

# The food industry and provincial economies

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This paper discusses the significance of the food industry for the Zhejiang provincial economy and for provincial economies generally. It is suggested that the strong ties between the food industry and provincial economies in China means that the food industry can be a key influence in the economic development of regional China. Moreover, the geographically diffuse nature of the food industry in China gives the industry a strategic significance in countering regional inequality within and between provinces, a by-product of China's rapid growth over the past 25 years. For these reasons, change in the food industry, whether it has its origins in the introduction of western fast foods, or in environmental, technological or economic trends, not only assumes significance for the health of the Chinese people (as other papers presented to the International Cuisine and Health Workshop at Hangzhou have pointed out), but also for the wealth of the nation and the way that wealth is distributed.

**Key Words:** regional economies, food industry, China, health, wealth

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## The provincial basis of the food industry in China

The food industry is more deeply embedded in the provincial and regional economies of China than most other industries. The agricultural base of the value chain in the food industry anchors the food industry in non-metropolitan China in a way that most other industries are not. While other industries are represented in provincial and regional economies in one form or another, their links with the areas in which they are located are often of an accidental or even "footloose" nature. The location of these industries in regional China is often a product of management decisions about the need to distribute product to certain segments of a national or global market or to take advantage of a package of financial incentives provided by government. By comparison, the presence of a particular food industry in a province, such as the variety of tea produced for some of the West Lake tea houses in Hangzhou, is usually explained by the particular physical and social attributes of the provincial area in question. These include the climate, the topography, soil or coastal conditions as well as the history and culture of the region.

The provincial orientation of the food industry in China is well illustrated by the existence of regional cuisines. The differences between the northern, eastern, western and southern schools of cooking in China are connected to the varying geographical, climatic, cultural and historical features of regional China. Indeed, so strong is the regional orientation of China's cuisines that it is possible to identify "provincial dishes" such as Anhui and Shandong in the north, Jiangsu, Fujian and Zhejiang (Hangzhou) in the east, Sichuan and Hunan in the west and Guangdong (Cantonese) in the south.

During the International Cuisine and Health Workshop, attendees visited Huzhou city, where they met with government and food industry leaders to discuss the significance of food for the health and wealth of the local economy. During the meeting, attention was drawn to the

unique characteristics of cuisine in Huzhou and to the endeavours of local government and food industry leaders to protect the special features of the local cuisine. At a banquet in Zhebei Grand Hotel following the meeting, the Workshop attendees experienced the immense diversity and distinctive tastes of the Huzhou cuisine. Fifteen courses were served against a background of beautiful Chinese music performed by an accomplished local ensemble. The courses, which included a green vegetable, embroidered brocade, which could only be grown in the Huzhou area, were: Far landscape; Fish head soup and fish pearly ball; Stir fried shrimps; Salted fish rolled in laver; Vegetable stuffed tofu and seaweeds; Watery region mutton; Stir fried vegetable tofu; Stir fried whitebait and aloe; Vinegar fish and greengage; Stir fried bamboo shoots; Pumpkin-like green dumpling; Crisp glutinous rice dumpling; Shrimps dumpling; Whitebait and vegetable soup; Welcome fruits.

The relationship between the food industry and regions is reinforced by the local orientation of the cuisine in regional cities such as Huzhou. For example, there are more than 100 dishes identified with Huzhou cuisine. What does the future hold? Urbanization and the growth of national and global food distribution systems might be expected to undermine the long established ties between food and regions in China. But, at the same time, there are other developments occurring in the food industry that will strengthen these ties. One of these is the growing awareness among food producers and retailers in China about regional branding as a means of adding value to food in the marketplace.

