

**THE POTENTIAL SOCIAL IMPACTS OF
MINING DEVELOPMENT IN SOUTHERN
MONGOLIA**

Table of Contents

I.	INTRODUCTION	3
II.	WHAT'S IN IT FOR ME? POTENTIAL SOCIAL IMPACTS	6
	LIVELIHOODS	6
	Livelihood Transitions for Herders	6
	New and Expanding Income-Generating Opportunities	12
	SOCIAL SERVICES	21
	Access to Basic Services.....	21
	Labor Mobility and HIV/AIDS.....	23
	LAW AND ORDER	31
III.	CROSS-CUTTING THEMES	32
	BENEFIT SHARING	32
	MECHANISMS FOR ENGAGEMENT	35
	SOCIAL CONFLICT AND CONFLICT MANAGEMENT	39
	MINE CLOSURE	43
IV.	CONCLUSION: WHAT NEXT?	45
	BIBLIOGRAPHY	47

TABLE OF FIGURES

<i>Figure 1: GDP Growth 1988 - 2008 (World Bank 2009).....</i>	<i>4</i>
<i>Figure 2: GNI per capita 1998 - 2008 (World Bank 2009)</i>	<i>4</i>
<i>Figure 3: Oyu Tolgoi Construction Workforce Assumptions (Construction and Operations)</i>	<i>14</i>
<i>Figure 4: Framework for a comprehensive HIV/AIDS response</i>	<i>30</i>
<i>Figure 5: Causes, manifestations of, and possible mechanisms to resolve, conflict</i>	<i>42</i>

I. INTRODUCTION

The transition from a centrally controlled Soviet-style economy to a democratic system with principles of private ownership brought many social changes to Mongolia, most driven by the sharp decline in income. GNP per capita dropped as unemployment increased and individuals resorted to alternative livelihoods such as herding (which resulted in movement from urban to rural areas) and artisanal mining. The excessively cold winters in 1999, 2000, and 2001 (the *dzud*) compounded poverty as herds were lost. This in turn led to a rapid expansion of the informal mining sector which saw approximately 20,000 new entrants (World Bank 2006).

While GDP growth has been strong—7 percent for 2005, 9 percent for 2006 and 10 percent for 2007 (World Bank 2009)—the Mongolian economy has yet to recover to its previous levels. Poverty is pervasive with approximately 33 percent of the population living below the poverty line and a higher poverty incidence in rural areas, 43 percent as compared to 30 percent in urban areas (World Bank 2005).

There are sharp disparities between rural and urban populations: electricity access is available in 98 percent of urban households but only 54 percent of rural households; there is access to improved sanitation in 65 percent of the urban population but only 26 percent of the rural population; and access to improved water supply is enjoyed by 93 percent of the urban population but only 35 percent of the rural population (The World Bank 2007).

The development of mining is seen as a potential boon for the economy and a contributor to addressing the challenges of rural development. Initial estimates indicate that mining development in the southern Gobi region could generate up to US\$5.2 billion annually against a current GDP of US\$3.9 billion (The World Bank Forthcoming). This would have a significant impact on poverty reduction.

Figure 1: GDP Growth 1988 - 2008 (World Bank 2009)

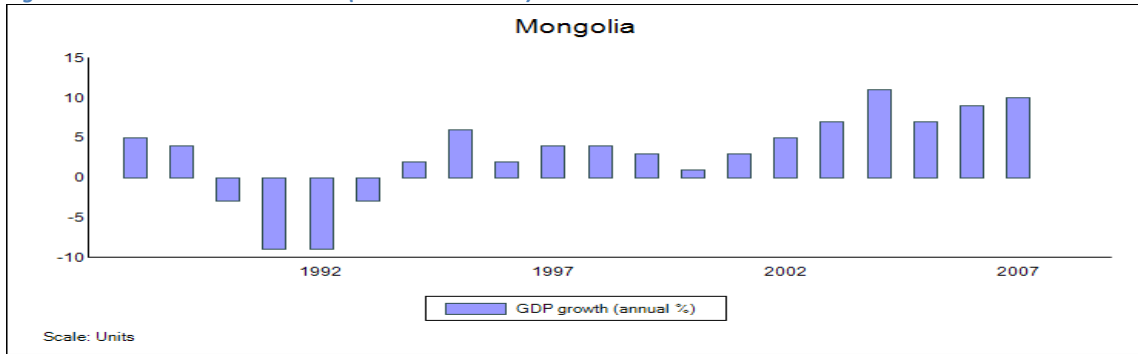
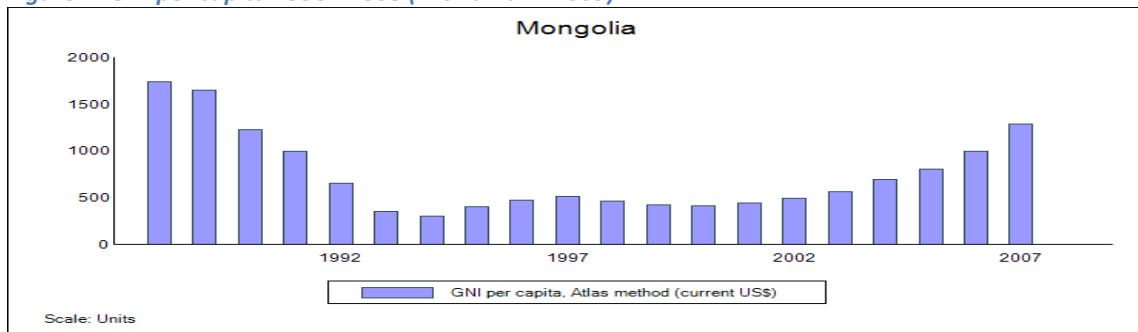


Figure 2: GNI per capita 1998 - 2008 (World Bank 2009)



In light of these potential economic gains there is enthusiasm about mining development. However, there are also concerns about how mining development will impact individuals and communities. This paper has been prepared in response to these concerns, specifically to highlight possible social impacts of mining development. ***For the purposes of this report, social impacts are defined as effects on the well-being of individuals, households, and communities and includes in its examination local residents and migrants.***

The provinces (*aimags*) of concern in this report reflect the focus of the study to which this report feeds, the *Infrastructure Development in Southern Mongolia* study. This study defines southern Mongolia as the *aimags* of Omnogovi, Dornogovi, Govisumber and Dundgovi. These *aimag* are sparsely populated and dominated by herders, mining speculators, mining operations, and artisanal miners. Herders are nomadic and organized around small settlements. District centers (*soum*) are small in number. The *soum* center of Tsogtsettsi in Omnogovi for example has a population of just over 2,000 people.

At first glance, mining development will present opportunities for these sparsely populated provinces which are poorly served by social and transport infrastructure. It will bring jobs and increase government resources which could be channeled to town development and infrastructure improvement. At closer examination however, job opportunities may not be readily accessible to local residents and there might be more negative impacts than anticipated as population figures increase and result in different settlement patterns, change community dynamics, and place stress on existing service delivery mechanisms.

Because of the breadth of potential effects, efforts to address these impacts cut across many sectors including health, education, law and justice, and social protection. This paper therefore, takes a general approach and where necessary guides the reader to the other sector-specific studies included in the *Infrastructure Development in the Southern Gobi* report.

The paper will discuss these impacts as follows: the first four sections focus on impacts in specific areas: livelihoods, social services (including a special focus on HIV/AIDS), law and order, and cultural preservation. The subsequent four sections look at the cross-cutting issues of benefit sharing, governance and consultation mechanisms, social conflict, and mine closure.

This paper has been informed by a literature review, in-country one-on-one interviews with stakeholders in Dalanzadgad, Tsogtsetsii, and Ulanbaatar in March 2009 and two workshops in Dalanzadgad (September 2008 and March 2009). Stakeholders include government officials, representatives of mining companies, representatives of civil society organizations, and Mongolian citizens. Consultations with social and mining specialists at the World Bank and staff from the Asian Development Bank were also undertaken.

It is hoped that this paper will provide a spring-board for more detailed and sector-specific discussions on mining development that take the individual and community into consideration.

II. WHAT'S IN IT FOR ME? POTENTIAL SOCIAL IMPACTS

LIVELIHOODS

Mining development will reduce the availability of grazing land for herders as land is increasingly taken up for exploration and exploitation activities. Mining development will also bring numerous employment opportunities including direct work for mining companies, work in mining-related activities, and work in activities supporting settlements around the mines.

Livelihood Transitions for Herders

Herders are the dominant users of land in southern Mongolia grazing their herds (goats, sheep, camels, etc.) on the expansive steppe. Herding is the dominant livelihood for the population of the Gobi provinces, employing 40 percent of employment. Herders rely on herds not only for income but also for food, housing, and clothing. Pasture land therefore, is critical to the sustenance of herds and of herders. However, as more ore deposits are tapped for exploration and exploitation and associated infrastructure is developed, the land available for grazing will diminish.

Mining and associated infrastructure development will require the use of land that was previously available for grazing. This re-allocation of land will result in herders being pushed out of grazing land that they have traditionally used. In addition, the quality of land may be threatened either by reduced water supplies, contaminated water, or overgrazing.¹ Current estimates place the outer reaches of demand at 350,000m³/day by 2020 against an estimated groundwater potential of 500,000m³/day (The World Bank Forthcoming) estimates which will place some stress on other non-mining users of water. In addition, overgrazing is already problematic in the Gobi and may continue to be a challenge if herders respond to increased demands for animal products from mines and growing population centers.

¹ Water sources may also be placed at risk of contamination if town development does not adequately provide for proper sanitation and solid waste disposal and if mercury is used incorrectly in artisanal mining.

Table 1: Exploitation and Exploration licenses as of January 2, 2009 (Open Society Forum n.d.)

Aimag	Type of License		Total (hectares)
	Exploitation	Exploration	
Dornogovi	43,957	6,407,038	6,450,995
Dundgovi	5,945	2,996,077	3,002,022
Govisumber	4,470	206,084	210,554
Total	234,694	39,448,676	39,683,370

The impact of mining development on herder livelihoods will include (i) the relocation of herders; (ii) the increase in income for herders as the demand for animal products increases and new markets open (from infrastructure development) ; (iii) a decrease in income and threat of chronic impoverishment for herders unable to adapt to new grazing areas or access new income-generating opportunities; and (iv) competition for natural resources (water, grazing land) which may lead to conflict.

The acquisition of land for development often results in the relocation of homes and businesses. At the individual level it can impact household wealth if assets are destroyed; income if distances to places of employment or access to markets is increased; and access to services if households are moved to unplanned settlements. At the community level, community integrity may dissipate if individual households disperse. Land acquisition strategies therefore often entail accommodation for individual compensation, asset replacement, livelihood restoration, and transitional assistance.

