



FES

Farmer Field Schools

**Approach for
Agroforestry
& Naturel
Resource
Development**

Farmers Reinforce Own Resilience and Make Changes of Local Landscape



Japan International Cooperation Agency



Oromia Bureau of Agriculture

Sustainable Natural Resource Management Project

Background

Semi-Arid Land in Ethiopia covers nearly one-fifths of its territory. With rapidly increasing population, forest has decreased significantly in recent years and about 80% of the land has already been converted to farm-land. The loss of vegetation cover has caused soil erosion and resulted in the decline of agricultural productivity, making lives of people unstable. The project has started to target those problems, in collaboration between Japan International Cooperation Agency (JICA) and Oromia Bureau of Agriculture.



Project period and target areas

Duration: June 2013 – March 2018 (4.7 years)

Target area: East Shawa, West Hararge and West Arsi

After one year of the verification, the project started in June 2013. Since the beginning, East Shawa has been the target zone and the project has covered three districts; Liben-Chukala, Bora and Adama. However, intending to scale up the project practices to other area of Oromia region, pre-scaling up experiment has started in West Hararge and West Arsi zones since March 2016.



Situation and the project strategy

The project is following two principal strategies derived from the situation analysis of the target areas:

1. Promote natural resource development through agroforestry practices

It is not easy for farmers to recognise importance and benefit of long term natural resource development activities. Therefore, the project promotes Agroforestry practices which are combinations of tree planting and other livelihood improvement activities such as vegetable garden, cereal crop, fodder production or fruit tree orchard, so that farmers can learn natural resource development activities while they practice improved agriculture.



2. Use of Farmer Field Schools (FFS) as extension methodology

FFS is one of the most suitable methods for learning new agriculture or forestry practices which require long-term interaction. A natural resource FFS under the project basically takes one year or 52 weeks and members learn about several enterprises every week. Because of this kind of regular monitoring and continuous learning-by-doing practices, farmers often change their mentality, attitude and behaviour even for tree planting and seedling production in dry area.



through FFS in the Rift Valley Area of Oromia Region

What is Farmer Field Schools?

FFS is a participatory and discovery-based non-formal adult education approach developed by FAO. Since 1980th, FFS approach is adopted globally in various disciplines e.g. agriculture, livestock, forestry, health and education. In the target communities, groups of around 20 to 30 farmers organise FFS groups and they meet regularly at their learning sites in the villages to implement farm experiments supported by trained FFS facilitators.

Encourage women participation

Women play important role even in agriculture and natural resource development. However, their participation in community activities and capacity building to them were not fully encouraged. The project had set a principle that a half of the members to be women at FFS group formation. FFS also developed effective facilitation methods for female members to participate and become confident.

In line to the government system

The project is trying to harmonise the FFS with existing government extension system intending FFS to continue functioning in real Ethiopian context.

Capacity building of government staff

The project builds capacity of the government staff with practical implementation techniques as well as the management of the programme from region to district level. The production of well experienced FFS master trainers is also a key issue for the reproduction of FFS facilitators/coordinators in wider areas.

Looking for the synergy with FTC

The Project is intending FFS to act as the catalyst to Farmer Training Centre (FTC) disseminating natural resource development practices. The characteristic of FFS which can be started in any farmland is also convenient to expand and demonstrate model agriculture and natural resource development practices from FTC to the remote areas in the village.

Use of farmers as FFS facilitators

Upon graduation of FFS, some potential members can be selected and trained as Farmer Facilitators, and they are going to facilitate other FFS groups in nearby communities. They assist government development agent (DA) and while DAs are used to be transferred to other areas, the Farmer Facilitators will continue supporting own communities, as the village level development promoters.



A FFS on weekly session



Women will be empowered through FFS



Training of FFS master trainers



A FFS promoting woodlot in FTC



A farmer facilitator managed FFS

How are the steps & weekly activities in FFS?

FFS steps

FFS promotion

FFS member selection



FFS members are selected by lot drawing from any farmers interested in attending. A half of members are supposed to be women.

FFS group organisation

Selection of enterprises

Planning of experiment

Host farm establishment



Host farm is a piece of farm provided by a FFS member. The members determine several experiments and develop host farm by themselves.

Weekly sessions

Field day



Field day is a great opportunity to show what FFS members learnt and share the experience with surrounding community members.

Result analysis

FFS evaluation

Graduation



Qualified members with enough attendance throughout one year FFS learning cycle will get FFS graduation certificate from authorities.

Weekly sessions

Roll call (Opening)



The group decide a day in week for FFS and all members to be present on time agreed. Attendance and lateness are strictly checked.

Recap of last week

Agro-ecosystem analysis (AESA)



AESA Taking



AESA processing



AESA Presentation

AESA is regular farm monitoring, plants observation, data taking, crop analysis and decision making process to empower farming practices.

Group dynamics



Energisers and group building practices are useful for all members to continue together during long learning period or even after the FFS.

Today's topic



Necessary knowledge and techniques related to the learning enterprises or members' particular interests will be taught and discussed

Planning for next week

Announcement

Roll call (Closing)

What kind of enterprises do we promote?

In our FFS programme, several potential enterprises are proposed to the members and they select some of them participatory according to their needs and interests.