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The value of branding food and beverages by their geographic origin has long been appreciated by food producers around the world, and most notably by the French wine makers. Regional branding enables food and beverage producers to differentiate their product in national and global markets. It also affords them an opportunity to protect the intellectual property associated with food production, although recent developments suggest this particular advantage of regional branding should not be overstated.<sup>1</sup>

Regional branding is also likely to be encouraged in China (as elsewhere) as a means of providing food producers and consumers with a self-regulating mechanism for protecting and maintaining food quality and safety standards. Through knowing the reputation of food production practices in particular areas, the consumer can discern the quality and safety of the food produced in that area when the food they purchase is branded as having been grown or processed in that area. The food industry in Zhejiang Province provides an ideal starting point for encouraging this kind of regional or provincial approach to regulating food safety. The introduction of new food safety standards is more likely to be effective if done on a regional (or provincial) rather than on a national basis.

### **The food industry in Zhejiang province**

Zhejiang is a relatively small province located on the east coast of China. It covers 101,800 sq km and has a population of 47.77m.<sup>2</sup> The Zhejiang economy is one of the most advanced and fastest growing provincial economies in China. Over the period from 1978 to 2001 Zhejiang recorded the fastest growth of per capita GDP of all provinces in China. In 1978 Zhejiang's per capita GDP was 0.87 times the national average. By 2001 it had increased to 1.94 times the national average.<sup>1</sup> Indeed, Zhejiang ranks among the top 20 performing regional economies in the world.

The food industry is a vital component of the Zhejiang economy. The development of the food industry in Zhejiang following the introduction of agricultural reforms and the opening up of international markets is one of the reasons for Zhejiang's improved economic performance ahead of "heavy industry" provinces such as Shanghai. In 2002, the GDP of the food industry in Zhejiang Province was US\$6.997billion. This represents 7.78% of the Zhejiang's GDP which in 2002 was US\$85.46billion.<sup>3</sup> About 17% of the food produced in Zhejiang was exported overseas to Singapore, Japan and other countries in 2002. Exported food products include tea, fruit, vegetables and seafoods.<sup>4</sup> There are no comparable figures available on food imported into Zhejiang. However, it is known that due to the limited supply of arable land, Zhejiang imported US\$457million in agricultural products in 2002 including \$US190 million in different grains (soy bean and wheat) and oils (palm oil, palm and stearine oil).<sup>5</sup> The imported wheat is processed by large and small mills into flour that is used to manufacture steam bread, noodles, dried noodles, and steamed buns with different fillings. These products are distributed through a wide range of food retail outlets including supermarkets and mill retail shops.

As is the case throughout China, the food industry in Zhejiang is a highly diffuse and decentralized activity involving both the public and private sectors. In Hangzhou, the capital of Zhejiang, there are 176 food companies with an annual production value in excess of 5 million RMB. The city is probably China's leading food service centre with a large number of privately owned restaurants. There are more than 20 restaurants in Hangzhou with a capacity in excess of 2000. Each of these restaurants has 40 to 100 different class VIP rooms. Teahouses are another feature of the food service sector in Hangzhou and throughout Zhejiang. Convenience foods, including food products not available in restaurants or teahouses, are also sold on the streets and roadways to bicycle riders and car drivers as they pass by, sometimes without needing to stop. Universities and some schools provide eateries and canteens. In the workplace, most companies provide free lunch for their employees. This food is prepared in the company or ordered from takeaway food outlets.

The agricultural and fisheries sectors are based on small to medium rural enterprises scattered throughout Zhejiang. Land use patterns in Zhejiang are shaped by the topography of the province which includes foothills in the southwest and an extensive network of channels in the north. The rice paddy is the predominant form of agriculture, although wheat, sweet corn and legumes are also grown in Zhejiang. Since the early 1980s, the use of land and water resources by farmers has been privatized, although the construction of buildings on rural land is regulated by local government. Agricultural and aquacultural activity is restricted to license holders.

