

Institution: University of Northampton

Unit of Assessment: 19 - Business and Management

Title of case study: The Promotion of Organic Agriculture and Organic Food Production in

China

1. Summary of the impact (indicative maximum 100 words)

Research on organic agriculture and organic food production in China by Professor Richard Sanders has contributed to the successful (re) adoption of organic agriculture there over the last twenty-odd years. With the formation of the Organic Food Development Centre (OFDC-MEP) under the auspices of the then State Environmental Protection Agency (SEPA –now the Ministry of Environmental Protection) in 1994, the Chinese government officially began the arduous task of persuading farmers to forgo conventional, chemical-based agriculture in favour of organic farming. From a negligible base, China now has more farmland sown to organic crops than any developing country and the highest percentage share (0.8%) of any medium/large developing country. Organic food, locally grown and/or processed, is now well-established in China. Organic farming has not only led to environmental benefits but also to poverty reduction and eco-tourism in parts of the Chinese countryside. Sanders has worked with the OFDC since its inception and these successes result from changes in government policy and institutional change which have been encouraged through Sanders' research and published papers, and through his face-to-face contact with significant stakeholders.

# 2. Underpinning research (indicative maximum 500 words)

Professor Sanders first became interested in 'green' developments in the Chinese countryside in 1992 when he was a lecturer in economics at Beijing Foreign Studies University, researching the social, economic and political basis of Chinese Ecological Agriculture (CEA, a sub-organic alternative to conventional agriculture). This was the Chinese government's first major initiative in encouraging farmers to reduce their dependence on the importation of chemicals into the Chinese countryside as fertiliser, pesticide and herbicide. He was primarily concerned with identifying the barriers of a social, political or economic kind which impeded farmers from adopting ecological agriculture so that, once identified, the barriers could be broken down. His research culminated in the single-authored volume "Prospects for Sustainable Development in the Chinese Countryside: the Political-Economy of Chinese Ecological Agriculture", published by Ashgate in 1999. Its main thesis was that the Chinese government operated policies which were mutually inconsistent. On the one hand, the government had encouraged – and continued to encourage - the break-up of the communes and a return to individualised family farming, yet, on the other, was attempting to encourage ecological agriculture which involved a huge array of inter-connected processes centred around communal biogas digestion allowing a virtuous circle of environmentally friendly agricultural practices. These practices could not be performed, however, by individual farmers working alone (a state-of-affairs encouraged by the Household Responsibility System introduced in early 1980s) and, indeed, were only possible in villages where the commune had never been broken up or where it had been reintroduced. The argument, accepted by China's National Institute for Environmental Science (NIES - the precursor to OFDC, and now its paymaster) was that ecological agriculture, and subsequently organic agriculture, could only be satisfactorily reintroduced in conditions of collective, rather than individualised farming (see Sanders, 1999, Sanders 2000 and Sanders 2005.below). The OFDC, influenced by the argument, thus encouraged organic agriculture on a collective basis.

However, individualised farming was not the only barrier to the adoption of organic agriculture: the risk of adoption was simply too great for poor farmers, albeit working collectively. As a result of research with organic food processors, it became clear that the most successful organic adoption took place where organic food processors, as a result of their sheer size and profitability, took over the risks of conversion, providing farmers with training, guaranteed prices, guaranteed supplies of organic fertilisers and pesticides and monitored performance. The thesis is at the heart of Sanders' 2006 paper. Sanders argued this point at the UN Food and Agriculture Organisation (FAO)'s first ever international conference on organic agriculture in Rome in 2007. The conference was called to "review existing information and evaluate the contribution of organic agriculture to food security *including conditions for its success* (our italics)". A copy of Sanders' 2006 paper was provided to all delegates as part of the delegates packs and his argument formed part of its

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concluding report.

- **3. References to the research** (indicative maximum of six references) All of these outputs have been produced within the 'China Centre" (now CTDERC) of the University of Northampton (and its prior incarnations):
- **1999** R. Sanders *Prospects for Sustainable Development in the Chinese Countryside: the Political Economy of Chinese Ecological Agriculture*, Ashgate, (ISBN 1840-149248)
- **1999** R. Sanders The Political Economy of Environmental Protection in China, *Third World Quarterly*, Vol. 20(6), (ISSN 0143-6597)
- **2000** R Sanders The Political Economy of Chinese Ecological Agriculture: Case Study evidence from seven Chinese eco-villages, *Journal of Contemporary China*, Vol. 9(25) pp.349-372 (ISSN 0333-716590)
- **2005** R Sanders Organic Agriculture in China: do property rights matter?, *Journal of Contemporary China*, Vol. 15(46), pp.113-132, (ISSN 1067-0564)
- **2006** R Sanders A Market Road to Sustainable Agriculture? Ecological Agriculture, Green Food and Organic Agriculture in China, *Development and Change*, Vol. 37 (1), pp.201- 226 (ISSN 0012-155X)
- **2010** R Sanders (with Xiao X) The Sustainability of Organic Agriculture in Developing Countries: Lessons from China, *The International Journal of Environmental, Cultural, Economic and Social Sustainability*,Vol.6 (ISSN1832-2077)

