

A PRACTICAL APPROACH TO SUSTAINABLE COMMUNITY FORESTRY IN ANHUI PROVINCE, CHINA

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ABSTRACT

Community forestry has changed the traditional slash-and-burn method and the large-scale utilization style of government forestry management. It plays an essential role in guiding and facilitating rural poverty alleviation. This paper describes how the community forestry component of the Center for Environment, Development and Poverty Alleviation (CEDPA) has helped the farmers meet the challenge of poverty alleviation through the creation of a model involving household forestry, science and technology demonstration households and independent farmers' organizations to implement ecologically sensitive poverty alleviation and how it plays a key role in helping the poor find the road to riches.

INTRODUCTION

Community forestry is a conceptual transformation from traditional rural forestry to a new form with a strong focus on community participation. Modern community forestry is based on forestry as a resource industry in which local people fully participate. It plays a key role in mitigating the interrelationships among economic, ecological and social factors in rural community development, helping the poor increase their economic income, lessening their burdens, protecting forest resources, improving the quality of the environment, providing employment opportunities for the people, and therefore, facilitating harmony between man and nature. As a result, poor farmers who participate in it are both enthusiastic and involve themselves actively. The innovative use of participatory approaches in community forestry is a new way of thinking, which, through the process of participation, helps farmers recover certain rights which belong to them.

CHALLENGES FOR POVERTY ALLEVIATION IN MOUNTAINOUS REGIONS

Poverty is a problem for both developing and developed countries. China is an ancient country and civilization. However, it is still at the so-called "preliminary phase of socialism". Agriculture has been the biggest challenge for the Chinese government. Since its rural reform policies were initiated in 1980s, the Chinese government has gradually realized that the biggest problem in China is still agriculture. Rural population increase and over-exploitation have led to the degradation of a fragile environment, which raises difficult questions for the government.

The greatest challenges for poverty alleviation are in the rural mountainous regions, where inadequate transportation systems, lack of information, poor living and working conditions, low quality of labour, low productivity and so forth are contributing factors to poor health and sanitation facilities, lack of cultural life

and other poverty-related problems. The Chinese government has made incessant efforts in combating poverty, and consequently, the absolute numbers of poor and the poverty ratio are decreasing. However, it remains a difficult task to continue poverty alleviation efforts and to find ways to help vulnerable groups avoid returning to poverty. Therefore, it is essential to adopt practical and efficient poverty alleviation approaches in order to ensure that sustainable community development can be realized.

CEDPA'S PRINCIPLES FOR COMMUNITY FORESTRY

Community forestry is one of the most important components of CEDPA. The project is characterized by "one approach and two awarenesses", that is, it puts into practice participatory approaches and develops environmental awareness and gender awareness. As a result, in project activities farmers are empowered with the "seven rights", which are: the right to knowledge; to speak out, to decide, to implement, to manage, to use and to own. Therefore, farmers are encouraged to take an active part in project design, implementation, monitoring and evaluation.

People-centred Principle of Participation

The direct beneficiaries of the community forestry project are the poor households in the remote project area. The people there have the opportunity to participate voluntarily in some of the project activities. They are encouraged to voluntarily participate in choosing those activities that they can undertake and to take training in relevant forestry technical skills. This proves to be effective in helping them develop their own mountainous resources from which they can benefit in the shortest period of time. At the same time, their technical and managerial skills are improved, which ensures that the sustainable development targets can be reached.

Environmental Protection Awareness

The dialectic relationship between environment and development has received careful attention in the field of community forestry. In community forestry, poverty alleviation activities cannot be encouraged if they are undertaken at the cost of environmental degradation. Under CEDPA, the conventional approach to community forestry focusing on large-scale planting of trees is replaced by household-based forestry, where each household manages to return their crop lands to forest on the hillsides around their homes while at the same time, soil and water conservation measures are taken. The development of the household-based forestry economy has improved the well-being of farmers and prevented further environmental deterioration.

The Awareness of Gender Equality

Attention needs to be given in community forestry to the issues related to gender equality by encouraging women to participate in project activities and making efforts to create employment opportunities for them. In project design and implementation, women's participation is essential. In so doing, women are able to get out of their families and develop themselves in a wider society. Thus, building gender awareness is a way of improving the ability of women to participate in social activities and changing their degraded social status.

