

In the practice FFS so far...

Practice FFS is being conducted in 45 villages (42 Groundnut and 3 Ragi) in the two districts, covering 868 farmers (773 women and 95 men). The 868 farmers will work in pairs and adopt three neighboring farmers (covering 1302 farmers), to practice their learning with them in small groups.



Practice FFS participants making compartment bunds

Participants facilitate practice FFS sessions, based on their weekly learnings, backstopped by a feedback and planning process and the facilitator team's support. The following key activities were taken up towards launch and establishing the FFS.

1. Identification of villages and groups of farmers
2. Collection of basic details and profiling of participants
3. Assessing needs, laying out experiments and plot design for the FFS learning plot
4. Arrangement of critical inputs like biologicals to the participating farmers
5. Finalising the monitoring and logistics arrangements for all the FFS sessions
6. Technical sessions dealt include seed germination, seed treatment with biologicals, compartment and interception bunding and enriched farmyard manure preparation.

Farmers experience alternatives

Muniappa learnt how to quantify germination status of Groundnut seeds in the Doddur FFS. When he tested his seeds, he found only 60% of them germinate and concluded that it is of poor quality. He immediately disposed the seeds and replaced them with fresh seeds. He had learnt a new skill and practiced it to his benefit.

Groundnut, being a season specific crop in drylands, has to be sown before 15th July. This minimises the losses due to pests like leaf miner and red hairy caterpillar, excess moisture and processing difficulties during harvest. However, this opportunity could be availed only in 11 out of 45 villages, where sowing could be completed due to early showers during June. In these villages, experiments have been laid out based on participatory decisions, with respect to varieties (TMV 7 and JL 24 being tested against the locally used varieties) and insitu rain water management practices like interception bunds, dead furrows and dust mulching have been carried out.



Participants in practice FFS

AME Foundation promotes ecological agriculture among small and marginal farmers in the semi arid areas of the Deccan Plateau by generating farming alternatives, enriching farmers knowledge, linking development agencies and sharing experience.

To,

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FFS Discovery Learning in Dryland Farming

(A Newsletter on Farmer Field School experience)

Issue 2

15th July 2006

- Launching of Modified Training of Facilitators (MToF)
- Organising FFS with CBOs
- Broadening FFS Curriculum to include dryland farming technologies for the first time...

Coordinator's column

With the programme gaining momentum in terms of participation, understanding and field level activities, this period has generated ample experience both in the regular sessions of MToF and also on establishing practice FFS. Practice FFS has been initiated in 45 identified villages. This involved intensive field activities for the selection of villages and participants, conducting orientation meetings, collecting baseline data and commencing FFS sessions.

The second issue details some of the activities and experiences gained in the MToF sessions as well as in practice FFS. While participants have learnt many aspects in terms of technology and skill upgradation, the newsletter reflects just one from each - 'insitu rainwater management', as one of the important technologies for smallholder drylands and facilitation as understood from the perspective of a participant. We would also like to introduce people in the MToF - starting with a sub group and its facilitator.

The newsletter committee hopes that this issue provides an useful reading experience.

G. Ravi Kumar
MToF Coordinator

MToF so far...

The participants during this period learnt various aspects related to soil profile, in situ management of rainwater, importance of preparatory tillage, crop physiology related to seed germination etc. Besides technical aspects, participants also learnt the nuances of effective facilitation and feedback.

Participants learnt to facilitate scientific methods in FFS by way of assessing field problems, designing the experiments and laying out the field. This is done in an identified FFS field in Jonabanda, a small village located near the training venue. Groundnut and Ragi, the two major dryland crops are cultivated on the FFS plots, to suit the learning needs and farming situation in the area. Long term experiments have been laid on *insitu* rainwater management, varieties, sowing methods and nutrient management.

Participants tried out various options for seed germination. The seed germination experiments concluded that the paper roll method is easy and effective than the tray and cloth methods.

Importance of enriched farmyard manure was understood. Participants have learnt to prepare enriched FYM using Rock Phosphate for the use in the MToF learning plot.