Box 1: Impacts of mining on herders

Impacts	Positive	Negative
Short term:	Increase in demand for animal products from mining companies and new settlements opens up new supply paths for herders	Relocation from historically used areas forces herders and herds to adapt to new grazing sites. This may result in lower meat production

Impacts	Positive	Negative
		Relocation of herders and their herds may permanently impact production (negatively) leading to impoverishment of herders
Medium-term impacts	Expanded transport network leads to an increase in access to markets which can be tapped by herders	Expanded allocation of mining licenses and town development results in smaller parcels for grazing
	Mining development will provide jobs that are directly and in-directly related to mining and jobs in the formal and informal sectors	Increased use of water and pressure on available grazing land will contribute to land denigration which in turn will reduce incomes as productivity drops.
	The expansion of the rural economy may lure the younger generation away from herding and into work in the mines or related business resulting in increased and diversified incomes for individuals and families.	The expansion of the rural economy may lure the younger generation away from herding and into work in the mines or related business resulting in the loss of culture surrounding traditional herding

The current framework for compensation and relocation under the Minerals Law does not sufficiently address these impacts. While it does provide compensation for assets and relocation costs (although not land compensation as grazing land is state-owned)², it does not provide for any assistance in relocation (transitional assistance) or for livelihood restoration. Guidance on compensation could strengthen the existing system as without these specificities (modes for its determination, standards of payment – including time frame and payment structures for relocation and assets, etc.) herders are subject to *ad hoc* compensation rates depending on the mining company with which they are dealing. In addition, households unable

² The Minerals Law require the license holder to compensate for “private and public residential dwellings, wells, winter animal shelters, other structures, and historic and cultural landmarks for the damages caused by exploration or mining operations, including if necessary, relocation costs.” (Government of Mongolia 2006)

to negotiate effectively may be exploited and underpaid. Conversely, the lack of standards exposes mining companies to possible extortion and government to spurious claims from opportunistic individuals.³

Current legislation provides for transitional assistance in general terms. Once compensation has been paid the displaced are required to leave the site and find alternative grazing land. Given the nature of nomadic herding, the inherent local knowledge, and the knowledge-sharing inherent in community networks, this approach may be better suited than one managed by others. Relocation however, can be a traumatic experience. Households can lose income in the transition as they adapt to new territory, some households may have less access to knowledge on relocation, and some individuals may have fewer resources (financial and in terms of community support) than others. Groups vulnerable to these impacts may include households headed by the elderly or single women.

Current legislation also provides avenues for channeling community voice: citizens are consulted when licenses are granted however whether or not there are mechanisms to ensure that disputes can be raised and resolved during the compensation and relocation process is unclear.⁴ It is also unclear if there is a grievance channeling or consultation platform for herders and mining companies to use if they have concerns about relocation or if compensation agreements have gone awry.

In addition to concerns about individual-based compensation and relocation, local residents have called for the protection of cultural and historically important heritage sites. There is concern that these might be destroyed which would have impacts on cultural heritage but also on income that is generated through tourism.

Box 2: Elements of Land Acquisition and Resettlement

Element	Description	Example of action
Consultation	Consult with potential affected people so that they are aware of changes	Community consultations

³ A government official noted that local communities tried to extort money from mining companies and that compensation was often combined cash with non-cash options (e.g. sending a child to school, hiring a relative at the mining company).

⁴ The law states that the Governor of the aimag must consult with citizens through the Citizens Representatives Hural of the relevant soum and the Presidium of Citizen Representatives Hural of the aimag. The hural may “refuse the granting of an exploration license only on grounds provided in the laws of Mongolia.” (Minerals Law, Art. 22.3)

Element	Description	Example of action
Compensation	<p>Provide financial and/or in-kind resources to individuals who have lost land, assets, and access to livelihoods</p> <p>Provide financial support and resources to facilitate the transition from old housing to new</p>	<p>Cash for lost assets such as structures, crops, and trees (would involve an inventory of assets)</p> <p>Cash for affected households to physically move</p> <p>Assistance to find new housing</p>
Livelihood restoration	Support households in restoring their livelihood levels to previous levels or above	<p>Support to businesses or households to find new jobs</p> <p>Job-training and job-placement assistance</p>
Grievance mechanisms	Provide an avenue for disputes to be aired and raised	
Monitoring mechanisms	Ensure that mining companies and government meet their obligations vis-à-vis compensation	

Recommendations: Supporting livelihood transitions for herders

1. *Provide guidelines on compensation to guide compensation for asset compensation, transitional assistance, and relocation costs.*

2. *Integrate the principle of livelihood restoration to protect individuals and households from project-related income shocks.*

Including a principle of livelihood restoration in relocation processes would protect herders from the negative impacts of relocation. This principle could mandate that people who are affected by relocation would, at the minimum, retain their pre-relocation standards of living. Livelihood restoration may include providing skills-building for the affected people, such as, entrepreneurship development training, job training; sharing information of relevance to entrepreneurs, such as opportunities to supply mining companies or towns; and support for relocated herders in the form of improved extension services.

Funding for these activities could be supported through a social rehabilitation fund, similar to the environmental rehabilitation fund required under the Minerals Law. This fund could also be used to support local residents who have been chronically impacted (negatively) by project-related relocation.

3. *Develop mechanisms to monitor the compensation and relocation process to track the effectiveness of compensation and relocation and the impacts on individuals.*

Monitoring the relocation process, the process and its outcomes, will provide opportunities to identify and respond to negative impacts outcomes (such as decreased income and the risk of chronic impoverishment of relocation).

The collection of baseline data would be critical here and could be done through Social Assessments (SA's) that would increase the knowledge base on impacted communities and nature of impacts. SA's are useful tools in identifying the range of impacts that projects will have on specific communities. Given the broad area of influence that mining projects can have, SIA's could be undertaken collaborative (among different mining companies) or the results actively shared.

4. *Mandate the protection of the vulnerable by identifying characteristics of vulnerability and methods to address these populations.*

General categories of vulnerable groups include single-headed households, the elderly, and the disabled. A more context-specific categorization that includes dimensions of vulnerability (that is answering the question what are groups vulnerable to?) would guide the development of specific support and protection to these groups.

5. *Develop dispute resolution and consultation mechanisms to channel foster dialogue and conflict resolution among actors.*

A dispute resolution would provide a channel for parties involved in relocation to air their grievances. Research into the nature of grievances and disputes, channels available for their resolution, and the level of satisfaction with their outcomes would inform the reinforcement of existing mechanisms or the development of purpose-specific mechanisms.

In addition, multi-stakeholder consultations could bring different stakeholders to the table and in so doing build buy-in to the process, provide an opportunity for input, and provide a space for grievance handling (see Section III for more details).

The creation of these fora should be partnered with programs that strengthen citizen capacity to engage with government and mining companies (e.g. seminars on relevant laws, rights, and obligations of citizens, government, and mining companies). Ensuring that herders are well-positioned to participate in the discussions on their displacement will be critical to the success of the relocation exercise and will minimize potential disputes.

Civil society organizations together with local government can play a critical role here. Civil society organizations are likely to have more access into communities and more experience working with communities at the grassroots level on capacity building initiatives. The work that CoCoNet has undertaken to support herders who want to protect their grazing land is worth examination. CoCoNet reports that there is little knowledge among herders of legislation that affects them and how they can use it to improve their livelihoods. CoCoNet conducts trainings to increase awareness of relevant legislation and to promote the use of the legal opportunities by communities.

6. *Protect cultural heritage and important natural history sites to preserve identity and support tourism generated income*

Historical and archaeological sites could be damaged or destroyed by new developments and should be protected by government. Consultations with local residents could ensure that sites are properly identified and protected.

New and Expanding Income-Generating Opportunities

The expansion of the local economy will bring opportunities for residents to work directly or indirectly for mining companies and associated industry.

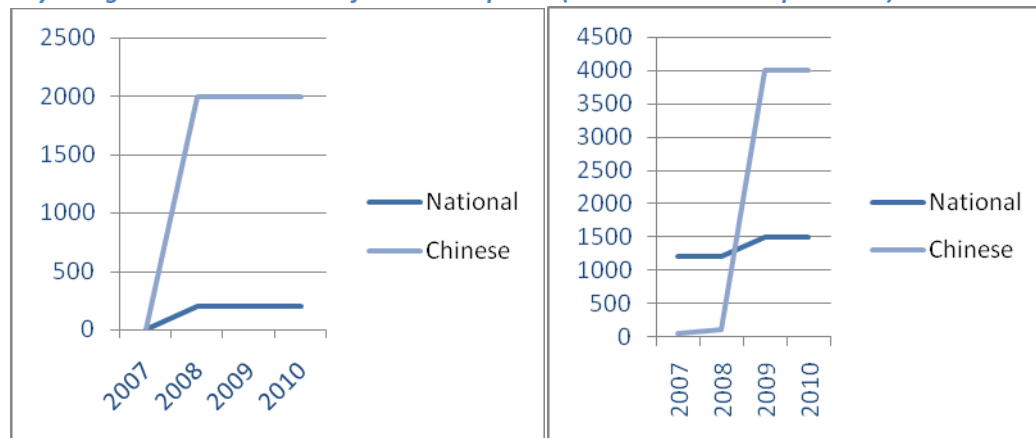
Jobs are likely to be the most visible and immediate benefit that local residents will see from the development of mining. Indeed, mining has the potential to provide livelihoods for thousands of people. Worldwide, large scale mining provides employment for approximately two to three million people.⁵ The current estimate of direct mining-generated employment in southern Mongolia is slightly less than 10,000 positions.

The low quality of education in rural areas and the outdated vocational training is likely to place some of the thousands of positions out of the reach of local residents. There is a mis-match between possible opportunities and available skills which has led to the increasing use of workers from Russia and China in the construction and mining sectors, the idleness rate of vocational school graduates is 26 percent (The World Bank 2007).

It will take some time before local residents can fully benefit from employment in mining companies. In the short-term it is likely that mining companies will rely on a mix of local and migrant workers with a higher proportion of migrant workers (see Figure 3 for assumptions for the Oyu Tolgoi mine). Bridging the skills gap with migrant workers should be approached with caution as there is a potential for this to be a source of conflict, pitting local residents against foreign migrants (to whom there is animosity), if local residents feel that they are being sidelined and benefits from the mines are accruing to others instead of them. Efforts should be put in place to ensure a transition to a larger proportion of local residents and national workers in the medium term. Training will be fundamental to ensuring that local and national residents are well-placed for employment. Timing will be essential as the highest labor load during mining development is in the construction stage. Ensuring that there are local residents positioned to take advantage of this as construction begins will be critical.

