



**MRPAM**  
**Mineral Resources and**  
**Petroleum Authority**  
**of Mongolia**

Project Document on the  
Main Phase of the

**Sustainable      Artisanal      Mining      Project**

in the Framework of Sustainable Natural Resources Management for  
Poverty Alleviation in rural Mongolia  
1/1/2007 – 31/12/2010

*International Vision for Artisanal Mining:* (from the Association for Responsible Mining, May 2006)

***Artisanal and Small-Scale Mining (ASM) is a formalized, organized and profitable activity, that uses efficient technologies and is socially and environmentally responsible; it progressively develops within a framework of good governance, legality, participation and respect for diversity; it increases its contribution to the generation of decent work, local development, poverty reduction and social peace in our nations, stimulated by a growing consumer demand for sustainable minerals and jewellery.***

# 1 Executive Summary

Mongolia has huge mineral deposits. The quest for a proper sharing of these resources between national and international companies, the government, and Mongolian's citizens is fueling political discussions and private conversations. Mongolia's economy has for the last 30 years profited from export of copper and lately also gold, gaining significant tax revenues and attracting significant foreign investment. Since the devastating winter disasters in 1999-2001 an informal mining sector emerged; an estimated 100,000 artisanal miners engage themselves into this poverty ridden, unregulated activity. Many are former herders, but also other poor families from rural centers dig for gold and other minerals. Students in search for their school fees and public servants trying to top up their meager salaries temporarily join these artisanal mining communities.

Poverty alleviation through private-led economic growth is a high priority for the Government of Mongolia and the MDG-based National Development Strategy 2007-21 enforce this. One of the keys for sustainable development is careful natural resource management as the livelihood of almost half of the population still relies on intact pastureland. Mining activities are posing a threat to the environment as water sources get polluted with mercury and other toxics, pastureland destroyed and whole areas depleted of bushes and shrubs for fuel sources. It is therefore not surprising that there is a significant conflict potential between miners and other natural resource users, but also between formal mining companies and informal miners.

Recognizing the significant potential in artisanal mining for rural development (the annual revenues from the sale of artisanal gold are estimated USD 100 million) the government started to pay careful attention to artisanal mining. Since the start of the Support for Artisanal Mining (SAM) project in 2005 by SDC and the Mineral Resource and Petroleum Authority of Mongolia (MRPAM) the later set up a unit within the authority to address issues in artisanal mining. Additionally, a law on artisanal mining was developed with assistance from SDC and MRPAM and submitted to Parliament. It is addressing issues like labor safety, child labor, social vulnerabilities like HIV/AIDS and access to mining licenses. It is harmonized with the mining law to allow upward integration of artisanal miners into the formal sector and provides mechanisms to collaborate with the formal sector. The SAM project started to test different regulations and mechanisms to formalize artisanal miners in two soums in Bayankhongor aimag. To monitor the impact of artisanal miners on the environment and also changes in socio-ecological parameters, an environmental assessment was conducted at two mining sites and socio-ecological baseline indicators established.

Encouraged by the results of the entry phase of the project SDC and MPRAM propose an implementation of a main phase of the project from 2007-2010, followed by a two year exit phase. Taking into account the external evaluation of the project in July 2006, participatory planning and consultations with national and international organizations, the goal for the main phase of the Support for Artisanal Mining project is to contribute to the development of responsible mining in Mongolia by working with all stakeholders to ensure that artisanal miners are recognized as responsible members of a key economic sub-sector contributing to sustainable rural development. The project will continue to address a) the legal and regulatory framework and of artisanal mining; b) institutional and organizational strengthening; c) responsible artisanal mining and artisanal mining community development; and d) provide tools and methods for conflict resolution and environmental conservation. Capacity development, mainstreaming of gender-related issues and improving governance will be carefully planned and progress assessed.

The project will be implemented by a project implementation unit jointly set up between MRPAM and SDC. During the main phase SDC will appoint the project coordinator, the exit phase will then be led by a member of MRPAM. Four team leaders will be responsible for the implementation of the different components. National and international advisors will provide technical expertise and strengthen the network with the international artisanal miners networks. The main beneficiaries will be the artisanal miners, who will also be involved in participatory monitoring of the project.

For the implementation of the project CHF 4,821,123 is requested from the approved framework credit for SAM of CHF 8 millions from SDC and MPRAM will contribute services worth CHF 281,767.

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## 2 Background of the Program

The conclusion of a careful appraisal of the environmental sector led to the decision to focus on artisanal mining<sup>1</sup> starting the GEP funded NRM program. The sector is economically promising, there is a lot of momentum and the beneficiaries are the vulnerable and poor. It was proposed to support the artisanal miners as a component within the Swiss Cooperation program for Mongolia through funds from the Swiss Global Environment Program (GEP), which provides funding for Mongolia since 2005. Following the lines of the entry proposal SDC earmarked funds of CHF 8 Mio. over a period of about 8 years to support artisanal miners. The project started with the preparatory phase of 1 ½ years in 2005. It will be followed by a main implementation phase of 4 years now and an exit phase of two years is envisaged. This project shall empower the Mongolian key stakeholders to integrate artisanal mining into the rural development in order to optimize their contribution to sustainable livelihood in remote areas.

The project, which officially started July 2005, has undergone an external evaluation in summer 2006. The evaluation provided some findings for the concept and design of the main phase. The present further builds upon the mutually agreed planning platform and a series of participatory planning sessions in Ulaanbaatar.

### 2.1.1 *Mongolia's Development Challenges*

Mongolia's top development concern is poverty and inequality reduction. Since entry into the transition stage in 1990, Mongolia has been having a high rate of poverty. 1995, 1998 and 2002/2003 poverty surveys estimate every third person in Mongolia is poor. In the last couple of years Mongolia achieved a reduction of poverty by 4%, from 36% down to 32% (World Bank 2006). But this achievement is at macro level following the recent economic growth. The poverty remains severe at household level especially in rural areas. One third of total households live in poverty. Most of the poor households concentrate in rural areas and suburban parts of the cities.

The key reasons for poverty are lack of income and employment and vulnerability to external factors especially natural disasters. Exclusive dependence on the natural resources due to low industrial infrastructure and traditional pastoral economy makes the livelihood of rural people quite vulnerable to climate factors. Almost 11 million head of livestock were killed during the natural disaster "dzud" in 1999-2001. As a consequence, poverty in rural areas rapidly rose to 41% versus 32% in urban areas. Poverty is most severe in the western region (51%), where SDC is focusing its activities.

The country's development goal is pro-poor economic growth, which aims at reducing the poverty and inequality and achieving a balanced regional development. This goal is consolidated in the Mongolian Government's commitment to the MDGs. The country is currently drafting a MDG-based National Development Strategy 2007-2021 (NDS). Important component of this strategy are sustainable natural resource use, industrial development, employment creation, education and education. Alternative pro-poor employment and income opportunities like artisanal and small scale mining (ASM) are being considered in the draft National Development Strategy.

### 2.1.2 *Geographical and environmental profile of Mongolia and its relation to artisanal mining*

With a population of 2.5 million distributed over 1.6 million km<sup>2</sup>, Mongolia is one of the lowest density countries in the world. However, its high altitude (1500 m above sea level on average) and dry continental climate (conditioned by land-lockedness) make Mongolia's environment very fragile and regeneration process slow. Therefore, a sound environmental management and conservation practices are essential for Mongolia.

Since the key economic sectors are based on natural resources, the pressure has always been on the environment. Starting in 1990 the pressure has intensified due to desperate demand to earn fast business cashes. Plus, the lack of income and job in rural areas push the poor to make uncontrolled use

<sup>1</sup> Artisanal Mining means placer and underground mining operations that have limited capabilities to extract minerals from the aboveground and underground with hand tools or small scale technology. It will become formalized, organized and profitable economic entities using efficient technologies and having social and environmental responsibilities.

of natural resources (forestry, hunting, collection of plants, berries and nuts, mining) in rural areas. The global warming adds to these pressures on the environment. Since 1960, the air temperature has risen by +0.7 causing quite a change in precipitation, vegetation and water distribution. The pressure by humans and climate has had a devastating influence on the Mongolian environment. Almost 70% of the total pasture land is overgrazed, forested area is down from 12% in 1998 to 8% in 2002, and desertification is on the constant rise to jeopardize the livelihood of the people in future. Loss of pasture and biodiversity, degradation of land, pollution of soils and scarce well waters are major environmental concerns. In this context, the country obviously faces the need of managing natural resources **sustainable**. More environmentally friendly practices are essential to be adopted in herding, mining, logging, cropping, tourism, hunting, medical plantation and other forms of economic use to ensure their long-term and sustained growth **and integrate into rural development strategies**.

According to an environmental assessment study carried out during the orientation phase (Adyasuren and Team 2006), there are clear environmental pressures associated with artisanal mining. The main ones are the increased pressure on local fuel supplies based on high concentration of people in a specific area (wood, shrubs, dung), water and soil pollution with mercury and cyanide, a scared landscape from digging holes and increased waste and littering associated with mining communities.

### **2.1.3 Socio-economic profile of Mongolia and its relation to artisanal mining**

Mongolian mineral potential is vast: over 7,000 mineral occurrences and deposits of 80 different minerals are known. The most economically significant of these are base metals, gold, and fluorite. The high demand for these products in two neighboring countries encourages the mining sector to develop fast in Mongolia since 1995s. The mining sector undergoes a strong boom period since second half of 1990s. In 2005 it provided for 21% of the GDP, a significant increase from 6.1% in 1995. Mining products count for 73.0% of industrial value addition, 24% of the total exports revenues and one third of the FDI is invested into mining. There are 130 companies engaged in exploration of mineral resources, many more have exploitation licenses.

The socio-economic assessment of artisanal mining implemented by the National Statistic Office (NSO) points out the relevance and potential of artisanal mining to combat poverty. In Bayankhongor, artisanal miners' household exceeds that of average herders and the herder's household's income increases by 20-40% from temporary artisanal mining activities. Income from artisanal mining is more regular than that from cashmere (cashmere wool combing is in spring only) and therefore important for daily necessities like food, clothing, communication and transportation.

In response to poverty people adapt the following strategies to improve their livelihoods:

- Increase the number of livestock, mainly goats:
- There are about 170,000 herders and the total number of livestock has increased from 24 million in 2001 to an estimated 34 million in 2006. About 45% of the people find employment with herding, which contributes about 20% to the GDP. The most significant source for cash income is cashmere; the annual sale value of raw cashmere being about USD 90 million; cashmere sales contribute about 50% to a herder family's income.
- Migration:
- Annually Ulaanbaatar and the two other major cities, Darkhan and Erdenet, grow by 2-4%. Half of the population of Mongolia lives now in Ulaanbaatar (UB). Access to better education is reported as the major driving force for migration to UB and economic incentives to countries like Korea or Japan.
- Collecting natural products (wood, berries, pine nuts, medical plants, hunting)
- These activities are mainly used to boost income but few people rely on them as their sole source of income.
- Artisanal mining:
- The recent phenomenon of artisanal mining rapidly emerged the last time around 1995 and expanded rapidly into all aimags in Mongolia. Currently, there are an estimated 100,000 regular

and temporary artisanal miners all across the country. These are basically rural poor who have no or very few livestock or come from herder families with surplus labor. Informal marketing channels to sell gold are readily available as the appetite for minerals of the neighboring countries is enormous. The annual sale value of gold by artisanal miners is estimated to be in excess of USD 100 million.

Artisanal mining, therefore, has a high relevance of rural poverty reduction and economic diversification to support the regional economic growth in Mongolia. With careful assessment of the relevance to poverty combating, development potential and extent of social and environmental problems of artisanal mining, SDC and MRPAM started the implementation of the Support to Artisanal Mining Project (SAM) from July 2005 to December 2006. The results of the orientation phase proved the economic and social dynamics of artisanal mining to grow into a mining sub-sector, provide job and income opportunities for rural poor and support the local economy. The similar conclusion was made by the independent evaluation team in June 2006. Thus, SDC and the project counterpart of the GoM, the Mineral Resources and Petroleum Authority (MRPAM) of the Ministry of Industry and Trade (MIT) have agreed to continue the project. The joint project will make clear contribution to development of the artisanal mining sub-sector and thus rural development in the framework of integrated natural resource management.

Due to SDC's 10-year experience on small scale mining in Latin American countries and CASM, a platform to discuss artisanal mining issues set up by the WB, exchange and sharing of experience and best practices is available for Mongolia through South-South exchange. Particularly, **PMSC in Ecuador**, generated experiences on collective environmental management in artisanal mining and the transfer to environmentally sound mining methods. The project in **Bolivia** now implemented by the **MEDMIN** foundation, has generated broad experiences in local manufacturing of environmentally sound equipment, transfer of technology, substitution of amalgamation in the open cycle, and the training of miners and NGOs. The project **GAMA**, in **Peru**, still in its last phase, provided internationally recognized experiences of the legalization of ASM operations, the support of the decentralization of mining administration, the establishment of innovative communication structures and integrated demand-oriented service delivery with empowerment of local service providers.

#### **2.1.4 Policy and Regulatory framework**

Mongolia's key development policies are the Mongolian Development Goals (based on the MDGs but added an additional goal in governance and human rights), the Economic Growth Support and Poverty Reduction Strategy and the Government Action Plan 2005-08. The main thrust of all these documents is to reduce poverty through private sector growth and improved framework conditions. Currently, Mongolia is drafting a MDG-based National Development Strategy (NDS) to accelerate pro-poor growth and achieve the MDGs. The draft NDS includes principles on mining sector development, which has become one of the priority economic sectors in Mongolia. The key pillars of development include:

- Ensuring macroeconomic stability and public sector effectiveness.
- Supporting production and exports and improving the environment for private-led development.
- Enhancing regional and rural development and environmentally sustainable development, in particular, speeding up the land reforms.
- Fostering sustainable human development and mainstreaming gender dimensions in poverty reduction interventions.
- Promoting good governance, and implementing and monitoring the strategy.

The Government of Mongolia commits to improve mining sector performance, and has recently passed an updated law on mining as well as instituted a windfall tax scheme. The law affirms the already approving legal environment for private mining activities, but demands a fair share of the benefits from the mineral revenues to the government, especially for those sites that were discovered with public funds. The law also aims at strengthening the regulation and coordination of allocating the lands for mining and exploration licenses. In the past, licenses were given on a first come first served basis. Additionally, environmental rehabilitation duties of the mining companies are now more strictly

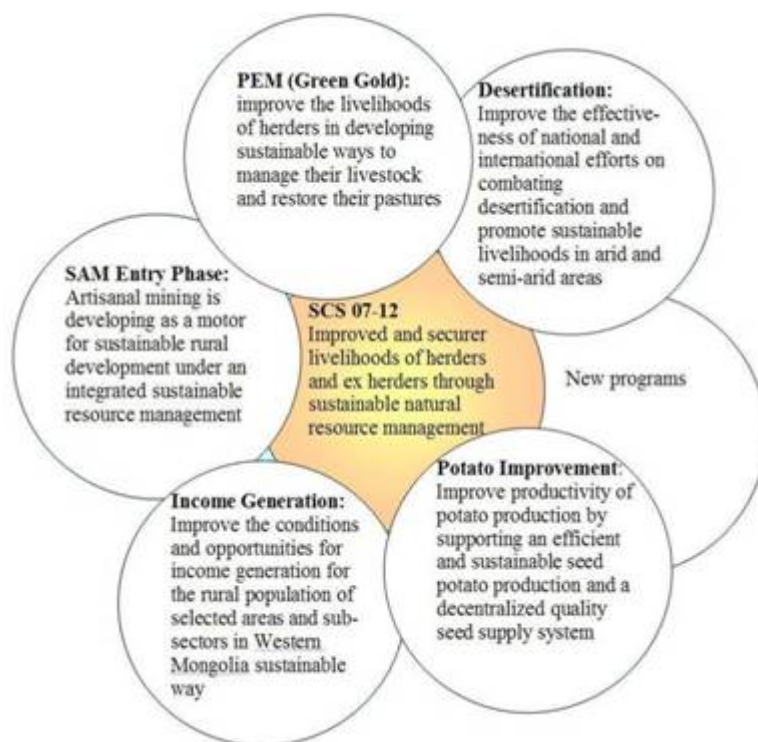
regulated. Mongolia is also in the process of joining the Extractive Industries Transparency Initiative (EITI), an initiative that is supported by the World Bank.

Recognizing the economic and social dynamics of artisanal mining, the GoM has commended a law on artisanal mining, which was drafted with support from SDC. The draft law aims at directing the development of artisanal mining into formalized and sustainable sub-sector of the economy. Other key elements are the allocation of exploration rights to artisanal miners, environmental stewardship, formalizing the sale of minerals through official channels and setting standards for labor safety.

After exposing some key stakeholders in artisanal mining of Bayankhongor aimag to the experiences in Latin America the local government develop and adopted a provincial legislation on artisanal mining. This legislation formalizes the artisanal mining activity within its territory and gives the SAM project the legal basis for developing this sector and test out different models of collaboration between artisanal miners and the government, private sector, and other resource users.

### 2.1.5 Swiss Cooperation Strategy and SDC programs in Mongolia

**Figure 1: Swiss Cooperation Strategy and SDC Programs in Mongolia**



The Swiss Cooperation Strategy (SCS) for Mongolia is a guiding frame for the SDC program development in Mongolia 2007-2012. SDC is careful to align its projects to the Mongolian Development Goals, the National Development Strategy, and the Economic Growth Support and Poverty Reduction Strategy, and Harmonization efforts as agreed in Paris. SDC targets herders and ex-herders, among them many artisanal miners, promoting preventive measures against further impoverishment and improving their livelihoods. The focus of SDC is in the Western Region, yet, if sustainability is at stake, is careful to not burden programs with too many built-in barriers like working in certain

areas or groups of people only, especially in such vast territories with so few people and few markets. The thematic focus is on sustainable natural resource management in rural development, considering local economic development in selected areas with potentials for pro-poor growth and selected sectors or products with a potential for local value addition. Governance and gender are transversal themes. Issues like access to mining rights, effective public services, land and water rights are key issues in sustainable rural development. SDC will link its grassroots experience with effective policy dialog and work towards improved social accountability, promote pro-poor growth, and support actions to strengthen the civil society contributing to capacity development for effective natural resource management by its users. SDC will mainstream gender in its programs and promote gender responsive budgeting on communal level. Additionally specific gender studies will be supported addressing key issues such as equitable access to land, participation in the management of natural resources and the distribution of additional income and labor within the value chains. Capacity development at the individual and the institutional level of national partners is crucial. SDC employs a long-term perspective and emphasizes the promotion of young people in its programs.

SDC supported programs aim at improving the legal framework and implementation capacities for management and monitoring of natural resources at the herders and national level (PEM, SAM, Desertification); the strengthening of herders' resilience to vulnerabilities in the livestock sector and



improving disaster preparedness and environmental stewardship (humanitarian interventions, PEM, SAM, Income Generation, PSI, Desertification); and increasing the income of herders and ex-herders in targeted areas based on improved productivity of their livestock and income diversification (PEM, PSI, Income Generation, SAM). The project will use synergies and capitalize on lessons learnt from other SDC projects as shown in Figure 1. Key partner projects are the Green Gold Program, the Combating Desertification and the newly developed Income Generation Project.

