Annual Report on TDC-NICRA during 2019-20

Name of the KVK: TANUVAS KVK Namakkal

Major climatic details of the village (2019-20): Drought

Table 1: Distribution of rainfall in comparison with normal during 2019

Month	**Normal rainfall (mm) Based on min.10years**	**Actual Rainfall (mm)**	**Difference of rainfall in comparison with normal rainfall (mm)**	**% Deviation i.e., Acual– Normal× 100 Normal**
		2019		
Jan	1.77	0.00	-1.77	-100
Feb	15.43	0.00	-15.43	-100
March	4.29	0.00	-4.29	-100
April	8.71	56.00 (4)	51.71	542.94
May	62.36	17.00 (1)	-45.36	-72.74
June	7.07	101.00 (2)	93.93	1328.57
July	53.27	0.00	-53.27	-100
August	98.93	49.00 (2)	-49.93	96.10
September	119.31	215.00 (8)	95.69	80.20
October	137.49	83 (5)	-54.49	-39.28
November	76.00	93(6)	17	22.37
December	23.63	0.00	-23.63	-100
Total	608.26	614.00 (28)	-6.84	1458.16
Total actual rainfall during cropping season (Sowing to harvest)	**530.12**	**541.00 (23)**	**14.65**	**1287.96**

Table 2: Distribution of rainfall during 2019-20 in NICRA village

Day	June	July	Aug	Sep	Oct	Nov.	Dec	Jan.20	Feb.20	Mar.20
1	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-
5	91 mm	-	-	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-	-
7	-	-	-	-	-	34 mm	-	-	-	-
8	-	-	-	-	-	5 mm	-	-	-	-
9	-	-	-	-	-	-	-	-	-	-
10	-	-	-	25 mm	-	-	-	-	-	-
11	-	-	-	48 mm	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-
13	-	-	-	14 mm	-	-	-	-	-	-
14	-	-	-	18 mm	-	-	-	-	-	-
15	-	-	-	-	-	-	-	-	-	-
16	-	-	45 mm	-	7 mm	-	-	-	-	-
17	-	-	-	15 mm	-	-	-	-	-	-
18	-	-	-	-	-	-	-	-	-	-
19	-	-	-	51 mm	-	-	-	-	-	-
20	-	-	-	-	-	12 mm	-	-	-	-
21	-	-	-	-	18 mm	-	-	-	-	-
22	-	-	-	-	-	-	-	-	-	-
23	-	-	-	-	-	-	-	-	-	-
24	-	-	-	15 mm	37 mm	-	-	-	-	-
25	-	-	-	-	-	-	-	-	-	-
26	10 mm	-	-	-	-	-	-	-	-	-
27	-	-	-	-	-	7 mm	-	-	-	-
28	-	-	-	-	-	30 mm	-	-	-	-
29	-	-	-	-	-	5 mm	-	-	-	-
30	-	-	4 mm	29 mm	13 mm	-	-	-	-	-
31	-	-	-	-	8 mm	-	-	-	-	-
Total	**101mm**	**-**	**49 mm**	**215 mm**	**83 mm**	**93 mm**	-	-	-	-

(On Third week of August 45 mm of rainfall has been received, it was very useful for land preparation and sowing of Black gram and Green Gram. After the second week of August that time plants were in vegetative stage, and further periodical rainfall during September second and third week 215 mm (8 rainy days) was very useful for flowering for Black gram and Green Gram for further pod development. In the month of November (93 mm) has been received and it can be utilized for onion planting and further the crop has been harvested in the month of February and March.

Summary of interventions during 2019-20

NRM

Name of the intervention	No. of units	Area (ha)	No. of farmers
Water saving technology- Micro irrigation (Laser spray irrigation)	10	3.6	10
Compartmental bunding	100	40	100
Green manuring	66	26.4	66
Crop residue composting	15	-	15
Total	**191**	**70**	**191**

By convergence	No. of units	Area (ha)	No. of farmers
Summer ploughing (Dept. of Agriculture)	465	186	465
Bund formation (Dept. of Agriculture)	216	86.4	216
Farm ponds (Heals NGO)	6	-	6
Micro irrigation (Dept. of Agriculture & Horticulture)	87	70	87
Total	**774**	**342.4**	**774**

Crop Production

Name of the intervention	No. of units	Area (ha)	No. of farmers
Short duration varieties Black Gram (VBN-8)	50	20	50
Introduction of Short Duration and synchronized maturity of green gram (Co-8)	50	20	50
Introduction of improved groundnut Var.	14	5.6	14
Integrated pest and disease management	15	6	15
Total	**115**	**26**	**115**

