National Mission for Sustainable Agriculture

Annual Action Plan -Rainfed Area Development (RAD) -2022-23

Total RAD Budget Outlay	:	Rs.2510.00 Lakh			
RAD scheme fund	:	Rs.2500.00 Lakh			
Total GOI Share	:	Rs.1500.00 Lakh			
Total State Govt. share	:	Rs.1000.00 Lakh			
RAD Administrative fund	:	Rs.10.00 Lakh			
ATMA funds	:	Rs.41.40 Lakh			
Implementing Department	:	Department of Horticulture & Plantation Crops as Nodal department, Department of Animal husbandry and Department of Agriculture			

I. General scenario

Rainfed Agriculture plays an important role in Indian economy. Rainfed crops account for 58 percent of net sown area in the country. Moreover, two thirds of livestock and 40 per cent of human population of the country live in rainfed regions.

Tamil Nadu is divided into 7 Agro climatic zones which are conducive for growing various kinds of Horticultural crops. But uncertainty and fluctuations of rainfall distribution reduce production and productivity under Rainfed conditions adversely affecting the livelihood of poor and marginal farmers. A large area remains underutilized because of unassured irrigation facilities and the low rainfall it receives.

There is an urgent need to increase the production of Horticulture crops mainly to provide nutrition to the growing population. The area available for cultivation has been gradually reduced due to urbanization and the scarcity of resources like water and labor which create much pressure on farmers to produce more from the minimum available land. With the available latest technologies, water holding capacity of the soil can be enhanced so as to retain more moisture for a prolonged period which helps in improving the production. Integrated Farming system, value addition and farm development

activities are the strategies proposed to guarantee sustainable income to the farmers. These activities are proposed in this project at an outlay of **Rs.2510.00 Lakh.**

II. Project Rationale

- Increase in population, increasing urbanization and industrialization leads to the reduction of cultivable land
- Eroded and unfertile soil conditions
- Prevalence of dry conditions for rainfed cultivation
- Arresting soil erosion and to improve the ground water-level
- Prolonged drought in the state made agricultural land to barren land

III. Objectives

- To bring more rain fed areas under cultivation.
- To promote integrated Farming System (IFS) with emphasis on intercropping, mixed cropping practices with allied activities like livestock to provide a sustainable income to the farmers.
- To reduce poverty in rainfed areas and provide livelihood support.
- Convergence of relevant developmental programme for the optimal utilization of resources.

IV. Project implementation

It is proposed to implement this programme in 30 districts of Tamil Nadu. A cluster- based approach of 100 Ha or more (contiguous or non-contiguous with close proximity in a village/ adjoining villages) will be adopted.

1.Integrated Farming system

Integrated Farming System is proposed to be implemented in 30 Districts of Tamil Nadu viz., Ariyalur, Chengalpet, Coimbatore, Cuddalore, Dharmapuri, Dindigul, Erode, Karur, Kallakurichi, Krishnagiri, Madurai, Namakkal, Perambalur, Pudukottai, Ramanathapuram, Ranipet, Salem, Sivagangai, Tenkasi, Theni, Thiruvallur, Thoothukudi, Tiruvannamalai, Trichy, Thiruppur, Tirunelveli, Tiruppattur, Vellore, Villupuram and Virudhunagar under Rainfed Area Development Programme. The Integrated Farming System unit proposed under RAD is as follows:

S. No	Component	Assistance	Total cost (Rs)	Assistanc e Proposed (Rs.)	Total for 5000 units (lakh)	Remar ks	
1	INTEGRATED FAR		_				
а	Horticulture based farming system with pulses/ oilseeds/ maize as intercrop	Rs.17,500/- per Ha (Rs.15,500/- for Main crop - Horticulture crop and Rs.2,000/- for intercrop – Agriculture crop	50,000	17,500	875.00		
b	Milch cow/Buffalo	Rs.15,000 per animal-1 No	30,000	15,000	750.00	RAD schem e fund	
С	Goat / Sheep	Rs.1,500 per Goat, (4+1) Nos	15,000	7,500	375.00		
d	Fodder crop (10 cents)	Rs.800/10 cents	1,600	800	40.00		
е	HDPE Vermibed	Rs.6000/unit (96 cu.ft)	12,000	6,000	300.00		
f	Apiary units	Rs.1,600 (2 nos)	8,000	3,200	160.00		
g	Livestock Shelter	Mandatory					
h	Compost pit	Mandatory					
	Sub-Total		1,16,60 0 50,000		2500.0 0		
2	CONTINGENCIES	Rs.0.20 lakh per cluster			10.00	RAD admin fund	
	Sub-Total				10.00		
	Total (1+2)				2510.0 0		
3	TRAININGS & EXPOSURE VISITS						
а	Official's trainings (30 districts)	20 officials per district @ Rs.400/ trainee			2.40	АТМА	
b	Farmers training	Rs.250 per farmer			15.00	fund	
С	Exposure visit	Rs.400 per farmer			24.00		
	Sub-Total				41.40		
	Grand Total (1+2+3)				2551.4 0		

Integrated Farming System is proposed to be implemented in **5000 units** at a financial outlay of **Rs.2551.40 Lakh** (Rs.50,000/IFS unit) in clustered manner (100 Ha each) along with other implementing Departments.