### 2.1.6 *Harmonization with like-minded donors*

SDC is fostering synergies with other donors with the overall objective to reduce poverty and contributing to MDG #1, #7 and #9. Harmonization at the sector and project level needs to lead towards a more effective and efficient use of development partners' resources. SDC will follow the human-rights based approach including the principles of equality and equity, accountability, empowerment and participation. SDC will aim at empowering especially young people to express their concerns freely, and advocate their causes in sector development strategies, program design and implementation. Although several projects in Mongolia are providing certain services and support for Artisanal Miners, apart from SDC, no other donor agency tackles the artisanal mining sector in an integrated manner. During the main phase, the SAM Project will continue to take a leading role in coordinating and harmonizing donor activities and establishing mechanisms of pool funding. At present the following organizations are directly or indirectly engaged in artisanal and large scale mining related fields: **ILO** (Child Labour), **World Bank** (Reports on Mongolian Mining Sector, host of CASM), **UNFPA** (Reducing Socio-Economic Vulnerabilities of Artisanal Mining Communities), **BGR** (Environmental Protection in Mining), **Open Society Forum** (Mineral's law and policies), **Asia Foundation** (Promoting responsible resource management), **ADRA** (Providing trainings for business development in rural areas), **St. Mary's University of Halifax/Canada** and **CIDA** (Education for Environmental Transition: Mining in Mongolia), **University Kassel/Germany** (Integrated Water-Resource Management). For more details see the [annex 9.4](#).

Important additional experiences are available from three SDC supported ASM projects in Latin America; all three within the Global Environment Fund project portfolio. The first one, PMSC in Ecuador, generated experiences on collective environmental management in artisanal mining and the transfer to environmentally sound mining methods. The project in Bolivia now implemented by the MEDMIN foundation, has generated broad experiences in local manufacturing of environmentally sound equipment, transfer of technology, substitution of amalgamation in the open cycle, and the training of miners and NGOs. The project GAMA, in Peru, still in its last phase, provided internationally recognized experiences of the legalization of ASM operations, the support of the decentralization of mining administration, the establishment of innovative communication structures and integrated demand-oriented service delivery with empowerment of local service providers.

### 2.1.7 *Implementation of Orientation Phase*

#### 2.1.7.1 *Goals and objectives*

The Development goal was defined in the orientation phase as follows:

*The Support for Artisanal Mining aims at creating favorable conditions and structures for the artisanal mining sector so that its contribution to socio-economic development based on a careful use of natural resources in selected areas will increase*

The four objectives were formulated to reach the development goal:

**Objective 1:** Support the establishing of an transparent and straight-forward **regulatory framework** for the artisanal mining sector in collaboration with all interested parties, which sets favourable conditions for the transformation of informal mining activities into legal ones, improving their livelihood security and clarifying the rights and obligations of all stakeholders.

**Objective 2:** Encourage the **formation of institutional structures** and organizations within the artisanal mining and related sectors and encourage cooperation at all levels.

**Objective 3:** Transfer skills and know-how to artisanal miners and other stakeholders in support of better performing and safer operations

**Objective 4:** Establish a knowledge base on the current natural resource uses and their overall implications for an integrated natural resource management and rural development component aligned with GEP requirements and perspectives for a long-term engagement in the area.

#### 2.1.7.2 *Results*

Based on an evaluation in June/July 2006, the orientation phase of SAM project has been successfully implemented. In auto evaluation, the staff of the SAM project, the responsible people of SDC in the Mongolia office and Project-Consult GmbH as implementers of the project, did SWOT analysis focusing on operational issues (pilot projects, legal affairs, institutional and organizational issues) as well as managerial issues (staff, procedures, work relations, coordination, etc.). The result of this process was provided as input into the external evaluation process. Soon after the auto-evaluation in June 2006, an independent team composed of an artisanal mining sector expert (the Association of Responsible Mining in Colombia) and a natural resource management specialist (the Centre of Development Studies from the University of Bern), provided a review of the project set-up and implementation during the orientation phase and developed proposals and strategic elements for the upcoming planning process for the implementation phase.

In close cooperation with the main partners, Mineral Resources and Petroleum Authority, Mining Rescue Service, Bayankhongor aimag government and artisanal miners, the orientation phase of the project started very fast and has progressed considerably. The key achievements of this phase may be summarized as follows:

- The project structure is established, relations with counterpart organization and implementing partners are excellent and an integrated team between MRPAM and the staff under the Swiss contribution is fully operational
- Contributions to the legal framework have led to an optimized and more flexible draft law for the legalizations of artisanal mining operations in Mongolia.
- Networking with cross-sectoral governmental organizations on the national, provincial (Aimag) and district (Soum) level, academic and non-governmental organizations, the private sector, other donors and projects, is established and cumulated in the National Forum held in May 2006.
- Based upon a comprehensive assessment the Bayankhongor Aimag and the Bumbugur and Shinejinst Soums were selected for pilot programs which started with planning and implementation of practical measures.
- A co-operation with the MRS including the establishment of infrastructure for a mobile rescue unit, led to a broad training and capacity building of artisanal miners in occupational safety issues and led, according to the MRS, to a notable reduction of accidents in artisanal mining operations. At the same time it created the necessary relation of confidence between the artisanal miners and the SAM project (door opening function). At the same time the interventions of the MRS have created expectations which the project has to meet immediately.
- A training needs assessment was performed guiding the implementation strategy related to the provision of training services.
- Technical and non-technical studies are initiated, i.e. the optimization of dry blowers, banking for the poor and establishment of official gold buying in Mongolia, best practice in relation to the institutional outline of basic organizations of artisanal miners.
- Applied studies (under component 4) have added to a better understanding of the environmental and social economic situation of the target group in the pilot areas and beared important inputs into planning of the main phase.
- Public relations (3 part documentary on ASM in Mongolia, website etc.) have led to a strong visibility of the project in Mongolia.

**These achievements cumulate into the following impact:**

- On the legal level, the impact of the project is high: draft Artisanal Mining Law has been developed and submitted to the Parliament. The Project lobbied Lawmakers, Ministries organizing special purposed workshops, seminars and meeting. However, domestic natural resources in Mongolia are understood in the rural population as open access resources, not requiring licensing or titles being granted by governmental authorities.
- On the institutional level, the project has created a lot of impact. MRPAM has committed itself for the management of artisanal mining in Mongolia, has created the necessary institutional framework (SAMU) and the project has identified a large number of already operational and potential partnership institutions and key players in the sector.

**2.1.7.3 Lessons learnt****Issues / lessons**

Even though the project has achieved a broad basis of awareness on ASM issues in the public and the institutional framework of Mongolia, first activities have been successfully implemented in the field, the following lessons and issues are important to guide the planning process for the future:

- So far too little importance has been given to actions directly related to the artisanal miners (technical optimizations, social projects, organizational issues and so on). Problems with the interaction as well as with the institutional culture of the mining administration not focusing on implementation in rural areas have to be overcome.
- The selection of an approach of a mobile training and rescue unit as implemented under the MRS has shown a great match with the traditional value system, the mobility of artisanal miners and would be a good guiding principle for the establishment of extension services in technical and non-technical issues towards the artisanal mining community in Mongolia in the future.
- A culture of broad cooperation is urgently required. Only this will allow restricting the role of the SAM project (respectively in the future the MRPAM/ SAMU) to a role of a facilitator requiring a reduced institutional structure (core-group). Especially non-technical issues that allow for the human development of the artisanal miners and the integration of ASM into the rural development framework have to be implemented in cooperation with other partners.
- Future changes of the livelihood situation and a conflict-free use of the mineral resources of Mongolia by artisanal miners will be determined by immediate focalized and effective implementation of field activities of the project. An early success is required in order to prepare for a broader recognition of the project and in view of a dissemination of successful solutions.
- Tools and instruments for the monitoring and evaluation (M&E) of implemented activities and of impacts has yet to be established, this M&E system should be based on a participatory approach. The development of the tools and instruments will be based on the findings of environmental and socio-economic assessment implemented in the orientation phase.
- The institutional focus of MRPAM and the outline of the project team are so far rather technical. It seems to be important to further incorporate social skills and competences and to strengthen ties with non-technical institutions, projects and initiatives to provide the required support in health, social, organizational, managerial and other non-technical aspects.
- The project is still somewhat isolated in the mining sector in Mongolia as well as in the rural development and rural natural resource management framework in the country and would require further coordination with the relevant stakeholders in order to provide for an effective contribution to sustainable development and poverty alleviation in Mongolia

**2.1.7.4 Implications of independent evaluation and assessment studies in the main phase**

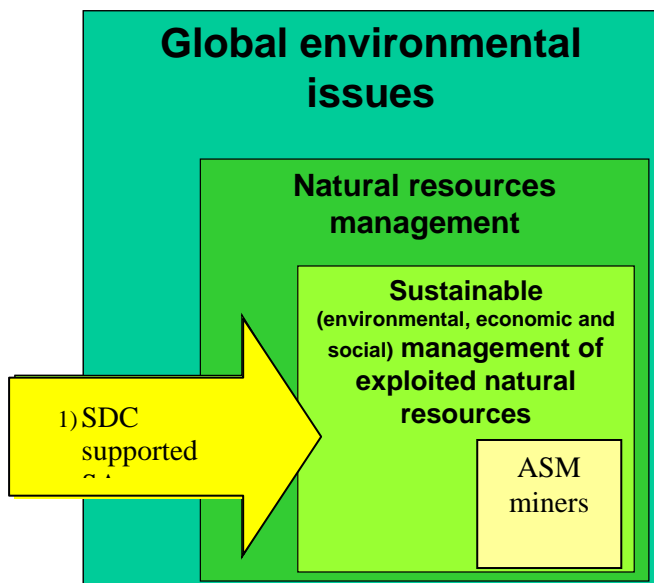
The basic assessment as well as the analysis of the context had been validated by both the project experiences as well as by the external evaluation team. The selection of the integrated resource management approach, the geographical area and thematic focus, have been proven correct as well as the selection of partners in particular from the Government authorities for the implementation of the project. It is expected that the measure as outlined during the planning process for the orientation phase, is going to provide useful and innovative lessons to all stakeholders as well as to contribute in a positive manner to the livelihoods in artisanal mining communities in Mongolia.

The socio-economic baseline survey estimates that artisanal mining provides more stable and quick income averaging at CHF 250-300 per month for the surveyed areas in Bayankhongor. For seasonal miners 20-40% of their household consumption income is covered by artisanal mining. To increase the productivity, better and safer technology and entrepreneurship skills need to be provided. Training on money management, health and safety issues is required and social issues will receive more attention. While the environmental baseline survey reveals the association of artisanal mining to environmental concern of mercury and cyanide pollution of soil and water resources and plant destruction. Therefore, effective technology allowing less mercury loss and alternative energy sources will be a main issue in the environmental component of the main implementation.

### 3 Rational

The suggested project is addressing a clearly expressed development problem of Mongolia. With an estimated annual income of more than USD 100 million the artisanal mining sub-sector is a key for rural development. Initial actions indicate that with an improved legal and regulatory framework the benefits of artisanal mining can become an even more efficient motor for rural development at less costs of human lives and without the appalling working conditions and insecurity of the people involved in artisanal mining. The project is addressing a key development issue in Mongolia. During the entry phase the project was able to develop a draft Artisanal Mining Law, widely discuss it and submit it to the Parliament. The Mineral Resource and Petroleum Authority of Mongolia (MPRAM) has committed itself for the management of artisanal mining in Mongolia and created the necessary institutional framework by setting up a Small-scale and Artisanal Mining Unit (SAMU). The project has identified a large number of already operational and potential partnership institutions and key players in the sector, identified pilot sites and assessed ecological, economic and social baseline indicators. Additionally, draft regulations governing artisanal mining based on Latin American experiences from SDC projects were developed and are being tested in Bayankhongor.

**Figure 2: The SAM project and its place within the global environmental issues**



The suggested main phase of the Support for Artisanal Mining Project is in line with the SCS 07-12 and will contribute to reach MDG #1 and #7. Continuing to work in the artisanal sub-sector provides SDC with the option to strengthen the autonomy of its partner institutions, most of all MPRAM, which is co-implementing the SAM project, and will greatly gain from capacity development. The opportunities in the sector to train and further institutional development of partner organizations at all levels and the exchange of know-how and technology are key principles of SDC's 2010 strategy (SDC 2000).

The Swiss Cooperation Strategy has a clear focus on sustainable use of natural resources and the SAM project fits well into this strategy (Figure 2). Additionally, SDC has a broad range of experience in development work in the artisanal mining

especially in Latin America. SDC in Mongolia can capitalize on this experience through the exchange of experts and through the experience gained by Projekt-Consult GmbH in Latin America, which has implemented the entry phase and kindly agreed to continue to offer advisory services for the Mongolian program.

### 3.1 Program Description

### 3.2 Challenges to Support Responsible Artisanal Mining

The midterm review points out, that Mongolia has not yet defined the role of mining for the sustainable development of Mongolia and for the reduction of poverty in the country. At the same time, MRPAM head of the mining department requested the team to assist MRPAM in the development of a future policy for the ASM sector. Therefore, to allow ASM to develop into a sound Mongolian mining sub-sector, it is required to contribute to the development of the policy framework for the entire mining sector in Mongolia. Although the law on artisanal mining is expected to be approved by parliament in the near future, a lot of work remains regarding the defining of **implementation guidelines** and the elaboration of regulations suited for the artisanal mining sub-sector at the local as well as the national level. Public policies and regulations for ASM need to be integrated into all aspects of the framework for responsible mining, namely: the social, governance and local development aspects, labor and Human Rights, environmental, technological and production, and financing and market aspects.

The project will work towards a formalization of ASM with all stakeholders at national, regional and local, and the household level. **Institutional strengthening** will be approached from the top and from the bottom: At the government level MRPAM will be further strengthened to become fully equipped to comprehensively address the challenges in artisanal mining at national and local level. The artisanal miners, on the other hand, will receive training and assistance to effectively organize themselves to articulate their aspirations and concerns. All stakeholders together will define 'responsible' mining as an activity that should tend to improve the quality of life of men and women, their families, and the community that hosts ASM endeavors. Equality should exist among men and women in all rights, access to resources, the use of earnings, and participation in decision-making processes.

As artisanal mining is a livelihood strategy is seen by many miners as temporary the project will pay close attention to these concerns of the people and provide assistance to other effective **poverty alleviation measures and income generation** furthering sustainable human development. Therefore, the project will select sectors or products with a potential for local value addition. Where informal mining communities seem stable over a span of several years because of land tenure as well as prospected mineral reserves the focus will be widened to assist measures that contribute to the economic development of the area and the quality of life for all. People engaged in artisanal mining need to enjoy conditions of freedom, equality, safety, and human dignity, allowing them a decent standard of living. Therefore the project will strengthen its engagement with **social issues** and address some of their root causes through careful assessment of the local situations and **empower communities** to respond to their needs in a knowledgeable and well-defined ways.

Responsible mining needs to address the manifold relations between ASM and the formal mining industry: in some licensed sites informal miners enjoy the 'right' to dig in places considered uneconomically by the license holder. Other companies allow the artisanal miners to sift through the processed dirt. In other locations formal and informal miners clash over the exploitation of the resources. Some companies have started to support local development initiatives (e.g. Boroo Gold and Ivanhoe Mines). Although these actions are appreciated some representatives of the civil society claim that the local communities do not have enough influence in the allocation of these funds as they are mainly channeled through the local government. The project shall opt to strengthen the ties of the informal miners with the formal mining industry, contribute to **minimize conflicts and increase understanding** between large and artisanal mining and to build up awareness among all stakeholders on the potentials and vulnerabilities of livelihoods based on artisanal mining. Artisanal miners should be **responsible stewards of the environmental**, strive for ecological restoration in its areas of influence. The use of toxic substances, the dumping of tailings into water sources and negative effects on biodiversity need to be stopped or minimized.

### 3.3 Project Goal and Objectives

The Sustainable Artisanal Mining Projects fits under the strategic objective of the Swiss Cooperation Strategy 2007-2012 (SCS) to contribute to improved and securer livelihoods of herders and ex-herders in rural areas focusing on improving sustainable use and rehabilitation of natural resources and supporting ecologically-oriented social and economic development. It will contribute to all three country outcomes: [1] improved legal framework and implementation capacities for management and monitoring of natural resources; [2] improved environmental stewardship; and [3] increased income and income diversification. The SCS is aligned with the MDGs and the main policy documents of the Mongolian government. The development goal of the SAM project was developed in participatory workshops prior to the entry phase and slightly updated during its implementation.

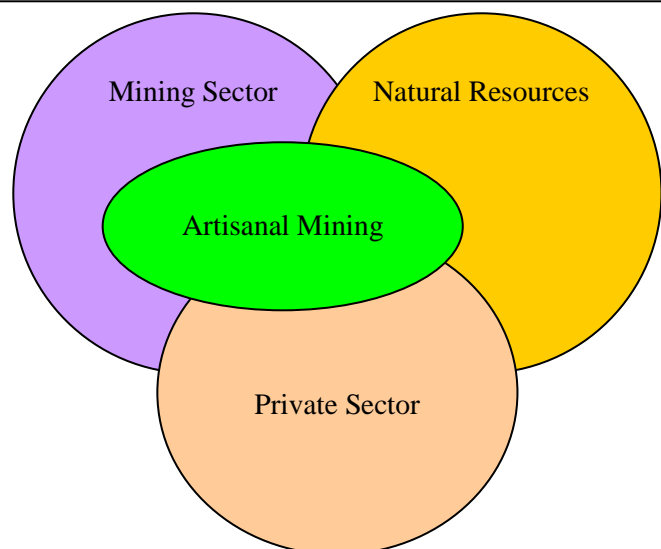
*The Sustainable Artisanal Mining Project will contribute to the development of responsible mining in Mongolia by working with all stakeholders to ensure that artisanal miners are recognized as responsible members of a key economic sub-sector contributing to sustainable rural development.*

To reach the stated development goal the Sustainable Artisanal Mining Project has the following four objectives:

1. To improve the development and implementation of a transparent and straight-forward policy and regulatory framework for artisanal mining
2. To improve the formation and functioning of institutional structures and organizations within artisanal mining at all levels
3. To strengthen the capacity of artisanal mining communities to engage in profitable and responsible mining and extended business activities aiming to reduce poverty
4. To empower artisanal miners and other resource users to address and solve ecological as well as social existing and potential conflicts responsibly

It is expected that by the end of the first phase of this project in 2010 the artisanal mining sub-sector will be governed by a participatory developed legal framework, which are enforced by institutional structures at all levels. The majority of the artisanal miners will be formalized and adhering to the regulations on responsible mining. At least 10% of the artisanal miners will cooperate and have formed small enterprises, sharing labor and engaging in diversified income generation activities. Mechanisms to address conflicts over the use of natural resources and between large and artisanal miners will be developed and applied in resolution processes. The artisanal mining sub-sector and its relations to mining, natural resources and the private sector are shown in Figure 3. Although artisanal mining is a sub-sector of mining, it also overlaps with the natural resources in a independent and different way from larger mining companies as the environmental assessment in Bayankhongor showed (Adyasuren and Team 2006; Ecosphere 2006). For example, communities of artisanal miners are using available fuel sources (shrubs, dung) in a far more excessive and thus destructive way than the herders and large mining companies as the herders are few in number and moving on and the larger companies make additional provisions for fuel supply, e.g. diesel generators or coal.

