Tamil Nadu Veterinary and Naimal Scineces University Directorate of Extesnion Education, Chennai ICAR-Krishi VBigyan Kendra Namakkal 637 002

NICRA Annual Action Plan 2019-20

1. B. Technologies proposed to be scaled up in the existing NICRA village during 2019

SI. No.	Name of technology	No. of farmers covered	Approx. area to be covered (ha)	Remarks
-	-	-	-	-

C. Module-wise technologies proposed to be scaled up in the adjoining villages during 2019

SI. No.	Name of technology	No. of farmers covered	Approx. area to be covered (ha)	Remarks
-	-	-	-	-

D. Module-wise resilient technologies proposed to be demonstrated for the year 2019-20

S. No.	Module	Climatic constraint addressed	Key intervention	No. of farmers proposed to be involved	Measurable indicator (s)
1	Natural resource management	Water saving technology	Micro irrigation (Laser spray irrigation)	5 (Groundnut) 5 (Small onion)	Farmers cultivating groundnut and onion crop during rabi season under flood irrigation, to save water and expand of irrigated area and higher productivity laser spray is recommended. Also less costcompared to drip irrigation.
		Drought	Compartmental bunding	100	Increase WHC and moisture conservation
		Soil health management	Green manuring	100	Increase the soil fertility
2	Crop production	Short duration varieties (specify)	Black gram (VBN-8)	50	50 % contribution from NFSM
		Intercropping systems (Groundnut with redgram)	Red gram (VBN-3)	50	Increase the yield production and income
		Critical inputs for Integrated Farming systems	-	5	100% contribution from HEELS NGO for promoting organic agriculture
		Crop protection	Integrated pest and disease management	100	To protect crop and increase yield.
3	Livestock & Fisheries	Drought	Fogger (For cow shed) Farmers 40%: NICRA 60%	10	Milk yield Fertility

		Drought	Development of trees around animal shed	10	Production performance
		Drought	Backyard native chicken	20	income generation
		Drought	Mixed fodder	125	Feeding management
		Drought	Vaccination	2500 animals	To reduce the mortolity
4	Institutional interventions	Training programme	ICM Practices in small onion	25	Crop production
		Training programme	Integrated farming system	40	Resource conservation
		Training programme	Technologies for rainfed agriculture	40	Dry land Agriculture
		Training programme	IPDM in small onion	50	Pest & disease management
		Training programme	Summer management and prevention of nitrate toxicity in dairy animals	40	Feeding management including nitrate toxicity
		Field day	intercropping in small onion	25	Crop production
		Field day	Demonstration of short duration Blackgram – VBN-8	50	Short duration pulses
		Field day	IPDM in small onion	50	Pest & disease management
		Exposure visit	IIHR,Bangaluru & KVK, Davanagere, Karnataka	12	farm mechanization in onion & Dry land farming system
		Exposure visit	CRIDA Farm & KVK	12	Dry land technologies in rainfed farming and performance of drought tolerant varieties.
		Exposure visit	PGRIAS, TANUVAS Kattupakkam	20	Awareness on scientific livestock management practices

2.0 ACTIVITIES AND COSTS

Non-recurring contingencies – Equipment

Proposal for procurement of farm machinery/ implements for Custom Hiring Centre

S. No.	Item	Unit cost* (Rs)	No. of units	Total amount (Rs)
1.	Digital SLR camera & spares of weter station,rain gauge, wet & dry blub	45,000	1	45,000
Tota	al NRC 2.0	-	-	45,000

3.0 Contingencies

3.1 Module 1 – NRM interventions

A) Repair / Renovation of existing water harvesting structures, drainage channels etc.

