



**TAMIL NADU AGRICULTURAL UNIVERSITY**

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**No.PC/KVK/RMD/ NICRA Project – Revised Action Plan /2015-16 Date: 29.05.15**

Sir,

**Sub:** KVK – Ramanathapuram - NICRA Project –Revised Action Plan 2015-16 - submitted –  
Regarding.

**Ref:** Arising .

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I submit to enclose herewith the Action Plan for the project on” **National Innovative Climate Resilient Agriculture” for 2015-16** in respect of KVK, Ramanathapuram for kind perusal.

Sd/xxx  
**Programme Co-ordinator  
KVK, Ramanathapuram**

To

The Principal Scientist & Co-ordinator  
National Innovative on Climate Resilient Agriculture (NICRA)  
Central Research Institute for Dryland Agriculture  
Hyderabad

**Copy submitted** to The Zonal Project Director, Zonal VIII, MRS, HA Farm post, Hebbal  
Bangalore – 560 024.

**Copy submitted** to The Director of Extension Education, TNAU, Coimbatore-3.



**TAMIL NADU AGRICULTURAL UNIVERSITY**

**2015-16**

**ACTION PLAN**

**Technology Demonstration Component**

**National Innovative Climate Resilient Agriculture**

**Krishi Vigyan Kendra**  
Collectorate Complex  
Ramanathapuram – 623 503  
Ph:04567 -232 639/230 250

**Project Proposal**  
**Under**  
**Technology Demonstration Component**  
**Of**  
*National Innovative Climate Resilient Agriculture*

Name of the scheme	National Innovative Climate Resilient Agriculture (NICRA)
Source of funding	Indian Council of Agricultural Research, New Delhi
Name of the coordinating institution	Central Research Institute for Dryland Agriculture, Santoshnagar, Hyderabad 500059
Name of the component of the scheme	Technology Demonstration component
Title of the project	Climate Resilient Agricultural Technology Package at village level
Name and address of the implementing Krishi Vigyan Kendra (KVK)	Krishi Vigyan Kendra Collectorate Complex Ramanathapuram – 623 503 Tamil Nadu
Area of operation (Name & address of selected the village)	<b>MELAMADAI village,</b> Thirupullani block Ramanathapuram Taluk, Ramanathapuram (DT) Tamil Nadu
Zonal project directorate (concerned)	Zone-VIII, Bangalore
Project team of the KVK	<b>Er.I.Seegan Paul</b> Programme Co-ordinator  Dr.M.Shantha sheela, SMS (Agrl. Extn.) Ms.R.Arulmozhi,SMS (Plant Breeding and Genetics) Dr.J.Ramkumar, SMS (Agrl. Ento.) Dr. K.Saravanan, SMS (SS& AC) Dr.S.Arokiya Mary, SMS(Home Science)
Duration of the project	2015- 2016 (April 2015 to March 2016)
Proposed budget	Rs.14,44,250 /-

**NICRA ACTION PLAN (April 2015 to March 2016)**

**Name of KVK, Ramanathapuram**

**Operational Village: Melamadai,  
Thirupullani block**

**Module-1: Natural Resource Management**

Interventions	Technology demonstrate	Critical input (Variety, Fertilizer / Chemicals doses)	No. of farmers	Area (ac)	Total Expenditure (Rs.)
1	2	3	4	5	6
Improved drainage channel during flooding	Stone pitching in the inlet water ways to control the erosion of farm pond bunds.	Stone pitching in inlet water ways. Rs.6, 000/unit.	6 Nos (Farm Pond established under NICRA scheme)		36,000/-
<b>Total</b>					<b>36,000/-</b>