By convergence	No. of units	Area (ha)	No. of farmers
Small onion CO-5 (Dept. of Horticulture)	12	4.8	12
Short duration of Black Gram varieties (Dept. of Agriculture)	60	24	60
Short Duration of green gram varieties (Dept. of Agriculture)	45	18	45
Introduction of improved groundnut Var. (Dept. of Agriculture)	50	20	50

Fruit saplings	30	-	30
Vegetables seeds	40	2	40
Total	**237**	**68.8**	**237**

Livestock and fisheries

Livestock

Name of the intervention	No. of units (Where ever applicable)	No .of animals benefited	No. of farmers
Fogger (For cow shed) Farmers	4	28	4
Chaff cutter	3	21	3
Brush cutter	2	26	2
Development of trees around animal shed	23	54	23
Shelters for Desi Chicken	4	90	4
Total	**36**	**219**	**36**

By convergence	No. of units (Where ever applicable)	No .of animals benefited	No. of farmers
Vaccination (FMD) (Dept. of Animal Husbandary)	-	386	67
Mineral mixture		167	35
Total			

Fodder production

Interventions (Fodder varieties/Azolla/Hydroponics etc.,)	No. of Units	No. of farmers	Area (ha)
Mixed Fodder for Livestock	23	23	7
Total	**13**	**13**	**7**

By convergence	No. of Units	No. of farmers	Area (ha)
Mixed Fodder CoFS-29 (Dept. of Animal Husbandary)	-	25	6.25
Total			

Institutional Interventions

Name of the intervention	Area (ha)	No. of farmers covered
Custom Hiring Centre	73	110

Total	**73**	**110**

By convergence:

By convergence	Area (ha)	No. of farmers covered
Custom Hiring Centre (MSDA Scheme) 5 Nos. of Tractors	24 ha	58
Total	**24 ha**	**58**

Capacity Building

Thematic area	No. of Courses	No. of beneficiaries		
		Male	Female	Total
Training	6	83	23	106
Total	**6**	**96**	**35**	**131**

Extension Activities

Thematic area	No. of activities	No. of beneficiaries		
		Male	Female	Total
Field days	3	45	13	58
Exposure visit	4	79	37	116
Awareness programme	1	135	77	212
Total	**8**	**259**	**127**	**386**

Progress Report of NICRA for 2019-20

Module 1.NATURAL RESOURCE MANAGEMENT - Compartmental bunding

1. Name of the technology	In-situ moisture conservation technologies
2. Objectives of the study	To hold the rain water for moisture conservation and increase the water holding capacity of the soil for longer time
3. Thematic area	NRM
4. Problemdiagnosis	In farmer's practice the entire field was sown without any compartments, hence the isolated rain water is not stored in the field, which leads to insufficient moisture.
5. Micro farming situation	Irrigated/Redsoils
6. Year of start	2019
7. Year of completion	2020
8. Comparisons/treatments	

a) Farmers practice* (Describe the practice) b) Improved technology	Without any bunding farmers sown the crop Compartmental bunding method Groundnut - Dharani
9. No. of Demonstrations	100
10. Area covered for each Demonstration (ha)	0.4 ha
11. No. of farmers covered	100
12. Amount spent for each demonstration/each farmer	Rs. 1200/- per farmer
13.Contribution of demonstration from a) Project b) Farmers	 250 -
14.Results (Yield, Cost of cultivation, Gross income, Net income, B:C ratio)	Described in following table

Results – Blackgram (Kharif)

Treatments	Seed yield (kg/ha)	Fodder Yield (kg/ha)	Cost of cultivation (Rs/ha)	Gross income (Rs/ha)	Net income (Rs/ha)	B:C ratio
Farmers practice	485	-	Rs. 15,850/-	Rs. 29100/- (Rs.60/kg)	Rs. 13,250/-	1.83
In-situ moisture conservation practice	635	-	Rs. 16,750/-	Rs. 38100/- (Rs.60/kg)	Rs. 21,350/-	2.27

Groundnut - (Kharif)

Treatments	Seed yield (kg/ha)	Fodder Yield (kg/ha)	Cost of cultivation (Rs/ha)	Gross income (Rs/ha)	Net income (Rs/ha)	B:C ratio
Farmers practice	960	2150	Rs. 24,550/-	Rs. 41,280/- (Rs.43/kg)	Rs. 17,000/-	1.68
In-situ moisture conservation practice	1320	2950	Rs. 26,150/-	Rs. 56,760/- (Rs.43/kg)	Rs. 30,610/-	2.17