**Figure 3: Artisanal mining sub-sector and its relation to other key sectors**



The above mentioned objectives were defined during the entry phase in participatory workshops with all stakeholders, including artisanal miners, formal mining company representatives, representatives of civil movements, local and international NGOs, representatives from other donors and from SDC, different ministries and the MRPAM. SDC paid attention to findings of the Preparatory Assessment for the Main Phase Report (Echavarría and Kläy 2006). Gender and geographically balanced representation in the key workshops throughout the development of this project document was ensured. Additionally, SDC successfully pioneered online-discussions in the development of a project document by immediately posting all findings of relevant workshops and the planning platform on the project's website and receiving constructive suggestions and feedback to it.

### 3.4 Strategic Implementation Principles

The project's main strategy is to enhance the capacity of artisanal miners and Mongolian institutions concerned for their welfare. It will facilitate the establishment of a framework for multistakeholder dialog and links between national and international centers of expertise in artisanal mining. A consensus on the definition of 'responsible artisanal mining' will be developed together with all stakeholders, addressing critical issues in ecology, safety, health, child labor and conflict mitigation and resolution. Training will be a main strategic focus of the project. Training will be at all levels, from the artisanal miner's families, the mining rescue service, civil movements to the responsible officials at national and regional levels. Training will be practically oriented and aimed at the concrete tasks of contributing to sustainable rural development.

**Governance** issues like access to mining rights, effective public services, land and water rights are key issues. The project will link its grassroots experience with effective policy dialog and work towards improved **social accountability**, promote income generation and diversification, and support actions to strengthen the civil society contributing to **capacity development** for effective natural resource management by its users. The program will mainstream **gender** and carefully analyze gender, power and multistakeholder relationships within the sub-sector.

The project will foster synergies with other donors and private companies concerned about responsible mining. **Harmonization** at the mining sector and artisanal mining sub-sector level needs to lead towards a more effective and efficient use of development partners' resources. The project will follow the **human-rights based approach** including the principles of **equality and equity**, accountability, empowerment and participation.

The program will be implemented jointly by people appointed from the MRPAM and SDC, who will work together within a Project Implementation Unit (PIU). This unit is responsible for the daily management of the program and will contract national and international institutions or advisors to develop capacity of the Mongolian stakeholders and train trainers, who will train others. The unit is lead by a Project Coordinator jointly appointed between SDC and MRPAM. The project has four clearly defined components aligned with the respective outcomes, which will be lead by team leaders responsible to achieve the expected results. The project coordinator will also be responsible for one of the components of the project. Additionally, he/she is responsible for reaching the management outputs as recorded in the Project Performance Measurement Table (see annex 10.1) He/she is reporting to MRPAM and SDC for on-going work (Operations Committee) and for approval of annual plans and reports to a Steering Committee led by the Ministry of Industry and Trade. With these simplified and clear structures communication within the implementation team will be improved, supported by team building and management training.

Pooling of funds is at this stage not possible under the current financial regulations of MRPAM. The expenses for the project will therefore be accounted and audited separately. However, innovative approaches to increase ownership and effectiveness of the project implementation will be pursued and discussed between SDC and MRPAM.

Institutional **capacity development** will be focused on the level of the implementation partners and civil society, Mongolian institutions and associations with a mandate beyond the duration of the project. The SDC appointed people within the PIU will transit out of the project, the MRPAM appointed ones will continue to work within MRPAM on issue related to artisanal mining.

An optimal integration of partners – national and international – coordination and harmonization of their activities and contributions will be a part of the implementation strategy.

### 3.5 Expected Outcomes, Outputs, Activities and Implementation Strategy

#### 3.5.1 Component 1: Improved policy and regulatory framework

**Outcome 1:** A transparent and straight-forward policy and regulatory framework for artisanal mining are developed and implementation started

##### *Outputs and Key Indicators to the Outcome*

Outputs to Outcome 1 (program deliveries)		Verifiable Key Indicators
1.1	An integrated policy on ASM and harmonized legal framework for ASM developed	Law on artisanal mining approved Participation of all stakeholders ensured ASM regulations congruent with other relevant laws
1.2	A transparent, straight forward local regulatory (incl. licensing) framework for ASM developed (including land tenure, environmental assessment, use of toxic substances, labor safety, etc.) at national and local levels	Regulatory framework at the local level developed in a participative and vertically integrated way and approved Regulatory framework tested and analyzed (costs, compliance, etc.) in selected locations
1.3	Reliable information, best practices and lessons learnt on ASM nationally and internationally collected, processed and disseminated	Reports, maps, resource use plans and fact sheets, documentations, publications, workshops, site visits Publicly accessible database and information site for ASM and integrated NRM established Monitoring reports of key ASM parameters

##### *Main activities, inputs and key stakeholders*

Output	Activities	Main Stakeholders	Inputs
1.1	Facilitate the participation of all stakeholders in the development of a legal framework for ASM Support key decision makers with info & international best practice	Parliament Local governments Artisanal miners Mining Associations	Support meetings International experience and examples
1.2	Support the development of a regulatory framework and regulations at all levels Assist in the dissemination and testing of the regulations at mining sites	Local governments Artisanal miners Civil movements	Support participatory meetings International experience Support testing
1.3	Stimulate learning and knowledge management within ASM from experiences within the country and international experience Organize knowledge sharing and discussion events and disseminate factual information to stakeholders Raising public awareness and about the ASM sub-sector	All stakeholders active in Mongolia	Support learning and knowledge sharing events Support coordination among different donors and other stakeholders Support publications, radio and TV programs Maintaining webpage and database



### *3.5.1.1 Implementation strategy – Creating an enabling environment*

An optimized legal framework supported by a clear vision for ASM as an integrated sub-sector into the overall mining sector will provide an enabling environment for professionalized and economically rewarding small scale mining activities. In such an environment artisanal miners and their families, small enterprises and the wider community can profit. A transparent process envisaged for the granting of titles and locally developed applicable solutions for the registration of artisanal miners will have a beneficial impact far beyond the legalization of mining activities itself. Registered citizens have also access to voting and social services, thus considerably strengthen their self-esteem.

The reach Outcome 1 the project will work with all stakeholders to further develop an appropriate regulatory framework for ASM in line with existing laws and based on the principles of Human Rights and gender equity. Although the draft law, which was elaborated during the pilot phase, is expected to be passed, there is a great need to define regulations and guidelines for responsible artisanal mining at national and local levels. The function of the regulatory framework is to create an enabling environment for artisanal mining to contribute to sustainable rural development. Within that framework responsible artisanal mining can develop in harmony with existing natural resource users, especially herders. The project will assist in the development of key elements for the legal framework (law, regulations, guidance on best practice), which is transparent in its implementation, gender-sensitive, and accountable to the main stakeholders at grassroots level. The strategy to reach the desired outputs is to support and strengthening of MRPAM and SAMU as leadership institutions in driving the processes of creating the enabling legal framework. Participation of all key stakeholders needs to be ensured to create ownership and achieve compliance with the regulations.

The project will initially take on an advocacy role for the artisanal miners to generate an improved perception and understanding of the social and economic benefits of ASM, its challenges and opportunities, among the general public and within government institutions. Once an umbrella organization representing the artisanal miners is established, this will take on this role. Therefore, it is important to set up an information base and collect and process factual knowledge regarding ASM. At the same time information sharing and learning will be facilitated among artisanal miners. The project will continue to raise awareness about the importance and role of the ASM in sustainable rural development. The raised awareness will result in better understanding, improved communication and reduced conflicts between all relevant actors.

### *3.5.1.2 Risks and Assumptions*

Since the launch of the SAM project the awareness of mining related issues, especially on the distribution of the benefits from mining, have increased significantly. There is a risk that politicking and issues related to formal mining will further delay the government and parliament to approve a law on artisanal mining. Although the law is important, it is not a limiting factor to continue to develop an appropriate regulatory framework. Safety standards, the responsible use of toxic substances, guidelines on waste reduction, etc. need to be elaborated anyway. There is a risk that a constructive dialog on regulations regarding the use of mercury will be jeopardized by some government officials, who insist that every use of mercury is illegal and that therefore a dialog with hard-rock miners using toxic substances for amalgamation of gold is intolerable. Experiences show that local environmental inspectors, however, appreciate a dialog and even artisanal miners themselves are concerned and are eager to collaborate to establish regulations and safety standards supported with appropriate technologies.

Participation of all stakeholders in the process of further developing appropriate regulations and discussing best practices is assumed, although there is risk that the fundamental difference between the formal sector and the civil movements might break into open conflict. However, as the National Forum organized by the President's Office, SDC, the WB and others showed, a constructive dialog on mining related issues is possible even at times when solutions are not yet in reach.

During the entry phase the project was able to gain a voice with decision makers in issues related to artisanal mining. Its close integration with MRPAM, the good reputation of SDC in Mongolia and the project's achievements provide a solid basis for the assumption that it will continue to effectively support the development of a regulatory and legal framework for ASM.

### 3.5.2 Component 2: Improved institutional structures and organizations

**Outcome 2: The formation and functioning of institutional structures and organizations within artisanal mining at all levels improved**

#### Outputs and Key Indicators to the Outcome

Outputs to Outcome 2 (program deliveries)		Verifiable Key Indicators
2.1	The formation and functioning of effective and efficient organizational and institutional structures among artisanal miners at the national and local level buttressed	Appropriate organizational and institutional structures established and formalized among artisanal miners at different sites ASM organizations are respected as counterpart in negotiations with other key stakeholders and the government
2.2	The capacity and functioning of effective and efficient key institutions and service providers to artisanal miners strengthened	Effectiveness and efficiency of institutions (e.g. MRPAM, MRS, SAM, etc.) in terms of competency of staff, available resources, and achieved results in dealing with ASM issues Mobile service provision units / community gers established Regulations implemented and followed by those concerned
2.3	National ASM council or network representing artisanal miners in Mongolia established and connected with international networks and centers of expertise	National ASM network (NAMC) formalized CASM meeting held in Mongolia South-South exchange enabled

#### Main activities, inputs and key stakeholders

Output	Activities	Main Stakeholders	Inputs
2.1	Organize stakeholder meetings to facilitate the sharing of information between artisanal miners, herders and other interested people at local level Support the drafting of a main vision and mission statement for a national organization representing the artisanal miners and develop constitutional documents and internal structure (National Artisanal Miners Council) Provide training in leadership and negotiation skills	Local communities  Artisanal miners Civil movements Working group from stakeholders  Leaders of NAMC	Support meetings Train facilitators  International and national expertise and legal advice  Training
2.2	Supported the establishment of service provision, learning centers and mobile units (i.e. MRS) Provide training in leadership and management skills	Local communities Mining Rescue Service  MRPAM and project staff	Technology transfer Support for training & infrastructure Management and leadership training
2.3	Facilitate networking and provide access to international centers of expertise favoring South-South exchange Awareness raising in Mongolia	NAMC Civil Movements MRPAM	Support the establishment of a ASM network Support CASM meeting in UB

### *3.5.2.1 Implementation Strategy*

To reach outcome 2 the project needs to facilitate the formation of a strong grassroots movement among the artisanal miners. Local communities first need to organize themselves, then regional structures will follow, culminating in the formation of a National Artisanal Miners Council. International experiences show that an ecologically adapted use of natural resources can not be managed by single households but only by a group of users. Even now artisanal mining communities consist of several groups that can be sub-divided into families or households. Each group has an informal leader, normally an experienced person, who is trusted by the other group members. The challenge is to help the communities to formalize some of the informal structures, train the key representatives and enable them to effectively speak for their community and access privileges and rights available to them. Further on the project will support the establishment and operation of civil society organizations at regional and national levels to coordinate artisanal mining activities. The program will support capacity development and strengthen good governance among key stakeholders with special focus on MRPAM, SAMU and its representatives in local areas.

SDC as well as other programs have demonstrated that there is significant latent capacity available to mobilize user groups by proper facilitation, training, modest technical and financial means, and learning-by-doing. Overcoming system-wide capacity constraints for natural resource management therefore requires additional delegation of responsibility to these groups, facilitation, training and careful co-financing of their activities. Strengthening and coordination of these supports are the responsibility of the local and national government. The project cannot take on responsibilities that the government should fulfill or only temporary and with clear transition strategies in place.

Management procedures rely on inter-institutional coordination and cooperation and support a fluent public-private dialogue, optimizing the macro-economic benefit of the mineral resource exploitation by artisanal miners.

### *3.5.2.2 Risks and Assumptions*

Capacity development is a key to success of the establishing of sustainable structure within the artisanal mining sub-sector as well as within the MRPAM and the project implementation unit. There is a risk that the time required for capacity development efforts to bear visible results is not congruent with the requirements for achieving the expected results within the proposed timetable. Projects resort usually to two risk alleviation strategies: either they buy the needed capacity on a temporary basis on the national or international market or they change the expected results during project implementation to accommodate for the additional time needed for capacity development. The project implantation team therefore needs to carefully consider its risk mitigation strategies and carefully weigh the consequences for the overall program. Concretely, the projects needs to take into consideration that the project implementation unit consists of people hired by SDC for the exact job and people from MRPAM who were government employees before but assigned to the SAMU. Differences in capacity, motivation, and additional demands to their time need to be carefully considered and capacity development adjusted accordingly. Similarly, the establishment of truly representative organizations among artisanal miners might take longer than expected as there is a risk that the representatives will foremost represent their clans or regions and not the artisanal miners as such.

There is a risk that the regulations are not followed and that the capacity of the local government is not enough to enforce them, either. To reduce this risk it is important to include the mining communities in the developing of regulations, support awareness building measures, provide training and improve access to information.

There is a basic assumption that the government is willing to support the on-going functioning of a unit within the MRPAM that deals exclusively with artisanal mining related issues. The commitment that MRPAM showed during the implementation of the entry phase by establishing a SAMU supports this assumption.

### 3.5.3 Component 3: Improved local economic development and responsible artisanal mining

**Outcome 3: Capacity of artisanal mining communities to engage in profitable and responsible mining and extended business activities improved**

#### *Outputs and Key Indicators to the Outcome*

Outputs to Outcome 3 (program deliveries)		Verifiable Key Indicators
3.1	Operational safety standards improved and followed by the artisanal mining communities (shaft safety, lightening, air circulation, dust reduction, etc.)	Level of Mongolian standards aligned with international best practice and technology Number of mining communities following improved safety standards Number of accidents at mining sites which follow standards reduced
3.2	Gold recovering technology and appropriate equipment/tools improved or introduced	Mercury use significantly reduced Gold recovery rate improved
3.3	Viable alternative income generation options identified and businesses started	Businesses operational one year after registration Income of selected mining communities increased
3.4	Financial, business management and marketing skills improved	Number of people with documented income and expenditure records Number of business plans developed Additional income through improved marketing strategies

#### *Main activities, inputs and key stakeholders*

Output	Activities	Main Stakeholders	Inputs
3.1	Developing of safety standards Training in safety issues Support the transfer and the production of appropriate technologies	Artisanal miners Mining Rescue Service	Technology transfer Training and safety courses
3.2	Facilitate the transfer and production of appropriate technologies and equipment Assessing technology options and training in their proper use Disseminate proven technologies	Artisanal miners	Technology transfer Training Support studies, knowledge transfer and local tool production
3.3	Assessments of local income generation and diversification potential Training in business development, start-up, technology, and fair-trade standards Provide capital assets for start-ups	Artisanal mining communities Entrepreneurs and initiative people	Assessment studies Training Equipment and tools
3.4	Training in financial and business management Training and facilitation in market assessment and marketing Formalize buying mechanisms for gold	Artisanal miners and herders Artisanal miners, entrepreneurs Commercial banks and artisanal miners	Training Training, market analysis Expertise

### 3.5.3.1 *Implementation Strategy*

To reach Outcome 3 the project will support know-how and technology transfer on a regional, national and international level. This includes testing, upscaling and disseminate of environmentally friendly, cost-effective, efficient and safe technology for artisanal miners. It is important that technology transfer is accompanied with appropriate theoretical and practical training to ensure compliance with safety regulations and for optimal use of the technology.

Further, the strategy of the project is to support artisanal miners to become sustainable entrepreneurial entities, (SMEs), which will generate formal employment and allow for diversification of labor and products (e.g. gold washing services, adventure tourism, production of mining equipment or jewelry). The formation of diversified SMEs within the artisanal mining sub-sector will indirectly contribute to local economic development. Support for income generation and diversification needs to be governed by the following strategies in line with the SCS:

- Job creation and more equal distribution of wealth are not primary concerns of the private sector. The project can only indirectly address them through a) supporting the creation of new markets and products; b) promotion of specific labor intensive sectors or production methods and c) the promotion of SMEs in the assumption that they will create additional employment and income. The project cannot directly generate sustainable employment and income.
- Sustainability and subsidization are incompatible. Subsidization implicitly means that sustainability – if defined in the sense that services and benefits continue in the long run – is not reached. If subsidies are not, eventually, incorporated into the product price, it simply means that the program has failed. It is an illusion to believe that the government will fill in the financial or service provision gap left behind after the project ends.
- Interventions by the project in the private sector always carry the risk that existing and perhaps fairly well functioning markets are distorted to the detriment of the weakest market players. Careful analysis of business opportunities, innovative products or processes and their consequences on markets in different locations should be considered.
- The project focuses at the meso level, addressing the "access to..." challenge. Interventions emphasize access to knowledge and skills, access to capital, access to markets for specific poor target groups or enterprises providing employment to them. Precondition for effective intervention is the existence of competent service providers. The project will not directly operate at the micro level, i.e. in private business activity.

### 3.5.3.2 *Risks and Assumptions*

There is a risk that the introduction of new technology is done without proper testing and fine-tuning for Mongolian conditions. Mongolians are extremely fast in trying out and adapting new technologies, sometimes at the costs of proper use and maintenance.

There is a basic assumption that alternative income generation opportunities exist and diversification is possible. However, the degrees and potential will vary significantly between different sites and communities with significant potential need to be chosen for project interventions.

Currently local banks do not purchase gold, so the majority of it is traded illegally. There is a risk that tax requirements by the Mongolian government for legally sold gold will continue to motivate artisanal miners to sell their gold directly to traders.

### 3.5.4 Component 4: Improved social and environmental conflict mitigation

**Outcome 4: Artisanal miners and other resource users empowered to address and solve ecological and social existing as well as potential conflicts responsibly**

#### *Outputs and Key Indicators to the Outcome*

Outputs to Outcome 4 (program deliveries)		Verifiable Key Indicators
4.1	Civil society and the dialog and mutual understanding between civil society, government and private companies strengthened	Conflicts resolved or prevented Resource use sharing agreements / integrated land management plans established Mediators trained and conflict mitigation tools developed
4.2	Artisanal mining communities (AMC) empowered to define and articulate their needs and address them through concrete actions (For example: improved access to social and health services and related basic infrastructure)	Articulated needs assessments for community development Concrete improvements - for example: <ul style="list-style-type: none"> <li>➤ Improved knowledge about preventive and basic health care, incl. HIV/AIDS</li> <li>➤ Reduced school drop-out rates</li> <li>➤ Clean drinking water available</li> </ul>
4.3	Mechanisms for participatory project monitoring and integrated natural resources use at local level established	Documented responses of key stakeholders, incl. the project, to the monitoring report findings
4.4	Environmental damage and conflict potential reduced	Appropriate environmental impact assessment tools available Reclamation methods tested Water contamination reduced Alternative and more efficient fuel sources identified and used by artisanal miners

#### *Main activities, inputs and key stakeholders*

Output	Activities	Main Stakeholders	Inputs
4.1	Training in conflict mediation, prevention and legal framework Training of mediators Process and make available factual information	Civil Movements, NGOs, local governments	Training and expertise Analysis and processed information (e.g. resource and user maps, water quality data, etc.)
4.2	Participatory assess the needs of artisanal mining communities Provide access to information and skills Train key community representatives in community organization and mobilization Support community initiatives	Artisanal mining communities (ACM) Bag governors and bag representatives	Needs assessment Training Resources for community development initiatives Technology transfer
4.3	Training in integrated natural resource assessment Training in participatory project monitoring	Government and AMC representatives	Training Tools and methodological expertise

	Document learning processes for the project	SAM project staff	Workshops
4.4	<p>Develop tool for appropriate and inexpensive environmental assessment for ASM</p> <p>Develop methods for reclamation of abandoned artisanal mining sites</p> <p>Develop and disseminate environmentally friendly technologies</p>	<p>Local government officials</p> <p>State inspectors and artisanal miners</p> <p>Artisanal miners and herders</p>	<p>Technology transfer</p> <p>Field tests and demonstrations</p> <p>Impact assessments and tools</p>

#### 3.5.4.1 *Implementation Strategy*

The project will adopt to two pronged approach: It will a) strengthen conflict-resolution mechanisms and b) identify causes of conflict and work towards their elimination. The approach will incorporate experiences from SDC in conflict regions like the Central Asia's Fergana Valley as described in the SDC Peacebuilding guidelines (SDC 2006).