**Module-2: Crop Production**

Interventions	Technology demonstration	Critical input (Variety, Fertilizer/Chemicals doses)	No. of farmers	Area (ac)	Budget
Upscaling of short duration varieties /drought tolerant varieties	CO (R) 51, Anna (R) 4	Seeds 30 Kg/ac – Rs.26/Kg	25	50 ac	39,000/-
		MN Mixture for Rainfed rice 5Kg/ac Rs. 35/kg	25		8,750/-
		PPFM 200 ml/ac Rs. 300/lit	25		3,000/-
		Biofertilizers Azospirillum 2 pkt/ac Phospho bacteria 2 pkt/ac Rs 6/pkt	25		1,200/-
		Pheromone traps 5 traps/ac- Rs. 25/trap, Rs. 15/ Lure two times	25		13,750
Crop diversification	Pulses Co-8	Green gram Co-8 Rs.90/kg seed rate 8 Kg/ac	10	10ac	7,200/-
		Pulse wonder, 2Kg/ac Rs.200/Kg			4,000/-
		Yellow sticky traps 5 traps/ac Rs.25/trap			1,250/-
		PPFM 200 ml/ac Rs. 300/lit			600/-
Chilli Nursery Management	Introduction of Protrays for raising seedlings	Protray 150 Nos /ac at the rate Rs. 20/unit	5	5ac	15,000/-
		NAA @60&90 DAS	5	5ac	5,000/-
One house one Tree	Dwarf coconut cultivars	Coconut seedlings (Dwarf x tall hybrid)	500 seedlings		50,000/-
<b>Any other (Pl. specify)</b>					
	Vermicompost	Low cost vermi bag 12X4X2 ft with a thickness of 250GSM (10 nos @ Rs.1950), worms 10 kg @ Rs.600/kg),	10	-	25,500/-
<b>Total</b>					<b>1,59,250</b>

**Details of activity:****Vermicomposting :**

The fertility status of the soil in the operational village is very low. The organic carbon content of soil is less than 0.3%. Application of organic manures (farm yard manure, vermin compost) has to insist to increase the soil health and fertility status. Silpaulin vermibag technology is the latest low cost technology by which farmer can produce vermicompost required for his farm holding. Through this demonstration farmer will be trained for producing vermicompost by themselves.

**Module-3: Livestock & Fisheries**

<b>Interventions</b>	<b>Technology demonstration</b>	<b>Critical input (Breed / Variety / Medicine doses,)</b>	<b>No. of farmers</b>	<b>Unit/ No. / Area (ha)</b>	<b>Budget</b>
Preventive vaccination	Management of endo parasite in goat and milch cows	<ul style="list-style-type: none"> <li>• Deworming</li> <li>• Mineral Mixture</li> <li>• Salt lick</li> </ul>	All the farmers having livestock will be covered	All live stocks (poultry birds, goat, cattle)	10,000/-
Income generation from existing farm ponds	Composite fish Culture	<ul style="list-style-type: none"> <li>• Catla,</li> <li>• Rogu,</li> <li>• Mirgal and</li> <li>• Common Carp</li> </ul>	6	-	30,000/-
Creation of green fodder bank	Introduction of fodder crops	<ul style="list-style-type: none"> <li>• Subabul,</li> <li>• Agathi,</li> <li>• Desmanthes,</li> <li>• CO 4 slips ,</li> <li>• Cumbu Napier,</li> <li>• Co FS 29</li> </ul>	6		15,000/-
HAY (dry fodder protection)	Fodder protection	HDPE sheets	10	Rs.3000/unit	30,000
Low cost Indoor green fodder production	Fodder production using fodder chamber	Fodder chamber Cumbu ,Sorghum seeds	2	Rs.4000/unit	8,000
<b>Total</b>					<b>93,000/-</b>

**Details of activity:****Preventive vaccination:**

The mortality and poor body weight in livestock will be curtailed by administering proper vaccination for ecto and endo parasites. This particular intervention will be done in linkage with the Veterinary Assistant Surgeon of State Department of Animal Husbandary. Under this component all the farmers having livestock will be covered in the operational villages.

**Composite fish culture:**

Farmers can easily take up fish culture in village ponds, tanks or any new water body and can improve their financial position substantially. The advanced technology of culturing more than one type of compatible fishes simultaneously is known as composite fish culture. In this technology, Indian and Chinese carps such as catla (*Catla catla*), Rohu (*Labeo rohita*), Mrigal (*Cirrhinus mrigala*), silver carp (*Hypophthalmichthys molitrix*), Grass carp (*Ctenopharyngodon idella*) and Common carp (*Cyprinus carpio*), which graze from different zones of the pond can be cultured. Catla and silver carp are surface feeders, Rohu is column feeder and both Mrigal and common carp are bottom feeders. Catla is zooplanktophagous, silver carp is phytoplanktophagous, common carp is omnivorous and grass carp feed on macrovegetation. The addition of grass carp in this synergic system not only increases fish production due to fast growth of this carp but also the semidigested plant matter voided by this fish in the form of excreta is eaten by other fishes. These six species of Indian and Chinese origin are cultured together under a system of management involving pond preparation, eradication of unwanted stock, fertilization, manuring, feeding these fish through supplementary feeding and manipulation of stock through intermittent harvesting and stocking. The fish yields ranging from 3,000–6,000 kg/ha/yr have generally been achieved through the adoption of above package of practices in the field conditions against the earlier production rate of 600–1000 kg/ha/yr. This intervention will be demonstrated in the already established farm pond at Kalari & Melamadai village.