Module 2. CROP PRODUCTION

Climate resilient varieties

1. Name of the technology	Introduction of Short Duration and synchronized maturity of Blackgram Var. VBN – 8.
2. Objectives of the study	To improve the yield and performance of black gram
3. Thematic area	Crop production
4. Problemdiagnosis	Rainfall showers occurs at harvesting stage
5. Micro farming situation	Rainfed
6. Year of start	2019
7. Year of completion	2019
8. Comparisons/treatments	1. Local variety 2. Improved variety (VBN -8)
9. No. of Demonstrations	50
10. Area covered for each demonstration(ha)	0.4 ha
11. No. of farmers covered	50
12. Amount spent for each demonstration/each farmer	Rs.1530/-
13. Contribution of demonstration from a) Project b) Farmers	NICRA share :Rs.1530/-
14. Results (yield, cost of cultivation, gross income, net income B : C ratio, soil moisture. Indicators / plant characters of flood/ drought tolerance in terms growth and yield components etc.,	Described in following table

Results - (Kharif)

Treatments	Seed yield (kg/ha)	Fodder Yield (kg/ha)	Cost of cultivation (Rs/ha)	Gross income (Rs/ha)	Net income (Rs/ha)	B:C ratio	Remarks
Farmers practice	594	-	16300	35640 (Rs.60/kg)	19300	2.18	-
Improved varieties	812	-	16850	48720 (Rs.60/kg)	31870	2.89	-

Short Duration, synchronized matured Green Gram Variety

1. Name of the technology	UP- Scaling of Successful interventions - Introduction of Short Duration and synchronized maturity of green gram (C0 -8)
2. Objectives of the study	To improve the yield and performance of Green gram varieties
3. Thematic area	Crop production
4. Problem diagnosis	Rainfall showers occurs at crop harvesting stage
5. Micro farming situation	Irrigated
6. Year of start	2019
7. Year of completion	2020
8. Comparisons/treatments	1.Local variety 2. Improved variety (C0 -8)
9. Area covered for each demonstration (ha)	0.4 ha
10. No. of farmers covered	50
11. Amount spent for each demonstration/each farmer	Rs.2,600/- for each demonstration per farmer
12. Contribution of demonstration from a) Project b) Farmers	NICRA share: Rs.2,600/-
13. Results (yield, cost of cultivation, gross income, net income B:Cratio)	Described in following Table

Results - (Kharif)

Treatments	Seed yield (kg/ha)	Fodder Yield (kg/ha)	Cost of cultivation (Rs/ha)	Gross income (Rs/ha)	Net income (Rs/ha)	B:C ratio	Remarks
Farmers practice	601	-	16874	35640 (Rs.60/kg)	18766	2.11	-
Improved varieties	835	-	17650	50100 (Rs.60/kg)	32450	2.83	-

Climate resilient varieties

1. Name of the technology	Additional crrop cultivation during excess rainfall – Solanaceous and pandhal vegetable cultivation
2 Objectives of the study	To improve the regular income from the farmers field
3 Thematic area	Crop production
4 Problem diagnosis	Mono cropping – Small onion Price fluctuation in small onion small onion is a Seasonal crop farmers are getting income from their field during the harvesting season (single harvested crops likecereals, pulses and oil seeds), after harvested of there is no regular income to the farmers
5 Micro farming situation	Irrigated
6 Year of start	2019
7 Year of completion	2020
8 Comparisons/treatments	1. Farmers practice No additional income generated from the cultivation practices 2. Technology demonstrated Daily income generated to the farmers through vegetables cultivation and sales of vegetables through market
9 Area covered for each demonstration (ha)	0.4 acre
10 No. of farmers covered	10
11 Amount spent for each demonstration/each farmer	80,000/-
12 Contribution of demonstration from a) Project b) Farmers	Dept. of horticulture
13 Results (yield,cost of cultivation, gross income, net income B:C ratio)	Described in following Table

Results

Treatments	Vegetable yield (kg/ha)	Fodder Yield (kg/ha)	Cost of cultivation (Rs/ha)	Gross income (Rs/ha)	Net income (Rs/ha)	B:C ratio	Remarks
Farmers practice	9.7	-	75,550	148750	73200	1.97	-
Improved varieties	14.1	-	93,600	217500	123900	2.32	-

Crop Prodution (Water saving technologies)

1. Name of the technology	Water saving technologies – Laser spray micro irrigation / Rainhose method of irrigation for Groundnut and small onion
2. Objectives of the study	Awareness to be created and utilize the stored water in a more efficient manner by micro irrigation system to minimize the use of water and increase the area of cultivation.
3. Thematic area	Crop production
4. Problem diagnosis	Flood irrigation –it requires more than 2 lakhs litre of water/acre/irrigation. Due to non availability of water during critical stages of crops yield to be reduced.
5. Micro farming situation	Irrigated
6. Year of start	2019
7. Year of completion	2020
8. Comparisons/treatments	Farmers practice: Flood irrigation (20 cent/irrigation)
a). Farmers practice* b).Improved technology	Flood irrigation Conservation measures: Laser spray irrigation (1 acre irrigation in same quantity of water)
9. No. of Demonstrations	10
10. Area covered for each demonstration(ha)	0.2 ha
11. No. of farmers covered	10
12. Amount spent for each demonstration/each farmer	Rs. 12,500/-
13. Contribution of demonstration from a) Project b) Farmers	NICRA share: 12,500 Farmer share: Rs. 12,500/-

