

A Training Workshop of MOST  
The Ministry of Science and Technology  
The People's Republic of China

REPORT OF PARTICIPATING INTERNATIONAL TRAINING WORKSHOP ON  
FULLY MECHANIZED COAL MINING TECHNOLOGY 2012

Participants:

Dr.Gerelt-Od Dolgor  
PE.Enhkbold Sosorburam  
Khureltogoo  
Soronzonbold

September 9-28, 2012

Beijing & Tangshan, China

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## **1. Purpose**

The purpose of participating the international workshop is to introduce to development of coal mining technology in China and mining equipment manufacture as well as the achievements obtained in recent years, and visit mine sites in China, and exchange experience with other countries participants on coal mining technology and advanced equipment, and learn of coal fully mechanized coal mining advanced technology.

## **2. Overview of participants**

The School of Mining Engineering of Mongolian University of Science and Technology cooperated with China Coal Overseas Development Co. Ltd and organized to help of selection process mining engineers who work in mining sites behalf on Mongolian site.

Initially, the following five participants who were selected by the committee of the workshop attended international training workshop on fully mechanized coal mining technology 2012.

- Dr.Gerelt-Od Dolgor has been working for the School of Mining Engineering of Mongolian University of Science and Technology since 2000. She has twelve years of teaching experience and four years of working experience of the strip mine. Present, she is as a deputy director of research and innovation of the school.
- PE.Enkhbold Sosorbaram has been working for the electricity and automation Section, Mongolyn Alt (MAK) as a senior engineer since January 2011. He has twenty four years working experience of a strip mine.
- PE.Soronzonbold Gurzed has been working for the section of technology police, Shivee-Ovoo strip coal mine as a mining technology engineer since 1982. He has thirty years working experience of a strip mine.
- Khureltogoo Mayagmarsuren has been working for the section of technology police, Shivee-Ovoo strip coal mine as a mining technology engineer since 2011. He has twenty two years working experience of a strip mine.

Mr.Soronzonbold returned to Mongolia on September 19, 2012 due to his health problem (high blood pressure).

All participants attended the workshop very much interested, activity, responsibility and punctual.

## **3. Activities of the workshop**

The following activities which were organized by China Coal Overseas Development Co.Ltd are accomplished this purpose.

1. Presentation of introduction to China Coal Industry, China Coal Overseas Development Co. Ltd, Kailuan coal mining group, Hebei Vocational College of Energy, Power support factory, Tashan coal mine and Zhangjiakou coal mining machinery Co.Ltd;
2. Lecture on coal mining technology used by Kailuan coal group and mining construction technology;
3. Visit in mining sites and industries such as Simulated operation of coal mining equipment, Kailuan Coal Underground Mine, National Coal Mine Rescue Center, Pingshuo Coal Underground Mine, Power Support Factory, Tashan Coal underground and strip mine, and Zhangjiakou coal mining machinery;
4. Visit sightseeing such as Kailuan Coal Museum, Nanhu Park, Tiananmen Square & Forbidden city and Great Wall.

## **4. Significance of training**

It is essential for Mongolia to operate a center that capable of handling the most up to date mining technology in the world.

In Mongolia, almost mines are strip mines. We are providing the following information.

1. The marketing of mineral resources and mining products has increased consistently since 1994. Although the demand of some minerals and mining related product has slowed by the global financial crisis 2009, the industry is still growing. It is projected that the number of deposits with exploration license and new licenses to exploit is rapidly increasing in the future;

2. The growth of industrial enterprises is directly related to increments of mining industries of exploitation of main minerals such as coal, oil and iron ore;
3. Based on dynamics of mining industry, exploitation of mineral resources and marketing of both semi-processed and final products have constantly developed;
4. The termination of the taxing of windfall profits as of January 1, 2011 has enabled more foreign investments in Mongolian mining industry. Also, initiating the exploitation of Oyu-Tolgoi and Tavan Tolgoi coal deposits has enabled more opportunities to develop Mongolian mining industry rapidly;
5. The exploitation of mineral resources and semi-processed industries are occupied over 30 percentages of total marketing and over 80 percentages of total exports. It is shown that mining branches are coming up the step to develop as the biggest industrial sector and as the major strategy significant branch which determine economic development of our country in addition to the social development;
6. In last several years, growth of Mongolian economics is directly depended on mining industries. The cross domestic products are mostly related fluctuation prices of mineral resources. It is related to poor processing industries. Therefore, to produce semi-products and final-products is to manufacture as value-added products within the country, and to export the same to increase the foreign trade balance of our country in the future;
7. Statistically by registration of Mineral Resources Authority of Mongolia, 1325 deposits have been registered at January 1, 2010 and it tends to increase depending on exploration research works.
8. Almost Mongolian mines are strip mines. But some strip mines are getting more depth. It needs to exploit some strip mines by underground technology.

The workshop is very much significant for understanding fully mechanized coal mining technology. Because mechanized coal mining technology is really new concept for us:

- Learned new technology as fully mechanized coal mining technology,
- Visited real mining sites is very importance to understand mining technology,
- International Collaboration with five countries participants and CODCO and others which we visited mines for more collaboration, and more research,
- By successfully attending the workshop, we have understood long wall methods with shearers, powered support.

#### **5. Plans for dissemination of participating result of the workshop**

- Establish to teaching fully mechanized coal mining technology to bachelor degree students;
- Write paper regarding fully mechanized coal mining technology on Journal of Science and Technology;
- Organize a workshop for introduction of fully mechanized coal mining technology to mining engineers in Mongolia.

#### **6. Plans of collaborations**

- Import coal washing technology and techniques;
- Write paper regarding fully mechanized coal mining technology;
- Invite Chinese experts for a conference and workshops as key-speakers;
- Contact with mines and mining industries which we visited during the work shop via professional of CODCO;
- Collaborate with CODCO to organize conference and workshop on behalf of Mongolian site;
- Research for technology on strip mines which are getting depth;
- Collaborate with CODCO on preparing mining engineers for underground in China.

#### **7. Comments**

We would like to suggest the following:

- Kindly provide all presentations which were taught and presented for us during the training workshop;

- Kindly select mining engineers, technology engineers and other who know English and Chinese.

## **8. Conclusions**

International Training Workshop on Fully Mechanized Coal Mining Technology was well-organized and high-levelled-managed. We reached our purpose. We have learned regarding fully mechanized coal mining technology and updated our knowledge of advanced mining technologies and modern automated equipments and achievements of industries in China from the training workshop. Mining coal technology and industries in China are developed as well developed countries. Main important point of the training workshop is that we have learned fully mechanized coal mining technology and chance to collaborate with CODCO and participants other five countries in future and visited mine sites and mining industries. We are very much like to Kailuan Coal Museum and Nanhu Park which rehabilitated the strip mine and simulated mines for training and lecturers and mine site's visits.

It is really rare opportunity that is not only learn fully mechanized coal mining technology and visit mine sites but also learn Chinese culture and custom and visit many cities in China.

China and Mongolia are neighborhood countries. It is very good condition of importing mining equipments and advanced technology from China.

Thank you very much for organizing the training workshop and giving us chance to learn and visit mine sites. Especially, we are really appreciate with Madam Shen Aimin to guide and provide safety and manage us properly. Also we would like to thank to Sheng Yiyang and Yang Qizhen for translating us all presentations and interpreting us and Wu Fei for helping us.

We are really satisfied with the training workshop.

We hope the training workshop will be the start of a rich and broad-ranging collaboration with CODCO as we strengthen our contribution to mining education and mining industries.