S. No.	Intervention* and village	Dimensions	No. of units	No. of benefi- ciaries	Convergence value, if any (Rs)	Value of farmers share (Rs)	Cost to project (Rs)
1	-	-	-	-	-	-	-
Sub-t	otal 3.1 A						

B) In situ conservation – Resource Conservation Technologies (RCTs)

Item (specify the	Unit	No. of	Coverag	e	Total amount	Remarks
interventions) and village	cost Rs./acre	demos	Area (acres)	No. of farmers	(Rs)	
Rainwater storage pond (in farmer field)	25000	25	25	25	6,25,000	40 % farmer share 60% MGRS
Compartmental bunding	1000	100	100	100	1,00,000 25% NICRA Contribution Rs.25,000	50% contribution from MSDA scheme & 25% contribution from farmers
Green manuring	1200	100	100	100	1,20,000 33% NICRA Contribution Rs.40,000	50% contribution from farmers
Crop residue composting	600	50	50	50	30,000 50% NICRA Contribution Rs.15,000	50% contribution from farmers
Micro irrigation (Groundnut and small onion)	15000	10	10	10	15,0000 50% NICRA Contribution Rs.75,000	50% farmers share
IPDM activities	90000	1	100	100	Rs. 90,000 50% NICRA Contribution Rs.45,000	
Grand Total	-	-	385	385	2,00,000	

3.2 Module II – Crop production interventions
A) Stress tolerant / Improved varieties / Short duration / Legume crops

Intervention and village	Descript	tion	Cost	No. of	Covera	age	Total	Remarks
	Crop	Variety (s)	(Rs/acr e)	demo s	Area (ac)	No. of farme rs	amount (Rs)	(purpose of intervention)
			Α	В	С	D	AxC	
Drought	-	-	-	-	-	-	-	-
Flood								
High temperature stress	-	-	-	-	-	-	-	-
Short duration varieties (specify)	Black gram	VBN-8	1500/ 0.5acre	50	50	50	75,000 50% NICRA Contribution 37,500	50% contribution from NFSM
Any other stress (specify, add rows if required)	-	-	-	-	-	-	-	-
Crop diversification (to other crops)	-	-	-	-	-	-	-	-
Agroforestry	-	-	-	-	-	-	-	-
Seed for green / brown manuring	-	-	-	-	-	-	-	-
Seed for legume catch crops	-	-	-	-	-	-	-	-

(specify)								
Intercropping systems (Red gramwith Groundnut)	Red gram	VBN-3	260 / acre	30	30	30	Rs.7,800	Intercropping of redgram in groundnut
Sub Total 3.2 A	-	-	-	80	80	80	45,300	_

B) Improved agronomic practices and other crop interventions

Intervention		Cost	No. of	Cove	rage	Amount	Remarks
		(Rs/	demos	Area	No. of	(Rs)	(Purpose of
		acre)		(ac)	farmers		intervention)
		А	В	С	D	AxC	
Water saving paddy cultivation methods	DSR	-	-	-	-	-	-
	Aerobic	-	-	-	-	-	-
	SRI	-	-	-	-	-	-
Community nursery		-	-	-	-	-	-
Critical inputs for Integrate management (specify crop)	Critical inputs for Integrated crop		-	-	-	-	-
Critical inputs for Integrated Farming systems		2800/ unit	5	5	5	14,000	100% contribution from HEELS NGO for
(specify inputs and crops) – vermicompost unit							promoting organic agriculture
Other inputs (soil amendment based nutrient management fertilizers, other soil and placed inputs etc)	ıt, bio-	-	-	-	-	-	-
Harvesting and post harves interventions	ting related	-	-	-	-	-	-
Facilitating insurance for cr	ops (specify)	-	_	-	-	-	-
Facilitation of marketing of farm produce		-	-	-	-	-	-
Any other (specify), add row	ws if needed	-	-	-	-	-	-
Sub-total 3.2 B		-	5	5	5	-	-

^{4.0} Module 3 – Livestock & Fisheries interventions
4.1 Improved fodder production strategies (annual/perennial fodder) in the village