1. Components of Integrated Farming System:

a) Horticulture based farming system:

50% of input cost limited to Rs. 17,500/- per Ha for Horticulture based farming system. Farmer will be cultivating Horticulture crop as the main crop and the intercrop will be any of the Agriculture crops viz, Pulses, Oilseeds, Maize, etc. Assistance will be provided for seeds & planting materials, land preparation, fertilizer/manure, plant nutrients, Integrated Pest management Practices, etc., and a maximum permissible assistance will be restricted to 1 Ha per beneficiary.

b) Milch cow/Buffalo:

The possession of Milch cow/Buffalo is an essential part of the Integrated Farming System. The cow not only provides milk but also additional income to the farmers by providing dung as the base material for Vermi-compost and other composting methods. Hence, it is envisaged that each farmer will be given subsidy to purchase 1Milch cow/Buffalo under Integrated Farming System. The subsidy available for one Milch cow/Buffalo is Rs.15,000/- or 50% of the cost of Milch cow/Buffalo purchased by the farmer whichever is lower.

c) Goats/Sheep:

Goats/Sheep are to be purchased as part of the Integrated Farming System where four should be female and one should be a Male. The assistance made available for the purchase of (4+1) nos. of Goats/Sheep will be Rs.7,500/- or 50% of the cost of Goat or Sheep purchased by the beneficiary whichever is lower.

d) Fodder crop:

The beneficiary farmer has to cultivate fodder crop in the field according to the area available. The subsidy amount will be 50% of the cost limited to a maximum of Rs.800/- for 10 cents as Back ended subsidy.

e) HDPE Vermibed:

Under value addition and farm development activities, it is proposed to establish HDPE vermibeds (96 cu.ft). 50% subsidy amount of Rs.6,000/- per unit for Vermi bed will be extended to the farmers.

f) Apiary (Bee Keeping):

The assistance to be provided for one Apiary unit consisting of box and colony will be Rs.1600/-. 2 Apiary Units as per the above rate of assistance would be provided to the beneficiary at an assistance of Rs.3,200/-.

- **g) Compost Pit:** Compost Pit is mandatory for every IFS unit. The farmer has to establish the compost pit on his premises with his own cost and in proximity to the IFS Unit.
- h) Livestock Shelter: It is mandatory that the farmer should construct with his own cost.

2. Contingencies:

The recurring contingencies for execution of the project will be made available at the rate of Rs.0.20 lakh per cluster to the concerned Assistant Director of Horticulture to meet out the incidental expenses as per requirement. The expenditure will be met from the administrative fund of NMSA.

3. Training and Exposure Visits:

The training and the exposure visit for the beneficiaries would be arranged by Department of Horticulture and Plantation Crops to successful IFS farms belonging to small farmers and to TNAU Centres /KVKs by utilizing the ATMA funds as follows:

a) Officer's training:

An amount of Rs.400 would be allotted for officer's trainings. In each district, 1 no of training would be conducted @20 officials /training (30*20 officers*400 = Rs.2.40 lakh)

b) Farmer's Training:

An amount of Rs.250 would be allotted to each farmer for participation one day training (120 trainings* 50 farmers *250) = Rs.15 lakh.

c) Exposure visit:

Within the state: The component will cover a maximum limit of 50 farmers for 1 day programme and each farmer will be allocated Rs.400 (120 nos of Exposure visits *50 farmers *400 = Rs.24 lakh.

Fund requirement - Component wise

(Rs in Lakh)

S. No	Component	Assistance	Phy	Fin	GOI Share	State Share	Beneficiaries (nos)
1	Integrated Farming system (IFS) in units (100 Ha/cluster)	0.5	5000	2500.00	1500.00	1000.00	5000
	Total (RAD			2500.00	1500.00	1000.00	
2	Contingencies	0.2	50	10.00	6.00	4.00	-
	Total (Admin			10.00	6.00	4.00	
	Grand Total			2510.00	1506.00	1004.00	5000

V. Budget

This scheme is a Centrally Sponsored with a sharing pattern of 60:40 between the Centre and the State. Hence the required budget of Rs.2510.00 lakh may be provided with the Government of India share of Rs.1506.00 lakh and State Government share of Rs.1004.00 lakh.

VI. Project Outcome

- Bringing 5000 Ha into Integrated farming system to double the farmers income and make farming self – sustainable
- Benefiting 5000 farmers through this scheme