



CASE STUDY: Community Based Systems, Lanxi, China The Farmers' Home Model

EXECUTIVE SUMMARY

The Farmers' Home model is an independent and open agriculture service facility integrating the functions of agricultural technology consultation, agro-technological extension, information services, and business operations. By combining agro-technological extension with information services it provides essentially a "one-stop" service. The Lanxi Farmers' Home is a store in a busy shopping area selling agricultural input products that farmers would otherwise have difficulty obtaining or not be aware of, such as seeds, fertilizers, and pesticides. Sales representatives offer farmers counselling as to how to use the products, and give out free technical materials. There is also a consultation desk staffed by local government bureaus where farmers can ask technical questions or market information on certain products.

1. BACKGROUND

Reason for Establishment

The Lanxi Farmers' Home was established to offer farmers a one-stop shop for agricultural products and information, greatly decreasing farmers' difficulty in accessing them. Previously, the products and information available at the Farmers' Home were unavailable in a single location, making these resources either prohibitively difficult for farmers to seek out or inequitably distributed across the region.

Organizers

The Farmers' Home was jointly created by the Lanxi agriculture, forestry, and water conservation resource bureaus.

Summary of Funding Sources

The government pays the Farmers' Home's US\$9640 yearly rent, and the Farmers' Home receives some small revenue from the sale of agricultural input materials. It was started with government seed money and could not survive without government funding and policy support.



Figure 1: Outside view of the Farmers' Home in Lanxi city

Marketing and Promotional Strategy

The Farmers' Home is located in a busy market area that many farmers pass through, with easy access and parking (Figure 1), allowing farmers to bring vehicles to pick up agricultural inputs. Outside appearance and internal display are also very important. There is a glass storefront so that passing farmers can see what is available, and the inside is spacious, well lit, and organized so farmers can easily find their way around (Figure 2). Also, agricultural input producers recognize that the Farmers' Home is a useful way to introduce their products to small rural farmers and assess how they are received.



Figure 2: Inside the Farmers' Home

Summary Time Path

The Lanxi Farmers' Home was founded in February 2002, and since then has exchanged information with 239,000 farmers. The Farmers' Home has offered production material supply and technological advisory services 86 000 times, distributed 154 600 free copies of technical materials, organized 102 free lectures and training for 16 000 people. Some 3 308 visitors used the facilities to browse the Internet. The farmers' home published 11 830 entries of information of various categories from the Internet. It has also been extended to Youfu, Yongchang and Mada townships.

Scale- Geographic Coverage & Size

The Farmers' Home model, located in a central area, is a bit less convenient to the average farmer than other models, but also covers a greater geographic area with a single shop. It reaches local farmers, agricultural enterprises, and specialized farmer associations as well as producers and agribusiness operators outside the area. The phone information service also allows the Farmers' Home to reach farmers unable to travel to the shop.

Relation to National Policy on Information and Communication

In recent years, the Chinese government has made the provision of market information to agricultural producers a primary objective, in order to facilitate more informed production decisions. This is a large shift from past policies, which focused simply on increasing production. The Farmers' Home fits into the Chinese Ministry of Agriculture's Action Plan for the Programme of Rural Market Information Service, which emphasizes

the development of both human and technology networks to supply information to rural agricultural communities. Under this plan, the Chinese government has offered funding and policy support to the Farmers' Home for startup and operating costs, without which it could not sustain itself.

2. OBJECTIVES

The objective of the Farmers' Home is to provide farmers in a wide radius around a central area with a one-stop shop for agricultural inputs and information. This is intended to increase farmers' choice of inputs, knowledge gathering ability, and income generating capacity.

3. STAKEHOLDERS

Rural Communities and Households

Producers and agro-business operators of agricultural products are the typical users of the Farmers' Home.

Rural Service Providers

Consultation groups in the Farmers' Home involve technically strong experts from the agriculture, forestry, water conservation, and other agriculture-related bureaus of the county government. Also, agriculture input suppliers can use them as a conduit to market products to farmers.

