined in **Appendix 2**, attached hereto and by this reference incorporated herein;

WHEREAS, the Soum, according to law, is willing to relinquish the Licensee of any and all rights to the land within the Project Area and wishes to grant the Licensee rights to the land of their relocation.

NOW THEREFORE, for good and valuable consideration, the Company, the Licensee and the Soum (each a “**Party**” and together the “**Parties**”) agree as follows:

1.0 THE LICENSE TERMINATION AND RELOCATION

1.1 Within three (3) months of signing this Agreement, the **Licensee** shall locate an area of available land no less than ten (10) kilometres beyond the boundaries of the Project Area that is suitable for the grazing needs of its animals and provides adequate protection from the winter conditions of the South Gobi Region.

1.2 On identifying a new location, the **Licensee** shall take all necessary actions and file all necessary documents with the appropriate governmental authorities to (a) terminate the existing license, and (b) apply for a new License to the area of land to which the Licensee shall relocate (New License).

1.3 The **Soum**, according to law, agrees to consider the relocation requests from the Licensee and to approve the relocations on an individual basis. Upon approval of the relocation, the **Soum** agrees to terminate any and all rights to the land within the Project Area and agrees to grant a new license, including grazing rights and water use rights at their new location.

1.4 The **Soum** shall provide the Company with the copies of the certificate and the contract confirming the Licensee's right to the new land by February 28, 2005, as well as a copy of termination agreement.

1.5 The **Company** agrees to assist in relocating the Licensee's Family, all dwellings, their animals, and animal shelters to their chosen new location, upon receiving a written request from the Licensee to assist in the relocation.

1.6 The **Company** shall assist in refurbishing, or providing a well or bore hole, at a location designated by the Licensee, with water of suitable quantity and quality to support the number of animals being relocated, as defined in **Appendix 2, Part 2**. The wells shall be completed to a nominal depth of 4 to 5 meters, for non-mechanized retrieval of the water. Bore holes or wells with mechanized retrieval of the water will be provided as required.

1.7 The **Company**, in cooperation with the Licensee, shall assist in the construction of an animal shelter as defined in **Appendix 2, Part 1**, by September 29, 2005.

2.0 COMPENSATION

2.1 Upon receiving from the Licensee sufficient documentation showing that the License has been terminated and the New License has been approved, the Company shall assist the Licensee in relocating to the New License area as provided in **Appendix 2, Part 1**, attached hereto and by this reference incorporated herein. The relocation assistance defined in **Appendix 2, Part 1**, shall be a one-time only assistance package and shall be completed by the Company by September 29, 2005, unless otherwise agreed.

2.2 The compensation provided under this Agreement, as specified in Appendix 2, Part 2, shall be provided only once and upon terminating the License and receiving the New License.

2.3 The Compensation specified in Appendix 2, Part 2, shall be granted to the Licensee and his/her Family provided that they stay with in the territory of the South Gobi *Aimag*. The **Soum** shall provide the Company with the information regarding the migration of relocated families outside South Gobi *Aimag*.

3.0 THIRD PARTY BENEFICIARIES

3.1 Only the Licensee and members of his/her immediate Family are entitled to the compensation provided under **Appendix 2, PART 1 and 2**, above.

3.2 Anyone who becomes a legal spouse to the Licensee or is born to or legally adopted by the Licensee may himself or herself become a member of the Licensee Family and, upon written notification to the Company (along with official documentation of the marriage, birth, or adoption, as the case may be added to the list in **Appendix 1**.

4.0 LIMITATION OF LIABILITY

4.1 Determining the suitability of the New License area for the uses intended by the Licensee (including the quality and quantity of water resources and grazing land) is the sole responsibility of the Licensee. Accordingly, the Licensee shall release and hold harmless the Company from any liability arising from damages or losses caused by any unsuitable conditions associated with the New License area.

4.2 The Licensee shall release and hold harmless the Company for any illness, injury, death, or property damage that may occur in the course, or as a result, of relocating from the **License** area to the New **License** area, except to the extent that such illness, injury, death, or property damage is proximately caused by the wilful misconduct or gross negligence of the Company.

5.0 PARTIES REPRESENTATIVE

5.1 The Licensee Representative

The Licensee shall be (*insert name*.....). or his/her nominee.

5.2 The *Soum's* Representative

The *Soum's* Representative shall be (*insert name*.....). or his/her nominee.

5.3 The Company's Representative

The Company's Representative shall be the Community Department Manager of the Company or his/her nominee. The name of the Company's Representative shall be communicated in writing to the Licensee and *Soum* within fourteen (14) days of the Commencement Date.

6.0 CORRESPONDENCE

All notices / correspondence shall be addressed in writing as follows:

TO LICENSEE...

Attention: _____

TO SOUM.....

Attention: _____

TO IVANHOE MINES MONGOLIA INC. Co. Ltd.

Attention: _____

Olympic Street 6, Sukhbaatar District, Ulaanbaatar, Mongolia

Facsimile No: 976 11 312337

7.0 MISCELLANEOUS PROVISIONS

7.1 **Amendment.** No amendment or modification of this Agreement shall be valid unless made in writing and duly executed by both Parties.

7.2 **Assignment.** The Licensee shall have no right to assign or transfer the benefits of this Agreement as defined in Appendix 3 and obligations arising from this Agreement or any part thereof to any other party without the prior written consent of the Company.

7.3 **Waiver.** The failure of a Party to insist on the strict performance of any provision of this Agreement or to exercise any right, power or remedy upon a breach hereof shall not constitute a waiver of any provision of this Agreement or limit such Party's right thereafter to enforce any provision or exercise any right.

7.4 Governing Law. The Contract shall be governed by and construed according to the Laws of Mongolia.

7.5 Inspection. Any person duly authorised by the Company shall have the right at any reasonable time to inspect any part of the work relating to the Agreement as it is performed by the Company. Any person duly authorised by the Company shall have the right at any reasonable time to inspect facilities provided under this Agreement.

7.6 Force Majeure. Force Majeure in the Agreement shall mean an event beyond the control of the Parties to this Agreement and not an event that is the result of the fault or negligence of any party to this Agreement. Without limitation, such events may include war, riot, civil commotion, strike, lock outs or other industrial action, unusual weather storms, fires, earthquakes, and floods. Accordingly, no party shall be liable for the failure to perform any of the obligations hereof in the event and to the extent that such failure is caused by force majeure. Immediate notice of force majeure which shall adequately describe the nature of the force majeure event and the extent of the effect on the Agreement or its terms shall be given in writing to the other party and delivered or transmitted by the most prompt means available.

7.7 Relationship. All parties to this Agreement are independent.

7.8 Indemnification. The Licensee and the *Soum* shall hold the Company harmless from and against all actions, causes of action, damages, claims, liabilities, or demands whatsoever, arising from or in any way related to the performance of the work required by this Agreement or the performance of the Agreement itself.

7.9 Early Termination.

(a) The Company shall have the right to early termination of this Agreement in the event that the Licensee, after the one-time relocation, moves to an area outside of South Gobi *Aimag*.

(b) The Company shall have the right to early termination of this Agreement by giving ninety (90) days notice to that effect at the expiration of which notice the Agreement shall early terminate and cease to be of any further effect whatsoever. However, obligations defined in Appendix 2, Part 1 and 2, which may have accrued and arisen up to the date of early termination, are to survive the termination.

7.10 Dispute Resolution. With regard to any dispute, controversy action or claim arising out of or in connection with this Agreement, or the breach, termination, or questioned validity thereof, the Parties shall first attempt in good faith to negotiate a resolution to such dispute, controversy or claim. If, after seven (7) days (or such other period of time to which the parties may agree), a negotiated resolution to the dispute, controversy, action or claim is not forthcoming, then such dispute, controversy, action or claim shall be finally settled by arbitration conducted under the Rules of the National Arbitration of the Mongolian Chamber of Commerce and Industry. The language to be used in the arbitral proceedings shall be English and the place of arbitration shall be Ulaanbaatar, Mongolia. The award shall be final and binding on the Parties, and judgment on the award may be entered by any court of competent jurisdiction.

7.11 Entire Agreement. This Agreement contains the entire understanding of the Parties and supersedes all prior agreements and understandings, oral and written, express and implied, between the Parties relating to the subject matter hereof. This Agreement shall be binding upon and inure to the benefit of the respective successors and permitted assigns of the Parties.

7.12 Counterparts. This Agreement may be executed in any number of counterparts, in both English and Mongolian languages, and it shall not be necessary that the signatures of both Parties be contained on any counterpart. Each counterpart shall be deemed an original, but all counterparts together shall constitute one and the same instrument; provided, however, to the extent that language in the English version of this Agreement conflicts with language in the Mongolian translation, the English version shall control.

7.13 Confidentiality. The Licensee agrees to keep the details of the Agreement strictly confidential and shall not disclose the same to any person, company or firm, directly or indirectly, during or after the term of this Agreement except with the prior written consent of the Company or as required by law. The provision of this Section shall survive the termination of this Agreement and shall continue in full force and effect according to its terms.

8.0 ACKNOWLEDGMENT

The parties hereby acknowledge that they have received, read, understood and accepted all of the terms and conditions contained in this Agreement.

Signed for and on behalf of

THE LICENSEE

Name (Print)

Name (Print)

Signature

Signature of Witness

Name of Witness (Print)

Signed for and on behalf of

KHANBOGD SOUM

by its duly authorised officer in the presence of

Name (Print)

Position

Signature

Signature of Witness

Name of Witness (Print)

Signed for and on behalf of

IVANHOE MINES MONGOLIA INC Co. Ltd

by its duly authorised officer in the presence of

Name (Print)

Position

Signature

Signature of Witness

Name of Witness (Print)

Annex B: Oyu Tolgoi Land Disturbance Permit Procedure Overview

ORIENTATION TO THE LAND DISTURBANCE PERMIT PROCEDURE

Rationale	<ul style="list-style-type: none"> ▪ Land is an essential life-support system which comprises soils, minerals, water and biota. ▪ Human-induced disturbance to land will cause disruption in healthy life-sustaining functions of land and lead to desertification. ▪ Being aware of this adversity, Oyu Tolgoi Project is committed to ensure sustainable use of the land that it leases by practicing sound land management which complies with the Mongolian law, regulations and standards.
Scope	<ul style="list-style-type: none"> ▪ The Oyu Tolgoi Land disturbance permit (LDP) procedure sets rules for land disturbance and establishes the environmental requirements of formal permitting process. ▪ LDP is an internal approval for land disturbance and it shall be issued by the Environmental Department prior to commencement of any ground work.
Objectives	<ul style="list-style-type: none"> ▪ Prevent unapproved land disturbances ▪ Minimise the extent and significance of various impacts from land disturbance
Management	<ul style="list-style-type: none"> ▪ Only the minimum area will be disturbed for the Project activities. Work areas shall be clearly delineated in accordance with survey map prior to commencement and the work must be restricted within the permitted area boundary. ▪ Permit to commence earthwork shall be issued if the environmental requirements are satisfied. ▪ Necessary environmental training or induction which discusses the importance of minimising vegetation and soil disturbance will be organised and provided by the Environmental Department to the earth work operators or contractors. ▪ Effective topsoil handling and assurance of soil quality for future rehabilitation will be ensured by an adherence to this procedure. ▪ Indiscriminate vehicles and machinery movements will be avoided. ▪ Chance found policy on cultural heritage findings, including archaeological and paleontological discoveries, will be implemented throughout the proposed earthwork duration.
Performance target	<ul style="list-style-type: none"> ▪ No unauthorised land disturbance both within and outside of the lease area.
Implementation	<ul style="list-style-type: none"> ▪ LDP procedure is approved by the Oyu Tolgoi Project Management Team (PMT). ▪ LDP procedure is administered and enforced by the Environmental Department in cooperation with the PMT and the Communities & Social Performance team. ▪ Minimum of 3 weeks in advance notification is required for proceeding LDP for proposed earthworks. ▪ Inspections conducted prior to permit issuance, during the operations, and after completion shall be performed in conjunction with the applicable Oyu Tolgoi EMS, Safety and Community Relations related documents.
Reporting	<ul style="list-style-type: none"> ▪ Unauthorised land disturbance will be reported to the PMT and managed as an incident as per the Oyu Tolgoi Incident and Hazard Reporting and Investigation procedure. ▪ Land disturbance associated with projects implemented off-site shall be regulated by local or state level permissions and its compliance with the environmental and social requirements imposed by the respective authorities shall be reported to the relevant authorities.

