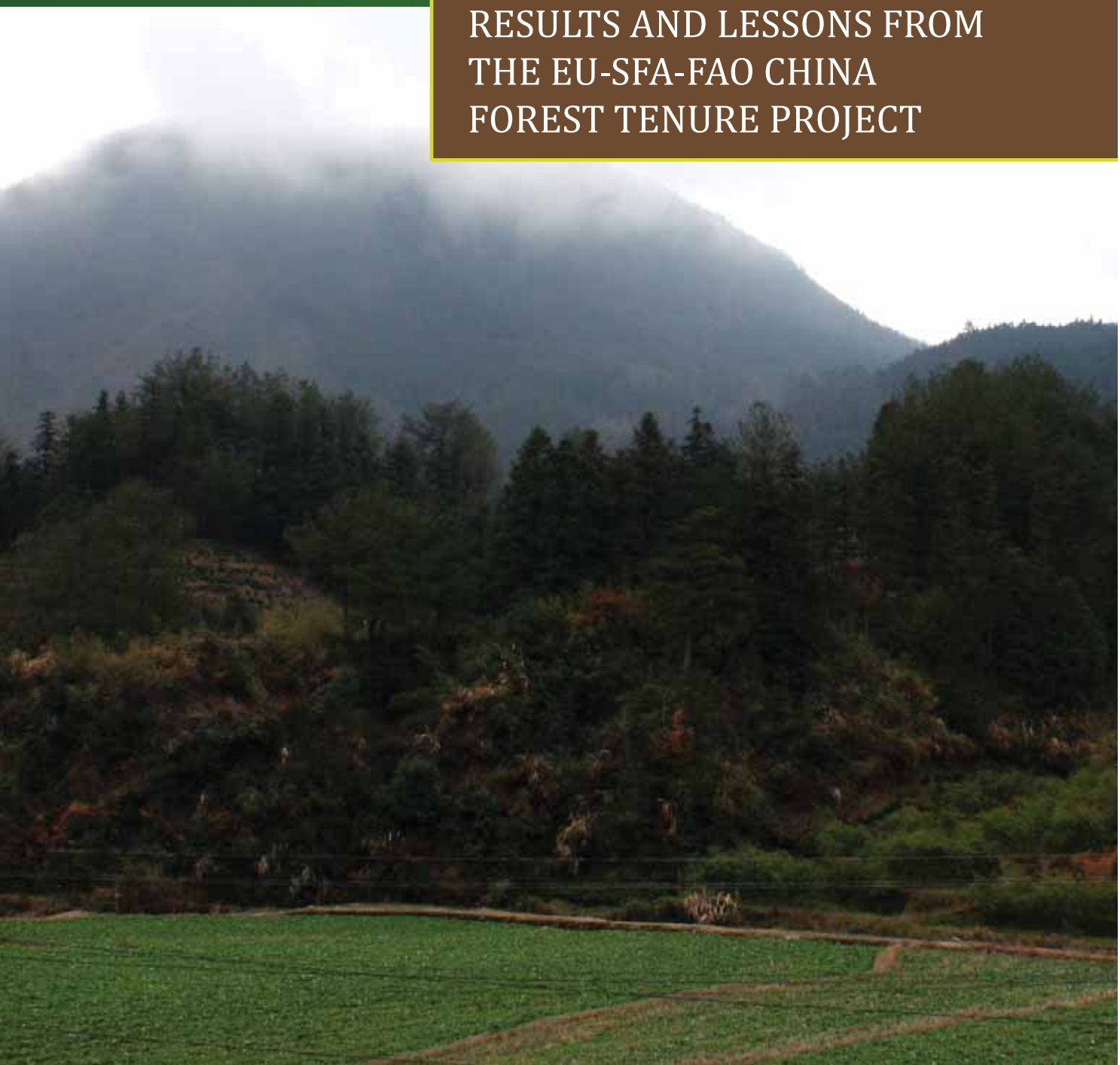




# FOREST TENURE REFORM IN CHINA

RESULTS AND LESSONS FROM  
THE EU-SFA-FAO CHINA  
FOREST TENURE PROJECT



The designations employed and the presentation of material in this information product do not imply the expression of any opinion whatsoever on the part of the Food and Agriculture Organization of the United Nations (FAO) concerning the legal or development status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. The views expressed in this information product are those of the author(s) and do not necessarily reflect the views of FAO.

All rights reserved. FAO encourages the reproduction and dissemination of material in this information product. Non-commercial uses will be authorized free of charge, upon request. Reproduction for resale or other commercial purposes, including educational purposes, may incur fees. Applications for permission to reproduce or disseminate FAO copyright materials, and all queries concerning rights and licences, should be addressed by e-mail to [copyright@fao.org](mailto:copyright@fao.org) or to the Chief, Publishing Policy and Support Branch, Office of Knowledge Exchange, Research and Extension, FAO, Viale delle Terme di Caracalla, 00153 Rome, Italy.

