conducted by Kenya office: March, 2013

国名	Intensified Social Forestry Project in Semi-arid Areas of Kenya
Kenya	

I. Project Outline			
Project Cost	453 million yen		
Project Period	March, 2004 – March, 2009		
Implementing	Kenya Forest Service (KFS) (former Forest Department, Ministry of Environment and Natural		
Agency	Resources)		
	(Supportive Agency: Kenya Forestry Research Institute (KEFRI))		
Cooperation	Forestry Agency		
Agency in Japan			
Related Projects (if any)	<ul> <li>Japan's cooperation</li> <li>Social Forestry Training Project (SFTP) (1985-1987, technical cooperation)</li> <li>Construction Project of the Nursery Training Centre for Social Forestry (1986, grant aid)</li> <li>Social Forestry Training Project (SFTP) Phase II (1992-1997, technical cooperation)</li> <li>Project for Expansion of Nursery Training Centre for Social Forestry (1993, grant aid)</li> <li>The Social Forestry Extension Model Development Project for Semi-arid Areas of Kenya (SOFEM) (1997-2002, technical cooperation)</li> <li>Project on Development of Drought Tolerant Trees for Adaptation to Climate Change in Drylands of Kenya (2012-2017, technical cooperation)</li> <li>Japan Overseas Cooperation Volunteers (JOCV): (1)Forestry: 1 (1986-1988), (2)Forestry(Kitui, Kwale and Nyandarua): 3 (planned to dispatch in June, 2013), (3)Forestry and Afforestation: 1 (planned to dispatch in September, 2013)</li> <li>Other donors' cooperation</li> <li>Green Zones Development Support Project (African Development Bank) (2006-2010)</li> <li>Support to Community Based Farm Forestry Enterprises in Semi-Arid Areas of Kenya (SCBFFE) Project (World Bank-Japan Social Development Fund)(2010-2013) (The project which succeeds ISFP)</li> <li>Natural Resource Management Project (World Bank) (2010-2011)</li> </ul>		
Background	Technical Assistance to the Kenya Forestry Service (USAID)  The arid and semi-arid lands (ASALs) covered about 80% of the total land surface of Kenya while the forest cover was estimated at less than 3%. Meanwhile, firewood and charcoal was accounts for more than 70% of the energy requirements for Kenya, and therefore securing and developing sustainable forest resources was indispensable.  With Kenya Forestry Research Institute (KEFRI) as an implementing agency, Japan had extended technical cooperation for the forestry sector for 17 years in the area of technology development on tree nursery establishment and tree planting and to provide training in social forestry in ASALs (Kitui District), which was characterized with high incidences of poverty. (Social forestry means that local farmers plants trees for captive use and income generation). As a result, basic tree nursery and tree planting technology in ASALs was developed and core farmers were developed as the base for the extension of the model developed under the technical cooperation projects.  In order to extend the area covered under social forestry in the target area, establishment of an extension system that the core farmers reach out to the surrounding farmers was necessary. In addition, capacity of the Forest department in personnel and institutional aspects for extension service delivery needed to be strengthened.  In this context, the Government of Kenya requested the Government of Japan a technical cooperation project for the sector aimed at extension of social forestry and strengthening administrative capacity for forestry extension.		
	Japanese Side	Kenyan Side	
Inputs	<ol> <li>Experts: 8 (5 for Long term, 3 for Short term)</li> <li>Trainees Received: 10 (Counterpart training in Japan)</li> <li>Equipment: 76 million yen</li> <li>Local Cost: 168 million yen</li> </ol>	<ol> <li>Staff allocated: 46</li> <li>Land and facilities provided</li> <li>Local Cost: 39 million yen</li> </ol>	
Project Objectives	Overall goal Living standards of the people in semi-arid areas are improved while enhancing sustainable environmental conservation.  Project Objective Individual farmers, farmer groups and other stakeholders intensify social forestry practices in semi-arid areas.  Outputs  1. Institutional and technical capacities for social forestry extension in Forest Department are strengthened.  2. Social forestry extension activities among individual farmers and farmer groups are promoted.		

- 3. Farmers and other stakeholders obtain enough practical knowledge and techniques.
- 4. Information on social forestry extension and related issues is shared among the stakeholders.