Many different vegetables are produced in Zhejiang. The most common are bok choy; baby bok choy; spinach; three-coloured amaranth; tuber onions; Chinese cabbage; leguminous vegetables including soybean, green bean, snake bean, snow pea, pea and horsebean; fruiting vegetables including tomato, cucumber, capsicum, pumpkin, towel gourd, winter melon, bitter melon, zucchini, corn chili, chili pepper and eggplant; flowering vegetables including citron daylily, cauliflower and broccoli; rhizomatic and bulb vegetables including spring onion, leek, onion, garlic bulb, celery, lotus root, turnip, radish, carrots, potato, yam, taro, asparagus and water caltrop. Over ten different species of edible bamboo is grown in Zhejiang. There are also many different types of fungi in Zhejiang, such as black and white *auricularia auricular*, and more than ten different edible mushrooms.

A wide range of fruit is also grown in Zhejiang. They include citrus fruits, melons, grapes, apples, grapefruit, apricots, bananas, peaches, pineapple, pears, berries, dates, kiwi, plum, cherries, and nectarines.

There is a significant fruit and vegetable processing sector in Zhejiang Province. Fruits and vegetables are processed into dried and canned foods. Dried foods include: Chinese mushroom, bamboo shoot, black and white *auricularia auricular*, banana, apricot, grapes, date and apple. Canned foods include: bamboo shoot, mandarine, pineapple, plum, cherries, apricot and peaches. Some vegetables are processed into cured salty foods such as potherb mustard, bok choy, turnip and kohlrabi.

Zhejiang's location on the east coast of China and the presence of substantial water bodies including lakes and estuaries enable aquaculture production in Zhejiang. Fish, prawn, crab and squid are the most common aquatic foods produced in the region. Eels, crustaceans, snails and seaweeds are becoming increasingly popular as the local aquaculture industry develops and farmers discover trading opportunities with these products. Seafoods and aquacultural products in Zhejiang are frozen for the export market or processed as dried and canned products for distribution to other provinces.<sup>6</sup>

The food industry in Zhejiang is serviced by complex distribution and marketing arrangements involving activity by a large number of publicly and privately owned enterprises in transportation, wholesaling and retailing. The agricultural trading market is a long established feature of the food distribution system in Zhejiang. It enables farmers or their agents to sell fresh and frozen product directly to the consumer at highly competitive prices. The popularity of supermarkets is growing, especially for consumers of semi-manufactured food.

### **The strategic significance of the food industry for regional China**

The food industry is one of China's largest and strategically most important industries. In 2002, the food industry accounted for 9.74% of China's GDP. The GDP of the food industry in that year was US\$130.4 billion. The food industry is also a significant earner of export income, and generator of a surplus in international trade. In 2002 the total value of food exported overseas was US\$15.512 billion. Food imports in that year were US\$9.266 billion. This created a surplus of US\$ 6.246 billion.<sup>6</sup> As China's role at the recent international trade negotiations at Cancun suggests, the country is highly attuned to the importance of developments in international trade for food and agriculture and for China's competitive advantage in this area of global trade.

The provincial basis of the food industry means that it plays a key role in the overall development of China's domestic economy, and has the potential to influence the distribution of wealth between the provincial areas of China. Although China's national economy has grown rapidly over the past 25 years, the growth rates of the provincial economies have been uneven. The twelve provinces/cities of the Eastern Coastal region of China – Beijing, Tianjin, Hebei, Liaoning, Shanghai, Jiangsu, Zhejiang, Fujian, Shandong, Guangdong, Guangxi, and Hainan – have experienced much faster economic growth over the past two decades than the six provinces, the three autonomous regions and one municipality of the Western region – Yunnan, Guizhou, Sichuan, Shaanxi, Qinghai, Gansu, Tibet, Ningxia, Xinjiang and Chongqing. Indeed the disparity between the economic performance of the Eastern Coastal and Western regions seems to have widened over this period. The gap in per capita GDP between the Eastern and Western regions of China increased from 380.6 yuan in 1978 to 3,354 yuan in 2000 in real terms.<sup>7</sup>

The strategies required to tackle regional inequality in China are complex. They receive the constant attention

of government at all levels. Regional development has always been an integral part of the Chinese Communist Party's policy agenda. The Tenth Five Year Plan (2001–05) has further strengthened the central government's commitment to addressing regional inequalities. The "Western Development Strategy" and "Go West Campaign" reflect the government's ongoing commitment. Current strategies range from the use of transfer payments to assist households in less developed regions through to the provision of subsidies to finance investment in social and physical infrastructure in those regions and to reduce the tax burden in delivering vital public sector services. They also include economic development strategies designed to develop enterprise and industry in less developed areas.

