



# Spirited away – Mongolia's mining boom and the people that development left behind

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# EXECUTIVE SUMMARY



This report presents the findings of a June 2011 fact-finding mission (FFM) to Mongolia organised by CEE Bankwatch Network, urgewald (Germany), Bank Information Center (USA) and Oyu Tolgoi Watch (Mongolia). The objective of the mission was to better understand the environmental and social impacts of the development of the Tavan Tolgoi coal (TT) and Oyu Tolgoi gold and copper (OT) deposits in the South Gobi region. The Ukhaa Khudag (UHG) coal mine within the TT deposit is financed by the European Bank for Reconstruction and Development (EBRD), while the Oyu Tolgoi project is under due diligence by both the EBRD and the World Bank's International Finance Corporation (IFC) .

The mission included visits to the capital of Ulaanbaatar, the Khanbogd and Tsogttsetsii soum centres and the UHG mine, as well as meetings with the following stakeholders:

- soum administration representatives including the governor and environmental inspector of Khanbogd, the deputy governor and environmental expert of Tsogttsetsii
- residents from Khanbogd<sup>1</sup>
- herders in Khanbogd and Tsogttsetsii
- doctors in Khanbogd and Tsogttsetsii
- ER staff at the UHG mine
- Rio Tinto Mongolia representative in Ulaanbaatar
- IFC representatives in Ulaanbaatar<sup>2</sup>
- several civil society representatives in Ulaanbaatar.

<sup>1</sup> The mission team was told that this meeting with 50 local residents was the first and only independent public meeting organised by someone other than the company where the community received information and raised its concerns.

<sup>2</sup> EBRD Mongolia RO staff was not available for a meeting with the FFM team.

The major findings of the mission are outlined below:

- Massive mining projects in the South Gobi are advancing even before sufficient scientific information has been produced about the possible environmental impacts of such large scale mineral development, raising concern about the effectiveness of the proposed mitigation measures. For instance mining continues without studies of water availability, the connection between deep water aquifers and shallow water tables, species migration and other issues.
- The interests of the South Gobi's traditional herder people and the mining sector are incompatible in the long-term and have resulted in conflicts over limited resources like land and water. The future for practicing a nomadic, herding lifestyle in the South Gobi is under threat, and yet there is insufficient information, discussion or consultation with the impacted communities, resulting in insecurity and fears about the future.
- The mining industry has to date had only a limited positive economic impact at the local level, while at the same time it has had predominantly negative environmental and social impacts. This is most pronounced in Khanbogd where infrastructure for the OT mine has been under preparation for years and the potential benefits for the community of mining have yet to materialise.
- Governmental institutions have limited capacity to ensure environmental protection and democratic and transparent decision-making. Citizens and local administration expressed feelings of marginalisation in decision-making on projects.
- The growing urban centres surrounding the mining projects are not prepared to provide adequate social services to the population influx, raising the risks for deteriorating conditions of health, safety and security. While mining companies can to some extent substitute for the soum administrations in provisioning for social services, this however undermines the local administration's governance function.
- There is little or no expertise and awareness among local people or soum administration officials about the health impacts from the development of the new mining industry – and potentially the coal power industry – as well as no capacity to monitor local air and water quality, areas that are most affected by mining activities and which pose the highest risk to community health.
- Awareness among impacted communities about the gender impacts and risks of major extractive industry operations is very limited. The gender impact assessment for the Ukhua Khudag project is far from adequate, consisting only of brief and ad hoc references to gender, employment, women and vulnerable groups, and community safety and security.
- The success of resettlement to date is debateable, as the accounts from mining companies and the EBRD differ from the concerns expressed by resettled herders and contradict sharply a report about OT commissioned by USAID.

# INTRODUCTION

Preventing the threat of climate change requires an immediate shift away from burning fossil fuels for energy, as confirmed by the International Energy Agency in its 2011 World Energy Outlook<sup>3</sup>. Investing in fossil fuel projects like coal mines and coal-powered thermal power plants locks countries into coal energy-dependency for decades, while at the same time the necessary shift away from fossil energy must occur within the next five years if global temperature rises are to be kept below two degrees Celsius, the scientific consensus for a safe climate. The carbon content of known fossil fuel reserves owned by governments and companies is already five times more than the amount that must be adhered to over the coming decades if we are to limit global warming to under two degrees Celsius<sup>4</sup>. 65 percent of the carbon potential of these reserves are in the form of coal.

In this context the development of the vast Mongolian mining sector – which has in recent years stirred the appetites of international mining companies and financial institutions alike –, should be evaluated as well for its potentially significant environmental and social impacts both locally and on the global level. Mongolia possesses 12 billion tonnes of proven coal reserves, of which two billion tonnes is coking coal and the rest thermal coal. Furthermore the development of Mongolia's vast copper and gold resources requires significant amounts of electricity, and this demand is likely to be met from coal-generated thermal power.

The market for Mongolian coking coal is relatively secure due to the demand of the Chinese steel industry, which it is estimated can absorb about 20 million tonnes of coking coal imports annually over the next five to ten years. Mongolia is in an ideal position to dominate China's import market<sup>5</sup>. However a market for thermal coal is less secure, due to China's own cheap domestic supply, as the competitiveness of Mongolian coal depends predominantly on the cost of transportation. As an alternative Mongolia is considering exporting electric power to its southern neighbour. For example of the 45 million tonnes of coal to be produced annually in the South Gobi region, 14 000 tonnes of thermal coal from Shivee Ovoo is planned to be converted into electricity in a 3 600 MW power plant.

It is understandable that Mongolia is looking to exploit its natural resources, as nearly a third of its population – close to one million – live below the poverty line. The country's strategy to achieve the Millennium Development Goals has set a target to reduce the poverty level to 18 percent by 2015. Measures to achieve this goal need to be intensified significantly given that poverty reduction between 2007 to 2008 was only 1.1 percent to a level of 35.2 percent<sup>6</sup>. The prospects for billions of dollars in revenues from copper, gold and coal are seen by some as a way to prosperity, illustrated by estimates that the OT gold and copper project once operational is expected to contribute to an increase of Mongolia's GDP by 30 percent.

3 IEA, 2011 WEO: [http://www.iea.org/press/pressdetail.asp?PRESS\\_REL\\_ID=426](http://www.iea.org/press/pressdetail.asp?PRESS_REL_ID=426)

4 "Unburnable Carbon – Are the world's financial markets carrying a carbon bubble," Carbon Tracker Initiative, 2011

5 WB Southern Gobi REA: The cost of production of Southern Mongolia's coal will be in the order of USD 10-USD 30/tonne. The cost of rail freight into China could be in the order of USD 10 - USD 30/tonne. And the price paid by Chinese power plants for thermal coal ranges from USD 18 - USD55, depending on the thermal value of the coal. The price paid for rail freight will be a key factor in selling thermal coal to China.

6 Mongolia's Third National Report on the MDGs Implementation, 2009

Nevertheless, many Mongolians are less optimistic about the benefits of mining, and their concerns are legitimated by the negative impacts that mining projects are already causing.

Traditional livelihoods in Mongolia are based in animal husbandry and rely on the pasture that covers 75 percent of the country. Agriculture contributes 20 percent to Mongolian GDP and employs 40 percent of the population, with cropping employing only three percent of the population)<sup>7</sup>. The animals raised in Mongolia are primarily sheep, goats, cattle, horses and camels, producing important sources of meat, milk and wool. Goats are especially valued for their cashmere and are the most economically-profitable livestock for herders.