⁵ Remy and others 2002 (John Strongman)

Figure 3: Oyu Tolgoi Construction Workforce Assumptions (Construction and Operations)



Particular attention should be paid to integrating women into the labor force. The Government of Mongolia’s 2007 report to the Committee on the Elimination of Discrimination Against Women (CEDAW) points to gender gaps in employment and salaries. The challenge may be more significant in the mining and construction sectors—where there is a 39.2 percent and a 13.8 percent gender gap, respectively—as compared to the service sectors where the gender gap in the restaurant and hotel sector is 29.6 percent, in favor of women. Barriers to women’s entry into the labor force include discrimination based on gender, age, and family-status and absence of child care.

Efforts to increase the number of women in the labor force should also be reinforced with efforts to protect women once they are in the labor force as they are susceptible to sexual harassment and violence.

SKILLS FOR MONGOLIA’S MINING SECTOR

In 2007, the Government and the European Bank for Reconstruction and Development launched a training program to raise the quality of management skills in the fast-growing Mongolian mining industry.

A total of thirty staff were targeted, from government and universities, to attend technical and financial seminars for six to nine months, covering topics from environmental health and safety- best practice to real option valuation of feasibility studies.

Training was provided by top university professors and industry experts from North American, the UK and the south Pacific region. The curriculum included: (a) economic, legal and regulatory issues related to international mining; (b) mining project evaluation; (c) mining project financing, risk management and negotiation; (d) environment, health and safety and social issues for the mining sector.

The program was coordinated with the World Bank and sponsored with funds from the Mongolia Co-operation Fund.

(European Bank of Reconstruction and Development 2007)

The expansion of large scale mining may contribute to an expansion of artisanal mining. Artisanal mining attracts workers from a wide range of backgrounds—a survey of hard rock miners in Tuv aimag found that more than 80 percent had finished secondary school, 3.5 percent held a university certificate, 3.4 percent had finished college, and 4.4 percent had a professional education (Janzan 2007)—who may work in the sector either permanently or seasonally. An increase in large-scale mining may result in an increase in the number of artisanal miners who exploit the areas abandoned by mining companies or exploit tailings that are unproductive for mining companies.⁶

Artisanal mining provides income generation and support for households (it has been reported that artisanal miners can earn up to MNT300,000 per month) and it also results in health risks for miners, many of whom suffer from dangers from mercury poisoning and respiratory illnesses. The use of mercury can also impact whole communities if water sources are contaminated. In addition, women suffer some unique health risks. For example younger women work as tunnellers climbing into deep holes to collect paygravel, tunnelers which may collapse and trap women inside (World Bank 2007).

Artisanal mining also results in the development of unplanned settlements with their attendant social problems: a lack of basic services results in dismal human development outcomes; law and order problems result from high alcohol consumption; domestic violence is rampant; and insecurity is compounded by hesitancy on the part of law enforcement to penetrate settlements or their low capacity to manage crimes such as violence against women.

Entrepreneurial activity in activity not directly related to mining will also have an opportunity to expand.

Mining development will result in opportunities for entrepreneurs from the outsourcing of goods and services, employment in mining-associated infrastructure development and in

⁶ Artisanal miners are allowed to work on: a) An area abandoned by mining companies, b) A segment of an area where a mining company is already working but has abandoned because it is not productive (this is agreed in a contract between at least two artisanal miners and the local government, and c) An area where the tailings are not productive for companies.

services (for example, building roads and running restaurants and hotels) and opportunities for herders to tap into new markets for animal products. It is calculated that for every job directly created by large mines, between “2 and 25 jobs are created with suppliers, vendors, and contractors to the mine and to miners and their families, typically provided in the context of small and microenterprise activity.”⁷

Exploiting these opportunities may however require expertise, financing, and access to market information resources in short supply in rural areas. A 2005 World Bank report notes that market access, information access and the implementation of national regulations is more difficult in rural areas. In addition, limited access to credit and high interest rates leads many businesses to rely on internal funds rather than on banks (World Bank 2005).

“Small mines may also create significant domestic demand for domestic suppliers of goods and services, such as high quality grinding balls, security and transport services, and safety equipment. [At Borro gold mine the] mining company has outsourced a range of services to a number of local companies to assist during the construction phase of the mine. SMEs are now supplying maintenance, haulage, catering, lime supply, and transportation services to Borro. There suggests there may be an additional role for the government to provide promotional support to incubate and nurture fledgling SMEs in order to develop skills base in IT, accounting, marketing, promotion, finance, and general management. ... the focus should be on transferable skills investment in order to minimize the risk of the investments.”

(The World Bank 2007)

Recommendations: Supporting new and expanding livelihoods

1. *Promote knowledge and skills transfer to local workers to increase their participation in the mining workforce.*

⁷ Cite

Mining companies should be required to implement aggressive training and apprenticeship and shadow-training programs. The Ministry of Social Welfare and Labor can play a critical coordinating role here as it has experience coordinating on-the-job-training programs. Existing programs could be evaluated, improved, and scaled-up where possible. Collaboration with the mining companies and the Ministry of Mineral Resources, and the Ministry of Immigration would be critical.

2. *Prevent potential conflict between foreign workers and locals by sharing information on the labor market.*

Disseminate information on the management of labor by mining companies. Include details on reasons behind the use of foreign labor, available employment and training opportunities for local residents in the short and medium-term, and immigration policies. Both Government and mining companies can contribute to this information dissemination.

3. *Develop a medium to long-term training strategy to increase the capacity of the national labor force.*

Medium term efforts could include providing on-the-job training, external short-courses, and workshops that would support the entry of local residents and nationals into the mining industry. Delivery options could include: rapid job training programs delivered by trainers, courses provided by provincial vocational training centers,⁸ and longer courses provided by polytechnics or other tertiary centers. Associated funding should also be available to ensure that the training is accessible.

Other efforts could include aligning the education curricula of secondary, tertiary, and vocational institutions to the changing needs of the labor market. Coupled with aligning the curricula would be efforts to improve the quality of school leavers. An investment in human capital at the secondary and tertiary level will make it easier for mining companies to recruit semi-skilled and skilled staff locally. A review of education sector expenditures and the curriculum are likely to be necessary.⁹

4. *Support local entrepreneurs' efforts to enter the mining economy.*

⁸ There are indications that the current vocational education system requires better management and increased resources. Privatization may be an option to improve resource collection and improve quality. Workshop participant, Dalanzadgad, March 2009.

⁹ See World Bank Policy Note on Education (cite)

Initiatives may include: increasing the capacity for micro-enterprises and small businesses to succeed. This could be done by increasing sources of credit available to small businesses, easing access to equipment (perhaps offering equipment on a lease basis), building mechanisms to incubate ideas, and provide mentorship to less-experienced entrepreneurs. It could also include efforts to promote the local procurement of goods. This would require an understanding of market needs and a determination of whether or not local entrepreneurs are in a position to meet these needs and if not, what should be put in place to position them more strongly.

5. *Encourage women's participation in the labor force by promoting women's entry into the labor force and protecting them from gender-based violence in the workplace.*¹⁰

As noted above, there is a significant gender gap in employment in the mining industry. Strategies to reduce this gap may include:

- Training women to move into employment sectors identified for growth that are now dominated by men;
- Providing incentives to employers to tap women's higher levels of education by making them managers or administrators;
- Balancing incomes in seasonal occupations like tourism where most women are employed through unemployment insurance and opportunities for self-employment; and
- Provide child care facilities for women with young children.

Once in the labor force, aggressive efforts to reduce workplace sexual harassment and discrimination should be undertaken. These efforts may include:

- Adopting a sexual harassment policy that includes guidelines setting out definitions of harassment and procedures for complaints and disciplinary action, and communicate it to all employees—both male and female;
- Adopting a zero tolerance policy for sexual harassment in the workplace;
- Enforcing existing labor laws;
- Making labor tribunals accessible to women and others who suffer discrimination and educating employers and employees on how the tribunals function; and
- Challenging employment stereotypes in public awareness campaigns.

¹⁰ Cite

RECOMMENDATIONS FOR SUPPORTING LIVELIHOODS

Supporting Entrepreneurs - Kazakhstan

The Government of Kazakhstan requires large multinational organizations to pay a mandatory social tax, or provide direct funds into local development projects. As part of this, Chevron Texaco developed a business development center.

- The project supported entrepreneurs through the creation of a business center supported by Chevron Texaco and Citigroup Kazakhstan and implemented by UNDP
- Chevron Texaco gave a \$400,000 grant to UNDP to establish and manage a business center. UNDP hired a technical adviser to train local consultants on sound business practices
- The center provides drop-in services, seminars, training and workshops to local entrepreneurs
- Chevron Texas provided resources for a pilot micro-credit scheme for graduates of the entrepreneurial training seminar offered by the center and Citigroup provided UNDP with a further \$100,000 for loan capital
- With additional resources from both multinationals, SMEs have access to secretarial support, workspace, legal help and office supplies
- The center has advised hundreds of local firms, it has created 230 business plans, more than \$2 million in loans have been disbursed, and 530 new jobs have been created.
- New businesses have sprung up such as a private ambulance service, bowling alley, and the city's first supermarket
- Chevron Texaco now procures more goods and services locally, thereby reducing costs.
- Support of this program improves community relations and contributes to a stable economic and political environment for the company's operations.

(Source: Partnerships for Small Enterprise Development)

Building a Base of Professionals - Namibia¹¹

The country is facing shortages of skilled professional and technical personnel in mining related fields, in all categories and at all levels. Of note are shortages of mining engineers and geologists in government and both professionals and artisans in the private sector. Across the sector core skills are needed in the following fields:- geology, mining engineering, mineral processing, metallurgy, mineral economics, mine surveying, chemistry, environmental science and mineral policy and investment analysis. Additionally, technician-level skills, such as mining and mineral processing technicians, geo-technicians, laboratory technicians and mine surveyors are required.

¹¹ Extracted from the Minerals Policy of Namibia, 2003

In 1996 a report noted that most of the professionals in the private sector were expatriates and that the Namibian mining sector needed to develop a skills base within the country to meet both its short- and long-term needs.

Responses:

Government

- It set up a geology department at the University of Namibia, the Namibian Institute of Mining and Technology was set up by the by the Rössing Uranium mining company, and the Polytechnic of Namibia.
- It launched and established Vocational Training Centers, which were designed to provide hands on training, and develop and produce artisans.
- Where necessary Government encourages the employment of regional and international experts to train local personnel.
- Government recognizes the need to relax the work permit regime to bring in specialized instructors and trainers, who would train Namibians in the relevant fields.

