## Overview of mineral sector of Pakistan

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As evident from the geological environment and present state of exploration and mineral discoveries made, so far, Pakistan has vast potential for varieties of minerals. These includes: 1) huge resources of Thar Coal Sindh, 2) well-known copper and precious metal potential of district Chagai Baluchistan, Waziristan and Gilgit-Baltistan, 3) marble and granite deposits of Khyber Pakhtunkhwa (K.P.), 4) rare earth elements in carbonatites in K.P., 5) world famous gemstones of K.P., AJ&K and Gilgit-Baltistan, and 6) huge potential of industrial rocks and minerals (rock salt and coal) in Punjab. In spite of having all these resources the country is importing metals and alloys, gold and fertilizer minerals. As a result of expanding economy the import of mineral based product continue to increase with time, rapidly. In order to encourage indigenous production of minerals and products for domestic use, government has been encouraging investment in exploration and development in the mining sector. The utilization of latest exploration techniques may bestow Pakistan with discoveries of world class concealed or sub-surface deposits as yet undetected by previous exploration programmes. It is very likely that future mineral discoveries with modern techniques of exploration, in the given area, may include such precious, base metals and rare elements which are highly prized in the present market. By using the aeromagnetic and geophysical techniques, future exploration may be able to find extension of known deposits.

Tectonically the country has been divided into eleven metallogenic zones. These inclued Chaghi Raskoh Magmatic Arc which is famous for world class copper-gold deposits, Chaman Ornach Nal Transform fault famous for antimoney occurances in Qila Abdullah, Lasbela- Khuzdar-Muslim Bagh- Zhob-Waziristan ophiolites zone which is famous for copper-gold, manganese etc. Sediment Hosted Lead-Zinc deposits, Kirthar Thrust & Fold Belt having coal deposits and decorative stones, Indo-Pakistan Shield rocks of Sargodha and Nagar Parkar, Sulaman Fold and Thrust Belt famous for gypsum and industrial rock, Salt range and Kala-Chitta Hills having rock salt, gypsum coal etc. Gondwanic domain rocks of Haripur, Sherwan famous for gemstones and industrial rocks, Kohistan Magmatic Arc having matelic minerals, ophiolites and melange zone having high quality gemstone etc. Karakoram Block having various economic minerals.

For development of these mineral resources through private national / international investment an investment friendly National Mineral Policy (NMP) has been formulated with the consences of all the provinces and stake holders. The NMP offers various incentives for investment in the mineral sector and all the provinces have formulated investment friendly mineral concession rules to enhance its shares in the GDP and make it competative in the international market. Due to existance of these investment friendly polices various international companies have started

exploration and mining in Pakistan which includes production of copper and gold from Saindak copper project Balouchistan and production of lead-zinc from Duddar deposit Balouchistan by the Chinese company M/S MCC. Detail exploration has been completed by the multinational Tethyan Copper Company (TCC) in district Chagi Balochistan. Moreover, various international companies have started work on development of various blocks in Thar coal fields Sindh which will lead to mining and power generation. Various investment oppurtunities are still available in coal mining and power generation, base metal exploration and mining, decorative stones and gemstones mining.