

for chromium concentrates.

Overall, Japan was the leading market for the country's exports of metallic ores and concentrates. It purchased US\$ 187 million or 85% of the total. South Korea and the People's Republic of China were a far second and third with a share of 6% and 5% respectively.

Mining Processes

Copper mining in the country utilizes open-pit mining operations which consists of drilling and blasting the rock. Then the ores are hauled out of the pit in large-capacity trucks. A couple of copper mining companies are also involved in underground operations using the block caving technique [1].

In underground operations, the ores are moved through underground passage ways to a centrally located shaft through which they are lifted to the surface. All these so far constitutes the mining stage.

The milling stage is where the copper-bearing minerals are separated from the ores. This is usually done by selective flotation. Initially, the ores are crushed into pieces, the size of peanuts. Thereafter, the crushed ores are finely grounded so that the individual mineral grains or particles are separated from the ore. Then, the mineral bearing particles in the powdered ore are removed by flotation.

This process works on the ability of certain minerals to cling to the air bubbles in water. Chemical reagents called frothers [2] are added to the solid-water mixture to condition the minerals to be separated. The air bubbles or froth that