Conflicts over access and use to natural resources are interwoven into Mongolia's history. Therefore, the project will work towards optimizing power-sharing between the central and regional governments as well as improving ties between the state, private sector, the informal artisanal miners and civil society as a whole. The project will engage in training and strengthening actors who commit themselves to social justice, human rights, and equal rights for men and women with the goal of increasing human security and can play a mediating role in conflict cases. The key challenge is to break through the vicious circle between exclusion, loss of access or stop and reverse destruction of natural resources and the affiliated rise in poverty.

Causes of conflicts will be addressed by empower local communities to actively work for the betterment of the livelihood of the people. The project will ensure the promotion of technical, social and process competences to staff and partners. It will establish clearly communicated support mechanisms and access to resources for decisions derived in participatory ways by the communities and where clear ownership to remove causes of conflict is displayed.

Principles of good governance will not only be promoted among partners, the project will engage with local communities to mutually learn and profit from each other. Therefore, participatory project impact monitoring (Germann and Gohl 1996) will applied to assess changes in socio-cultural aspects of AMC. The members of these communities need to be trained in observation (watching), reflection (deliberation) and decision making. The same principles will also be use to empower communities to monitor environmental health. The adoption of environmentally friendly technologies will be promoted.

#### 3.5.4.2 *Risks and Assumptions*

There is a risk that conflicts escalate. It is therefore important that the mediators are perceived neutral, listening and carefully considering the concerns of all parties involved. As only formal mining companies were able to get licenses up to now, almost 50% of Mongolia's territory is given to companies for exploitation and exploration. There are strong feelings of injustice and helplessness among artisanal miners and herders existing. However, experience from the entry phase indicated that formal mining companies are willing to negotiate with artisanal miners and allow them limited access to their licensed territory based on clear agreements.

There is a risk that communities are not stable enough to seriously engage in community development activities. The fluctuations include a change in composition of the community (new people coming in for various lengths of time or old ones leaving) as well as the appearance or disappearance of whole communities based on the available resources (gold, water, fuel, etc.) or legal issues (forceful displacement). The challenge in addressing community development is to find solutions flexible enough to bring lasting benefit to the mobile communities. First experiences with the mobile rescue

service show that mobile service provision might also work for other community development challenges.

Improved environmental care and conservation methods might be too expensive for the artisanal miners to afford. Despite the importance of demonstrating practical solutions to fuel reduction and substitution, reclamation of abandoned mining sites, water source improvements, etc. the project needs to be carefully analyzed the costs associated with these measures. Only if the measures are cost-saving or neutral, upscaling from demonstrations to a wider, sustainable use and including these measures into regulations will work.

### **3.6 Expected Project Impacts**

It is expected that at the end of the project artisanal mining will be recognized as a formalized, organized and profitable activity that uses efficient technologies and is socially and environmentally responsible. Artisanal mining communities will continue to progressively develop within a framework of good governance, legality, participation and respect for diversity. ASM generates decent work, local development, poverty reduction and social harmony with other resource users, stimulated by a growing consumer demand for fair-traded minerals and jewelry.

#### **3.6.1 Component 1: Improved policy and regulatory framework**

The optimized legal framework supported by a clear ASM policy will thereby provide an enabling environment for a more professional and more economically rewarding small scale mining activity, which not only benefits the entrepreneurs, their workers and their families, but as well will generate secondary income in the rural areas.

The transparent processes envisaged for the granting of titles and locally developed applicable solutions for the registration of artisanal miners will have a beneficial impact far beyond the legalization of mining activities itself: it will result in the recognition of citizen's rights giving the registered ASM access to voting and social services and considerably strengthen their self esteem.

#### **3.6.2 Component 2: Improved institutional structures and organizations**

It is expected that the foreseen new project organizational framework will result in the fast and systematic development of skills and capacities within the partner organization MRPAM able to provide qualified services of excellence in the administration of mineral resources with respect to artisanal mining. The creation of straight forward decision making processes and component-wise allocation of responsibilities to professionals as well from MRPAM, not only related to implementation issues but also covering duties for the planning and budget allocation and control will have an enormous effect in the empowerment of the partners. Thereby the structure will prepare the ground for a smooth transfer of responsibilities towards Mongolian authorities in view of the defined exit strategy. At the same time it is expected that the outlined organizational setup will contribute to the development of a strong team spirit within the project team.

The outline related to the implementation of activities, coordinating with partners, other projects and stakeholders, is expected to result in the establishment of broad networking and the application of the cooperation principle in the sector and the natural resource management in Mongolia. Staff members of the relevant institutions will be trained to deal with the cross-sectoral challenges of artisanal mining, bearing in mind its important role in buffering urgent economic needs for the rural poor. Management instruments as well as reference on basic knowledge will be available for the key stakeholders.

#### **3.6.3 Component 3: Improved local economic development and responsible artisanal mining**

The provision of appropriate technology – locally produced, socially acceptable, environmentally sound and economically performing – will be embedded into a broader support system, building upon the vast experiences on proven solutions from Latin American and other ASM projects. It will facilitate the transfer from conflict-loaded, risky, harmful and environmentally polluting mining practice towards sound, sustainable and well performing artisanal and small scale mining operations. This will considerably raise the macro-economic contribution of ASM to rural development.



In addition the project will contribute to the vision of branding Mongolian jewelry products from artisanal mining on the world market as ecologically clean, produced under fair and decent conditions and respect of human rights.

### **3.6.4 Component 4: Improved social and environmental conflict mitigation**

Communities will be empowered to define their needs and address them with their own resources and commitment as well as with support from the project. Participatory monitoring of the health of natural resources and the project performance will provide valuable feedback to the project and enable learning processes and effective knowledge management. It is expected that the project has a positive impact on the social and livelihood situation of the rural poor, especially of the artisanal miners and their families in Mongolia. The lowering of barriers towards legalization, the support of formalization of the activity, and the provision of access to social services (especially health, education and access to clean drinking water) will help the miners to be part of the formal society, to raise their livelihoods, and to offer education and future-orientation to their children.

Environmentally better performing technologies are substituting traditional and harmful methods and a reclamation and restoration of ASM degraded land is gradually improving. Assisted by trained mediators conflicts will be dealt with in a peaceful and participatory way, thus leading to widely accepted resource use agreements among local stakeholders.

Social responsibility and the principles of sustainability in the mining administration of Mongolia will be modeled through the project. Thereby the door is opened for a remarkable contribution of MRPAM to poverty alleviation in rural Mongolia and the optimization of mineral resources exploitation in terms of meso and macro economic benefits. This in turn will also support the prevention of burning conflicts between large and artisanal mining.

## **3.7 Key Stakeholders and Beneficiaries**

The SAM Project cooperates with all relevant stakeholders who are directly or indirectly engaged in artisanal mining. This includes government, private sector and civil society organizations as well as artisanal miners, herders and their families affected by mining activities. The most important stakeholders are listed below. More details are provided in the annex. (see annex 10.2)

### **3.7.1 Artisanal miners**

Currently these miners have no or only very limited approved access mining sites, yet their number is growing annually as artisanal mining is a coping strategy to increase food security. MRPAM estimates that there are about 100,000 artisanal miners active in Mongolia. Artisanal miners are an inhomogeneous group, some work permanently in mining, others during certain seasons or on weekends. It is expected that improved access to mining sites, improved safety and technology will significantly increase their livelihoods. Most of them use hand labor. Child labor exists. Artisanal miners are the main beneficiaries of the project as they will gain status, rights, dignity and the potentially more income.

In this group belong also small traders and service providers, who gain an additional income through services provided to the artisanal miners. They are viewed as the crucial group that will contribute to wider rural development. The program anticipates that the business links will mainly be established between the artisanal miners and these small traders because of trust they have within the communities. Therefore, bringing them into artisanal mining associations will be crucial for the development of communities.

### **3.7.2 Mineral Resource and Petroleum Authority of Mongolia (MRPAM)**

This institution is in charge for the mineral resources management and is situated under the Ministry of Industry and Trade. Even though MRPAM is generating a large amount of revenues from license fees the institution is under-financed and lacking instruments and resources to effectively deal with the artisanal mining sector. Rural extension is only being developed since the start of the SAM project.

MRPAM staff is delegated into the SAMU. These people will benefit from thorough on-the-job-training in artisanal mining related issues and additional resources for focused capacity development.

### **3.7.3 *Aimag and soum administrations***

Aimag and soum governments are mandated to further local development and play a mayor role in the management of the resources but analogously lack resources and skills. Every soum should have a trained land management specialist, but currently only 100 out of the 360 have one. The program will involved the government in all major decisions particularly in the area of land use planning and legislation. Local governments also act as authorities to approve user rights to land, licensing of land for natural resource user groups and the use of water. Every soum has an environmental inspector responsible for implementing environmental regulations and accountable to the Specialized State Inspection Agency under the Prime Minister's Office.

### **3.7.4 *Formal mining companies***

Formal mining companies will benefit from reduced level of conflicts with artisanal miners. Responsible mining is also an issue for them, especially those that are listed at international stock exchanges. The companies have a desire to see the program succeed and the artisanal sub-sector regulated.

### **3.7.5 *Ministry of Industry and Trade and Nature and Environment***

The MIT has the mandate to provide policy directions for trade and industrial policies and supervise their implementation. Similarly, the MNE is developing environmental policy recommendations and provides environmental standards to the other ministries. Most of the activities envisaged to be taken up under the SAM project are related to areas of responsibility of these two ministries and both will be members of the Steering Committee. Their role in the implementation of the program could be defined as follows:

- Actively participate in the steering committee
- Provide monitoring and evaluation support during the implementation of the program
- Assist in liaison to local governments and policy makers
- Provide experts and facilities for the program
- Give access to statistical data and other relevant information
- Support in importing and approving appropriate technology and contracting international experts

### **3.7.6 *Universities and Government Institutions***

The program will closely collaborate with the Mongolian Universities and other institutions, e.g. Mining Rescue Service. Staff from these organizations will be trained and involved in testing and demonstrating appropriate technology, community mobilization, service provision, social assessment and participatory research. The responsibilities of the Universities and other institutions can be described as follows:

- Assist in design, testing and dissemination of new technology and tools
- Provide training, technical expertise in assessments and analytical work
- Implement praxis oriented field research and measure the required parameters (e.g. water pollutions, mercury contamination, fuel efficiency, gold recovery rate, etc.)
- Assist the program in organizing field training and demonstrations

### **3.7.7 *International Partners***

The program will receive technical and scientific advice from the Projekt-Consult, International Consultants through MRPAM, SDC supported projects in Latin America (e.g. Medio Ambiente y Minería, Proyecto Minería Sin Contaminación), the Association for Responsible Mining and others as needed. The participation of advisors in the program will be coordinated through Projekt-Consult GmbH in Germany and through MRPAM in Mongolia. It is expected that these advisors will play major roles in activities related to improving the regulatory framework, technology, training specialized agencies (e.g. MRS) and building platforms for incorporation of the user's perspective in

research and development. Specialized support to the program and advanced training will be given by the advisors as requested according to pre-established annual work plans.

### **3.7.8 Indirect Beneficiaries of the Program**

The strengthening of artisanal mining communities will benefit non-miners as well. Herders and their animals will benefit from less polluting and environmentally destructive technologies. Increased capacity in conflict mediation will also be available to other conflicting parties, e.g. herders fighting over access to water and grazing land. Mongolia as a country will benefit as the national production of jewelry will increase and less money spent on importing it from other countries.

### **3.7.9 Swiss Agency for Development and Cooperation (SDC)**

As the funding agency, SDC will have joint responsibility for the management and implementation of the program. SDC will ensure that the program resources are targeted at implementing the planned activities and at achieving the intended outputs. It will release the funds and also support the organization of external inputs such as TA and foreign trainings. It will directly supervise the works of the implementer and be responsible for operational and financial monitoring and controlling. SDC is part of the PSC and has the right to veto any decisions that would contradict the overall purpose and goal of the program as outlined in this document and subsequent reports and evaluations. Accounts will be audited annually by an external audit company approved by SDC.

## **3.8 Operational Principles**

The program will be guided by the following key operational principles to achieve the development goal:

**Participation:** Planning, implementation, monitoring and evaluation of project activities will be based on a participatory approach. Through the involvement of the key stakeholders, i.e. artisanal miners, herders, local government officials and formal miners, it is envisaged to ensure the ownership of the development efforts to be anchored at the level of the artisanal miners and their institutions. The project will apply working methods that encourage the active involvement and participation of the beneficiaries at various levels and moments, especially for the identification of information and learning needs, testing of appropriate technologies, making choices and decisions, etc..

**Equity:** The project is committed to contribute to the reduction of the existing social and economic inequality. This includes addressing gender, location and ethnicity based inequalities. The project will work towards balanced development in these areas. Equity will be monitored throughout the project.

As the project is dealing with common resources (land and water) it is important to address equity issues in this field to strive for the inclusion of the poor and vulnerable. The needs and opportunities of vulnerable groups will be specifically considered in the context of improved access to resources, information, inputs and services at the informal level. The project will monitor the effects of its outputs on the livelihoods of vulnerable families.

**Innovation:** The project intends to adopt innovative approaches and to focus on pioneering activities that add value to existing and on-going development interventions in related areas of operation. It seeks to make the best use of synergies with related national and donor-operated initiatives. It will preferably demonstrate new technologies for mining, land restoration and other natural resource uses. Special attention will be given to promoting the ethos of fair trade (see [www.FairTrade.net](http://www.FairTrade.net)) and its requirements to increase the competitive advantage of Mongolian jewelry products over those imported from abroad. The project's focus during this phase is therefore directed towards piloting and systematically documenting best practices and making this information available to all stakeholders.

**Empowerment:** The project is determined to build capacity of all key stakeholders. It aims at empowering especially the vulnerable artisanal miners by enhancing their access to land titles, appropriate technologies, information and decent working conditions. This includes facilitating the formation of the NAMC so that artisanal miners can voice their interest through an

effectively organized body. Improved access to information, basic social services, and business and technical know-how is a key requirement of empowerment of the artisanal miners.

**Sustainability:** The project will emphasize economically, ecologically and socially sound solutions to improve the livelihoods of artisanal miners. Principles of win-win solutions will be favored in governing the relationships between public institutions, the private sector and artisanal miners. Clear distinction between public goods (where a continuous subsidy element is justifiable due to their external benefits) and private goods (where benefits can directly be attributed to individuals and should also be paid for by them) need to be followed and applied. If subsidies are paid the proposed actions need to have an explicit strategy concerning

- The type of subsidy (supply or demand sided)
- The reference criteria on which it is based (cost factors, client segment, sales volume etc)
- The duration
- The exit scenario (time-bound/result-oriented? Alternatives to project funding?)

The project will not give free hand-outs, even though the poverty situation may justify aid.

**Blending knowledge:** The project will build upon the indigenous knowledge of the artisanal miners. It will also utilize the knowledge and experience of international professionals to train and improve the capacity of the miners in selected areas. The project will seek for a good blend of traditional, modern and adapted practices of artisanal mining through training, demonstrations, information and experience exchange and consultancy services.

**Cost-sharing:** The project will work together with those partners (government, civil society and private) that are willing to share in the costs of the inputs and take ownership of the outputs. At the implementation level, SDC and MRPAM will share the costs of the project. Complementary not necessary equal participation in collaboration among partners will be fostered.

**Flexibility:** The project in its design, partnerships and working methods will have a built-in flexibility to enable the stakeholders to experiment, learn and adapt to their specific needs and opportunities. The project expects to be enriched and kept on focus by suggestions originating from all stakeholders during the annual planning activities. These events therefore become crucial times for reflection and strategizing in participatory ways with the different stakeholders of the sector. Therefore, the activities as currently identified in this document may be further refined and improved and documented in the course of its implementation.

**Communication:** The project implementation team will strive to keep an open communication and all members commit themselves to gaining mutual respect and trust in fulfilling their duties despite differences in leadership style, sex, age, salary, or employment security.

**Collaboration:** The MIT is putting very high priority to this project and is willing to provide funding for implementation as well as heading the steering committee and, through MPRAM, lead donor coordination in the sector. Additionally, the SAM project already has established good relationship with all the other donors working with artisanal miners and coordination efforts will continue, resulting in co-funded activities and a free sharing of information and best practices.

### 3.9 *Geographic scope*

The artisanal mining law and its regulatory framework will be applicable for all of Mongolia. As SDC is partnering with MRPAM in the implementation, the agency needs to respond to needs and requests from all of Mongolia. However, to demonstrate new technologies and to conduct thorough assessments Bayankhongor shall remain the target area for these activities.

A baseline study has been conducted in two mining sites in Bayankhongor Aimag to produce a set of impact monitoring indicators, which will be used together with community monitoring schemes to assess the impact of the project. Lessons learned, successful tools, methodologies and technologies will be disseminated according to the requirements of the ASM sub-sector in the places of need. Careful attention will be paid to not overextend the radius of the project to avoid a collapse of services when MRPAM is alone taking the services on after the end of the project.

Additionally, the project will support regional offices of MRPAM already established in Zaamar and Bayankhongor, areas with a high concentration of artisanal miners.

### 3.10 Program Duration and Main Milestones

The time frame for the next phase shall be 4 years: starting January 1, 2007 until December 31, 2010.