Land Disturbance Permit Checklist

Project Name: _____

Required Documents _____

- A preliminary work description and plan
- A site survey map and other engineering drawings
- Land Quality Assessment for a proposed project area of the land it leases AND of the land it uses/disturbs for any Project-related activities
- EIA on a proposed project, if the earthwork operator is one of the Oyu Tolgoi own departments, an EIA documents shall be available at the Oyu Tolgoi Environmental Department)
- A sediment and erosion control plan
- Photo presentations of pre-work area conditions
- Other applicable documents

Specify: _____

Legal compliance:

- Is a permit or consent required? Answer the questions given in a table below, if required.

Permit name	Required?	Obtained?	In progress?
A Land Use Permit			
An Environmental Protection Plan			
A Permit to Dig			

Information acknowledgement:

- Has earthwork Supervisor been provided with the information on where topsoil shall be removed from and stockpiled to?
- Has earthwork Supervisor been provided with the information on the potential environmental impacts posed within the vicinity of proposed project area?
- Has earthwork Supervisor been informed of the community and cultural heritage aspects which are a matter of discussion for the proposed project area?

Form completion:

- Section 1 of the LDP form is completed and signed properly
- Section 2 of the LDP form is completed and signed properly

Conclusion for an approval: _____

Environmental Supervisor's signature: _____ Date: _____

ГАЗАР ХӨНДӨХ ЗӨВШӨӨРӨЛ

LAND DISTURBANCE PERMIT

Зөвшөөрлийн
дугаар:

Permit Number:

Зөвшөөрлийн нэр:

Permit Name:

Зөвшөөрлийн огноо:

Permit Date:

Зааварчилгаа / Instructions:

1. Зөвшөөрлийг ажил эхлэхийн өмнө батлуулсан байна. /The permit must be approved before work may begin.
2. Зөвшөөрлийн хэсэг бүрийг тодорхой заагдсан этгээд бөглөнө. /Each section of the LDP form shall be completed by a designated individual.
3. Гарын үсгүүд бүрэн, шалгах цэсүүд анхааралтай шалгагдсан байна. /Ensure all signatures and checkboxes are completed.
4. Зөвшөөрлийн эх хувийг Байгаль Орчны Хэлтэст хадгална. /Original of the completed form shall be kept at the Environmental Department.
5. Зөвшөөрлийн хуулбарыг ажлыг гүйцэтгэх гэрээт компани эзэмшинэ. /A copy of the completed form shall be passed to earthwork operators/contractors.
6. Батлагдсан зөвшөөрлийг бусад холбогдох бичиг баримтын хамт ажлын талбарт зарлаж байрлуулна. /Post a copy of the approved permit along with other required documents at the work site.
7. Зөвшөөрлийн заалтуудыг дагаж мөрдөнө. /Follow the permit conditions.

ХЭСЭГ 1 / SECTION 1: ГАЗАР ШОРООНЫ АЖЛЫН ТАНИЛЦУУЛГА / EARTHWORK DESCRIPTION

Төслийн Менежер (ТМ) эсвэл Газар шорооны ажлын ахлагч бөглөнө. /To be completed by a Project Manager (PM) or Earthwork Supervisor

1.1. ТМ / Газар шорооны ажлын ахлагчийн нэр: Name of a PM/Earthwork Supervisor:	1.2. Компанийн нэр: Company name:	
1.3. Ажлын талбарын байршил (координатын цэгүүдийг оруулна уу) / Location of a work site (include grid coordinate):		
1.4. Төлөвлөсөн ажлын товч тодорхойлолт / Description of a proposed work:		
1.5. Эхлэхээр төлөвлөсөн огноо / Proposed start date:	1.6. Дуусахаар төлөвлөсөн огноо / Proposed end date:	
1.8. Газар хөндөх ажлын зорилго / Purpose of land disturbance:	1.9. Хөндөх талбай [га]: Area to be disturbed [ha]:	1.10. Өнгөн хөрс хуулах талбай [га]: Topsoil area [ha]:
1.11. Өнгөн хөрсний зузаан [см]: Topsoil depth [cm]:	1.12. Өнгөн хөрс хуулах байршил: Location where topsoil to be removed from:	1.13. Өнгөн хөрсний овоолго хийх байршил: Location where topsoil to be stockpiled:

Хавсралтууд / Attachments

1.14. Ажлын/төслийн төлөвлөгөө: <input type="checkbox"/> Тийм <input type="checkbox"/> Үгүй Work/project plan: <input type="checkbox"/> Yes <input type="checkbox"/> No	1.15. Төлөвлөгөөний нэр/дугаар: Plan name/number:
1.16. MapInfo файл: <input type="checkbox"/> Тийм <input type="checkbox"/> Үгүй MapInfo file: <input type="checkbox"/> Yes <input type="checkbox"/> No	1.17. Файлын нэр: Map title:
1.18. Ерөнхий сэрэмжлүүлэг (уншиж танилцсаныхаа дагуу чагтална уу) / General Precautions (check as you read through)	
Ургамлан бүрхэвч, өнгөн хөрс болон нөхөн сэргээгдсэн газрыг Газар хөндөх зөвшөөрөлгүйгээр хөндөхийг хориглоно. Do not disturb or clear any undisturbed vegetation, topsoil or rehabilitation areas without a Land Disturbance Permit.	
Газар хөндөх зөвшөөрлийг газар шорооны ажил эхлэхээс өмнө Байгаль Орчны хэлтсээс авсан байна. Obtain a Land Disturbance Permit approved by the Environmental Supervisor prior to the commencement of a proposed earthwork.	
Байгаль орчны болон соёлын өвийн ач холбогдол бүхий газар нутагт нэвтрэх буюу хөндөхийг хориглоно. Do not enter or disturb an Area of Significance.	
Тээврийн хэрэгсэл болон өөрөө явагч машин, техникүүд зөвхөн зөвшөөрөгдсөн зам, маршрутаар зөвшөөрөгдсөн үйл ажиллагааны дагуу зорчино. Зам болон маршрутыг Байгаль орчны ахлах ажилтан эсвэл Төслийн Удирдах баг батална. Vehicles, mobile equipment and machinery shall travel only by approved routes and roads for authorised activities. Routes and activities are to be approved by the Environmental Supervisor or PMT Representative.	
Өнгөн хөрсний түр овоолгыг аль болох түргэн хугацаанд байнгын овоолго хийх тотогдсон байршил руу нүүлгэж, заасан өндрийн дагуу овоолно. Topsoil shall be relocated from nominated temporary stockpiles area to permanent stockpiles (nominated area/ height) as soon as practicable.	
Өнгөн хөрсийг бороотой болон газар хэт чийгтэй байх үед хуулахыг хориглоно. Topsoil shall not be removed when raining or soil is excessively moist.	

Өнгөн хөрсийг Байгаль орчны ахлах ажилтны тодорхойлсон зузаантайгаар хуулна. <i>Topsoil shall be stripped to the depth specified by the Environmental Supervisor.</i>	
Өнгөх хөрсийг хуулах ажлыг зөвхөн өдрийн цагаар гүйцэтгэнэ. <i>Topsoil shall only be removed during a dayshift.</i>	
Ажлын талбар дээр аюулгүй ажиллагааны холбогдох стандарт болон журмуудыг цаг тутам баримтлан ажиллана. <i>Relevant safety standards and procedures must be complied at all times at the work site.</i>	

ХЭСЭГ 2/SECTION 2: ГАЗАР ХӨНДӨХ ЗӨВШӨӨРЛИЙГ БАТЛАХ / LAND DISTURBANCE PERMIT APPROVAL

Хэсэг 1 бөглөгдсөний дараа Байгаль орчны ахлах ажилтан бөглөнө. / To be completed by the Oyu Tolgoi Environmental Supervisor after Section 1 is completed