Raising livestock in the Gobi is particularly more difficult than in the rest of the country, due to the scarcity of pasturelands and water. There are very few herders remaining near the Tavan Tolgoi coal mines, primarily as a result of the 2008 and 2009 zuds<sup>8</sup> that claimed 70 percent of herd sizes. Around Khanbogd the situation is considerably different – there are approximately 630 herder families and more than 100,000 livestock<sup>9</sup>, which are at risk from the coal export road and the development of OT infrastructure.

The future of herding in the South Gobi is under threat, as the development extensive mine infrastructure pushes herders out of traditional camps, fragments pasture land and puts pressure on water resources. Increased concentrations of dust have only exacerbated desertification and the decreasing quality of vegetation.

***“Water levels are decreasing, our household can only sustain 60 animals instead of 200. This is not sufficient for earning a living, it is even hard to feed the family.” – Herder at the public meeting in Khanbogd.***

In return for the heavy impacts on their environment and livelihoods, local communities have been promised increased employment opportunities. However an influx of people from outside the region increases competition for jobs, and while herding engages both men and women, mining offers more opportunities for men. Herders also lack training for the types of work needed in the mines, and the salary for an unskilled position does not match the income generated from a herd size of 100 goats.

South Gobi residents have also been promised improved urban infrastructure from mining companies like ER to develop soum centers like Tsogttsetsii. On the contrary this report shows that the development of infrastructure is not properly planned and implemented in a timely and coordinated manner that addresses the increasing risks posed by population influxes, resulting in decreased access to and quality of services like health and education.

***“What can the OT company show as the achievements of its community programmes? You see we have no infrastructure, no electricity ... the promised benefits are not being realised as fast as the destruction of our health, land and livelihoods.”***  
– Participant of the Khanbogd public meeting.

7 Source: [http://en.wikipedia.org/wiki/Agriculture\\_in\\_Mongolia](http://en.wikipedia.org/wiki/Agriculture_in_Mongolia) Additionally, statistics on employment can be seen here: <http://www.infomongolia.com/ct/ci/1161/146/> and on animal husbandry: <http://www.infomongolia.com/ct/ci/1506/>

8 Mongolians divide between black and white zuds – winter disasters that kill many animals. A white zud means that there is too much snow for the animals to access food, while a black zud is when all water sources are frozen and the animals cannot access water.

9 USAID report

# TAVAN TOLGOI

## – who benefits from the Gobi’s vast coal deposits

The Mongolian government and international mining companies want to see the country transformed into a modern mining nation, and the vast coal deposits in the Gobi desert are essential to these plans. The Tavan Tolgoi deposit (TT), located around 270 km north of the Chinese border, is one of the largest exploration areas with an estimated 6.4 billion metric tonnes of coal, about a quarter of which is estimated to be the high quality coking coal necessary for steel production and the rest thermal coal. To date the vast majority of the deposit has not been tapped. Currently the Mongolian state holds mining rights to the deposit via Erdenes MGL LCC, a state company that has since the 1960s exploited a minor part of the deposit. Erdenes MGL LCC has created the subsidiary Erdenes Tavan Tolgoi (ETT) to handle the coal deposit assets<sup>10</sup>.

### Ukhaa Khudag coal mine

While the Mongolian government decides how best to use the Tavan Tolgoi deposit, the private Mongolian company Energy Resources LLC (ER) is already developing a small portion of the deposit. The company owns a licence for 2,962 hectares and 286 million tonnes of proven and probable reserves respectively<sup>11</sup> and has operated since 2009 the Ukhaa Khudag (UHG) coal mine, producing a variety of high quality coking and thermal coal products. According to ER estimates, the UHG mine covers four percent of the Tavan Tolgoi deposit.

The European Bank for Reconstruction and Development (EBRD) owns a minority stake in ER and in 2010 provided a USD 180 million loan to the company for mine expansion and the construction of a coal washing plant<sup>12</sup>. Currently ER is implementing the second phase of the UHG project, expanding its production from 2 million tonnes to 15 million tonnes annually. In 2010 the mine achieved its annual production target of 3.8 million tonnes of coal and has a target of 7 million tonnes for 2011.<sup>13</sup> The EBRD also provided a senior loan of USD 35 million to Leighton Mongolia, subcontractor at the UHG mine, *“to finance the initial working capital, and part of the costs for the equipment required for contract mining of the UHG mine, and to finance additional work on Mongolian projects”*<sup>14</sup>.

10 „Mongolian coal selloff attracts foreign banks“ AFP, 9.2.2011

11 As of 31 May 2010 <http://www.energyresources.mn/projects>

12 EBRD press release “EBRD funds first coal washing plant in Mongolia”, 6.7.2010: <http://www.ebrd.com/pages/news/press/2010/100706.shtml>

13 ER Press release “Ukhaa Khudag mine production target achieved ahead of schedule”: <http://www.energyresources.mn/news/show/id/6>

14 Project Summary Document: <http://www.ebrd.com/english/pages/project/psd/2009/40664.shtml> transport sector.”

UHG is located in the Tsogttsetsii soum (municipality) in the Umnogovi aimag (South Gobi province), not far from another world class deposit, the Oyu Tolgoi copper and gold deposit, where Ivanhoe Mines and Rio Tinto are expected to commence operations with the financial support of both the EBRD and International Finance Corporation. Additionally the EBRD is considering a loan of USD 350 million for the Mongolyn Alt Corporation's Tsagaan Suvarga copper mine, a Mongolian-owned company that already received a loan of USD 45 million from the EBRD in 2007. The USD 350 million investment in MAK Phase II will exceed the EBRD's net business volume in Mongolia for the period between 2006 and 2010<sup>15</sup> and dwarfs the bank's investments in the non-mining sector<sup>16</sup>.

## Mining town Tsogttsetsii – benefit-sharing and local infrastructure

Tsogttsetsii is a coal town that has grown significantly in the past few years, largely as a result of ER's construction activities and the influx of people looking for jobs at the UHG mine. The soum's economy was traditionally based on the herding of livestock until just a few years ago, but recent winter disasters wiped out around 70 percent of herders' livestock. Many herders then settled in Tsogttsetsii and began searching for employment. The population increased from 2200 to 4500 permanent residents between 2008 and 2011, and is as high as 10000 people when counting temporary workers<sup>17</sup>.

Like many urban areas in Mongolia, Tsogttsetsii is divided into two types of residential areas. Aside from the municipality and ER buildings, only a minority of the town lives in brick houses with a constant power supply, sanitation and piped-in water. The majority of people live in traditional 'ger' shelters that lack the infrastructure for power, heating, water and sanitation. Those living in gers bring water from several water supply points in town, use outhouses and burn coal or other combustible materials for cooking and heating. Some gers have solar panels for electricity.

Tsogttsetsii's deputy governor and environmental specialist said that the local administration is generally content with role ER has played for the town's development, but it remains to be seen whether the municipality's low institutional capacity will be able to cope with the challenges posed by the growth of mining operations in the soum territory. For example though the number of residents in Tsogttsetsii has doubled, the hospital remains the same size (with just ten beds), as are the school (400 places) and kindergarten. The administration now plans to expand these services, but the soum does not currently earn enough income from taxes and mine revenues to expand both the school and hospital at the same time.

