Details of FLDs implemented during 2021-22

Technology-1

Crop : Sugarcane
Thematic area : Nutrient Management
Technology demonstrated : Demonstration Aapplication of 100% RDN and K in 12 equal splits from 30-150 DAP through drip fertigation in sugarcane
Season and year : Rabi & 2020
Farming situation : Irrigated up land, red loam soils, low in nitrogen, high in phosphorous and potassium.
Source of fund : ICAR-ATARI
No of locations (Villages) : 1
No. of demonstrations (replications/farmers/beneficiaries): 8
No of SC/ST Farmers and women farmers: 2 & 2
Area proposed (ha) : 5.0
Actual area (ha) : 3.2
Justification for shortfall if any : Target area not achieved due to area under drip in sugarcane is less.
Feedback from farmers : Aapplication of 100% RDN and K in 12 equal splits from 30-150 DAP through drip fertigation in sugarcane in resulted in good yields when compared to farmers practice.
Extension activities on the FLD: Training programmes and Field visits

Technology-2

Crop : Mango
Thematic area : Cropping system
Technology demonstrated : Multiple cropping in Mango
Season and year : Kharif, 2020
Farming situation : Red loamy soils, Irrigated
Source of fund : KVK
No of locations (Villages) : 7
No. of demonstrations (replications/farmers/beneficiaries): 12
No of SC/ST Farmers and women farmers: 3 SC farmers and 1 woman farmer
Area proposed (ha) :10
Actual area (ha) :12
Feedback from farmers : farmers felt happy to obtain additional net returns with adoption of Multiple cropping in Mango
Feedback of the Scientist : This technology is more significantly profitable to overcome low returns or loss of income from mono cropping
Extension activities on the FLD: Farmers trainings-2, Media coverage-2, Training to Extension functionaries-2

Technology-3

Crop: Chilli
Thematic area **:** Integrated Nutrient management
Technology demonstrated **:** Soil test based fertilizer application
Season and year **:** Rabi, 2020
Farming situation **:** Sandy clay loam soils, Irrigated
Source of fund **:** KVK
No of locations (Villages) **:**3
No. of demonstrations (replications/farmers/beneficiaries):17
No of SC/ST Farmers and women farmers: 3 and 2
Area proposed (ha) **:** 4
Actual area (ha) **:** 6
Justification for shortfall if any:
Feedback from farmers **:** Farmers are happy to overcome the problem of low quality yields
Feedback of the Scientist **:** this technology is useful to achieve significant higher quality yields compared to farmers practice
Extension activities on the FLD: Farmers Trainings-2, Media coverage-1, Training to Extension functionaries-1

Technology-4

Crop: Brinjal
Thematic area : Integrated Pest Management
Technology demonstrated : Integrated Pest Management in Brinjal
Season and year **:** Rabi, 2020
Farming situation : Black loamy soils, Irrigated
Source of fund : KVK
No of locations (Villages) :2
No. of demonstrations (replications/farmers/beneficiaries):15
No of SC/ST Farmers and women farmers: 5SC farmers and 4 women farmers
Area proposed (ha) :6.0
Actual area (ha) : 6.0
Justification for shortfall if any:
Feedback from farmers : Farmers are willing to adopt IPM for shoot and fruit borer in Brinjal
Feedback of the Scientist : This technology is more effective in reducing the incidence of shoot and fruit borer
Extension activities on the FLD: Farmers training-2, media coverage-1, training to Extension Functionaries-2 (Field days, Farmers training, media coverage, training to Extension Functionaries)

Technology-5

Crop : Mango
Thematic area : Production Management
Technology demonstrated : Fruit drop management in Mango
Season and year : Rabi, 2020
Farming situation : Red loamy soils, Irrigated
Source of fund : KVK
No of locations (Villages) :8
No. of demonstrations (replications/farmers/beneficiaries): 30
No of SC/ST Farmers and women farmers: 5 SC farmers, 2 women farmers
Area proposed (ha) :10
Actual area (ha) :12
Justification for shortfall if any:
Feedback from farmers : Farmers felt happy to overcome heavy fruit drop and smaller sized fruits
Feedback of the Scientist : This technology is more economically profitable with the higher fruit yields
Extension activities on the FLD: Farmers trainings-2, Media coverage-2, Training to Extension functionaries-2 (Field days, Farmers training, media coverage, training to Extension Functionaries)

