



Yunnan Seminar on Organic and Sustainable Agriculture

Conference Report
October 2006

Co-hosted by PEAC and Kadoorie Farm and Botanic Garden

Our seminar on organic and sustainable agriculture in Yunnan province was held from September 22-24, 2006, in Kunming, Yunnan, at the HaiKun Hotel.

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This report is meant to provide an overview of the activities and events at the organic agriculture seminar, held in Kunming from September 22 to September 24, 2006 in the Hai Kun Hotel. The conference explored issues and opportunities in China's organic market, the development of the Participatory Guarantee System (PGS) for farmers to ensure quality and consistency of organic produce and policy recom-

mendations to assist the Chinese government in developing the Chinese market for organic produce. Representatives from the Pesticide Eco-Alternative Center (PEAC), the Center for Biodiversity and Indigenous Knowledge (CBIK), the Yunnan Eco-Network (YEN), Green Watershed as well as local graduate students, organic farm representatives, and farmer association leaders were present. Mr. Hil Padilla of the Kadoorie Foundation provided additional insights, including comparative examples of organic farming techniques utilized in the Philippines and Hong Kong. PEAC and the Kadoorie Foundation jointly hosted the conference.

Prof. Kuang Rongping of the Pesticide Eco-Alternative Center (PEAC) opened the conference with a discussion of why the conference was being convened and that the results presented by PEAC were the culmination of one year of research funded by the Kadoorie Foundation. Prof. Kuang emphasized the complex problems facing organic



Conference participants introduce themselves on the first day.

agriculture and the need for young people to remain actively involved in resolving these problems. The focus of the conference, Prof. Kuang added, was not to state right or wrong but to engage in debate and exchange of ideas to better forward organic agriculture in China.

PEAC staff member Yang Song gave the first presentation, describing an overview of the development of the organic market in Yunnan province. The presentation emphasized that organic agriculture stresses understanding of the local ecology and the cycles of cultivation, while also providing opportunities to boost farmer incomes. Yang Song provided an overview of Yunnan's geography, which is heavily mountainous and represents up to fifty percent of China's total biodiversity. Biogas is also prevalent in Yunnan, which has approximately 1.5 million units, the fourth highest in the country.

Yang Song outlined the results of research at the Hao Bao Qing organic farm, where organic

fertilizers are in use. He stressed the need for a clearer and more harmonious relationship between the company and the farm, under China's "company plus farmer" organic scheme. Often when the relationship between company and farmer breaks down, farmers return to chemical-based farming and abandon their organic endeavors. Further tensions develop when farmers realize they can cut out the company and bring their products directly to market. Better linking organic products to the Chinese market, at both the local and national levels, is another challenge that Yang Song pointed out.

Yang Song suggested greater attention to farmer groups. Organic farming will only work with the right economic incentives. Without effective farmer groups, economic challenges are harder to overcome. While there are some organizations, these remain highly technical. Participation rate among farmers does not often extend above 30 percent.

No farmers have organized themselves in organized groups in Yunnan, Yang Song continued. Organic certification is costly, which is another reason for farmer organization as this can help to reduce costs. Might need multiple certifications for export.

Consumer trust of certified organic products in China is also low. Too many products and services in China, Yang Song pointed out, are not what they appear to be. Farmers need to get proactive, do self-certification and even open up the prospect for consumer monitoring.

During the discussion following the presentation, conference participants discussed various aspects of the challenges facing Yunnan's organic agriculture. While the Chinese government's "Develop the West" campaign is boosting Yunnan agriculture, chemical pesticides and fertilizers are rising, participants pointed out. This is especially true near the urban areas.

From 1990-2001, Yunnan experienced one of the sharpest rise in chemical pesticide and fer-

tilizer use in the country. So there is a great need to improve farmer understanding of the chemicals and promote alternatives. Yang Song described how the lack of clarity over what constitutes organic persists not only among consumers but among farmers as well. In his fieldwork, Yang Song interviewed a farmer who described his farm as organic—*you ji*—which in Chinese sounds similar to "have machinery." The farmer described the tractor that he owns.