Mining companies

- Provide in-house training programs on mines.
- Provide general information and guidance on career opportunities and educational paths in mining to enhance knowledge of training opportunities.
- The industry will promote and encourage co-operation among companies with regard to the use of in-house multi-skilling programs.
- Mining companies will be encouraged to provide the necessary training support when outsourcing activities to small companies.

Multiple stakeholders

- A tripartite consultative process between the Ministry of Mines and Energy, the academic institutions and industry to determine requirements and the delivery of the quality of training programs.
- Government will also examine the possibility and desirability of sharing the costs of training with various stakeholders.

SOCIAL SERVICES

Access to Basic Services

It is reported that the current capacity of government facilities and staff to deliver services in the rural areas is stretched. In health, access is difficult because of geographic constraints and the scarcity of transportation between health centers and settlements. While there have been efforts to improve access through mobile health clinics and visits to villages by *soum* level medical staff¹² there are still significant gaps in the health delivery system.

In education, the delivery of quality education is undermined by inadequate inputs. Facilities, equipment, desks, books, and other key requirements for teaching are lacking. In addition, the number of specialist teachers in rural areas is insufficient as there are few incentives to work in rural areas where compensation is lower than in urban areas:¹³ less than 10 percent of the teachers in rural areas have the rank of lead teacher as compared to 30 percent in city schools (World Bank 2006). Providing incentives for teachers and increasing the allocations for pupils to “provide for those sparsely populated *soums* that are at a disadvantage from the budget allocation” is critical, especially in the context of mining development where improving human capital is critical to increasing local employment and thus local incomes. (The World Bank 2007).

In addition, administrative barriers make accessing services difficult. *Soums* receive an envelope of financing from the national government based on population. Theoretically, when an individual moves from one *soum* to another the funds allocated to them are also moved.¹⁴ In practice, however, this transfer does not happen in real time, migrant workers may not have their registration documents, migrants may choose not register in a new *soum*, or migrant workers may not be able to afford registration. In the absence of registering, migrants may pay

¹² Omnogovi *aimag* has carried out aggressive health campaigns including monthly visits to Bagh by medical staff.

¹³ Teachers rely heavily on additional income: only 59 percent of their pay is a regulated base salary while the rest is supplemented through a series of supplements, bonuses, and additional work. Teachers are therefore more likely to work in areas where they can ‘top-up’ their salaries. The 2006 Poverty Assessment notes that the chances of earning more money increases if one is working in a large school. Sizeable schools are typically located in the cities such as Ulaanbaatar, Erdenet, and Darkhan and in *aimag* centers. Teachers in small schools may not be able to fill their work week with classes and therefore may have no opportunities to earn extra money and might have to take a salary reduction (World Bank 2006).

¹⁴ Registration is mandated by the Labor Law.

for their own care, resort to self-treatment, or ignore their ailments. It has been noted that unregistered women are more likely to avoid health services while men regularly seek treatment (World Bank 2007).

There have been efforts undertaken to address the challenges of stretched and uncertain service delivery: The Ministry of Education has used innovative methods to encourage learning in rural areas through its *ger* kindergarten program which provides meals for students; there have been calls to strengthen non-formal education and expand distance education; the Ministry of Health has aggressively used mobile clinics; and efforts to register migrant workers have been undertaken (see box below).

The increase in population, which is estimated at approximately 80,000 people, will however test the social service system if attendant township development is not undertaken. Existing facilities and staff will be stretched, migrants may not be able to access services, facilities may not be available in new settlements, and as a result public health may be threatened. In health particularly, the potential for new threats to the public can cause serious problems if there is no supporting health system (see Table 3 below).

Table 2: Potential project-induced health impacts in each EHA (International Finance Corporation Forthcoming)

Environmental Health Area	Potential Impacts
Housing and Respiratory Issues	Acute respiratory infections (bacterial and viral), pneumonia, and tuberculosis; respiratory effects from housing, overcrowding, and housing inflation
Vector-related diseases	Malaria, trypanosomiasis, onchocerciasis, lymphatic filariasis, dengue, and ectoparasites (fleas, ticks, lice), etc.
Sexually transmitted infections	HIV/AIDS, syphilis, gonorrhea, Chlamydia, hepatitis B
Soil- and Water-Borne diseases	Geohelminths (e.g., giardia, hook and pin worms, etc).
Food and Nutrition related issues	Changes in subsistence practices; stunting, wasting, anemia, micronutrient deficiencies (including folate, vitamin A, iron, iodine); gastroenteritis (bacterial and viral); food inflation
Accidents/Injuries	Road traffic-related accidents, spills and releases, construction (home and project related) accidents; drowning
Exposure to Potentially	Road dust; air pollution (indoor and outdoor related to industrial activity, vehicles, cooking, heating, or other forms of

Environmental Health Area	Potential Impacts
Hazardous Materials	combustion/incineration); landfill refuse or incineration ash; effects of other project-related solvents, paints, oils, or cleaning agents
Social Determinants of Health (SDH)	Psychosocial effects; resettlement/relocation; violence; security concerns; substance misuse (drugs, alcohol, smoking); depression and changes to social cohesion
Cultural Health Practices	Changing role of traditional medical providers; loss of indigenous medicines and unique cultural health practices
Health Services Infrastructure and Capacity	Excess strain on physical infrastructure; inadequate staffing levels and competencies, or technical capabilities of health care facilities
Program Management Delivery Systems	Coordination and alignment of the project to existing national and provincial level health programs (e.g. TB HIV/AIDS) and future development plans
Non-Communicable Diseases	Hypertension, diabetes, stroke, and cardiovascular disorders
Veterinary Medicine/Zoonotic Issues	Potential disease distributions secondary to changes in animal migration patterns due to project-related activities or infrastructure

Labor Mobility and HIV/AIDS

As discussed previously, mining development and an increase in infrastructure construction will pull workers from different parts of Mongolia and neighboring countries to southern Mongolia. Within population centers, high incomes, a concentration of a predominantly male population—many of whom will be away from their families, and a concentration of unemployed female labor speculators will create an environment in which commercial sex work and transactional sex will thrive.

The mines will include mobile workers (who travel within *aimags*, who fly-in fly-out/bus-in bus-out) and will increase the mobility of workers (who will have more disposable income) which in turn will lead to an external and/or an internal spread of the disease.

A 2008 report from Australia noted that mine workers on fly-in fly-out arrangements have driven a rise of infection, of almost fifty percent, in mining states. It is reported that these workers travel to Asia, engage in risky sexual behavior and return to Australia and spread infection.¹⁵

While reported prevalence in Mongolia is low (see box above) these numbers can explore if adequate preventative measures are not put in place in potential hot spots for the disease.

The HIV/AIDS Epidemic and Mobility in Mongolia

Prevalence and Trends

- Reports indicate that only between 500 – 1800 adults over fifteen years are living with HIV and that there have been less than one hundred deaths from the disease.
- 51.3 percent of mobile men had sex with casual partners in 2005.
- Mobile men were the least likely group to have been tested for HIV and to know the results.
- 36 percent of sex workers were diagnosed as having a sexually transmitted infection (STI) – a rate 16 times higher than that of low-risk women.
- The number of reported cases of STIs account for more than 47 percent of all communicable disease infection in the country.
- The interaction among the construction workforce, local communities, and sex workers can create a potentially high-risk environment for the spread of HIV infections through unprotected sex and/or injecting drug use.

Groups Vulnerable to Infection

- Mobile and migrant workers are at great risk of both contracting the HIV infection and bridging HIV transmission to the general population, as their increased disposable income attracts commercial sex establishments and allows them to offer money, food, and clothing to rural women and girls in exchange for sexual favors.
- Increased risk behavior and the growing number of mobile and migrant workers in the country provide an ideal environment for the rapid spread of HIV infection.
- Nearly 50% of foreign workers in Mongolia work in the mining sector. The formal mining sector employs over 12,000 people and the informal mining sector involves many times this number.
- The construction and mining industries accounted for 10% of the total labor force in 2006, and the figure is expected to be much higher in the coming years.

(Ministry of Health 2006); (UNAIDS n.d.)

¹⁵ Reuters reported in 2008 that there has been an increase in HIV infection rates in Australia by almost fifty percent with a large number of new infections among heterosexual men in the country's mining rich states of Western Australia and Queensland. See <http://www.alertnet.org/thenews/newsdesk/SYD52638.htm> for more details.

The costs of HIV/AIDS can be high for mining companies and government, and tragic for family and surrounding communities. Impacts range from reduced productivity among workers, increased demands for both private and public health care, pressure on social protection systems, an increased burden on women who are often primary care-givers, and higher school drop-out rates as children are forced to work to substitute ailing parents income.

Both Government and mining companies have a role to play with the Ministry of Health taking a leading role in setting policies for prevention, management, and care of the disease and mining companies serving as key agents in sending messages on prevention and supporting treatment. The Ministry of Health has experience working on raising awareness of healthy behavior however officials note that efforts have been uncoordinated. The development of a more structured and coordinated strategy should be a priority as mining development kicks-off.

Table 3: Impacts from HIV/AIDS (Source: IFC, 2004)

Workplace impacts	Societal impacts	Family and community impacts
Reduced supply of labor	Negative impact on economic growth from reduced productivity and contracting tax base	Increased burden on women to combine care and productive work
Loss of skilled and experienced workers	Changing consumer behavior/spending	Loss of family income and household productivity leading to increased impoverishment
Absenteeism and early retirement	Falling demand in investment and enterprise development undermined	Orphans and other affected children forced out of school and into child labor
Stigmatization of and discrimination against workers with HIV/AIDS	A threat to food security and agricultural production as rural workers are increasingly affected	Pressure on women and young people to survive by providing sexual services

Increased labor costs for employers from health benefits to retraining	Increased demands for health care	Reduction in social cohesion in communities due to stigmatization of and discrimination against people living with HIV/AIDS
	Additional demands on pension, provident, death and funeral benefits	
	Social protection systems and health services under pressure	
	Pressure on higher purchase or bank loans and life insurance	

Mining companies can play instrumental roles in promoting healthy behavior and reducing infection rates. BHP Billiton, the world's biggest mine company, has faced significant challenges in South Africa where HIV/AIDS has reached epidemic proportions. BHP Billiton has adopted a multi-pronged approach, including raising awareness, offering voluntary counseling and testing (VCT) services, promoting care and support, and investing in research for a vaccine. In addition, BHP has sought to address the hostelling system where migrant workers live in single-sex hotels away from their families. BHP redesigned their approach to accommodation so that employees could live with their families.¹⁶

BHP's efforts have paid off. For every dollar it invests in HIV training, education and medical programs, the return is four-fold in terms of benefits such as stable production, employee commitment and productivity. More importantly, in 2006 BHP's employee HIV prevalence rate was 7.7 percent compared to that of the general working-age population which stood at 18.8 percent (Asia Pacific Business Coalition on HIV/AIDS n.d.).