Technology-6

Crop : Silkworm rearing
Thematic area : ICM
Technology demonstrated : Management of micro climatic factors in silkworm rearing during the summer season
Season and year : 2021
Farming situation : Irrigated
Source of fund : ICAR
No of locations (Villages) : 4
No. of demonstrations (replications/farmers/beneficiaries): 10
No of SC/ST Farmers and women farmers: 2
Actual area (ha) :**4**
Feedback from farmers :Farmers are satisfied with the technology by maintenance of temperature and humidly in silkworm rearing room during the summer rearing and also controlled disease attack in silkworms due to high temparatures.
Feedback of the Scientist : This technology is much useful to farmers for the maintenance of micro climatic conditions in summer season.
Extension activities on the FLD: Method demonstrations, Farmers trainings

Technology-7

Crop **:** Mulberry
Thematic area **:** IPM
Technology demonstrated **:** Demonstration of Bio control agents in mulberry against leaf roller
Season and year **:** kharif 2021
Farming situation **:** Irrigated dry
Source of fund **:** ICAR
No of locations (Villages) **:** 4
No. of demonstrations (replications/farmers/beneficiaries): 20
No of SC/ST Farmers and women farmers:
Area proposed (ha) **:** 8
Actual area (ha) **: 8**
Justification for shortfall if any : Nil
Feedback from farmers : Farmers are happy to overcome the problem of leaf damage and low leaf yields.
Feedback of the Scientist **:** This technology is much useful to control the leaf roller compared to farmer's practice
Extension activities on the FLD: Method demonstrations, Farmers trainings

Technology-8

Crop: mango
Thematic area **:** Value addition
Technology demonstrated **:** Demonstration of Value addition to mango
Season and year **:** Kharif
Source of fund **:** KVK
No of locations (Villages) **:**1
No. of demonstrations (replications/farmers/beneficiaries : 25
No of SC/ST Farmers and women farmers:2
Feedback from farmers : good income generating activity
Feedback of the Scientist **:** farm women are very much interested

Extension Studies:

Study1: Impact of National Innovations on Climate Resilient Agriculture (NICRA) Interventions carried out by KVK

To study the impact of NICRA interventions on agriculture and allied sectors a number of 80 farmers from chittecherla, Kothapalli, Deendaarlapalli, Thettupalli, Bakarapet, diguvuru, kotabailu and chattevaripalem Villages of chinnagottighallu mandal were selected and collected data from respondents by using interview schedule.

Objectives of study :

1 .To distribute the respondents based on their profile characters

2 .To assess the impact of NICRA interventions

Results of the study:

Distribution of Respondents based on Adoption of Climate Resilient Technologies)N =(80

S.No	Climate Resilient Technology	Adoption			
		NICRA		Non NICRA	
		Adoption	(%)	Non Adoption	(%)
1	Polythene Mulching in Tomato and Vegetable	39	97.5	22	22.0
2	Deep Plough / Summer Ploughing	36	90.0	08	8.0
3	Tank Silt Application	32	80.0	0	0.0
4	Micro Irrigation Technology	40	100.0	29	29.0
5	Soil Testing	40	100.0	18	18.0
6	Green Manuring	36	90.0	08	8.0
7	Drought Tolerant Dharani Groundnut	38	95.0	19	19.0
8	Direct seeding in rice by Drum Seeder	24	60.0	04	4.0
9	Contingency cropping	33	82.5	24	24.0
10	Multiple / inter cropping in mango orchards	27	67.5	02	2.0
11	High Yielding Arka samrat Tomato cultivation	37	92.5	14	35
12	Fruit Drop Management in Mango	34	85.0	11	27.5
13	Corp Rotation	33	82.5	13	32.5
14	Integrated Pest Management	32	80.0	16	40
15	Integrated Farming System	29	72.5	04	10
15	Cultivation of Co FS-31 and Co-4 Fodder	27	67.5	12	30
17	Azolla as supplementary feed	18	45.0	02	5
18	Raja sri poultry rearing	22	55.0	04	10

