

Farmer Field School (FFS) based Woodlot Development Promotion

through Japan International Cooperation Agency (JICA) Forestry / Natural Resource Projects in East Africa



JICA technical cooperation projects in forest sectors in East Africa since 1985

1. Kenya

- Social forestry training project phase I & II (1985-1997)
- Social forestry extension model development project (SOFEM) (1997-2002)

Intensified social forestry project (2004-2009)

- Project for Development of Drought Tolerant Trees for Adaptation to Climate Change in Dry Lands of Kenya (2012-2017)
- Capacity development project for sustainable forest management (2016-2021)

2. Tanzania

Kilimanjaro village forestry project (1991-2000)

3. Ethiopia

- Belete-Gera participatory forest management project (2003-2012)
- Project for Supporting Sustainable Forest Management through REDD+ and Certified Forest Coffee Production & Promotion (2014-2020)
- Sustainable natural resource management project through FFS in Rift Valley areas in Oromia region (2012-2018)

Most of projects are targeting Semi-Arid Areas

Ethiopia

Natural tree stands are used for wood fuel





Ethiopia

Free grazing tradition



Disturbance to natural regeneration reduces trees on farm



Use of cow dung for fuel instead of compost to farm



Secured wood fuel from planted woodlot

Kenya

It was always a challenge

Ethiopia

How can we make farmers introduce such long term crops

Woodlot developed by a farmer

Since 2004

12

Farmer Field School approach was a good solution

Kenya



Set up of experiment and regular farm observation & monitoring



Equip farmers with systematic analytical skill



Build their capacity through presentation, discussion & decision making

Key issues for woodlot establishment with small scale farmers

- 1. Combination with short term crops / Agroforestry system
- 2. Seedling productions by farmers themselves

are inbuilt to FFS by the projects

- 3. Capacity building and empowerment of farmers
- 4. Long term continuous interaction with farmers

were already in FFS structure

1. Combination with short term crops / Agroforestry system



helps adoption of natural resource development activities





Maize and Avocado intercropping

Woodlot with food crop in FFS Host Farm

Kenya

2. Seedling productions by farmers themselves



Optimisations of types and sources of seedlings



Required tree seedling production by farmers at their locality

Ethiopia

3. Capacity building and Empowerment

- Situation of small scale farmers in rural areas:
- (1) Little access to the information.
- (2) Lack of knowledge and education.
- (3) Lack of experiences on new practices.
- (4) Lack of surplus land for experiments.
- (5) Lack of resources for new trials.
- (6) Existing high risks to the failures.
- (7) Lack of the confidence in decision making.
 - Those are the reasons why they never try new ideas and continue conventional practices which they feel safe.

(1) Little access to the information

FFS is Weekly Session

FFS facilitator bring new ideas every week

(2) Lack of knowledge and education

Learning topics every week

FFS makes farmers more knowledgeable

(3) Lack of experience on new practices

Learning by Doing

In FFS, farmers learn with practices

(4) Lack of surplus land for experiment

FFS uses Host Farm

Use of some members surplus land no risks own farm

(5) Lack of resources for new trial

Learning materials

FFS provides materials just for learning purpose

(6) Existing high risk of failure

Experiments First

All what farmers implement to their farms were already experimented and proved by themselves

(7) Lack of confidence on decision making

GUYYAA-251

Rajaa AES

Furdina Bifilasmi

Empowerment

mala Futmata

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1:51-5:55 1153-6:0

Triade

Labo

Guy

Escape from the

chain of poverty

(2050 HOU

FUdha

FFS empowerment process makes farmers as confident experts

Adoption Rate of New Enterprises



73% of FFS Farmers applied New Enterprises

Source: SNRMP End-line Survey by Farm Africa (2017)

Practice Rate of New Techniques

90.6 92.5 82.6 82.9 74.0 64.0 81.2 81.3 78.3 79.3 87.4 87.6 84.2 73.4 90.0 61.4 93.7 81.2 78.2 84.2 88.2 90.1 94.9 74.4 25 50 75 100 0

Variety selection (cereals) **Tree planting** Transplanting (veg) **Transplanting (fruits) Traditional Pesticide (veg) Traditional Pesticide (cereals)** Use of Polytube (fruits) Seed treatment (fruits) Seed bed preparation (veg) Seed bed preparation (fruits) **Regular monitoring** Manure use (veg) Line/row sowing (cereals) Inter cropping (cereal) **Fruits Tree Forage and Fodder production** Fencing for seedlings (fruits) Farm record keeping **Cost benefit Analysis Compost (fruit) Close observation Chemical Pesticide (veg) Chemical Fertilizer (veg)** Buck wheat

82%

of FFS Farmers applied New Techniques

Source: Supplemental Endline Survey for SNRMP by Farm Africa (2017)

%

4. Long term continuous interaction

Woodlot preparation with maize crop

Kenya

FFS weekly sessions continues for a year and trees are continuously monitored

Protection of trees after harvesting crops

Ethiopia

Same site after 8 months



Woodlot intercropping site after 8 months

Kenya

Established Grevillea robusta woodlot (Same place after five years)

Kenya

Calliandra calothrysus fodder bank by a FFS member

Mango Orchard by a FFS member



Support to Community Based Farm Forestry Enterprises in Semi-Arid Areas of Kenya Project (SCBFFE)

Kenya Forest Service with World Bank-Japan Social Development Fund (JSDF)



Moringa woodlot by a FFS group

Tree Nursery managed by FFS group Kenya

Woodlot developments are accelerated with micro-financing



Senna siamea woodlot by a FFS member

Eucalyptus woodlot by a FFS



Acacia polyacantha woodlot by a FFS member

Asante sana

A charcoal kiln developed by FFS graduated farmers with micro-financing through SCBFFE Project