The experience of developed countries such as Australia suggests that the food industry can be a more significant industry than most for the application of regional economic development strategies in provincial China. The value chain in the food industry, beginning with agriculture/aquaculture and extending through to food processing/manufacturing and retailing, provides regional economic development strategists with multiple access points for stimulating the development of those provincial economies in which the food industry is embedded.

Although there are no comparable "provincial dishes" in Australia – apart from certain indigenous cuisines – the food industry in Australia, like China, is, nevertheless, a highly diffuse and decentralized economic activity. As in China, key components of the food industry value chain in Australia are regionally-based. This is not only true of the farm and fisheries sector which involves over 115,000 rural enterprises scattered throughout regional Australia. These enterprises, which commonly take the form of family-owned farms or cooperatives, are engaged in the production of a diverse range of food commodities such as meat, grain, milk, poultry, horticulture and fish. The food processing sector, which adds economic value to agricultural production through processing operations that preserve and package food and diversify food product range and presentation, is also regionally-orientated. Although only one third of Australia's population lives outside capital cities, about half of the 4000 food processing establishments in Australia are located outside those major population centres. They are situated close to the supply of raw materials which are agricultural commodities used in processed products including beverages, cereal and baked goods, confectionery, dairy and deserts, egg products, fat-based products such as margarine, fermented foods, fish products, flavourings, food analogues, canned and packaged fruit, functional foods, jams, meats, sugar and vegetable products.

Indeed the proportion of food processing establishments which are located in regional Australia is likely to grow rather than decline as Australian food processors are drawn into global systems of production and distribution. The globalisation of the food industry is causing investors and managers to come to the view that it is more important to establish processing plants in locations which have immediate access to raw materials such as meat, milk and wine grapes, than to transport this material

to a plant in a metropolitan centre where the market for end products has matured and is declining in significance for sales growth by comparison with international markets. For example, about 80% of the food processed in Southwest Victoria is exported to over 100 countries including China. The Melbourne and Sydney markets are increasingly less relevant to the future prosperity of these regionally-based companies.

There is some anecdotal evidence that the development of the food industry in China is also attracting skill and investment back into the regions, reversing the trend for young people from the Western regions to relocate to the large cities in the east. Newsweek writer, Melinda Liu, recently reported the story of Liu Yonghong, a migrant worker from Sichuan who worked for several years in a Hangzhou silk factory. Discovering the concept of the supermarket in Hangzhou, Liu Yonghong decided to save his wages and return to his hometown in Santai County to apply the supermarket concept there and become his own boss. After opening his first supermarket in 1997, Liu now has 5 branch stores and an ice cream factory. According to the Newsweek report, Liu's experience is not uncommon. Melinda Liu writes: "Today, across the Chinese countryside, peasants turned entrepreneurs are returning from the big city and fomenting a quite revolution. They're investing money. They're introducing modern know-how. And they are proving peasants can turn profits".<sup>8</sup>

### Implications for public policy and development strategies

The provincial orientation of the food industry in China has several implications for research and the development of public policy and economic strategies in food producing areas.

Firstly, it suggests that the development of the food industry is not readily susceptible to a policy framework that fails to take adequate account of the regional basis of the industry. Indeed, the history of the food industry provides some spectacular examples of the serious consequences of this kind of failure on the part of central or colonial authorities. The failure of the collectivization of agriculture in the Soviet Union in the 1930s is one such example. The great famine in Ireland of the late 1840s, which had its roots in a colonial power's active suppression of the regional way of life that underpinned agricultural production in that country at the time, is another. The size, complexity and geographic diversity of the food industry in China suggests that the resolution of current food industry issues including food safety, business ethics and governance issues, is more likely to be achieved if approached on a regional or provincial, rather than national, basis.

