China: Greening the Green Revolution

by Uwe Hoering, September 2009

Is China at the "onset of an organic revolution", as some observers believe? Undoubtedly, the flood of food certificates creates the impression, that one third of agricultural land is already under eco-food production. And clearly, there is a growing interest in "green" food by consumers. But not everything which claims to be "organic" really is. An assessment of the attempts to polish the image of China's agrarian products, by Uwe Hoering.

On the beer tins, there is a label reading "Green Food", as well as on the sachets with rice, chips and spices, on tins and bottles. In the "green" section of the Carrefour-supermarket in Beijings Guangqumennei Dajie, posters explain the origin of fruits and vegetables from the field to the shelf. A young sales woman stands alert to answer questions from customers. "China is now a world leader in organic production", claims the Australian agronomist John Paull. China's first 'eco-village' Liu Min Ying, established already in the 1980s, has grown into a trust, which supplies supermarket chains and diversified into ecotourism and training, and is one of the richest villages in the capital region. Health-food shops like Lohao City have branches in Beijing, Shanghai and the industrial region of Shenzhen.

The figures are impressive indeed, the growth rates even more: One third of the total agricultural land of around 122 million hectares has been certified – although with different standards. Within less than ten years China shot up into the ranks of the five leading organic producers worldwide. 180.000 products and more than 1.000 key companies in the food industry have been ranked as "green", according to a report in *China Daily* early this year. In 2007 the share of products with the "Green Food" label in agricultural exports reached 2,1 billion US-Dollar or seven percent, with an average growth rate of 40 percent per year.

Growth of labels

But not everything, which carries a label, is really organic in the strict sense. The major proportion, around one quarter of total farmland, is certified as *Wugonghai*, a confirmation that the products are "hazard-free", meaning that they fulfill the basic requirements of food safety. More strict is the "Green Food" label (*Lüse Shipin*), which was introduced in the early 1990s. It labels products, which are grown with controlled use of agrochemicals, but it excludes neither the use of pesticides generally nor genetically modified crops. The cultivated area and the quantities are already considerably smaller, all the more for the "Green Food AA" standard, which complies broadly with the criteria of organic agriculture, but as a solely Chinese certification system has been recognized internationally only by a few buyers so far. Only two to four percent of cultivated area are under organic management according to the criteria of IFOAM, the *International Federation of Organic Agricultural Movements*, and comply therefore with international requirements.

At the same time foreign supermarket chains like Carrefour and Wal-Mart realized the opportunities, offered by a moneyed and quality conscious urban middle class, alarmed by food scandals. Carrefour for example, which runs more than 130 stores, has its own "Quality Line". The company promises, that each step from the farm to the store is carefully controlled. Direct contracts with individual farmers or

cooperatives eliminate middlemen from the value chain. Low wages compensate for the higher labour intensity of organic agriculture. And consumers are ready to pay significantly higher prices for "green" food.

The diversity of labels, which is confusing producers and consumers alike, is a strategy to come to grips with the consequences of the Green Revolution. Since the 1980s China tried to satisfy a growing demand in spite of dwindling land and water resources with a rigorous push towards intensive agriculture, using High Yielding Varieties, agrochemicals and irrigation. Traditional organic agriculture, which has a long history, has been pushed back to marginal areas and resource poor farmers. World wide leading in the use of industrial fertilizer and pesticides, foods crops in China are highly contaminated, leading again and again to cases of food poisoning, scandals and occasionally to protests. At the same time China's ascent to the fifth largest exporter of agricultural products – according to WTO - has been restrained by import restrictions by countries like Japan, USA and Europa, especially because of high contamination with pesticides and antibiotics. Notoriously conspicuous were frozen chicken and shrimps. But also peanuts with poisonous substances and tea with pesticides scratched the image. At the same time the importing countries increase their standards continuously, setting the barriers higher for the producers, while competitors like India are also pushing into the eco-markets of Europe and the US.