2.1. Байгаль орчны хянах цэс / Environmental Checklist

2.1.1.	Төлөвлөж буй ажлын талбай OT ашиглалтын талбайн дотор байрлаж байгаа эсэх? Хэрэв тийм бол 2.1.7-оос эхлэн хариулна уу. <i>Is the proposed work site located within the Oyu Tolgoi lease area? If YES, go to 2.1.7, or if NO answer 2.1.2 to 2.1.6.</i>	<input type="checkbox"/> Тийм <input type="checkbox"/> Үгүй <input type="checkbox"/> Yes <input type="checkbox"/> No
2.1.2.	Төлөвлөж буй ажлын талбай нь Тусгай хамгаалалтай газарт хамаарах эсэх? <i>Is the proposed work site is within or near the surveyed areas of Endangered Regional Ecosystem/Strictly Protected Area?</i> Хэрэв тийм бол ажлыг гүйцэтгэх үйл ажиллагааны төлөвлөгөөнд энэ талаар тусгагдсан эсэх? <i>If Yes, has it been described in the operations plan of the proposed work?</i>	<input type="checkbox"/> Тийм <input type="checkbox"/> Үгүй <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Тийм <input type="checkbox"/> Үгүй <input type="checkbox"/> Yes <input type="checkbox"/> No
2.1.3.	Төлөвлөж буй ажилд сум, аймаг, Засгийн Газар болон холбогдох Яамдаас шаардлагатай зөвшөөрлүүд олгогдсон эсэх? <i>Does the proposed work have necessary approvals or permits from Khanbogd soum Government/Omnogovi aimag Government/Ministries?</i>	<input type="checkbox"/> Тийм <input type="checkbox"/> Үгүй <input type="checkbox"/> Yes <input type="checkbox"/> No
2.1.4.	Төлөвлөж буй ажлын талбай хуурай сайр, усан сан, худаг, булаг зэрэг усны эх үүсвэрийг дайран гарах эсвэл огтолцох эсэх? <i>Is the proposed work site located or crossing river beds, ponds, wells, or springs?</i> Усны эх үүсвэрийн нэр / Name of the water course: _____ Энэхүү усан орчинд ямар нэг сөрөг нөлөөлөл үзүүлэх магадлалтай эсэх / Is any disturbance to watercourse likely to occur? Хэрэв тийм бол тодруулна уу / If yes, please specify: _____	<input type="checkbox"/> Тийм <input type="checkbox"/> Үгүй <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Тийм <input type="checkbox"/> Үгүй <input type="checkbox"/> Yes <input type="checkbox"/> No
2.1.5.	Төлөвлөж буй ажлын талбайд малчдын өвөлжөө байрладаг эсэх? <i>Are there any winter shelters of the local herders in the work area?</i> Малчны нэр / Name of the herder: _____ Нутгийн ард болон төслийн хооронд ямар нэг зөрчил байгаа эсэх? <i>Are there any conflicts between the local community and the project?</i>	<input type="checkbox"/> Тийм <input type="checkbox"/> Үгүй <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Тийм <input type="checkbox"/> Үгүй <input type="checkbox"/> Yes <input type="checkbox"/> No
2.1.6.	Археологи, палентологийн холбогдолтой асуудлууд шийдвэрлэгдсэн эсэх? <i>Is the area free of archeological or paleontological sites?</i> Хэрэв үгүй бол тодруулна уу / If no, specify: _____	<input type="checkbox"/> Тийм <input type="checkbox"/> Үгүй <input type="checkbox"/> Yes <input type="checkbox"/> No
2.1.7.	Хөрс угаагдаж тунахаас сэргийлэх арга хэмжээг боловсруулж, танилцуулсан эсэх? <i>Has a sediment control plan been developed and submitted?</i> Энэхүү төлөвлөгөө нь байгаль орчны стандартууд болон журмуудад нийцэж байгаа эсэх? <i>Does it meet the requirements of the environmental standards or procedures?</i>	<input type="checkbox"/> Тийм <input type="checkbox"/> Үгүй <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Тийм <input type="checkbox"/> Үгүй <input type="checkbox"/> Yes <input type="checkbox"/> No
2.1.8.	Төлөвлөж буй ажлыг гүйцэтгэхэд Байгаль орчин хамгаалах тусгай төлөвлөгөө боловсруулах шаардлагатай эсэх? <i>Does the project require a project-specific Environmental Protection Plan to be developed?</i> Хэрэв тийм бол уг төлөвлөгөөг боловсруулж, батлуулсан эсэх? <i>If yes, has it been developed and got approved?</i>	<input type="checkbox"/> Тийм <input type="checkbox"/> Үгүй <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Тийм <input type="checkbox"/> Үгүй <input type="checkbox"/> Yes <input type="checkbox"/> No
2.1.9.	Өнгөн хөрсний судалгаа хийгдсэн эсэх? <i>Has a topsoil survey of the area been undertaken?</i> Өнгөн хөрсийг тусгайлан хуулж, хадгалах шаардлагатай эсэх? <i>Does the topsoil need to be removed and stored?</i> Өнгөн хөрсийг хуулах болон зөөж хадгалах газрын байршлуудыг газар үорооны ахлах ажилтанд мэдэгдсэн эсэх? <i>Have the locations to remove from and send to been provided to the Earthwork Supervisor?</i>	<input type="checkbox"/> Тийм <input type="checkbox"/> Үгүй <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Тийм <input type="checkbox"/> Үгүй <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Тийм <input type="checkbox"/> Үгүй <input type="checkbox"/> Yes <input type="checkbox"/> No
2.1.10.	Ажлын талбайд ямар нэг ховор ургамлын зүйл тодорхойлогдсон эсэх? <i>Have any rare plant species been identified in the area?</i> Зүйлийн нэр / Species: _____ Тодорхойлогдсон ургамлын зүйлийг шилжүүлэн нүүлгэх шаардлагатай эсэх? <i>Is transplantation or relocation of the plants required?</i>	<input type="checkbox"/> Тийм <input type="checkbox"/> Үгүй <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Тийм <input type="checkbox"/> Үгүй <input type="checkbox"/> Yes <input type="checkbox"/> No
2.1.11.	Төлөвлөж буй ажилд дүүргэгч материал ашиглагдах эсэх? <i>Will filling materials be borrowed for the proposed work?</i> Хэрэв тийм бол дүүргэгч материал авах/ашиглах цэгүүдийн байршлыг батлуулсан эсэх? (Цэгүүдийн зургийг хавсаргасан байх) <i>If yes, have the borrow source locations been approved? (the map of the borrow pits locations shall be attached)</i>	<input type="checkbox"/> Тийм <input type="checkbox"/> Үгүй <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Тийм <input type="checkbox"/> Үгүй <input type="checkbox"/> Yes <input type="checkbox"/> No

2.2. Байгаль орчны ахлах ажилтны зөвшөөрөл / Environmental Supervisor's Approval		
<input type="checkbox"/> Тийм <input type="checkbox"/> Yes		<input type="checkbox"/> Үгүй <input type="checkbox"/> No
2.2.1. Нөхцөл / Conditions:		
2.2.2. Нэр / Name:	2.2.3. Гарын үсэг / Signature:	2.2.4. Огноо / Date:

Газар шорооны ажил гүйцэтгэчийг төлөөлж миний бие нь ажлын талбай, хамрах хүрээ, газар хөндөх үйл ажиллагааны үе шатууд гэх мэт гүйцэтгэх ажилтай холбоотой мэдээллүүдийг ажил олгогч талд өгч, мөн энэхүү зөвшөөрлийн хүчинтэй хугацааны турш мөрдөх үүрэг, хариуцлагуудтай танилцаж, улмаар Оюу Толгой ХХК-ийн Байгаль орчны ахлах ажилтнаас газар шорооны ажлыг эхлүүлэх зөвшөөрөл авсан болохыг баталж байна.

As the earthwork operator/contractor, I _____ have provided information on the work area, extent, and the period of the proposed land disturbing activities, and have got familiar with the obligations to be complied during the permit period, and finally, I have received the approval and signature of the Environmental Supervisor of Oyu Tolgoi to commence the earthwork.

Гарын үсэг	Огноо	Цаг
Signature	Date	Time

SECTION 3: LAND DISTURBANCE PERMIT COMPLETION

To be completed after the proposed earthwork has been completed

3.1. Earthwork operator/contractor			
3.1.1. Date of earthwork completion:			
3.1.2. Topsoil		3.1.3. Map Information	
Area [m ²]:	Volume [m ³]:	Attached: <input type="checkbox"/> Yes <input type="checkbox"/> No	Title:
3.1.4. Notes:			
3.1.5. Name:	3.1.6. Signature:	3.1.7. Date:	

3.2. Environmental Supervisor's Sign-off		
3.2.1. Note on the site audit:		
3.2.2. Note on the site reclamation:		
3.2.3. Name:	3.2.4. Signature:	3.2.5. Date:

Annex C: Key Socio-Economic Baseline Data for Herder Households

Family no.	Bagh	Family size	Children aged 0-17	Elders aged 55 and over	Unemployed	College students incl TVET	Children			No. of livestock	Type of livestock					Wells used	Total annual income	% of Cash Income				
							At school	In kinder	At home		Camel	Horse	Cow	Sheep	Goat			Cashmere	Wool	Milk	Meat	Salary / pension
1	Gaviluud	2	0	0	0					153	6			80	67	1	10,700,000	8%	2%			90%
2	Gaviluud	2	0	0	0					193	31	3		49	110	1	8,000,000	12%	8%			80%
3	Gaviluud	7	3	0	3		2			73		4		18	51	1	1,000,000	100%				
4	Gaviluud	1	0	1	0					87	14			13	60	1	2,450,000	45%	5%			50%
5	Gaviluud	2	0	1	0					172	23			62	87	2	9,700,000	15%	5%		10%	70%
6	Gaviluud	5	2	0	1		1		1	269	2			150	117	2	7,300,000	20%			20%	60%
7	Gaviluud	1	0	0	1					117	15	37		45	20	2	1,100,000	37%	26%		37%	
8	Gaviluud	5	1	0	2	1				123	22	12		12	79	1	6,000,000	14%	4%	7%	14%	60%
9	Gaviluud	5	3	0	0		2		1	243	6	7		60	170	1	3,600,000	90%	3%	3%	4%	
10	Gaviluud	1	0	1	0					207	35	2	10	40	120	3	3,500,000	40%	10%			50%
11	Gaviluud	4	1	0	2		1			40		9		10	21	1		1				
12	Gaviluud	6	0	0	1		3		1	81	16	17	0	12	36	1						
13	Gaviluud	6	3	1	1		1		2	258	30	28	0	100	100	1	3,200,000	80%	20%			
14	Gaviluud	5	3	0	1		2		1	284	54	29	0	110	90	1	3,350,000	60%	40%			
15	Gaviluud	6	4	0	1		4			174	22	0	0	65	87	2	7,400,000				15%	85%
16	Gaviluud	3	1	0	1		1			190	0	0	0	110	80	1	6,000,000	40%	60%			
17	Gaviluud	4	2	0			1		1	203	32	21	0	70	80	1	2,000,000	80%	20%			
18	Gaviluud	4	1	0	0		1			62	22	3	6	10	21	1	1,440,000	80%	20%			

Family no.	Bagh	Family size	Children aged 0-17	Elders aged 55 and over	Unemployed	College students incl TVET	Children			No. of livestock	Type of livestock					Wells used	Total annual income	% of Cash Income				
							At school	In kinder	At home		Camel	Horse	Cow	Sheep	Goat			Cashmere	Wool	Milk	Meat	Salary / pension
19	Javkhlant	3	1	0	0				1	307	68	22		117	100	1	2,000,000	60%	25%		15%	
20	Javkhlant	1	0	0	0					200				100	100	1	2,500,000	100%				
21	Javkhlant	1	0	0	0					430	370			10	50	2	8,000,000	70%	20%	10%		
22	Javkhlant	4	1	0	0	1	1			354	120	14	20	60	140	2	10,000,000	35%	35%	10%	20%	
23	Javkhlant	4	0	1	0					56	6	50				1	2,160,000	40%				60%
24	Javkhlant	4	0	0	0			2		238	25	5	8	20	180	1	2,500,000	50%	10%	25%	15%	
25	Javkhlant	4	0	0	0	2				230	30				200	1	4,000,000	50%	10%	10%	20%	
26	Javkhlant	7	2	1	2	1	2			207	28	15	19	15	130	1	2,000,000	50%	30%		10%	
27	Javkhlant	2	0	2	0					16					16	1		70%				30%
28	Javkhlant	4	2	0	0			2		633	103	28	22	100	380	1	10,000,000	50%	25%	10%	15%	
29	Javkhlant	5	1	0	1			2		903	58			460	385	1	7,000,000	50%	25%	15%	10%	
30	Javkhlant	1	0	0	0					122	43	14		5	60	2	1,000,000	60%	30%		10%	
31	Javkhlant	3	1	0	1			1		170	70			30	70	1	2,500,000	50%	30%	20%		
32	Javkhlant	6	2	0	1			1		170	20			30	120		5,100,000	40%	5%			55%
33		1	0	1													972,000					100%
34	Javkhlant	1	0	0	1					120	35			29	56		2,000,000	50%	50%			
35	Javkhlant	6	3	0	0	2	2			245	20		45	80	100	2	10,000,000	50%	20%	15%	15%	
36	Javkhlant	6	0	0	1	2				431	20	60	1	120	230	2	5,500,000	90%	5%	5%		
37	Bayan	4	1	0	1	1	1			52		6		15	22		7,000,000	100%				
38	Bayan	4	2	0	1	1	1			9		1		1	7	2	2,500,000	70%	10%	10%	10%	

