



The agricultural sector accounts for 10% of China's GDP and almost 40% of its labour force

SHAPING ORGANIC AGRICULTURE IN CHINA



China is a large country with a long farming history. Agriculture remains a very important sector with over half the population relying on farming. China's agriculture is characterized by a huge number of smallholder farmers with extremely small farms, working in very diverse contexts.



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The national average farm size in China is only about 0.6 ha. China's rapid recent economic development has led to even more diversification in agricultural production and consumption. We present here two different models developed by smallholder farmers in producing organic vegetables.

China's agricultural sector accounts for 10.3% of China's GDP and 39.5% of its labour force (2010 figures). Vegetable production is especially important and accounts for more than 10% of total agricultural production. Roughly 78 million rural dwellers work in vegetable production and an additional 80 million work in vegetable processing and marketing. China's vegetable exports have greatly increased in the last two decades, yet still account for only about 1% of total production, with the vast majority of production being for domestic consumption. Chinese food culture encourages vegetable consumption; annual per capita consumption reached 140 kg in 1980. It has since declined, yet is still much higher than the world average of 100 kg. The market has now entered a new development stage in which the pursuit of quality and diversification are important factors.

Organic growth in China

Certified organic production in China started in the early 1990s, driven by export markets and has developed significantly since then. Between 2000 and 2006, China went from being the forty-fifth largest organic producer (in terms of the area of organic land) to second place,



trailing only behind Australia. Currently, China has about 4 million hectares of land under organic management, about 50% certified for wild collection, 15% under conversion and the rest being used to cultivate crops. In 2007, total domestic organic production reached nearly 3 million tons and the value of organic exports was about 350 million US\$. Domestic demand is also increasing as a result of rising average incomes and recent food safety scandals. The Chinese Ministry of Agriculture expects organic acreage and production to increase by 20-30% per annum in the coming years (to 2017). This increase is expected to be mainly driven by domestic demand for high quality and safe food.

Different farming systems

There are currently various organic production systems operating in China. We examine two contrasting models here: an export driven model and Community Supported Agriculture (CSA). Organic vegetable production mostly started in the north-eastern and south-eastern



coastal areas (Shandong, Fujian, etc) during mid 1990s and early 2000s and was aimed at the export market. Only recently have these enterprises started to explore the domestic market – driven by rising domestic demand and a decline in export premia caused by changes in the RMB's exchange rate. These enterprises now also focus on the rich upper class population in big cities, such as Beijing and Shanghai, who are willing to pay high prices for organic produce

Export oriented production in Shandong

An example of an export oriented organic enterprise can be found in Jihetang village (Shandong Province), the leading area for organic vegetable production, marketing and export located in a favourable coastal area. The initiative was started by 315 households, heavily reliant on agriculture and with an average size plot of about 0.4 ha each. The village started organic vegetable production in 1994 becoming the production base for an organic vegetable processing export company, Tai'an Taishan Asia Food Company (TTAFC). The collaboration has continued until today and expanded to include more households and increase its acreage. The change has increased farmers' average household income from 5,000 Yuan in 1994 to 23,610 Yuan in 2011. This increase has

mainly come from yield increases bought about by technical improvements.

TTAFC is now the most important organic vegetable exporting company in Shandong. In 2011, it was contracting 27 farmers' cooperatives from different villages involving about 5,800 farming households that have converted to organic vegetable production. Jihetang village was the first of these and remains the largest one among them. TTAFC is a food processing company that exports frozen organic vegetables, mainly to Japan, USA and Europe. As a processing company it needs large and secure supplies. At the same time the smallholder farmers urgently need technical services, financial support and market linkages, which TTAFC provides. To reduce transaction

western China, in 2005 by Partners for Community Development (PCD), a Hong Kong based NGO. The concept has developed rapidly in the last few years and there are now over 200 farms within the national CSA network plus hundreds of unknown ones, spread across the country, that follow the same concepts and principles. The CSA model directly links smallholder producers to ordinary consumers, providing them high quality organic vegetables at a reasonable price. There is normally no formal certification, and the relationship is based on interactions between producers and consumer which foster mutual trust and benefits. A few CSA farms are trying to introduce community based certification based on the Indian model.

income from organic production increase from 146 Yuan in 2009 to 7,945 Yuan in (the first 9 months of) 2011. The women's group is now experimenting with expanding into pig farming and looking for other organic value-added items, such as flower tea, herbal medicines, fresh maize, chickens and ducks.

Prospects

The emergence and success of these two contrasting models reflects the different needs and interests of producers and consumers in different contexts. The export oriented model is a full value chain operation which uses contract farming to ensure a regular and large supply of safe and high quality organic vegetables for export and for high income domestic consumers. This model is appropriate for export driven and commodity based production in an area such as Shandong. It is one that requires formal market channels, certification, trade marks, advertising etc. By contrast the CSA model is based on local production and consumption, directly linking producers to consumers through rural-urban interactions that develop mutual trust. It is a small scale local market focused on a diversity of high quality local products in small amounts. This model is more relevant for subsistence farmers and ordinary local organic consumers. It is one that has the potential to attract and influence more domestic consumers and to close the rural-urban divide. Both examples show that a collective platform, structured either as cooperative or a group, plays a crucial role in supporting and linking smallholder farmers to markets. ■

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TWO MODELS OF VEGETABLE PRODUCTION AND MARKETING

costs TTAFC has a contract with the villages farmers' cooperatives, a model it deployed from the very beginning in Jihetang Village. These cooperatives act as a collective platform linking hundreds of smallholder farmers to the company. They also channel the technical and financial support provided by the company, arranging the contracting, certification, production planning, technical services, quality control, supplying inputs and arranging collection, delivery and other services for their farmers. They are now even considering organic seed production.

Community Supported Agriculture (CSA) in Guanxi

The CSA model for organic farming and marketing was introduced into south-

A good example of a CSA initiative can be found in Guangxi, a relatively remote poor area. This initiative was started by a group of 5 women farmers in Shanggula village who started organic vegetable farming in 2008 in collaboration with a local organic restaurant called 'Local Produce for Local People' and was one of the pioneering attempts at introducing the CSA model in China. They were supported in their efforts by Farmers' Friends, an NGO, and a research project of the Centre for Chinese Agricultural Policy (CCAP). The number of farmers involved, total production, the range of varieties and quality have all increased over the years. It can now meet the needs of the restaurant and supply a number of other customers. The participating households have seen their