# Contents

<b>FOREST TENURE REFORM IN CHINA</b>	<b>1</b>
Tenure reform history	1
Reform process and results	2
Forest policy and regulatory constraints	4
<b>THE CHINA FOREST TENURE PROJECT</b>	<b>5</b>
Project organization and strategy	5
<b>RESULTS AND LESSONS</b>	<b>7</b>
Forest tenure trade centres	7
Tenure trade services	8
Forest farmer cooperatives	
Status of forest farmer cooperatives	10
Capacity development	10
Status of forest farmer cooperatives	11
Capacity development	11
Guidelines for cooperative development	12
Participatory forest management	13
Testing the participatory forest management materials	13
Towards an enabling regulatory framework	14
Developing an effective forestry extension system	15
<b>THE WAY FORWARD</b>	<b>17</b>
<b>REFERENCES</b>	<b>19</b>

# FOREST TENURE REFORM IN CHINA

The China Forest Tenure Project was implemented by the State Forest Administration (SFA) and the Food and Agriculture Organization of the United Nations (FAO). An appreciation of the lessons learned from the project requires an understanding of the context in which it operated. For that purpose, a brief sketch of the history of tenure reform in China is presented here, followed by a discussion of the tenure process and background information on policy and regulatory constraints.

## TENURE REFORM HISTORY

---

Tenure reform has been a major element of agricultural – including forest – policy since the beginning of the People's Republic of China in 1949.

Particularly since market-oriented reforms in the 1980s, there has been a trend towards the privatization of land use and management rights. The

Figure 1 The benefits of secure tenure



household responsibility system was introduced in the early 1980s. By 1984, forestland certificates had been issued for 97 million hectares of forest land, with one-third (30 million ha) designated as “private mountains” to be managed by, in total, 56 million families.

More than 50 million ha were contracted out by collectives (local government) to groups and individuals as “responsibility mountains”. By 1986, 69 percent of the collective forest area had been allocated as private mountains or responsibility mountains.

Regulations were introduced in the 1990s to enable the transfer of forest land use and management rights.

These various reforms resulted in a variety of management regimes at the local level: household management, collective management (local government or groups) and shareholding arrangements.

Because farmers' rights were not clearly defined, however, the reforms resulted in a lack of tenure security. Moreover, the cutting-quota system restricted farmers' management and benefits and therefore their interest in forest management.

Building on wider legal reforms in rural resource management, a new forest policy to “accelerate the development of forestry” was enunciated in 2003.

The policy objectives were to enhance the role of forests in ecological rehabilitation and environmental protection, increase timber supply through commercial investment, and promote rural well-being and poverty reduction. The policy emphasized the need for long-term use rights to private mountains and to secure tenure in other arrangements, and the need to increase the effectiveness of collective forest management.

A new round of forest tenure reforms was initiated in 2003, with pilot activities in four provinces – Fujian, Jiangxi, Liaoning and Zhejiang. The lessons from those pilots are reflected in a 2008 decision by the Communist party of China and State Council of the PRC on collective forest tenure reform.

#### **Box 1 Collective forest-tenure reform objectives**

1. Clarify property rights and extend duration to 70 years.
2. Issue a certificate to each household for the verification of scope and rights.
3. Grant farmers more freedom to manage their contracted forests.
4. Permit contractors to subcontract, lease, transfer or mortgage forests.
5. Ensure farmers' rights to benefit from their forests.

Source: Wang et al., 2012

## **REFORM PROCESS AND RESULTS**

---

By 2011, the property rights of 168 million ha (92 percent) of collective forest land had been clarified, with certificates issued for 144 million ha. About 82 million households had received forestland certificates.

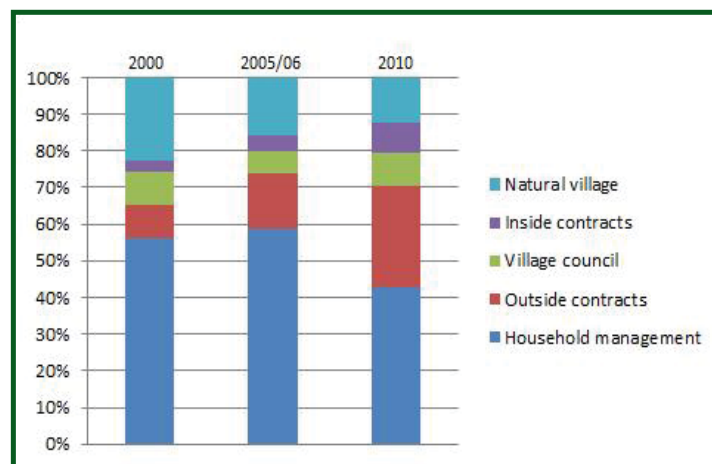
The local processes of tenure reform were guided by the following principles:

- each household has equal rights to contract collective forest land;
- balance is to be maintained between farmers' benefits and ecological protection;
- farmers' preferences are to be respected;
- farmers are to be fully informed about the reform and have the right to participate in making reform decisions;
- the reform is to be in accordance with the law as well as local conditions;
- A majority of two-thirds of forest farmers is required for the adoption of decisions about tenure arrangements.

Reportedly, these principles were widely adhered to.

According to one survey (Figure 2), the frequency of forest management by contracted households increased a little immediately following the reform and then declined. There was also a steady decline in management by natural villages, whereas the management by village councils was the same in 2010 as it was in 2000.

Figure 2 Evolution of tenure arrangements, 2000–2010



Source: Xu et al., 2012

The main increases were in subcontracts by individuals and organizations, both inside and (even more so) outside villages.

These changes reflect the difficulties experienced by many households in managing small and often scattered forest plots, particularly in villages with a high level of labour migration.

There are large variations in this general pattern, however. For example, the contracting of “outsiders” is more common in Yunnan than in most other provinces. Similar variation exists as a result of differences in forest type and condition, and there is also variation in the area allocated to households.

Figure 3 A tenure certificate for generations



Case studies carried out by the project found that tenure reform had, in most cases, succeeded in increasing farmers’ sense of tenure security. This was also demonstrated in an increase in plantation establishment after the reform.

