

Strategies for Operationalization of Programme

During the year 2007-08 the programme covered 2.74 lakh ha of more than 1.95 lakh farmers in 1847 villages.

At village level ‘Organic Farming System Plans’ are evolved by participatory exercises taking into account location specific problems and plan for reducing costs of cultivation by using the on farm and off farm resources within the villages. Individual farmer’s plans would be aggregated into village plans. The farmers would be trained by other experienced farmers, and resource persons from NGOs and research institutions in efficient utilization of their resources. The programme will converge with the ongoing National Rural Employment Guarantee Programme for Natural Resource Management, Village NRM plans would be prepared during the December which would be implemented along the season. NPM and establishment of community seed banks to produce save and share seeds, and making arrangements to move towards organic farming systems. The plans for 2007-08 are already made and implemented.

Capacity Building

Intensive Orientation training, monitoring and communication programmes are planned at different stages of the crop. Several communication material are also being developed. This material will be handy in expanding the programme. The trainings upto the district level would be in the real farm situation.

The details of work plan for five years are given below.

Organic Farming Systems – Operational Strategies

Main Issues	Operational Strategies
Cropping Systems <ul style="list-style-type: none">• Currently there is a monoculture of crops and varieties across the situations which are resulting in pest and disease build-up.• Cropping intensity needs to be	<ul style="list-style-type: none">• Developing Organic farming System plans through participatory exercises.• Situation specific crops based on soil suitability, water budgeting etc.• Promoting pulses as an intercrop and one of the components in the crop cycle will be made

<p>increased by following rational intercrop and mixed cropping systems.</p>	<p>mandatory. This will increase the cropping intensity, soil productivity and total pulse production.</p> <ul style="list-style-type: none"> • Integrating with livestock. • Promoting tree based farming systems.
<p>Community Seed Banks</p> <ul style="list-style-type: none"> • Community seed banks to make available of good quality seed, in time at affordable price. • Focused on selecting, maintaining, saving, storing, sharing and reusing good quality seed 	<ul style="list-style-type: none"> • A matrix of farmers preferences to particular seeds would be made for each village. • Training farmers on seed saving production and maintaining of lines • Existing best varieties (improved and traditional) could be used. • Seeds which have deteriorated in quality would be replaced with newer stock. • Demonstrations of new varieties of seed to address specific pest, disease and soil related problems will be taken up. • Traditional seeds which have a preference would be regenerated. • Identifying planning and implementing employment and income generating activities.
<p>Non Pesticidal Management</p> <ul style="list-style-type: none"> • Integration of all suitable management techniques in a harmonious manner with natural regulating and limiting elements of the environment to prevent insects from reaching damaging stage and damaging proportions. • Making best use of natural resources locally available and take best advantage of the natural processes. 	<ul style="list-style-type: none"> • Farmers would be trained in concepts of ecosystem identifying insect pests and predators in various stages of life cycles and management strategies • Farmers will develop pest calendars for the village depicting the seasonal occurrence of pests across the crops • Adopting various NPM methods like <ul style="list-style-type: none"> i) Agronomic practices: Summer ploughing, border crops ii) Seed Treatment : trichiderma viridae, etc., iii) Traps : Bonfires, light traps, pheromone traps, sticker plates, etc., iv) Enabling environment : trap crops, bird

	<p>perches, decoctions, etc.,.</p> <p>v) Green sprays : NSKE, Chilli-Garlic extract, Nux Vomica, etc.,.</p> <p>vi) Inventory of resources which can be used in the pest and disease management.</p> <p>vii) Documenting innovations and their effects.</p>
<p>Improving Soil Health and Productivity</p> <ul style="list-style-type: none"> • Improving the soil organic matter • Promoting best cropping systems by increasing crop and genetic diversity. 	<ul style="list-style-type: none"> • Developing village resource maps and village NRM plans. • Biomass plantation on the bunds and common land. • Promoting dry land composting techniques. • Tank silt application. • Using bio-fertilizers like azolla, BGA, Azospirillum, Azotobacter and VMA. • Using liquid manure like Panchagavya, Amrutapani and Jeevamrutham. • On farm biomass production plans like Dabholkar method, ICRISAT model.

Farmer Resource Persons : Continuing the tradition of using Community Resource Persons in promoting women SHG concept best practitioners would be used as Farmer Resources Persons to motivate and build capacities of the other farmers. We found that these Farmer Resource Persons have the following rules to play based on their skills. A directory of the resource persons would be printed and shared.

