

## NEWS AND NOTES

### *Proceedings of the Mining Exploration Convention – D.V. Pichamuthu and R.H. Sawkar*

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The Mining Exploration Convention was held during 5-7 September 2001 at Bangalore. The convention was divided into an opening session, seven technical sessions and the valedictory session.

#### **Opening Session**

The session opened with the welcome address by P.K. Mukherjee, President, FIMI. He highlighted the importance of exploration, as 0.60 million sq km of the Indian land mass has been identified as having "Obvious Geological Mineral Potential". Our exploration spending has been abysmal averaging \$ 15/sq km compared to \$124 and \$118 for Australia and Canada respectively. Following the traditional lighting of the lamps, the Chief Guest, Smt. Galla Arunakumari, Hon'ble Minister of Mines, Government of Andhra Pradesh, delivered the Inaugural Address. She praised the role of FIMI in furthering the interest of the industry while also playing a prominent role in working with the Central and State Governments. She commended FIMI for organising the Mining Exploration Convention & Trade Show and spoke about the mineral resources of Andhra Pradesh and the efforts made in conservation like beneficiation, and utilisation of waste products. Scott Jobin-Bevans, President of Prospectors and Developers Association of Canada (PDAC) spoke on behalf of its 10,000 members. PDAC promotes the interest of the Canadian Mineral Exploration and Development Industry within Canada and other countries. PDAC holds its annual convention in March 2012 in Toronto. He said that many Canadian companies have a great desire to discover and develop Indian mineral resources. He hoped that the proposed MMDR Act 2011 will be conducive for attracting foreign investment. He also mentioned that the Governments of India and Canada have signed a MoU in June 2010. He made a special mention of the collaboration between PDAC and FIMI. Mr Anjani

Agarwal, National Leader – Mining & Metals Sector, Ernst & Young made a brief presentation of the publication, "Exploring India: Mining the opportunities". The publication was released by the Chief Guest. She also released a CD "Investment Opportunities in Andhra Pradesh" and a brochure, "Initiatives taken by Andhra Pradesh Government to welcome investment".

#### **Policy Initiatives in Mineral Exploration and Development**

Mr Scott Jobin-Bevans, President, PDAC, spoke on "Countries wilting to foster mineral exploration with supportive policies reap benefits over the long term". He touched on different countries which have had such policies and who had benefited. Canada is one of the most attractive countries followed by Australia. Accordingly they are attracting the maximum investments. Patra of GSI spoke on the major thrust areas of GSI in mineral exploration. Apart from the usual minerals, GSI is exploring for coal bed methane and shale gas. V.N. Vasudev of Geo-Mysore Exploration Services, presented his paper "India can produce 100 tonnes of gold by 2027. How?" He showed, by facts and figures, how this can be achieved provided certain steps are taken by the Government, notably fast and transparent procedures to clear applications for mineral concessions. He also spoke on the need for the creation of a "Precious Metals Authority of India".

#### **Investment and Financing Mineral Exploration**

P. Balakrishnan, CEO of Anglo-American, spoke on "Can India lure private investment in mineral exploration and production?" He mentioned various constraints that are inhibiting private investments. He cited the example of the cancellation of licences to mine 24 coal blocks due to various procedural road blocks and lack of clarity. Aaron Rosland,

Counsellor (Commercial) and Head, Ontario International Marketing Centre in India, jointly with Mr Biswas, presented a paper on "Investment Opportunities in Ontario's Mining Sector". Ontario is one of the most promising provinces for investment in exploration and mining. Sanjeev Jain, Executive Director, Ernst & Young, presented a paper on "Direct Tax Code and Mining Companies". The Direct Tax Code will subsume many of the existing tax laws and therefore tax treatment will be drastically changed. He highlighted how some of the changes would affect mining companies. N.K. Kavdia, General Manager and G Karunakar, Associate General Manager of the HZL, spoke on "Exploration Practices of HZL". HZL has in-mine, near mine and green-field exploration. They have high speed drills capable of drilling down to a depth of 1400 m. They have also acquired devices to check deviation of bore holes. The greatest hindrance they have found is in obtaining clearances from the Government.

#### **Invest Potential in India**

Tony Hardy, Exploration Manager, Rio Tinto, spoke on "Emerging markets and investment potential in India – Rio Tinto Perspective". In spite of many setbacks, Rio Tinto is still optimistic about the prospects in India but other emerging markets are moving ahead. Rio Tinto believes in sustainable mining and does its own exploration. They also believe that community development is integral to their operations. P. Selvam, NMDC spoke about the exploration activities of NMDC. NMDC is producing over 30 mt of iron ore and by their exploration have added 90 mt to their resources. Apart from iron ore, their exploration activities encompass limestone in Arki (HP), magnesite and sapphire (J&K). They have opened a Global Exploration Centre at Raipur and have taken up work in Tanzania. NMDC has entered into joint ventures with the Governments of Andhra

Pradesh and Jharkhand for exploration. Sitaram Kennamanu, Exploration Manager of Vale India (Pvt) Ltd., spoke about "Resource Acquisition in India"

### Presentation by State Governments

S.K. Srivastava, Additional Secretary, Ministry of Mines, Government of India chaired the session. He gave his introductory remarks and stressed on the importance of the mineral sector. He spoke on the various issues before us, viz., balance between domestic requirement vis-a-vis exports, value addition, reservation of areas, exploration etc. He hoped that with the passing of the MMDR Act 2011, many of these issues will be resolved. Presentations were made by the representatives of the following governments.

*Jharkhand:* Arun Kumar, Geologist, spoke about the rich resources of Jharkhand. Gua has a huge stock of iron ore fines. Apart from iron ore, Jharkhand has rich resources of limestone, bauxite, graphite and base metals. 70% of the State is covered with granite.