Three of the five reform objectives (clarification of rights, certification of rights, and subcontracting) appear, therefore, to have been achieved as planned.

On the other hand, the objectives of granting farmers more freedom to manage forests and ensuring their rights to benefit from such management remain to be achieved.

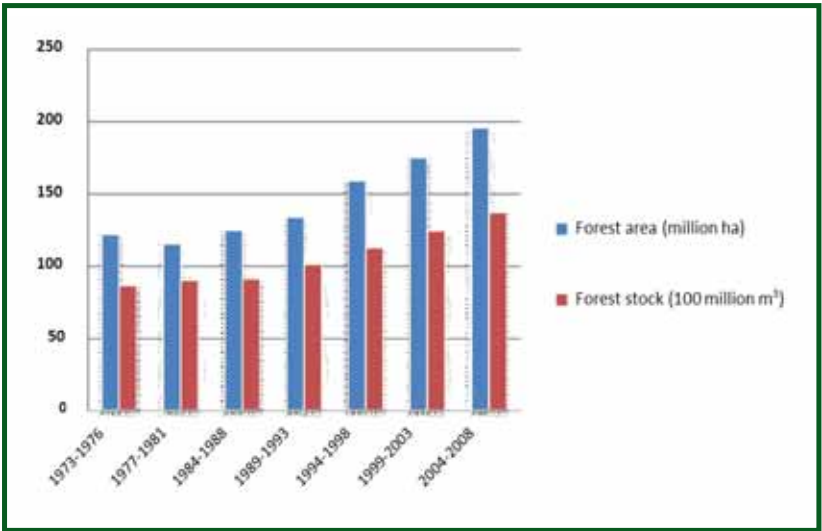
The limited potential of forests to contribute to farmers’ incomes because of their small size and generally low harvestable volumes is exacerbated by regulatory constraints. In many cases, such constraints seriously affect the management rights to and benefits obtainable from forests.

The diversity of local conditions is reflected in the wide variation in the present and potential contributions of forestry to rural incomes.

## FOREST POLICY AND REGULATORY CONSTRAINTS

Widespread deforestation and forest degradation in China in the 1960s and 1970s was followed by a transition to afforestation and regeneration in the late 1970s, as shown in Figure 4.

Figure 4 China's forest transition



Source: SFA, 2009

Much of the recovery can be attributed to the success of afforestation and forest protection policies. Improving the condition of the forest and enhancing its contribution to environmental protection remain important forest policy goals. The two policy instruments most affecting forest farmers' use and management rights are the cutting-quota system and the forest classification system (particularly classification as public welfare forest, or "ecological forest"). The challenge for forest tenure reform is to develop adaptations or alternatives for these instruments that can contribute to both environmental and economic policy goals.



# THE CHINA FOREST TENURE PROJECT

The EU-SFA-FAO China Forest Tenure Project was implemented from July 2009 to December 2012. Eighty percent of the project budget of €2.75 million was provided by the European Union (EU), with FAO and the SFA providing 20 percent.

Project activities were implemented by national organizations and consultants, with occasional assistance from international consultants.

The main objective of the project was to develop and share options to overcome major challenges in the implementation of the tenure reform that was initiated in collective forest areas in 2003.

The first of these challenges relate to the transfer of tenure rights and particularly to the prevention of inequitable outcomes of such transfers. For this element, the project focused on the operation of forest tenure trade centres (FTTCs) in facilitating and regulating subcontracting, mortgages and insurance.

Another challenge is resolving the problems faced by new forest rights-holders in managing their small forest areas (1–2 ha, on average) and marketing their produce. For this element, the project explored the development of forest farmer cooperatives (FFCs), as well as approaches to participatory forest management.

A third key project element focused on the sharing of experiences, information and knowledge to develop capacity in collective forestry development among key actors.

## PROJECT ORGANIZATION AND STRATEGY

---

The project was directed by the deputy director of the policy and regulations department of the SFA, with management assistance from a senior researcher at the Chinese Academy of Forestry and FAO-China and technical advice from FAO's policy and institutions division.

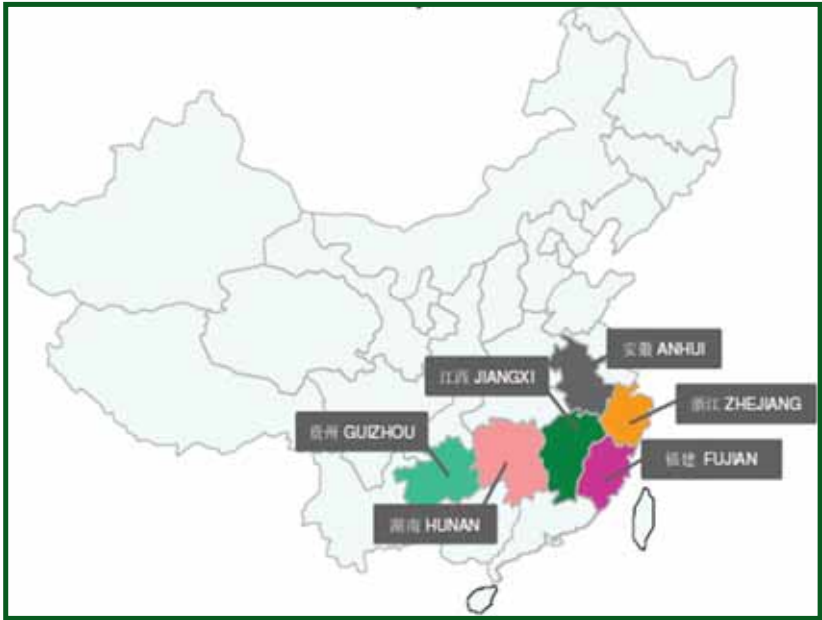
Project activities were implemented in six provinces in which collective forests predominate (Figure 5 next page), including three of the four provinces that had initiated tenure reform in collective forests in 2003.