The government's Agricultural Extension Bureaus, furthermore, don't support organic agriculture and are often directly involved in sale of pesticides. This further complicates the lack of understanding of what organic is.

Prof. Kuang noted companies have little motivation to help the environment and that protection incentives needed to be devised alongside the development of organic agriculture.



Participants listen attentively to Yang Song's presentation on the Yunnan study

Next, PEAC showed a video

outlining organic farming in Yunnan, the prospects and challenges. The video reviews many of the key points of agriculture in Yunnan and of the situation in organic farming across the province. Several insightful segments feature consumers who state they are uncertain as to what organic is, while others state organic produce is often too expensive and not worth the extra money. The video demonstrated that 73 percent of consumers in Yunnan are unsure of what organic produce is.

Conference participants next discussed the participatory certification system. In order for this system to work, farmers must trust each other and also provide mutual checks and balances for each other.

A conference participant asked where the figures featured in the video came from. PEAC staff explained that many of the figures were supplied in government reports. Participants lamented that government figures are often incomplete or inaccurate, yet there are few other comprehensive sources of information.

The next presentation was by PEAC staff member Tu Wanli, who outlined the farmer certification participatory guarantee system and presented international case studies of self-certification that may prove useful as China devel-



Ms. Tu Wanli presents on PGS

ops its own understanding and implementation of this system.

Tu described the guarantee system as necessary to promote organic products, while the national system in place is lack-

ing and features abundant constraints.

At present, the cost of government organic certification is around RMB 10,000. This large price can only be borne by major companies and it is prohibitively hard for individuals to secure. Rural income in Yunnan remains around RMB 2000 per year. As a result, areas that are pursuing organic agriculture are uncertified and therefore less profitable. Tu described the umbrella certification policy launched in April 2005.

Next, Tu offered a comparison of examples of organic certification cooperatives, featuring OFDC and Certified Naturally Grown. She provided an overview of how they were founded, how they work and the effect these two groups are having. OFDC is the only body in China that can certify organic for both domestic and international consumption.

Tu closed with a question, wondering how to bolster China's own certification process and also promote consumer awareness and trust in organic products? Because PEAC has only just begun to work in this area, she pointed out, there maybe some holes in the information.

In the group discussion to follow, participants observed the current certification system serves companies, not individuals. There is great interest in getting organizations together but there is need for government cooperation. Without this, the certification could be illegal.

Other participants observed that economic incentives remain essential in China, or else people won't do organic farming. Also there is need to look into alternatives. At present, the price differential between organic and non-organic produce is prohibitively high in China. Most consumers will not abide by the higher price of organic

produce, especially as there is little trust in the certification that the produce is, in fact, organic.

A participant asked about the regulations and standards for organic farming. PEAC staff pointed out that most existing certification bodies don't pay attention to the farm of origin. China lacks proper standards for organics, a market that has only just started. As a result, it is important to look toward international standards in market development.

Before lunch, Kadoorie representative Hil Padilla presented some alternative farming techniques from other parts of Asia, including organic markets in HK. He also showed the popularity of organic markets in Hong Kong.

Dou Hong presented her research next, an examination of pest problems in the apple orchards of La Shi Lake, of the current ecology in the area among both pests and natural enemies and of her progress in researching viable alternatives.

"As long as any insect is on the trees they will eat the fruit," a local farmer tells Dou Hong. She describes a very low understanding of the role of natural enemies. Although the farmers in the Lashi Lake area often use low toxicity pesticides, these chemicals are still having a profound effect on the local ecology and are killing off both natural enemies and common pests alike. Dou Hong described her efforts to promote the usefulness of the natural enemies as well as alternative pest control in the La Shi Lake area. She presented extensive evidence of the variety of natural enemies in the area that could serve the farmers and of their inability to survive the farmer's chemical farming habits.