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BUILDING THE PARTICIPATORY SUSTAINABLE POVERTY ALLEVIATION MODEL

The key for community forestry is the process in which groups with different economic, social, political and cultural interests can participate. However, this way of participation cannot simply be done by applying a framework pre-designed by external experts or helpers. It can only be meaningful if it is done through two-way communication between the local people as project partners and the external experts and helpers, after which a common understanding with regard to the project can be made. This understanding reflects the interests of various stakeholders and is the baseline for project design and implementation. Only based on this way of working together with the local people will participatory community forestry make sense, as can be seen from the experience of CEDPA. CEDPA's sustainable poverty alleviation model of "household forestry, demonstration household and independent farmers' organizations" is the result of this effort.

Household Forestry

The foundation of CEDPA's "development style" of the sustainable development poverty alleviation model puts particular emphasis on full coverage of the village in project planning, project design based on households and subsidies allocated directly to poor households. At the same time, in the process of project implementation particular emphasis is placed on the impact of the project on the environment. Thus, water and soil conservation measures are a key feature of community forestry. Specifically, the features of the household forestry are as follows:

- (1) With regard to project participation, emphasis is given to the principle of voluntary participation of farmers, government agencies and technical bureaux. A bottom-up approach is adopted in project design, selection, implementation, monitoring and evaluation.
- (2) The project design favours small-scale and relatively scattered activities.
- (3) The selection of trees to be planted is based on species which farmers prefer and trees which can offer good economic returns within a short period of time are planted so as to ensure the sustainability of the forestry activities.
- (4) Trees are planted on the hillsides around farmers' homes and barren mountain land suitable for forests, and cultivated slopes are returned to forest, with appropriate soil and water conservation measures taken.
- (5) When trees are planted, measures are taken to forbid clearing by burning or clear-felling. Various water and soil conservation measures taken ensure "three conservation" hillsides, that is conserving water, conserving soil and conserving soil fertility.
- (6) To avoid soil erosion, timing of activities is restricted in terms of seasonal plantation. For example, unless activities must be done in summer (such as tilling the soil in bamboo stands), everything else which might affect the soil is arranged after the rainy season.
- (7) Through establishing a system of science and technology demonstration households, the project can have an impact across a much larger number of people, bringing more benefits to the local people as they learn from each other's technical skills and experience.

- (8) There is a high level of transparency in financial management, in which the project carries out inspections, provides subsidies as rewards, publicizes the awards granted and disburses the funds on a timely basis so as to encourage farmers to carry out soil and water conservation measures effectively.

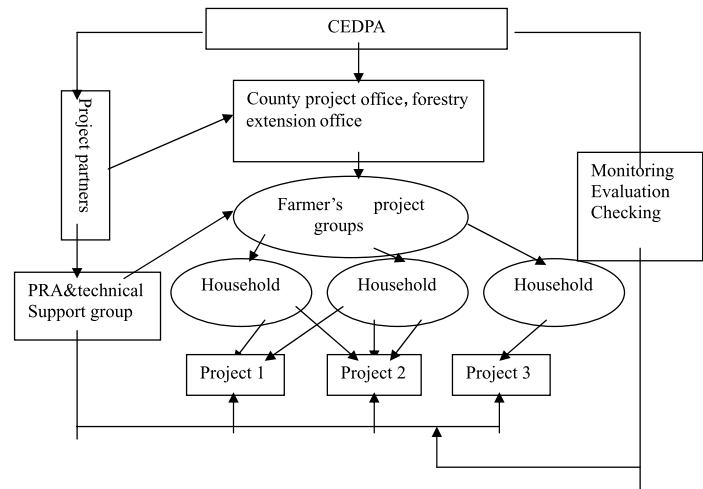


Diagram 1: participation process for household forestry

Science and Technology Demonstration Households

The principle of tripartite participation has always been a priority for the community forestry component of CEDPA, which emphasizes not only the participation of farmers but also of government offices and technical bureaux. Technical staff play an important role in disseminating technical information, participating in project design and planning, and provide the technical training and instruction on which the system of science and technology demonstration households is based. Several years of experience have shown that increasing the technical knowledge of farmers is a prerequisite for them to improve their technical skills and their capacity for project participation. Moreover, it has greatly increase farmers' incomes and created an incentive for their ongoing participation in forestry activities.

(1) The design of three-level training network

Due to the interdisciplinary nature and multi-party involvement of community forestry activities, it is not possible to provide a single type of training for all those involved. Thus the project designed a three tiered training program based on the needs of different parties involved in the project, namely, training of trainers, training of science and technology demonstration households (including training of indigenous specialists) and training of farmers.