According to the environmental and social impact assessment (ESIA) of UHG's Phase II project, the projected long-term impact of the project on communal infrastructure is positive because of increased investments from both mining companies and the government as tax revenues and royalties increase. At the same time the ESIA also acknowledges that the influx of job-seekers and their families will pose significant challenges for Tsogttsetsii's social infrastructure and will negatively impact access to these services in the short-term<sup>18</sup>.

15 EBRD country profile for Mongolia: <http://www.ebrd.com/pages/country/mongolia.shtml>

16 The EBRD claims the following on its web site: "The EBRD will continue to play a crucial role, together with partner IFIs, in developing the transport, energy and municipal infrastructure in the country. The majority of future Bank investments (in terms of volume) are expected in the transport sector." See <http://www.ebrd.com/pages/country/mongolia.shtml>

17 Numbers were given by the soum's deputy governor, although other reports suggest that the population has expanded from 1,500 people to at least 13,000, of which 2,000 will have permanent jobs at UHG: USAID report "Mongolia - Oyu Tolgoi Copper/Gold/Silver Mine Project Trip Report", May-June 2011

18 From the ESIA: "Making sure these long term benefits to do not come at the expense of short term impacts will require temporary funding to meet the gap between state funding budgets and local needs, which will reduce during the Project life."

The soum government should receive 10 percent of the royalties paid to the state by mining companies, with the provincial (aimag) government set to receive 20 percent and the rest going to the central government. The central government has however restricted the amounts that the soum receives. The deputy soum governor estimates that the soum can keep around MNT 200 million (roughly EUR 112 000) of the MNT 6.1 billion paid in royalties, or about three percent. Yet this amount is also based only on the 4500 permanent residents in Tsogttsetsii and does not account for non-registered residents and additional commuters like truck drivers.

While the Tsogttsetsii deputy governor estimates that the agreed ten percent of mining royalties would be sufficient to expand the school and hospital, the current amount that is actually received is sufficient only to pay administrative running costs. Any extra money is allocated to the soums according to their expressed needs, and in the case of Tsogttsetsii, an additional MNT 2.1 billion has been requested from the state for the extension of the kindergarten, a heating plant, the expansion of transmission lines and a new cultural facility.

Because Tsogttsetsii lacks funds to construct new infrastructure, ER is investing significantly in the soum's development. While the administration plans to gradually repay ER, the deputy governor is unsure of the terms of this agreements eg. whether the investments are in the form of a public-private partnership or similar. ER explained that the company is building the school and hospital and will allow the administration to use it on the condition that the administration pays for its use.

Examples of ER investments include:

- Over USD 67 000 for school infrastructure improvements, teacher exchange programmes, and hospital upgrades<sup>19</sup>;
- Summer school for 70 pupils, with the ten best participants receiving scholarships to study abroad;
- Construction of a school complex for 640 students and a dormitory for 100 students, with ER financing most construction and equipment costs and assuming responsibility for its management<sup>20</sup>.
- A water purification plant that will provide drinking water for soum residents. The price of water will be MGT 1.5 per litre, which does not include the cost of water purification, so ER plans to cover the difference. However ER did not mention the actual price of water purification.<sup>21</sup>
- Plans for addressing the soum's solid waste, including a new landfill site with a recycling plant on which construction should soon begin. The deputy governor appreciated this initiative of ER.
- A 18MW power plant at the UHG mine<sup>22</sup> that is expected to provide electricity to both the mine and the soum centre. In June 2011, energy supplies in Tsogttsetsii were still very unstable with frequent blackouts, so many households and service facilities use diesel generators as a supplement.
- An airport and associated paved road to the mine site, including several pedestrian crossings in the soum centre, paved sideways with street lights; and
- An annual festival of the traditional long song to promote local cultural heritage.

19 ESIA for UHG Phase II Project

20 Reply from Alistair Clark to letter from Fidanka Bacheva-McGrath, dated 14th September 2011.

21 Additionally the Asian Development Bank (ADB) intended an investment in a water sanitation project in the Umnogovi aimag (where Tsogttsetsii soum is situated). However, the design for this project was for the original 2.200 inhabitants, so it was put on hold and awaits adaptation of design for the enlarged population. The EBRD is currently considering joining the project: <http://www.ebrd.com/english/pages/project/psd/2011/41627.shtml>

22 Opened in September 2011. ER press release: <http://www.energyresources.mn/news/show/id/20>

In Tsogttsetsii there is also a noticeable difference between the facilities provided for company workers (situated two kilometres from town) and the living conditions in the predominantly ger residential areas of town. This supports the observations of one recent World Bank study that “*mining companies are not the best entities to plan, build and operate town services*”<sup>23</sup>, especially when these services should provide for non-employees in growing mining towns. ER currently subsidises the water and power supplies in Tsogttsetsii, but it is uncertain whether the company will continue to do so when the town’s population rises significantly. Therefore the lack of coordination between the central government and local administrative levels is worrisome in light of the preparations necessary to support the expected further growth of mining activities and population influx to the region.

#### **BOX: ENERGY ACCESS FOR THE POOR**

With the growth of mining activities in the south Gobi, demand for both urban infrastructure and electricity is increasing. Supplying electricity for TT operations and the OT gold and copper mine will require new power generation capacities and transmission infrastructure and as well significant investments. The question remains who will make these investments and how will optimal scenarios for the end-user be secured.

Because of abundant coal reserves and expertise in thermal-power generation, coal-generated thermal power is seen as the natural solution. While China has a huge demand for coking coal, the market for thermal coal is less promising and thus prompting alternative plans for Mongolia to export electricity. Although solar panels (and to a lesser extent wind turbines) are often seen on gers to supply electricity, the large-scale utilisation of renewable energy resources (RES) is not on the political agenda of the Mongolian government, businesses or international financial institutions<sup>24</sup>. Some experts dismiss RES as the solution for Mongolia’s population and industry due to the limited storage options, while an ER representative pointed to possible compatibility problems with desert climate conditions. Ultimately the lack of expertise in RES utilisation and sufficient policy and financial incentives for solar or wind projects only promotes plans to lock Mongolia into a carbon-heavy dependency.

There are several planned projects and some already being implemented to construct new power generation capacities and transmission lines in the South Gobi to address the future needs of TT, OT and other mines:

- In 2008 the Ministry of Fuel and Energy proposed the construction of a 600 MW power plant for Tavan Tolgoi coal mining projects. An even larger, 2000 MW power plant was discussed but little work has been done by the government to realise these plans.
- In addition to the 18MW thermal power plant at the UHG mine, the project’s Phase II ESIA mentions construction of a 100MW coal-fired power plant at the mine site to provide enough electricity for expanded mine operations, the coal handling and preparation plant (CHPP) and associated infrastructure, mine

<sup>23</sup> Southern Mongolia Infrastructure Strategy, IBRD/WB, 2009

<sup>24</sup> For example the EBRD has invested less than USD 1 million in the Salkhit wind project: <http://www.ebrd.com/english/pages/project/psd/2009/41112.shtml>

camp facilities, the delayed railway, and as well the soum centre. As scarcity of water sources may limit the possibility for water-cooling at the 100 MW power plant, an air cooling system is proposed to accommodate the future generation capacity.