Family no.	Bagh	Family size	Children aged 0-17	Elders aged 55 and over	Unemployed	College students incl TVET	Children			No. of livestock	Type of livestock					Wells used	Total annual income	% of Cash Income				
							At school	In kinder	At home		Camel	Horse	Cow	Sheep	Goat			Cashmere	Wool	Milk	Meat	Salary / pension
39	Bayan	5	3	0	1		2		1	780	140	40		200	400	1	14,500,000	60%	20%			20%
40	Bayan	2	0	2																		
41	Javkhlant	5	3	0	0		3			233	30	3	30	20	150	2	4,000,000	70%	30%			
42	Javkhlant	4	0	0	0	1				800	60	30	10	100	600	1	20,000,000	50%	10%			40%
43	Nomgon	4	2	0	1		2			150	36			30	80	1	2,000,000	70%	30%			
44	Nomgon	4	0	0	1	1				96	30	0	4	22	40	1	1,000,000	70%	15%	15%		
45	Nomgon	7	3	1	1		2		2	102	50	0	7	15	30		1,300,000	80%		20%		
46	Nomgon	4	2	0	2		2			260	60			100	100	1	2,080,000					
47	Nomgon	4	2	0	0		2			76	13			3	60	1	2,080,000	40%	9%			51%
48	Nomgon	3	1	0	1		1			128	50	13	5	0	60	2	1,000,000	80%	20%			
49	Javkhlant	6	0	0	2	1	1															
50	Javkhlant	1	0	0	1					3					3							
51	Javkhlant	4	2	0	0			1	1	220	20			80	120			10%				90%
52	Gaviluud	3	0	1	1					559	34	45	0	180	300	1	9,000,000	70%	20%		10%	
53	Gaviluud	4	2	0			2									1						
54	Gaviluud	4	0	0	1	2				65	12	0	0	35	18	1	2,000,000	20%	20%			60%
55	Javkhlant	3	1	0	0					130	26			50	54	1	2,000,000	75%	15%		10%	
56	Javkhlant	5	1	0	1		2			307	65	10	2	80	150		10,000,000	50%	20%	10%	20%	
57	Bayan	7	3	0	2		3			200	65			70	66	2	3,000,000	45%	45%	10%		
58	Bayan	2	1	0			1			10		10				1	4,000,000					100%

Family no.	Bagh	Family size	Children aged 0-17	Elders aged 55 and over	Unemployed	College students incl TVET	Children			No. of livestock	Type of livestock					Wells used	Total annual income	% of Cash Income					
							At school	In kinder	At home		Camel	Horse	Cow	Sheep	Goat			Cashmere	Wool	Milk	Meat	Salary / pension	
59	Bayan	4	2	0	1		2			306	55	21		80	150	2	4,500,000	66%	30%	4%			
60	Bayan	7	2	0	5	2			1	263	145	8		60	50	1	10,000,000	10%	30%	10%	50%		
61	Javkhlant	8	3	0	2	1	2		1	138	27	8	0	34	69	2	2,000,000	60%	40%				
62	Javkhlant	3	0	2	1					73	24	0	10	12	25	2	3,600,000	25%	25%			50%	
63	Javkhlant	2	1	0				1	31	4			12	15	4,600,000		5%	5%				90%	
64	Javkhlant	6	2	0	1	2	2		129			6	3	120	-		20%						80%
65	Gaviluud	5	2	1	1		2			400	60	40		170	130	2	4,000,000	40%	20%				20%
66	Gaviluud	1	0	1	1					46	9			25	12	1	1,500,000						
67	Gaviluud	4	2	0	0		1	1		260	3	54	3	50	150		13,000,000	25%					75%
68	Bayan	3	1	0	1				1	46	18			15	13	1	4,500,000	10%					90%
69	Bayan	3	1	0	2					115	14			34	67		1,200,000	60%	40%				
70	Bayan	6	3	0	2		1		3	124	40	14		30	40		2,000,000	50%	50%				
71	Gaviluud	8	2	0	4		1			55	3	30	0	17	5	1	8,400,000	5%	5%				90%
72	Gaviluud	4	2	0	1		1		1	380	130	10		60	180	1	9,000,000	45%	45%			10%	
73	Gaviluud	4	0	1	3					470	100	30		40	300	1	9,000,000	50%	30%			10%	10%
74	Nomgon	3	0	0	2					55	1			14	40	2	2,000,000	50%					50%
75	Nomgon	4	0	0	1		1			678	178	0	0	200	300	1	10,000,000	60%	40%				
76	Nomgon	2	0	1	1					98	40			30	28	1	3,700,000	10%	40%				50%
77	Bayan	2	0	0	1					347	40	7	0	120	180	1	4,600,000	80%	20%				
78	Bayan	6	0	2			1		1	67				30	37	1	3,500,000	10%					90%
79	Bayan	4	2	0	1		1		1	253	53	11	0	74	115		3,600,000	60%	40%				

Family no.	Bagh	Family size	Children aged 0-17	Elders aged 55 and over	Unemployed	College students incl TVET	Children			No. of livestock	Type of livestock					Wells used	Total annual income	% of Cash Income				
							At school	In kinder	At home		Camel	Horse	Cow	Sheep	Goat			Cashmere	Wool	Milk	Meat	Salary / pension
80	Bayan	3	1	1	1				1	162	60	25	0	30	45	2	3,700,000	35%	30%			35%
81	Bayan	6	3	1	1		3			909	300	100	9	200	300	1	15,000,000	50%	40%			10%
82	Bayan	4	0	0	1					150	45	0	0	25	80	1	2,700,000	50%	50%			
83	Bayan	5	3	0	1		1		2	135	20	5	0	30	80	2	2,000,000	80%	20%			
84	Bayan	5	0	1	2					180	60	30	0	70	30	2	4,600,000	30%	20%			50%
85	Bayan	5	2	0	1		2		1	244	71	45	0	41	87	2	3,500,000	50%	50%			
86	Bayan	4	2	0	1				2	73	8	1	0	17	47	1	1,150,000	90%	10%			
87	Bayan	6	4	0	1	1	4			112	6	0	0	33	73		2,600,000	90%	10%			
88	Bayan	4	0	1	1	1				388	130	24	0	74	160	1	8,300,000	45%	40%			15%
89	Bayan	3	2	0			1		1	202	54	26	0	46	76		2,800,000	50%	50%			
90	Bayan	4	2	0	1		2			242	48			76	118	2	3,500,000	70%	30%			
91	Bayan	4	2	0	1		1		1	280	90	10	0	50	130	1	5,000,000	50%	50%			
92	Javkhlant	2	0	1		1				206	46	0	15	65	80	2	5,000,000	35%	25%	10%		30%
93	Javkhlant	5	2	0	1	1	1	1		820	180	30		270	340	3	7,000,000	70%	20%	5%	5%	
94	Javkhlant	4	2	0	2		2			577	40			297	240	3	9,000,000	70%	10%		20%	
95	Javkhlant	2	0	0						214	42	4	6	54	108		-					
96	Javkhlant	3	1	0				1		118	25			43	50		-					
97	Javkhlant	3	1	0				1		159	26	8	1	45	79		-					
98	Javkhlant	3	1	0			1			460	131	5	6	120	198		-					
99	Javkhlant	4	1	0		1	1			264		5		122	137		-					
100	Gaviluud	3	1	0	0		1			278	28			150	100	1	4,000,000	50%	25%	10%	15%	

Family no.	Bagh	Family size	Children aged 0-17	Elders aged 55 and over	Unemployed	College students incl TVET	Children			No. of livestock	Type of livestock					Wells used	Total annual income	% of Cash Income						
							At school	In kinder	At home		Camel	Horse	Cow	Sheep	Goat			Cashmere	Wool	Milk	Meat	Salary / pension		
101	Gaviluud	1	0	0																				
Totals		393	121	26	70	25	73	5	25	19,519	4061	917	229	5145	9161	83	-	46%	20%	3%	6%	25%		

Annex E: Detailed Entitlements Matrix

Project Site / Facility / Area	Affected Category	Type of Loss / Category	Eligible Entity	Eligibility Conditions	Entitlements	Number of Household
A1. Oyu Tolgoi Mine Site Area (2004) COMPLETED	Herder family with winter shelter/residing in Mine Site Area/Exclusion Zone	Physical displacement: <ul style="list-style-type: none"> Winter camp / shelter loss Pasture loss Water access loss 	Households with: <ol style="list-style-type: none"> Nuclear or extended family Single member⁵³ 	<ul style="list-style-type: none"> Winter shelter in Mine Licence Area or exclusion zone Consensus that household will be affected 	Resettlement package , including: <ul style="list-style-type: none"> A new winter shelter in agreed area, including stockyard fence, animal barn Land certificate for residential land New well Fifteen goats, fifteen sheep, two camels Two tertiary scholarships for students One permanent job for one family member Training programs, including pasture management, business development and English language 	10 HHS 16 families
B1. Oyu Tolgoi Khanbumbat Airport Area	Herder household affected by Airport Site	Economic displacement: <ul style="list-style-type: none"> Severe loss/restriction of summer pastures Noise nuisance 	Households with: <ol style="list-style-type: none"> Nuclear or extended family Single member 	<ul style="list-style-type: none"> Certified, occupied winter shelter within 5 km of Airport Site⁵⁴ Consensus that family has been impacted by the particular project 	<p>Permanent job (one per household)</p> <p>AND</p> <p>Education assistance:</p> <ul style="list-style-type: none"> Tertiary scholarship for student. Supply support for school student (once per year). <p>AND</p> <p>Compensation package for livelihood restoration⁵⁵, partnership and investment in establishing a new and/or improved livelihood, e.g. capital purchases, improved livestock, business development, training and ongoing</p>	7 HHS

⁵³ There were no individual herders as such - only households/families involved in 2004. There appears to be a trend to an increasing number of single-member households so in some cases Oyu Tolgoi will be compensating individuals who comprise single member households.

⁵⁴ At the time of the 2005 Resettlement Programme, the Mongolian Land Law of 2002 was still new and only half the households had obtained title to their winter shelters. With the passage of time, all herders resident in the area at the cut-off date are believed to have obtained certificates of title, and consensus has deemed that possession of a winter shelter title certificate AND occupation of the winter shelter are prerequisites for eligibility. If a winter shelter is considered by consensus to be and is in the process of obtaining its certificate, then it will be deemed as eligible. No shelters constructed after the cut-off date will be included.

⁵⁵ The compensation package for livelihood restoration will be implemented through the Local Business and Economic Development (LBED) Programme already in place by Oyu Tolgoi.

Project Site / Facility / Area	Affected Category	Type of Loss / Category	Eligible Entity	Eligibility Conditions	Entitlements	Number of Household
					support etc. AND Short term training (1 time, in Mongolia, up to 45 on job readiness, vocational training, etc)	
B2 (A). Oyu Tolgoi Khanbumbat Airport Area	Herder household affected by Airport Site	Economic displacement: <ul style="list-style-type: none"> Moderate loss/restriction of summer pastures Nuisance noise 	Households with: <ol style="list-style-type: none"> Nuclear or extended family Single member 	<ul style="list-style-type: none"> Certified, occupied winter shelter within 5 – 8 km of Airport Site Consensus that family has been impacted by the particular project 	Permanent job (one per household) OR Education assistance: <ul style="list-style-type: none"> Supply support for school student (once per year). AND Compensation package for livelihood restoration, partnership and investment in establishing a new and/or improved livelihood, e.g. capital purchases, improved livestock, business development, training and ongoing support etc.	8 HHs
B2 (B). Oyu Tolgoi Khanbumbat Airport Area	Herder household affected by Airport Site	Economic displacement: <ul style="list-style-type: none"> Minor loss/restriction of summer pastures Nuisance noise 	Households with: <ol style="list-style-type: none"> Nuclear or extended family Single member 	<ul style="list-style-type: none"> Certified, occupied winter shelter within 8 – 11 km of Airport Site Consensus that family has been impacted by the particular project 	Permanent job (one per household) OR Education assistance: <ul style="list-style-type: none"> Supply support for school student (once per year). AND Compensation package for livelihood restoration, partnership and investment in establishing a new and/or improved livelihood, e.g. capital purchases, improved livestock, business development, training and ongoing support etc.	7 HHs
C1. Oyu Tolgoi to Gashuun Sukhait road	Herder household affected by Oyu Tolgoi to Gashuun Sukhait Road	Economic displacement: <ul style="list-style-type: none"> Division of permanent pastures Severe disruption in construction, ongoing disruption during operations 	Households with: <ol style="list-style-type: none"> Nuclear or extended family Single member 	<ul style="list-style-type: none"> Certified, occupied winter shelter within 500 m either side of Oyu Tolgoi to Gashuun Sukhait Road Consensus that family has been impacted by the 	Permanent job (one per household) AND Education assistance: <ul style="list-style-type: none"> Tertiary scholarship for student. Supply support for school student (once per year). AND Compensation package for livelihood restoration, partnership and investment in establishing a new and/or	4 HHs

