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## Professionalising Artisanal Mining in Mongolia

A SUSTAINABLE ARTISANAL MINING PROJECT SUCCESS STORY



# Formalisation of ASM

- ASM sub-sector recognised in Minerals Law
- ASM regulation
  enforced
- ASM partnerships and NGOs established
- ASM National Federation of Mongolia established

### Abstract

Professionalism and accountability to facilitate the shift from poverty to prosperity through responsible artisanal and small-scale mining (ASM) and a transparent formal supply chain are the main objectives of the Sustainable Artisanal Mining (SAM) Project. Since 2014, the SAM Project has been coordinating activities focused on the professionalisation of ASM with the Swiss Agency for Development and Cooperation's VET Project, the Ministry of Labour, the Mining Rescue Unit of the National Emergency Management Agency (NEMA) and local TVET schools. This collaboration has resulted in the introduction of new ASM mining and safety courses at the TVET school in Bayankhongor aimag (province). At present, 14 students are undertaking a ASM Mining course and are expected to graduate as artisanal miners in 2016 after two years of study. A further 15 ASM miners responsible for occupational health and safety within their partnerships and NGOs are also enrolled in the two-week certified ASM Safety course. The curricula of the two courses was developed by such stakeholders as the Ministry of Labour and the Mining Rescue Unit of the NEMA and was approved by the National Committee on Occupational

Institutionalisation of ASM and the formalisation of professional roles

 Ministry of Labour National OHS Committee

> ASM OHS Subcommittee

- School of Geology and Mining Engineering of the Mongolian University of Science and Technology
- TVET schools in Zaamar soum, Tuv aimag, and Bayankhongor aimag
- Vocational Education and Training Project funded by SDC in Mongolia
- ASM National Federation of Mongolia and ASM NGOs and partnerships

Safety and Health and the Ministry of Labour. The School of Geology and Mining Engineering (SGME) of the Mongolian University of Science and Technology, which is focused on mining sector training and research, is also collaborating with the SAM Project and is supporting improvements to the curricula of the two courses based on feedback from ASM miners and TVET teachers. The SGME is also supporting the ASM sector by building the knowledge and skills of ASM miners in geology, mining, ore processing and environmental protection, and is conducting research on ASM. This article demonstrates the advanced professionalism of ASM in Mongolia and the ongoing formalisation of coordination and capacity building structures and processes that is occurring through the increased responsibility of ASM miners in relation to the environment, safety, labour and social outcomes.

### **Problem overview**

Since its transition to a market economy in the early 1990s and in the aftermath of sequential climatic disasters that caused widespread poverty and unemployment in 2000, Mongolia has experienced an unprecedented mining boom, followed closely by an upsurge in informal and irresponsible ASM. By 2005, when the SAM Project was launched, there were an estimated 100,000 ASM miners operating throughout the country. The public viewed ASM as a temporary annoyance, with its crude methods of extraction, serious environmental impacts, illicit trade in minerals, poor safety conditions and paltry social welfare.



The informal operations of 500 ASM miners in Zaamar soum, Tuv aimag

Because mining operations were informal and unorganised, ASM sites were unsafe and environmentally hazardous. However, thanks to the persistence of the SAM Project and its collaboration with project counterparts, the ASM sector is now recognised in the Law on Minerals and ASM regulations are enforced, an ASM National Federation representing miners has been established, and ASM miners are making progress towards safe and environmentally friendly mining practices.

# Professional trainings

- Needs assessment of TVET for ASM in central and western regions
- New curriculum for ASM mining course

14 students in ASM Mining course

 New curriculum for short-term, certified ASM Safety course

15 miners in shortterm, certified ASM safety course

 Developing curriculum for new short-term ASM geology and oreprocessing course However, while there has been ASM sector formalisation, many miners are not yet fully benefiting from the progress that has been made due to a lack of professional knowledge and skills about the mining cycle.

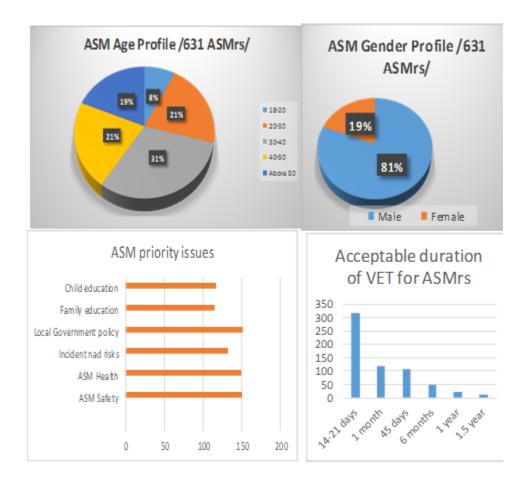
## Professionalisation

In 2015, the SAM Project collaborated with the TVET school in Bayankhongor aimag and conducted synergy activities with SDC's VET Project focused on the assessment of needs for professional skills training and the development of TVET curricula for ASM miners in Bayankhongor aimag.

### Needs assessment of TVET for ASM miners

- Conducted a survey on ASM priority issues and training needs via a questionnaire involving 631 miners
- Undertook quality and quantity analyses of the labour market in Bayankhongor aimag
- Visited 13 ASM sites in Galuut, Bumbugur, Bayan-Ovoo, Baidrag and Ulzitt soums, Bayankhongor aimag
- According to the results of the questionnaire, 394 miners (or 64 percent of respondents) were interested in receiving training on the mining profession, while 36 percent were interested in receiving training other than on the mining profession.

Age and gender of ASM miners who participated in the survey and the general findings of questionnaire



#### **TVET NEEDS BY PROFESSION**

#### **Contacts:**

Sustainable Artisanal Mining Project

Sky Plaza Business Centre, Olympic Street 12, Khoroo 1, Sukhbaatar District, Ulaanbaatar, Mongolia

Tel: +976 11 328 848

Fax: +976 11 322 415

E-mail: Ulaanbaatar@sam.mn

Web: www.sam.mn



Based on the results of the survey, a needs assessment of TVET for ASM miners was conducted. The TVET school in Bayankhongor aimag then developed, in conjunction with the VET Project, a two-year training curriculum for an "Open-Pit Artisanal and Small-Scale Mining" course that was approved by the Ministry of Labour in 2015. The preparation of teachers and training facilities was completed before enrolments to the course. The first student intake of 14 students, including two ASM miners, took place in September for the 2015-2016 academic year. As part of the course, students are also able to intern at ASM and large mining sites in Bayankhongor aimag.



Based on the needs assessment, the short-term "ASM Safety" course was also introduced, and is piloting a curriculum developed by a range of SAM Project counterparts and approved by the ASM Occupational Health and Safety Subcommittee in 2014. The "ASM Safety" course was held from 27 April to 7 May, 2016, with 15 students selected from different ASM NGOs

recommended by the ASM National Federation of Mongolia

In 2016, the SAM Project has been collaborating with the TVET school in Zaamar soum, Tuv aimag, and the SGME. At present, the ZaaMar soum TVET school is

conducting a TVET needs assessment for ASM miners in the central region and is planning to develop the required TVET content. The SGME is working with the SAM Project to institutionalise ASM professionalism through the development of new professionals, the conducting of research, trainings and internship programs, and the development of ASM professional trainings. At present, the SGME is developing mining, geology, ore-processing and environmental training curricula for ASM miners. As a key institution involved in the professionalisation of the mining sector, the SGME will lead all activities in this regard implemented under the project.



ASMers in Bayankhongor aimag, Mongolia