- Under the current investment agreement with the Mongolian government, OT can import electricity from China for the first five years of production and then must source electricity domestically. As such, a 450 MW coal power plant is under preparation for the OT mine.
- A single coal-fired power plant is being discussed for both TT and OT operations, but this option is the least preferred by the mining companies, because they prefer in-house generation, so the suggestion has received the least attention.

Financing the new investments will require tariff increases, and some cost recovery calculations suggest that this infrastructure may lead to increases of 230 percent for drinking water and 350 percent for electricity when compared with current tariff levels in southern Mongolia<sup>25</sup>. It is not clear if the population of the region will be able to afford the new tariffs, and no studies could be found that examine the risk for increased energy poverty.

Moreover, the soum administration in Tsogttsetsii has no equipment for monitoring air quality or other impacts from the UHG mine and relies solely on the company's own monitoring data. Soum officials lack expertise and have extremely limited capacity, with just one environmental specialist compared to 18 at ER. In spite of this, the soum has no additional resources to invest in equipment or technical and language training for staff.

Altogether there is little to no awareness among local officials about the health impacts of coal mining and thermal power generation, the ESIA consultations on the UHG project do not appear to have been enlightening in this respect. Much more awareness-raising is needed for administration officials and the population, and this issue underlines the limited role that mining companies can play in awareness-raising on health issues. There is a lack efforts on behalf of central government to address local government needs to better understand the negative impacts of the coal industry.

In conclusion, given the dependence of the local government on mining companies, it is hard to understand how mine development has contributed to improved resource sharing and governance at the local level, or how the soum administration is now better positioned to make independent, competent and transparent decisions in the interest of its citizens. The current experience is not reassuring that the Mongolian government is prepared for further mineral development in the South Gobi.

## **The environmental and social impacts of the Ukhaa Khudag mine**

### **Health impacts and awareness**

The deputy soum governor and environmental specialist shared with the FFM team that the local administration is not well enough aware about health problems associated with coal

25 USAID report "Mongolia - Oyu Tolgoi Copper/Gold/Silver Mine Project Trip Report", May-June 2011

mining in areas around the mine. Although project ESIA's include assessments of health impacts, these officials said that the health risks were not discussed in enough detail during public consultations to the extent that the affected community would understand them sufficiently.

The responsible corporate social responsibility authority at ER said that such meetings were held previously, and the official ER website records training sessions for medical doctors from four soums and that around 1500 patients have received health screening and diagnoses<sup>26 27</sup>. The company representative stated that the next training sessions and health screening were planned for 18-19 June 2011 and would include the aimag centre Umnogovi. These initiatives appear more focused on surveying public health in the community rather than raising awareness about potential health problems associated with coal mining.

The ESIA for Phase II of the UHG project also includes some alarming statistics:

- Medical experts raised concerns about the rise in asthma and bronchitis cases associated with increasing dust and diminishing water quality
- Local herders attribute many health concerns to dusty conditions and poor water quality
- The Tsogttsetsii soum has higher averages than other parts of the Umnogovi aimag for all diseases, a tendency that may be linked to an increase in fugitive dust and traffic from mining activities
- Injuries, poisoning and other disorders caused by external factors in Umnugovi aimag are twice the aimag average, which may be attributable in part to increasing vehicle traffic associated with mining
- The rural Umnugovi aimag saw annual increases in communicable diseases each year between 2005 and 2008, which could be associated with an increase in population during the same years, resulting in the generation of more waste and sewage, overcrowding and higher demand on services.

While the ESIA assessed the health impacts of the projects, it mostly focuses on the impacts and associated mitigation measures of the construction of a planned railroad to China. The ESIA is preoccupied with the benefits of rail transport over road and does not assess in enough detail the impacts of the road and dust generated from it. The railroad project has not been realised and the prospects for its implementation are unclear, therefore it is questionable how adequately the dust and health impacts of transportation have been assessed.

During the mine site visit ER staff said that the company is currently working on a more detailed health impact assessment, yet this was contradicted by the EBRD. The bank insists that the health assessment was completed and consulted as part of the ESIA process, and now the company is in the process of implementing its Environmental and Social Management Plans and the relevant Community Health, Safety and Security and Stakeholder Engagement Plans<sup>28</sup>. It remains unclear whether or not a new assessment will be performed and how this might influence current ER activities.

26 Based on health screening, patients suffered predominantly from stomach inflammation, bile inflammation, gallstones, kidney stones, hardening of the muscles, cervical cancer, tension headaches, pain in neck, waist, back and spasms.

27 <http://www.energyresources.mn/responsibility/show/id/10>

28 Reply from Alistair Clark to letter from Fidanka Bacheva-McGrath, dated 14<sup>th</sup> September 2011.

## Air pollution

Sources of air pollution and dust from the UHG project more specifically include the:

- mining site, including the pits and piles of waste rock;
- power production at ER power plants;
- boiler sources for CHPP and tailings facility;
- supply of construction materials (quarrying) or land disturbances for related infrastructure eg worker accommodation, airstrip, water pipeline, internal roads; and
- transportation of coal to China, including the stockpile near the Mongolian-Chinese border.

These dust sources are exacerbated by strong winds and occasional dust storms in the area. There are provisions like water suppression proposed within the ESIA and management plans to tackle dust and particulate matter in the air for all stages of production and transportation. However, these seem not to have effectively materialised yet. For example during a visit to the mine site, the company did not have the permission to use water for dust suppression on the roads because it is prohibited by Mongolian legislation. Additionally, the deputy governor explained that the piles of waste rock are covered with soil and planted trees<sup>29</sup>, however no signs of soil coverage or trees on the piles were visible.



*Waste rock pile at the UHG mine*

The expansion of the UHG Mine will lead also to increased traffic on the coal road. Since other coal companies use the road, the UHG Project does not exercise operational control over the existing road. Furthermore, as the ESIA for Phase II focuses on railroad

<sup>29</sup> "The stockpile(s) should be in an area where drainage from the site can be controlled to prevent sedimentation of water bodies. Wind erosion can be controlled by seeding the stockpile with a seed mix that establishes quickly and maintaining a roughened surface." Environmental and Social Impact Assessment

construction and stresses the benefits for air quality, emissions reductions, safety and general efficiency of the railroad over the coal road. However, the impacts of transportation by trucks on the coal road as well as mitigation measures are not studied sufficiently, and as the ER railroad project is currently on hold by the ruling of the Mongolian government, it is unclear how the company is mitigating the impacts from the coal road.

Additionally there is the problem of the cumulative impacts of coal transportation to China. In addition to the dust caused by other entities using this route to export products, dust is also caused by activities like pipeline construction or quarrying for inert material. In the Khanbogd soum especially, which is crossed by the longest stretch of the export road, dust and respiratory problems for people and livestock are most severe.

At the public meeting in Khanbogd mothers complained that increased dust is causing more severe and frequent respiratory diseases like bronchitis, and herders complained that animal entrails are black with dust and thus unfit for consumption. Doctors interviewed in the Khanbogd soum said that respiratory diseases and laryngitis are increasing and also suggested that this might result from the high amounts of dust from mining activities and the transportation of coal to the Chinese border. The Khanbogd hospital has also experienced an increase in traffic-related accidents on the roads from export activities, but currently the soum has only one ambulance that at times can be on call for the whole day with one of the doctors.