- Campaigners : Farmers having rich experience in organic farming/sustainable agriculture who can share their experiences, analyse the problems and convince other farmers in taking up organic farming.
- Innovators : Farmers who have made innovations who have larger applicability would be identified and the innovations would be documented and shared with other farmers. They would be involved in evolving practices which can manage emerging problems refining the technologies already developed.
- Training and capacity Building : Farmers successfully practicing organic farming and having good communication skills would be involved in training other farmers in organic farming.

- Trouble Shooting : whenever any farmer complains a problem, a resource farmer from a nearby village.
- Conducting Field Days : Field days are conducted in the Farmer Resource Persons Farms
- Melas, Exhibitions : The farmer Resource Persons would plan an important role in conducting Kissan Melas and Exhibitions. They share experiences and motivate other farmers to take up organic farming.
- Farmer festivals : Harvest festivals are conducted in the best fields. The crop cut experiments and discussion on the cost savings, health and ecological benefits and internalization of inputs would be discussed.

Custom Hiring :

Most of the small & marginal farmers in the programme do not own plough bullocks. With the result their sowings get delayed and there will be drastic yield reduction. Further the preparation of botanicals require manual grinding to make powder or paste involving drudgery. When a program is operated in higher scale, huge demand is generated for supply of these botanical preparations and supply is to be ensured to maintain momentum of the program. Neem seed pulverisers or multi purpose grinder will be one such intervention. Similarly providing spray equipments, markers and weeders in case of SRI cultivation, and mini dal mills to process for value addition are to be provided. If one time revolving fund of Rs. 50,000/- are provided to this VO(SHG) organizations, they will be procured, and one poor SHG family, will be selected to run it on custom hiring basis as an enterprise. This program will be integrated with the custom hiring component of Department of Agriculture.

Evolving Suitable Institutional Systems for Improving the Livelihoods of Small and Marginal Farmers in a Sustainable Manner.

1. The village organization of women Self Help Groups(SHG) and the Federation of Women Self Help Groups will be the main implementation platform of the program at the village level. The mandala mahila samakya (MMS), the Federation of Women SHGs a mandal(Blocks in A.P.) level anchors the program.
2. At village level the farmers would be organized into small organic farmer groups (Sasya Mitra Sangha) which operate 'Organic Farm Schools' (Sendriya

Polam Badi). These field schools are homogenous groups of farmers growing similar crops and possibly in contiguous areas. They federate at the village level as collectives and organize the production and maintain internal control systems in the form of participatory guarantee system. The federation of these producer collectives would take up the marketing activities with the help of VOs. These institutions would also help in sustaining the initiative. At the same time, the food produced would be integrated into food security programme (on going) of the SHGs.

3. Village resource centres established at the village level will build capacities of these farmers, agriculture workers and other small entrepreneurs who involve in pre production and post production processes.
4. At village level village activists would be identified who would be a practicing farmer. These village activists (4 to 5 in number) regularly organize the 'Organic Farm Schools' field schools every week through the village resource centres. Five such villages in a close areas will form a cluster which is the basic unit of operation in this programme. The technical support and regular monitoring of the programme would be the responsibility of the cluster coordinator. Each mandal(blocks n A.P.) will have one or more cluster.
5. Identified NGOs and KVKs having experience in establishing sustainable agriculture, organic farming will provide support in the form of community mobilization, capacity building and monitoring. At mandal level MMS will enter into an agreement with the NGOs. Currently around 90 NGOs are identified in the program. They formed a consortium called 'Sustainable Agriculture Network'. At state level technical support is provided by identified resource organisations who have established sustainable agriculture, organic farming models successfully. Currently centre for Sustainable Agriculture, Hyderabad, WASSAN, Hyderabad are acting as resource agencies.
6. At state level, a State Project Management Unit(SPMU) is established in the Society for Elimination of Rural Poverty (SERP) that will act as the nodal agency. The state secretariat of the Consortium of NGOs(SANET) involved in the programme would be hosted with centre for Sustainable Agriculture which also with SPMU in planning the field level activities, establishing appropriate institutional systems, designing the resource material, capacity building programs, monitoring and reviewing, process documentation and reporting.

Broad Expansion Strategies

Year	Strategy
2007-08	Existing 300 clusters with 2 years experiences
2008-09	250 clusters with 2 years experience will adopt other clusters in the mandal, total 480 clusters
2009-10	40 clusters with 3 years experience will adopt other clusters total 500 clusters
2010-11	500 cluster with 2 years experience will adopt another 800 clusters
2011-12	800 clusters will expand to 1000 clusters