Season	Name of fodder	Variety	Area (ha)	Unit cost of demo (Rs/ha)*	No. of demos	Total amount (Rs/ha)*	Remarks (purpose of intervention & No. of farmers covered)
Kharif	Mixed fodder	Co Fs 29 &CO4	10 (0.1/ person)	300.00 (Farmer share: 150.00 NICRA share: 150.00	100	15,000	To provide green fodder for better productivity and performance
	Mixed fodder	Co -FS 29 &CO4	3	200	25	-	100% contribution from CFDS scheme implemented by Dept. of Animal Husbandry

Rabi	Mixed fodder	Red chari+ cow pea	25	250	100	-	100% contribution from SFDS scheme implemented by Dept of Animal husbandry
Summer	-	-	-	-	-	-	-
Sub-total	4.1	-	38	750	225	15,000	-

 $[\]textbf{4.2 Feed demonstrations for crop residue management} / \textbf{stress management: silage} / \textbf{feed blocks} / \textbf{mineral mixture (MM) blocks} / \textbf{feed enrichment}$

Details of feed demo*	Unit cost of demo (Rs)	No. of demos	Total amount (Rs/ha)	Remarks (purpose of intervention & No. of farmers covered)
a) Silage demos	-	-	-	-
b) Feed block demos	-	-	-	-
a) Mineral mixture demos	-	-	-	-
 a) Unconventional feed resources (eg., red gram stalks, cotton stalks etc) used in preparation of complete feed 	-	-	-	-
 Feeding management & disease control programme in livestock (Total Mixed Ration, Mineral block, medicines & disinfectant solution) 	Blue tongue vaccine	2000	10,500	50% contribution from farmers for service cost with 50% NICRA share for medicine to overcome disease outbreak during climatic stress
	PPR	500	1,500	
	FMD and RDVK vaccination	Convergen % subsidize	•	of Animal Husbandry with 100
 a) Any other (specify), add rows if needed 	-	-		
Sub-total of 4.2	-			2500 12,000

4.3 Improved housing / shelter for protection of livestock against extreme weather

Type of shelter improvement*	Unit cost of demo (Rs)	Cost to project (Rs)	Farmer's share (Rs)	No. of demos	Total amount (Rs)	No. of farmers covered	Remarks (purpose of intervention)
Improved shelter- Fogger for cow shed	10000	5000	5000	10	50,000	10	Protectthe animals from heat stress
Sub-total of 4.3	10000	5000	5000	10	50,000	10	-

4.4 Livestock / Fisheries units

Α	В	С	D	E	F	G
Enterprise/unit*	Unit cost (Rs)	Convergence share in unit cost, if any** (Rs)	Project share in unit cost (Rs)	No. of units/ farmers	Cost to Project (D x E) (Rs)	Remarks (purpose of intervention& farmers covered)
-	-	-	-	-	-	-
Sub-total of 4.4	-	-	-	-	-	-

5.0 Module 4 – Community interventions

5.1 Establishment of fodder banks (hay)

Name of the SHG Fodder Quantity of type storage (t) Unit (Rs.	No. of Amount Remarks (purpose of intervention& farmers covered)
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-	-	-	-	-	•	-
Sub-total 5.1	-	-	-	-	-	-

5.2 Establishment of Seed banks

Name of the SHG	Crop and variety	Quantity of storage (t)	Unit cost (Rs.)	No. of units	Amount (Rs.)	Remarks (No. of beneficiaries & Period of use)
-	-	-	-	-	-	-
Sub-total 5.2	-	-	-	-	-	-

6.0. Capacity Building & Training Programmes 6.1 Training Courses proposed

Theme	Title of training course	Proposed month	No. of participants	Cost to project (Rs.)
Crop production	ICM Practices in small onion	October & November	25	2,500
Resource conservation	Integrated farming system	August 2019	40	2,500
Dry land Agriculture	Technologies for rainfed agriculture	July 2019	40	2,500
Pest & disease management	IPDM in small onion	September 2019	50	2,500
Soil health management	Soil fertility management	July 2019	50	2,500
Feeding management including nitrate toxicity	Summer management and prevention of nitrate toxicity in dairy animals	Feb 2020	40	2,500
Sub-total 6.1	-	-	245	15,000