In conclusion it is apparent that the increase of mining operations in the south Gobi region has negatively impacted the health of the local population, and unfortunately citizens and officials remain uninformed about these impacts, about possible future risks and the measures available for mitigation. While mining companies like ER are doing the minimum required by law to inform and consult affected communities about health problems caused by their operations, they will not exceed the minimum and accept more responsibility, particularly as some impacts are cumulative from the activities of different companies.

#### **BOX: THE COAL ROAD AND OTHER GOBI INFRASTRUCTURE**

In early 2011, the number of trucks on the coal road daily reached over 1000, causing protests in May from herders and a temporary closure of the road.<sup>30</sup> ER transports coal daily in up to 500 trucks, and this number can reach 1300 when including the transport from other mines<sup>31</sup>. In September 2011, ER reported completion of a new 245 km hard-surface road to Gashuun Sukhait on the Mongolian-Chinese border, and ETT is said to transport coal on this same road<sup>32</sup>.

This road sets an interesting precedent, as it is the first infrastructure project in Mongolia constructed by a mining company for the use of the industry<sup>33</sup>. While the road relieves to some extent problems related to dust, pasture fragmentation and road safety, it also raises concerns from some stakeholders about the approach to infrastructure development in the South Gobi region.

As the government lacks the expertise and financial resources necessary to

30 According to Khanbogd citizens, who participated at the public meeting with the FFM team on 8th June 2011.

31 USAID report: "However, there are reports that as many as 4,800 trucks/day are operating from Tsogt Tsetsee. [...] Segments of the new [hard surface] road the USAID team viewed did not have any wildlife crossing areas."

32 Media report "Energy Resources LLC completes coal road to Gashuunsukhait": <http://www.business-mongolia.com/mongolia/2011/09/30/energy-resource-llc-completes-paved-road-to-gashuunshukhait/>

33 Media report "Energy Resources receives infrastructure financing" of USD 75 million from Standard Bank : <http://www.business-mongolia.com/mongolia/2010/07/08/energy-resources-receives-infrastructure-financing/>

coordinate and invest in necessary infrastructure, mining companies fill this vacuum and are advancing a number of projects like roads, airstrips, water pipelines, electricity transmission lines and so forth. The local people that are affected have little say in the decision-making process and are caught in the web of various infrastructure projects. Even though studies on wildlife migration patterns are incomplete, construction has preempted any meaningful mitigation measures.

For example the 220 kV transmission line stretching 120 kilometres from OT and to the Chinese border will be constructed next to a separate 100 kilometre road to Gashuun Sukhait. This route is parallel to the ER coal road, with the two crossing in places and at times within 10 kilometres of one another. OT claims that it cannot use the same road as used for transporting coal because their trucks are larger and are moving heavy equipment, necessitating the extra metre and a half-wide road. While this may justify OT's requirements, it is impacting local herders, whose pastures have been degraded by increased dust, fragmentation and noise.

*"It is questionable anyway why the OT company needs its own separate road: all five animals (camels, horses, cattle, sheep and goats) use the same ways, why can't the OT company use the same road as the other mining companies."* Participant at the Khanbogd public meeting.

This infrastructure increases the impacts on traditional herders and their livestock, natural ecosystems and wildlife. Several stakeholders have already raised concerns that the main impacts of mining will be outside of the direct mine footprint, a point which has not been adequately assessed during project preparation. In the case of OT and Khanbogd, the ongoing infrastructure construction works are already frustrating local herders, while consultations and information processes are expected only later after the ESIA is finalised – when it is already too late. A USAID report estimates that in Khanbogd, approximately 630 herder families and more than 100 000 livestock have already been directly or indirectly impacted by infrastructure developments.

## Water

In a desert environment like the Gobi, water is obviously an important resource and especially true in the context of mining, which requires significant amounts of water and influences the flow of groundwater through dewatering of open pits. The Tsogttsetsii deputy governor confirmed that herders are complaining that shallow, manual wells are drying up.

The ESIA for the UHG Phase II project<sup>34</sup> does not include an alternative scenario for the coal handling and preparation plant, which will consume the majority of water during the production process. At full capacity, the coal-washing plant requires approximately 125 litres per second during operations, of a total 177L/s required for the entire project. Although there are benefits in locally improving the quality of coal products before transportation, more careful considerations of water scarcity in the region would call for looking again at the chosen option.

<sup>34</sup> ESIA for UHG Phase II Project

## Water Requirements of the Project

Year	Estimated Water Demand (L/s)				
	2009	2010	2011	2012	2013
Stage	1	1	2	3	4
CHPP	0	42	42	84	125
Camp Domestic	1	2	2	5	5
Mine Domestic	1	2	2	5	5
Power Station	0	7	7	7	7
Dust Suppression	0	0	35	35	35
<b>Total</b>	<b>2</b>	<b>53</b>	<b>88</b>	<b>136</b>	<b>177</b>

Source: Aquaterra (2009) Ukhaa Khudag Railway Construction Water Supply

ER draws water from a deep-water aquifer in the Naimant Depression at a rate of 117 litres per second. The 200 metre-deep boreholes are located 20 kilometres north of the mine and transported to the mine through a pipeline. The outtake of groundwater will lead to a drawdown of water levels in the deep aquifer, and the recovery of deep aquifers is unlikely due to the low rainfall and very low rates of infiltration. As such ER is allowed to use only 25 percent of the aquifer for its total mine lifetime.

While UHG is allowed to use 25 percent of the aquifer, the deposit includes only four percent of Tavan Tolgoi's coal, suggesting that there will be competition for water once other parts of the deposit are developed. The ESIA for Phase II identifies that the Balgasyn Ulaan Nuur groundwater resource, located 70 kilometres west of the UHG mine site, *"can sustainably provide more than 150L/s of groundwater, with an associated drawdown of 3m. On this basis, formal approval was provided by the Mongolian Water Authority for a supply of 150L/s to ER."*

When asked about complaints from herders about wells drying up, ER staff said that there was no exchange between the deep and shallow aquifers that the herders use and that this was an issue before the work at the UHG mine commenced. The EBRD supports this idea of there being no exchange between the two layers of water and asserts that these represent two distinct water systems. While there are doubts about this opinion, it cannot be judged accurately without the availability of hydrogeological data. At the same time, the Galbyn Gobi aquifer is under consideration as an additional water supply for OT, although tests have shown a connection at least in part between the deep and shallow aquifers.<sup>35</sup>

There is additionally the problem of mine dewatering that can lead to lower surface water tables, causing springs and shallow wells to evaporate and leading to stress on the soils and plants in the desert ecosystems. One World Bank study argues that the impacts of dewatering *"are not of great consequence in the context of the entire SGR [South Gobi Region], but they can be quite significant on a local or subregional scale in the context of herders and their animals, resident and migratory wildlife, and land degradation"*<sup>36</sup>.

At the waste rock dumps there were no visible protective measures against acid leachate from waste rock (to impact soils, ground water and surface waters<sup>37</sup>) mentioned by the Tsogttsetsii deputy governor and environmental expert. While this might seem like a

<sup>35</sup> USAID report

<sup>36</sup> WB, Southern Gobi REA

<sup>37</sup> "Ensuring that a low permeability basement pad or surface is present prior to stockpiling can significantly reduce the potential for contaminated stockpile seepage or drainage to migrate offsite through the shallow or deeper groundwater zones.", same

minor issue given low precipitation levels in the Gobi at only 122 millimetres annually, the pollution/acid leachate can be brought to the shallow aquifers easily as these are refilled through local precipitation and infiltration, given that “the soils in these areas have high infiltration rates and are well drained”<sup>38</sup>.