Impact of NICRA interventions on Production and Productivity of Major crops

S.No	Crop / Unit	Production)Q/ha /(Ltrs		Improvement (%)	Net Income (Rs./Ha)		Improvement (%)
		NICRA	Non NICRA		NICRA	Non NICRA	
1	Groundnut	34.5	27	27.8	1,27,487.5	79,925	59.51
2	Paddy	64.0	55.7	14.8	34,400	22,160	55.23
3	Mango	76.2	53.7	41.9	3,80,750	2,16,845	75.59
4	Tomato	515	449.0	14.7	2,40,655	1,58,300	52.02
5	Chrysanthemum	107	76.5	39.9	3,20,750	1,85,562.5	72.85
6	Milk)1animal/year(	1966.5	1595.75	23.2	43,082.5	23,333.25	84.64
7	poultry	Per 10 chicks per year			5120	3800	53.89

Study2: Impact of KVK interventions in adopted Villages

To study the impact of KVK interventions at adopted villages, Udayamanikyam, Chintagunta, Gaddamvaripalli villages of Yerravaripalem mandal and Agarampeta, Atturu and Mangalgiri Kandriga villages from Nindra mandals were selected purposively and 20 farmers from each village were selected by simple random sampling to make 120 sample size and collected data from respondents by using interview schedule.

Objectives of the study:

1. To assess the impact of KVK Interventions in Adopted Villages
2. To elicit the constraints in adoption of KVK recommended technologies

Results of the study:

Summary of activities carried out by KVK (2021-2018)

S.No	Activity	Number of activities	No of participants
1	On Farm Testing	43	270
2	Front Line Demonstrations	40	1448
3	Training Programmes	455	12895
4	Extension Activities	506	16830
5	Diagnostic field visits	482	3240
	Total	**1526**	**34683**

Adoption of KVK technologies by the farmers)N = (120

S. No	KVK recommendation / Technology	Adoption				Improvement (%)
		Before Adopt		After Adopt		
1	Soil Test Based Fertilizer Application	21	17.5	86	71.67	54.17
2	High Yielding varieties	08	6.67	91	75.83	69.17
3	Integrated Crop Management	41	34.17	102	85.00	50.83
4	Integrated Pest Management	35	29.17	82	68.33	39.17
5	Farm Mechanization	49	40.83	97	80.83	40.00
6	Bio fertilizers application	12	10.00	64	53.33	43.33
7	Soil and water conservation measures	18	15.00	75	62.50	47.50
8	Green manure crops	21	17.50	93	77.50	60.00
9	Organic farming	08	6.67	33	27.50	20.83
10	Summer / deer ploughs	27	22.50	69	57.50	35.00
11	Crop rotation	42	35.00	112	93.33	58.33
12	Value addition of produce	06	5.00	34	28.33	23.33