Sanders benefitted in the 1990's from study grants (1996) and travelling research grants (1999) from the British Council in Beijing. In 2008, he was invited and fully funded by the China-Europa Forum to present a paper on "The Significance of Collectives to the Adoption of Organic Agriculture in China" at a conference on collectives in Sun Yatsen University, Guangzhou, China, More recently he have benefitted from the generosity of OFDC –MEP and Moutai Kweichou Liquor Company in funding his primary research in China in the form of generous payments of all expenses incurred, to include international travel costs.

**4. Details of the impact** (indicative maximum 750 words)

Originally, the primary motive for encouraging organic agriculture for the OFDC, and for Sanders working with it, was to reduce the degree of importation of chemicals into the Chinese countryside. Conventional, chemical-based agriculture has many environmental downsides and dangers to farmers and consumers in China. Globally it leads to the emission of greenhouse gases, as does the manufacture and transportation of the chemical fertilisers, pesticides and herbicides involved. Thus any reduction in conventional, chemical-based agriculture, in terms of reducing China's currently huge global footprint can only be a good thing. And the expansion of ecological and organic agriculture, encouraged by Sanders' research and associated activities has helped to do this. In particular, Sanders' research has had positive institutional impacts at three different levels:

At the level of government. China has established the Organic Food Development Centre (now OFDC-MEP) in Nanjing in 1994, and alongside the China Green Food Development Centre in Beijing (which Sanders has also visited frequently), has developed standards for green and organic food, the latter corresponding to strict international standards. Latterly the Chinese Government has established the Ministry of Environmental Protection in 2009 (to whom the OFDC ultimately reports, via NIES), and has encouraged through state, county and local Environmental Protection Bureaux, the development of organic and green food throughout every province in China (bar Tibet) and has achieved international recognition of a Chinese domestic organic certifier (OFDC-MEP) through that organisation's full membership of IFOAM since 2005. As a result of his research in the field, Sanders was accorded the honour of becoming one of only two International Research Fellows of the OFDC in 2007 and he has regularly attended and spoken to the OFDC's

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annual conferences (in 1999, 2003, 2007, 2011 and 2013). Delegates to the annual OFDC conferences include representatives of all the main stakeholders involved in organic agriculture in China to include government officials, members of Environmental Protection bureaux, research institutes, organic food processors, as well as organic farmers. Thus he has had an opportunity to reach and encourage a very large number of stakeholders in the sector over the years. Sanders has also given lectures based on his research to the staff of the OFDC in Nanjing on many occasions. As the Director of OFDC-MEP testifies, "On behalf of OFDC, I sincerely appreciate the long-term support and contributions from Prof. Richard Sanders (which he has) made to the Chinese organic movement, especially to our center" (our italics, testimonial 1).

At the level of the farm. Throughout the last decade of the twentieth century and the first decade of the 21st, Sanders visited countless sites of organic agriculture throughout the Chinese countryside, which confirmed his general thesis that organic agriculture was not possible with individualised farming. As a result of this and further published work, discussions with officials and presentations at conferences, he helped to effect a partial reappraisal of government policy with regard to the promotion of collectives and consequent changes in land tenure arrangements, to include re-adoption of collectives, earlier abandoned. As the current Deputy-Director of NIES testifies "Professor Sanders wrote some influential articles. In particular he argued that it was difficult for individual farmers to convert to organic agriculture and that some form of cooperative enterprise was necessary (see Testimonial 2, below)". Successful cooperatives were indeed established at that time: see Testimonial 3 from a farmer and leader of Shifo village, Anhui Province "Professor Sanders visited us in 2000 and 2003... he talked to us about the importance of organic culture...in 2005 we established China's first organic tea cooperative." Also see the testimonial from the Director of OFDC-MEP "Prof Richard Sanders has written many articles on organic agriculture in China, some of which have been translated into Chinese and these have been influential in developing organic agriculture here, particularly his works on property right(s)" (testimonial 1).