Liu Zhihong of PEAC gave a presentation on sustainable development following Dou Hong's presentation, including a discussion of what constitutes sustainable development and of the importance between economic growth and environmental protection, a point often lost in China's current development phase. Liu highlighted sustainable development as a policy problem in China.

Liu described PEAC's fieldwork in Yunnan including the economic and development background of several villages. 271 heads of households were interviewed, 70 were women. Liu presented economic information about the villages as well



Mr. Hil Padilla describes his farm for the participants (with Ms. Pay, translator)

as a survey of local environmental change and connected these findings to the overall status of sustainable development in the province. Use of pesticides and health effects were also surveyed.

In the discussion to follow, conference

participants pointed out that in many villages, population growth is a challenge for sustainable development. Farmers have had little exposure to pesticide training, furthermore, and 91.5 percent of the farmers were unaware of basic safety procedures. People with higher capacities leave the village.

In a broader discussion about sustainable development, participants described the various challenges farmers face and their need to determine priorities around such basic issues as water, pollution and income. How people order these things has a direct impact on whether or not an area will be sustainable.

Another conference participant points out that the key factor is participation—involving people, giving them a sense of ownership. It is also easier for farmers to understand what is unsustainable. It is best to work through local people that are trusted. PEAC staff pointed out that everyone's understanding of sustainable development is different, depending on whom you speak to. In a village that is 95 percent sustainable, there is still 5 percent that is unsustainable.

Following this discussion, Ms. Li Xiaochun of the Science and Technology Bureau gave a few comments. She noted the robustness of PEAC, especially of the young people involved in the organization who were participating in the conference. She stated that this show of participation remains rare in government bureaus and that in civil society groups such developments should be encouraged and celebrated.

"In many cases in my office it would take 10 years before people could perform at this level, nor would young people be allowed to speak. I am impressed by the young people's presentation. This is very useful and shows the strength of the organization. Everyone can understand sustainability and is worried

about it," Ms. Li said.

Ms. Li further noted that in 2002, the Science and Technology Bureau started a scientific non-profit non-government association to assist farmers. She added that NGOs are really important for the next step in agricultural development in Yunnan. This work has been difficult but is very important, and yet there is little support for this kind of work in the local government. She thanked PEAC for its work in this area.

Next, PEAC's Prof. Kuang added some further thoughts.

He queried how best to keep farmers involved in China's development and not cut out. In light of China's WTO entry, it is important to help individual farmers remain competitive. At the moment, there remains a great sense of dependence among farmers on government assistance. People reuse the containers that pesticides come in, often pesticides provided by local government, without knowledge of the risks these empty containers pose. Other farmers wait to be given seeds by the government and allow these donations to determine what they plant.

Ms. Li of the Science and Technology Bureau expressed hope that farmers get to the point where they can organize and improve their situations by themselves rather than wait for the government to assist. Having corporations go into the rural areas is not really the solution either, Prof. Kuang added, because farmers bear all the risk.

At this point in the conference, participants broke up in to three groups, each considering different topics and noting their ideas on large pieces of paper. One group discussed prospects and limitations of organic agriculture in Yunnan. A second group considered the participatory guarantee system for organic certification. The final group held a discussion of key policy shortcomings in promoting and sustaining Yunnan's organic market, and explored key policy recommendations that civil society needs to make.

Conference Day Two

The following day of the conference opened

with a review of the previous day's discussion and key points made. Then each group presented their findings from the previous day's individual discussions.