14. Results (yield,cost of cultivation, gross income, net income B:Cratio, other parameters like amount of water saved in terms of irrigation, yield components, soil moisture depth etc.	Described in following table

Results

Groundnut - Rabi

Treatments	Seed yield (kg/ha)	Fodder Yield (kg/ha)	Cost of cultivation (Rs/ha)	Gross Income (Rs/ha)	Net income (Rs/ha)	B:C ratio	Remarks
Farmers practice (Flood Irrigation)	1272	2875	Rs. 30,150/-	Rs. 57,240/- (Rs.45/kg)	Rs. 27,090/-	1.90	-
Water saving technology- Laser spray Micri irrigation for Groundnut	1925	3825	Rs. 33,550/-	Rs. 86,625/- (Rs.45/kg)	Rs. 75,575/-	2.58	-

Onion - Rabi

Treatments	Seed yield (kg/ha)	Fodder Yield (kg/ha)	Cost of cultivation (Rs/ha)	Gross Income (Rs/ha)	Net income (Rs/ha)	B:C ratio	Remarks
Farmers practice (Flood Irrigation)	13,200	-	2.98,000	4,16,225	1,18,225	1.40	-
Water saving technology- Laser spray Micro irrigation for Small onion	15,500	-	2,23,750	4,88,750	2,65,000	2.18	-

Crop production: NUTRIENT MANAGEMENT

1. Name of the technology	Nutrient management by incorporation of Green manure into the soil
2. Objectives of the study	To improve the fertility of soil by incorporation of multigrains
3. Thematic area	Nutrient management
4. Problem diagnosis	Nutrient deficiency Lake of availability of Farmyard manure during monsoon period
5. Micro farming situation	Irrigated
6. Year of start	2019
7. Year of completion	2020
8. Comparisons/treatments	
a) Farmers practice* (Describe the practice) b) Improved technology (Mention test crop and varieties/variety used in demonstration)	1. Farmers practice of nutrient management (does not adopted any technology) - 2. Improved nutrient management practice by incorporate of green manures
9. No. of Demonstrations	66
10. Area covered for eachdemonstration (ha)	0.4
11. No. of farmers covered	66
12. Amount spent for each demonstration/each farmer	Rs.240
13. Contribution of demonstration from a) Project b) Farmers	 Rs.560 Rs. 240
14. Results (yield, cost of cultivation, gross income, net income B:Cratio, other parameters like vigor, ear head weight, No. of pods/plant if applicable and population/sq.m at harvest) **(Brief results to be summarized)**	Described in following table
15. Any other information/details	-

Results

Treatments	Seed / Grain yield (kg/ha)	Fodder Yield (kg/ha)	Cost of cultivation (Rs/ha)	Gross income (Rs/ha)	Net income (Rs/ha)	B:C ratio	Remarks
Farmers practice	10500	-	74312	147865	73553	1.99	-
Improved technology (INM etc.,)	12100	-	77899	178643	100744	2.29	-

CROP PRODUCTION: PLANT PROTECTION

1. Name of the technology	IPDM technology in small onion CO -4
2. Objectives of the study	To reduce the pesticide uasege To reduce the pest and disease population like Thrips and basal rot incidence To reduce the cost of cultivation
3. Thematic area	Crop production
4. Problem diagnosis	Onion is mainly affected by basal rot and thrips resulting in yield loss of 20 – 30 %
5. Micro farming situation	Irrigated
6. Year of start	Oct. 2019
7. Year of completion	Jan. 2019
8. Comparisons/treatments	Test crop: Small onion Non – IPDM field

a). Farmers practice* b) Improved technology	1. Farmers method of plant protection (Non – IPDM practice) 2. IPM technology: Bulb treatment and soil application of Trichodermaviride + Pseudomonas fluorescence, Beaveria bassiana, Barrier crop fodder maize seed, Blue and yellow sticky trap – 10Nos./ac.
9. No. of Demonstrations	15
10. Area covered for eachdemonstration (ha)	0.4
11. No. of farmers covered	15
12. Amount spent for each demonstration/each farmer	Rs. 600/-
13. Contribution of demonstration from a) Project b) Farmers	NICRA project Rs.600/- Rs.600/-
14. Results (yield, cost of cultivation, gross income, net income B:C ratio)	Described in followi ng table
15. Any other information/details	-