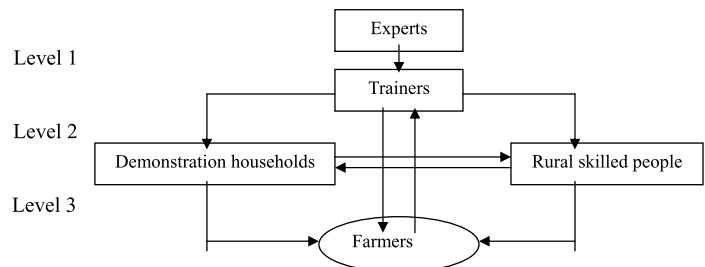


Diagram 2: The training framework

(2) **Designing technical materials on community forestry**
Farmers are the main participants in community forestry. However, due to social and economic constraints, poor rural households often lack the necessary skills for participation and their mindsets are still dominated by some traditional management methods in forestry, which is an impediment to the dissemination of new technology. Therefore, CEDPA organizes experts in community forestry to design practical technical materials, which are easy to understand for the farmers as part of the capacity building program.

(3) **Improving the technical service system**
To increase the scientific content of the household forestry program, a large number of forestry technicians with relatively high theoretical background in forestry, years of work experience, passion, perseverance and selflessness are needed. For this reason, CEDPA has employed forestry experts from the Chinese Academy of Forestry, Anhui Agricultural University and Anhui Forestry Department to teach selected technical staff participatory methods and intensive technical skills and knowledge. These people have become trainers after the training and established themselves as technical training service groups to training demonstration households, rural skilled people and farmers in different forestry seasons. At the same time, technical journals such as the Practical Technology in Forestry and Forestry and Society are distributed to the demonstration households to expand their horizons. By so doing, each participant in the training has learned one or two technical forestry skills, which has been beneficial to their self-development.

(4) **Establishing the science and technology demonstration household system**
Household forestry is based on a people-centred principle with particular focus on people's participation and project sustainability. CEDPA provides quality training for households, who have in turn become qualified technical leaders. They play an important role in teaching and helping others grasp the necessary skills and knowledge in forestry and in so doing ensure the sustainability of the project.

It is important to note that CEDPA's approach to the system of demonstration household in forestry is unique in some respects. In other projects it is common to select demonstration households at the outset of project activities and through them to disseminate experience and knowledge on a broader scale. This approach involves complicated procedures and high operational cost. In contrast, in the community forestry component of CEDPA the demonstration households are identified in the process of implementing the household forestry project. Subsequently, a network of demonstration service is then built around the identified households, and agreements are signed between CEDPA and the household which stipulates the type of service to be provided and the number of households to be served by the demonstration household. This has proved to be effective in serving both project implementation and forestry demonstration purposes with the active participation of other households. It is also a way of saving operational cost and enhancing the productivity of the farmers. In addition, these agreements stipulate that monitoring will be conducted by CEDPA with regard to the services provided by each demonstration household. Moreover, small subsidies are given as rewards to those with good performance.

Enhancing Farmers' Ability of Self-Help

(1) Establishing independent farmers' organizations is essential for sustainable forestry

It was found that the household-based forestry was still based on small-scale agriculture with limited economic output. Thus, not only was it urgent to consolidate and improve it, but also to support the establishment of independent farmers' organizations based around the system of science and technology demonstration households. CEDPA aims to develop human resources and enhance the self-education and self-help abilities of farmers through this channel. Thus, the establishment of independent farmers' organizations represents a higher stage of development of the family responsibility system and is an important guarantee for the sustainability of agriculture and forestry in rural areas. It represents both a learning process and consciousness rising for farmers.

(2) Role of the independent farmers' organizations

- organizing farmers to participate in the management of the organization (enhancing their self-management ability)
- providing technical training (improving their vocational skills)
- creating employment opportunities for surplus labour
- providing opportunities for women to participate in community activities
- increasing the prices of forestry products which were cheap and difficult to be sold and stabilizing the price and market for non-timber products
- providing technical support and market information

(3) Types of the independent farmers' organizations

- operational management type

After the household forestry project was implemented, to make up for a lack of necessary skills and knowledge in operational management, some households voluntarily established special interest groups to help each other. These later joined together to become independent organizations such as the chestnut growers association.

- community development fund

In order to protect the forest and lessen the burden on the natural resources as a result of over-cutting of trees, steps are taken to implant environmental awareness and promote sustainable utilization of resources by farmers. Based on the voluntary participation of farmers, and with a modest amount of financial support from CEDPA in the form of a Community Development Fund, community development organizations such as the forestry farmers associations have been established.