Apart from the impact of organic agriculture in reducing the carbon footprint of agriculture and ameliorating soil erosion and other environmental dangers, the development of organic agriculture in China has also had an impact on poverty reduction in the Chinese countryside, an impact that Sanders has helped to effect. As the Director of OFDC-MEP suggests, "from 1996 to 2003, during the implementation of the Sino-German organic agricultural development project in (the) povertystricken area of Anhui Province, Professor Sanders came to China almost every year and visited Shifo and Yufan villages located in remote areas of the province and giving guidance and encouraging local farmers to make conversion from conventional farming into organic farming. (Testimonial 1). In that area, organic agriculture has also led to poverty-relieving eco-tourism. As the Deputy Director of the Yuexi County Environmental Protection Bureau testifies, "I first met Professor Sanders in 2000 and had a long discussion with him on how we should develop our local economy. Professor Sanders suggested we develop eco-tourism on the basis of organic agriculture which was very interesting to us. And indeed we have been promoting ecological tourism in our county over the last few years. In particular we have developed a solid organic tea industry in association with our ecological tourism development" (testimonial 4). The leader of Shifo Village adds, "with Professor Sanders' encouragement and support, (our) Yuexi village has been developing its ecological tourism which has brought us enormous benefits (see testimonial 3).

At the level of the organic food supply chain. Many significant food processors have begun to source their raw materials exclusively from organic farms, to include one of China's most important and historically significant state companies –Kweichow Moutai Liquor Co Ltd- which now produces all its white spirit through the distillation of organic sorghum and wheat. The OFDC, with whom Sanders was closely working, helped to persuade Kweichow Moutai to source its raw materials exclusively from organic farmers and this has led to one of the most significant single expansions of organic agriculture in China since 1994. Sanders first met the Director of Supply at Kweichow Moutai at the 2007 OFDC annual conference at which he spoke after being honoured as a Visiting Research Fellow of OFDC. Subsequently, he was invited by Moutai three times to speak to their senior leaders, as well as to their employees and to the organic sorghum farmers providing their raw materials, the last time in summer 2011. The Director of Supply testifies, "Working with

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OFDC, Professor Sanders has encouraged, supported and reinforced our decision to produce organic liquor and this has meant a big increase in organic farming in our region" (Testimonial 5). Sanders influenced other Chinese food processors to include the Jiangsu Ruikang Organic Food Co. Ltd., Nanjing China.

In summary, Sanders has contributed to the development of organic agriculture in China through his articles, his researches and his spoken words in conferences and workshops to organic farmers, organic processors and other Chinese organic stakeholders

### 5. Sources to corroborate the impact

Written testimonials on the significance of Sanders' work for the promotion of organic agriculture and organic food processing in China has been obtained altogether from 10 Chinese sources: (either written in English by their authors, or written in Chinese, (with English translation by University of Northampton staff), eight provided in the original, two scanned). The 5 testimonials quoted in 4 above are from 1,2,3,4 and 5; the other five testimonials additionally remain on file.

- The Director, Organic Food Development Centre-MEP, Nanjing China. He is the most significant government official directly responsible for organic agricultural promotion in China, and has been so for 15 years. Sanders first met the Director in 1993 when he worked in the ecological agricultural division of NIES, before the formation of the OFDC in 1994
- The Deputy Director of the Nanjing Institute of Environmental Sciences (NIES), Ministry
  of Environmental Protection (MEP), Nanjing, China. The OFDC-MEP works directly
  beneath this Institute and the Ministry and reports to them. Sanders first met the
  Deputy-director NIES in 1993 when he first visited Nanjing
- 3 . Farmer, erstwhile leader of Shifo Village, Yuexi County, Anhui, China, and Director of China's first organic tea producing cooperative. Sanders visited the village on several occasions, both before and after the formation of the tea cooperative there in 2005.
- 4. The Deputy Director, Yuexi Environmental Protection Bureau, Yuexi County, Anhui, China. Yuexi County had responsibility for the development of the organic tea project in Shifu Village (see above)
- 5. The Director of Supply, Kweichow, Moutai Liquor Company, Renhuai City, Guizhou Province, China. Moutai Liquor Company is the most famous white spirit producer in China. The university has also received a testimonial supporting the above statement from the Director, Renhuai Organic Agricultural Development Office, Renhuai City, Guizhou. Renhuai City is the major production base for organic sorghum and wheat for Moutai Liquor Company)
- Invitation from the Food and Agricultural Organisation of the United Nations to speak at its first conference on 'Organic Agriculture and Food Security' at the FAO headquarters in Rome, March 2007
- 7. The report of the International Conference on Organic Agriculture and Food Security, FAO of the United Nations, Rome, 2007. Sanders' contribution appears in paragraph 37.