#### II. Result of the Evaluation

### Summary of the Evaluation

The arid and semi-arid lands (ASALs) covered about 80% of the total land surface of Kenya while the forest cover was estimated at less than 3%. Meanwhile, firewood and charcoal accounted for 70% of the energy needs of Kenya and indispensable for the people's life. In addition, in recent years, demand for the firewood and charcoal had increased because of the population growth. As a result, forest resources had decreased, soil productivity declined, and natural environment had thus degraded. With the achievement of the social forestry development for which Japan has extended support for 17 years, this project was implemented with Kenya Forest Service (KFS) as an implementing agency, aiming to intensify social forestry activities in ASALs.

This project has largely achieved the project purpose "Individual farmers, farmer groups and other stakeholders intensify social forestry practices in semi-arid areas". Social forestry activities which utilized Farmer Field School (FFS)<sup>1</sup> approach was implemented in three target districts (Kitui, Mbeere, and Tharaka), and as a result, the seedlings production and the number of trees planted have increased. The FFS graduates continuously use and apply the techniques they acquired through FFS in their farmlands. In terms of overall goal, there are many cases that the beneficiaries' incomes have increased as a result of the continuous implementation of social forestry. In addition, there is an impact on institutional aspect of mainstreaming of FFS approach in Kenya, as KFS decided to use FFS as a major extension approach and FFS approach is used at projects supported by other donors. For sustainability, some problems have been observed in terms of institutional and financial aspects because the implementing agency have limited number of personnel for further extension, and its financial resources for the extension services remains uncertain.

For relevance, the project has been highly relevant with Kenya's development policies, development needs as well as Japan's ODA policy at the time of both ex-ante evaluation and project completion. For efficiency, the project cost slightly exceeded the plan.

In the light of above, this project is evaluated to be satisfactory.

#### 1 Relevance

This project has been highly relevant with Kenya's development policies "development of arid and semi-arid area and development and promotion of agroforestry" as set in Economic Recovery Strategy 2003-2007, Medium Term Plan 2008-2012, and Vision 2030, development needs "extension of social forestry by utilizing FFS approach", as well as Japan's ODA policy "formulation and conservation of forest as set in the area of environmental protection in "Country Program Paper"" at the time of both ex-ante evaluation and project completion.

Therefore, relevance of this project is high.

# 2 Effectiveness/Impact

This project has largely achieved the project purpose, "Individual farmers, farmer groups and other stakeholders intensify social forestry practices in semi-arid areas". Institutional and technical capacities for social forestry extension of the implementing agency have been strengthened, and social forestry extension activities, i.e. FFS have been implemented for 330 farmer groups (more than 5,000 farmers) in three target districts (Kitui, Mbeere and Tharaka) were reached. The project has developed farmer facilitators in addition to the extension officers of KFS who run the FFS. Among 330 FFS, 220 were run by the farmer facilitators.

As a result, at the time of project completion, most of the FFS graduates practiced social forestry activities, and production of seedling has increased in Mbeere and Tharaka, and the number of trees planted has increased in Kitui and Mbeere. According to interviews with beneficiaries in Kitui and Mbeere, they continue utilizing techniques acquired through FFS such as seedlings production and fruit tree planting (mango, grevillea, and others), poultry raising, vegetable cultivation (maize), utilization of compost, and woodlots (eucalyptus and others). Also, the number of farmers who practices social forestry has increased as the production of seedlings and the number of trees planted have increased in the surrounding areas of FFS graduates. In interviews, those FFS graduates said that they shared those techniques with the surrounding farmers. However, there are cases that farmers abandon the techniques acquired through FFS. According to interviews conducted in Tharaka, many farmers gave up continuing fruit tree planting and seedling production after failures due to drought<sup>2</sup>.

As to overall goal of "living standards of the people in semi-arid areas are improved while enhancing sustainable environmental conservation", although no data was obtained to show increase of farmer's income, most of the FFS graduates who responded to interviews said that their incomes have increased by seedling production, fruit tree planting, poultry raising, goat farming, apiculture, grafting tree services and others. Currently World Bank-Japan Social

<sup>1</sup> The FFS approach was developed by FAO in 1990s as an agriculture extension approach. FFS is a field based school which runs in a cropping season (several months to one year). More than 10 farmers study together at a specific filed once a week. This project applied FFS to the ASALs and aimed that trees (fruit trees, timbers, fire woods, and feed crops) which match the land and climate of ASALs are planted around the people's houses and farmlands. This project is the first case of applying FFS to forestry in ASALs, and the project modifies the existing techniques and contents of agriculture FFS to agroforestry. The project has developed a comprehensive FFS package for project implementation which includes (1) designing of a school field, (2) setting of items for comparative observation, (3) setting annual schedule for agriculture products and trees in accordance with their growing characteristics, (4) selection of farms and farmer groups, (5) technical guidance and monitoring for extension officers, (6) fund management and others.