Policy-makers and their advisers

The Farmers' Home can allow policymakers to find out the types of crops farmers are producing, the types of inputs they are buying, and the questions they are asking. The establishment, operation, development, input and management of the Farmers' Homes is strongly backed by agricultural administrative departments of local government.

4. PRODUCTS AND SERVICES

The Lanxi Farmers' Home is located in a 450 square meter "store" that is rented within a busy shopping area of the county capital. It includes eleven specific sales counters, one expert consultation desk and one agricultural product exhibition and trade area. While shopping for agricultural production materials, farmers can at the same time speak with sales representatives for the correct application methods of their purchases or any other product. Relevant technical materials are also distributed to farmers for free at the counters. When farmers have technical questions or want to know market information about certain agricultural products, they can turn to the consultation desk for assistance.

Information and Products

The Farmers' Home offers diverse information, advising farmers on agricultural production and management, as well as on marketing their products (Figure 3).

Designated people on duty address people's information needs. The Farmers' Home emphasizes the principle of combining material and information services. It gives not only practical technical information, but also new crop varieties, techniques and pesticides suitable to local areas and market price information. In the past 3 years, the Lanxi Farmers' Home has produced and sold more than 243 new crop varieties and pesticides and 95,100 kg of improved crop seeds, which have significantly helped in diversifying and improving the efficiency of agriculture in Lanxi. When farmers ask extension agents questions, it serves as both a pressure and a motivation. It reinforces the urgency of grassroots science and technology workers to learn modern agricultural science and technology, to know technical and market information, and to broaden the coverage of their knowledge.

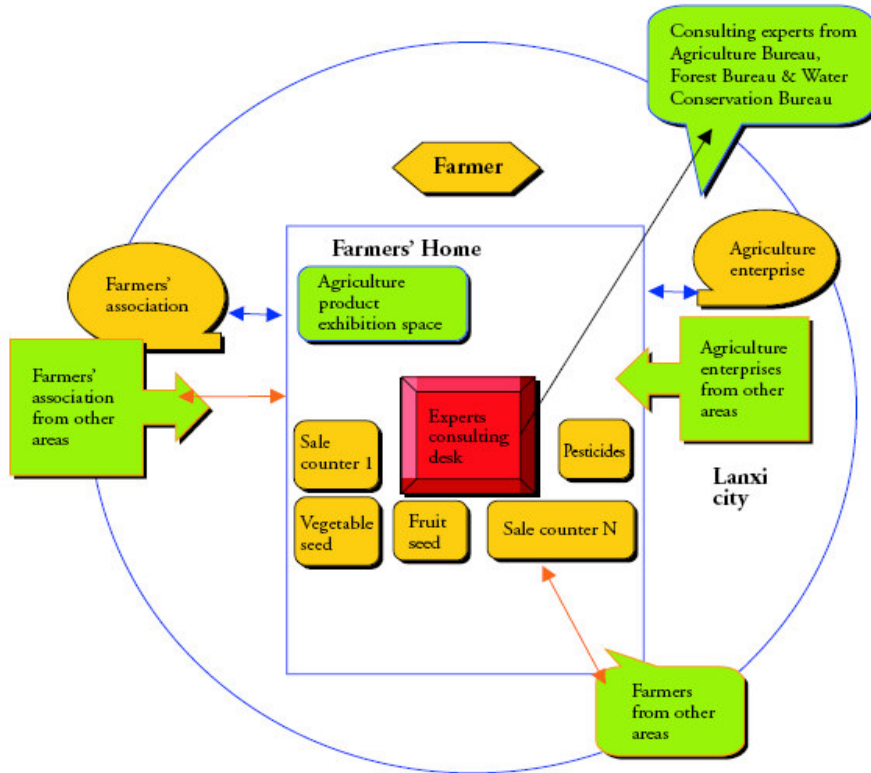


Figure 3: Information flow of the Farmers' Home model

Approaches to content development

Farmers coming to the Farmers' Home ask questions and request products, therefore they play a role in deciding what the content will be. The content is provided by expert consultants employed by the government who ostensibly can verify the information's accuracy. Its relevance is determined by farmer questions.

Content also comes from websites such as the China Agricultural Information Network, the Provincial Agricultural Information Network and other relevant Web sites which provide market supply and demand information of local agricultural products and information for local agricultural production which can be downloaded for free distribution to farmers.