Project Site / Facility / Area	Affected Category	Type of Loss / Category	Eligible Entity	Eligibility Conditions	Entitlements	Number of Household
				particular project	improved livelihood, e.g. capital purchases, improved livestock, business development, training and ongoing support etc.	
C2 (A). Oyu Tolgoi to Gashuun Sukhait road	Herder household affected by Oyu Tolgoi to Gashuun Sukhait Road	Economic displacement: <ul style="list-style-type: none"> Division of permanent pastures Moderate disruption to herding practices in construction, ongoing disruption during operations 	Households with: <ol style="list-style-type: none"> Nuclear or extended family Single member 	<ul style="list-style-type: none"> Certified, occupied winter shelter within 500 m – 3.5 km either side of Oyu Tolgoi to Gashuun Sukhait Road Consensus that family has been impacted by the particular project 	<u>Permanent job (one per household)</u> OR <u>Education assistance:</u> <ul style="list-style-type: none"> Supply support for school student (once per year). AND <u>Compensation package for livelihood restoration,</u> partnership and investment in establishing a new and/or improved livelihood, e.g. capital purchases, improved livestock, business development, training and ongoing support etc.	7 HHS
C2 (B). Oyu Tolgoi to Gashuun Sukhait road	Herder household affected by Oyu Tolgoi to Gashuun Sukhait Road	Economic displacement: <ul style="list-style-type: none"> Minor disruption to herding practices in construction 	Households with: <ol style="list-style-type: none"> Nuclear or extended family Single member 	<ul style="list-style-type: none"> Certified, occupied winter shelter within 3.5 – 6.5 km either side of Oyu Tolgoi to Gashuun Sukhait Road Consensus that family has been impacted by the particular project 	<u>Permanent job (one per household)</u> OR <u>Education assistance:</u> <ul style="list-style-type: none"> Supply support for school student (once per year). AND <u>Compensation package for livelihood restoration,</u> partnership and investment in establishing a new and/or improved livelihood, e.g. capital purchases, improved livestock, business development, training and ongoing support etc.	7 HHS
D1. Water Pipeline & Transmission Line Areas	Herder households affected by Transmission line or the Gunii Hooloi Water Pipeline	Economic displacement: <ul style="list-style-type: none"> Division of permanent pastures Severe disruption in construction, possible ongoing disruption 	Households with: <ol style="list-style-type: none"> Nuclear or extended family Single member 	<ul style="list-style-type: none"> Certified, occupied winter shelter within 1 km either side of Transmission Line or Water Pipeline (1st phase) Certified, occupied winter shelter within 3 km either side of Water Pipeline (2nd 	<u>Permanent job (one per household)</u> AND <u>Education assistance:</u> <ul style="list-style-type: none"> Tertiary scholarship for student. Supply support for school student (once per year). AND <u>Compensation package for livelihood restoration,</u> partnership and investment in establishing a new and/or improved livelihood, e.g. capital purchases, improved	11 HHS

Project Site / Facility / Area	Affected Category	Type of Loss / Category	Eligible Entity	Eligibility Conditions	Entitlements	Number of Household
				<p>phase)</p> <ul style="list-style-type: none"> Consensus that family has been impacted by the particular project 	<p>livestock, business development, training and ongoing support etc.</p> <p>AND</p> <p>Short term training (1 time, in Mongolia, for less than 45 on access to job readiness, vocational training, etc)</p>	
D2 (A). Water Pipeline & Transmission Line Areas	Herder households affected by Transmission line or the Gunii Hooloi Water Pipeline road	<p>Moderate economic displacement:</p> <ul style="list-style-type: none"> Moderate disruption to herding practices in construction 	<p>Households with:</p> <ol style="list-style-type: none"> Nuclear or extended family Single member 	<ul style="list-style-type: none"> Certified, occupied winter shelter within 1 – 2 km either side of Transmission Line or Water Pipeline (1st phase) Certified, occupied winter shelter within 3 – 5 km either side of Water Pipeline (2nd phase) Consensus that family has been impacted by the particular project 	<p>Permanent job (one per household)</p> <p>OR</p> <p>Education assistance:</p> <ul style="list-style-type: none"> Supply support for school student (once per year). <p>AND</p> <p>Compensation package for livelihood restoration, partnership and investment in establishing a new and/or improved livelihood, e.g. capital purchases, improved livestock, business development, training and ongoing support etc.</p>	7 HHs
D2 (B). Water Pipeline Area (2nd Phase)	Herder households affected by Transmission line or the Gunii Hooloi Water Pipeline	<p>Minor economic displacement:</p> <ul style="list-style-type: none"> Minor disruption to herding practices in construction 	<p>Households with:</p> <ol style="list-style-type: none"> Nuclear or extended family Single member 	<ul style="list-style-type: none"> Certified, occupied winter shelter within 5 – 7 km either side of Water Pipeline (2nd phase) Consensus that family has been impacted by the particular project 	<p>Permanent job (one per household)</p> <p>OR</p> <p>Education assistance:</p> <ul style="list-style-type: none"> Supply support for school student (once per year). <p>AND</p> <p>Compensation package for livelihood restoration, partnership and investment in establishing a new and/or improved livelihood, e.g. capital purchases, improved livestock, business development, training and ongoing support etc.</p>	4 HHs
E1. Summer Grazing	All <i>soum</i> herders	<p>Communal grazing land loss:</p> <ul style="list-style-type: none"> Overall reduction of grazing land in 	<p>Community members of <i>soum</i> (represented by <i>bagh</i> governor)</p>	<ul style="list-style-type: none"> Consensus with Governor and communities on herding 	<p>Sustainable Pastureland Management Programme*, including participation in benefits to be developed and implemented under this programme for herders.</p> <p>AND</p>	All

Project Site / Facility / Area	Affected Category	Type of Loss / Category	Eligible Entity	Eligibility Conditions	Entitlements	Number of Household
		Khanbogd <i>soum</i> for seasonal herders		families/individuals within affected <i>baghs</i> and discussed at Citizens Representatives Khural	Substantial community compensation delivered through this programme exclusively in-kind (e.g. communal fodder growing enclosures and storage, building materials, road and well works etc). AND Contribution to each Pasture User Group for every member household (a one-off contribution to be put into a Revolving Fund for the Pasture User Group).	
F1 Un-occupied Winter Shelters	Herders with certified but unoccupied winter shelters in any of the defined impact areas above (certificate holders)	Restricted access/disturbance to physical assets: <ul style="list-style-type: none"> Minor disruption impacts such as restricted access to property Move from winter shelter may have been caused by cumulative impacts 	Households with: <ol style="list-style-type: none"> Nuclear or extended family Single member 	<ul style="list-style-type: none"> Certificate of possession of a verified unoccupied winter shelter within the defined impact zones. Consensus that household has abandoned winter shelter because of adverse cumulative impacts and is now vulnerable. 	<u>Permanent job (one per household)</u> AND <u>Education assistance:</u> <ul style="list-style-type: none"> Tertiary scholarship for student. OR Supply support for school student (once per year). AND <u>Compensation package for livelihood restoration,</u> partnership and investment in establishing a new and/or improved livelihood, e.g. capital purchases, improved livestock, business development, training and ongoing support etc. OR <u>Short term training</u> (1 time, in Mongolia, for less than 45 days, e.g. job readiness, vocational training, etc)	4 HHs
F2. Un-occupied Winter Shelters	Herders with certified but unoccupied winter shelters in any of the defined impact areas above (certificate holders)	Restricted access/disturbance to physical assets: <ul style="list-style-type: none"> Minor disruption impacts such as restricted access to property 	Households with: <ol style="list-style-type: none"> Nuclear or extended family Single member 	<ul style="list-style-type: none"> Certificate of possession of a verified unoccupied winter shelter within the defined impact zones. 	<u>Education assistance:</u> <ul style="list-style-type: none"> Tertiary scholarship for student. OR Supply support for school student (once per year). AND <u>Short term training</u> (1 time, in Mongolia, for less than 45 on access to job readiness, vocational training, etc).	18 HHs
Additional Impacts to Herders already Eligible in other Categories						

Project Site / Facility / Area	Affected Category	Type of Loss / Category	Eligible Entity	Eligibility Conditions	Entitlements	Number of Household
Water Access Restrictions / Loss	Herders affected by impacts to water supply/wells (in all impact zones)	Impacts to physical assets: <ul style="list-style-type: none"> Water access loss or restriction, or reduced supply etc 	Households with: <ol style="list-style-type: none"> Nuclear or extended family Single member 	<ul style="list-style-type: none"> Water sources are cut off from pasture <u>OR</u> from winter shelters <u>OR</u> Water quality or quantity are compromised 	Replacement/reconstructed well , or equivalent as agreed with affected herder family to guarantee water supply. Water sources location will be selected and decided in consultation with pastureland user groups and will be aligned with pastureland management plans.	(4HHs)
Households Affected in more than one impact zone	Herders affected in categories A to D above.	Impacts from more than one category <ul style="list-style-type: none"> Household affected in more than one impact zone/category above 	Households with: <ol style="list-style-type: none"> Nuclear or extended family Single member 	<ul style="list-style-type: none"> As per eligibility for categories A to D above. 	Additional compensation payment. An additional payment or equivalent contribution to livelihood restoration packages will be provided to those herders affected in more than one category.	(7HHs)

The categories B2(A), B2(B), C2(A), C2(B) and D2(A) and D2(B), only differ for one entitlement. As agreed with affected HHs, the amount of contribution that is provided for the livelihood support package implemented through the Local Business and Economic Development Programme, is higher for those HHs closest to Project facilities. All other entitlements are the same as shown. The LBED contributions are as shown in the following table.

Impact Zone/Category	Contribution for Livelihood Restoration (under Local Business & Economic Development (LBED) Programme)
B1	15,000,000
B2(A)	10,500,000
B2(B)	7,500,000
C1	20,000,000
C2(A)	10,500,000
C2(B)	7,500,000
D1	15,000,000
D2(A)	10,500,000
D2(B)	7,500,000
F1	5,000,000

Note: these are not the total amounts for compensation, only the contribution for livelihood support packages under the LBED Programme.

* All directly affected herders are eligible for, and will receive priority inclusion in the Sustainable Pastureland Management Programme.

Annex F: Detailed Findings from 2010 Review of Resettled Herder Households

Overview

Table 1 below shows a summary of the households and families that were resettled as part of the Oyu Tolgoi Project *Herder Relocation Programme* in 2005. The age range of HH members varies from 2 years to 86 years old. In 2004 there were 61 people resettled.