CEDPA'S ACHIEVEMENTS IN COMMUNITY FORESTRY

CEDPA's community forestry project has benefited 15,245 households, which counted for over 80% of the poor population in Huoshan County, Anhui Province. It completed the afforestation with bamboo, chestnut, fir trees and other economic trees; at the same time improving the production of the low-yielding chestnut, bamboo and tung oil trees over a total area of 3,810.5ha. From 1998 to 2002, the total economic income reached RMB 7,868,000,

with an average cumulative increased income of RMB510 per household and average annual increased income of RMB102 per household.

Through the project three forest farmers associations aimed at the protection and comprehensive utilization of the secondary growth forest were established. A total of 369 households joined the associations, in which engineering techniques were used with regard to mountain closure and planting trees of 616.6 ha. As a result, the secondary growth forest has been protected and wisely utilized, with important consequences for reducing soil erosion. In addition, farmers' awareness of environmental protection has also been raised.

A total of 230 training sessions on forestry technology were organized, in which more than 8,536 people attended. More than 35,000 copies of training materials were distributed during the training. As a result, farmers have learned practical knowledge and grasped one or two new forestry technical skills, which is necessary for them to improve their forestry management abilities.

The system of demonstration households has had 160 households take the lead in disseminating technical information, practical techniques and knowledge in forestry to 1,707 households. The average income from forestry per household was RMB 408 before they became the demonstration households. In contrast, after they became the demonstration households, their income from forestry activities increased to RMB1,142, an increase of 180%. The average income from forestry activities of the households influenced by the demonstration households increased by RMB259, an increase of 113%. Therefore, this project is widely accepted by the local people because of its sustainable potential.

Case 1

In Liangganong Village of the Shangtushi Township, 107 chestnut households voluntarily established their own chestnut growers association with aim to solve the problems in chestnut production and marketing. After these associations were established, 10 households which have chestnut production and management experience were chosen as the demonstration households and given relevant skill training. These households became leaders in facilitating and helping others learn and grasp the necessary skills for chestnut production and management. As a result of the upgrading of low-yield forest, 15,000 kg of chestnuts were harvested in the village for that year, being an increase of 11,000 kg. Their income increased by RMB 66,000, being an increase of RMB 616 per household. Moreover, among the 10 chestnut demonstration households, the largest amount of chestnuts harvested reached 1500kg per household, representing an income of RMB 9,000.

Based on the above achievements, a chestnut production service center was also established with a view to providing the farmers living in and around the village with chestnut production and integrated pest management service.

Case 2

With regard to reasonable utilization of forest resources, correcting the wrong practices in forest exploitation and restoring the fragile ecosystems, CEDPA supported 119 households in Songlin Village of Taiyang Township to establish a forest farmers association. After the association was established, 188 ha of natural secondary growth forests were protected. At the same time, farmers were encouraged to use the branches, bushes and wood chips in the forests to grow edible fungus. In that year, 140,000 bags of mushrooms were grown and sold, which resulted in an income increase of RMB100,000 with an average net income of RMB300 per person. In 2001, the total production reached RMB150,000 with an average net income of RMB427 per person.

CONCLUDING REMARKS

The sustainable poverty alleviation model of "household forestry, science and technology demonstration households and independent farmers' organizations" as developed by CEDPA has proved to be effective in poverty alleviation and environmental protection.

The independent farmers' organization is an innovation in modern rural economic cooperation, and is thriving. It builds the capacity of poor farmers in self-development, self-help and self-management, which is necessary for them to get out of the vicious cycle of poverty. Also, it is a way of training those farmers who have skills to take the lead in fighting poverty. Moreover, through protection and sustainable utilization of natural resources, it provides village surplus labour and especially women with employment opportunities, which is important for social stability in rural areas. It is through this effort that farmers have the opportunity to increase their incomes and their ability to pay reasonable agricultural taxes. Thus it is a way of assuaging the conflict between the farmers and the government.

With a unique feature of self-help of farmers, the independent farmers' organizations play a role in uniting people to achieve their common objectives in a way which cannot be done by a single household or a community or even the local government. In addition, these organizations are helpful for farmers in terms of helping them learn and grasp updated technical skills and knowledge, reducing their operation and management cost and increasing forestry production and incomes.

In collaboration with various stakeholders, community forestry in Huoshan has set a new starting point different from traditional modes of forestry development. The practical approach to sustainable community forestry developed in Huoshan is hoped to have its impact on forestry governance-related policies of the country.

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