In each province, pilot villages were selected by provincial and county-level project management offices.



In both Fujian and Hunan, the project operated in two counties and four pilot villages; in each of the other four provinces it operated in one county and two pilot villages.

Figure 5 Project pilot provinces



For each of the key project elements, assessments were commissioned by the project. These were carried out by researchers and consultants from provincial and national forestry universities and research organizations, often with some involvement of international consultants in the analysis and reporting of findings.

The results of the assessments were shared and critically reviewed in workshops with experts and stakeholders, and the assessments and workshops also formed the basis of training materials and/or guidelines and policy briefs. In addition, national and international study tours were organized.

An international conference to share the main project findings and recommendations was held in late 2012. The project newsletter, project reports in English and Chinese, and other media were also used to share experiences and lessons (see also the project publications in the reference list at the back of this report).

Figure 6 Sharing lessons



# RESULTS AND LESSONS

The main results and lessons of the project are presented in this section in the following order:

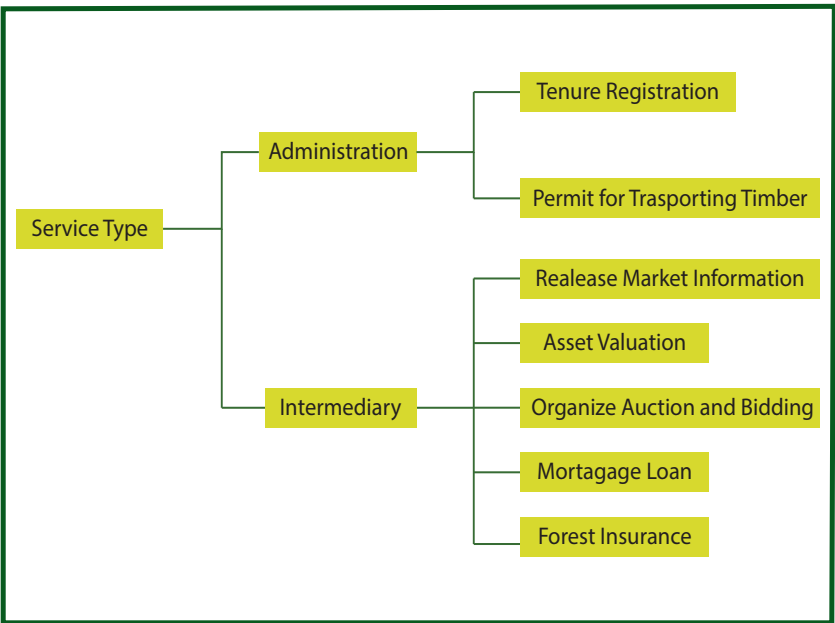
- FTTCs: findings and lessons from case studies of 26 FTTCs in the six pilot provinces;
- FFCs: findings and lessons from case studies of 28 FFCs, training materials, and guidelines for future development;
- participatory forest management: findings and lessons from the testing of participatory forest management training materials in 16 villages and guidelines for the development of regulatory and advisory capacity to support the effective, sustainable and equitable management of collective forests.

## FOREST TENURE TRADE CENTRES

For the purpose of registering and issuing tenure certificates, FTTCs were formed, initially at the county level; the first was formed in Fujian in 2004. By the end of 2009, 426 FTTCs had been formed at various levels – township, county, provincial, regional and national – and were functioning in 20 percent of the key forestry counties (5 percent of all counties) in China.

In addition to their original function of tenure registration, FTTCs now provide a range of services. Some maintain a focus on tenure administration, while others provide brokerage, market information and other services (Figure 7).

Figure 7 Typical FTTC services



The China Forest Tenure Project commissioned researchers from universities to carry out case studies in 26 FTTCs in the six pilot provinces to assess their effectiveness. The following sections discuss the findings and lessons from the case studies with regard to administering the transfer (trade) of tenure rights, brokerage services and the provision of advisory and information services.

## TENURE TRADE SERVICES

The core function of the FTTCs is to administer tenure rights and facilitate the trade of tenure rights. Provincial regulations stipulate that changes in the tenure of state and collective forests need to be administered by the FTTCs, which issue tenure certificates specifying the rights of households. Transactions (subcontracts) between the new rights holders and others may also be registered by the FTTCs.

The process of registering tenure rights and issuing certificates is expected to be completed in the near future, but the function of the FTTCs in facilitating and registering subcontracts has been much less successful. Most subcontracts are arranged informally because small forest farmers are reluctant to use FTTC services given the (often) large distances to the FTTC, complex procedures and high transaction costs (Box 2).

On the other hand, entrepreneurs renting many small forests for commercial operations appreciate the services of the FTTCs because they provide them with greater tenure security (Box 3).

After the transfer of rights and the issuance of certificates in the initial stages of the reform, the core function of the FTTCs diminishes in importance and the provision of other services increases.

Two of the brokerage services performed by FTTCs are the facilitation of bank loans with forest stock as collateral, and the insurance of forest stock against damage by fire and other disasters. For both these, the value of the forest stock needs to be determined; forest asset assessment, therefore, is another service that FTTCs can provide, which also helps parties to negotiate fair rates for subcontracting.

