Action Plan
2022

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3.Training programme to be organized

(a) Farmers and farmwomen

Thematic area	Title of Training	No.	Duration	Venue On/Off	Tentative Date	No. of Participants								
						SC		ST		Other		Total		
						M	F	M	F	M	F	M	F	T
I. Crop Production														
Production technology	Improved production technology of jute in jute based cropping system	2	3	Off	Feb, 23-25 and April 6-8, 2022	55	5	0	0	0	0	55	5	60
Resource Conservation Technologies	Improved production technology of rice in jute-rice cropping system	2	3	On	June 22-24, 2022 and November, 23-25, 2022	55	5	0	0	0	0	55	5	60
Production technology	Organic farming and zero budget natural farming in jute based cropping system	2	3	On	May 18-20, 2022	55	5	0	0	0	0	55	5	60
II. Horticulture														
Seed production	Seed production of Vegetable crops in jute based cropping system	1	3	On	15.12.22 to 17.12.22	15	15	0	0	0	0	15	15	30
Vegetable cultivation	Cultivation techniques of solanaceous vegetables in jute based cropping system	1	3	Off	20.10.22 to 22.10.22	15	15	0	0	0	0	15	15	30
Water management	Micro irrigation technology in jute based cropping system	1	3	On	08.06. 22 to 10.06.22	15	15	0	0	0	0	15	15	30
Nursery management	Nursery management of vegetable crops in jute based cropping system	1	3	On	15.09.22 to17.09.22	15	15	0	0	0	0	15	15	30
Nutrient	Role of plant nutrients and deficiency	1	3	Off	05.05.22 to	15	15	0	0	0	0	15	15	30

management	symptoms in horticultural crops				07.05.22									
Plant propagation techniques	Plant propagation techniques of sub-tropical fruit crops	1	3	On	22.07. 22 to 24.07.22	15	15	0	0	0	0	15	15	30
Production and Management technology	Improved production technology of potato in jute based cropping system	1	3	Off	10.11. 22 to 12.11.22	15	15	0	0	0	0	15	15	30
III. Soil Health and Fertility Management														
Soil fertility management	Role of nutrient vis-à-vis crop production in jute based cropping system	1	3	On	Sept. 27-29, 2022	25	5	0	0	0	0	25	5	30
Production and use of organic inputs	Need for composting and different types of compost preparation	2	3	On	February 16-18, 2022 and August 24-26, 2022	55	5	0	0	0	0	55	5	60
Soil testing	Need for soil testing and soi test based fertilizer application vis-à-vis jute based farming systems	1	3	On	Oct. 26-28 2022	25	5	0	0	0	0	25	5	30
IV. Crop Protection														
Crop protection	Seed treatment in Rice	1	3	Off	21.06.2022, 22.06.2022, 23.06.2022	20	10	0	0	0	0	20	10	30
Crop protection	IPM in Rice in Integrated Farming System	1	3	On	05.07.2022, 06.07.2022, 07.07.2022	25	05	0	0	0	0	25	05	30
Crop protection	Disease management in Brinjal	1	3	Off	24.08.2022, 25.08.2022, 26.08.2022	20	10	0	0	0	0	20	10	30
Crop protection	Disease management in Mustard	1	3	Off	09.11.2022, 10.11.2022, 11.11.2022	23	07	0	0	0	0	23	07	30
Crop protection	Disease management in Cole crops	1	3	On	02.12.2022, 03.12.2022, 04.12.2022	20	10	0	0	0	0	20	10	30
Integrated pest management	Integrated pest management in paddy	1	3	On	08.06.2022 to 10.06.2022	15	15					15	15	30
Integrated pest	Insect pest management in Solanaceous	1	3	Off	15.02.2022 to	15	15					15	15	30

management	crop				17.02.2022									
Integrated pest management	Insect pest management in cucurbitaceous crop	1	3	On	06.09.2022 to 08.09.2022	15	15					15	15	30
Integrated pest management	Insect pest management in oil seed crop	1	3	Off	01.12.2022 to 03.12.2022	15	15					15	15	30
V. Agro meteorology														
Others	Awareness cum training Programme on "Introduction of Agromet Advisory Service at block levels and Popularization of Meghdoot application in dissemination of weather forecast"	1	1	Off	08.06.2022	25	5					25	5	30
Others	Awareness cum training Programme on "Climate smart agricultural techniques and familiarization with various climatic normals affecting crop productions"	1	1	On	15.07.2022	22	8					22	8	30
Others	Awareness cum training Programme on "Crop weather pest interaction and Importance of weather forecasting in managing pest-disease infestation in crops"	1	1	On	23.08.2022	17	13					17	13	30
Others	Awareness cum training Programme on "Role of Agromet Advisory bulletins in income generation of farmers under changing climatic conditions and Popularization of DAMINI App"	1	1	Off	20.09.2022	19	11					19	11	30
Others	Awareness cum Training programme on "Different microclimate modification techniques for input management in agriculture under climate change and Popularization of Mausam App among farmers"	1	1	Off	17.11.2022	20	10					20	10	30
Others	Awareness cum Training on "Organic agriculture to combat climate change and discussions on various impacts of extreme weather events on crops and their management"	1	1	On	19.12.2022	21	9					21	9	30
TOTAL		**32**	**72**			**667**	**293**	**0**	**0**	**0**	**0**	**667**	**293**	**960**