The Organic Agriculture/ Sustainable Agriculture Evaluation Group

felt that it is important that during the promotion of organic agriculture, we combine the academic or scientific principles of organic farming with the practical experience of farmers. Participants suggested passing on recommendations for the evaluation of sustainable agriculture to local and provincial government for their own use. Continued discussion and debate is necessary within and among the participants' organizations in order to strengthen development of sustainability and organic agriculture. Participants felt it was valuable to reconsider evaluation methods for sustainable agriculture and land use, especially as those methods might affect their own project assessments. Further research on insect ecology and natural pest control is critically needed. Participants were interested to see PEAC take on more of this type of work.



Small group of staff from CBIK, Green Watershed, and Yunnan Eco-Network

The Participatory Guarantee Systems (Community Self-Certification) Group

recognized PGS as a new approach for promoting sustainability in rural areas, but recognize that it is not the only approach. It is necessary to strengthen the case-studies of PGS, including specific methods for implementation, results, and consumer feedback. Without this kind of information, it is difficult to promote in China.

Advantages of a PGS system

1. Easy to operate;
2. Saves money, the operating costs are low, appropriate/acceptable for farmer households;
3. Facilitates producers' participation in the entire process, creates enthusiasm for organic production;
4. Feasible for farming households (as op-

posed to existing certifications);

5. Would improve public recognition of organic products, promotes the development of organic agriculture;
6. Strong community level basis.

Disadvantages

1. Regional/local limitations, can be difficult to expand;
2. How to coordinate with the existing government management system?
3. How to establish a relationship of trust with consumers?
4. How to build internal quality control system?
5. The temporary unavailability of product markets and recognition by the public and existing organic certification agencies;
6. Policy support is not enough, must be supported by farmers;
7. Basic understanding isn't sufficient, real understanding and participation is necessary to implement the system;
8. Loose/informal organization may leave groups open to risks (market, otherwise);
9. Technical equipment for organic certification/monitoring is expensive, and farmers currently do not have this equipment.

The Next Step

Internal (farmers and NGO partners)

1. Further training with outside support
2. Create systems for external oversight;
3. Development of the local specialty products;
4. Nurture local groups: farmers' organizations, institutions and leadership;
5. Standardization in the production chain;
6. Play the role of a bridge (NGOs);
7. Market training;
8. Create fair trade, consumption channels.

External (consumers, government, and market)

1. Publicity: primarily targeting consumers;



Guizhou farmer-leaders present the small group's points

2. Seek initial financial subsidies;
3. Establishing brands;
4. Face-to-face exchanges between producers and consumers to establish a mechanism so that consumers have contact with the farming community;
5. Establishing local interest in and market for farm products and rural restaurants and entertainment (Nong Jia Le 农家乐 – popular rustic weekend getaways for urban people)
6. Regulation of the market system, monitoring and supervision

The Policy Recommendations Group

suggested that some of the largest environmental problems in China are caused by the government's insufficient implementation of existing policies. All farmers, and especially organic farmers, would be benefited by enforcement of existing bans on toxic chemicals, and extension of support for farmers associations that is already in law, but not yet in practice.

1. In addition to support for companies, the government should provide more targeted and specific support policies for small-scale farmers
2. When local government and extension officers promote or distribute agrochemicals, they should also provide trainings in more rational and scientific use of pesticides and fertilizers, including information on alternatives and risks. It may be nec-

essary to provide trainings for ag extension workers.

3. Formulate a policy to give more consideration to regional differences;
4. Recognize that economic wellbeing is the key in encouraging farmers to adopt organic, green, or sustainable agriculture practices;
5. Government should strengthen supervision and management of packaging/labeling and sales of pesticides and fertilizers.
6. It is critical to strengthen policy implementation, for example, for the pesticides have been banned, the government should strengthen the corresponding control
7. Relevant government departments should strengthen supervision and training so that farmers understand the labeling of pesticides and fertilizers as well as the existence of potential health and safety risks, and safer practices;
8. Full reporting by government monitoring agencies on food safety (pesticide residues) should be conducted. This will promote public awareness of issues with traditional/chemical agriculture, and represents recognition of a basic right-to-know.
9. Support for the development of chemical alternative technologies/techniques to support agriculture is necessary. Government should not support agrochemical companies without also supporting alternative research;
10. It would be valuable for the government to establish a system where initial risk is shared for farmers transitioning to green or organic agricultural production, for example, government purchasing futures on crops.