Many FTTCs also provide assistance in obtaining harvesting permits and transport permits and complying with other regulations.

### Box 2 Small farmers and FTTCs

Small forest farmers in Jiangxi reported that “forest farmers are not willing to transfer in the forest trade tenure centre since it is too far and complicated to trade there, and they will be charged for the trade. Their forest is small. If they need cash, they would rather have an agreement to make a private trade, than have the transfer in the centre”.

Source: Wang et al., 2012

### Box 3 Entrepreneurs and FTTCs

An owner of a processing enterprise in Jiangxi “thinks highly of the forest tenure trade centre”. Without the centre he could not have acquired the rights to 4000 mu (267 ha) of forest. He feels that “the transfer through the centre is not only of good standard and transparent but can also guarantee the interests of the forest farmers. The mortgage loans provided through the centre promote more transfers as well as the development of his industry”.

Source: Wang et al., 2012

Some FTTCs provide technical information and advisory services, as illustrated by some of the FTTCs that were established in the pilot stage of the tenure reform. In Zhejiang's Suichang county, a "forestry management service centre" has evolved, with two units ("examination and approval" and "tenure registration") focused on providing administrative services, and two other

#### Box 4 Expansion of services

"... now the forest farmers no longer only need the trading services, but also services related to the management of forest resources, control of pests and diseases and other technical services". There is a need for a "one stop window" in which all services are provided in a coordinated manner.

Source: Jiangxi FTTC report, p. 22

units focused on providing tenure market and technical information ("investment information" and "science and technology"). These four services are provided as public services; for paid services, a company has been formed for the assessment of forest resources, the facilitation of forest mortgage loans, and tenure trade arrangements

(auctions, bidding and quotations). The importance of further developing information and advisory services is recognized in the other provinces as well.

In view of the small size of the forest areas to which households have obtained the rights, various forms of collaboration and cooperation are emerging. In some villages, existing forest farms are maintained or adapted; in others, village leaders initiate arrangements for collaboration in forest management and the facilitation of administrative permits.

The government supports the development and registration of FFCs to pool resources, facilitate access to markets and services and promote investment in forest management.

## FOREST FARMER COOPERATIVES

The promotion of cooperatives in other sectors in China, such as agriculture and credit, inspired a similar initiative in the forest sector. After pilot initiatives in the formation of forest cooperatives in provinces such as Zhejiang, the SFA issued the "Guidance on Promoting Specialized Forestry Cooperatives" in 2009.

#### Box 5 State of cooperative development

"By the end of 2010, collective forestland was allocated to 72.60 million rural households with a total area of 95.6 million ha. At present (end 2010) 94 000 FFC/FFA are registered with government agencies of which 17 800 FFC are registered with local Industrial and Commercial Bureau. These FFCs cover 6.55 million rural households (or 9% of the total number of households) and 4.86 million ha (or 5% of the total area) of former collective forestland. Average plots are small (around 0.73 ha) which has to be taken into account when developing strategies to generalize and promote collaborative forms of forest management (incl. FFCs)."

Source: Busstra and Liu, 2012, p. 13

In line with the Law on Specialized Farmers Cooperatives, the key principles for such cooperatives are service provision, respect for the wishes of farmers, increases in resources and farmers' income, and a market orientation. The government leads in the development of cooperatives.

The case studies to assess the present status and prospects of FFCs provided the basis for the preparation of training materials and for the development of guidelines for the future development of FFCs.





## STATUS OF FOREST FARMER COOPERATIVES

The 28 case-study FFCs are located in eight counties in the six pilot provinces. The villages in which the FFCs are located have relatively large forest areas per household and high levels of forest-based economic activity.

### Box 6 Role of entrepreneurs in cooperative development

The Xiaozhuang Bamboo Shoot Cooperative was founded in 2007 by the owner of the local food processing factory. Initially there were five funding members, with registered funds of 70 000 yuan and 72 non-funding members. By 2009, the cooperative had grown to include 132 members,. The cooperative focuses on quality management in order to increase market share. Shoots supplied by members need to meet the quality standards set by the cooperative

Source: Luo and Zhang, 2012

A great diversity in scope, activities and organizational arrangements was found to exist. The main divide in the type of organization is the difference between the more recently initiated registered “for profit” cooperatives and the various collaborative “service-oriented arrangements” (forest farms not charging fees, three-defense associations, and similar informal village organizations).

Many of the recent FFCs have been initiated by owners of processing enterprises, village

leaders and forest farmer entrepreneurs (Box 6).

In many of the FFCs, the democratic principle of “one member, one vote” is combined with the principle of “one share, one vote”, leading to a situation in which most decisions are made by funding members.

Most FFCs are product-focused (i.e. “specialized cooperatives”) – for example, tea oil, bamboo and timber. The service-oriented arrangements often focus more on forest management and forest protection.

Policy is presently focused on developing the for-profit cooperatives. Studies commissioned by the project point to a need to pay more attention to the development of service-oriented collaborative arrangements. Another finding is that there appears to be much potential for developing existing organizational arrangements – such as collective forest farms – to operate according to cooperative principles.

There are many similarities in the development

needs of both for-profit cooperatives and the service-oriented organizational arrangements.

## CAPACITY DEVELOPMENT

The capacity of FFCs required for initial establishment, organizational management, financial management and forest management was assessed.