Originally drainage channels were planned ‘downstream’ from the stockpile in order to direct rainfall towards a central storage pond where the water would be prevented from reaching surface waters and later recycled for dust suppression or filtered prior to release into the natural environment, but these were not observed either. Even though the impact is considered minimal for the mine site, it seems to underestimate the impact on the rest of the sites, as there is widespread use of shallow aquifers by herders throughout the region.

### **Resettlement**

The Asian Development Bank, IFC and EBRD policy requirements on indigenous peoples have not been officially applied to this project, because residents in the project area are not considered indigenous people or ethnic minorities.<sup>40</sup> ER claims resettlement has been done according to best international practice,<sup>41</sup> but two herders interviewed during the mission expressed their dissatisfaction<sup>42</sup>.

#### **Interview with first herder at the UHG mine**

One family was resettled twice, since the land offered as compensation after the initial resettlement is licensed by the mining company Erdenes Mongol. The family considers compensation from the second resettlement inadequate since they received no land title certificate. In later discussions with ER representatives, ER acknowledged this issue but responded that the company had in fact provided the resettled families with land titles. Therefore it is not possible to conclude if the problem was resolved and what were the exact causes of dissatisfaction for the resettled herder.

#### **Interview with second herder at the UHG mine**

Another herder whose winter camp was located in the ER mining area received MGT 4.2 million in compensation, or roughly equal to his annual income. He complained that the compensation did not match the impacts of resettlement, which last much longer than a one off cash payment. He sought compensation for an amount equal to 30 years of employment, but the relocation contract was not negotiable, provided to all parties on a take-it-or-leave-it basis. The herder was able only to review the contract just before signing in 2010.

He also recalled that, in anticipation of the winter zud, he tried to sell 100 of his weakest goats to ER. The company refused to buy the goats since ER requires certificates ensuring their quality, but which are impossible to certify due to the excessive coal dust that makes internal organs unusable. Thus he said that most of the meat eaten at the ER facilities comes through a contractor from Ulaanbaatar. The herder lost all his animals in the zud and had no reason to stay at the relocated place after that, therefore he moved to the soum centre.

38 ESIA for UHG Phase II Project, p.6-52

39 Ibid, p. 6-67

40 Ibid, p.5-101

41 Ibid, p. 5-137

42 Response to a letter of OT Watch from Alistair Clark, EBRD’s Corporate Director, Environment and Sustainability Department, dated 23 Nov. 2011

## BOX: AN EXAMPLE OF ER'S SOCIAL AND COMMUNITY PROGRAMMES

ER has a program for retraining resettled and former herders that moved to towns after losing livestock. The company intends to train them to cultivate agricultural products and search for plant varieties that can be cultivated in the Gobi desert. The idea is to plant trees and cultivate the land with for example vegetables and shrubs. At its operational facilities, ER has a show garden where after two years of constant watering and work, some plants and trees are growing and testing survival in the desert, including the Mongolian almond tree and pine, Siberian peashrub and sea buckthorn.

ER's garden looks completely different from a gardening project outside the ER compound. Seven kilometres from the soum centre and along a water pipeline, the only sign of a garden within the fenced is a placard that shows a lush green area with plants. Dry twigs within the area might one day become trees or shrubs, but the fact that none had leaves in mid-June creates doubt that any of these plants will live, and no other plants were visible. However several people came to work the land, and the FFM team was told that 18 households participate in this "gardening centre", seven to eight of which were hit by the most recent zud that claimed all their livestock.



# OYU TOLGOI

## gold and copper mine

Oyu Tolgoi (OT) is the world's largest undeveloped gold and copper mine. OT is 66 percent-owned by Ivanhoe Mines Mongolia Inc (known locally as the 'OT company'), a joint venture between Ivanhoe and Rio Tinto, and the Mongolian state that retains a 34 percent stake<sup>43</sup>. OT is situated 160 kilometres southeast of the Tavan Tolgoi deposit en route to the Mongolian-Chinese border crossing of Gashuun Sukhait.

### Khanbogd soum centre

The Khanbogd soum centre is the nearest town to the OT mine and has a population of around 9,000 residents that live primarily in traditional gers. The problem of governance is even more pronounced in Khanbogd, where the local governor is from the opposition party and the pressures on the local population are not yet balanced by increases in employment and investments in local infrastructure. The Khanbogd governor expressed disappointment that the OT company and the central government were in bilateral negotiations for community development, although this should happen trilaterally and consulted with the soum.



*Transporting water pipes on the road to Oyu Tolgoi*

<sup>43</sup> The government of Mongolia is seeking to boost its stake to 50 percent according to Dashdorj Zorigt, Mongolia's minerals minister, at Oyu Tolgoi in September 2011: <http://www.businessweek.com/news/2011-09-26/ivanhoe-falls-after-mongolia-seeks-bigger-stake-in-copper-mine.html>

The Khanbogd governor and community members on the public meeting in Khanbogd repeatedly voiced concerns about the acute problem with information dissemination and consultation, as the central government has failed to balance the interests of foreign investors with those of the impacted communities. The OT company has an office in Khanbogd, though it has no information board and provides no brochures or other information materials. At a public meeting local people said that the Khanbogd office cannot be relied upon for solving problems or providing information, as they often do not get information in a timely manner themselves.

Additionally many people complained that the company does not inform them about its plans. For example before mining operations can begin the OT company must implement several infrastructure projects in the soum like a road, transmission lines, water pipeline construction. In implementing these preparatory projects, the OT company has not asked local people for their consent to interfere with the environment that their health and livelihoods rely on. Instead local residents believe that the OT company only holds meetings with community members after a project has already begun and there are complaints or protests. Even then the company often declares that it has received a green light from the capital and intends to continue with the project as planned.

As one resident put it *“the company is like the spoiled child of a big boss, the central government. No one can stand up against it, as we always hear the same reply: ‘We will take it to Ulaanbaatar.’”*

*“We are afraid that the company will take all the profit and leave us with a moon-like landscape that has been destroyed and we will get only the remains”,* added another villager.

Employment opportunities remain limited for Khanbogd. The OT company announced that Mongolians will comprise 40 to 60 percent of the workforce during construction and 90 percent during operation. In a report presented to the local governor,<sup>44</sup> the OT company claims close to 15000 employees, of which about 60 percent are Mongolian and the rest foreign employees. However it also says that of these 60 percent Mongolian employees, 3000 are students on vocational training, making the total figure rather unclear.

Khanbogd residents are worried mostly about dust and the fragmentation of pastures, and as well the future impacts on water from the OT project. OT is addressing herders’ concerns about resettlement and compensation on a case-by-case basis, because then the indirect impacts that affect larger numbers of people do not receive attention as significant. For instance in Khanbogd herders were unsatisfied and did not understand the criteria employed by the OT company to compensate some families and not others who had been affected by road and water pipeline construction. Also more serious concerns about the long term sustainability of the resettlement are not being addressed and herders worry about their chances of surviving in the middle of this mining rush.