Following this review, Mr. Chen Yong-song of Yunnan Eco-Network gave a presentation on biogas and waste management options in Yunnan. He noted that 7 million tons of agricultural waste is produced in China each year and his presentation explored ways to make this waste more useful given its agricultural value.

In particular, he focused on the role of biogas in agricultural production and the promotion of more organic agriculture. This method also presents important savings for the farmers.

Yet there remains a lack of exchange among groups working in this field. Farmers need to learn more in order to stop regarding the waste as worthless and rather as something to be used. In this way, the Yunnan Eco-Network is working on promoting biogas in rural areas.

Following this presentation, Mr. Hil Padilla of Kadoorie gave a presentation on pig farming and of several new innovations in this area from Sweden. In particular he pointed out the ways that water washes through the piggens and onto the rice fields, thereby creating natural irrigation and fertilization while reducing labor.

After a short break, a Green Watershed representative presented recent research on the Lashi Lake area. He highlighted the diverse natural ecology and the extensive biodiversity projects in the area. In particular, much water from the area is sent to Lijiang where development has created greater demand. Yet development in the area neglects environmental needs. In the last four years, water across China worsened, slipping in rank from level two to level three. Pollution is especially serious on banks of La Shi, eliminating local plants that used to be prevalent.

Green Watershed has arranged for training for local farmers to help explain how to plant orchards in an ecologically sensitive way. The organization included the broader community by inviting some local Buddhist monks to participate. Other companies have also played a role in helping to promote organic agriculture in the area.

Population in the area is increasing, so human impact is increasing. One resource Green Watershed has tapped is organizing an elderly persons association to gather more local ecological knowledge and understand traditional preservation methods. Green Watershed has further organized people to discuss the local environmental issues. Heads of

households will hopefully spread this knowledge to other people in their families and communities. Even local songs have references to the ecology.

Overall, Green Watershed is trying to increase access to information in the rural areas. Whole community participates in community clean-up days. Afterwards, older people who want to have a chance to sing and dance.

In the discussion that followed this presentation, Green Watershed further revealed that, in this Naxi minority area, flower gardens are traditional. The organization has been promoting the cultivation of more flower gardens.

Conference participants wondered of Green Watershed was paying the farmers to participate in these various eco-activities. Indeed, the organization is funding some of the farmer organizations.

Next, a representative from the Center for Biodiversity and Indigenous Knowledge (CBIK) presented an overview of eco-agriculture. To this effect, the organization has been focusing on five points:

- 1) Research—connecting information with farmers. Emphasizing eco-agriculture can increase income.
- 2) Technology—how this resource can play an important role in bolstering eco-agriculture.
- 3) Market—what are the market regulations? Many are unclear. Consumers need training and farmer associations can be useful.
- 4) Structure—how best to approach the broader needs of successful eco-agriculture.
- 5) Government participation—a critical component to any local initiative.

Next, CBIK outlined the organization's efforts in fostering participatory discussions and farmer field schools. There was great emphasis on the importance of farmers training themselves. In some rural areas, the NGO has been called on to mediate conflict.

CBIK noted there is little government interaction between Kunming city people and the surrounding areas. CBIK working to connect farmers with urban consumers so water issues, which are especially bad in the borderline areas between rural and urban communities, can be cleaned up.

The CBIK representative emphasized this is very challenging work and there is a need to utilize the media and some government contacts to ensure success.

In the discussion to follow this presentation, participants described how farmer organizations can be very specific, focusing on just one crop. This can make it hard for different groups to mix given the great difference of their foci. Sometimes it can be advantageous to found a new farmer association but this is difficult, a frustrating bureaucratic process with lots of different forms and offices. TO some extent this continues to be connected to government suspicion of farmer organizations and of broader civil society, conference participants noted.