### Box 7 Types of cooperatives in Fujian

In Fujian’s Youxi county, tenure reform was completed by the end of 2009. Three types of FFC are found in Youxi: forest industry associations, specialized – product-focused – cooperatives, and shareholding forest farms. An example of the latter is the Lu Yuan FFC in Shanlian village: “Guided by relevant superior authorities and based on the suggestion of the village neighbourhood committee, the village authorities developed a plan to readjust the forest property rights and decided to set up the Lu Yuan Forest Cooperative of Shanlian Village which operates as a joint stock based on the principle of ‘allotting shareholding without contracting mountains and sharing profits without contracting forests’. Now the cooperative has 226 households as members”.

Source: Fujian FFC report, p. 5



To address capacity development needs, training materials were developed for all four areas (i.e. initial establishment, organizational management, financial management and forest management). General training materials for participatory assessment of present and required services by FFC members, and materials for participatory forest management, were prepared.

A training guide was developed to build the capacity of forestry field personnel to:

- assist (members of) FFCs in identifying and formulating their demand for support services to improve forest management and strengthen their organizations;
- use communication and facilitation skills based on participatory and adult learning techniques;
- introduce and adapt information and training activities for FFCs;
- coordinate services to FFCs – in collaboration with available service providers – and adapt these services to the actual demand of the FFCs.

In addition to the training guide, a more general guide for the future development of FFCs was prepared.

Figure 9 “... how will you sell your timber?”



## GUIDELINES FOR COOPERATIVE DEVELOPMENT

International experience indicates that the key principles for the creation and maintenance of strong FFCs are :

- Adherence to the “one member, one vote” principle in decision-making and ensuring that members participate in all important decisions.
- Clear rules for decision-making, and the distribution of benefits. These rules must be agreed by all members and must include requirements for the regular and transparent distribution of benefits based on members’ sales and purchases through the cooperative.
- Collaboration with other cooperatives (e.g. through federations), other collaborative arrangements (e.g. forest farms) and non-members (e.g. villagers who are not members should be able to market their produce and access other services).

### Box 8 Key training topics

- FFC characteristics
- Intersectoral coordination
- Policy consultation
- Technical extension
- Relationships with members
  - o member training and education
- Internal FFC structure and management
- Finance
- Public relations
- Forest product marketing



To implement cooperative development policy, the government should create and mobilize expertise in cooperative development, at different levels, particularly the field (township) level.

Coordination with other departments (such as cooperative development offices in agriculture and credit) is important for mobilizing expertise and applying lessons from their experiences. Also, linkages with other forestry extension (information and advisory) services need to be established and maintained. Cooperative development activities include advice on and the monitoring of FFCs, including the preparation of simple development plans, along with charters and rules of procedure.

Other activities include promoting the involvement and participation of youth and women in cooperatives.

## PARTICIPATORY FOREST MANAGEMENT

The capacity development needs of FFCs for forest management were found to be greater in implementing forest management than in preparing operational management plans (Table 1).

Capacity needs in forest management	Category 1 (for profit)	Category 2 (service)
Operational plans (afforestation, harvesting, marketing)	1	2
Effective management (including quality control)	3	3
Appropriate skills	2	2
Access to technical information	3	3
Access to marketing information	2	N/A
Appropriate equipment	2	2
1 = well developed and appropriate 2 = exists in some form but not well developed or sufficient 3 = non-existent at the moment N/A = not applicable		

## TESTING THE PARTICIPATORY FOREST MANAGEMENT MATERIALS

The testing of participatory forest management training materials confirmed the need to focus on the implementation – rather than the planning aspects – of forest management by forest farmers.

The participatory forest management training materials prepared by the project were tested by teams of researchers in the six pilot provinces. Teams from universities and forest departments did pilot training exercises in the project pilot sites and also assessed the policy and regulatory constraints for participatory forest management (forest management by the new rights holders). They worked with various stakeholders representing forest farmers managing their forests on their own, as well as with representatives from both

categories of forest farmer groups and enterprises. Foresters from township stations and county forestry bureaus were also involved.

Major regulatory constraints identified by stakeholders are the restrictions and complex procedures arising from the cutting-quota system. Another major constraint arises from the establishment of “public welfare forest”, in which use and management is prohibited or severely restricted. The compensation presently offered is not commensurate with the benefits foregone.

For the other categories of forest (fir and pine plantations, economic forest, and bamboo forest), the capacity to prepare simple management plans is already in place; access to technical information is of greater importance for the management of these forests.

These lessons from the participatory forest management pilot experiences suggest two immediate priorities for promoting the sustainable management of collective forests after the reform:

- the alleviation of regulatory constraints (particularly related to ecological forests and cutting quotas);
- the development of forestry extension capacity (for information and advisory services).

## TOWARDS AN ENABLING REGULATORY FRAMEWORK

The cutting-quota system and restrictions imposed by the natural forest protection programme (establishment of “ecological forests”) were identified as major constraints for the sustainable management of collective forests after the tenure reform. In both cases there is scope for further refinements in the design and implementation of regulations, as well as for the – gradual – replacement by an approval system or the introduction of voluntary guidelines for sustainable forest management.

A good example of the refinement of regulations is the adaptation of the cutting-quota system in Jiangxi. There, greater transparency and better information was combined with simplifications in the approval of the cutting quota requested by forest farmers. A more radical approach is the proposed replacement of the cutting quota by simple forest management plans. A variation of this approach is advocated in the participatory forest management guide prepared by the project, in which the adoption of principles, criteria and indicators for sustainable forest management is proposed as the basis for the approval of management and transport.

