lia, and Liaoning province. The main products produced and exported from these provinces are cereals, various types of bean and sunflower/pumpkin kernels. The developed coastal region including Shandong, Jiangsu, Beijing, Shanghai, Zhejiang and Fujiang provinces mainly produce organic vegetables for the domestic market and for export to Japan. Southeast China like Zhejiang, Jiangxi and Fujian is the main area for organic tea production. The processing products are mainly distributed in eastern developed areas such as Shanghai, Beijing, Zhejiang, Shandong, Jiangsu Province.

Key actors

In the early 1990s, the Nanjing Environment Research Institute under the State Environmental Protection Agency (SEPA) was the first agency to get involved in organic management and certification and set up the Organic Food Development Center (OFDC) in 1994. Since then, SEPA has been involved in the management of organic farming development in China. In 2003, the Certification and Accreditation Administration of the People's Republic of China (CNCA) replaced SEPA as the official authority on organic agriculture especially for the administration of certification and accreditation under the regulations of the People's Republic of China on certification and accreditation issued by the State Council. The Ministry of Agriculture (MOA) has also been a key player in the development of environmentally friendly agricultural production, which launched a campaign for green food and pollution free agricultural products in 1990s. In 2002 an organic certification body called China Organic Food Certification Center (COFCC) was set up to promote organic farming under the system of the agricultural authority. Currently, government bodies are becoming increasingly involved, and they have issued policies to promote the development of organic farming in China, such as the Ministry of Commerce (MOC), the Development and Reform Committee, and the Ministry of Science and Technology (MOST).

Market & trade

In China, the majority of organic products are exported to foreign markets, mainly to the EU, US, and Japanese markets; this is especially true for the years prior to 2005. Export products include beans, rice, tea, mushrooms, vegetables, processed oil, herbs among other products. Beans account for the largest export, with around 42 percent of the total export value, followed by cereals, nuts, vegetables, and tea. The products are exported to more than 20 countries according to 2009 statistics. According to the China Organic Food Certification Center (COFCC), the value of exported organic products increased from 0.3 million USD in 1995 to 350 million USD in 2004 accounting for 1.7 percent of the total value of Chinese agricultural exports (Li, 2006).

The Chinese domestic organic market was nearly non-existent in 2000, but it has grown fast since. Currently, most of the products sold in domestic markets are certified by COFCC and OFDC. Beijing is the largest organic market, accounting for one third of the total domestic market value, followed by some other mega-cities such as Shanghai, Guangzhou, Nanjing and Shenzhen. The main channel for organic food sales are specialized stores, supermarkets, and home delivery systems, which are new and have become popular over the last couple years. The main organic products found in domestic markets are cereals (rice or beans), meat, eggs, milk, vegetables, and oil for human consumption. The price of some organic products is up to three times that of the price of conventional products for cereals or meat, but for organic vegetables, the price can be as much as 10 times more expensive than conventional products (Zhao, 2007).

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Legislation

Since 2000, food safety and eco-labeled products are the major themes in delegates' proposals at every session of the People's Congress and Chinese People's Political Consultative Conference (CPPCC). A Law on Agricultural Food Safety has been issued by the Committee of the People's Congress and was implemented on November 1, 2006. Three relevant milestones for organic regulations have occurred recently. In 2001, SEPA issued Organic Food Certification and Management Measures. The National Regulation of People's Republic of China on Certification and Accreditation was put into effect on November 1, 2003. All certification and accreditation bodies including ISO 9000, ISO 14000, HACCP, as well as organic certifiers must follow this regulation in their certification activities (Zhou, 2005). In 2003, CNCA issued guidelines of accreditation for organic products certification agents. In 2005, the Chinese National Organic Product Standards were issued and effective on April 1st. At the same time, the Organic Product Certification Management Rule and Organic Products Certification Administrative Methods came into effect.

Figure 23: China: National logo for organic products

Government and international (development) support

There is some indication that the central government will continue its commitment to green food and pollution-free products and provide more financial incentives for farmers to switch from intensive (chemical input) agriculture. It is clear that the central government has a positive attitude towards organic agriculture, but there is no substantial investment yet. With the background of the central government support, several local and regional governments mainly in eastern and southern developed regions have expressed their commitment to support organic agriculture and some have invested in pilot projects and research. By now the support is mainly towards covering the cost of certification and support is low. Apart from the support for production and trade, also research and consultation on organic agriculture are receiving funds from donors/government. Most research conducted in organic agriculture has been funded by international organizations such as the International Fund for Agricultural Development (IFAD), the German Technical Cooperation (GTZ), the AMBER Foundation and Greenpeace, Asian Development Bank Institute (www.adbi.org), the International Centre of Research in Organic Food systems, Denmark (www.icrofs.org), Asialink[1], the Asia-Pacific Economic Cooperation (www.apec.org) among others. Since 2000, some projects also receive funds from domestic sources. These projects demonstrate the willingness of the state to support the further development of organic agriculture throughout China (Feng et al., 2005).

[1] The Asia Link was set up by the European Commission in 2002 to promote regional and multilateral networking between higher education institutions in Europe and developing countries in Asia. The programme aimed to develop new and existing partnerships between European and Asian universities. For more information see http://ec.europa.eu/europeaid/where/asia/regional-cooperation/higher-education/index_en.htm

Research and Consulting

Although organic agriculture is developing fast in China, it is still facing some challenges in the research sector to provide substantial and practical support with technology and the way of thinking. During the last 30 years, research has mainly focused on eco-agriculture and green food, which is the key area in China for sustainable agriculture development plan. Until now there are no specific funding schemes for organic agriculture research in China. Since 2000, international cooperative programs provided financial support for research on China's organic agriculture mainly in the area of organic agriculture development and assessment. Later, research institutions and universities also started technological consulting and research programs with funds from enterprises, local government and a little part from central government with some regions compiling organic development planning by local governments at provincial and county level as well. At present, substantial and practical organic technology, policy decision making and marketing linkage are the key needs for the current organic research and development. There is no platform for organic research cooperation at national level; a national organic industry alliance is foreseen to be set up with the support from the Ministry of Science and Technology in the near future.

The government does not have a supporting policy to help farmers receive consulting, nor do they provide financial subsidies for consulting. This leads to an awkward situation that farmers wish to receive consulting yet consulting agencies cannot find any business. In China there are nearly 30 certification agencies but only about 5 professional organic agriculture consulting organizations from universities and institutes, with most of them focusing on establishing quality systems instead of technique consulting. At the same time, the local extension service has not yet played an important role in the organic farming technology development, it should be better promoted.

Constraints and Outlook

Chinese organic production has been promoted by the global trade and the growing market allows products to be certified in a short time. Although there is a quality control system to guarantee the conformity with the organic regulations, there is still a substantial lack of technologies and advice regarding pest and disease control as well soil fertility maintenance.

Currently, most organic food production in China is managed by smallholder farmer organizations. Although small households have been organized as grower groups by the company, the grower group is loose and most of them are not well organized and managed. Most of the farmers do not understand the essence of organic production. They only know that no chemical inputs are allowed in organic production, the economic aspects attract them to cooperate with the companies.

Food security is vital for China, research on scientific operation technology, reasonable management measures, standards and the demonstration of successful business model are necessary to be carried out as a support base to promote organic agriculture. The support style should be diversified including credit support, less tax for organic ventures especially for farmer cooperative organizations, subsidies for land conversion among other things.

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Links/Further reading

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