**Fodder production:**

In order to overcome the non-availability of green fodder during off season it has been proposed to grow fodder trees in common land as well as along the field bunds.

**Tree Planting:**

To improve the rainfall and soil conservation perennial horticultural trees species are being planned to be planted along the farm pond bunds and in field bunds. To prevent the cattle menace tree guards are to be provided till the establishment of the trees.

## Module-4: Institutional Interventions

Interventions	Details of activity			Critical input (Breed / Variety / Medicine doses,)	No. of farmers	Unit / No. / Area (ha)	Total expenditure (Rs.)
	Name of crops / Commodity groups / Implements	Quantity / Number / Rent / Charges	Technology used in seed / fodder bank & function of groups				
1	2	3	4	5	6	7	8
Seed bank	-	-	-	-	-	-	-
Fodder bank	-	-	-	-	-	-	-
Commodity groups	-	-	-	-	-	-	-
Custom hiring centre	-	-	-	-	-	-	-
Collective marketing	-	-	-	-	-	-	-
Climate literacy through a village level weather station	-	-	-	-	-	-	-
<b>Any other (Pl. specify)</b>	-	-	-	-	-	-	-
Room Rent for NICRA office at village	-	-	-	-	-	-	20,000
Technical Assistant 2 Nos @Rs8,000/month	-	-	-	-	-	-	1,92,000
<b>Total</b>							2,12,000

### Details of activity:

**Fodder bank:** The grazing land in NICRA operating village is very poor which in turn affects the weight gain of livestock. In order to improve the feed quality it has been proposed to introduce fodder crops in NICRA operating village.

**Room Rent for NICRA office at village:** As per the recommendation of the NICRA Review team headed by Dr.Veerabhadraiah , it has been proposed to take NICRA office room at NICRA operating village on rental basis in order to monitor the scheme in an effective manner.

**TA:** To monitor all the interventions in an effective manner it is essential employ TA for NICRA Scheme.

**Capacity Building (HRD):**

Sl. No.	Thematic area	Title of training	No. of Courses	No. of beneficiaries	Amount (Rs)
1	2	3	4	5	6
<b>Trainings</b>					
1	Crop management	Improved production technologies in Rice, Pulses & Chilli.	3	75	3000
2	Crop management	Vermi composting	2	50	2000
3	Composite Fish Culture	Composite Fish Culture	2	50	2000
4	Livestock production and management	Production and management of livestock in rainfed ecosystem	4	100	4000
5	Fodder production	Fodder for rainfed condition	2	50	2000
6	Farm mechanization	Demonstration of Roto Till Seed Drill for paddy,	2	75	3000
7	Post harvest technology	<ul style="list-style-type: none"> <li>• Spiral separator for cleaning and grading of Pulses.</li> <li>• Demonstration on solar chilli drying unit.</li> <li>• Chilli seed extractor demonstration.</li> </ul>	3	75	3000
8	Exposure visit		2	40	50,000
<b>Total cost</b>					<b>69,000</b>

**Implements / machineries**

Sl.No.	Particulars	Amount
1	Construction of Chilli solar drier (1No)	4,00,000/- *
2	Knapsack power sprayer cum duster (2 nos)	15,000/-
3	Brush cutter (1 no)	10,000/-
<b>Total</b>		<b>4,25,000/-</b>

\* If Subsidy is obtained from state government the cost will reduced to Rs.2, 00,000



## Proposed Budget

Sl.No.	Particulars	Amount
1	Module I Natural Resource Management	36,000
2	Module II Crop Production	1,59,250
3	Module III Livestock and Fisheries	93,000
4	Module IV Institutional Interventions	2,12,000
5	Capacity Building	69,000
6	Implements / machineries	4,25,000
7	Travelling Allowance	50,000
8	POL, Vehicle maintenance, Hiring and other recurring contingencies	4,00,000
	Total	14,44,250

## The sanctioned head-wise BE for 2015-16 under NICRA

Sl no	Head	Budget sanction 2015-16 (Rs in lakh)
1	Operational expenses (Labour,skilled staff, POL,supplies et.), contractual services including RA/SRF etc	5.25
2	TA	0.50
3	Non recurring contingency (Farm implements, Machinery etc.)	4.25
	<b>Total</b>	<b>10.00</b>

Sd/xxx  
Programme Coordinator  
KVK, Ramanathapuram