Korea's rapid expansion has absorbed most of the available work force. As a result, unemployment remains low. In 1988, for example, it was only 2.5% of the workforce and demand for labour remains strong. Korean workers, however, are beginning to demand a greater share of the benefits that economic success brings. Strikes and labour unrest are pushing up wages. As a result, the country is losing its original advantage as a low wage producer. At the same time, export success has led to inflationary pressures at home. Inflation ran at 7.1% in 1988 and 6% in 1989, fueled in part by real estate speculation which drove up land costs in a country that is among the most densely populated in Asia.

These changes mean that Korean products are losing some of their cost advantages in the international marketplace. In response, some Korean companies are focusing on domestic markets where economic and social transformation has led to strong and growing demand. The other response is to emphasize technological skills and move into higher value-added exports.

Technology Dependency

Any attempt by Korea to move into high value-added export activities is complicated by the fact that the country is dependent on foreign technology. For example, in 1989, Korea exported $12.4 million of its own technology. In the same year, it imported $1,098 million in foreign technology. Korea's technological dependency stems from a tendency of its companies to import technology rather than do their own R&D. They license other people's technology and then improve the manufacturing processes associated with that technology.

A Focus on R&D

The Korean government is determined to reduce the country's technological dependence by supporting the acquisition of core technologies that will allow the country to perform more of its own R&D activity. Through the recently announced Seven Year Plan for High-Technology and Industry Development, it hopes to make Korea one of the world's leading technological powers within a decade.

Korea has already been seeing an increase in R&D expenditures. They grew from $692 million (0.9% of GDP) in 1981 to $6.25 billion (2.6% of GDP) in 1989. Under the government's technology plan, R&D expenditures will expand by 15% for the next six years. The objective is for R&D activities to reach 3% of GDP by the year 2001. The overall objective for the 1990s is to expand the resources available for scientific and technical activity, and to promote industrial efficiency.

Korea's R&D efforts will be broadly based. The country intends to develop advanced technologies for industrial and commercial application, basic scientific research, and technologies associated with social welfare. The private sector has been assigned applied research projects for commercialization. The universities will do basic research, and the government will pursue R&D in key industrial technologies that are of public interest, especially in energy and resources, health, and the environment.

The Republic of South Korea's Ministry of Trade and Industry has identified seven strategic industrial sectors that it will be emphasizing in encouraging the development of applied and commercial technologies: microelectronics, factory automation, new materials, fine chemicals, biotechnology, optics, and aerospace. In these areas, the government intends to set overall goals and facilitate the development of appropriate infrastructure as well as promoting increased R&D activity.