

#### Survey Blames Fertilizers **For Water Contamination**

Underground water in Japan has been found to be contaminated with nitrate nitrogen, a problem that is probably caused by fertilizers, according to a survey by a geological expert at the Agency of Industrial Science and Technology.

The survey, conducted by Shigeru Nagai, a senior staffer at the Geological Survey of Japan, was on water collected from wells, fountains and tap water sources in various parts of the country. Nagai reported that whereas nitrate nitrogen was detected in few places in 1965, the toxic substance has been found in all the water sampled since 1988.

The water standard in Japan sets the maximum permissible amount of nitrate nitrogen in drinking water at 10 milligrams per liter. According to Nagai's survey, water collected from some wells contained as much as 17 milligrams

Nagai puts forward the theory that fertilizer is transformed into nitric acid nitrogen after seeping through the soil. He says the contamination of underground water has spread from the upper layers to the lower layers over the past two decades. He urges that the use of fertilizers be reduced and other measures be taken to prevent a further spread of the contamination.

Water contamination by nitrate nitrogen, which causes cyanosis in infants and turns rivers and lakes eutrophic, had earlier been reported in West Germany and other industrialized countries.



### Women Account for 36.8% Of Japan's Work Force

The number of working women has continued to increase in Japan, reaching a record 16.7 million at the end of 1988, up 550,000 from 1987, and accounting for 36.8% of the country's work force, up 0.3 percentage point from the previous year. according to the 1989 White Paper on Women Workers issued by the Labor Ministry.

However, three years after the enactment of a law giving men and women equal job opportunities, working women still face various obstacles. For example, women who quit work to have families or for other reasons find it very difficult to get new jobs later. Those working women who have to take care of elderly or sick family members are not granted special leave for nursing purposes. According to the white paper, only 20% of workplaces have introduced systems offering these women support.

Meanwhile, a private survey shows that 60% of working women living in the Tokyo metropolitan area cited earning money for leisure and recreation as the purpose for working.

The survey, by Recruit Research, covered 1.500 working women aged 20 to 39. and also showed that half of them were considering changing their jobs-to obtain more holidays and shorter working hours rather than for higher pay or more rewarding work.

# JETRO Predicts 6.4% **Growth in World Trade**

Paced by steady economic growth in industrialized countries, world trade on an FOB basis will expand 6.4% in real terms and 10.3% in nominal terms in 1990, according to a forecast by the Japan External Trade Organization (JETRO).

JETRO estimates that global trade volume in 1990 will reach \$3,217.2 billion in real terms and \$3,377,3 billion in nominal terms on the basis of 1988 prices. Economic expansion in industrialized countries is expected to contribute more than 60% of real global trade growth, according to the projection.

Trade balances will improve in the United States, the European Community (EC) and Japan, but those in member countries of the Organization of Petroleum Exporting Countries (OPEC), developing countries and the socialist bloc will worsen, JETRO said.

While Japan's trade surplus is expected to increase, the pace of shrinkage in the U.S. trade deficit is likely to slow, complicating the trade imbalance correction problem. Japan's overall trade surplus in 1990 is calculated to grow to \$99.6 billion, up from \$94.9 billion in 1989, and the EC's to \$13.1 billion, up from \$8.5 billion. The U.S. trade deficit in the year is projected to shrink to \$94.6 billion from \$98.9 billion.

JETRO's world trade forecast assumes economic growth in the U.S. in 1990 at 1.7%, that in the EC at 3.1% and Japan's at 4.9%, with the yen-dollar exchange rate predicted to average ¥135 to the dollar.

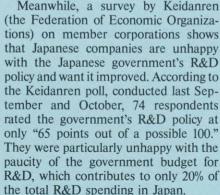


#### **Domestic Demand Growth Boosts R&D Investment**

Japanese manufacturing industries have been rapidly stepping up their investment in research and development as they boost spending on equipment amid the expansion of domestic demand.

According to an Economic Planning Agency survey, R&D investment by Japanese manufacturing companies in fiscal 1989 was projected to be 2.6 times more than in fiscal 1980 and far outpaced the 1.6-fold increase in total egipment investment in Japan during the period.

The sharp increase in R&D investment reflects the fact that as Japan now stands on a par with the United States and Europe as regards the level of its technology. Japanese companies can no longer rely on foreign technologies and thus have to develop their own as part of their longterm corporate strategies.



They regarded the high-temperature superconductor as the issue to which the government should give top priority in its R&D initiative. Next in order of importance, they said, is the development of automatic software production systems.



### **GNP Will Grow 4%** In FY 1990, Gov't Savs

Strong domestic demand will mean continued expansion for the Japanese economy in fiscal 1990, but the real growth rate will slow to 4% from the 4.6% growth rate projected for fiscal 1989, according to government forecasts.

Domestic demand will contribute 4.6 percentage points to fiscal 1990 growth. while weak external demand will trim expansion by 0.5 point. Personal consumption should be bullish, the forecast says. reflecting the lessening of the effect of the consumption tax. Growth of corporate plant and equipment investment will sag to 7.3%, however, barely half the record 14.5% growth projected in fiscal 1989.

The current account surplus will fall from a projected \$61 billion in fiscal 1989 to an estimated \$56 billion in fiscal 1990. the economic outlook said.

In contrast to the government projection, most private research organizations are forecasting growth of the mid-4% level, down only slightly from the current fiscal year. Further increases in real income will boost personal consumption. many private forecasters say.



A major tax reform proposal drafted by the ruling Liberal Democratic Party for fiscal 1990 includes special tax incentives to promote imports. The goal is to encourage imports of manufactured goods from the United States in order to reduce Japan's huge trade surplus with that country.

The proposed new legislation, which would expire after three years, would allow manufacturers either to deduct a sum equivalent to 5% of any increase intheir annual imports of designated manufactured goods from their corporate tax payments, or to receive an extra 10% depreciation allowance (20% for machinery imports). According to LDP officials, the incentives could increase Japan's imports by \$3 billion in the first year alone.

The proposal reflects a growing perception among LDP legislators that Japan must respond to overseas demands for increased imports, or else face protectionist retaliation by the United States.

A parallel import-promotion measure has also been proposed by the Tariff Council, an advisory panel to the finance minister. The council calls for abolishing import duties on 1,004 items, including satellites and cameras. The Finance Ministry intends to end the tariffs in April 1990.



## **Protectionism Threatens** Global Trade, EPA Savs

In an annual report on the world's economy, the Economic Planning Agency (EPA) said that rising protectionism threatens to hamper the development of the global economy and emphasized the need to strengthen free trade based on the General Agreement on Tariffs and Trade (GATT).

The 1989 White Paper on the World Economy singled out Washington's invoking of the Super 301 provision of the U.S. omnibus trade act against Japan as an example of protectionism and criticized the recent protectionist argument in the United States, which it said cannot be justified from an economic viewpoint.

The report urged the U.S. to cut its financial deficit, raise the savings rate and increase competitiveness, instead of resorting to protectionist policies.

The EPA document evaluated Moscow's perestroika as having contributed to the economic and political reforms in Eastern Europe, though it has failed to achieve the intended results in the Soviet Union itself. The report hailed the moves in Eastern Europe to introduce a market mechanism as desirable to world trade.