Tree nursery



In dry season, despite difficult availability of the water, FFS members practice tree nurseries. They will become able to produce their favourite tree seedlings in their household.

Horticulture



The project also promotes horticulture crops since it will bring quick success and returns which will make farmers confident to try new natural resources related enterprises.

Tree intercropping



Although, people used to protect trees in the farm, frequent cultivation and free grazing made it to disappear. Tree intercropping will be a solution to rehabilitate such farmland.

Fodder bank



As natural vegetation decrease, the needs of fodder increases. Fodder grass and trees are conservational land use and it also contribute to reduce grazing pressure to farm/woodland.

Fruits orchard



Fruits trees produce food or cash crop while they provide environmental conservation services. It is a good entry point particularly for women to grow trees in their homestead.

Woodlot



Scarcity of wood fuel is a common problem in the communities in semi-arid area. Promotion of tree planting and small tree stand like woodlot will be a solution to such challenges.

Implementers comments



Mr. Worku Birra,
former Administrator, Liben-Chukala district

"When the project started FFS, I thought it would not be beneficial for us. However, I found out after FFS, our farmers are really practicing what they learnt. Now I can say that it's effective extension method for Agroforestry."



Mr. Yidnekachew Wolde-Yesus,
Natural Resource Team Leader, Liben-Chukala district

"When we introduce new practice to the farmers, we also have to facilitate them to build their capacity and empower them so that farmers to feel confident to try it. FFS also focuses on such human development factors."

How our farmers have changed?

Tree seedling producer



Mr. Gadaa Guddata has an excellent farm and tree nursery which have a varieties of crops and seedlings. "I just introduces what I practiced. I learnt through FFS, even me I am able to try and realise new things."

Woodlot grower



After FFS, Mr. Tesfaayye Lamma planted Eucalyptus and Papaya with his family. "I never tried before but I succeeded. Now our woodlot is growing well and we are expecting Papaya fruits as it become flowering."

New technique trailer



After FFS, Mr. Kaabboo Aliyyii started sowing Maize in line. "When I heard this technique from someone before, I was not sure. But now I am very confident about it because I already tested through FFS."

Livestock fodder grower



Mr. Jimma Worjii has introduced various fodders after FFS. "I used to have difficulty to feed animals but the problem has resolved now. I am even selling the fodder cutting to the neighbours to try the same."

Woman farmer facilitator



FFS farmer facilitator Mrs. Ayyuu Badhaasoo has planted the seedlings risen by herself. "FFS is good in demonstration because the examples are just around, many farmers can come and learn from us."

Farming wife & husband



Mrs. Chule Tufaa attended FFS constantly. "Every week I shared with my husband what I learnt and we practiced in the farm." Now their farm is enriched with fodder, fruit and forest trees, and seedlings, etc.

Look those self-practitioners after FFS

Tree inter-cropper



“My worry is that the beneficial trees like *Faidherbia albida* in the farm has recently decreased.” Mr. Amaan Maddaa said. “But, I have found through FFS, tree inter-cropping is the right way to recover such farmland.”

Farmer facilitator forest cooperative



Farmers who experienced FFS Facilitators have formed a forest cooperative and started seedling production to promote tree planting in the community. The district is supporting them by providing the land.

Horticulture grower



“I used to rest after sowing the crops but now I am busy looking after the farm regularly as I practiced in FFS.” Mr. Robba Batte is busy in dry season also since he developed own well for watering veegetables.

New crop challenger



Buckwheat is a crop widely cultivated in the world but less known in Ethiopia. Agriculture Research Centre also recommend it as an alternative crop to the marginal land.

Mr. Guddataa Hordofaa said, “We proved it through FFS. It can be harvested in two months and yield was not bad. Now I am looking forward to eat Injera or bread made from Buckwheat with my family.”



Woman farmer backstopper



“The capacity buildings was mostly meant to male education before but FFS gave us equal chance to learn.” Mrs. Milkoo Gurmeecha said. “As we become confident through FFS, other ladies also are able to.”

School teacher



Teacher Agidda impressed with a FFS farmer and started planting seedlings with his students. “Our place is very dry and that is why we have to teach them the importance of trees and how to conserve it.”

Faaruu BQD (FFS song)

1.

Barnootaa Qoteebula Dirree
Ni baranna kayoo afur qabannee
Midhaan garii ta'ee haa omishinuu
Masii kenya yeroon haa dawwannu
Qabeenyaa uumammaa kunuunsinaa
Qotee bulaa ogeessa taasiifina

2.

Huunduu BQDtti haa hirmaannu
Dargaggo fi maanguddonni
Haawwota fi shamarranniin
Qixxeen keenyaa dubartootaa
Hin gaafatuu sadarkaa barnootaa
Torban torbaniin hirmannaa
Qotee bulaa Ogeessa ni taana

3.

Yaalii hedduu gaggessiinee
Ofi-eeggannoon xinxallnee
Adeemsa isaas hubannee beeknee
Ofitti amantummmaas gonfanne
Dandeetti waa Uumuu horannee
Qotee bulaa Ogeessaa taane

**Sustainable Natural Resource Management Project
through FFS in the Rift Valley Area of Oromia Region**



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