Participants understood the different types of bunds, how they help in soil water conservation. They had practical experience of construction of interception and compartmental bunds.

The art of facilitation was discussed with the participants using role playing method. The details are explained in later sections.

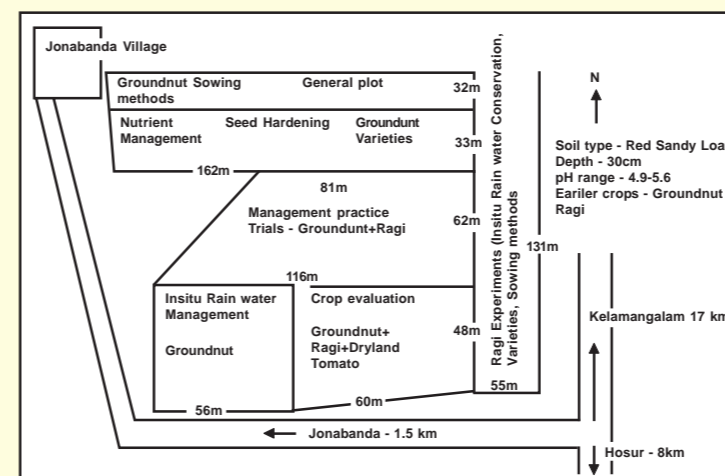


Participants preparing enriched FYM

What others say

I am really happy to know that AMEF has worked directly with the CMRCs in Krishnagiri. This is really a major breakthrough and provides further evidence of your wisdom and your commitment to empower people's institutions.

Padmasri Aloysius P Fernandez
Executive Director, MYRADA



MTToF Plot Layout

Understanding dryland technologies- *In situ* rain water management

Moisture management in dry farming is a critical need. Both excess and deficit moisture at critical stages of crop growth greatly influence the productivity. Thus, managing soil moisture regime during long dry spells and draining excess moisture during intensive periods, becomes a major activity in drylands. In drylands, the focus should be particularly on insitu conservation for water to infiltrate than allowing it to run off carrying away with it the fine topsoil particles and valuable organic matter.

The effectiveness of soil water conservation is best achieved by a combination of land shaping, ploughing, intercultivation techniques and crop stand improvement. The land configuration, economic feasibility, easiness of adoption and social acceptance are some important factors, which determine the combination of such activities in smallholdings. While ploughing and crop stand management aspects can be taken up simultaneously as part of improving the agronomic practices, the land shaping activities need extra investment in terms of labour time and money.

Loss of cropping area due to interception bunding – Gain or loss?

Farmers often fear bunding as a technology that takes away cultivable area. When constructing an interception bund of basal width 45 cm along a 21 m long and 11 m broad plot, the area covered is approximately 8% of the total area. Participants calculated and observed that the yield loss due to less than optimum population (22 instead of 33 plants per sqm) is 4 times (33%) more than that lost by bunding. Participants concluded that the 'visible' loss due to bunding can be compensated by planting on bunds for generating biomass.

Bunding is a more feasible land shaping technology to address many critical needs in dry land conditions. Bunding serves three purposes – harvesting more rainwater insitu, distributing the available moisture evenly within the bunded area and draining excess moisture, if designed and laid out appropriately. The types of bunds, their advantages and expected challenges learnt by the participants are summarised in the Table.

Participants prioritised inter bunds, compartment bunds and scooping as viable technologies suited for Groundnut and Ragi cultivated areas, with slopes of 2–3%. They learnt and practiced them in the MToF plot in smaller sub groups.



Participants making bunds

They came out with suggestions on how best to simplify these technologies, suitable for small farmers. They felt that compartment bunding is particularly disadvantageous, when human labour is employed. They also suggested modifications like making bunds simultaneously with summer ploughing, by slightly reorienting the plough lines (tilting the plough to form a deeper trench and a higher ridge, after each 6–8 rows). Another suggestion was to plough criss-cross lines at necessary intervals to form barriers between plough lines.