(b) Rural youths

Thematic area	Title of Training	No.	Duration	Venue On/Off	Tentative Date	No. of Participants								
						SC		ST		Other		Total		
						M	F	M	F	M	F	M	F	T
Production and use of organic inputs	Need for composting and different types of compost preparation	1	3	Off	August 17-19, 2022	25	5	0	0	0	0	25	5	30
Seed production	Seed production of rabi rice	1	3	Off	Dec. 20-22, 2022	25	5	0	0	0	0	25	5	30
Rural craft	Making of jute handicrafts	2	7	On	16.02.22 to 23.02.22 and Dec. 24-30, 2022nd	0	40	0	0	0	0	0	40	40
Production of bio control agents and bio pesticides	Bio-pesticides and its role in organic farming and zero budget natural farming in jute based cropping system	1	3	Off	28.04.22 to 30.04.22	15	15	0	0	0	0	15	15	30
Mushroom Production	Improved Production Technology of Oyster mushroom	2	3	On	(16.02.2022, 17.02.2022, 18.02.2022) and (14.12.2022, 15.12.2022, 16.12.2022)	40	20	0	0	0	0	40	20	60
Bee-keeping	Bee-keeping for better pollination and alternative livelihood	2	3	On	(22.02.2022, 23.02.2022, 24.02.2022) and (15.11.2022, 16.11.2022, 17.11.2022)	44	16	0	0	0	0	44	16	60
Bee-keeping	Awareness programme on bee keeping for better pollination of crops	3	1	On	14.06.2022, 23.08.2022, 18.10.2022	60	30	0	0	0	0	60	30	90
TOTAL		**12**	**23**			**209**	**131**	**0**	**0**	**0**	**0**	**209**	**131**	**340**

(c) Extension functionaries

Thrust area/ Thematic area	Title of Training	No.	Duration	Venue On/Off	Tentative Date	No. of Participants								
						SC		ST		Other		Total		
						M	F	M	F	M	F	M	F	T
Conservation agriculture	Sustainable crop production through conservation agriculture in jute based cropping system	1	3	On	July 20-22, 2022	25	5	0	0	0	0	25	5	30
Production of bio control agents and bio pesticides	Bio-pesticides and its role in organic farming and zero budget natural farming in jute based cropping system	1	3	On	24.08.22 to 26.08.22	15	15	0	0	0	0	15	15	30
TOTAL		2	6			**40**	**20**	**0**	**0**	**0**	**0**	**40**	**20**	**60**

Abstract of Training: Consolidated table (ON and OFF Campus)