Another serious concern raised by locals is the diversion of the Undai river crossing the OT property, as it is the only source of surface water in the area. Most of the river flow is subterranean, replenishing springs and downstream wells, so herders and local authorities fear an increase in future water problems. Yet the OT company has failed to present and publicly consult the Undai river diversion plans.

<sup>44</sup> Correspondence between OT and Khanbogd governor, “OT LLC & Contractor Company list of employees, expat and national employees ratio”, April 30, 2011

According to the Khanbogd governor, the OT company also brought representatives from communities in Canada and Australia to Khanbogd to share experiences with regards to river diversion and water management. The local administration acknowledges its lack of expertise in this area, so it has established an expert group to research issues like river diversion and fossil water pumping.

Another example of the local administration's limited capacity is highlighted by the management of Special Protected Areas (SPAs). The Khanbogd cultural centre is responsible for SPAs and has established 32 so far, including several monasteries, rock drawings, dinosaur prints and caves, and the local governor believes there is potential to establish hundreds more. However the local administration has no brochures or maps for the sites, only information about their distance to and from Khanbogd, demonstrating the insufficient capacity of the administration to manage these areas.

## Health in Khanbogd

Currently there are four medical doctors (pediatrician, dentist, gastroenterologist, gynecologist) and eight nurses in the local hospital. The hospital is supposed to serve 35000 people in the local soum at maximum capacity, 5000 of which are migrants. 18000 people are of reproductive age and half are females).

Khanbogd's head doctor believes that most ailments prevalent among the local population include:

- respiratory illnesses cause by dust and increased populations;
- digestive illnesses and cancer of digestive organs due to unhealthy consumption habits, low quality of food, seasonal sicknesses and tonsillitis that complicate digestive diseases;
- sexually transmitted and urinary diseases as a result of migration and noted increases in the spread of syphilis, gonorrhoea, chlamydia, (no HIV/AIDS noted).

These findings are in line with the health impacts outlined in the ESIA for Phase II of the UHG project.

The hospital also has very limited capacity to make proper diagnoses, and disruptions in electricity supplies make laboratory tests practically impossible. The doctor acknowledged the problem of dust and its impact on health but had no information about dust near Khanbogd. There is no sanitary service in the town, and doctors do not have the capacity to monitor pollution and water and air quality. The doctor referred to cases of domestic animals being discovered with black internal organs feeding along the roads but because of the absence of veterinary services, these cases were not properly reported.

The doctor acknowledged that among the OT company's corporate programs were measures to better equip the dentist cabinet with upgraded technologies, which is now the best within the aimag. The OT company also held a training session on HIV/AIDS but only for OT employees.

In conclusion, health services are experiencing an additional burden because of mining activities and exports that create dust and road traffic. Health facilities across the board generally need to be upgraded and the electricity supply improved. Khanbogd's doctors need to be among the first to know about the health impacts of mining, and the OT company needs to supply them with information and consult with them accordingly.

## Resettlement by OT

In 2004 eleven families living in the OT mine licence area were resettled. According to two of the families, the resettlement consisted of the following compensation: a summer camp with a wooden fence, costs of resettlement, a scholarship for one family member and a job with the OT company for one family member.

The accounts of these two families differ from resettlement information provided by the EBRD. An EBRD response on the question of resettlement says that *“at the time of resettlement, all households were provided with either deep or shallow replacement wells and, in some instances, more wells were built later based on herders’ requests when those new wells failed to function adequately or did not meet demand.”* Nonetheless, both of these families said that the pumps for the new wells broke within a year, so one of the herders replaced it with his own money, while the other never had it replaced.

Furthermore, while the EBRD cites an October 2010 OT evaluation finds nine of ten resettled families with increased herd sizes, a USAID study reports the following: *“Several herder families have moved back to their original sites. The primary reason for moving back was to accommodate their livestock since in many cases their livestock either went back to their original pasture on their own or herders took them back because of better pasture, housing and water conditions. Out of the families that were initially resettled, 4-5 continue herding and the remaining have stopped altogether – although we were not able to determine what their current status is.”*

It is possible that the herds were severely affected during the last harsh winter, resulting in half the families abandoning herding altogether. Indeed one of the interviewed herders reported losing a third of his herd last winter alone. However the EBRD reports from a separate June 2011 assessment produced by an independent environmental and social consultant, highlighting a failure of the EBRD not updating project information adequately. This oversight also raises concerns about the quality and integrity of information that the EBRD obtains from its clients and consultants, on the basis of which EBRD shareholders will review the OT project.

*“The herders think that OT does not consider herding a profession and that OT has the impression that herders are stupid and not educated,”* according to the USAID report.

### Interview with first herder resettled by OT

Life for the first interviewed herder did not change considerably following the resettlement, neither worsening nor improving. The new area provided for his winter camp had an electric well that worked only for two months before breaking in 2004. Since then he uses a hand well, as the company did not respond to his requests to fix the electronic one. His younger daughter received the scholarship and the older daughter a job with the OT company. She had to stop working when she became pregnant however, and after the birth she was unable to return to the same position and instead accepted a job with a subcontractor, earning less money. Terms of resettlement were nonnegotiable and were proposed on a take-it-or-leave-it basis.

### Interview with second herder resettled by OT

The second family interviewed was unsatisfied with the resettlement, as their old winter camp was located in a well isolated place where the family lived for generations. The OT company threatened that the family must move in any event, even if they did not accept

the terms of resettlement. The new wooden summer camp home is of poor quality, and the wind can enter through all sides. The home is too cold in the winter and too hot in the summer. While their old winter camp was built of sturdy stone, the new wooden structure is rotting. During the last zud when the family lost 100 out of its 300 animals, the herder believes that in his old shelter he would have lost fewer animals since it didn't get as cold as in the new one. The herder also believes that the increased dust has greatly affected his animals' health and has made them less resilient to the harsh winters.

The family is now confined to a small pasture area, since further afield is another herder's land and as well the borders of the OT company license. Overgrazing has become a concern, since the company is taking over more territory and building more roads, resulting in fragmentation and degradation of the land. South of the OT area there are serious problems with dust, and the families complain that the OT company is not receptive.

The family's electric well pump also broke, which they repaired with their own money. The water level in the hand well decreased one meter last year, and while previously the level was continuously decreasing, it had never done so that drastically. The changes also occurred during a year of good precipitation. The herder's brother in law worked for the OT company but lost his job, and no one else from the family will receive employment.

When asked about the future and whether he would want to become a miner, the herder believes he is too old, since OT does not employ people over 40. He is unsure about his future, and he does not know whether his two kids will be able to continue herding under the changing conditions. The scholarship covers school fees but not all boarding costs.

In general the family does not feel well-informed about the future plans of the OT company and what to expect from mining. They do not trust the information they receive via OT and in particular, they do not believe that their voice is being heard or has any weight. For instance he participated with another 60 or 70 herders at a protest outside the OT camp while the company held a meeting inside, petitioning that the construction of the OT road stop. While the OT company engaged in what appeared as negotiations, they actually continued building the road.

#### **BOX: "THE BIG GER" OR OT'S TAKE ON THE TRADITIONAL GER CAMP**

OT owns an exclusive ger camp about ten kilometres from its mine site, used to host extravagant events for potential investors, government officials and other movers and shakers. It's the Mongolian equivalent of the modern dude ranch.