Table 4: BHP Billiton initiatives to manage HIV/AIDS in the workplace (Source: Asia Pacific Business Coalition on HIV/AIDS)

Awareness	<ul style="list-style-type: none"> ➤ Extensive awareness, education and training program at all operation sites. ➤ HIV awareness is promoted through a variety of media including theatre, picture posters, and leaflets.
------------------	---

¹⁶ This was driven by a call by the National Union of Mineworkers for family accommodation by 2005.

VCT	➤ Most operations offer voluntary testing and counseling programs to employees under the strictest confidentiality.
Care and Support	➤ Employees are supported by universal medical insurance which offers access to appropriate treatment methods for HIV and AIDS. ➤ Occupational health nurses from BHP and five other major companies founded the Ethembeni Care Centre South Africa to provide care and support to people living with HIV/AIDS.
Research	➤ Investment in the trial of a new HIV immune therapy treatment in South Africa which if successful would offer a solution to the significant infrastructure issues hampering the management of HIV epidemics in developing countries globally.
Addressing underlying causes	➤ BHP Billiton led the closure of mining hostels and the establishment of support structures allowing employees to live in homes with their families.

Recommendations: Service Delivery and HIV/AIDS

1. *Provide additional resources to strengthen service delivery at the aimag and soum level in recognition of the population influx*

This additional support could be offered as special grants to mine-affected areas and can be financed through the various mine-related fees including license fees, fines on hiring foreign workers,¹⁷ and royalties. Papua New Guinea (PNG) may provide useful guidance here. The national government of PNG provides for a Special Support Grant which is transferred from the national Government to the Local level Government (the lowest level of government) to support infrastructure development required as part of mining development (National Economic and Fiscal Commission 2003). In an effort to balance this, non-mining provinces receive what was called a derivation grant which was derived from non-mining revenues.

2. *Promote and where possible scale-up innovations to service delivery.*

There are a number of innovations to service delivery being tested and expanding successful models should be explored. Initiatives that may be considered include: the Ministry of

¹⁷ The Labor Law states that, "If the number of foreign citizens exceeds ten percent the license holder shall pay ten times the minimum monthly salary for each foreign citizen every month and this payment will be "submitted to the budget of the relevant *soum* ... and shall be disbursed to the educational and health sectors; relevant procedures shall be approved by Citizens Representatives Hural of the relevant *soum* ..." (Art. 43.2 and Art 43.3).

Health's efforts to register mobile workers and give them identity cards so that they can access health services¹⁸ and the use of mobile health services to provide basic services.

3. *Proactively manage the development of ger settlements and ensure proper planning of emerging townships.*

While Mongolians will typically have the option of *gers* for housing these settlements are often unplanned and lack basic services such as potable water, waste treatment, and heating. Managing their development in a way that provides affordable housing options yet provides for basic services will reduce the chances of public health concerns. In emerging townships, town development should take into account the need to provide basic services such as drinking water, waste water treatment, electricity, heating and solid waste management.

Registration of Undocumented Workers

The Ministry of Social Welfare and Labor organized a census of informal miners engaging in gold, fluorspar, and natural salt extraction. The goals were to:

- Officially register them with their current employment
- Improve the social protection and welfare of artisanal miners by improving access to health care services and social insurance
- Increase public awareness on social insurance and employment legislation among ASM communities.

Under the banner of the census:

- 392 trainings and public awareness activities on State policy on ASM, occupational and health safety, access to social insurance, and consequences of child labor were undertaken
- 11698 individuals obtained related information
- 472 individuals were provided with access to pension, welfare, and health care services, and industrial and occupational disease insurance

Partners:

- The central and local Labor and Welfare Agencies personnel
- Respective Aimag Citizen's registration and statistics, social insurance, health and educational officers
- UNFPA project "Reduction of Socio-Economic Vulnerabilities of Artisanal Miners and Migrants"

¹⁸ This project was supported by the Swiss International Development Agency and carried out in eight *aimag*: Selenge, Darhanuul, Bayanhongor, Tuv, Arhangai, Dornogovi, Omnogovi, and Uburhangai.

- ILO/IPEC project Elimination of Child Labor

Financial support: Sustainable Artisanal Miners project

(Sustainable Artisanal Mining Project n.d.)

4. *Promote the prevention of HIV/AIDS and protect employees from discrimination on the basis of HIV/AIDS status through a workplace policy on HIV/AIDS.*¹⁹

The workplace is an opportune environment for disseminating information on prevention techniques and behavioral change. Mining companies should develop a context-specific policies that respond to the country situation and the needs of the workers. Elements in the policy could include the following:

- Information about HIV/AIDS and how it is transmitted;
- Educational measures to enhance understanding of personal risk and promote enabling strategies;
- Practical prevention measures which encourage and support behavioral change;
- Measures for the care and support of affected workers, whether it is they or a family member who is living with HIV/AIDS;
- The principle of zero tolerance for any form of stigmatization or discrimination at the workplace; and
- A plan of action that provides guidance on how the policy will be operationalized - information on both the policy and the plan of action should be widely disseminated in a format that is easy for workers to understand.

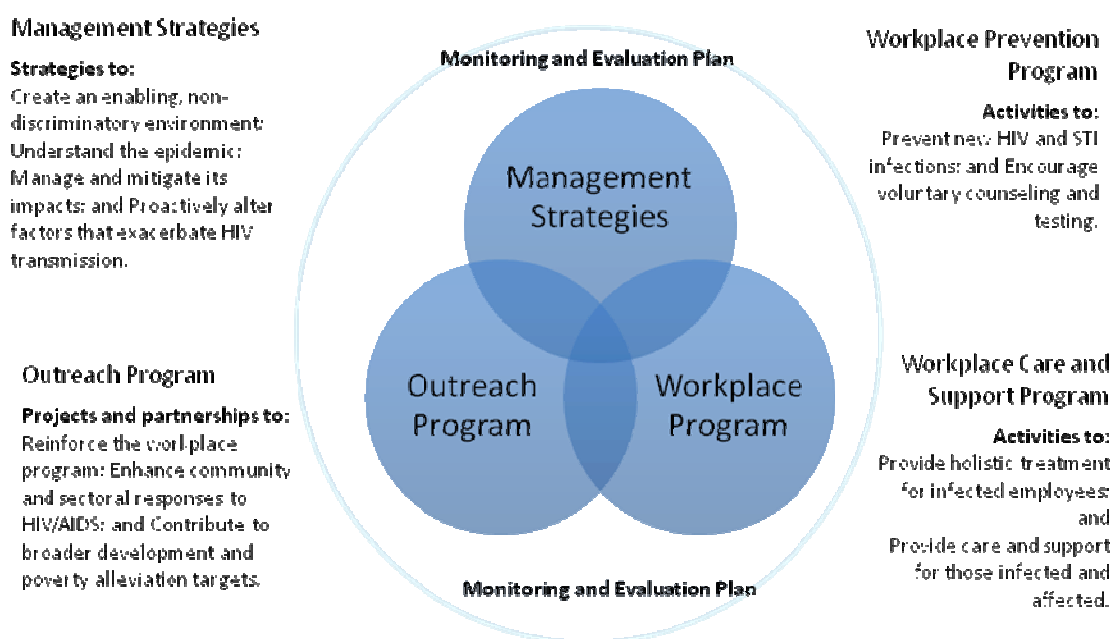
In addition, mining companies should form a body to monitor the application of the policy. This body should include a wide-range of actors such as, “representatives of top management, supervisors, workers, trade unions, human resources department, training department, industrial relations unit, occupational health unit, health and safety committee, and persons living with AIDS”

5. *Develop a widespread prevention campaign that is targeted towards mobile workers.*

¹⁹ Extracted from the ILO Code of Practice on HIV/AIDS and the World of Work.

The Technical Assistance Project currently being undertaken by the Asian Development Bank—Mongolia: HIV/AIDS Prevention in ADB Infrastructure Projects and the Mining Sector—will contribute to these efforts with components focused on provision of HIV prevention services and institutional capacity building. This Technical Assistance Project is being executed by the Office of the Deputy Prime Minister.

Figure 4: Framework for a comprehensive HIV/AIDS response



LAW AND ORDER

The potentially rapid increase in population and settlements could threaten social cohesion such as criminality and anti-social behavior. The concerns of law and order are likely to vary and will include different levels of crime and vice from petty crime, domestic violence, sexual harassment, commercial sex work, to fraud and vandalism.

Contributing factors to disruptions of law and order include unemployment, income inequality, price inflation of basic goods, perceptions of skewed benefit sharing, alcohol consumption compounded by the absence of recreation facilities for workers.

Inflation deserves special note here, as mining booms often result in an increase in the price of labor, goods, and accommodation. This creates an environment in which laborers can afford goods while the unemployed have difficulties making ends meet.

Victims of crime and violence may include migrant workers (particularly foreigners) who may be perceived of as taking opportunities that local residents should be entitled to, and women who are susceptible to gender-based violence (especially amid high alcohol consumption rates)²⁰ and are at a physical disadvantage in crimes of violence. Perpetrators are likely to include labor speculators or camp followers, disenfranchised local residents, and unemployed youth.

Of particular note is the potential rise of hate-related crimes against the Chinese. Mongolians are concerned by Chinese expansion and Mongolia has a history of xenophobic attacks; Chinese workers have been threatened and attacked as have Mongolian women who associate with Chinese men (US State Department Bureau of Democracy, Human Rights, and Labor 2008). Careful leadership at the local and national level will be required to ensure acceptable working standards and respect for the human rights of all workers, **including** temporary foreign workers.

Recommendations: Law and Order

1. *Strengthen the capacity for ensuring law and order.*

This will include ensuring that there are sufficient police, jails and functioning courts to manage crimes. Law enforcement officers should also be trained to deal with foreign

²⁰ Current rates of violence against women are estimated at 35 percent (cite).

workers in particular and hate-related crimes. In addition, the state should aggressively prosecute crimes against foreigners to deter hate-driven crimes.

The Government of Mongolia should ensure that immigration laws are implemented to deter and reduce visa violations. The perception of undocumented foreign workers may be a cause for interpersonal or more widespread conflict between local residents and migrants. Improving immigration law enforcement may require increasing the enforcement capacity of the Ministry of Immigration and increasing resources (staff, computers with networking facilities) at border posts.

2. *Develop a broad information awareness campaign on the need for foreign workers.*

An information awareness campaign targeted towards local residents and migrants could address issues such as: the need for migrant workers, employment opportunities for local residents, immigration laws, local laws and cultural norms, human rights for migrant workers, etc.