Secondly, the interdependence of food and regions means that the achievement of the economic goals in a particular food industry is more likely if, in the planning of the goals, the regional community which services that food industry has been fully engaged. Through participatory planning, as distinct from "top down" planning, it becomes possible to take account of local, regional and provincial priorities and to generate a broadly based consensus or shared vision about the kinds

of new industries, for example, that are appropriate to an area. This also facilitates the mobilisation of resources towards the taking of local and regional economic initiatives, however large or small they may be.

Thirdly, because the well-being of the food sector and provincial economies are intertwined, the achievement of sustainable economic objectives in the food industry requires a multi-faceted approach which extends beyond business development to such matters as the maintenance and enhancement of viable public infrastructure and the identification of appropriate land use and management systems. Thus, in the collection and analysis of data, a food industry development strategy should not only cover commercial considerations, but also take account of the social and physical capacities of the region in which the food industry is located. Food industry planning is inescapably an exercise in integrated local area planning.<sup>9</sup>

Not the least of the challenges faced in such an exercise is determining how the upgrading of the social and physical infrastructure of a food region is best financed, given the scarcity of public funds. Critical to this challenge is the success of the current reform of the banking sector, including the rural credit cooperatives. The need to reform the financial sector has been further stimulated by China's entry into the World Trade Organisation in December 2002. The outcomes of some recent pilot projects in micro finance hold promise for rural China and the food sector.<sup>10</sup> They parallel similar developments in rural Australia.

### References

1. Gumble P. Food Fight. Time, September 8, 2003
2. <http://www.cfiin.com/>
3. Golley J. Industrial Location and Regional Development In: Garnaut R, Song L, eds. China: New Engine of World Growth. Canberra: Asia Pacific Press, 2003
4. <http://www.cfiin.com/>
5. <http://www.zj.xinhuanet.com/>
6. <http://www.hangzhou.gov.cn/main/gb/tradition/index.html>
7. Tingsong Jiang, Zhiyun Zhao. Government Transfer Payments and Regional Development. In: R Garnaut, L Song, eds. China: New Engine of World Growth. Canberra: Asia Pacific Press, 2003.
8. Liu M. Rural Riches. Newsweek Special Issue. October – December, 2003
9. Blakely E, Bowman K. Taking Local Development Initiatives. Canberra: AIUS, 1986.
10. Enjiang Cheng. Rural Financial Markets and Institutions: New Developments. In: Garnaut R, Song L, eds. China: New Engine of World Growth. Canberra: Asia Pacific Press, 2003

## 食品工业和地方经济

### The food industry and provincial economies

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本文讨论了食品工业对浙江省地方经济和中国整体地方经济的重要性。在中国关于食品工业和地方经济的关系是食品工业在地区经济的发展中是一个关键的影响因素。在中国由于食品工业的地域分布性质不同，使食品工业在地方工业规划中的重要性因地域不同各异。食品工业是中国在过去的 25 年里快速增长的行业之一。由于这些原因，关于改造食品工业时在引入西方速食、环境、技术和经济发展趋势时应考虑是否适合本地的整体发展，除了要考虑对中国人健康的重要性（作为其它的文章在杭州国际烹饪和健康会议指出的），还要考虑它对国家的财富和财富分布的方式。

This paper discusses the significance of the food industry for the Zhejiang provincial economy and for provincial economies generally. It is suggested that the strong ties between the food industry and provincial economies in China means that the food industry can be a key influence in the economic development of regional China. Moreover, the geographically diffuse nature of the food industry in China gives the industry a strategic significance in countering regional inequality within and between provinces, a by-product of China's rapid growth over the past 25 years. For these reasons, change in the food industry, whether it has its origins in the introduction of western fast foods, or in environmental, technological or economic trends, not only assumes significance for the health of the Chinese people (as other papers presented to the International Cuisine and Health Workshop at Hangzhou have pointed out), but also for the wealth of the nation and the way that wealth is distributed.

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