Table: Influence of IPM technologies on yield and income in cotton

Treatments	**Seed/Grain yield (kg/ha)**	**Fodder Yield (kg/ha)**	**Cost of cultivation (Rs/ha)**	**Gross income (Rs/ha)**	**Net income (Rs/ha)**	**B:C ratio**	**Remarks**
Farmers practice	11,050	-	1,54,740	3,31,500	1,76,760	2.10	Unawareof practices
Improved method /IPM	14,500	-	1,52,650	4,35,000	2,82,350	2.85	Timely following the IPDM practices

- Price of sale bulb @ Rs. 30/kg
- Higher herbicide application, over irrigation, cool climate leads to severe pest and disease outbreak which leads to yield loss.

Module 3: LIVE STOCK AND FISHERIES

1. Name of the technology	Promoting of multicut fodder for livestock (CoFs29)
2. Objectives of the study	To improve the nuteient status of fodder and increasing milk yield
3. Thematic area	Livestock
4. Problem diagnosis	Shortage of green fodder due less awareness of green fodder cultivation Livestock reared mainly based on grazing and no special ration was provided Feeding low nutritive and locally available feed grains
5. Micro farming situation	Irrigated
6. Year of start	Sep. 2019
7. Year of completion	In standing Crop
8. Comparisons/treatments	Test crop CoFS 29 variety
a). Farmers practice* *(Describe the practice) b) Improved technology	1. Farmers practice: Rearing of livestock by providing dry fodder, low nutritive feed stuffs and grazing only. 2. Improved technology: green fodder cultivation (multicut sorghum) and provided to livestock
9. No. of Demonstrations	23
10. Area covered for eachdemonstration (ha)	0.4
11. No. of farmers covered	23
12. Amount spent for each demonstration/each farmer	Rs. 1600/-
13. contribution of demonstration from a) Project b) Farmers	 NICRA share: 800 Farmer share : 800
14. Results (Fodderyield,cost of cultivation, gross income, net income B:Cratio)	Described in following table
15. Any other information/details	-

Table: Potentials of fodder varieties under irrigated or rain fed environment

Treatments	**Fodder Yield (t/ha)**	**Cost of cultivation (Rs/ha)**	**Gross income (Rs/ha)**	**Net income (Rs/ha)**	**B:C ratio**	**Quantity used for live stock and qty. sold**
Local variety fodder	8.6	11050	25800	14750	2.33	6225 kg 2375 kg
Improved variety	28.5	15550	57000	41450	3.6	18000 kg 10500 kg

Live stock and fisheries: Shelter Management

1. Name of the technology	Shelter management in dairy
2. Objectives of the study	Improved housing / shelter for protection of livestock against extreme weather
3. Thematic area	Live stock
4. Problem diagnosis	-
5. Micro farming situation	Small and marginal farmers dependent on mostly daily wages and rainfed agriculture
6. Year of start	2019
7. Year of completion	2020
8. Comparisons/treatments	Type of bird species: local
a) Traditional method * (Describe the practice) b) Improved technology	1. Traditional method of housing (thathed roof) 2. Improved method of housing (Fogger)
9. No. of Demonstrations	4
10. No. of families covered in Demonstration	4
11. No. of animals benefited/farm family	10
12. Amount spent for each demonstration/each farmer	Rs. 5000/-
13. Contribution of demonstration from a) Project b) Farmers	 Rs.5000/- Rs. 6,800/-
14. Results	Described in following table
15. Any other information/details	-

Results

Table: Performance of improved shelters in

Parameters with unit	With fogger shed	Without fogger shed
Temperature inside the shed	25.6	28.2
Temperature outside the shed in summer	29	29
Milk yield (Litres/day)	6.4	5.7
SNF content (%)	7.9	7.9
Fat content (%)	3.4	3.4

Module 4 :INSTITUTIONAL INTERVENTIONS

Example: Custom Hiring center

1. Name of the technology	Custom hiring center
2. Objectives of the study	To establish community based custom hiring center to provide hiring services of agricultural operations in a village
3. Thematic area	Institutional innovations
4. Problem diagnosis	Low productivity of crops due to lack of timely Operations
5. Micro farming situation	Group based activity in a village
6. Year of establishment	2011
7. No. of families as members in community based custom hiring center	19
8. Contribution for the establishment of the center (Rs) (a) From the Project	Rs. 7,90,692 (in the form of farm implements)
(b) Farming community	Rs. 1,60,000/-
(c) Loan from the Bank	Rs. 6,00,000/- (Punjab National Bank, Namakkal)
(d) Other sources	-