Table 1: Description and Key Summary of resettled HHs, by year, 2004-2010

Household and Description	No. Families	HH size		Livestock		Soum Centre (SC) or Rural (R)*
		2004	2010 [#]	2004	2010	
HH1: Household consists of 2 families one being an elderly couple the other headed by the son of the first household along with his children and a grandchild.	2	7	7	128	166	R
HH2: This is a single family household consisting of a couple and two children.	1	4	4	224	773	SC
HH3: A single family multigenerational household consisting of a father mother and five children. The eldest son has since taken over as household head after the death of his father. They had winter camp licence in 2004.	1	7	7	38	55	SC
HH4: This extended family comprised a single household of 5 members consisting of a couple their two children and the wife's father.	1	5	4	45	128	SC
HH5: This household of five was considered to be two families one headed by the patriarch who shared his residence with a grandchild or child and the second headed by the old man's son and his family of three. They had a winter camp licence in 2004.	2	5	5	207	219	SC
HH6: This single family household consists of an elderly mother her son and his wife and their two children. They had a winter camp licence in 2004.	1	5	4	33	106	R
HH7: This household is made up of two families one headed by the father and his wife and four children. The second family is headed by the father's eldest daughter** who lives with one of her brothers. She had her own <i>ger</i> and winter shelter so asked to be counted as a separate household and was with respect to receiving a replacement winter shelter. As they had a combined herd however only one set of	2	8	8	378	322	SC

Household and Description	No. Families	HH size		Livestock		Soum Centre (SC) or Rural (R)*
		2004	2010 [#]	2004	2010	
compensatory animals was provided. The daughter was already employed by and continues to work for the Oyu Tolgoi Project. . They had a winter camp licence in 2004.						
HH8: This household consists of two families one consisting of a couple and their two children plus the husband's brother. The second family comprised the first husband's sister and her husband. This latter family had no livestock but requested a second residence which was agreed to. They had a winter camp licence in 2004.	2	7	5	196	339	R
HH9: This extended household of seven consists of two families one a grandmother and grandchild the other headed by the old lady's son living with his wife and three other children.	2	7	11	287	310	R
HH10: In 2004 this household was made up on two families one comprised of a father and grandmother the other consisting of a son and his wife and three children. Due to death the first family no longer exists and the household has become a single family unit which is why only 15 not 16 families were surveyed in the 2010 study.	1	7	7	346	735	R

* Denotes whether the household lives in the *soum* centre or in their rural residence, as of end 2010.

** It is the daughter's family that has sometimes been counted as a separate household because she made a claim to be considered so but in most counts as she had combined her herd with her father's she was not considered to be a completely separate household but rather a second family within the larger household.

Note: Household numbers vary for households due to death, birth as well as family members, particularly students living part time in the countryside and in the *soum* centre or elsewhere.

Sources of Income

The following tables illustrate the proportion of income per household derived from various sources by the resettled herder families.

Vegetables

None of the households reported receiving any income from rent or from family members either abroad or elsewhere in Mongolia. Only one of the households reported deriving income from vegetable production and that only commenced in 2008, from which time that family drew almost half its income from vegetables (*Table 2*). The particular household concerned was one of those that has remained living in a rural area.

Table 2: Number of resettled families deriving income from selling vegetables - number of households, percentage of income, by year, 2004-2010

Vegetables	2004	2005	2006	2007	2008	2009	2010
Number of Households	0	0	0	0	1	1	1
% income	0	0	0	0	45	45	50

Source: Oyu Tolgoi Survey of resettled households, October 2010. N=15.

Meat

The number of households selling meat products as part of their income remained fairly constant from before resettlement until 2010, with one additional family reporting receiving ten percent of their income this way in 2005. The average percentage of income derived from meat declined slightly throughout the period from twenty percent in 2004 to sixteen percent in 2008-9. The range of income families depend upon from meat varied from five to forty percent, although ten percent to 25-30 percent was most common (*Table 3*).

Table 3: Number of resettled families deriving income from selling meat products - number of households, percentage of income, by year, 2004-2010

Meat	2004	2005	2006	2007	2008	2009	2010
Number of Households	7	8	7	7	7	7	7
Ave% income	20	18.75	17.86	18.57	15.71	15.71	18.57
% range	10-30	10-30	10-25	10-30	10-25	10-25	5-40

Source: Oyu Tolgoi Survey of resettled households, October 2010. N=15.

Wool

The majority of resettled households derived a majority of their income from wool, including cashmere as well as camel and sheep wool (*Table 4*). All fifteen families reported obtaining income from wool in 2004, before resettlement, with only one less family relying upon wool for the rest of the period, with the exception of 2010 when only thirteen families did. Not only was wool an almost universal source of income, it was also the primary source, with the families selling wool consistently reporting that more than half their income came from this source, on average. This did vary from family to family, however, as the range of percentages of income from wool varied from five to one hundred percent. In 2004, four households reported that all their income came from wool, and between two and three said this for the rest of the period. Evidently wool production and sales represent a very important source of income for many of the families.

Table 4: Number of resettled families deriving income from selling wool, including cashmere - number of households, percentage of income, by year, 2004-2010

Wool	2004	2005	2006	2007	2008	2009	2010
Number of Households	15	14	14	14	14	14	13
Ave% income	60	51.07	51.78	51.78	55.36	56.07	51.54

Wool	2004	2005	2006	2007	2008	2009	2010
% range	10-100	5-100	5-100	10-100	20-100	10-100	10-100
No. 100%	4	2	3	2	3	2	2

Source: Oyu Tolgoi Survey of resettled households, October 2010. N=15.

Dairy products

Dairy products were an important source of income for only four of the fifteen resettled families (and only three in 2007). For these families, this source represented between five and forty percent of their income, averaging at around twenty percent (Table 5).

Table 5: Number of resettled families deriving income from selling dairy products - number of households, percentage of income, by year, 2004-2010

Dairy	2004	2005	2006	2007	2008	2009	2010
No. HHs	4	4	4	3	4	4	4
Ave% income	27.75	22.5	23.75	21.67	16.25	17.5	16.25
% range	10-40	10-30	10-35	10-35	5-35	5-40	5-35

Source: Oyu Tolgoi Survey of resettled households, October 2010. N=15.

Waged income

Providing a job to one member of each resettled household, if they had a member willing and able to work, which was not so in all cases, was an important part of the resettlement package, so examining income from waged employment is a useful indicator for measuring the effects of the program.

Table 6 shows that more than half the families reported receiving a portion of their income from wages (this does not equate to number of jobs, but share of household income, which could come from more than one person). The number of households that reported wages income rose from five in 2004 to seven by 2010. Given the small number of households in the survey this represents a small but not insignificant increase. In three of the households (HHs 3, 4 and 6 in Table 1 above), there was no adult sufficiently free of other responsibilities to be able to take on a full-time job. At the time, no alternative was considered necessary by the herders, as the provision of 32 best-breed livestock almost doubled their herds, which was a sufficient income and livelihood boost to compensate them for having to relocate to new pastures. If the resettlement was being undertaken now, with the availability of the IFC guidelines, perhaps this would have been done differently, instead, Oyu Tolgoi has included these households in its programs for vulnerable people.

In 2004, no family was entirely dependent upon wages, and the average percentage of wages income for families was 64 percent. From 2005, there was one family entirely dependent upon wages. That particular family was 90 percent dependent upon wages even in 2004, also deriving ten percent from wool sales that year. On average, those families receiving wages derived about three-quarters of their income from that source.

Table 6: Number of resettled families deriving income from wages - number of households, percentage of income, by year, 2004-2010

Wages	2004	2005	2006	2007	2008	2009	2010
No. HHs	5	7	7	7	6	7	7
Ave% income	64	73.6	75	78.6	78.3	81.4	81.4
% range	30-90	30-100	30-100	40-100	40-100	40-100	40-100
No. 100%	0	1	1	1	1	1	1

Source: Oyu Tolgoi Survey of resettled households, October 2010. N=15.

Temporary jobs also provide supplementary income for some families, never more than three and usually only one or two households. Up to thirty percent of family income came from temporary employment for the one family concerned from 2004 to 2007. The others who also took temporary positions in 2008 to 2010 received only five to ten percent of their income in this way (Table 7).

Table 7: Number of resettled families deriving income from temporary jobs - number of households, percentage of income, by year, 2004-2010

Temp. job	2004	2005	2006	2007	2008	2009	2010
No. HHs	1	1	1	1	2	2	3
Ave% income	30	30	30	30	17.5	10	10
% range	30	30	30	30	5-30	5-15	5-15

Source: Oyu Tolgoi Survey of resettled households, October 2010. N=15.

Living conditions

Rural or Urban Residence

One of the most telling indicators in this survey has been the location of the primary residence for the majority of the resettled families. In 2004, all fifteen households resided in the countryside. In 2005, following resettlement, three families, or twenty percent, had moved to the *soum* centre (Table 8). From 2006 onward, around half the households had relocated to the urban centre (not to the provincial capital, only the district centre). All households retained their rural places by means of their winter shelters and herds, but employed relatives or others to mind their herds. This is a clear indication of improved economic status, being able to choose between staying in the town or country.

Table 8: Number of resettled families residing in rural areas or the *soum* centre, by year, 2004-2010

Residence	2004	2005	2006	2007	2008	2009	2010
<i>Soum</i> centre	0	3	7	8	8	8	8
Rural	15	12	8	7	7	7	7

Source: Oyu Tolgoi Survey of resettled households, October 2010. N=15.

Number of Migrations

There has been a steady decline in the number of migrations undertaken in all seasons by the resettled households, another indication of the appeal of the urban centre and easier options than the long and frequent movement of herds. From a total of 53 annual migrations in 2004, the number declined fairly steadily to only 20 to 30 per year since 2006, the same time many of the families moved to the *soum* centre. As many of the resettled households now live in the district centre, they employ relatives or workers to tend their herds, so many of the migrations may not even involve the original herders themselves now (Table 9).

Table 9: Number of resettled families undertaking seasonal migrations, by year, 2004-2010

Migrations	2004	2005	2006	2007	2008	2009	2010
Winter	10	8	3	2	2	3	1
Spring	13	11	7	4	3	6	4
Summer	19	19	14	11	10	12	10
Autumn	11	14	9	7	7	10	7
Annual total	53	52	33	24	22	31	22

Source: Oyu Tolgoi Survey of resettled households, October 2010. N=15.

Land Tenure and Real Estate

The possession of land in rural Mongolia is complicated. In effect, it is only in district centres or other urban areas that land can actually be owned, with every Mongolian able to apply for ownership of 0.07 hectares of land. As a result of moving to centres, a steadily increasing number of the resettled families have obtained title to urban land, rising from none in 2004 to 12 in 2010, a sign of increased economic status.

For pasturelands, herders can apply for titles of possession (not ownership) of their winter shelters, but not the pasturelands that they graze their herds in each season. Access to pastures is on a usufructuary basis rather than land ownership.

At the time of the resettlement, half the families concerned had possession certificates for their winter shelters, half did not, and none had title to any urban land. IMMI ensured that those herders who already had possession certificates to their winter shelters received equivalent certificates in their new places and that the half who did not yet have possession certificates would receive them. This is clearly demonstrated in the *Table 10* below, with all 15 having acknowledged winter camps by 2005. Winter shelters were built for each of the 11 households resettled, completed by 2006. All families already had gers but several have obtained additional or newer ones since.

Table 10: Number of resettled families possessing various forms of real estate, by year, 2004-2010

Real estate	2004	2005	2006	2007	2008	2009	2010	
Private (0.07ha)	0	4	6	9	9	9	12	cumulative
Winter camp	8	15	15	15	15	15	15	cumulative
Spring camp	1	1	1	1	2	2	2	cumulative
Winter shelter	1	10	11	11	11	11	11	cumulative
Gers	16	2	1	0	1	2	0	additional

Source: Oyu Tolgoi Survey of resettled households, October 2010. N=15.

Water Sources

An important part of the agreements for resettlement was that water sources would be replaced with an equivalent or better water source in the new place. Herders have noted that the provision of deep wells in places where there were formerly no reliable water sources had opened up areas of pasture that were previously not viable due to lack of water. Where reliable surface water was obtainable, Oyu Tolgoi offered to supply strongly-constructed and protected surface wells rather than deep (bore) wells, as these are easier to use and maintain for herders than deep wells with diesel pumps, requiring mechanical maintenance and expensive to run. Thus, in 2005, the year of resettlement, six deep and six shallow wells were provided (*Table 11*). In 2006 and 2007, three households requested deep wells, as they were dissatisfied with their water supply, and this was done, taking the number of deep wells to eleven - one per household.

