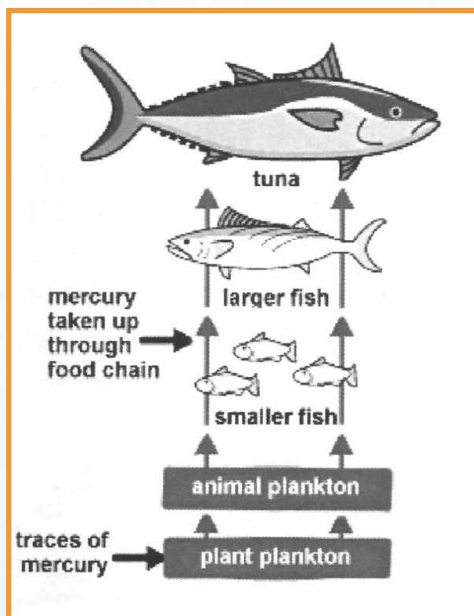


'Minamata' brings to mind, the name of a very deadly neurological disorder caused by mercury. The disease first came to light in the 1950s, when people around Minamata Bay started dying due to a neurological disorder. A number of babies were also still born. Studies indicated that a factory near the Bay producing acetaldehyde and vinyl mercury was using mercury for its manufacturing processes. Mercury converted to dimethyl mercury and entered the food chain. Dimethyl mercury reached the people through the fish they consumed. Since the disease was first detected in the Minamata Bay, it came to be known as the Minamata disease.



Mercury even today is used in a number of industrial applications and processes. Effluents from these plants get discharged into air and water. India is the largest user of mercury in the world (207-531 tonnes annually). Chlor-alkali industries are the major source of mercury release in the atmosphere and surface water in India. Other contributors are coal fired thermal power plants, steel industries and cement plants. In addition plastic, pulp and paper industries, medical instruments and electrical appliances, etc also use mercury.

Mercury content in Indian coal ranges between 0.01 parts per million (ppm) and 1.1 ppm. A typical power plant emits 90 percent of its mercury into the air and 10 per cent to the land. Emission rates are high as mercury boils at low temperatures. Assuming the average mercury content in Indian coal to be 0.25 ppm, about 65 tonnes of mercury has been released into the atmosphere every year between 1991- 2001 due to coal consumption alone.

Mercury pollution is widespread in India. Discharge of untreated effluents has led to groundwater contamination in Gujarat (Vatwa, Ankleshwar and Vapi) and Andhra Pradesh (Patancheru, Medak). Rainwater also absorbs mercury vapour present in the atmosphere. Mercury has been detected in both groundwater and surface water in the vicinity of chlor-alkali industries, dyes, paints and pigment manufacturing units. More and more Indians today face the threat of being crippled by mercury poisoning. Minamata is not far away!