Total	Rs. 7,60,000/- (Including Registration fee)
9. Process of establishment	Oct 2011
10. Date of formation of Management committee	23.03.2011
11. Types of equipments procured for running the center	Annexure 1. Rotovator 2. Spring tyne cultivator 3. Seed driller 4. Bund former 5. Ridge former 6. Chain block 7. Chain pully 8. Chisel plough 9. Electronic weighing balance (50 g capacity) 10. Electronic weighing balance (500 kg capacity) 11. Electronic weighing balance (100 kg capacity) 12. Community incubator 13. Liquid nitrogen container (35l capacity) 14. Liquid nitrogen container (3l capacity) 15. Mobile sprinkler 16. Mobile sprinkler accessories 17. Five tyne arrow cultivator 18. Spring loaded nine Tyne cultivator 19. Tractor attached tanker 20. Tractor attached sorghum harvester 21. Maize cob harvester 22. Nine Tyne cultivator without spring 23. Power sprayer
12. No. of persons engaged on hire basis in running and maintenance of equipments	19
13. No. of meetings held by the Management committee in a year with dates	2 Nos.
14. Recommendations of the committee for improved functioning	Frequent meeting conducted by VCRMC
15. Results/ performance	Good
16. Key leanings for sustainability of the center	-

Table: Performance of custom hiring center

Year	Crops in demand for servicing custom hiring center	Area covered with hiring services (ha)	Amount realized due to services with custom hiring services (Rs)	Amount spent on contact service personnel For running the center	Amount incurred in maintenance of tools and center	Net amount realized due to custom hiring center	Number of farmers benefitted	Additional Yield advantage due to timely farm operations
2018-19	*Kharif*	23	19,800/-	11,600/-	-	8,200/-	37	-
	Rabi	38	44,415/-	26,805/-	-	17,610	54	-
	Others	12	10,400/-	6320/-	-	4,080	19	-
	Total	**73**	**74615**	**44725**		**29890**	**110**	

5. Capacity Building

Date	**Title of the training programmes**	**duration in days**	**No.of programmes Organized**	**No. of participants**			**Remarks**
				Male	**Female**	**Total**	
15.5.2019	Training programme on Summer management and prevention of nitrate nitrate toxicity in dairy animals	1	1	13	4	17	-
6.12.2020	Off campus training cum demonstration on ICM Practices in small onion	1	1	16	9	25	-
11.9.2019	Integrated farming system	1	1	11	3	14	-
6.12.2020	Training programme on IPDM in small onion	1	1	16	9	25	-
13.12.2020	Off campus training cum demonstration on Soil fertility management	1	1	25	10	35	-
28.1.2020	Off campus training cum demonstration on Composting technology	1	1	15	-	15	-
	Total	6	6	**96**	**35**	**131**	-


ICAR - Krishi Vigyan Kendra

6. Extension Activities

Date	Title of the activity	No.of programmes Organized	No. of participants			Remarks
			Male	Female	Total	
02.10.2020	Celebrated 150th birth aanivarsary of Mahatma Gandhi	1	135	77	212	-
16.10.2019 & 23.11.2019	Desimination of NICRA activities to school childrens of sarojini naidu and National public school namakkal	1	117	104	221	
04.11.2019 & 19.02.2020	Field days (Demonstration of short duration Blackgram – VBN-8)	3	39	12	51	-
28.01.2010 & 29.01.2020	Exposure visit- (IIHR,Bangaluru & KVK, Davanagere, Karnataka)	2	6	5	11	-
11.02.2020	Exposure visit - AIIRLIVAS (Advanced institute for integrated research in Livestock and Animal sciences and farmers conclave 2020) at Thalaivasal	1	33	27	60	-
24.02.2020	Farmers exposure visit to Krishimela @ Namakkal	1	22	3	25	-
13.03.2020	Workshop, TNAU, Coimbatore	1	18	2	20	-
Total		**8**	**118**	**49**	**167**	**-**


ICAR-TARALABALU KRISHI VIGYAN KENDRA, DAVANAGERE
28 01 2020


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29 01 2020


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7.Up-scalable Technologies

S. No	Name of the Technology	Previous area of adoption (ha)	Target area achieved during 2019-20 (ha)	Area of adoption achieved during 2019-20 (ha)	Remarks
1.	Water saving laser spray micro irrigation for small onion	1.4 ha	4 ha	10 ha	-
2.	Introduction of short duration and synchronized maturity Blackgram Var. VBN -8	10 ha	20 ha	44 ha	-
3.	short duration and synchronized maturity Greengram Var. Co-8.	10 ha	20 ha	38 ha	-
4.	Nutrient management based on soil test	26.4 ha	40 ha	23 ha	-
5.	Institutional arrangement to mitigate health issues for livestock Vaccination for foot and Mouth disease	34 farmers	34 farmers	150 farmers (Animal health department)	-