During our mission, OT employees were hurriedly preparing the camp for the arrival from Ulaanbaatar of Canadian investors and UB officials. An impromptu informative tour was given by an OT employee eager to impress upon a Western visitor the camp's penchant for luxurious styling.

Days in advance of an event, the approach road is watered daily to keep dust from drifting towards the camp. The camp is entirely covered by wireless Internet signal, and each ger is outfitted with electricity and installed air conditioning units. The availability of water is a non-issue at the camp, since it's trucked in directly from the mine site. Diesel generators are used to provide electricity throughout the

camp, including for the tall stack of subwoofers that blast music and song on the wooden stage where regular concerts and performances are held. At the rear of the stage is a giant barbeque where camel, horse and other traditional meats are slowly roasted for guests at receptions.

Receptions are held in the large ger at the camp's centrepiece. The intricately and elaborately-decorated ger is about eight metres tall at its apex. It hosts several air-conditioning units that cool the ger's interior to a comfortable 21 degrees Celsius during the sweltering summer months. There's enough seating around the several rows of dining tables for scores of guests, who are able to catch up with the latest news via satellite on one of the ger's giant plasma, flat screen televisions.

This contrast between the modern comforts of affluent urban dwelling located at the Big Ger and the conditions of those resettled herder families living in the immediate proximity is striking. The failure of the OT company to repair an electric water pump while at the same time indulging guests at the exclusive compound is all the more incomprehensible.



*The 'Big Ger', flanked by air conditioning units and satellite dishes*

# RECOMMENDATIONS

More than 90% of EBRD's investments in Mongolia go for the natural resources sector, although investment needs for other sectors, eg. infrastructure and agriculture, are urgently needed and are clearly beyond the government's capacity. Although the mining sector brings some employment opportunities, it puts pressure on municipal services in the growing mining towns and on the resource base for traditional herding, i.e. pasture land and scarce water resources.

Moreover the bank acknowledges that in spite of increasing FDI in Mongolia and the growth fueled by mining *"[t]here has been a marginal decline in the poverty rate in recent years. The declines were greatest in urban centres, while in rural areas poverty levels increased. Poverty also remains widespread in the ger settlements living around the main cities – a result of the continuing migration from rural areas. Thus, despite strong economic growth in recent years, not all the population has benefited in the same way; instead, it has led to increasing income inequality.<sup>45</sup>"*

Therefore we would like to propose the following recommendations:

- The EBRD needs to diversify its portfolio in Mongolia as a measure to mitigate the country's growing dependence on commodity exports and vulnerability to oscillations in global commodity prices.
- Balancing the EBRD's portfolio should follow more faithfully the bank's strategic goals for the country, thus distributing better its investments in other sectors that it has declared to be strategic, *"including agribusiness, cashmere/textile, hotel and tourism, property and services, which will contribute to the diversification of the economy.<sup>46</sup>"*
- The bank's investments in infrastructure should focus on municipal infrastructure, eg. water supply, wastewater, household waste management, especially in rural areas like the South Gobi region. Municipal environmental infrastructure (MEI) and the bank's other strategic priorities above should be given priority over investment into transport, energy and water infrastructure for the needs of the extractive industry.
- The bank should provide technical assistance to the Mongolian government and local administration for elaboration of strategies and plans for development of municipal infrastructure and services, especially for rural areas, such as Tsogttsetsii and Khanbogd soums that face increased challenges due to migration and population growth.
- The EBRD should ensure that MEI projects<sup>47</sup> incorporating tariff setting and tariff reforms for municipal services will be guided by affordability criteria and due attention to social categories of users. In cases when infrastructure benefits both local communities and the extractive industry, investment recovery burden should be fairly distributed, thus avoiding the practice of industry paying preferential prices of water and power and households carrying the burden of unaffordable prices.

45 EBRD web site, Mongolia Country Profile, Focus Areas: <http://www.ebrd.com/pages/country/mongolia/focus.shtml> , last updated 21 April 2010

46 EBRD's Country Strategy for Mongolia, As approved by the Board of Directors at its meeting on 21 October 2009 : <http://www.ebrd.com/pages/country/mongolia/strategy.shtml>

47 For example in cases like the South East Gobi Municipal Infrastructure Project currently under consideration by the EBRD, PSD: <http://www.ebrd.com/english/pages/project/psd/2011/41627.shtml>

- In its policy dialogue the EBRD should assist the Mongolian government in devising solutions for improved benefit sharing with local governments in mining areas, in order to empower local administrations to take a more active and aware role in decision-making and providing better access to education, health and municipal services, and improving local regulatory structures' capacity to monitor the extractive industry's impacts on water, air, soil, biodiversity.
- The EBRD needs to better measure the human development results of the projects it finances and the wider associated projects, in order to be able to better understand whether its financing really has positive impacts for people and the environment.

Lack of scientific data – eg. on migration routes of endangered species - and reliance on future exploration – eg. for supply of water for mining operations – result in an incomplete and unclear picture of projects' needs and impacts, both for local communities and for decision-makers. A piecemeal approach in decision-making on separate projects (and phases or elements of bigger projects) is not sustainable - although it may work in favour of short-term projects of mining companies, it disadvantages local people and the environment in the long-term, and limits the future options for development of more sustainable livelihoods. In expectation of EBRD's continued interest in the natural resources sector in Mongolia we recommend that:

- Before financing any new mining projects in Mongolia such as the Oyu Tolgoi mine, the EBRD should assess project sustainability through the lens of long-term cumulative impacts of mining developments in the area.
- The EBRD should not finance mining projects that have not proven sufficient supply of water for the life-time of the project, taking into account the competing needs of the local community, or of other planned/expected projects in the area.
- The EBRD should ensure that projects it supports are consulted in a meaningful way with the affected communities, ensuring that local people's concerns are adequately and openly addressed, and that all households whose livelihoods are impacted will be fairly and adequately compensated.
- The EBRD should ensure that assessment of extractive industries projects includes adequate gender impact assessment and mitigation measures.
- The EBRD should ensure that its clients regularly disclose monitoring and research data on water levels, eg. from monitoring wells at the Naimant Depression Bore Field for the UHG mine of ER, in order to address the problem of lack of information that fuel the concerns of local people and CSOs. Claims that the deep aquifers are distinct from the shallow ones and that there is no exchange between the two are so far not supported by sufficient scientific studies, therefore mining companies should substantiate/retract such claims with results from their monitoring.
- Similarly ongoing monitoring data on air quality and from health surveys of the population should be regularly be published by the EBRD's clients.

While it is up to Mongolia's people and decision-makers to choose whether or not to concentrate on coal or coal power exports, European public money should not be used to finance climate damaging coal infrastructure, therefore:

- The EBRD should stop investments in coal mining and should not invest directly or indirectly in any coal power generation projects.
- The EBRD should help to balance its past investments in fossil fuel projects in Mongolia with investments in renewable energy and energy efficiency in the country.
- The EBRD should improve its methodology for assessment of climate impacts of its projects, and should carry out such assessment for the whole project with all its components, not only for the phases or parts that it finances.

*'Why does Oyu Tolgoi need its own separate road? All our animals – camels, horses, cattle, sheep and goats – use the same way, why can't the OT company use the same road as the other mining companies?'*

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