Table 1 - Types of bunds

Sl	Type	Features	Advantages	Challenges
1	Field bunds	Laid along the border of the fields.	Effective in smaller plots	Should combine with other methods. Expensive and less effective in high rainfall periods. More chances for breaching.
2	Inter bunds	Laid across the slope within the plots to form small barriers to water movement, to sub divide plot areas into small compartments <i>Some examples: Interception bunds, Compartment bunds, scooping</i>	Distributes water evenly in small plots, thereby avoiding moisture stagnation at lower points and drying at higher points within plots.	Hinders sowing and intercultivation, if plot size is small, particularly when done using tractors.
3	Contour bunds	Laid along the contour lines in the plot	Effective method of harvesting and evenly distributing rainwater.	Hinders sowing and intercultivation, when done with implements.

Learning the art of facilitation

Facilitation skill is one of the essential requirements of a facilitator, particularly in an FFS. Facilitation is a combination of many methodologies, effectively used to enable FFS participants to learn and practice complex things in a easy way. Facilitation has three parts – understanding the participants and believing in their abilities, creating a situation for their learning, allowing them to practice with creativity and make them evaluate the outcome on their own. This does not mean, allowing the participants to be fully on their own, but be with them like a coach, enabling them whenever they face difficulties with learning. The final outcome is learning by experience, thereby leading to change in thinking, knowledge and skill levels, expected of an empowered individual.

Do's in facilitation

1. Prepare well before the session – be clear about the purpose and role
2. Believe in the participant's ability to learn
3. Create situations for observations and discussion in small groups. Clarify the tasks to the groups
4. Allow practice in their own ways – this will lead to innovations
5. Help the group to evaluate the outcome and take decisions
6. Consolidate and provide feedback before closing the session
7. Follow up with the planned activities and support their implementation
8. Accept honestly, when you are not familiar about an aspect raised by the group

Dont's in facilitation

1. Briefing should be short – don't spoon feed participants
2. Do not kill the thinking and creative abilities, by giving answers directly
3. Ask questions to enable thinking, not for the sake of asking
4. Be a role model for the group

Know the people...

The participants have been divided into groups, so that there is intense and effective learning among themselves. The uniqueness of the programme is also reflected in the way these groups have been named. The groups are named as Rain, Earthworm, Honey bee, Silkworm, Lady bird beetle and Spider, representing various facets of dry farming. In this issue, we would like to introduce the "Rain" group and its facilitator Mr. Indudhar Hiremath.

Rain Group

The name signifies the only source of water in dryland farming, making it a vital natural resource. Also, indicating that each individual in the group is hoped to become a precious resource like rainwater.

Number of members – 8
Gender balance – Highly balanced
Marital status – All are married
Eldest member – Mrs. Bakshunisa (44)
Youngest member – Mr. Madesh (24)
Uniqueness of the group – The group's strength lies in its unity, beyond diversity in age, language (two speak Kannada and one in Telugu and the rest speak Tamil) and educational background.



Rain group in field action

Mr. Venkatesan is the only other graduate in the participants group.

Facilitator – Mr. Indudhar.S.Hiremath
Co-facilitator – Dr. Diraviam

Meet the FAO Master Facilitator

Name - Mr. Indudhar.S.Hiremath
Native - Saundatti, Belgaum district of Karnataka
Age - 32 years
Qualification - MSc (Ag) in Plant Breeding
Profession: Agricultural Officer (Karnataka State Agricultural Department)
Marital status: Married to an Agricultural Officer, has two kids – a son and a daughter



I S Hiremath – Facilitator

Training undergone: Trained in the Raichur FAO ToF in 2001.
Experience as a facilitator: Facilitated two FAO ToFs and two State level ToFs. He has also served as District IPM coordinator for one year.
Mr. Hiremath is now facilitating his sixth ToF
Philosophy he believes in: 'Detailed planning and practice makes you perfect'
AME Foundation and MToF participants congratulate him on the arrival of his daughter, during this period.