Laying out the process and reasons for recruiting workers, both foreign and national, will reduce the impression of nepotism (concerns have been raised about jobs being apportioned to relatives and friends in urban areas such as Ulaanbaatar instead of to local residents) and will contribute to reducing possible tension between local residents and foreigners.

III. CROSS-CUTTING THEMES

BENEFIT SHARING

There have been consistent calls for benefit-sharing from local residents in southern Mongolia. There is a strong sense while talking with community members that while they are excited about the development of mining they are deeply concerned that they will be left out of the opportunities, losing out either to urbanites from Ulaanbaatar or foreigners. These concerns have contributed to calls for benefit-sharing. Types of benefits vary, some with some calling for local residents to be prioritized in employment, others calling for revenue to be retained at the local level, and others calling for investments at the local level.

Because previous sections have discussed labor opportunities and social services, this section will focus on: a) the financial benefits that will accrue to government from the mine and b) the in-kind contributions from mining companies.

Governments impose a range of taxes on mining companies the most significant being the royalty. Royalties are unique to the natural resources sector and are perceived of as compensation to the state and its citizens for the extraction of non-renewable resources (James Otto 2006). Royalties can be extracted based on the number of units produced, the value of units or the profit made by mining companies.²¹ National legislation often indicates how royalties are to be used, at what level of government, and for what general purposes.

Royalties can be held at the central level and absorbed into the governments' general expenditure or they can be distributed to sub-national governments. Alternatively they can be collected and retained at different levels of government. In Mozambique and Argentina for example, royalties can be collected at lower levels of government.

Table 5: Examples of how royalties are distributed (Source: Otto et. al.)

Sub-national level	Distribution of royalties
Mozambique	Percentage of royalties are paid directly to lower levels of government.
Ghana	20 percent of mineral royalties are paid to a Minerals Development Fund which returns this income to communities directly affected by mineral development (the local government authority, landowners, and local communities.
Namibia	Royalties are paid into a Minerals Development Fund. Expenditures include providing funds for the development of training and education facilities and programs and supporting economic diversification.
Argentina	States can levy, collect, and spend royalties.

In Mongolia, royalties are collected by central government and then allocated to the *aimag* and *soum* budgets—at 20 percent and 10 percent, respectively. However, discussions on royalty revenues and license fees revealed surprisingly little information on how much money is received from royalties and how it is spent. A 2005 World Bank report flagged this opacity as a

²¹ See Otto et. al., 2006 for an in-depth discussion of different taxation structures

key issue noting that, "... there is a critical need to clarify and simplify the process for determining central government transfers to local authorities, including VAT and mining revenue sharing arrangements" (World Bank 2005).

Royalties present an opportunity for government to finance local development activities and to compensate the local area for the impacts of mining development.

Mining companies make a wide range of contributions to communities by, for example, donating supplies, providing bonuses for service providers to work in remote areas, or donating funds for the construction of facilities. In areas where government is present and governance strong, mining company contributions function as a supplement to governments' activities. However, where government is weak and governance poor mining companies can risk slipping into the role of a quasi-government entity. The latter scenario can be advantageous to weak government as demands on delivery is reduced, often leaving officials to operate without scrutiny. Corruption can fester in this type of environment and could be accompanied by explicit actions to block engagement between citizens and government.

In this type of situation, mining companies will find themselves in a difficult position, uninterested in taking up the business of government but obligated by a sense of social responsibility to support the communities in which they work.

For sustainable community development, it is important that these contributions are aligned with a local development strategy, if one exists and if not, the emergence of mining development could serve as a catalyst for the development of such a plan. Links with sectoral ministries are critical to ensure that the capacity of the ministries is strengthened and that necessary arrangements such as operations and maintenance, are made. If these alignments are missed, there is a risk that contributions will not respond to community need or may be unsustainable because funds for recurrent expenses have not been allocated.

Recommendations: Benefit-Sharing

1. Contributions by mining companies should be linked to government systems.

Contributions that mining companies make to local communities can be made more sustainable if mining companies work with *aimag* Governments to ensure alignment of contributions with the *aimag* strategic plans.

In addition, donations that include physical investments and equipment should be made in close consultation with relevant line ministries to ensure that funds are set aside for recurrent expenses. Without adequate sectoral links donations can create rather than alleviate a burden for local institutions. In addition, donations that include financial resources should either be time-bound with a specific, and well-understood, goal in mind, or structured in a way that hands-over the responsibility and commitment to more sustainable entities such as government.

2. *Promote transparency and accountability of revenues and contributions to communities.*

Providing for citizens to examine benefits (and revenues) that are channeled from mining to the government and communities can reduce and prevent corruption. Legal tools available for monitoring, transparency and accountability include: Article 42.3 of the Minerals Law which allows citizens to elect a representative to provide public monitoring of the license holder's activities and chapter 9 of the Minerals Law provides access to minerals related information and reports.

In addition, initiatives underway to provide monitoring of mining company activities include: The Extractive Industry Transparency Initiative which seeks to increase knowledge of the transactions between mining companies and governments and License Watch (Open Society Forum) which provides statistical analysis on the numbers of licenses and the procedure to obtain licenses, information on contracts (such as investment agreements and concessions, etc) In addition, the Open Society Forum hosts discussions on the use of mining revenue (revenue watch).

MECHANISMS FOR ENGAGEMENT

Lessons over the years have consistently emphasized the need for inclusive multi-stakeholder engagement at every stage of mining development. The basic groups of participants are community members, government, and mining companies. There are often different sub-groups within this triad—special interest groups or civil society organizations—who should be part of any consultation process.

Platforms which bring all actors to the table provide opportunities for information sharing, decision-making, and dispute resolution. These platforms should: (i) define clear roles and responsibilities for actors, (ii) be developed as early in the mining development cycle as possible, and (iii) be created as a multi-partite endeavor. While developing these platforms will see a lot

of activity in the early stages of mine development they must be used throughout the mining cycle as noted below.

Canada presents an experience of a multi-stakeholder consultation forum. This tri-partite consultation forum (which includes communities, companies, and governments) has been useful at addressing concerns raised by mining development. As part of the partnership, companies must negotiate impacts and benefits agreements with their communities using community based consultation procedures that have been developed. Through this consultation forum, communities have requested training programs for mine work, assurances of buying local inputs, and a policy of eventual 100 percent regional employment.

Box 3: Description of Phases of the Mining Project Cycle and Company/Community Interactions (Community Development Toolkit 2005)

Phase	Description
Characteristics	
Exploration	<ul style="list-style-type: none"> • Highly competitive and structured within very short time horizons • The nature of the relationship between company and local communities is established and generally sets the tone of relationship from then forward. • This is a challenging time since, in the early stages at least, there is an inbuilt mismatch between the interests of communities that want full information disclosure and a long-standing relationship and the interests of exploration teams who want to keep their data confidential and who will move on if there are no promising prospects for follow up.
Feasibility	<ul style="list-style-type: none"> • Extensive technical studies and consultations with government and local stakeholders • Important opportunities for the company to engage with local communities to establish needs, concerns and to inform communities about possible mine development scenarios and timing.
Construction	<ul style="list-style-type: none"> • Relatively short, but typically brief and intense, set of activities in the construction phase potentially with a large and/or temporary workforce • The influx of temporary workers can be traumatic for community • A lot of cash introduced into the community

Operations	<ul style="list-style-type: none"> • Medium to long-term horizons. • Period of greatest presence and stable activities. • Opportunities to implement long-term community development programs, focusing on locally identified development needs and community participation and stakeholder partnerships in program design, implementation, and monitoring.
Decommissioning and closure	<ul style="list-style-type: none"> • May be according to a long-term plan or may occur prematurely. • Need for closure planning throughout the mining project cycle to ensure that programs can survive mine closure. • Role and development of local partners is critically important in planning for closure. • Even well planned and implemented closure will likely cause significant decline in community income and tax base of local government
Post-closure	<ul style="list-style-type: none"> • Long-term time horizon. Includes monitoring of environmental impacts and social conditions following closure • Requires clear allocation of responsibilities for monitoring and remediation of any post closure impacts • Support for post-closure alternative income generation measures and sustaining the delivery of social services.

Power asymmetry is likely to be a characteristic of engagement in these platforms with mining companies and civil society organizations more likely to have a great deal of experience in this type of multi-stakeholder dialogues and mining companies will have far more resources at their disposal to convene meetings or scuttle efforts. Conversely, local communities and non-affiliated citizens may not be well-positioned to engage with mining companies. In addition, local residents may not have the necessary tools or be organized in ways that makes these types of dialogues inclusive. For example, cultural norms may exclude youth or women from these discussions or may privilege wealthy residents over poorer and more vulnerable individuals.

In addition to a consultative mechanism issue-specific partnerships may also necessary. The experience from ongoing initiatives could be very useful. For example the multi-stakeholder partnership in Dornogovi aimag which serves as a mechanism for sharing information. This partnership includes the aimag government, environmental staff, social staff, agricultural staff,

NGOs, mining companies and contractors who meet at least once a year to discuss problems emerging from mining development.

Recommendations – Mechanisms for Engagement

1. *Develop a policy that mandates a multi-stakeholder forum as a platform for engagement vis-à-vis mining development.*
2. *Strengthen the capacity of stakeholders to engage in multi-stakeholder fora.*

To strengthen these fora building the capacity of local government to work with communities might be necessary especially in cases where governments' engagement with citizens is weak. Promoting the use of participatory decision-making between local government and community members will promote ownership of decision-making and ensure that all voices are taken into consideration.

In addition, working with citizens to build their understanding of multi-stakeholder engagement and to ensure that they are inclusive in raising their voice will also be important.

3. *The Government decision-making process could be revised to ensure publication of issues papers, with a mandatory period for public comment, prior to major ministerial or Government decisions.*

International Good Corporate Practice

On Stakeholder Communication and Consultation

- Develop project-specific policies and guidelines for community engagement and engagement with non-commercial stakeholders (community groups, NGOs, non-shareholding government authorities, universities etc) pursuant to the framework of domestic laws and regulations and international obligations, and including company management and employee training, an effective monitoring system and communication of performance to external stakeholders.
- Disclose information about project operations and potentially adverse environmental and social impacts sufficiently early in planning of each stage of new operations (conceptual design, feasibility studies, construction, operations and decommissioning) to allow engagement with stakeholders on weighing the trade-offs and contributing to design and impact mitigation.

