

# Mineral resource's proper use can help country reap huge benefits

**Md Hasanur Rahman Tanzir** – Bangladesh can reap huge benefits if measures are taken to ensure proper domestic use and exports of the vast untapped mineral resources, rough value of which is expected to be more than US\$2.26 trillion.

If adequate efforts are made to explore and extract the resources which are stored mainly in the country's 16 districts can be a major source of foreign exchange earnings along with ensuring domestic energy security, according to the Geological Survey of Bangladesh (GSB).

As per the GSB's report, in the 16 districts of the country, there are 10 types of mineral resources- coal, peat, hard rock, ordinary stone or sand mixed stone, silica sand, plain soil, mineral sand, limestone, metallic minerals and iron ore.

"The estimated roughly value of country's naturally stored mineral resources is more than US\$2.26 trillion, equivalent to Tk 241.97 trillion," says the GSB, country's lone public entity working on exploring and extracting the natural resources.

"Initiatives are very minimal to explore and extract the valuable mineral resources mainly sands in the offshore area and in the rivers including coastal areas of Cox's Bazar, Jamuna River and Brahmaputra River," said Bureau of Mineral Development (BMD) Assistant Director Md. Mahfuzur Rahman.

Talking to reporter, he said the significant mineral resources discovered in the country so far include coal, hard rock, ordinary stone or sand mixed stone, silica sand and plain soil.

“There is vast valuable mineral sand in the big rivers but the initiatives are not enough to extract it. However, plain soil (alluvial soil) is being extracted to some extent locally along with some glass sand,” he added.

About the value of the mineral resources, GSB officials said the financial value of the discovered mineral resources is basically a conceptual number obtained from the reserves.

If feasibility studies can be conducted, the actual data and ideas can be obtained about the size of mineral resources and accurate financial value as per the existing market price, they added.

GSB Director Md. Ali Akbar said, “More investigations and researches are needed to have a clear idea about the mineral resources on a priority basis and thus, a budgetary allocation can be made for the development of the sector”.

“At least Tk 100 crore needs to be allocated every year for exploration of and carrying out research about the natural resources but the annual allocation is very nominal . . . it is less than Tk 5 crore, he said.

GSB, the explorer of the most of the country’s mineral resources, has a huge crisis of sophisticated equipment and transports that are ultimately affecting its research and exploration activities.

There are 7,803 million tons of coal stored in five coal mines, discovered by GSB but coal is being extracted only from the Barapukuria coal mine, he said, adding that 525MW electricity is now being generated using the extracted coal.

Feasibility studies for Dighipara and Khalashpir coal fields have already been completed. However, for the Jamalganj coal field, it has become impossible to extract coal due to its depth but in future, it can be extracted using the underground coal gasification (UCG) method or Coal-bed methane (CBM) by

drilling wells into coal seams.

Other reserve mineral resources include around 60 crore tons of peat coal, 2,527 (two thousands 527 crore tons) tons of limestone worth US\$758.1 billion, 20.10 crore tons of hard rock worth US\$5.42 billion, 23 crore tons of plain soil worth US\$29.9 billion, 511.70 crore tons of glass sand worth US\$6.4 billion, 220 crore tons of gravel worth US\$3.3 billion and 62.5 crore tons of iron ore worth US\$6.88 billion.

According to the GSB studies, the richest districts in terms of mineral resources in the country include Sylhet, Sunamganj, Moulvibazar, Habiganj, Panchagarh, Lalmonirhat, Dinajpur, Rangpur, Joypurhat, Netrokona, Mymensingh, Sherpur, Cox's Bazar, Comilla, Bandarban and Khagrachari.

Of the five coal fields, Barapukuria in Dinajpur, discovered by GSB in 1985, has coal reserves of 390 million tons, Dighipara coal mine, discovered by GSB in 1995, has coal reserves of 706 million tons and Khalashpir coal mine in Rangpur, discovered in 1989, has coal reserves of 685 million tons.

Phulbari coal mine in Dinajpur, discovered by BHP in 1997, has 572 million tons of coal reserves and the Jamalganj coal mine in Joypurhat, discovered by GSB in 1959, has 5450 million tons of coal reserves.

There are eight general stone or sand mixed stone quarries in Sylhet, two in Sunamganj, 19 in Panchagarh, 11 in Lalmonirhat and 10 in Bandarban where stones or sand mixed stones are available in the places around 1966 hectares of land.

In addition, there is silica sand in three places in Sylhet, 52 places in Moulvibazar and 23 places in Habiganj where silica sands are available around 332 hectares of land while there is a hard rock mine at Madhyapara area at Parbatipur upazila of Dinajpur.

BMD Deputy Director Md. Mahfuzur Rahman said there are huge potentials of having mineral resources in the hilly region. 'More and more studies are needed to know what types of minerals are there,' he added.

Many accidents are heard in coal mining in different countries of the world including China but there is no reported accident in coal mining in Bangladesh and thus, coal can be mined at a higher rate which is very low in the country, he said.

"Ordinary sand is also a mineral resource as it generates several thousand crore of taka every year", he said.

Regarding limestone reserves, GSB says the country has the largest limestone reserves at Naogaon which holds a reserve of more than twenty-five thousand million tons of limestone in the districts' Tajpur, Badalgachhi, Bhagwanpur.

Apart from this, 270 million tons of limestone is reserved at Joypurhat Sadar, 59 million tons in Panchbibi Upazila, 17 million tons in Baghalibazar in Sunamganj, 12.9 million tons in Tekerghat and 12.9 million tons in Lalghat.

According to reports, there are 125 million tons of valuable plain soil in Madhupur in Tangail, 68 million tons in Madhabpur in Habiganj, and 25 million tons in Bijoypur in Netrokona.

It has also reported a reserve of 2.2 billion tons of gravel in six districts of the country.

Estimated iron ore reserves are 650 million in Hakimpur of Dinajpur while the country has 32,000 million tons of glass sand reserves.