To this, a participant from Guizhou province described that it is in fact relatively easy to gain registration for a farmer association as long as you have a close relationship with the local government. This is, he noted, very important to secure the registration. The farmer noted that in his experience, the farmer organization provided copious gifts of first-harvest produce to the local government officials who then made the group's registration process easier and provided assorted points of preferential treatment. The leader of this group had very good relations with local government officials. Still, the total time for registration took 2 months.

In 2004, China passed a new

regulation encouraging farmer associations.

The next presentation

was from Mr. Ming, the business manager of Hao Bao Qing organic farm.

Organic farming in Yunnan is challenging, he noted, and not totally profitable at this point. One of the biggest challenges is to reach the market. While organic farming is good for protecting the environment, the representative wondered if the government could be of greater service in the estab-



Staked fields at HaoBao Qing organic farm, Kunming, Yunnan

lishment of this market. He also called on NGOs to be more supportive, especially in terms of getting products to the market and requested any technical or market advice that could be provided.

At this point, conference participants discussed how there remains a great divide between government and NGOs, despite often working on parallel issues. It is beneficial for NGOs to get together and share experiences.

In closure, Prof. Kuang

noted that by creating such dialog and information sharing between the groups, the goal of the conference was reached. Cooperation between groups on projects is important, while projects should be coordinated so overlap is avoided.

One of the best characteristics of Yunnan civil society, Prof. Kuang continued, is emphasis on study and learning. People participate in conferences because they are eager to learn. All the people here are interested in learning. In addition to information exchange, the other goal of conference is to set up cooperation. This is difficult in current China environment, especially between organizations. Yet conference participants agreed important steps in coordination and liaison had been achieved in this two-day meeting.

Participant Response

At the conclusion of the conference, paper was passed to each participant and all were asked to contribute their perspectives, responses, and advice to PEAC. Responses were anonymous, and have been summarized into a number of general categories as follows:

Organic and Sustainable Agriculture Evaluation

1. It is important that during the promotion of organic agriculture, we combine the academic or scientific principles of organic farming with the practical experience of farmers.
 2. Participants suggested passing on recommendations for the evaluation of sustainable agriculture to local and provincial government for their own use.
 3. Continued discussion and debate is necessary within and among the participants' organizations in order to strengthen development of sustainability and organic agriculture.
 4. Participants felt it was valuable to reconsider evaluation methods for sustainable agriculture and land use, especially as those methods might affect their own project assessments.
 5. Further research on insect ecology and natural pest control is critically needed. Participants were interested to see PEAC take on more of this type of work.
3. Participants emphasized that the next step for PEAC and their organizations is enhancing consumer awareness of organic and green products, including the environmental and health reasons that such products are superior. Particularly disturbing is the lack of trust in any certification systems.
 4. Many felt that one benefit to PGS is that the idea was very practical and seemed to have a lot of potential for implementation in China's rural areas.
 5. A few participants noted that PGS implementation would be impossible without capacity building in rural areas, including connecting farmer groups working on similar systems, encouraging cooperation and team building in rural communities.

Policy Recommendations

Participants felt that it would be valuable for government officials at the province, county, and some village levels to receive copies of the reports and information prepared by PEAC for this conference, including the province-wide evaluation of organic agriculture, as well as a summary of the assessment of sustainable agriculture. It was further recommended that some of the concrete policy suggestions that grew out of these reports and the conference be outlined for direct submission.

Participatory Guarantee Systems (Community Self-Certification)

1. Participants recognized PGS as a new approach for promoting sustainability in rural areas, but recognize that it is not the only approach.
2. It is necessary to strengthen the case-studies of PGS, including specific methods for implementation, results, and consumer feedback. Without this kind of information, it is difficult to promote in China.