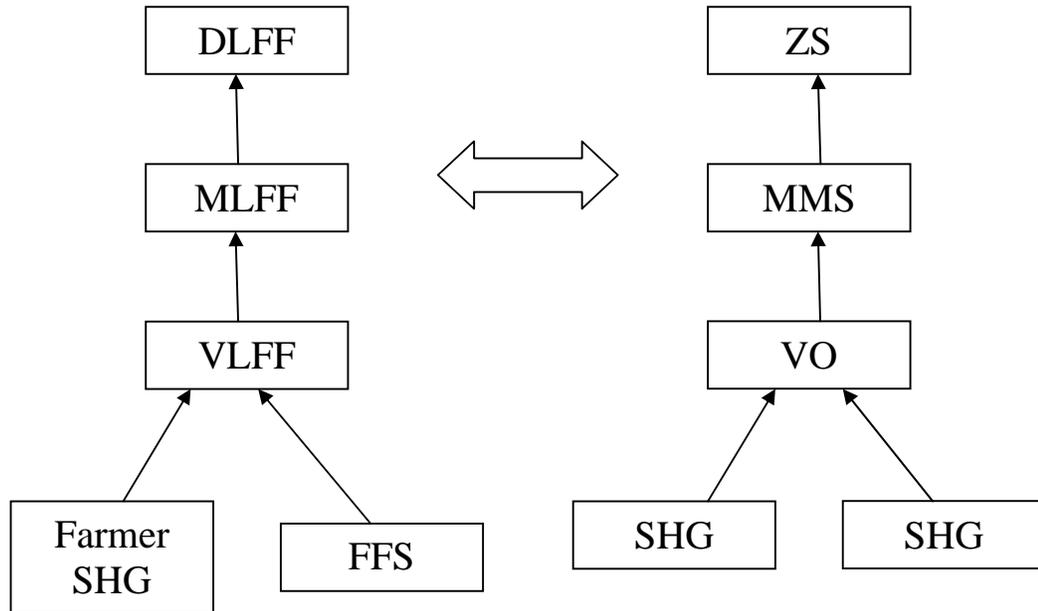
- There will be NPM and marketing in common in all the villages – NPM produce will be integrated into ongoing food security.
- New mandal will be included only when an NPM mandal reaches more than 70% villages
- Focus towards tribal mandals as pesticide consumption in these areas is going up due to commercial crops

Human Resources

- Identification of village activist, cluster activist, district project manager(NPM) will be done one year advance and trained in rabi season of the preceding year.
- Concerned Sarpanches, village organizations would be brought to exposure during kharif.
- NGOs work will be deepening in their villages.
- Best practicing farmers would be used as resource persons to strengthen the program.
- Resource Organizations : NGOs part of Sustainable Agriculture Network of NGOs, Krishi Vigyan Kendras, Agriculture University Scientists, ICAR scientists and Department of Agriculture who believe and have experience in organic farming would act as resource organizations in the entire program.
- Centre for Sustainable Agriculture is currently providing the technical support and monitoring at the state level.

Institution Building

At the village level there will be a village level farmer federation including women SHGs. They will federate at mandal level as MLFF(Mandal Level Farmer Federation) and district level as District Level Farmer Federation (DLFF)



There will be forward and backward linkages

Village farmer federation

This includes crop farmer, Dairy farmer and Horticultural farmer.

These federations basically work on;

1. Production and marketing plans
2. Technical capacity building
3. Post Harvest technologies

Indicators at Village level

- Productivity of the cropping system rather than individual crop
- Increase in net realizable incomes
- Reduction in pesticide and fertilizer usage
- Extent of internalization of inputs
- Decrease in distress and tied up scales
- Increased nutritional security

Financial System

The Nodal Agency for Implementation of this project would be society for elimination of rural poverty.

The overall requirement of funds for this special project is given (upto 2008-09) below.

(Rs. In Crores)

SNo	Component	2007-08	2008-09
1.	Cluster Level Activities	4.015	21.535
2.	Seed Bank	5.250	12.250
3.	District Level Activities	0.465	1.455
4.	State Level support	0.360	1.860
	Total	10.090	37.100

ANNEXURE – II

List of NPM Villages in Andhra Pradesh - 2008-09				
SI No.	Name of the District	No. of Mandals	No. of Clusters	No. of Villages
1	Srikakulam	9	55	297
2	Vizayanagaram	18	39	220
3	Visakhapatnam	13	30	150
4	Guntur	13	26	130
5	Nellore	11	22	110
6	Kurnool	7	17	85
7	Ananthapur	30	146	730
8	Chittoor	7	13	65
9	YSR Kadapa	15	26	130
10	Rangareddy	3	7	35
11	Nizamabad	3	5	25
12	Medak	18	48	240
13	Mahabubnagar	14	37	180
14	Nalgonda	15	31	154
15	Warangal	9	38	190
16	Khammam	18	42	210
17	Karimnagar	17	12	60
18	Adilabad	20	31	160
	Total	240	625	3171