*Chattisgarh:* J.K. Pashine, Joint Director, spoke about the rich coal, iron ore and bauxite deposits. 13% by value of total mineral wealth of the country is in the State. Considerable reserves of limestone and dolomite are also there. It is the only State where tin occurs.

*Gujarat:* D.U. Vyas, General Manager, GMDC mentioned that the diamond processing industry is the largest in the world. Salt and soda ash industries are also large. It is one of the three States where lignite occurs. Marble and granite industries are also well developed.

*Andhra Pradesh:* K.C.L. Narasimha Reddy, Joint Director of Mines and Geology, spoke about the mineral resources. Coal is the most important mineral followed by limestone and bauxite. Occurrences of gold and diamond have been proved.

*Karnataka:* D.R. Veerana, Additional Director, Department of Mines and Geology, made a good presentation of the mineral resources. Karnataka has the only working mine producing gold. It has the largest resources of magnetite and good deposits of haematite. Limestone is a very important mineral. Occurrences of bauxite, dolomite, magnesite etc make it one of the

most important mineral producing States.

There was a very interesting interactive session with very good audience participation.

The Chairman, Sri S K Srivastava very able summed up the discussions.

### Mineral investment climate and exploration investment opportunities in Australia

The session was chaired by Mr. Devis Smedley, Counsellor, Dept of Resources, Energy & Tourism, Australian High Commission, New Delhi. Mr. Smedley spoke briefly about the policies of the Australian Government in encouraging investments in exploration and mining. James Johnson, Chief, Onshore Energy and Mineral Division, Geoscience Australia, gave an overview on "Investing in Australian mineral resources: opportunities across the continent". He spoke about the abundance of resources and the investment-friendly procedures which have enabled Australia to become one of the leading mineral countries of the world. Mr. Michael Smith, Principal Project Officer, Primary Industries and Resources SA, Government of South Australia spoke about the mineral resources in South Australia. Though not as well known as West Australia, there are considerable mineral resources in the State and investors can take advantage of the same. Mr. Richard Sellers, Director General, Geological Survey of Western Australia presented a paper on the mineral resources of West Australia. Mr. Bradford John, Director, EA, Geological Survey of Queensland highlighted the fact that coal is the chief mineral and the State accounts for 80% of Australia's coal exports. There are other minerals as well.

### Geological Society of India

The Session was chaired by Mr. R.H. Sawkar, Secretary, Geological Society of India, Bangalore. Mr. Sawkar spoke briefly about the favourable geological environment of metals in India such as uranium and rare earth PGE base metals and gold. The high risk and size of the capital required to convert resources into reserves being not available in India, the deposits worked so far are chance discoveries based on ancient workings at KGF and Hutti Gold;

Malanjkhand, Ghatsilla, Chitradurga (copper), and Jaduguda (uranium). Sanjay Rana, Director Parson Overseas (P) Ltd., explained how different types of geo-physical techniques help to solve cost and time in exploration with Indian example. K.T. Vidyadharan, Former Deputy Director General, explained the geological settings of PGE prospects of the world with special reference to Indian prospects in Karnataka, Maharashtra, Orissa, Jharkhand, Kerala, Manipur Nagaland, Madhya Pradesh, Uttar Pradesh, Meghalaya with scope for exploration and development of nickel-copper-PGE deposits in 8000 sq km area. A.K. Rai, Regional Director, Atomic Minerals Directorate, Government of India, spoke on the classification of uranium and rare earth elements, geological criteria, geochemical parameters and stages in the exploration and development depending on the type of deposits. He explained the exploration methods adopted in Dharmapuri riftzone, Cuddapah, Bhima and Kaladgi, Singhbhum, Mahadele, Aravalli, Vindhyan and Siwaliks. He indicated possible resources to produce 15,000 mw of power for 40 years. S. Ravi of the Geological Survey of India gave a historical aspects of diamond mining in India and recent efforts in Indian diamond exploration and its status. Core technical issues involved in the discovery of kimberlite pipes and diamond deposits at Bandar Project in M.P. was explained. Dr. J.N. Das, Director, GSI explained the details of IKC 2012 to be held in India from 6<sup>th</sup> February to 12<sup>th</sup> February 2012 at Bangalore followed by field visit. He informed that more than 400 foreign delegates are expected to attend the conference. R.H. Sawkar, Secretary, Geological Society of India, explained the India's position in world gold industries, rising prices, lack of conversion of resources into reserves, relation between scale of operation, grade of ore, price of gold, method of mining, capital cost, and breakeven point. He explained the similar geological conditions in Indian shield areas for gold prospects as compared to South Africa, Canada, China and Australia. He explained the feasibility of establishing large number of mines distributed all over shield areas of India by creating Gold Authority of India as suggested by B.P. Radhakrishna.

Mr. Johanson representative of Prinoth explained Gotract vehicles filtered with exploration drills used for short hole drilling and deep exploration drills for minerals for inaccessible and extremely difficult terrains. Prinoth Bearer is used for clearing forest line maintenance, right of way creation, seismic line maintenance for all exploration activities. A movie of different types of vehicles used in exploration was shown.

### **FIMI Sustainable Mining Derivatives**

K.P. Nyati, CEO, FIMI – Sustainable Mining Initiative, gave a very interesting talk on sustainable mining. The concept compared the triple bottom line to a three-legged stool where the three legs represent economic, social and environmental factors. There can be no sustainable enterprise if any one leg is missing and

therefore each of them is equally important.

### **Valedictory Session**

After the welcome address by H. Noor Ahmed, Vice-President, FIMI, D.V. Pichamuthu, Director, FIMI South, summed up the entire proceedings. The convention came to a close with the customary vote of thanks by P.K. Mukherjee, President, FIMI.