

Food processing technologies from Taiwan

Government support for R&D and technology transfer

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Taiwan's food industry has a high output of processed food products. Most of it, however, is comprised of the small and medium sector. Governmental support, therefore, in terms of R&D promotion and technology transfer has been critical to their growth and development. Taiwan keeps pace with modern developments in food processing, especially with those in neighbouring Asian and Pacific countries. This article discusses recent R&D activities in Taiwan, which have led to the development of many new food processing technologies and processed food products.



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Introduction

The food industry played an important role in the early economic development of Taiwan. Before the '60s, only a limited quantity of agricultural produce, such as banana, rice, canesugar, and pineapple, was exported. Mushroom and asparagus were introduced into Taiwan in the early '60s. These, together with the existing pineapple, orange and bamboo shoot, formed a sizeable canning industry that enjoyed a dominant international market for almost 20 years, through the '80s. These exports of processed agricultural products not only greatly increased farmer incomes, but also brought in considerable foreign exchange, badly needed for industrial development at that time.

Processed foods accounted for 69.5 per cent of total export in 1952, and 55.7 per cent in 1960. The share gradually decreased to 12.8 per cent in 1970, 5.6 per

cent in 1980, 3.8 per cent in 1990, and only 1.2 per cent in 2000 as a consequence of rapid developments in other industrial sectors since the '70s. It can thus be seen that the food industry laid a solid foundation at the early stages of industrial development in Taiwan.

From export to local market

Following the country's rapid industrial development during the '80s, the export of food products ceased to be profitable; production costs were too high compared to those in other developing countries.

As a consequence of economic development, however, domestic demand for processed foods greatly increased. Since then, the role of the food industry in Taiwan shifted from earning foreign exchange to the supply of high quality food products to satisfy ever in