Impact of KVK interventions on Production and productivity

S.No	Crop	Production)q/ha.(		Increase (%)	Net Income (Rs./Ha.)		Increase (%)
		Before	After		Before	After	
1	Paddy	58.4	63.5	8.8	14,497.5	24,625.0	69.9
2	Groundnut	26.8	33.9	26.3	53,480.0	98,527.5	84.2
3	Redgram	9.4	12.0	28.0	7,875.0	13,490.0	71.3
4	Sugarcane	975.0	1063.8	9.1	75,625.0	1,36,287.5	80.2
5	Greengram	12.3	14.6	19.2	38,037.5	65,875.0	73.2
6	Blackgram	13.0	16.8	28.8	35,150.0	56,450.2	60.6
7	Sun flower	15.5	18.8	21.0	24,800.0	41,800.0	68.5
8	Mango	53.8	90.5	68.2	1,76,845.2	2,55,750.0	44.6
9	Tomato	403.0	490.0	21.6	1,16,130.5	2,25,655.5	94.3
10	Chilli	50.5	58.3	15.3	2,45,500.0	380,600.0	55.0
11	Bhendi	105.0	120.0	14.3	172,605.5	2,57,395.2	49.1
12	Brinjal	555.0	635.0	14.4	2,63,495.0	4,30,395.0	63.3
13	Chrysanthemum	76.5	99.5	30.1	150,562.5	2,45,500.0	63.1
		181.09	**208.98**	**23.47**	**35637.86**	**50127.95**	**67.48**

Study3: Training Need Assessment of farmers in KVK Adopted Villages

To study the training needs of the farmers in newly adopted villages by KVK, Perumallapalli, Chavanapalli and Komaragunta villages from vedurukuppam mandal Kayampeta, Chinthakalva and Patti puttur villages from vadamalapeta mandal were selected purposively and 20 farmers from each village selected by simple random sampling to make 120 sample size and collected data from respondents by using interview schedule.

Objectives of the study:

1. To find out training needs of the farmers in adopted villages
2. Preparation of action plan for trainings based on TNA

Result of the study

Farmer training needs in Agri and horti divisions)N(120 =

S.No	Training Ares	Need	Percentage	Rank
1	Market information and marketing	112	93.3	I
2	High Yielding Varieties	105	87.5	II
3	Crop and variety selection	101	84.2	III
4	Fertilizer management	76	63.3	IV
5	Soil sampling and soil testing	68	56.7	V
6	Crop harvesting	61	50.8	VI
7	Water management	54	45.0	VII
8	Post harvest management	48	40.0	VIII
9	Contingency crop planning	47	39.2	IX
10	Crop rotation	38	31.7	X
11	Land preparation	26	21.7	XI
12	Value addition	19	15.8	XII

Training needs in plant protection)N(120 =

S.No	Training Ares	Need	Percentage	Rank
1	Pest and disease management	115	95.83	I
2	Bio fertlizers application	86	71.67	II
3	IPM	58	48.33	III
4	Novel pesticides and usage	49	40.83	IV
5	Precautions while handling agro chemicals	32	26.67	V

Training needs in animal husbandry)N(120 =

S.No	Training Ares	Need	Percentage	Rank
1	Disease management	98	81.67	I
2	Animal nutrition	65	54.17	II
3	Selection of breeds	51	42.50	III
4	Backyard poultry	42	35.00	IV
5	Sheep and goat rearing	36	30.00	V

Training needs of other areas)N(120 =

S.No	Training Ares	Need	Percentage	Rank
1	Preparation of infusions	83	69.17	I
2	Farm machinary	67	55.83	II
3	Mushroom production	53	44.17	III
4	Vermicomposting	49	40.83	IV
5	Sericulture	36	30.00	V
6	Income generation activities	29	24.17	VI
7	Medicinal plants cultivation	27	22.50	VII
8	Honey bee keeping	12	10.00	VIII

Overall training needs of the farmers (N(120 =

S.No	Training Ares	Need	Percentage	Rank
1	Agriculture crops	112	93.33	I
2	Horticulture	94	78.33	II
3	Plant protection	89	74.17	III
4	Veterinary science	63	52.50	IV
5	Sericulture	47	39.17	V
6	Farm machinery	39	32.50	VI
7	Home science	21	17.50	VII

Preferences of training programmes (N=120)

Venue of training 1. Own village :84 2. KVKs : 29 3. Head quarte of mandal :07	**Duration of training** 1. One day :101 2. Two days :15 3. Three days :04
Time of the training 1. Before sowing :109 2. After sowing 11 : 3. After harvesting 00 :	**Number of programmes** 1. One per year :21 2. Two per year 85 : 3. Three per year :14