1. Table: Information on NICRA Village Clusters

S.No	Name of the villages in the cluster		Year of Inclusion of new villages	Intervention undertaken in new villages
	Old villages	New Villages		
1	Vadavathur & Jambumadai	Thipramadevi	2018	Water saving: Laser spray micro irrigation for groundnut & onion
2		Muttanchetti & Sevendhipatti	2019	Short duration varieties Black Gram (VBN-8)
				Introduction of Short Duration and synchronized maturity of green gram (Co-8)
				Introduction of improved groundnut Var. Dharani
				Climate based Integrated Pest and Disease Management in small onion
				Soil testing & issue of soil health cards

2. Information on Technology Saturation during 2019-20

S.No	Name of the NICRA village	Module	Technology selected for saturation	Achievement during 2019-20			% Saturation achieved (Area of adoption of intervention /Area under the crop in the village) or No. of animals covered by the intervention/Total no. of animals in the village or No. of households covered / Total no. of households in the village)
				Area covered (ha)	No. of farmers benefited	No.of animals benefited	
1	Vadavathur & Jambumadai	NRM	Water saving technology: Laser spray micro irrigation for groundnut & onion	1	2	-	43 farmers (21.98%)
			Compartmental bunding	32	80	-	243 farmers (81%)
			Green manuring	18.4	36	-	45 farmers (22.5%)
			Crop residue composting	-	15	-	Newly introduced 2.1%
		Crop Production	Short duration varieties Black Gram (VBN-8)	10	25	-	118 farmers (59.67%)
			Introduction of Short Duration and synchronized maturity of green gram (Co-8)	10	25	-	139 farmers (69.50%)
			Introduction of improved groundnut Var.	2.8	7	-	16 farmers (8.54%)
			Climate based Integrated Pest and Disease Management in small onion	4	10	-	128 farmers (64%)

		Live stock and fisheries	Fogger (For cow shed) Farmers	4	28	4	Newly introduced (3.3%)
			Chaff cutter	-	3	21	32 farmers (25%)
			Brush cutter	-	2	26	18 farmers (14.14%)
			Development of trees around animal shed	-	23	54	145 farmers (72.5%)
			Shelters for Desi Chicken	-	4	90	78 farmers (52%)
			Mixed Fodder for Livestock	7	23	70	46 farmers (35.9 %)
2	Thipra madevi, Muttan chetti & Sevend hipatti	NRM	Water saving technology: Laser spray micro irrigation for groundnut & onion	2.8	8	-	38 farmers (5.84%)
			Compartmental bunding	8	20	-	243 farmers (32.40%)
			Green manuring	8	30	-	54 farmers (7.2%)
		Crop Production	Short duration varieties Black Gram	10	25	-	68 farmers (22.67%)
			Introduction of Short Duration and synchronized maturity of green gram	10	25	-	108 farmers (34.67%)
			Introduction of improved groundnut Var.	2.8	7	-	16 farmers (3.54%)
			Climate based Integrated Pest and Disease Management in small onion	2	5	-	84 farmers (11.2%)
			Soil test based nutrient management	10	23		178 farmers (23.73%)

3. Benefits accrued due to differentinterventions under NICRA in the adopted villages under different modules since inception of the project

S.No (a)	Module (b)	Name of the intervention (c)	Previous adoption Area ((ha)/ Number before NICRA (d)	Additional area(ha) or Number covered/ benefited since inception (sum of all years) (e)	Monitory benefit (Rs./ha) (f)	Benefit accrued since inception (e) x (f)
1	NRM	Desilting / renovation of Senguttai, Aayiramkuttai, Ponnankannikuttai, Periyakalingikuttai	104 ha	362.8 ha	-	-
		Farm ponds	Nil	28 (In farmers field with the contribution of MGRS)	-	-
		Check dams	2	13	-	-
		Percolation tanks	0	2	-	-
		Recharge structures for bore wells	2	8	-	-
		Supplementary irrigation with harvested water	Nil	96 (with lining sheet) 28 (without lining)	-	-
		In-situ moisture conservation measures (specify)	135 ha	525 ha	-	-
		Soil quality and fertility management	Nil	504 ha	-	-
		Weather station	-	1	-	-
2	Crop production	Climate resilient varieties	Nil	503 ha	69250	**3,48,32,750**
		Crop diversification	Nil	164 ha	12160	**19,94,240**
		Intercropping systems	Nil	428 ha	57920	**2,47,89,760**
		Farm	Nil	307 ha	35500	**1,08,98,500**