Table 11: Number of resettled families owning deep and shallow wells, by year, 2004-2010

Wells	2004	2005	2006	2007	2008	2009	2010	Total
Deep	2	6	2	1	0	0	0	11
Surface	12	6	1	0	0	0	0	19

Source: Oyu Tolgoi Survey of resettled households, October 2010. N=15.

Ownership of Consumer Goods

Acquisition of various consumer durables, such as electrical items and vehicles is a well-accepted indicator of economic change. Resettled families were asked whether they owned a range of goods, and when they had obtained them. *Table 12* below illustrates the responses. There appeared to be some duplication in the tables where people reported obtaining something that they had already reported acquiring in an earlier year. These duplications have been excluded from the cumulative totals, although it is possible that some households had acquired more than one copy of some of the goods, or perhaps just replaced an older model with a newer one. If people had bought more than one refrigerator or television, for example, then the numbers would be slightly higher.

Table 12: Number of resettled families owning various durable consumer goods, by year, from before resettlement (2004) to 2010

Item by Household	2004	2005	2006	2007	2008	2009	2010	TOTAL
1. Car	5	0	2	0	0	0	0	7
2. Truck	1	0	0	0	0	0	0	1
3. Motorcycle	7	0	0	1	0	0	0	8

Item by Household	2004	2005	2006	2007	2008	2009	2010	TOTAL
4. TV	8	2	1	1	0	1	0	13
5. DVD player	2	0	0	2	0	0	1	5
6. CD player	1	2	0	0	0	1	0	4
7. Radio	9	0	0	0	0	0	2	11
8. Computer	1	1	0	0	1	1	1	5
9. Generator	7	2	0	0	1	0	0	10
10. Satellite dish	5	2	1	1	1	2	1	13
11. Wind turbine	4	2	1	0	0	1	1	9
12. Washing machine	1	3	0	0	2	1	0	7
13. Mobile phone	2	8	3	0	1	1	2	16
14. Electric Stove	2	0	0	1	1	0	1	5
15. Fridge	2	1	1	1	1	0	0	6
16. Gas Furnace	4	0	1	0	0	1	0	6
17. Vacuum	0	0	1	0	1	1	0	3
18. Camera	0	0	1	0	0	0	1	2
19. Water boiler	0	0	1	0	0	0	0	1
20. Rice cooker	0	0	0	0	1	0	0	1
21. Oven	0	0	0	0	0	1	0	1

Source: Oyu Tolgoi Survey of resettled households, October 2010. N=15.

These results show a steady accumulation of consumer durables, with the most marked changes being the number of mobile phones, which increased from two before resettlement to 16 in the current year, with the greatest increase in the year of resettlement. The other major items are televisions and satellite dishes for receiving signals, which were possessed by 13 of 15 families by 2010, whereas only five families had satellite dishes and eight televisions in 2004. The increase in these goods was steady, with no sudden change.

There was not much change in the number of vehicles owned by resettled families, with only two extra cars and one additional motorcycle being acquired over the period. Perhaps the fact that half the resettled families have moved to the *soum* centre explains this, as alternative transport is more easily available in the urban centre.

Livestock Numbers

Table 13 shows that there has been a significant increase in the number of livestock owned by the majority of herder families since 2004. In 2004 prior to resettlement a total of 1882 livestock were owned by the households, this had increased only slightly by 2007 after resettlement, but had increased significantly between 2007 and 2010, to a total of 3,119 livestock. Thirteen out of fifteen families had increased their herd size since 2004, with some families doubling and tripling their herd size (see also Question 3 below). With respect to the 2 families who reported less livestock, in both cases this is due to the family moving to the *soum* centre and taking on other economic activities.

Table 13: Number of resettled HHs and livestock numbers before resettlement and purchased since they relocated, 2004, 2007 & 2010

Household	Household Members	Livestock 2004	Livestock 2007	Livestock 2010	Licence 2004 (Y/N)
1	7	128	171	166	N
2	4	224	420	773	N
3	7	38	62	55	Y
4	5	45	100	128	N

Household	Household Members	Livestock 2004	Livestock 2007	Livestock 2010	Licence 2004 (Y/N)
5	5	207	60	185	Y
6	5	33	134	106	Y
7	8	378	447	322	Y
8	7	196	325	339	Y
9	7	287	160	310	N
10	6	346	214	735	N
Total	61	1882	2093	3,119	Y = 5

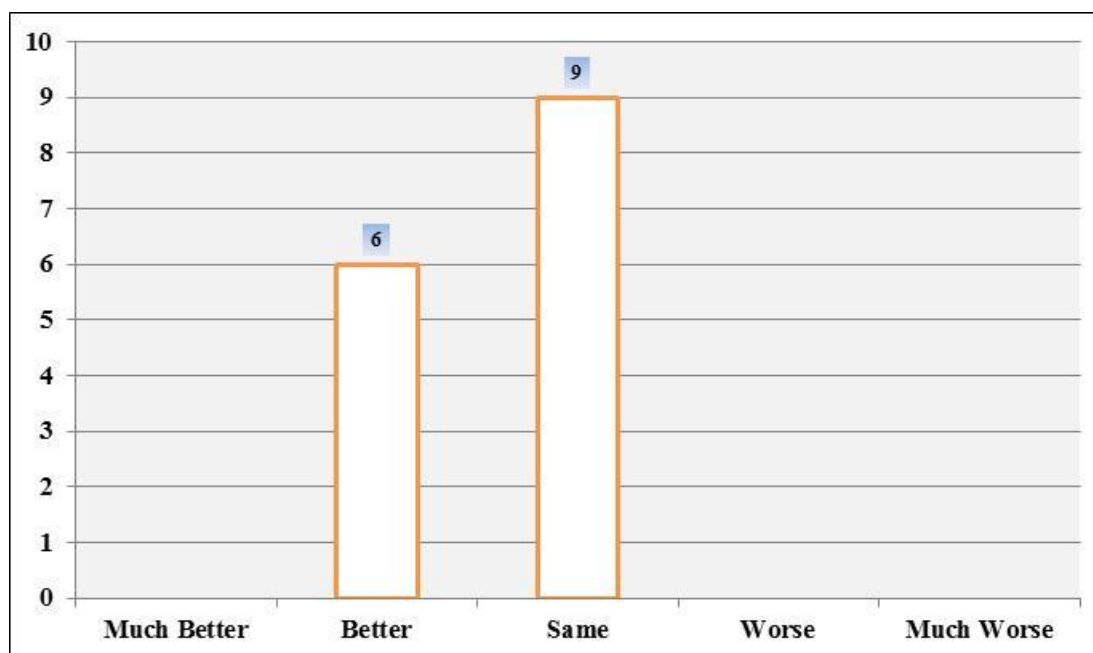
Source: Oyu Tolgoi Survey of resettled households, October 2010.

Views of Resettled Families on the Changes in their Lives

In addition to the questionnaire about incomes, possessions, land and so forth, a series of questions about people's perceptions of whether their standards of living had changed for better or worse were also asked. Responses to these were on a five-point scale, with the mid-point indicating no change. The responses are presented in graphic format below. The questionnaire was completed by all families separately, not as households.

Question 1. Standard of Living

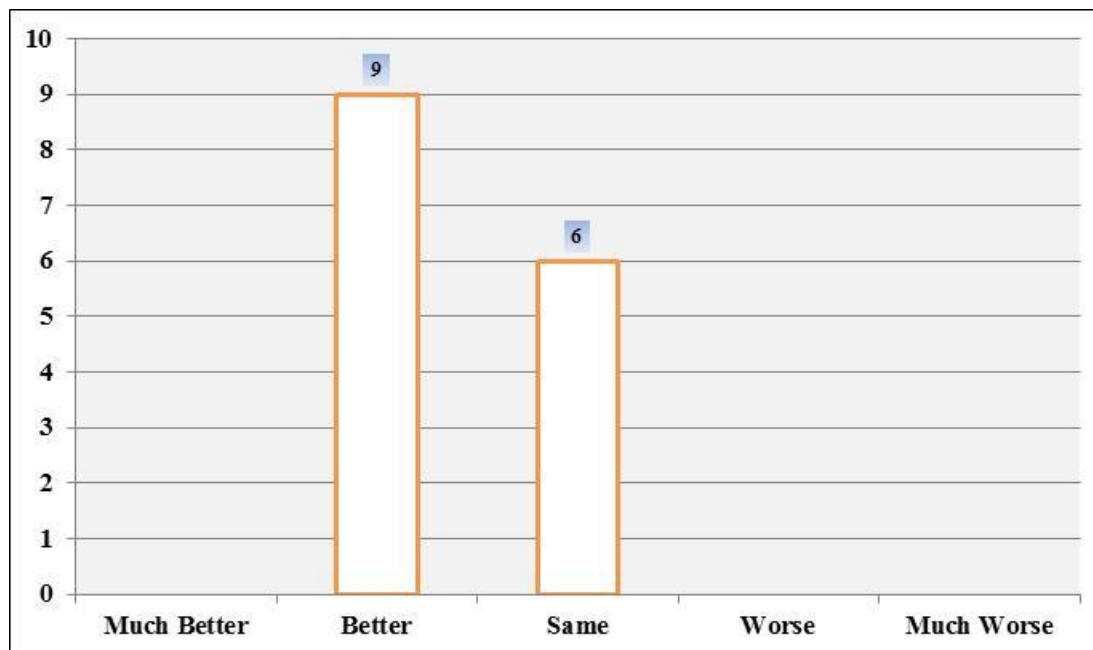
Would you say that your standard of living has changed since you were resettled?



The response to this first question indicates that all respondents considered their families to be as well off or better (over one-third) than they were before they were resettled.

Question 2. Income

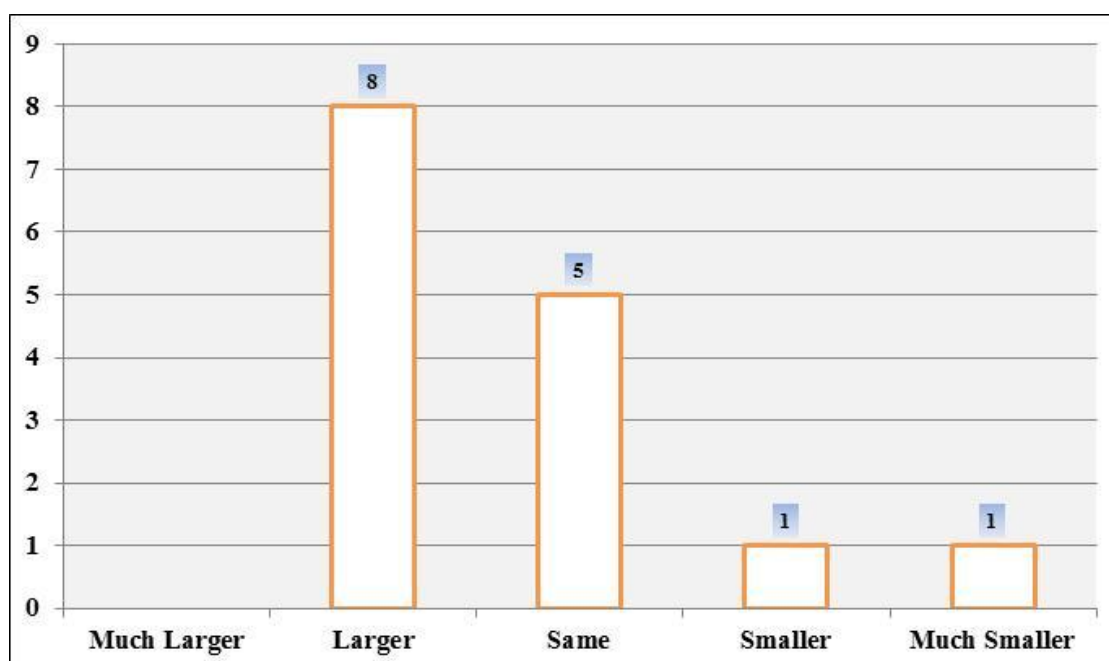
Would you say that your income has changed since you were resettled?