- Communicate meaningful information for stakeholders to make informed choices, i.e. information in readily understandable formats tailored to the needs of different stakeholder groups.
- Communicate information that is accessible to those stakeholder most affected by business operations.
- Identify and inform all relevant stakeholders, with sufficient time (and where necessary facilitation) the interpretation of the information.
- Continually engage with and 'track' stakeholder engagement, with emphasis on measuring company performance (i.e. stakeholder satisfaction) and 'bundling' of different activities that stakeholder would wish to address collectively, e.g. compensation negotiations, employment opportunities and mitigation of adverse socio-economic impacts.
- Maintain oversight of the outcomes of stakeholder engagement undertaken in the name of the company by others, e.g. cases where engagement is undertaken by government (e.g. for asset loss compensation) or contractors (e.g. during Environmental Impact Assessment studies).
- Involve government agencies and legitimate community groups, NGOs etc. in consultation and other engagement activities to build trust and mutual understanding.
- Communicate accessible and safe mechanisms for stakeholders to raise and resolve grievances with the company.
- Recognize the need to secure informed consent on decisions affecting indigenous peoples and their domain areas.
- Involve community, local government and NGOs in environmental and social monitoring, e.g. of ESIA-related management plans and on-going social management systems.

(AccountAbility - AA1000 Series n.d.)(Source: *Source of Good Practices International Finance Corporation - Doing Better Business through Effective Public Consultation and Disclosure* - <http://www.ifc.org/enviro/Publications/Practice/practice.htm>; Dow Jones Sustainability Indexes – Guide - <http://www.sustainability-index.com/assessment/criteria.html>; AccountAbility - AA1000 Series - <http://www.accountability.org.uk/resources/default.asp>

SOCIAL CONFLICT AND CONFLICT MANAGEMENT

Conflict is inherent in social change. Given the extent of the potential impacts on individuals, households, and communities outlined above social conflict will be a feature of southern Mongolia albeit at different levels.

Given the nature of the southern Mongolian development the sources of conflict are likely to be resource or identity based. The former could be triggered by an influx of outsiders and a scurry for resources while the latter would be triggered by an influx of non-Mongolians.

The manifestation of these conflicts may vary and may include interpersonal attacks against foreigners those associated with foreigners; overt attacks or covert sabotage against the pro (Corporation n.d.) (Dow Jones sustainability Indexes - Guide n.d.) party of mining companies; interpersonal disputes between owners of resources versus those without (including interpersonal violence); localized or widespread intergroup violence between local residents and foreigners or between nationals and migrants; group attacks against the government and/or mining companies (verbal, written, or physical attacks); and group attacks against individual foreigners.

These manifestations will indicate that there is a potential for: (i) escalating the conflict, either by increasing the number of groups involved, widening the affected area, or entrenching actors in their positions; and (ii) making the conflict more complex by introducing more concerns into the conflict.

Conflicts can escalate when there is a reaction to one parties' action and this becomes a vicious upward spiral. Conflicts can also escalate when the nature of conflicts create and entrench certain behavior among communities and parties which in turn entrench positions and increase responses to conflict. This can result in more extremism, increased number of supporters on either side of the conflict, and stronger cohesion within the conflict parties (Rubin 1986). Because of the nature of escalation it is critical that culturally relevant dispute resolution mechanisms are available; culturally relevant mechanisms for managing large-scale conflict are available; that monitoring of potential sources of conflict occurs in an effort to provide early warning and response.

Backlash Against Migrants in South Africa

High migration rates can lead to tensions between resident and migrant populations. In 2007, violence against foreigners in South Africa led to the deaths of approximately fifty people and the displacement of tens of thousands others. Target populations included African migrants, Chinese speakers, Pakistani migrants and South Africans from minority language groups. The episodes of violence that led to these deaths were a culmination of years of discrimination, prejudice, and latent conflict between South Africans and outsiders.

A rapid response survey carried out in an effort to understand the violence uncovered the following themes as critical to the emergence of tensions:

1. Role of government

- Frustration over the insufficient pace of service delivery and consultation in general, and over housing provision and administration in particular.
- Ineffective communication and/or engagement with local citizenry around the violence and its underlying causes.
- Perceived corruption and impropriety of government officials, especially in the police service and

Department of Home Affairs.

2. The scale of the influx of 'migrants' and migration policy

- Poor management of cross-border migration.
- Unease about the threat posed by undocumented migrants of access to resources such as housing, business opportunities, formal employment and local women.
- Perception that foreign nationals arrive in the country with cash, skills and tolerant of low wages and hard work.

3. The impact of migrants on gender dynamics

- Perception among locals that menial or ill-paid work undermines the hard-won fruits of democracy ('entitlement') and undermines dignity.
- Anger that foreign arrivals are 'showing up' local men by earning more, working harder and take whatever work they can get. This diminishes the locals in the eyes of local women.
- Perception that young women admire foreign men for creating opportunities for themselves and being prepared to do whatever work is available to make a living.
- Women believe South African men are complicit in criminal activities and corruption.

4. The pace of housing policy and the administration of housing

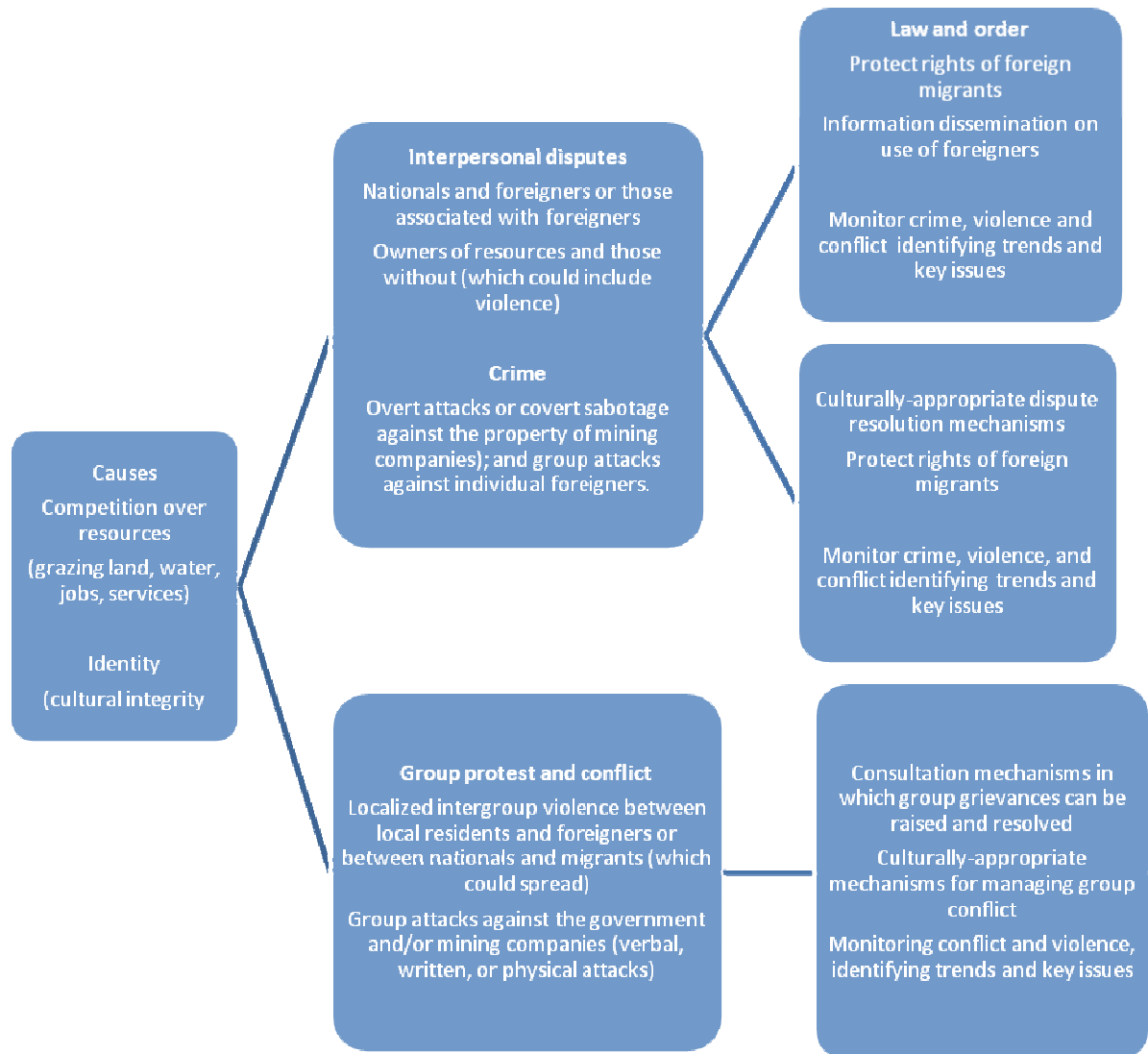
- Corrupt housing practices.
- Locals rent out their homes to migrants to secure regular cash income.
- The slow provision of housing.

5. The politics of economic livelihoods and the competition for resources

- Competition for resources such as water, sanitation and health services together with employment and business opportunities is also a key dimension to the recent spate of conflict.
- Further conflict exacerbated by local practice of preferring non-South African employees, particularly in the domestic, gardening and construction sectors.
- The lack of a minimum wage in the casual labor sector also means locals are undercut by migrants, triggering unhappiness.

(Hadland 2008)

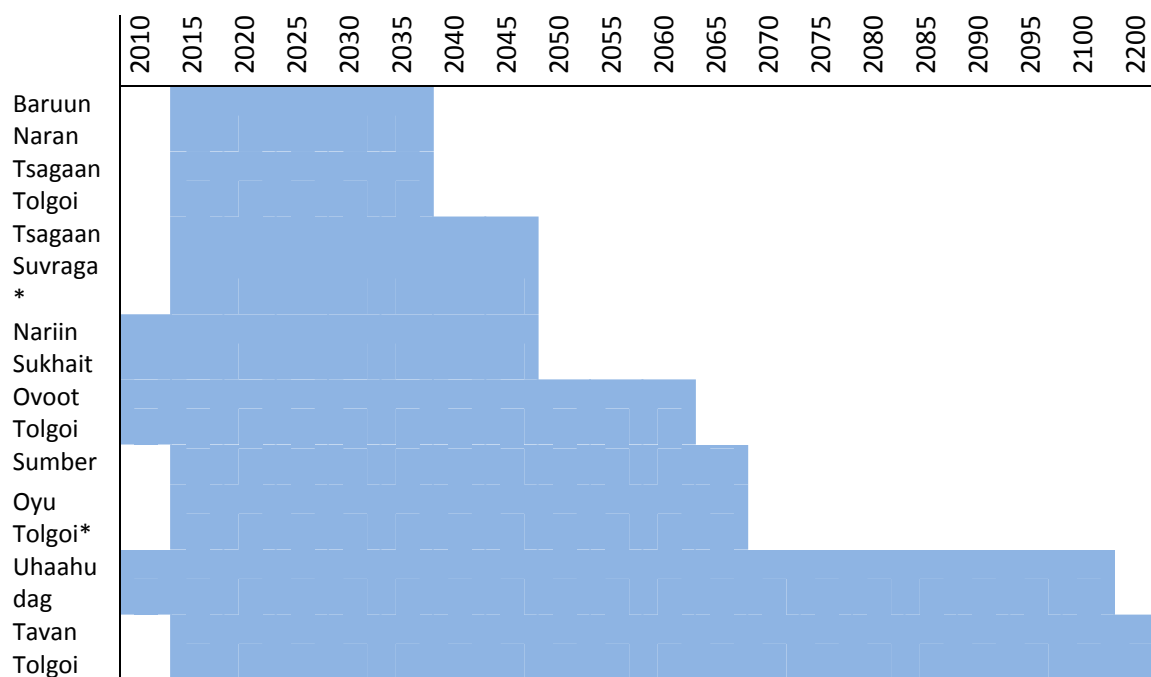
Figure 5: Causes, manifestations of, and possible mechanisms to resolve, conflict



MINE CLOSURE

Each of the impacts laid out above should be prepared with mine closure in mind. The estimates of mine life vary from twenty to over two hundred years. With an eye on the short-lived mines (see Table 6 below) the government and communities should come to the table of mining development with mine closure and its impacts in mind. Indeed, international experience shows that it is never early enough to prepare for mine closure.