<sup>&</sup>lt;sup>2</sup> Currently, a technical cooperation project "Project on Development of Drought Tolerant Trees for Adaptation to Climate Change in Drylands of Kenya" is implemented with KEFRI as an implementing agency in accordance with KFS's needs of development and extension of new drought-tolerant seeds.

Development Fund (World Bank-JSDF) is funding "Support to Community Based Farm Forestry Enterprises in Semi-Arid Areas of Kenya (SCBFFE) Project" in Kitui, Mbeere, and Tharaka as a follow up project, and SCBFFE promotes networking of groups of FFS graduates, developing a microfinance system, and supports small-scale businesses using agricultural and forestry products. SCBFFE has formed additional 50 FFS groups (1,200 beneficiaries) so far, and SCBFFE's contribution to the production and income increase is expected, as the first disbursement is scheduled to be implemented in October, 2012. In addition, other donors including FAO and World Bank (Natural Resource Management Project) have implemented FFS in areas other than the target area of this project (There are 5,566 graduates from 287 FFS implemented from 2009 to 2012). Therefore, social forestry has contributed to improvement of household income and living standards, although not in the entire ASALs.

In terms of social impact, the project has empowered FFS participant farmers and farmer groups. There is a case that a farmer group formed by a farmer facilitator carries out awareness raising activities to promote drought mitigation for agricultural production. In addition, FFS graduates said they are able to speak in front of many people with confidence and they are able to manage funds for their activities, thanks to the experience of FFS activities. In institutional aspect, FFS has become the mainstream of extension approach for KFS as mentioned in KFS's Strategic Plan, and have been used in many projects supported by other donors including African Development Bank, World Bank, FAO, and UNEP.

Furthermore, the project produced a great impact on human resource development since FFS master trainers<sup>3</sup> developed by the project have contributed for expansion of FFS approach. FFS master trainers have been involved with the UNEP supported "Innovative Approaches towards the Rehabilitation of Mau Ecosystem (IARME)" and the FAO supported "Sustainable Livelihoods Development in the Mau Forest Complex". One master trainer has attained managerial position in the World Bank-JSDF project, while many have taken part in implementation FFS in projects supported by other donors.



Honey sale by FFS members at Mbeere



Mango trees planted by a FFS member in Kitui

Therefore, effectiveness/impact of this project is high.

### 3 Efficiency

While the inputs were appropriate for producing the outputs of the project and the project period was within the plan (ratio against the plan: 100%), the project cost was slightly higher than the plan (ratio against the plan: 116%) because of implementation of an additional study on economic and financial impact of the project and the purchase of motorcycles for monitoring of FFS activities. Therefore, efficiency of the project is fair.

The project has been implemented efficiently; Introducing an existing approach of FAO's FFS has saved the time and resource consumption for developing a new approach, and developing a FFS implementation guideline with the support of FAO.

## 4 Sustainability

This project is consistent with the Kenya's policies of Vision 2030, District Development Plans 2002-2008, Medium Term Plan 2008-2012, and KFS's Strategic Plan, which emphasizes activities for forestry conservation, importance of development agenda in ASALs, and especially continuous utilization of FFS as the important extension approach, and therefore the project continues to be positioned as an important part of the Kenya's forestry sector. The implementing agency has no problem in the technical aspect because nine master trainers have been trained, FFS projects supported by other donors have been continuously implemented, and capacity development within KFS has been carried out.

However, in terms of institutional aspect, although the Extension Division is willing to promote FFS, and implementation of 500 FFS by 2013 is one of the objectives under the KFS's Strategic Plan, the implementing agency has a problem of lack of personnel for further extension.