6.2 Field Days proposed

Theme	Title of training course	Proposed month	No. of participants	Cost to project (Rs.)
crop production	Intercropping in small onion	November/De cember	25	2,500
Short duration pulses	Demonstration of short duration Blackgram – VBN-8	December 2019	50	2,500
Soil health management	Preparation of composting from crop residue	Dec. 2019	50	2,500
Pest & disease management	IPDM in small onion	January 2020	50	2,500
Sub-total 6.2	-	-	175	10,000

6.3 Exposure Visits proposed

Place of visit	Purpose of visit	Proposed month	No. of participants	Cost to project (Rs.)
IIHR,Bangaluru & KVK,Davanagere, Karnataka	farm mechanization in onion & Dry land farming system	October	12	25,000
CRIDA Farm & KVK	Dry land technologies in rainfed farming and performance of drought tolerant varieties.	September 2019	12 (Rs.2500/head	25,000
PGRIAS, TANUVAS Kattupakkam	Awareness on scientific livestock management practices	Jan 2020	20	25,000
Sub-total 6.3	-	-		75,000

7.0 Plan for contingency situations involving various crops during the cropping season 2018-19)

SI. No	Possible contingency situation	Measures envisaged	Unit cost/ acre	No. of farmers to be covered	Cost to project (Rs.)	Remarks
1.	Late onset of monsoon	-	-	-	-	-
2.	Prolonged breaks during the season	-	-	-	-	-
3.	Early withdrawal of monsoon	-	-	-	-	-
4.	Intense storms	-	-	-	-	-
5.	Temporary flooding/ Water logging due to heavy rains	-	-	-	-	-
6.	Any other,	-	-	-	-	-
Sub-total 7.0						

8.0 Contractual Manpower (SRFs/YPs)

Category	Rate/month (Rs.)	No. of months	Amount (Rs.)
Senior Research Fellow	25,000	10	2,50,000
Field Assistant	8,000	6	48,000
Sub-total 8.0	33,000	16	2,98,000

9.0 Media Products to be developed (video films/brochures/bulletins proposed to be developed

Item description	No. of copies	Amount (Rs.)
NICRA 2019-20 pamphlet (Multi color)	250	20,000
Sub-total 9.0	500	20,000

Summary of budget Estimates for 2019-20 (Tentative)

Item	Title of the Item	Amount (Rs.)
2.0	Procurement of farm machinery/implements for CHC	45,000
3.1 A	Repair/ Renovation of existing water harvesting structures & drainage channels etc.	0.0
3.1 B	In situ conservation – Resource Conservation Technologies (RCTs)	2,00,000
3.2 A	Stress tolerant/ Improved varieties	45,300
3.2 B	Improved agronomic practices and other crop interventions	14,000
4.1	Year round fodder production strategies (annual/perennial fodder) in the village	15,000
4.2	Feed demonstrations for crop residue management / stress management: silage / feed blocks/ mineral mixture blocks / feed enrichment	12,000
4.3	Improved housing /shelter for protection against extreme weather	50,000
4.4	Livestock/fisheries units	
5.1	Establishment of fodder banks (hay)	
5.2	Establishment of seed banks	
6.1	Training courses	15,000
6.2	Field days	10,000
6.3	Exposure visits	75,000
7.0	Plan for contingency measures for various crops during the cropping season 2018-19	
8.0	Contractual manpower (SRFs 10 months X Rs.25000 = 2,5,0000 / FAs 6 months X Rs.8000 = 48,000)	2,98,000
9.0	Media products to be developed	20,000.0
10.0	Office contingencies (TA etc)	45,700
10.1	TA	40,000
	Grand total (Rs.)	8,85,300