Table 6: Potential major mines in southern Mongolia (The World Bank Forthcoming)



The closure of a mine can mean the loss of thousands of jobs, the exodus of skilled residents, the deterioration of service delivery, and the hollowing out of once vibrant communities. These impacts can be mitigated if early on in mine development governments focus on diversifying local economies and reducing dependency on extractive industries. Other impacts are not so easy to address, such as lingering inflation and the risk of increased crime and vice.

Governments and communities should be prepared to see rising rates of impoverishments, particularly among segments of the population who are unable to move to new areas where they can earn livelihoods. If mining companies had played lead roles in service delivery there is a risk that citizens would be left without basic services and that human development indicators

would drop. Especially in contexts in which there were no provisions for government to take over these roles or if government had deliberately stepped away from its role in service delivery.

Two examples are worth review: firstly, the experience of Gecamines, a state-owned mining company in the Democratic Republic of Congo. When Gecamines reduced its operations in the late-1990s the company shut down all the infrastructure services it provided to the surrounding community, including schools, hospitals, clinics and worker housing. At the time the Government was at the tail end of a devastating conflict and the government unable to continue providing services. In Britain, the decline of coal mining has had disastrous effects on towns. The box below provides some insight into the implosion of communities as coal mines closed down.

Watching the pits disappear

In 1984, the year of the miner's strike, there were 170 working collieries in Britain. Today there are only eight working pits left in the country. The impact of the devastation of an industry that once employed over 100,000 workers has been especially severe for the communities concerned because in many villages the Coal Board was the sole employer.

David Parry, spokesperson for the Coalfields Communities Campaign, comments, "You get 50 jobs created in a place where 2,000 men used to work and this means older men in particular are parked outside the labour market." Hidden unemployment is a large problem with many former miners existing on sickness benefit, while regionally there are some very real blackspots where not very much has moved in the past 10 years.

The fabric of the housing stock has deteriorated and many villages in the former coalfields have become like inner city sink estates except they are in semi-rural isolation. The government has also acknowledged the particular problems faced by ex-mining and coastal communities. An employment report by HM Treasury noted that within regions, though, there remain pockets of high unemployment. A tail of around 15-20 local authority districts have not enjoyed the fruits of recovery seen throughout the rest of Britain. The majority of these areas are in inner cities, but seaside towns and former coal mining areas also feature.

Often people from ethnic minorities, lone parents and people with disabilities are disproportionately concentrated within these small areas. They may suffer from poor housing, inadequate transport links and high crime rates, leading to social exclusion. Low employment rates are often both the cause and effect of these areas' problems. (HM Treasury, 2000:1).

(BBC News Online n.d.)

Efforts to prepare for mine closure will require the engagement of multiple stakeholders including mining companies, government (at different levels), local communities and civil society groups, and donors and international financial institutions.

Mining Companies	Local Government	Central Government	Local Communities & Civil Society	Donors and IFIs
<ul style="list-style-type: none"> •Begin planning for closure at feasibility •Work in partnership with local governments and communities, building capacity and social capital •Ensure availability of financial resources for closure •Implement closure in line with laws, regulations, and agreements with government and local communities 	<ul style="list-style-type: none"> •Prepare for post-closure •Develop sustainable service delivery •Support economic diversification 	<ul style="list-style-type: none"> •Provide an adequate legal and regulatory framework for closure as well as monitoring and enforcement institutions •Responsibly invest and distribute fiscal revenues from mining •Promote sound local and regional planning 	<ul style="list-style-type: none"> •Avoid dependency •Participate in closure planning •Use income to prepare for the future <p>Civil Society</p> <ul style="list-style-type: none"> •Support communities in reducing dependency on the mine •Engage in service delivery where appropriate •Monitor mining and closure activity 	<ul style="list-style-type: none"> •Donors and IFIs •Support governments, as necessary, to: •Establish a modern legal framework for mine closure •Finance closure costs and social support for workers leaving state-owned mining operations •Facilitate regional planning •Encourage economic diversification •Disseminate good practices

IV. CONCLUSION: WHAT NEXT?

Mining development presents an unparalleled opportunity for growth, improved human development outcomes, and a decrease in the poverty rate. The potential negative impacts on individuals and communities, while significant and wide-ranging, can be mitigated by careful planning in these early stages.

While this report has outlined numerous recommendations the key messages that run through are: firstly that early, consistent, and inclusive consultation with communities, mining company representatives, and government is critical; secondly that there must be clear and well-defined responsibilities for mining companies and government—merging these responsibilities can result in citizens losing out on potential benefits; thirdly, that information-sharing, transparency, and open lines of accountability play a role in preventing disputes and conflict; and fourthly that that the preparation for mining development should include preparation for mine closure.

Given the breadth of issues and the number of actors that could potentially be called to the table, how does the process of preparing citizens for mining development start? Table 8 identifies the feasibility stage as the point at which important opportunities for consultation between communities and mining companies occur. Indeed, in many respects the southern region of Mongolia as a whole is experiencing the transition between an exploration and feasibility stage and this might be the opportune time to start a dialogue that brings mining companies, community members, and government to the table to discuss the specific ways in which mining development will impact citizens' lives.

How this dialogue takes place, who specifically is involved and the details of the mechanisms for engagement are very much up to the Mongolian people. Nonetheless it is important to note that this type of consultation is effective only if all actors come to the table as equal partners, with a commitment to be fully engaged, and if the process takes place in the regions in which the impact will be felt, that is, not in urban centers distant from the relevant *aimags*. These dialogues would go beyond general themes and could include as goals obtaining commitments for policy action from relevant ministries and creating mechanisms for multi-stakeholder engagement over the medium to long-term.

Indeed, a series of consultations in the southern Gobi that (i) discussed the impending changes; (ii) began to map out specific roles and responsibilities for the impacts highlighted above, in addition to special concerns faced by segments of the communities; (iii) solicited and obtained commitments for action from each of the stakeholders; and (iv) prepared a policy to institutionalize this process then mining development in southern Mongolia would be well-positioned to deliver positive outcomes for its people.

BIBLIOGRAPHY

Interview by Author. (March 2009).

BBC News Online. *BBC News Online*. <http://news.bbc.co.uk/1/hi/uk/3514549.stm> (accessed April 2009).

"Community Development Toolkit ." ESMAP Formal Report Series, Washington DC, 2005.

European Bank of Reconstruction and Development. *European Bank of Reconstruction and Development*. May 25, 2007. (accessed March 27, 2009).

Forum, Open Society, interview by Author. (March 2009).

Government of Mongolia. " Mineral Resource Law Article 41.1." Government of Mongolia.

Government of Papua New Guinea. "Organic Law on Provincial and Local Level Government Affairs, Article 97." Government of Papua New Guinea, 2005.

HIV/AIDS, Asia Pacific Business Coalition on. *Asian Pacific Business Coalition on Aids*. www.apbca.com/_news/BHPB_Case_Study_Final.pdf (accessed April 25, 2009).

International Finance Corporation. *Project-Induced In-Migration*. Washington, DC: IFC, Forthcoming.

James Otto, Craig Andrews, Fred Cawood, Michael Doggett, Pietro Guj, Frank Stermole, John Stermole, and John Tilton. *Mining Royalties: A Global Study of Their Impact on Investors, Government, and Civil Society*. Washington, DC: The World Bank, 2006.

Janzan, J. "Artisinal and Small-Scale Mining in Mongolia: The Global Perspective and Two Case Studies of Bornuur Sum/Tuv Aimag and Sharyn Gol Sum/Sarkhan-Uul Aimag." Ulaanbaator, Mongolia: Center for Development Research, 2007.

Ministry of Health. "The National Health Indicators." Ulaanbaatar, 2006.

National Economic and Fiscal Commission. *Review of Intergovernmental Financing Arrangements: Interim Report and Proposals for a New Framework*. Port Moresby: NEFC, 2003.

Open Society Forum. www.forum.mn/index.php?coid=2258&cid=357 (accessed March 28, 2009).

Sustainable Artisanal Mining Project. (accessed 2009).

The World Bank. *Country Economic Memorandum: Sources of Growth*. Washington, DC: The World Bank, 2007.

The World Bank. *Foundation for Sustainable Development: Rethinking the Delivery of Infrastructure Services in Mongolia*. Washington, DC: The World Bank, 2007.

The World Bank. "Southern Mongolia Infrastructure Strategy." Washington, DC, Forthcoming.

UNAIDS. *UNAIDS*. www.unaids.org/en/CountryResponses/Countries/mongolia.asp (accessed April 27, 2009).

US State Department Bureau of Democracy, Human Rights, and Labor. *2008 Human Rights Report: Mongolia*. Washington, DC, February 2009, 2008.

World Bank. *A Review of Environmental and Social Impacts in the Mining Sector*. Washington, DC: The World Bank, 2006.

World Bank. "Gender and Mining: An Assessment of the Impact of Gold Mining on Women in Mongolia." 2007.

World Bank. *Mongolia: Poverty Assessment*. Washington, DC: The World Bank, 2006.

World Bank. *Mongolia's Regional Development*. Policy Note, Washington, DC: The World Bank, 2005.

World Bank. *Quantitative measures of poverty in 1998 and 2002: a note based on the Living Standard Measurement Surveys*. Washington, DC: The World Bank, 2005.

World Bank. *World Development Indicators*. Washington DC, 2009.