Figure 11 Extension: facilitation of learning processes



For the restrictions arising from the establishment of ecological forests, which affect about one-third of all collective forests, a similar range of options is to be considered.

There is agreement that the compensation presently being offered for the establishment of ecological forests falls far short of the benefits foregone. Some argue, therefore, for an increase in compensation based on internationally accepted principles (such as the calculation of benefits foregone based on best management practices) and/or for applying lessons from payment for ecosystem services initiatives more widely.

The well-established practice in China of locally initiated policy experiments enables the simultaneous exploration of several options. Government interest in involving farmers in policy consultation may create more space for such locally initiated policy experiments.

## DEVELOPING AN EFFECTIVE FORESTRY EXTENSION SYSTEM

The need for effective information and advisory services for forest farmers was identified in all project work. Such services would include training needs assessment, the management of FTTCs, the development of FFCs, and participatory forest management.

For the development of a better regulatory framework, there is an urgent need to replace or complement coercive regulations with information and advisory services. The need for such adjustment has been demonstrated worldwide.

### Box 9 Tenure and regulatory reform

“In pre-reformed situations, the government’s role often emphasized enforcement, which translated into keeping people out of forests and preventing them from harvesting forest products. The regulatory frameworks of the time reflected this emphasis. Although government agencies must retain the mandate for appropriate law enforcement, in devolved forest management they also need to adopt a supportive and facilitative role to assist the efforts of forest managers.”

Source: FAO, 2011, p. 46

Many of the elements of a forestry extension system are already in place or have great potential for further development, such as township-level forestry stations supported by county, prefectural, provincial and national departments, as well as strong research and education institutes and universities.

Therefore, the first step in planning the strengthening of a forestry extension system is to assess existing arrangements, needs, capacities and the potential for forestry extension development. Such assessments would need to be carried out at the provincial level, with guidance and support from national organizations and government.

Based on international experiences in developing agricultural and forestry extension, the project proposed the use of an analytical framework and procedures for assessing, transforming and evaluating extension systems. Many of these procedures have been used in the development of China’s

agricultural extension system. Relevant expertise and lessons from agricultural extension development may be mobilized for forestry extension development.

Key steps in these procedures include:

- Foster shared understanding of the range of extension models and approaches.
- Identify linkages between forestry development and extension objectives.
- Identify extension clients and assess their needs.
- Assess extension service providers and arrangements.
- Identify options, priorities and strategies for forestry extension development.

It is important to recognize the full range of possible extension approaches to ensure that the diversity of needs from different clients is catered for.

Technology transfer approaches may be relevant for introducing new species and better natural forest management. Other approaches, such as participatory extension or non-formal education approaches (e.g. forest management learning groups based on farmer field school principles), may be required.

The case studies commissioned by the project revealed a great diversity of extension clients, as well as a range of present and potential extension service providers.

Consideration of all extension approaches, clear extension objectives and well-defined client needs and service providers form a basis for identifying development options and strategies.

Options include the development of human resources, information and communication systems, and investments in equipment and transport and other critical infrastructure.

#### **Box 10 Range of extension approaches**

##### *Technology transfer extension approaches*

- Ministry-based agricultural extension or advisory services
- Training and visit extension

##### *Market-oriented advisory approaches*

- Commodity-based advisory systems
- Innovative, market-driven extension approaches

##### *Participatory extension approaches*

- Animation rural
- Integrated rural development
- Farmer-based extension organizations

##### *Non-formal education/extension approaches*

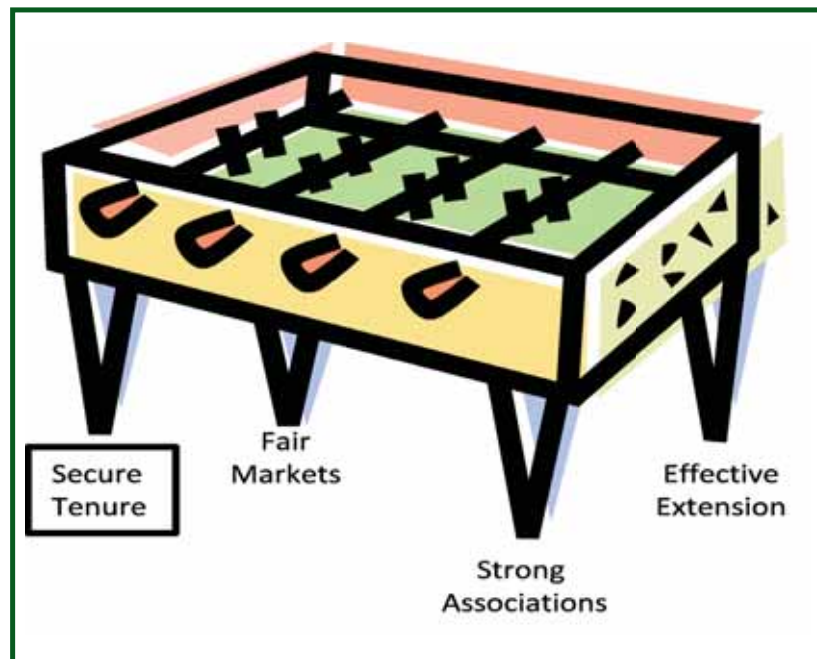
- Farmer field schools
- University-based extension

# THE WAY FORWARD

Collective forest tenure reform has been remarkably successful in strengthening one of the four key pillars of sustainable forest management in collective forests identified by the International Family Foresters Alliance , the other three being fair markets, strong associations and effective extension services (Figure 12).