For financial aspect, the implementing agency has so far implemented 57 FFS over the period 2010 and 2011 with its own budget, and more FFSs are scheduled to be opened in 2012 and 2013: over 40 District Forestry Officers are scheduled for training in FFS methodology and to run FFSs in 2012 and a further 20 will be trained in 2013 and this will lead to opening and running of these additional FFSs in North Rift, Nyanza and Coast conservancies using KFS funds<sup>4</sup>. However, there has been some problem. Although the Extension Division applies the budget for extension every year, it has been difficult to obtain sufficient annual budget from KFS's headquarter. In addition, although various donors support FFS projects including SCBFFE by World Bank-JSDF which has succeeded this project, it is not clear how KFS mobilizes financial resources after those projects complete. Detailed financial information of KFS was not obtained.

As stated, since the implementing agency has some concerns with regard in institutional and financial aspects, sustainability of the project effect is fair.

Trainers who has the same capacity as those who attended three-months facilitator training by FAO.

<sup>&</sup>lt;sup>4</sup> It is expected that the running of these FFSs would be enhanced when the 50 new mortorcycles which have been procured under the Forest Preservation Programme (FPP), a grant aid programme of Japan, would be delivered in February 2013.

#### III. Recommendations & Lessons Learned

#### Recommendations for Implementing agency

KFS implements FFS methodology every year using its own budget and various donors have supported forestry projects which use FFS approach. KFS should document the results and lessons of those projects and work to promote FFS by organizing seminars and workshops. Although FFS approach is an established approach to some extent, it could be improved based on the various projects' experiences. In addition, in order to expand KFS's personnel and budget, it is important to raise public recognition of FFS approach.

Considering the high number of existing FFS and planned new ones, it is necessary to monitor and confirm the continuation of activities by farmers' facilitators and farmers themselves.

#### Lessons learned for JICA

#### 1. Effective use of existing approaches

This project applied the existing proven extension approach in agriculture sector to use FFS methodology in the forestry sector through innovative adjustments to the methodology (timelines, curriculum and careful participatory choice of enterprises). By doing so, the project was completed in time because the project saved the time and operational resource consumption for the approach development. In the future project planning, JICA should utilize existing approaches for this purpose.

#### 2. Effective use of local human resources

Implementation of farmer run FFS is one of the factors that social forestry has been applied to many farmers. In addition, after the project, there is a case that a farmer group formed by a farmer facilitator carries out awareness raising activities to promote drought mitigation for agricultural production. In this project, farmer facilitators have social cohesions with neighbors and in many case, they continue activities because of "satisfaction" of being a facilitator or a leader. In addition, some of them are employed by other project supported by other donors such as activities to promote drought mitigation for agricultural production and they follow up FFS, too, while carrying out other activities. Because farmer facilitators are local, they can be key persons for other rural development activities after the project completion, and FFS group can be the core organization for those activities. In rural development projects, it is important that there are existing local organizations or leaders who can act as partners of the projects. Local resource can be used not only for forestry projects but also for agriculture projects.

### 3. Contribution to empowerment

FFS approach contributes to empowerment of participant farmers. The FFS graduates said (1) female farmers, who had not had opportunity to express their opinions before the project, are now able to speak in front of many people with confidence and discuss how they should improve their agriculture production and livelihood with their colleagues and share opinions, and (2) they are able to manage fund for their activities thanks to the experience of FFS activities. These advantages of FFS approach can be utilized from the gender perspective for future project planning.

#### 4. Project components

According to interviews with beneficiaries, marketing is limiting for the mangoes being produced, since many farmers plant them. Under this situation, some farmers have increased incomes by starting new production items such as apiculture and goat farming, while others are not able to shift to new product items because they do not have knowledge on how to select items which match the local environment and local needs, or they do not have money for the purchase of seedlings. Farmers who sell honey in small volume to individual farmers said they want to cooperate with other individual farmers and sell honey in high volume so that they can expand their markets and stabilize their incomes. In response to those problems, the World Bank-JSDF project was planned and is being implemented. When JICA formulates agriculture and forestry projects which use FFS approach in future, it is important that JICA includes components such as "access to finance (eg. Microfinance)", "access to market (eg. selection of sellable tree species, linkage to market and others)", and "networking of FFS groups (forming of an association), as the World Bank-JSDF project does. If FFS project can select an item which is marketable and profitable, and techniques for seedlings and planting can be extended, the livelihood of farmers improves. And if farmers are able to increase their incomes, they will plant more trees, and therefore contribute to forest conservation.