**Table 1: Milestones (Moment Forts) of the SAM Project**

Period		Moment Forts
<b>On-going</b> 2007-2010		⇒ Implementation of activities on basis of YPO ⇒ Participatory progress monitoring and planning ⇒ Regular reporting through annual progress reports
<b>Program implementation start main phase</b>	1 <sup>st</sup> semester 2007	⇒ Office move to MRPAM and re-installation ⇒ Finalization of working modalities ⇒ Contracts with partner organizations (including other donor projects) and staff ⇒ Selection of a professional NGOs as partner implementation organizations on the basis of public tender ⇒ Finalization and approval of YPO 2007
	2 <sup>nd</sup> semester 2007	⇒ Monitoring and evaluation guidelines developed and procedures set up for the whole project ⇒ CASM meeting in Mongolia
	1 <sup>st</sup> semester 2008	⇒ First exhibition / trade fair of jewelry produced from artisanal mined minerals
	2 <sup>nd</sup> semester 2008	⇒ Mid course external review ⇒ Possible mid course corrections for YPO 2009
	1 <sup>st</sup> semester 2010	⇒ External review phase I ⇒ Design planning process exit phase
	2 <sup>nd</sup> semester 2010	⇒ Project Document and Credit Proposal ⇒ Capacities at MRPAM sufficiently developed to fully integrate SAM during the exit phase
	2011-12	⇒ Exit phase of SAM ⇒ Final evaluation

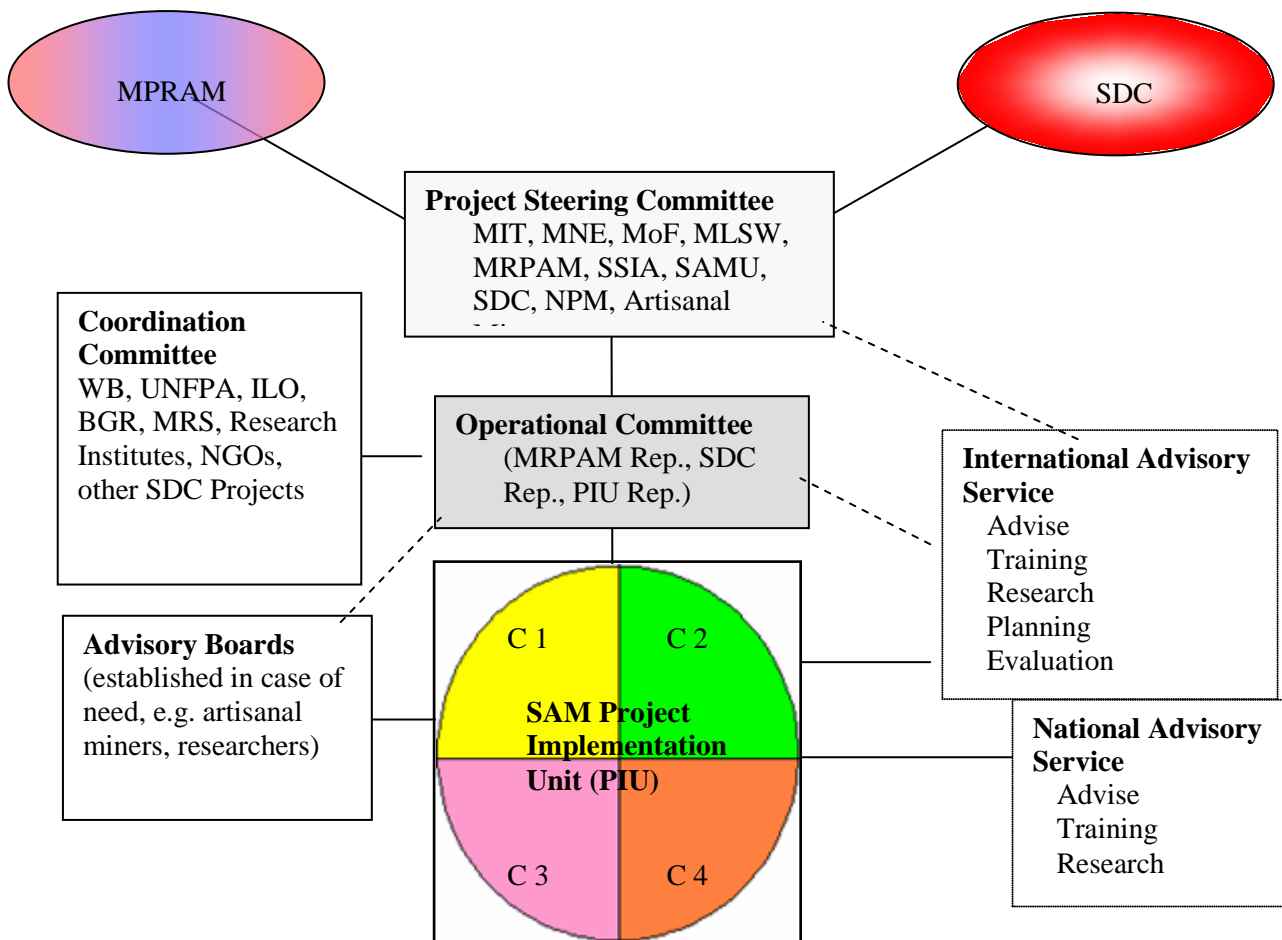
### 3.11 Overall Risks, Assumptions and Risk Mitigation Strategies

Risks	Mitigation Strategies
Artisanal miners do not want to be formalized	It is assumed that the integration of artisanal mining communities (grass roots) on an active participatory basis and the creation of institutional inter-links with soum/aimag administration and MRPAM will succeed because artisanal miners are tired of their insecure status. However, access to secure licenses will be crucial. The ASM law will, in contrast to the expectations of some, not lead to an immediate massive legalization of currently informal ASM activities.
Lack of availability of untitled areas to legalize ASM operations	The project will provide guidance and assistance in the mediation of conflicts and in the development and negotiation of legal contracts between titled mining companies and artisanal miners. Both the experiences from other countries, such as Peru (where about 95% of the interesting concessions of existing artisanal mining operations had already been titled to third parties and successfully exploitation contracts between companies and artisanal miners have been negotiated) and Mongolia, show that there are means to provide artisanal miners a legal status even when the desired area is already taken. Best practice examples will be studied and disseminated as positive case histories.

Risks	Mitigation Strategies
Miscommunication may reduce effectiveness of project	The entry phase had shown that short and clear communication channels are important in a project that is jointly implemented between different partners. Clear responsibilities, transparent structures and training in communication are foreseen. Bottlenecks will be overcome by coaching and focused capacity development with support from the operational committee and the advisors.
Lack of ASM know-how in the project implementation unit	MRPAM and SDC in Mongolia have only recently started with a project in the ASM sub-sector and still lack know-how and expertise. The project foresees national and international advisory support in key areas as well as coordination with other projects and experts in the country.
Change of Government may disrupt political ties and lead to change policy towards the ASM sector	The project, although working with the MRPAM is having an independent role from Government. The establishment of political links are an important element of the project strategy, the project will work with transparency, reliability, constant commitment and avoid party-political statements and affiliations. The establishment of grassroots networks will help to develop to give the artisanal miners a voice independent of political developments.
The legislative process towards the adoption of an ASM law and its regulation may be slowed down prolonging the legal vacuum for artisanal miners	The Project explicitly unlinks the normalization and legalization approach from the approaches and regulations towards technical, social, environmental and institutional development. The Project already received the political backup, both from national and provincial governments, to perform, even without existence of an ASM law, pilot activities in Bayankhongor Aimag. The Project will provide knowledge and will develop tools and instruments fostering the development towards sustainable and conflict free artisanal mining operations.
It is difficult to find adequately skilled staff for the position of component team leaders	To motivate MRPAM staff seconded to the SAM project the project will provide funds for further capacity development. In addition, the project structure emphasizes on inter-linkage between staff member from the Mongolian and Swiss contribution allowing for a systematic coaching and training of partner staff.
The planning economy concept of mineral resource management based upon government information may fail with the ASM sector	ASM operators have world wide proven to be the cheapest geologists. The project will closely monitor both the compliance of artisanal miners with attempts to allocate land (and deposit areas) to artisanal miners on one hand and the development of the artisanal mining sector as such on the other hand. A sensitive monitoring system will be developed in order to minimize financial risks for the mining administration of Mongolia in dealing with the artisanal mining sector.
High prices for black marketed gold may hinder the establishment of legal marketing	The Project will provide assistance towards the maximization of economic impacts of the mining activity in the local and regional economic environment. The Government will be advised upon the macro economic benefits of artisanal mining, which would justify partial exemption from tax payments for the benefit of a more competitive legal buying scheme and channelling larger portions of ASM production through the official trade system of Mongolia.
International advisory services are not acknowledged appropriately by local stakeholders	Previous experiences with the provision of international advisory services was met with resistance due to the high costs, the sometimes huge gap between the expert advice and local conditions and the perceived neglect of local resources and indigenous knowledge. The project therefore will help international advisors to focus towards the establishment of local capacities for the development of appropriate solutions. South-south exchange will also help to reduce the perceived distance and improve knowledge transfer.

## 4 Project Organization and Management

Figure 4: Proposed organizational chart for the implementation of the SAM project



### 4.1 Agreements

SDC Mongolia has established an implementation agreement with the MIT and MRPAM for the initial phase with the understanding that these agreements will be renewed for the main phase. Therefore an agreement between the Department of Policy and Coordination for Loans and Aid, the MIT and SDC HQ will be signed upon approval of the main phase and based on the framework agreement between Switzerland and Mongolia. SDC in Mongolia will for the main phase hire the Project Coordinator. He/she will be accountable to the Country Director of SDC or his designated representative. SDC HQ also will be responsible for contracts for international consultants.

### 4.2 Project Management

In respect to the project management a clear definition of roles and responsibilities with a workable, transparent process of decision-taking and monitoring is the basis. Improving the national ownership and strengthening the project team is a part of capacity development. Developing capacity at all levels and in all aspects of project activity (strategic, managerial, technical, financial, etc.) is very important in order to enable people and the country becoming self-reliant in a long-term. The Code of Ethical Conduct of SDC in Mongolia is valid at this level of implementation. In respect of human resource development, allocating competence and responsibility on the one side and implementing a strong monitoring and supervising mechanism on the other, is a possible way to address strengths of each within a project team and enable learning on the job. It is envisaged to have a thorough integration of staff under the SDC contribution and under the MRPAM contribution in order to support capacity development.

The **SAM Project Implementation Unit (PIU)** acts under the supervision of the Operational Committee and is led by the **Project Coordinator (PC)**, supported by administrative staff for overall

administration as well as within the components. Supporting staff will be employed for accounting and cash management, translation and interpretation, IT, media and communication, office management and other services as needed and agreed. Each of the four **components (C1-C4) within the PIU** (different colors in Figure 4) will be led by a team leader responsible to reach the expected results. They are fully responsible for the implementation of the activities planned within the phase and yearly plan of operations, including the management of the relevant budgets. They also take the leadership for required mandating of tasks, liaison and coordination within the SAM project team and with relevant partners outside. Additionally, local representatives are part of the implementation structure. Whenever possible, the project should rely on existing structures and people at soum level (either local government staff or artisanal miners themselves). Only with inexpensive and lean structures will the means that the project have a high likelihood of being institutionally and fiscally sustainable. The management performance indicators are listed in the annex. (see annex 10.1) The PC is responsible for reaching the outputs based on annual plans.

Different thematic working groups shall be established and contribute to hands-on training and the empowerment of the team leaders, focusing on issues such as:

- Planning and implementation
- Financial management and budgeting
- Coordination with implementation partners (universities, institutions, etc.)
- Coordination with donors and other projects
- Reporting, monitoring and evaluation, etc.
- Supervision of staff and regional representatives

Thereby, the team leaders as well as other staff will predominantly work in planning, coordination, harmonization, supervision of implementation, coaching of partners, follow-up of measures and integrating results of partner interventions into the SAM project and MRPAM institutional policy and its application. SDC, MRPAM and advisors need to provide the required training and supervision of these processes to ensure capacity development of the SAM project staff and its partners.

The **Project Steering Committee (PSC)** oversees the implementation of the program by the PIU and sets general guidelines and provides recommendation. Its head is appointed by the MIT to coordinate all national and international efforts in artisanal mining. It consists of representatives from the Government Official in charge of mining policy (at present MIT Deputy Minister), MRPAM (currently the chairman), SDC (Country Director), Artisanal miners and civil society, as well as representatives of MNE, MLSW and SSIA and holds meetings twice per year. The Project Coordinator and other invited staff or attendees are ex officio. The main functions of the PCS are:

- Overall steering and strategic decision making (policy orientation, management, coordination)
- Appraise and approve of annual plans and budgets within the framework of the program document
- Appraise and approve of annual progress reports and re-direction where needed
- Provide feedback to government of Mongolia and SDC in Switzerland
- Monitor and review progress and provide necessary recommendations
- Leverage support (funds, resources) from counterparts and stakeholders
- Coordinate with other donors and government action plans
- Facilitate in solving conflicts
- Commission external reviews as planned and evaluate and accept their findings

The **Operational Committee (OC)** acts under the supervision of the PSC and is responsible for operational decision making. It consists of representatives of MRPAM (National Project Director, NPD), from SDC (National Program Officer, NPO), and from PIU (National Coordinator, NC and Team Leaders) and holds regular bi-weekly meetings.



International advisory services are essential due to the lack of international networking, know-how, technical expertise and capacity in dealing with artisanal mining issues in Mongolia. It will include contributions of professional advice, training and capacity development, technology and know-how transfer, planning and reporting, evaluation activities as well as support of fund raising activities by the project. The international advisory services have the objective to provide the project with international experiences, know how, and instruments from other artisanal mining projects, guaranteeing the transfer of international lessons learnt and mitigating strategic and human risks and hazards in the implementation of the project.

The **Coordinating Committee (CC)** should be established in order to coordinate and harmonize the activities of donor and partners such as UN, World Bank, ILO, BGR and MRS, research institutes and NGOs as well as other SDC projects – on the basis of information sharing and cooperation.

**Advisory Boards (AB)** – with the aim to provide thematic advice and expertise – can be established in case of need.

#### **4.2.1 Exit Strategy**

The SAM project aims at a lasting effects through the continuation of expected benefits to the artisanal miners and the rural societies as a whole. The exit strategies different from among the four components and the overall management part of the project.

**Management:** The exit strategy implies transferring the overall responsibility and leadership for the management of the ASM sector to the SAMU under MRPAM. The SAMU is expected to be transformed into a strong, capable department of MRPAM able to manage ASM issues and to facilitate networking with all stakeholders. The institutional interlinking of the SAMU with the local government administration – at booth levels, strategic and operational – is hereby of crucial importance.

Based on mutual agreement between all stakeholders during the entry phase the exit strategy implies national ownership and sustainability the project management. As a first step the management of the project will be transferred from Projekt-Consult GmbH to a national PIU. During the main phase the responsibilities of the Project Coordinator under the SDC contribution will decrease and the responsibilities of the Project Deputy, at the same time the head of the SAMU will increase. The aim is that the project will be led by the SAMU head by the end of the main phase and then throughout the exit phase of two years). The former Project Coordinator will then work as a deputy.

**Component 1:** The legal framework will be established satisfactorily by the end of the project. The capitalization of experiences through process documentation, dissemination of lessons learnt and knowledge management will enable the program to consolidate the efforts within that component. The MRPAM and the NAMC will continue to monitor the legal framework.

**Component 2:** The regulatory framework will continue to be developed. Key drivers of that process will be the NAMC and MRPAM. The Mongolian artisanal miners will be linked to international networks and have access to expertise and know-how.

**Component 3:** The project will work together with NGOs, national and international experts in delivering the project outputs. The project will be in a role of facilitation and resource provision. As it will be not possible for artisanal miners to fund international experts, the key strategy is to build capacity within Mongolian nationals, especially among artisanal miners, NGOs and the technical university. These institutions will then be able to continue to provide technical support and disseminate technological innovations.

**Component 4:** Training in mediation will empower Mongolians to become skilled and experienced in this. The project will work with NGOs and public institutions to select trainers for mediation, community development and monitoring. These NGOs and institutions will continue to provide these services even after the ending of the project.

**Strategic partnership arrangements:** The project emphasizes strong partnership arrangements with national and local level formal and non-formal institutions including other donor assisted projects. All testing and demonstration activities will be implemented in collaboration and with the involvement of nationals, including artisanal miners themselves. The strategy is that knowledge generated from the project's interventions as well as the capacity to conduct further demonstrations to derive practical advice on successful artisanal mining remain with Mongolians. Training will be provided to key trainers able to train others, including local government officers and artisanal miners, who are the ultimate beneficiaries of the project. Thus the chances of up-scaling successful interventions are ensured.

## 5 Monitoring and Evaluation

The actions planned within the main implementation phase of the SAM project shall contribute to the development of a sustainable mining activity and introduce changes to minimize negative impacts. This requires constant Monitoring and Evaluation. Following the guidance of the Evaluation Report (Echavarría and Kläy 2006) the project will establish a participatory impact monitoring systems as for example suggested in (Germann and Gohl 1996). Planning, implementation and monitoring of activities need to focus from the outset on self-managed activities of selected persons, groups or organizations, with whom the project cooperates and interacts directly. This is of course a greater challenge. Progress may be slower, the failure risk higher, mainly at the beginning. However, the chance of learning by doing is higher and the lasting midterm and long-term success better.

On-going participatory monitoring is an integrated part of the operational plan and will be facilitated by the program implementation unit but conducted mainly by the beneficiaries. Monitoring needs to look at a few indicators of major importance to SDC and MRPAM. Especially the components that have an indirect impact on the development goals (such as employment and income generation, poverty alleviation, livelihood improvement) need to have clearly agreed indicators from the beginning and approved methodologies on how to collect that information (interviews, focus group discussions, case studies, random inquiries, etc.). A set of possible change-indicators is given in the project. Additionally, SDC in Mongolia will monitor the PIU with reference to the program document and program implementation standards set up by SDC. The project steering committee will monitor the overall progress of the program towards the expected outcomes and require adaptations, if necessary.

There are many technical parameters to monitor, e.g. safety standards, gold recovery rate, pollution rates, etc. to establish praxis-oriented recommendations to artisanal miners. These parameters will be monitored by institutions with the necessary technical capacity. The adequacy of the current legislation will be monitored by the PIU and the stakeholders.

It must be kept in mind that information, which is important to SDC as a donor may not necessarily be of importance and/or value to an implementing agency or the (commercially oriented) service providers and even less to the beneficiaries. It is unrealistic to expect these stakeholders to undertake costly data collection on issues which are of no relevance to their operation. Measuring impact of a social nature is therefore basically a task of the development program and costs related to it must, consequently, be borne by the donor

During the first half of 2007 monitoring and evaluation guidelines, incl. terms of references, will be developed. This will make the evaluation process at the end transparent and clear as all the main stakeholders will have agreed on what the performance expectations are. The baseline study in Bayankhongor on socio-economic indicators as well as on environmental issues will provide the basis for selecting key indicators.

An internal review will be conducted in 2008 leading to possible mid-term corrections for the YPO for 2009-10. In the first semester 2010 an external evaluation will be mandated by the PSC to value the programs achievements and to provide guidance in developing the exit phase. The evaluation team will consist of a representative from the steering committee, SDC HQ (i.e. thematic division), a professional with experience in artisanal mining from ARM or from another artisanal mining project of SDC. The team will include Mongolians and foreigners and men and women.

### 5.1.1 *Program Monitor Criteria*

**Social:** The introduction of an appropriate regulatory framework and organizational structures to artisanal miners will have improved their livelihoods, especially in regards to reduced conflicts, human rights, gender equity, better access to social services and improved operational safety.

**Economic:** The introduction of improved technology and the support to alternative and diversified income generation activities will have improved the livelihood of artisanal miners. Artisanal miners shall have improved skills in financial and business management.

**Physical:** The program will build little physical infrastructure. It will assist beneficiaries with appropriate technology solutions for mining shaft construction, gold recovery (e.g. mills, retorts), etc.. Physical infrastructure shall have model character in efficiency, effectiveness, safety standards, etc. and not serve 'project monument creation' purposes.

**Empowerment:** Artisanal miners will get more self-confident because of their legal status and improved know-how. They will feel that their needs are heard and represented well through local associations and the NAPC. Labeled jewelry produced from artisanal mined minerals under fair-trade conditions will contribute to national pride.

Staff at MRPAM, especially those working in the SAMU, shall have improved their managerial, leadership and professional skills to be able to lead the exit phase of the project themselves with advice from outside.