Responses to this question on income show that a majority of families have improved their incomes since they were resettled and the rest have at least as much income as before.

Question 3. Herd Size

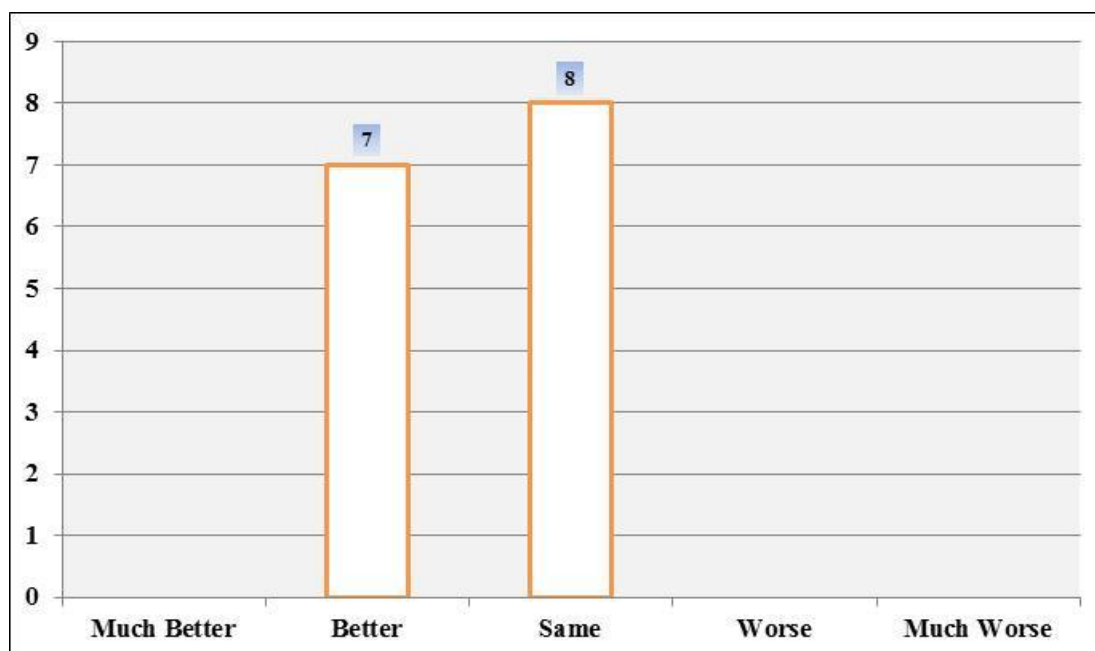
Would you say that your herd size has changed since you were resettled?



More than half of the resettled families' herds have grown or stayed the same. One respondent's has decreased and one has decreased substantially. As described above, these herders are now earning most of their income from paid work and living in the *soum* centre.

Question 4. Herd Quality

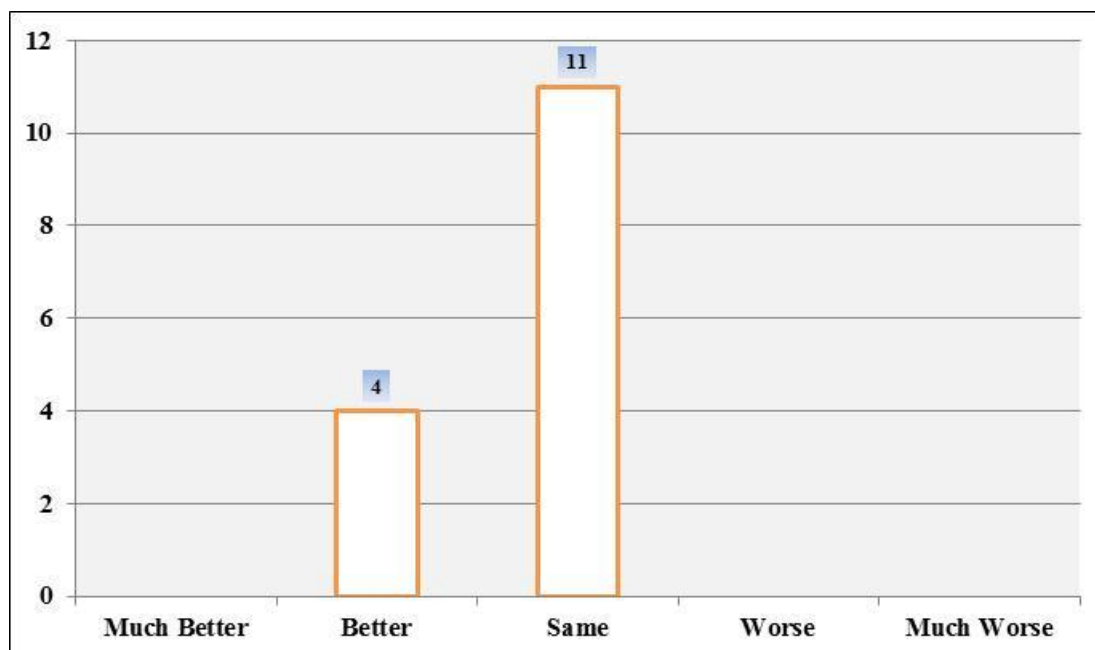
Would you say that your herd quality has changed since you were resettled?



Half the respondents said their herds were of the same quality as before while the other half said their livestock quality had improved, a significantly positive response.

Question 5. Pasture Access

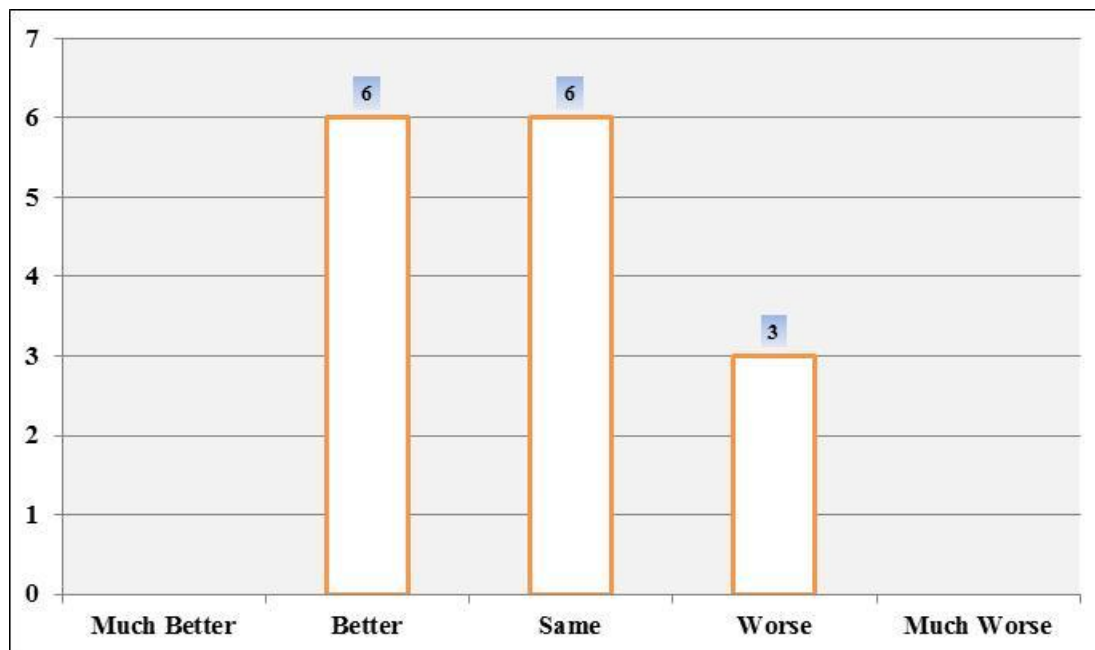
Would you say that your access to pasture has changed since you were resettled?



Most families said that their access to pastures had not been affected, either negatively or positively, by resettlement. Four families said that their access to pasture had been improved by the move, and no-one said their access to pasture was diminished. This demonstrates that the resettlement was successful in maintaining the herders' grazing access, and even improving it slightly.

Question 6. Water Access

Would you say that your access to water has changed since you were resettled?



Three families reported that their access to water has decreased since resettlement. Oyu Tolgoi has followed up with these families as has determined that the issues reported relate to well servicing/repairs, and is providing maintenance and repairs to these families. The other families, in equal numbers, said their access to water was the same as before or improved. For these families, the resettlement has restored or improved their access to water.

Annex G: Oyu Tolgoi Community Grievance Form and Flowchart

OASIS/Case No.:	
-----------------	--



Community Grievance Form

To be completed by community member / or Oyu Tolgoi

1: Personal information of community member

Name of complainant:	<i>First</i>	<i>Last</i>
Address:		
Aimag/soum/bagh:		
Contact number:		
Email:		
Organisation:		
Position:		

2: Type of Grievance

Check the box that most accurately describe the nature of the grievance

- Culturally significant, religious or heritage sites
- Resettlement
- Human rights
- Recruitment procedures
- Staff/contractor/supplier behaviour
- Security Personnel

- Environmental
- Donation-related
- Other (describe)

Note: if multiple complaints tick multiple boxes

3: Description of grievance

In order for your grievance to be properly addressed, you must provide detailed information for each question below. You may attach additional supporting documentation if necessary.

Date of the event (or knowledge of the event):

Description of the event that led to the filing of this grievance:

4. Suggested course of action:

--

5: Certification

I hereby certify that all information submitted on this form is true and complete to the best of my knowledge.

Signature:	
-------------------	--

Date of submission:	
----------------------------	--

Legal disclaimer

By receiving this grievance form completed by a community member, Oyu Tolgoi takes all subsequent actions and measures to resolve the complaint whether through its internal mechanisms, negotiation and mediation, or with the involvement of appropriate government bodies, however it does not warrant or assume any legal liability or responsibility that the course of action suggested by the complainant will necessarily be taken and enforced as described herein or expressed verbally by the complainant.

To be completed by Community Relations Officer

Date of receipt:	
-------------------------	--

Received by:	<i>First</i>	<i>Last</i>
Department:		
Position:		
Staff ID no.:		
Phone number:		
Email:		

Description and Level of Grievance

Write a detailed description of the grievance and classify the grievance according the Level outlined in the Grievance Procedure.

--

Initial complaint classification:			
<input type="checkbox"/> Level 1	<input type="checkbox"/> Level 2	<input type="checkbox"/> Level 3	<input type="checkbox"/> Violation Does Not Exist

Case No. Assigned:	
Submitted to:	
Department:	
Position:	

To be completed by Investigating Department Manager (or delegate)

Name:	<i>First</i>	<i>Last</i>
Department:		
Position:		
Staff ID no.:		
Authority:		
Phone number:		
Email:		

Date of receipt:	
-------------------------	--

Confirmation of complaint classification:			
<input type="checkbox"/> Level 1	<input type="checkbox"/> Level 2	<input type="checkbox"/> Level 3	<input type="checkbox"/> Violation Does Not Exist

--

5: Certification

I hereby certify that all information submitted on this form is true and complete to the best of my knowledge.

Signature:	
Date of submission:	