5. TECHNOLOGY

IT System Architecture

The farmers' home at present has four computers, one touch screen computer and one large LCD (digital text) displayer that is 8 sq m in size. Internet connectivity through broadband is available, through which agricultural information Web sites can be accessed.

Software

The computer software being used is Windows 98.

People/Organizations

There is always a senior expert at the consultation desk to provide advisory information to farmers. The Farmers' Home also has organized an advisory group consisting of 28 experts, of whom 22 are specialists from the agricultural bureau and three each are from the forestry and water resource bureaus.

The Lanxi Farmers' Home offers:

- Face-to-face Consultations with experts at the Farmers' Home counters.
- An auto-audio service system in which an automatic recording responds to farmer questions by phone.
- Electronic screens with agricultural price information (Figure 4) and policy news.
- The farmer's home in Lanxi also coordinates with the *Lanxi Daily* newspaper to run a column called *Wind of the Field* every Thursday. The column takes up the entire second page of the daily, which is the economic page. The newspaper has a circulation of 15,000 copies per day.
- In cooperation with 5 other counties, Lanxi has launched an agricultural information website that features the local rural economic dynamics and information of agricultural product supply and demand.



Figure 4: Electronic screen displaying agricultural product price information at the Farmers' Home

6. FINANCIAL ASPECTS

Business Model

The farmer's home operates as a public good, selling inputs to help cover costs but mainly financed by the government. This gives it the advantage of being able to organize large information science activities, such as technical trainings given by experts.

Incomes/Revenues

Income comes partly from the sale of agricultural inputs but mainly from government support. This is a stable funding base that allows for the development of strong service.

Costs

The Farmers' Home's costs include rent, and the organization of large scale information-service activities, such as hiring experts to deliver technical training to farmers.

7. KEY ISSUES & CONCLUSIONS

Benefits

One key benefit of the Farmers' Home is that it has helped to change Lanxi farmers' perception of information services. Information and inputs such as fertilizer and pesticides have become something that many farmers expect and see as an essential part of agricultural production.

In addition, the nature and scope of rural government services have changed. The Lanxi Farmers' Home emphasizes the principle of combining material and information services. In addition to providing practical technological information, it also supplies new crop varieties, technology and pesticides suitable to local areas. In the past three years, it has introduced and sold more than 243 new crop varieties and pesticides and 95 100 kg of improved crop seeds, which have significantly helped in diversifying and improving the efficiency of agriculture in Lanxi.

Constraints

Lanxi is relatively well-off compared to other rural areas in China where ICT is being implemented, with a senior middle school graduation rate of 58.8%, 25% higher than the next most educated region studied, and a per capita income of \$459, compared to \$215 in Shucheng county. Therefore it is possible that this model would be more difficult to implement in other areas.

Farmers' capacity to use information needs improvement

Most farmers are uneducated, which makes it harder for them to know how to benefit from the available information and to understand why they need to adopt technological innovations or use market information. This could reduce the demand for the Farmers' Home, although because it also offers them an opportunity to buy input products, it may be a way of drawing in farmers who would otherwise not be interested.

Low farm income levels make government funding necessary

Even in Lanxi, farmers are generally too poor to be able to pay the premiums on agricultural products and information that would allow the Farmers' Home to cover its costs without government subsidies. While this funding is currently assured, the Farmers' Home is vulnerable to government budget cuts which may make long term planning more difficult than if it was able to sustain itself through the sale of products alone.

Low organization level of farmers and small-holder farmers lowers the efficiency of information services

Many farmers are not organized or benefiting from a collective understanding of the market, and therefore their production is not focused on something that might be in demand and/or have competitive advantage. With so many small-holders all doing their own (different) thing, there is no focused demand for information. Under such circumstances, information service workers are overwhelmed handling a large number of simple and repeated questions. As a result, the investment in agricultural information service is quite high and the impact of information use is relatively low. In areas where farmers are not well organized into groups, collectives or specialty production associations, the ripple effects generated by services such as the Farmers' Home become less significant than they could be.