National ownership of the project and the topic will have created and PIU succeeded in achieving its expected results. Good governance principles and the Code of Ethical Conduct are observed at all levels within the project and young people promoted.

**Environment:** Mongolia's soils, flora and fauna are fragile. It is of utmost importance that the program monitors the impact on the soils, flora and fauna and carefully avoids any technology or measures that lead to long-term degradation.

Mongolia has very limited capacity to do environmental assessments and the Ministry of Nature and Environment has asked SDC to assist in training its staff. The suggestion is taken on by the desertification program planned by SDC.

**Legislation:** The artisanal mining legislation is adequate, gender-sensitive and clearly beneficial to the ASM sub-sector and its main stakeholders. The implementation is efficient and straight forward and understood and heeded by the artisanal miners.

**Public awareness:** The public will be aware and appreciative of artisanal mining in Mongolia and its role in sustainable rural development.

## 6 Partner Contributions and Project Budget

### 6.1 *National Resources and Contributions of the Different Stakeholders*

Different categories of stakeholders i.e. artisanal miners and their institutions, MRPAM, local governments, universities and government institutions, line ministries, private companies, NGO partners and SDC, contribute to the program in different ways.

#### 6.1.1 *Government Sector*

*Government partners* (central government, local governments, research organizations, universities and institutions) will make available the required human resources as agreed upon in contracts between the project and these organizations.

**MRPAM:** MRPAM, will be the main coordination body for the project and is also chair the PCS. MRPAM will provide office facilities for the project implementation unit, salaries for their members of the PIU and their local representatives, support for workshops, forums and international conferences. It will also provide a foreign expert working for MRPAM as an advisor for the project during his time in Mongolia (2007-08). Current regulations do not allow

for the pooling of funds, so the contribution of MRPAM to the project will be ‘in kind’ and not appear in the books of the project. Despite a firm commitment to the project and its goals, the size of the financial contributions needs to be approved within the normal budget allocation procedures of the MIT on an annual basis.

**Mining Rescue Service and other government institutions:** The MRS has been a main implementation partner in the initial phase of the SAM project providing training to artisanal miners. The MRS will provide human resources to the project.

**Local governments and government officials:** Key partners are the land management officers and the environmental inspectors. The project will train them but not subsidize their state-mandated duties, which need to be borne by the government.

### 6.1.2 Private Sector and Civil Society

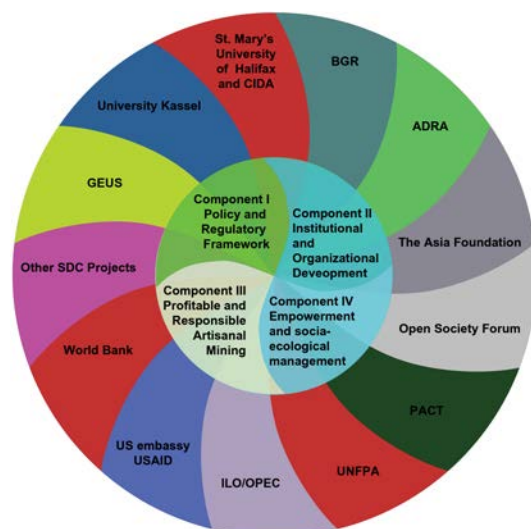
The main beneficiaries are the artisanal miners, members of the informal, private sector. As they are also vulnerable the project will strive to empower them by supporting organizational structures and capacity development of the people. Actions that have a clear economic benefit to them need to be negotiated based on cost-sharing of full cost recovery terms as the project needs to avoid building up false hopes based on subsidies.

There are several NGOs with the aim to support the development of responsible mining in Mongolia (e.g. Asia Foundation, Civil Movements [like the Homeland and Water Protection Coalition, Oingin River Movement, Huvsgul Environmental Movement representing the interests of local communities in natural resource use], ADRA, Open Society Forum, and others). There is considerable experience to build on among these different stakeholders, which can be capitalized on in the establishment of artisanal mining associations and a NAMC. Civil society organizations will also be mandated to implement specific tasks within the four project component. Financial contributions to the project will be minimal, if at all possible.

### 6.1.3 SDC and Other Donors

The *Swiss contribution* is made through project funds. SDC will contract the implementer and make funds available to meet project costs and administrative costs for the implementation of the development activities based on annual action plans and budgets. SDC will also provide funds for services of international consultants. Pooling of funding with other donors in specific project activities is considered. Pooling of funds with MRPAM is discussed, but needs significant adjustments of fund disbursement mechanisms on both sides.

**Figure 5: Overview of some donors interested in ASM**



For the collaboration with other donors and projects co-funding mechanisms will be applied towards cost sharing. This project represents a platform open for other donors to join in with funds, in-kind contributions, know-how, etc.. Collaboration and co-funding of a National Mining Forum with ILO, BGR, WB and others already happened in spring 2006. Overall information sharing is already happening and concrete collaboration agreements with different donors (see Figure 5) for the four components are envisioned to start in 2008.

Key partners are UNFPA and PACT and their projects focusing on HIV/AIDS prevention among artisanal miners and other vulnerable groups; ILO and their artisanal mining project focusing on child labor reduction and improved safety; BRG and their project

on reclamation of mining sites, the University of St. Mary's and Halifax as they cooperate already with the Technical University of Mongolia in improving technology used in artisanal mining and the Asia Foundation and their efforts to define 'responsible' mining for Mongolia.

## 6.2 Program Budget

The total budget for the entry phase (2005 – 2006) was CHF 1.28 million, of which SDC provided CHF 1.13 million and MRPAM CHF 0.15 million. SDC has allocated CHF 8 million for the whole SAM project, including the exit phase 2011-12.

**Table 2: Budget summary for the SAM project 2007-2010**

TOTAL BUDGET	2007	2008	2009	2010	TOTAL BUDGET		
	SDC [CHF]	SDC [CHF]	SDC [CHF]	SDC [CHF]	SDC [CHF]	MRPAM [CHF]	TOTAL [CHF]
<b>Component 1:</b>							
1.1	27,778	5,556	55,556	11,111	100,000	-	100,000
1.2	27,778	22,222	27,778	22,222	100,000	-	100,000
1.3	27,778	19,444	18,333	17,500	83,056	-	83,056
	81,000	40,833	75,742	52,395	249,970	26,895	276,866
<b>Total</b>	<b>164,333</b>	<b>88,056</b>	<b>177,408</b>	<b>103,229</b>	<b>533,026</b>	<b>26,895</b>	<b>559,921</b>
<b>Component 2:</b>							
2.1	27,778	38,889	16,667	16,667	100,000	-	100,000
2.2	47,778	81,111	47,778	36,667	213,333	-	213,333
2.3	75,556	20,000	17,778	26,667	140,000	13,333	153,333
	90,963	78,281	95,336	82,873	347,454	23,533	370,988
<b>Total</b>	<b>242,074</b>	<b>218,281</b>	<b>177,559</b>	<b>162,873</b>	<b>800,788</b>	<b>36,867</b>	<b>837,654</b>
<b>Component 3:</b>							
3.1	27,778	53,333	33,333	33,333	147,778	-	147,778
3.2	22,222	44,444	22,222	22,222	111,111	-	111,111
3.3	38,889	44,444	50,000	61,111	194,444	-	194,444
3.4	16,667	16,667	16,667	16,667	66,667	-	66,667
	61,333	63,467	99,040	79,170	303,010	90,200	393,210
<b>Total</b>	<b>166,889</b>	<b>222,356</b>	<b>221,262</b>	<b>212,503</b>	<b>823,010</b>	<b>90,200</b>	<b>913,210</b>
<b>Component 4:</b>							
4.1	38,889	38,889	27,778	22,222	127,778	-	127,778
4.2	38,889	72,222	72,222	72,222	255,556	-	255,556
4.3	55,556	50,000	44,444	66,667	216,667	-	216,667
4.4	38,889	72,222	61,111	61,111	233,333	-	233,333
	113,000	131,467	120,107	108,929	473,502	26,895	500,397
<b>Total</b>	<b>285,222</b>	<b>364,800</b>	<b>325,662</b>	<b>331,151</b>	<b>1,306,835</b>	<b>26,895</b>	<b>1,333,731</b>
<b>Overall Project Implementation</b>							
Delivering Outputs	4,444	2,778	4,444	1,111	12,778	-	12,778
Manag. Human & Fir	212,333	164,894	164,473	171,085	712,785	100,910	813,696
Managing Relations	112,444	124,111	129,361	139,318	505,235	-	505,235
Knowledge Manag.	6,667	46,667	6,667	66,667	126,667	-	126,667
<b>Total</b>	<b>335,889</b>	<b>338,450</b>	<b>304,945</b>	<b>378,181</b>	<b>1,357,464</b>	<b>100,910</b>	<b>1,458,375</b>
<b>GRAND TOTAL</b>	<b>1,194,407</b>	<b>1,231,943</b>	<b>1,206,836</b>	<b>1,187,937</b>	<b>4,821,123</b>	<b>281,767</b>	<b>5,102,890</b>

The total approved framework credit for SAM is CHF 8 millions, of which 1.1 were spent during the entry phase. The budget for the SDC contribution during the main phase is CHF 4.82 million, which includes the costs for 1) program implementation; 2) for the four program components, 3) for technical assistance (international advisory) and 4) for the final evaluation. The budget is allocated annually based on the activity reports and the annual plan. Annual plans are approved by the Project Steering Committee and SDC. MRPAM's contribution is CHF 0.28 million, the total budget therefore being CHF 5.1 million over the next four years. This includes 4 working months of the Natural Resource Advisors from SDC for the projects funded through the GEP. The person will be shared with the desertification project. A detailed budget is showing the costs for the main outputs of each component and the overall implementation. That leaves a budget of CHF 2 millions for the exit phase.

Allocations by MPRAM will be 'in kind', in terms of human resources, office space, transportation provision, conference organization, etc.; the budget shows the estimated value of their contributions

only. Auditing will be done for the SDC contribution by a certified auditing company in Mongolia on an annual basis, the MPRAM contributions are audited independently.

### **6.3 Backstopping (National and International Advisory)**

All partners involved in the SAM entry phase project implementation have opted for national implementation of the project during the next phase. The fact that neither the SDC nor MRPAM have human resources with sound experiences and capabilities in the artisanal mining sector requires that the project engages national and international advisory service. However, MRPAM is keen to profit from backstopping services not just for one project, but for their overall work. Ways will be explored on how MRPAM can play a more active role in recruiting, guiding and profit from international advisors without compromising on the needs of the project.

#### **6.3.1 Objective of the international advisory services**

The international advisory services have the objective to provide the project with international experiences, know how, and instruments from other artisanal mining projects, guaranteeing the transfer of international lessons learnt and mitigating strategic and human risks and hazards in the implementation of the project. The project will hire international advisory services from Projekt-Consult GmbH as well as from other agencies and SDC related projects to cover the following issues:

**Professional advise:** This encompasses the development and adaptation of the project strategy, technical assistance to the target group and project partners and technical and organizational support, especially of the component heads with respect to a most efficient and effective implementation of the tasks outlined in the work program. Besides the direct contribution on missions it practically includes for instance the review of technical planning documents (mini project proposals etc.) and the development of discussion papers. Furthermore the advisors need to strongly focus upon professional strengthening and capacity development within the counter part organization in view of the exit strategy. Professional issues include: Geology of gold and other important ASM commodities, the evaluation of deposits, mining and mineral concentration technologies, mining environmental issues, legal aspects and legalisation of ASM operations, conflict resolution, marketing of ASM products, occupational health and safety with respect to artisanal mining operations and mining related community hazards, the establishment and support of ASM organizations such as cooperatives, associations, and other umbrella organizations, the funding of ASM operations, support in the establishment of ASM extension services and qualification of service providers, the decentralisation of ASM administration by governments, etc.

**Training and capacity development:** This encompasses the development of curricula for training courses and other training measures as well as the development of guidelines, best practice examples, reference materials, etc. In addition, this activity covers the support during training courses and supporting the international networking, i.e. with CASM, with other ASM projects world wide, etc. SDC will be hiring an natural resource advisor to support the SCO in technical aspects of the implementation of its project, but also in training, coaching and empowering the national implementers in project management, team building, communication and reporting.

**Technology and know-how transfer:** in this field advisors need to provide hardware examples, drawings, skills and operational knowledge from other ASM countries and from international suppliers of appropriate technology and equipment for artisanal mining (exploitation, mineral concentration and environmental remediation).

**Planning and reporting:** Covering support of technical and regular reporting, input to the strategic planning.

**Evaluation:** Support of self-monitoring processes during the implementation phase in view of ASM specific issues and moderation of participatory processes for monitoring and evaluation within the project.

### 6.3.2 Specification of services according to components

The key focus of the international advisory support is to the support capacity of Mongolian key institutions and the project in planning processes, strategic orientation and integration with world-wide experience from similar ASM experiences worldwide, especially from areas where SDC is already at work or from neighboring countries, where development challenges are similar.

**Table 3: Key international advisory Issues for the different project components**

	Man Days	Budget [CHF]
<b>Key advisory issues for Component 1</b>		
Capitalizing of international experiences in the promotion of formalization and legalization of ASM with references to the development of enforceable regulations	30	33000
Support in connecting with international ASM networks	15	16500
Advisory services to the stakeholders for the establishment of a legal trade-framework for gold from artisanal mining production	30	33000
<b>Key advisory issues for Component 2</b>		
Support in the decentralization of mining administration with respect to effective management of artisanal mining	40	44000
Support in design and the establishment of data basis on ASM, its evaluation	20	22000
Support of the preparation and outline of the CASM AGM event proposed for late 2007 in Mongolia	20	22000
<b>Key advisory issues for Component 3</b>		
Provision of integrated technical support for all aspects of mining (mineral concentration, mining restoration techniques, technology transfer, etc.) and dissemination of technology and innovative solutions	80	88000
Support in development of training materials and the assistance in training measures	20	22000
<b>Key advisory issues for Component 4</b>		
Training in mediation and conflict resolution	25	27500
Advice in establishment of ASM specific participatory monitoring systems	15	16500
Support in strengthening of capabilities related to environmental management in artisanal mining, including appropriate and low cost technologies for rehabilitation, the reduction of use of toxics, etc.	50	55000
<b>Key advisory issues for the overall management</b>		
Assistance in planning and reviewing of mini-projects and pilot measures	22	24200
Team building, management and technical support (SDC Advisor)	480	396000
<b>TOTAL</b>	<b>847</b>	<b>799700</b>

The costs for a day of international backstopping are calculated at CHF 1111 as an average, the SDC Natural Resource Advisor's at CHF 825 per day. The project is well aware that rates differ depending on the service provider and that other costs occur, like travel and per diems, which are included in the above rates. In line with the requirements of the Paris Declaration the project will carefully plan advisory missions together with other donors in the sub-sector to have at least 25% joint missions during the implementation period.

## **6.4 Key organizations involved in artisanal mining and collaboration potentials**

### **6.4.1 ILO/IPEC project: Support to the National Sub-Program to Eliminate the Worst Forms of Child Labour**

ILO/IPEC works in Mongolia since 1999. Its main intervention is to contribute to implementation of a National Program for Elimination of Child Labour in Mongolia. In this framework ILO/IPEC is planning to extend the project with the overall aim of preventing or eliminating the exploitation of children of the age from 5-17 by inappropriate labour. The project targets some informal mining sites, where the child labour is worst. One of the target areas for the project is Bayankhongor. The SAM project has preliminarily agreed to cooperate with ILO/IPEC project in dealing with child labour through exchange of experience, joint working on education and school drop-outs as well as training for children and parents. Collaboration in the development of a policy and regulatory framework is already established and public awareness raising campaigns through media and cooperation foreseen.

### **6.4.2 UNFPA project: Reducing Socio-Economic Vulnerabilities of Selected Peri-Urban and Informal Mining Communities in Mongolia**

UNFPA is a close partner to Mongolian Government (Ministry of Health and Ministry of Social Welfare and Labor) in the area of reproductive health and prevention of unwanted pregnancy and HIV/AIDS and STI elimination. It has gained trust among national stakeholders by well targeted and effective interventions. Starting in 2007 UNFPA is intending to implement a project on improved access among unregistered migrant communities including informal mining communities. The project will deliver mobile reproductive health care services. The SAM project has agreed to cooperate in establishment and deliver of mobile health and information units at mining sites as well as producing and distribution training manuals.

### **6.4.3 World Bank**

The World Bank has cooperated with SDC in organizing the first national forum on mining. At the forum over 300 representatives from all walks of life in the mining and artisanal mining sector in Mongolia came to discuss on problems and development potentials. Next year the project will cooperate with WB on organizing CASM workshop in Mongolia, an international platform within the WB on small scale mining.

The World Bank is also active in other natural resource related issues and has done a lot of analytical work over the last year, among them a report on environment and mining.

### **6.4.4 Federal Institute for Geosciences and Mineral Resources (BGR)**

BGR implements an project in Environmental Protection in Mining from 2005-2010 focusing on small mining. The main aspects of the project include capacity building of environmental inspectors regarding environmental protection in mining, demonstration and implementation of new methods and technologies, conducting of training for good reclamation praxis and support implementation of mining related laws and regulations. The SAM project has worked together with the BGR project in issues related to laws and regulations and will continue to do so, including aspects of Component 4.

### **6.4.5 Non-Government Organizations**

#### **6.4.5.1 Open Society Forum**

Open Society Forum was established as a NGO upon closure of Soros Foundation in Mongolia. The forum functions regularly and takes funds from donors to carry out activities mainly in organizing awareness raising events, social dialogues and negotiations. Their service can be sought in organizing an annual national forum on mining and transparent mining. Another possible cooperation area is support to artisanal miners initiative to organize their national association (Component 2) and in social dialogs and conflict mitigation training (Component 4)

#### **6.4.5.2 Asia Foundation**

This international NGO is working in the mining sector, actively promoting dialog among all stakeholders. They have good network with local movements which can play a role in mitigating the



conflicts between formal and informal miners (Component 4). They are a driving force behind the development of a definition on 'responsible' mining for overall mining in Mongolia.

#### 6.4.5.3 Local Movements

Local movements Ongiin Gol River and Call for Land are working actively in local areas to represent the voice of local herders. Especially they fight with irresponsible mining and organize local communities to strengthen the environmental rehabilitation by formal companies and provide fair share of benefits from mining to the local community development.

### 6.4.6 **Private Sector**

#### 6.4.6.1 Projekt-Consult

Projekt Consult has gained wide experience of working in the small scale mining sector in Latin America, Africa and Asia. Michael Priester, Co-Director of the company, is an internationally known expert and has contributed a lot to successful implementation of orientation phase of SAM project in Mongolia. Especially, the experience gained in drafting the legislation on artisanal mining and transfer of sound technologies in labour safety and environmental contamination and link with international network and expertise on small scale mining is of big value in the main phase of SAM project.

#### 6.4.6.2 Ecosphere

Ecosphere, consulting environmental company, has conducted an environmental baseline survey at two project sites of Bayankhongor aimag. The survey produced a number of important findings and data for development of baseline indicators on the environment. Ecosphere cooperates closely with Ministry of Nature and Environment and donor organizations(UNDP, WB) in providing the assessment work for natural resource related projects.