The challenge for the future development of collective forest areas, therefore, lies in creating conditions and providing support for the strengthening of markets and associations and the provision of better extension services. These are required if rural families are to enjoy their new rights and to meet their responsibilities as sustainable forest managers.

Figure 12 Leveling the playing field for forest farmers



The lessons and materials generated by the EU-SFA-FAO China Forest Tenure Project will prove very relevant for the implementation of balanced policies and programmes aimed at leveling the playing field for forest farmers.



乡油茶专业合作社



# REFERENCES

## PROJECT PUBLICATIONS

---

### PROJECT BRIEFS

**FAO.** 2010. Support forest tenure reform in China's collective forests. Poster presented at World Forest Week, COFO 2010. Beijing.

**FAO.** n.d. Farmers benefit from forest privatization in China. Project fact sheet. Beijing.

**Jiang, C.** 2012. Overview and lessons from FAO-SFA case studies. Presentation at International Conference on Forest Tenure Reform, 21–23 November 2012, Hangzhou, China.

### FOREST TENURE TRADE CENTRES

**Anon.** 2010. Assessment of Forest Tenure Trade Centers (six volumes: Anhui, Fujian, Guizhou, Hunan, Jiangxi, and Zhejiang). GCP/CPR/038/EC. Beijing.

**Anon.** 2012a. Forest tenure trade centers. Progress and challenges. August 2012.

**Yi, X.** 2012. Forest trade center. Experience from the FAO China Project. Presentation at International Conference on Forest Tenure Reform, 21–23 November 2012, Hangzhou, China.

### FOREST FARMER COOPERATIVES

**Anon.** 2010a. Synthesis technical reports of FFCs (six volumes: Anhui, Fujian, Guizhou, Hunan, Jiangxi, and Zhejiang). GCP/CPR/038/EC. Beijing.

**Anon.** 2010b. Training manual on the development and management of forest farmer cooperatives. Beijing, China Forest Tenure Project.

**Busstra, B. & Liu, C.** 2010. Assessment of present services to FFCs provided by government institutions at county level. Recommendations to improve services. Beijing, China Forest Tenure Project.

**Demarsh, P.** 2012. Guidelines for the development of forest farmer cooperatives in China. Beijing, China Forest Tenure Project.

**Jordan, G.** 2010. Training needs analysis report and capacity building strategy. Beijing, China Forest Tenure Project.



## PARTICIPATORY FOREST MANAGEMENT

**Anon.** 2011. Technical synthesis reports on the pilot application of training material (6 volumes: Anhui, Fujian, Guizhou, Hunan, Jiangxi, and Zhejiang). GCP/CPR/038/EC, Beijing.

**Veer, C. & Li, W.** 2010. Guides for facilitators and trainers. participatory appraisal, planning and monitoring by forest farmer groups. Participatory forest management in China (two volumes). EC-SFA-FAO China Forest Tenure Project. Beijing.

**Veer, C.** 2012. Smarter rules – better advice. Lessons from participatory forest management research for the sustainable management of collective forests in China. A guide for forest policy and extension development.

## REGULATORY FRAMEWORK

**Anon.** 2012b. *Tenure reform: new policy – new policy instruments*. Policy brief. August 2012. Beijing, China Forest Tenure Project.

## OTHER REFERENCES

**FAO.** 2011. Reforming forest tenure: issues, principles and process. FAO Forestry Paper No. 165. Rome.

**FAO & Agricorn.** 2012. Strength in numbers: Effective forest producer organizations. Rome.

**Katsigris, E., X., Xu, J., White, A., Yang, X. & Qian, W.** 2010. Forests and incomes in China. Washington, DC, Rights and Resources Initiative.

**Luo, X. & Zhang, X.** 2012. Testing research report on forest farmer cooperatives in Longquan, Zhejiang, China for the Forest Connect Toolkit, Guidance Module 14. Rome, FAO and London, IIED.

**SFA.** 2009. General situation of forest resources in China. The 7th national forest inventory. Beijing, State Forestry Administration.

**Swanson, B.E. & Rajalahti, R.** 2010. Strengthening agricultural extension and advisory systems: procedures for assessing, transforming, and evaluating extension systems. Agriculture and Rural Development Discussion Paper 45. Washington DC, The World Bank.

**Wang, X., Scalise, E. & Giovarelli, R.** 2012. Ensuring that poor rural women benefit from forestland reforms in China: fieldwork findings and policy recommendations. Seattle, USA, Landesa Rural Development Institute.

**Xu, J., White, A. & LeLe, U.** undated. China's forest tenure reforms. Impacts and implications for choice, conservation, and climate change. Washington, DC, Rights and Resources Initiative.

**Xu, J., Deininger, K., Siikamaki, J. & Ji, Y.** 2012. Forest tenure reform, economic recession and farmer household labor re-allocation decision. Presentation at International Conference on Forest Tenure Reform, 21–23 November 2012, Hangzhou, China.

**Zhu, K.** 2012. A case for farmers and rural communities' right to compensation under China's Natural Forest Protection Program (NFPP). Seattle, USA, Landesa Rural Development Institute and Washington, DC, Rights and Resources Initiative.







Contact

**Ewald Rametsteiner**

Team Leader

Forest Policy Team

FAO - Viale delle Terme di Caracalla

00153 Rome, Italy

Email: [Ewald.Rametsteiner@fao.org](mailto:Ewald.Rametsteiner@fao.org)