Lack of trained personnel

The ratio of information service workers to rural laborers, the users of service, is basically one to several thousands. In addition, along with the furthering of agricultural product diversification, crop varieties and animal breeds used in rural areas are increasing day by day, while the requirements for agricultural technology are much diversified. On the other hand, the knowledge of many existing agro-technological workers is outdated, making it difficult for them to suit the requirements of new and complex situations. Third, information service workers in rural areas not only need to be familiar with agricultural technology but need to master computer operation and applications of the network, the laws of market economy *and* be good at collecting, processing and publishing market information. At present, proper human resources are very scarce, especially in townships and villages. Since most of the information service workers at this level are part time, it is very difficult to ensure that they will be dedicated to the job.

Lack of content and need for improvement in the quality of information available and its reach to the grassroots level

Generally a great deal of information is available relating to technical problems, and it is relatively easy to find, but market information is much more difficult. It can be hard for associations to get detailed information on their particular commodity. Even when some analysis exists on past and present markets, there is little that predicts future trends. 64.7% of farmers in Lanxi said that it is not easy to get the information they need.

In addition, the Farmers' Home is located in Lanxi city proper, 10 km or more away from the rural areas where many farmers live. It is not convenient for many farmers to go into town only for a consultation. The use of telephone and computers to resolve problems from a distance is rather limited. Information provided through television, radio, newspapers and periodicals is sometimes without accurate targeting and produces unfocused or unspecific effects. Therefore, it is necessary to improve the capacity of the information service organization network to reach farmers who do not come to the Farmers' Home.

Key Points for Replication

(i) Government backing in the form of policy support and funding is the first needed step in setting up a Farmers' Home. Government seed money is needed to get the system started and considering that agriculture materials produce small profit, government support is also needed to keep the service going. In Lanxi city, the government continues to provide financial support to the Farmers' Home, which opened four years ago. Among other things, it pays the annual rent of US\$9 640 for the premises.

(ii) Considerable thought should be given to the location, outside appearance and internal display of services. The service facility should be located in an area with a large number of people pass by and there is easy transportation access, preferably close to a parking area. Easy access for automobiles is important for the farmers who will be going to the facility to pick up items as well as information.

A spacious facility with sufficient light produces a feeling of openness and easy accessibility and thus encourages farmers, or anyone, to come often, find what they need and take their time picking up whatever information they might think is useful. The Lanxi Farmers' Home has a wide glass storefront that lets people in the street clearly see the products displayed. Inside, the products and counters are well organized, and users can easily spot and find what they need, including experts for consultation.

(iii) The human resources of different fields need to be consolidated in the preliminary phase. In Lanxi, the agricultural, forestry and water conservation bureaus formed a joint consultation group to pool their resources and strengths in formulating the Farmers' Home model to provide better service. At the same time, government regulations

covering work ethics and formalities in dealing with clients were set up to guide the conduct of each member of the group so as to ensure the effects of service.

Mapped Across the BRDD Elements

Content adapted to Local Context

Information is based on farmer requests and therefore the content is by necessity locally adapted. Demand requires that it be put into languages farmers can understand.

Building on existing systems

Farmers are already used to travelling into town to buy input products. The Farmers' Home adds value to that system by offering new products and information.

Capacity building

The Farmers' Home offers trainings from technical experts and teaches farmers how to use the agricultural inputs sold.

Access and Empowerment

Supportive policies and government awareness of the need for an information service are hugely important to success. The Farmers' Home could not exist without government financial and policy support.

Strengthening partnerships and participation

The Farmers' Home connects agricultural product suppliers to farmers, making them more responsive to farmers needs.

Realistic approach to technologies

The Farmers' Home takes a realistic approach to technologies that farmers might not know how to use by providing intermediaries to help farmers access information.

Costs and financial sustainability

As long as the Farmers' Home is supported by the government, it is financially sustainable. However, its operations are constrained to some degree by limited funding.

URL of the full report:

http://www.fao.org/documents/show_cdr.asp?url_file=/docrep/007/ad504e/ad504e00.htm

Prepared by Zhong Yongling, Michael Riggs, and Nathaniel Heller