#### 6.4.6.3 Geo Consulting Ltd

This is a small private company specializing in geological consulting services. The company is run by Mr Tumenbayar, geologist-environmentalist by profession. His competence is highly recognized in the mining sector especially in impacts of mercury use and its reduction in mineral processing(gold). Mr Tumenbayar and his company has cooperated with SAM project closely by providing available research work on mercury contamination and reduction and participating in thematic group work of SAM on mercury reduction. Mr Tumenbayar and his company has carried out several projects on small scale mining and mercury funded by international organizations such as JICA, WB and CANADA FUND.

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## 8 Abbreviations and Definitions

AMC	Artisanal miners community: Group of more than 10 artisanal miner units (families, informal groups) that permanently live in one location for an extended period of time and are likely to stay there for the next years. The community can also include non-miners.	GoM	Government of Mongolia
ARM	Association for Responsible Mining – <a href="http://www.communitymining.org">www.communitymining.org</a>	GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit GmbH
ASM	Artisanal and small-scale mining, also artisanal mining	ILO	International Labour Office / Geneva
BGR	Bundesanstalt für Geowissenschaften und Rohstoffe / Hannover (German Geological Survey)	IPEC	International programme for the Elimination of Child Labour
BMBF	Federal Ministry for Education and Research, Germany	JICA	Japanese International Cooperation Agency
CASM	Communities and Small-Scale Mining (platform hosted by World Bank)	LA	Latin America
CDE	Centre for Development and Environment	LSM	Large Scale Mining
CIDA	Canadian International Development Agency	MDG	Millennium Development Goals
FDI	Foreign Direct Investment	MEDMIN	Medio Ambiente y Minería (SDC supported ASM project in Bolivia)
GAMA	Gestión Ambiental en la Minería Artesanal (SDC supported ASM project in Peru)	MIT	Ministry of Industry and Trade
GDP	Gross domestic product	MLSW	Ministry of Labor and Social Welfare
GEP	Global Environment Program	MMSD	Mining, Minerals and Sustainable Development
GEUS	Danmarks og Grønlands Geologiske Undersøgelse (Danish Geological Survey)	MNE	Ministry of Nature and Environment
		MONEF	Mongolian Employers Federation
		MRPAM	Mineral Resources and Petroleum Authority of Mongolia
		MRS	Mining Rescue Service
		MUST	Mongolian University of Science and Technology
		NAMC	National Artisanal Miners Council (suggested organization)
		NDS	National Development Strategy
		NGO	Non Governmental Organisation
		NRM	Natural Resource Management

PEM	Pasture Ecosystem Management Program, also named “Green Gold”	SDC	Swiss Agency for Development and Cooperation
PIU	Project Implementation Unit	SME	Small and Medium-size Enterprises
PMSC	Proyecto Minería Sin Contaminación (SDC supported ASM project in Ecuador)	SNRM	Sustainable Natural Resources Management
PMU	Project Management Unit	SSIA	Specialised State Inspection Agency accountable to the Prime Minister
PSC	Project Steering Committee	STI	Sexually Transmitted Infections
PSI	Potato Seed Improvement Project	UB	Ulaanbaatar – capital of Mongolia
SAMU	Small and Artisanal Mining Unit of the MRPAM	UNFPA	United Nations Population Fund
SCO	Swiss Cooperation Office	USAID	US Agency for International Development
SCS	Swiss Cooperation Strategy	WB	World Bank
		YPO	Yearly Plan of Operation

**The Association for Responsible Mining:** ARM is an independent, global-scale effort, and pioneer initiative, created as an international and multi-institutional organization to bring credibility, transparency and legitimacy to the development of a framework for responsible artisanal and small-scale mining. Its goal is to enhance equity and wellbeing in mining communities through improved social/environmental mining practices, governance and the implementation of ecosystem restoration practices, based on innovative approaches that use economic incentives as drivers for transformation. The development, consultation and pilot testing of standard zero for fair-trade Artisanal gold is a key part of this strategy and the object of this public consultation. ([www.communitymining.org](http://www.communitymining.org))

**Fair Trade:** Fair Trade is a trading partnership based on dialogue, transparency and respect that seeks greater equity in international trade. It contributes to sustainable development by offering better trading conditions to, and securing the rights of, marginalized producers and workers - especially in the South. Fair Trade organisations (backed by consumers) are engaged actively in supporting producers, awareness raising and in campaigning for changes in the rules and practice of conventional international trade. ([www.FairTrade.net](http://www.FairTrade.net))

## 9 Annexes

### 9.1 Project Performance Measurement Table

Performance Area	Management Outputs (by 2012)	Indicators / Assessment	Means of Verification
<b>Delivering Development Results</b>	Project specific outputs are reached	70%	Project Document, Reports
	Project outputs adjusted in areas where actual progress is significantly off-track and/or where significant changes in the context occurred	Updated project document	Annual Plans
	Effective implementation structures at MRPAM and local levels established under avoidance of establishing parallel structures	Implementation and coordination agreements Coordination with other donors and government	National and local implementation units efficiency and effectiveness assessment
	Support to strengthen capacity is coordinated	50% of the capacity development activities are coordinated with others	Operational and financial reports
	Tangible results related to gender and governance demonstrated	Key issues streamlined in all components Specific outputs related	Gender assessment Checklist with key questions
<b>Managing Human &amp; Financial Resources</b>	Staff competent in their field of responsibility and competent in implementing the program	Reports and plans meet standards of SDC and MPRAM Training opportunities used to improve skills	Feedback SDC and MPRAM Training track records
	Employees feel empowered and enabled	Clear responsibilities and allocation of resources Work attitude of >90% the staff is positive	Job Descriptions and Performance Monitoring Feedback from employees
	Staffing of project adequate to requirements of the SAM project	Capacity to manage components sufficient	Meeting deadlines
	Budget for SAM spent effectively and according to approved internal and external standards	Budget spent according to annual plans (plus/minus 10%) High return (results) for spent amounts	Audit report Annual Budget and fund allocation
	Work-life balance maintained	Attrition rate < 10% per year Lost days because of sickness < 5 days per employee	Survey, personal records

Performance Area	Management Outputs (by 2012)	Indicators / Assessment	Means of Verification
	Increased pooling of funds with partners	At least 50% of the funding from SDC (excl. implementation costs) is spent through partners	Budgets and financial reports
<b>Managing Relationships (External &amp; Internal)</b>	SDC recognized as co-leading agency in the coordination of artisanal mining related issues	Coordination meeting among donors involved in artisanal mining shows concrete results	Other donor's assessment of SDC's work
	Synergies with other SDC funded projects utilized for improved results and reduced costs	Collaboration initiatives and agreements	Joint reports Achieved cost savings
	Assessment missions jointly with other donors or other SDC funded projects	40% of the missions joint	Reports (authorship and finance records)
	Analytical work undertaken jointly done with other donors and national agencies	60% of the analytical work	Reports (authorship and finance records)
	Effective and efficient routines for communication and exchange of information between the project and SDC, MPRAM, relevant MN authorities (SC, MF, MIT, etc.) in place	No breakdown in communication between the project, SDC and MPRAM	Feedback from SDC, MPRAM and MN-actors
	Effective and efficient communication within the project implementation unit cultivated	No breakdown in communication between the different members of the PIU	Feedback from PIU to MPRAM and SDC
<b>Knowledge Management</b>	Every year at least 8 significant achievements (result, best practice, tools) of the project are shared within interested stakeholders through Onsite Insights and other channels	Contributions to Onsite Insights Documentation like briefs, movies, etc.	Awareness of the project among stakeholders (survey, media track record)
	Information available from other SDC programs and development partners effectively processed and used (e.g. South-South Exchange)	Information, best practices, and tools	Thematic platforms (missions, study tours, conferences, workshops)
	National Forums on key development issues re. artisanal mining organized	Attendance (qualitative and quantitative), policy recommendations and implications	Records, proceeding, media coverage
	Best practices, lessons learnt and other relevant topics regularly shared and discussed within the team	Bi-weekly meetings, presentations, ad-hoc meetings	Overall awareness of project related issues and relevant development issues

## 9.2 Key Stakeholder Analysis for the SAM Project

The following table gives an overview over the key stakeholders involved in the artisanal mining sector, their strengths and weaknesses as well as their potential involvement in the project

Stakeholder	How is the stakeholder affected by, or affecting the problem(s)?	Capacity/motivation to participate in addressing the problems	Relationship with other stakeholders (e.g. partnership or conflict)	Relative importance of the stakeholder	Aim
<b>Ministry of Trade and Industry (MIT)</b>	Mining as economic activity falls under the Ministry's responsibility	Considering that ASM should be regulated and coordinated Participated in developing a draft ASM Law An order by the Minister was issued to implement pilot projects on ASM organization and coordination Understaffed with mining professionals	Although MIT is the Ministry to which MRPAM is belonging there is poor liaison between MIT and MRPAM	MIT is the Ministry in charge of mining activities in Mongolia	Develop trade and industry policies and supervise their implementation
<b>Ministry of Nature and Environment (MNE)</b>	General position against environment harming mining activities Not accepting any use of mercury in gold mining (not even under controlled conditions)	Commenced its cooperation with the project in terms of development of ASM environmental impact assessment and reduction of adverse mercury impacts	Cooperates closely with regulations on environmental standards at mining	Has the mandate to license the use and exploitation of non-mineral natural resources and the use of toxics	Develop environmental policy and supervise its implementation
<b>Ministry of Social Welfare and Labour (MSWL)</b>	Aware that ASM results in a number of social problems and difficulties	Willing to cooperate with the project. Minister and other officials have good understanding on the project activities	Close links to ILO/IPEC and MONEF		Develop the labour and social welfare policies Developed and approved policy on informal employment
<b>Mineral Resources and Petroleum Authority of Mongolia</b>	SAM Project Partner Artisanal Mining Unit (ASMU) was established and works within the	Strong commitment to resolve the artisanal mining problem Understaffed with skilful	willing to take a leading role in coordination of donor projects on mining and	MRPAM is the governmental regulatory agency regulating and coordinating mining	Regulating and legalizing Artisanal Mining activities in Mongolia

Stakeholder	How is the stakeholder affected by, or affecting the problem(s)?	Capacity/motivation to participate in addressing the problems	Relationship with other stakeholders (e.g. partnership or conflict)	Relative importance of the stakeholder	Aim
(MRPAM) (MRPAM)	project structure	professional mining personnel	small scale mining	production, petroleum geological survey, mining databases, and mineral cadastre department policies	
<b>Mining Rescue Service (MRS)</b>	Mobile service for safety and training is set up and training and information unit was established to provide the know how on labour safety standards and needs.	Further strengthening of MRS especially in form of mobile services is needed.	During the SAM Project orientation phase, MRS has conducted several training courses and gained the trust of ASM communities Good relations to the formal mining stakeholders	Runs under the Ministry of Energy MRS is the sole professional institution that deals with mining labour protection and operational safety Good personnel and material resources required for delivery of services. (About 50 professionals in 4 offices, head office in Nalaikh)	Improve operational safety in mining and provide rescue services
<b>State Specialized Inspection Agency (SSIA)</b>	Bans on mercury use	Interested in cooperating with SAM project especially in mercury reduction and elimination and environmental rehabilitation. Especially its local officers are important in supervising the technology.	SSIA is partner of the BGR project on environmental management	Runs under the Prime Ministry SSIA has inspectors in all soums and aimags of the country	Controlling and inspecting environmental activities and work processes
<b>Environmental inspectors</b>	In many soums approach towards artisanal miners is understanding and helpful	Environmental inspectors work in all soums. Profound knowledge about the artisanal mining situation but lack mining related technical knowledge as well as skills related to artisanal	One of main partners at soum level.	Environmental Inspectors belong to the SSIA	Controlling and inspecting environmental activities and work processes

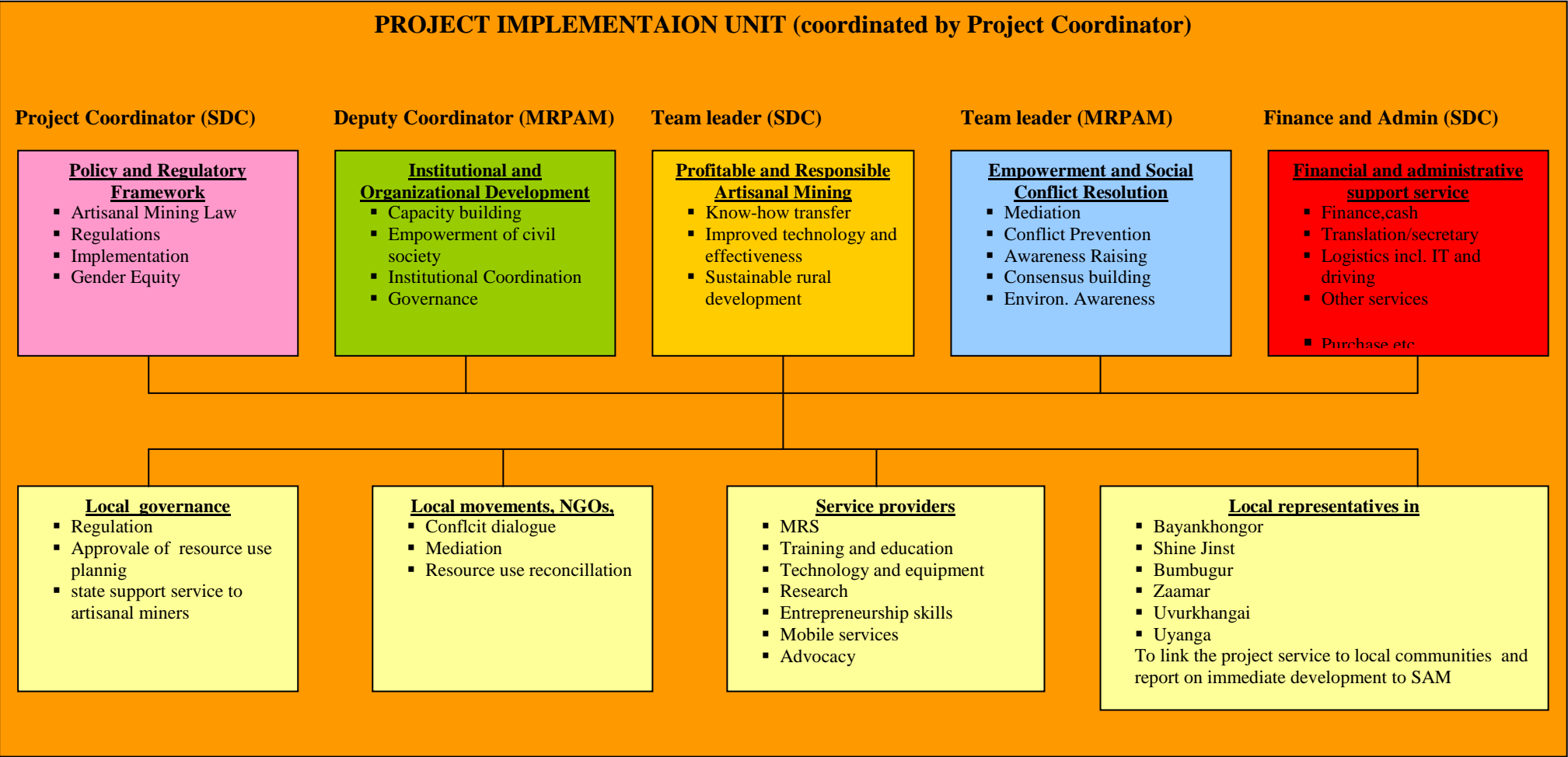
Stakeholder	How is the stakeholder affected by, or affecting the problem(s)?	Capacity/motivation to participate in addressing the problems	Relationship with other stakeholders (e.g. partnership or conflict)	Relative importance of the stakeholder	Aim
		mining			
<b>Association of Mongolian Miners</b>	As they represent the interests of formal mining companies they often see themselves in conflict with Artisanal Miners	Motivation to cooperate with Artisanal Miners stems from possibilities for reduced transaction costs through reduced conflicts with artisanal miners	Hosted the first conference on artisanal mining in 2002 Cooperating with the ILO-MONEF child labour project	Umbrella organisation of the formal mining industry About 60 members out of the 130 mining companies	Advocacy group for the interests of formal mining companies Pay special attention to the mining sector policies
<b>Mongolian Employers' Federation (MONEF)</b>	Very supportive of the enactment of the artisanal mining law	Willing to cooperate with the project	Partner of the ILO/IPEC project	Umbrella organisation of employers 8,000 members from the private and public industry	Advocacy group for the interests of employers
<b>Aimag administrations</b>	Artisanal Miners are acting within the aimag territory Some aimags have tried to establish own ASM regulations	Several aimag governments have expressed great interests in solving ASM related problems and challenges There is lack of decentralization and skilful personnel at aimag level	Some Aimag government officials/ authorities cooperate with the project on ASM related issues	Obligated to implement the governmental policies at aimag level One of the main partners to regulate ASM operations at aimag level	Socio-economic development of their aimags
<b>Soum Administrations</b>	Artisanal Miners are acting within the soum territory	Little capabilities and authority in regulating ASM activities Some soums have developed a negative perception of artisanal miners, others are willing to deal with the artisanal miners in a manner reducing the social and legal conflicts	Soums have an important role for mining including as well in the legalisation of formal mining operations which require a permit of the local administration	About 100 soums in the country with artisanal miners (out of 360) In terms of regulating ASM activities they are one of the main partners at local level	Socio-economic development of their soums
<b>Artisanal Miners (ASMs)</b>	Are blamed for huge environmental damage Lack access to social	Willing to legalise given the condition that they receive gold bearing sites and do not have to	Operating without mining title thus in conflict with formal	About 100.000 ASMs countrywide (nearly operating in all areas of	Livelihood security Food security



Stakeholder	How is the stakeholder affected by, or affecting the problem(s)?	Capacity/motivation to participate in addressing the problems	Relationship with other stakeholders (e.g. partnership or conflict)	Relative importance of the stakeholder	Aim
	services Contribute significantly to the local economy Highly flexible and mobile	pay high taxes ASMs lack organisation (associations, lobby groups, umbrella organisations)	license holders Have conflicts with herders and non mining communities about degradation of environment	Mongolia) Target group of the SAM project	
<b>Formal mining companies</b>	- especially in the placer areas some have very outdated and inefficient technology causing huge environmental damages and losses - thus leaving tailings which are mined again by Artisanal Miners	- motivation to cooperate with Artisanal Miners stems from possibilities for reduced transaction costs through reduced conflicts with ASMs - some more recently developed mines have imported technological and environmental standards to the country	- many are in conflict with Artisanal Miners - some have established agreements to cooperate with Artisanal Miners in the interest of both parties	About 130 mining companies active in Mongolia At present mining companies are the only legal holders of exploration and exploitation licences (for about 50% of the country's territory)	Extracting minerals
<b>Companies that manufacture small scale mining equipment</b>	Producing the equipment and tools that are used in ASM	Have not yet the skills and knowledge to produce equipment to high quality and safety standards		If capabilities are developed they could become key partners of artisanal miners	Manufacture equipment and tools
<b>Mongolian University of Science and Technology (MUST)</b>	Took part in the development of draft ASM Law	Experienced scientists, professors and skilful researchers Lack of funding	Cooperates with Saint Mary's University (Halifax) to strengthen technical and managerial capacity in the SAM community	MUST trains all mining sector specialists and professionals in the country	Academic and applied research, education
<b>Civil Movements</b>	NGOs formed to protest environmental damages caused by formal and informal mining activities	Highly motivated to solve environmental and social problems Lack of funding	Some interested in peaceful conflict resolution of conflicting groups Others mainly formed to protest negative	Grassroots movements with increased support from the public Finding a hearing with government and are supported by some	Some local movements like Homeland and Water Protection Coalition (HWPC) reflect the interest of local