Most of the products which are organic in a strict sense are destined for export markets and produced by large state-run companies. Till now these are mainly rice, tea and herbs, vegetables and mushrooms, pumpkin and sunflower kernels and cooking oils. Controls and labeling for the vast majority of certified products meant for the domestic markets are hardly more than the usual precautions to make sure that food products are no health hazards. They focus mainly on the final products, while monitoring of production conditions, of farms and processing is rare as the scandal about milk powder contaminated with Melamine underlined. Even more illusionist are requirements to trace the origin of food back to the producers, often small-scale farmers and micro processing plants.

.... leaving the farmers out

For most peasants the flood of labels has little benefit. Like all farmers in the region around Beijing, Li Gui Yong for example owns just a few *mu* of land, less than half a hectare. He was one of the first farmers who started 14 years ago to construct his own greenhouse: A roof made of bamboo sticks and plastic sheets facing the South, while thick mud-walls on the other three sides storing the warmth. Today, there are rows after rows of such huge greenhouses in the area. Cucumbers, tomatoes and chillies are replacing wheat, maize and cotton.

Li Gui Yong gets water free of charge from the community well, he only has to pay the electricity for the pump. In spite of this, he took up drip irrigation promoted by a project by the German *Gesellschaft für Technische Zusammenarbeit*, GTZ, to improve intensive agriculture. He explains, how he reduced the input of pesticides and fights pests with biological means. But for a certification it "is still too early". Therefore he and the village cooperative can sell only in the wholesale market, where their cucumbers have a competitive advantage but don't bring higher prices. A single greenhouse earns him 50.000 Yuan per year, around 5.000 Euro – after the reduction of costs still a lot of money compared to the monthly income of just 1.000 Yuan for a seasonal worker.

Like for the official policy, where the export is the most important driving force, for

farmers like Li Gui Yong it is economics, not ecology, which turned them "green" - lower costs and better markets. A complete conversion to organic agriculture is difficult for most farmers. The risk is too high, explains Li Gui Yong, the conversion period too long, and certification too complicated. Moreover most farmers are poor and have hardly any access to urban markets. Government support is lacking, while the agroindustry receives subsidies. Therefore, but for a few exceptions the "organic revolution" bypasses the large majority of farmers. Price premiums, which can be between 10 and 50 percent for "Green Food" and much more for organic products, go into the pockets of the traders or the large producers like the state-run farms, all the more the profits from exports.

There is still a long way for China's agriculture to become really organic. In spite of "Green Food" labels and environment scandals like the algal bloom in the Tai Lake in 2007, which turned the drinking water for two million peoples in the city of Wuxi green and fetid, production and use of chemical fertilizer increased according to *Greenpeace*. Frequently there are reports about fake labels and counterfeit products. It is difficult to build a reliable, encompassing monitoring system and to convince the farmers to stick to the given standards – especially as long as sewage sludge, often containing heavy metals, is in many regions the cheapest fertilizer available.

But there is hope: Back in the 1990s, Thailand too had tremendous problems with agricultural products and their safety, which have been resolved more or less since then. With every new food scandal the support from the Ministry of Agricultural for improved monitoring and organic production increases, the environment expert Eva Sternfeld observed. And if China really would succeed and it's millions of small-scale farmers would feed the huge population organically, that in deed would be a breakthrough for organic agriculture worldwide.

John Paull, The Greening of China's Food – Green Food, Organic Food, and Ecolabelling. Sustainable Consumption and Alternative Agri-Food Systems Conference Liege University, Arlon, Belgium, 27-30 May 2008. http://orgprints.org/13563

John Paull, China's Organic Revolution. Journal of Organic Systems 2007 2(1) 1-11. http://orgprints.org/10949

Eva Sternfeld, Organic Food "Made in China". EU-China Civil Society Forum, 10/2009 – 11. August 2009. www.eu-china.net/web/cms/front_content.php? idcat=5&idart=1200

F. Zhang, u.a., A Perspective on Organic Agriculture in China – Opportunities and Challenges. 9. Wissenschaftstagung Ökologischer Landbau. http://orgprints.org/10388