		mechanization for resource conservation (specify)				
		Resource / water saving technologies (Eg. Zero tillage maize)	Nil	-	-	-
		Nutrient management of crops	Nil	298	16552	**49,32,496**
		Better crop protection practices	Nil	487	97000	**4,72,39,000**
3	Live stock	Improved fodder varieties	Nil	55.29	8340	**4,60.368/-**
		Fodder preservation through silage	Nil	46	8340	**3,83,640/-**
		Feed enrichment techniques	Nil	214 farmers	11300	**24,18,200/-**
		Backyard poultry	Nil	43 farmers	1500	**64,500/-**
		Health management interventions	Nil	415 farmers	2700	**11,20,500/-**
		Shelter management	Nil	215 farmers	4000	**8,60,000/-**
		Interventions in fisheries	Nil	13 farmers	6500	**84,500/-**
4	Institutional interventions	Custom hiring center	Nil	736 farmers	-	**10,10,786/-**
		Seed bank	Nil	64 farmers	14000	**8,68,000/-**
		Fodder bank	Nil	21 farmers	7500	**1,57,500/-**

4. Budgetary Details

Sanctioned RE for 2019-20	Opening balance as on 1st April 2019	Funds received	Expenditure up to 31 March 2020	Closing balance as on 01st April 2020)
10,35,000/-	**11,775/-**	**10,23,225**	**10,35,000/-**	**0**

Success stories of the farmers/technologies) particularly on the adoption of resilient practice

<table>
<tr><td>1</td><td>Name</td><td>:</td><td colspan="3">First name: S. Amutha

Middle Name:

Surname: subramani  </td></tr>
<tr><td>2</td><td>Postal address</td><td>:</td><td colspan="3">S. Amutha
W/o subramani
Jambumadai village
Vadavathur post,
NamakkalDt.Tamil Nadu
Farmer Mobile No:9677424683</td></tr>
<tr><td>3</td><td>Age</td><td>:</td><td colspan="3">41 years</td></tr>
<tr><td>4</td><td>Land holding (acres)</td><td>:</td><td colspan="2">Irrigated: 3 ac</td><td>Rainfed: 2 ac</td></tr>
<tr><td rowspan="7">5</td><td rowspan="7">Farming experience</td><td rowspan="7">:</td><td>Crops grown:</td><td>Area (acres)</td><td>Productivity (kg/acre)</td></tr>
<tr><td>Onion</td><td>1</td><td>6 tones/acre</td></tr>
<tr><td>Fodder Sorghum</td><td>1.5</td><td>12 tones/acre</td></tr>
<tr><td>Sorghum</td><td>2.5</td><td>7 tonnes /acre</td></tr>
<tr><td colspan="2">Livestock (no.): cow 10</td><td>Poultry (no.): 52</td></tr>
<tr><td colspan="2">Heifer : 6</td><td>Duck : 0</td></tr>
<tr><td colspan="2">Small ruminants (no.): Goat 4</td><td>Farm machinery available: Sprayer, chaff cutter, brush cutter, Tractor</td></tr>
<tr><td>6</td><td>Description of innovation / adoptedClimate resilient practices (1 or 2 practices)

Describe in not more than 100 words and attach separately / photo of the innovation /adopted technology)</td><td>:</td><td colspan="3">1. crop production:
Cultivated onion in one acre and the average income of Rs. 80,000/- from the agriculture produce
2. Poultry night shelter:
She adopted low cost night shelter for poultry birds to prevent the birds from heat stress and predators as an innovation by seeing the intervention of KVK under NICRA scheme to fellow farmers in his village and the average income of Rs. 36,000/- from poultry
3 Dairy shed
She built dairy shed for dairy animals to withstand heat stress
and the annual income of Rs. 2,05,000/- from dairy
3. Improved shelter for extreme weather condition
She installed the Fogger to dairy shed to prevent the heat stress of animals
4. Cultivation of mixed fodder:
By cultivating mixed fodder she can able to rear the livestock in a balanced ration at low cost.
5. Dry fodder storage bank:
In her farm, she preserved the dry fodder storage bank by putting aluminium sheet over the fodder.
6. Disease prevention strategies</td></tr>
</table>

			Adoption of regular vaccination & deworming of small ruminants 7. Feeding Feeding balanced concentrate feed and unconventional feeds such as onion crop residue for better weight gain and to overcome stress during vagaries of climate change 8. Clean Milk Production Adopted strategies of by using teat dip with KMNO4
7	**Impact of innovation on other farmers (Quantify in terms of no. of other farmers adopted, area covered)**	**:**	In this NICRA village more than 40% of the poultry farmers, 80% of the Dairy farmers adopted housing management.60-70% of the farmers cultivated green fodder for their livestock. Majority of the farmers (90%) preserved their fodder for feeding their livestock.
8	**Any other information pertaining to innovation/ adoption of the technology not covered above**	**:**	She has effectively integrated dairy, goat and poultry enterprise with agriculture and doing organic agriculture and fetching more income from crop component too.