Stakeholder	How is the stakeholder affected by, or affecting the problem(s)?	Capacity/motivation to participate in addressing the problems	Relationship with other stakeholders (e.g. partnership or conflict)	Relative importance of the stakeholder	Aim
			consequences of mining activities	international donors	communities in natural resource use
<b>Non mining communities like herders etc.</b>	Some are heavily affected by mining and artisanal mining related changes (drying of rivers, pollution of water, dust, etc.)	Dispersed, mobile, lack of organization and voice Motivation to cooperate with Artisanal Miners stems from possibilities for reduced conflicts and the fact that many ASMs themselves used to be herders	Often in conflict with formal mining companies as well as ASMs	About 170,000 herders households countrywide They are the traditional land users who used pastureland for hundreds of years	Livelihood security Food security
<b>Donors i.e. UNFPA, BRG, WB, ILO</b>	Donors are increasingly aware of ASM related problems and challenges Some projects have been launched recently addressing problems in ASM	Willing to coordinate with the project Waiting for someone to take a leading role in donor coordination		Harmonized and well organized, the donor activities have the potential to contribute to significant changes in favour of ASM communities	Solving ASM and mining related problems in a participative way
<b>Academic and research institutes</b>	The link is being established with academic and research institutes to assess ASM sector.	The capacity to reveal and compare the potential as well as integrate in development plan is not adequate.	Sometimes lack pragmatic attitude and not considered seriously by state organizations.	Development of assessment methodology, technology, analysis of situation and projection of inputs and potentials	Providing sound analysis of potential and ways of development

9.3 Draft Job Descriptions for key positions in SAM



<b>Positions</b>	<b>Tasks and duties</b>
<b>Steering</b>	
SDC country director	Responsible for political and strategic integration of the project into the development framework of Mongolia and the SDC country programme, coordinates with SDC Bern, the project director and the relevant Mongolian stakeholders at political and strategic level and represents SDC at Steering Committee, contracts SDC financed Project Staff and evaluates their work. He may delegate parts of the related duties to the NPO.
National Project director	On behalf of MRPAM responsible for overall results of the project, represents the national ownership for all activities and integrates the project results into the institutional and policy-framework in Mongolia, takes leading role in coordination of donor activities in ASM sector.
National Program Officer SDC	In charge of the supervision of the Swiss contribution to the project on behalf of the SDC COOF in Mongolia, reviews the operational plan and budget and makes monitoring over the implementation of activities and use of resources.
SDC Head office desk officer	<p>Overall desk responsibility for the implementation of the project and responsible for the integration of the project into the global environmental programme of SDC and for coordination with the Asia II desk and the SDC in Mongolia country director. He is responsible for the supervision of the project implementation and progress as direct contractor:</p> <ul style="list-style-type: none"> <li>• Provide funding in line with contract</li> <li>• Responsible for approving budget changes, reallocation of reimbursable expenses, and approving changes in key technical assistance consulting personnel</li> <li>• Nominate independent and external evaluation teams to review the Project progress in coordination with SDC Mongolia office</li> </ul>
<b>Professionals</b>	
General responsibilities of component heads	The heads of components are fully responsible for the implementation of activities planned within the general log frame and within the yearly plans of operation for the relevant objective for the component. This includes the design and planning of measures (including the definition of objectives, tasks, partners, methodologies, follow up, deliverables, time frame, etc.), the resource allocation within the agreed budgetary framework (for both the entire phase and specific planning periods), the allocation of human and material resources, the negotiation of contractual agreements with implementation partners, the monitoring and evaluation of the implementation, the documentation of results as well as the follow up of the measures. At the same time the component heads are responsible to lead the coordination with the other components for those elements that have cross-component relevance. They actively participate in the project management and are responsible for the embedding of their component into a harmonic project frame work. The component heads are, in addition, responsible for a coaching and support of the development of personal and professional capacities, not only for themselves but as well for their assigned support staff. They regularly report, according to an agreed reporting framework, to the project management unit or: to the Operational Committee, with oral and written reports.
Project manager, head of policy and networking	The project manager has a mixed function: on one hand he is in charge of the establishment of the general project infrastructure according to the guidelines of SDC, the project document, YPO, the budget and key remarks of the Steering Committee. On the other hand he is responsible for the harmonisation of the 4 components and himself in charge of the implementation of the component 1:

Positions	Tasks and duties
unit	<ul style="list-style-type: none"> <li>▪ Reports on the project, results and progress to MRPAM including NPD and SDC COOF</li> <li>▪ Responsible implementation of Component 1</li> <li>▪ Cooperating with MRPAM in the clustering of other projects with relevance to the ASM sector around the SAM project and stimulation of the creation of synergies and harmonised implementation strategies</li> <li>▪ Managing disbursement and administration of funds provided by SDC in accordance with SDC regulations and guidelines</li> <li>▪ Channelling funds to the Components according to budget and YPO</li> <li>▪ Guiding the conceptual development within the PMU during the project implementation</li> <li>▪ Finalizing and channelling of proposed amendments to project planning (annual working plan, schedule, detailed budget) in discussion with MPRAM and SDC and finally for approval by the Steering Committee</li> <li>▪ Management of the general project infrastructure</li> <li>▪ Administrative management of the human resources of the project</li> </ul>
Head of institutional development component	<p>The Head of institutional development component is the key link between the project and MRPAM as sector authority. At the same time he is responsible for the implementation of Component 2. He reports to the PMU and the Mongolian project director:</p> <ul style="list-style-type: none"> <li>▪ Liaise with other departments of MRPAM in order to integrate the results, findings and experiences from the project in the entire institution</li> <li>▪ Cooperating with MRPAM in the clustering of other projects with relevance to the ASM sector around the SAM project and stimulation of the creation of synergies and harmonised implementation strategies</li> <li>▪ Responsible together with the NPM for the reporting of the project</li> </ul>
Head of profitable and responsible artisanal mining component	<ul style="list-style-type: none"> <li>▪ Takes overall responsibility for implementation of Component 3, develops and implements a project on the safety and technology, supervises the development and testing of safety standards, disburses the fund allocated and reports on it to NPM, NPD and SDC</li> </ul>
Head of empowerment and socio-ecological management component	<ul style="list-style-type: none"> <li>▪ Takes overall responsibility for implementation of Component 3, develops and implements a project on the safety and technology, develops and tests environment monitoring indicators and technology disburses the fund allocated and reports on it to NPM, NPD and SDC</li> </ul>
Community and social expert	<ul style="list-style-type: none"> <li>▪ assist Head of empowerment and socio-ecological management component in the implementation of the planned interventions</li> <li>▪ prepare and organise field trips and interventions</li> <li>▪ M&amp;E</li> </ul>
Communication / information	<ul style="list-style-type: none"> <li>▪ assist Head of institutional development component in the implementation of the planned interventions</li> <li>▪ assist the Head of institutional development component in the elaboration of reports</li> </ul>

<b>Positions</b>	<b>Tasks and duties</b>
manager	<ul style="list-style-type: none"> <li>collaborate in the preparation of annual, half yearly and quarterly plans of operation</li> <li>assist NPM to realize Project cycle management</li> <li>assist in the preparation of annual Project budget and budget change</li> <li>Contact with aimag and soum representatives, monitor their duties</li> <li>Establish effective and efficient communication system within the broader project team (incl. representatives of SAM and MRPAM in the aimags, soums etc.) and channel all important information</li> </ul>
<b>National Advisory staff:</b>	
National short term experts	<ul style="list-style-type: none"> <li>provide professional contributions in specific technical and non-technical key issues for the project, such as research and development, studies, training and training materials, advisory services etc. according the clearly defined TOR for the services</li> </ul>
<b>International Advisory staff:</b>	
International project advisor	<p>The international advisory service staff assists the project and its relevant team members in specific strategic and implementation related tasks according to a planning agreed upon between the Mongolian and Swiss supported project management. International project advisor and short term experts are contracted directly by SDC head office and are supervised by MRPAM and SDC in Mongolia</p> <ul style="list-style-type: none"> <li>Provide contributions of professional advise, training and capacity development, technology and know-how transfer, planning and reporting, evaluation activities as well as support of fund raising activities by the project both from the home base in Germany as during regular missions to Mongolia</li> <li>Participate in Steering Committee meetings and advise members on key ASM development issues</li> <li>Development and submission of discussion papers on key issues of the project</li> <li>Review of planning documents and submission of recommendations</li> <li>Supporting field implementation within the project</li> <li>Report regularly to the PMU, the SDC office in Mongolia and the SDC head office on important developments and findings</li> </ul>
International short term experts	<ul style="list-style-type: none"> <li>Provide specific inputs in technical and non-technical ASM topics such as ASM mineral product marketing, funding of ASM operations, legalisation and formalisation, development of community mining projects, strengthening of ASM organisations, occupational safety and health etc.</li> <li></li> </ul>
<b>Administrative staff:</b>	
Accountant / admin. Assistant	<ul style="list-style-type: none"> <li>Administer disbursement planning in accordance with the budgets, regulations and fund allocation</li> <li>Making bank and cash transfers</li> <li>Regularly report to the PMU and heads of components on finances and personnel, prepare accounts for annual audits</li> <li>Provide the necessary information on budgeting and transactions to National Programme Support Officer of SDC in Mongolia</li> <li>Office management, personnel management (work contracts, vacation and leave control, payroll, etc.)</li> </ul>

Positions	Tasks and duties
	<ul style="list-style-type: none"> <li>Interaction with Mongolian authorities re. taxes, social security, legal matters, etc</li> <li>Assistance with administration and management of the Project supplies, equipment, and general maintenance with the project team</li> </ul>
Translator/cashier /secretary	<ul style="list-style-type: none"> <li>Assist the NPM, the component heads and other by undertaking secretarial tasks, as needed including arranging meeting times, answering telephones, registering mails, typing and formatting documents as required, record keeping and filing, undertaking attendance and leave monitoring, etc.</li> <li>Organize staff meetings and take minutes</li> <li>Translate documents from Mongolian to English and vice-versa</li> <li>Administer the cash expenses of the project</li> </ul>
Interpreter	<ul style="list-style-type: none"> <li>Provide verbal translation especially during STE missions (on case by case contract basis)</li> </ul>
IT officer	<ul style="list-style-type: none"> <li>Maintain the computer network</li> <li>Support the project with installation and upgrading of software, training of staff in it's application</li> <li>Assisting staff in the development of publications (lay out and formatting) and presentations</li> </ul>
Service	<ul style="list-style-type: none"> <li>Clean office and support project team with minor duties</li> </ul>
Drivers	<ul style="list-style-type: none"> <li>Driving the project vehicle</li> <li>Maintaining the vehicle</li> <li>Assisting staff during field trips logistically and with basic services (supply etc.)</li> <li>Provide messenger services in UB</li> </ul>
<b>Local representatives:</b>	
Bayankhongor	<ul style="list-style-type: none"> <li>Form a coordinated representative office of MRPAM and SAM project in the region</li> <li>Develop joint work plan with line of contributions from MRPAM and SDC</li> <li>Liaise with aimag government and administration in ASM related issues and channel the information to the key stakeholders</li> <li>Inform the project on important developments</li> <li>Regularly report on important developments of ASM and project to SAM project and MRPAM</li> <li>Provide mutual cooperation</li> <li>Support the elaboration of studies</li> <li>Support field trips of SAM team</li> <li>Cooperate with local movements in mitigation of conflicts between resource uses</li> <li>Establish close link to artisanal miners and support them to voice their interests and needs to Project</li> <li>Make supervision over mini projects, support their implementation and report on their results to Project</li> </ul>
Uvurkhangai or other selected aimag	<ul style="list-style-type: none"> <li>Represent SAM project in the region</li> <li>Liaise with aimag government and administration in ASM related issues and channel project information to the key stakeholders</li> <li>Regularly inform project on important developments</li> <li>Support the elaboration of studies</li> </ul>

Positions	Tasks and duties
	<ul style="list-style-type: none"> <li>Support field trips of SAM team</li> </ul>
Shinejinst	<ul style="list-style-type: none"> <li>Represent SAM Project at local level</li> <li>Liaise with sum administration in ASM related issues and channel project information to the key stakeholders</li> <li>Regularly inform project on important developments</li> <li>Support the elaboration and conduction of trainings and studies</li> <li>Guarantee sustainable use of Projects resources at pilot sites (Miner's Community Ger, equipment etc.)</li> <li>Support field trips of SAM team</li> </ul>
Bumbugur	<ul style="list-style-type: none"> <li>Represent SAM Project at local level</li> <li>Liaise with sum administration in ASM related issues and channel project information to the key stakeholders</li> <li>Regularly inform project on important developments</li> <li>Support the elaboration and conduction of trainings and studies</li> <li>Guarantee sustainable use of Projects resources at pilot sites (Miner's Community Ger, equipment etc.)</li> <li>Support field trips of SAM team</li> </ul>
Zaamar	<ul style="list-style-type: none"> <li>Represent MRPAM in decentralised offices</li> <li>Liaise with local government, administration and stakeholders on ASM issues</li> <li>Inform project on important local developments</li> <li>Assist SAM project in implementation and follow up of project measures</li> <li>Liaise project staff with local stakeholders</li> </ul>
Uyanga	<ul style="list-style-type: none"> <li>Represent MRPAM in decentralised offices</li> <li>Liaise with local government, administration and stakeholders on ASM issues</li> <li>Inform project on important local developments</li> <li>Assist SAM project in implementation and follow up of project measures</li> <li>Liaise project staff with local stakeholders</li> </ul>

#### 9.4 List of Donors, their projects and possible areas of collaboration

Donors and Projects	Goal/ Main Focus	Possible Areas of Collaboration
Other SDC Projects	Integrated sustainable resource management	<p>Harmonize activities in Western Mongolia</p> <p>Cooperate with PEM on reclamation of abandoned mining sites</p> <p>Synergies in local economic development with the planned income generation and desertification projects</p>



<b>Donors and Projects</b>	<b>Goal/ Main Focus</b>	<b>Possible Areas of Collaboration</b>
<b>World Bank</b>	Houses CASM (Communities and Small-Scale Mining) at its headquarter Publishes reports on the Mongolian mining sector, Participates in the organization of the National Forum on Mining, Regulations and Environment	Cooperate in organizing CASM Meeting in Mongolia Cooperation in organization of the “National Forum on Mining, Regulations and Environment”
<b>US embassy/ USAID</b>	USAID is conducting a mining sector assessment, aiming at probably starting a new project in the mining sector	Depending on the assessment results
<b>ILO/IPEC</b> <i>Support to the National Sub-programme to Eliminate the Worst Forms of Child Labour (WFCL)</i> <b>Project Duration:</b> 09/05-12/09	Strengthening institutional environment for national action against WFCL in Mongolia	Collaboration on Child labour elimination in ASM through public awareness raising on WFCL and organize trainings to school age Artisanal Miners Policy and legislation on artisanal mining and WFCL in artisanal mining
<b>United Nations Population Fund (UNFPA)</b> <i>Reducing Socio-Economic Vulnerabilities of Selected Peri-Urban and Informal Mining Communities in Mongolia</i> <b>Project Duration:</b> 07/06-12/07	Contributing to enhanced human security of underserved and marginalized citizens by creating conditions that enable better access to basic social services, including reproductive health	Establish mobile health units to provide medical services and information on operational health among ASM communities Development training and Behaviour Change Communication (BCC) materials on STI/HIV for Artisanal Miners Advocacy for Artisanal Mining Law
<b>PACT</b> <i>STI/HIV/AIDS Prevention Project</i> <b>Project Duration:</b> Orientation Period 03/2007 - 06/2007, Main Phase 07/2007 - 06/2012	Targeted HIV/AIDS/ and other Sexually Transmitted Infections (STI) prevention and education for high-risk groups (like Artisanal Mining Communities)	Train Artisanal Miners on HIV/AIDS/STI issues Establish and work with the mobile health units, provide first aid courses, Voluntary counselling and testing services and distribute condoms Publish and distribute Education and Communication Material (IEC) Material for Artisanal Miners

Donors and Projects	Goal/ Main Focus	Possible Areas of Collaboration
<b>Open Society Forum (OSF)</b>	Providing policy research, analysis, and public access to information resources. Supporting public engagement in the policy formulation and implementation monitoring process. Mineral's law and policies are focal points and OSF is promoting Extractive Industries Transparency Initiative (EITI) in Mongolia	Training, dialogue among stakeholders Cooperation in ASM policy issues and organization of the "National Forum on Mining, Regulations and Environment"
<b>The Asia Foundation (TAF)</b> <i>Environmental Program</i>	Promoting responsible resource use to protect human and environmental health	Support the formation and strengthen the capacity of Associations of Artisanal Miners Organize stakeholders meetings to resolve conflicts between Artisanal Miners, formal mining companies, herders and local communities
<b>Adventist Development and Relief Agency (ADRA)</b> <b>Project:</b> <i>Micro Business Advancement and Self-help group program</i> <b>Project Duration:</b> 01/06 – 09/07 (and 3-5 year implementation phase planned) <b>Project:</b> <i>Bayankhongor Family Agricultural Initiative</i> <b>Project Duration:</b> 01/05-12/07	Improve the livelihood security of poor households through self-help groups, Enable Mongolian financial providers to serve poorer clients who were previously considered "un-bankable" Improve food and income security amongst poor rural residents of Bayankhongor aimag	Technical assistance and training delivery in self-help group concepts, bank savings and micro business start-up at artisanal mining sites Seed money facilitation with formal sector financial providers Training delivery in agricultural techniques at artisanal mining sites Technical assistance and inputs for agricultural cooperative formation and operation amongst miners
<b>Federal Institute for Geosciences and Mineral Resources (BGR)</b> <i>Environmental Protection in Mining (EPM)</i> <b>Project Duration:</b> First Phase 10/2005-10/2008, Planned Project Period: 2005-2010	Capacity building of environmental inspectors regarding environmental protection in mining, Implementation of new methods and technologies, Conduct training for good reclamation praxis and support implementation of mining related laws and regulations	Joint efforts to promote environmental protection in ASM through capacity building and training of environmental inspectors, improvement of knowledge about laws and regulations Conduct joint workshops on "Good mining practices" and land rehabilitation in ASM Cooperation in organization of the "National Forum on Mining, Regulations and Environment"

Donors and Projects	Goal/ Main Focus	Possible Areas of Collaboration
<b>St. Mary's University of Halifax and CIDA</b> <i>Education for Environmental Transition: Mining in Mongolia</i>  <b>Project Duration:</b> until June 2010	Strengthen technical and managerial capacities in the ASM community and enable environmentally sound and economically sustainable practices (in cooperation with Mongolian University for Science and Technology- MUST)	Joint educational programs for Artisanal Miners on reduction of land degradation and effective mine site rehabilitation Offering students from MUST in research and project implementation activities
<b>University Kassel (Germany)</b> <i>Integrated Water-Resource Management Project implemented</i> <b>Project Duration:</b> 08/2006-07/2009	Academic research project and cooperation between the University Kassel and the National University of Mongolia (NUM) on environmental impact of mining in North-East Mongolia	Joint research on water resource management in the Artisanal mining sector
<b>Geological Survey of Denmark and Greenland (GEUS)</b> <i>Small-scale mining Asia and Africa</i>	Planned Activities: Training program for medical doctors and Artisanal Miners in handling problems with mercury Cleaning of a major mercury spill in Boroo River area	Training of medical doctors and small-scale miners in handling problems with mercury, cleaning of a major mercury pollution in selected areas