Farmers and Farm women

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
I. Crop Production													
Weed Management													
Resource Conservation Technologies	2	0	0	0	55	5	60	0	0	0	55	5	60
Cropping Systems	2	0	0	0	55	5	60	0	0	0	55	5	60
Crop Diversification													
Integrated Farming													
Water management													
Seed production													
Nursery management													
Integrated Crop Management													
Fodder production													
Production of organic inputs	2	0	0	0	55	5	60	0	0	0	55	5	60
Others, (cultivation of crops)													
TOTAL	6	0	0	0	165	15	180	0	0	0	165	15	180
II. Horticulture													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
a) Vegetable Crops													
Integrated nutrient management	1	0	0	0	15	15	30	0	0	0	15	15	30
Water management	1	0	0	0	15	15	30	0	0	0	15	15	30
Enterprise development													
Skill development													
Yield increment													
Production of low volume and high value crops													
Off-season vegetables	1	0	0	0	15	15	30	0	0	0	15	15	30
Nursery raising	1	0	0	0	15	15	30	0	0	0	15	15	30
Exotic vegetables like Broccoli													
Export potential vegetables													
Grading and standardization													
Protective cultivation (Green Houses, Shade Net etc.)	2	0	0	0	30	30	60	0	0	0	30	30	60
Others, if any (Cultivation of Vegetable)													
TOTAL	6	0	0	0	90	90	180	0	0	0	90	90	180
b) Fruits													
Training and Pruning													
Layout and Management of Orchards													
Cultivation of Fruit													
Management of young plants/orchards													
Rejuvenation of old orchards													
Export potential fruits													
Micro irrigation systems of orchards													
Plant propagation techniques	1	0	0	0	15	15	30	0	0	0	15	15	30
Others, if any(INM)													
TOTAL	1	0	0	0	15	15	30	0	0	0	15	15	30
c) Ornamental Plants													
Nursery Management													
Management of potted plants													
Export potential of ornamental plants													
Propagation techniques of Ornamental Plants													
Others, if any													
TOTAL													
d) Plantation crops													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Production and Management technology													
Processing and value addition													
Others, if any													
TOTAL													
e) Tuber crops													
Production and Management technology													
Processing and value addition													
Others, if any													
TOTAL													
f) Spices													
Production and Management technology													
Processing and value addition													
Others, if any													
TOTAL													
g) Medicinal and Aromatic Plants													
Nursery management													
Production and management technology													
Post harvest technology and value addition													
Others, if any													
TOTAL													
III. Soil Health and Fertility Management													
Soil fertility management	1	0	0	0	25	5	30	0	0	0	25	5	30
Soil and Water Conservation													
Integrated Nutrient Management													
Production and use of organic inputs	2	0	0	0	55	5	60	0	0	0	55	5	60
Management of Problematic soils													
Micro nutrient deficiency in crops													
Nutrient Use Efficiency													
Soil and Water Testing	1	0	0	0	25	5	30	0	0	0	25	5	30
Others, if any													
TOTAL	**4**	**0**	**0**	**0**	**105**	**15**	**120**	**0**	**0**	**0**	**105**	**15**	**120**
IV. Livestock Production and Management													
Dairy Management													
Poultry Management													
Piggery Management													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Rabbit Management													
Disease Management													
Feed management													
Production of quality animal products													
Others, if any (Goat farming)													
TOTAL													
V. Home Science/Women empowerment													
Household food security by kitchen gardening and nutrition gardening													
Design and development of low/minimum cost diet													
Designing and development for high nutrient efficiency diet													
Minimization of nutrient loss in processing													
Gender mainstreaming through SHGs													
Storage loss minimization techniques													
Enterprise development													
Value addition													
Income generation activities for empowerment of rural Women													
Location specific drudgery reduction technologies													
Rural Crafts													
Capacity building													
Women and child care													
Others, if any													
TOTAL													
VI.Agril. Engineering													
Installation and maintenance of micro irrigation systems													
Use of Plastics in farming practices													
Production of small tools and implements													
Repair and maintenance of farm machinery and implements													
Small scale processing and value addition													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Post Harvest Technology													
Others, if any													
TOTAL													
VII. Plant Protection													
Integrated Pest Management	4	0	0	0	60	60	120	0	0	0	60	60	120
Integrated Disease Management	4	0	0	0	88	32	120	0	0	0	88	32	120
Bio-control of pests and diseases													
Production of bio control agents and bio pesticides													
Others, if any	1	0	0	0	20	10	30	0	0	0	20	10	30
TOTAL	9	0	0	0	168	102	270	0	0	0	168	102	270
VIII. Fisheries													
Integrated fish farming													
Carp breeding and hatchery management													
Carp fry and fingerling rearing													
Composite fish culture & fish disease													
Fish feed preparation & its application to fish pond, like nursery, rearing & stocking pond													
Hatchery management and culture of freshwater prawn													
Breeding and culture of ornamental fishes													
Portable plastic carp hatchery													
Pen culture of fish and prawn													
Shrimp farming													
Edible oyster farming													
Pearl culture													
Fish processing and value addition													
Others, if any													
TOTAL													
IX. Production of Inputs at site													
Seed Production													
Planting material production													
Bio-agents production													
Bio-pesticides production													
Bio-fertilizer production													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Vermi-compost production													
Organic manures production													
Production of fry and fingerlings													
Production of Bee-colonies and wax sheets													
Small tools and implements													
Production of livestock feed and fodder													
Production of Fish feed													
Others, if any													
TOTAL													
X. Capacity Building and Group Dynamics													
Leadership development													
Group dynamics													
Formation and Management of SHGs													
Mobilization of social capital													
Entrepreneurial development of farmers/youths													
WTO and IPR issues													
Others, if any													
TOTAL													
XI Agro-forestry													
Production technologies													
Nursery management													
Integrated Farming Systems													
TOTAL													
XII. Others (Pl. Specify)	6	0	0	0	124	56	180	0	0	0	124	56	180
TOTAL	**32**	**0**	**0**	**0**	**667**	**293**	**960**	**0**	**0**	**0**	**667**	**293**	**960**

Rural youth

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Mushroom Production	2	0	0	0	40	20	60	0	0	0	40	20	60
Bee-keeping	5	0	0	0	104	46	150	0	0	0	104	46	150
Integrated farming													
Seed production	1	0	0	0	25	5	30	0	0	0	25	5	30
Production of organic inputs	1	0	0	0	25	5	30	0	0	0	25	5	30
Planting material production													
Vermi-culture													
Sericulture													
Protected cultivation of vegetable crops													
Commercial fruit production													
Repair and maintenance of farm machinery and implements													
Nursery Management of Horticulture crops													
Training and pruning of orchards													
Value addition													
Production of quality animal products													
Dairying													
Sheep and goat rearing													
Quail farming													
Piggery													
Rabbit farming													
Poultry production													
Ornamental fisheries													
Para vets													
Para extension workers													
Composite fish culture													
Freshwater prawn culture													
Shrimp farming													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Pearl culture													
Cold water fisheries													
Fish harvest and processing technology													
Fry and fingerling rearing													
Small scale processing													
Post Harvest Technology													
Tailoring and Stitching													
Rural Crafts	2	0	0	0	0	40	40	0	0	0	0	40	40
Enterprise development													
Others if any (ICT application in agriculture)	1	0	0	0	15	15	30	0	0	0	15	15	30
TOTAL	**12**	**0**	**0**	**0**	**209**	**131**	**340**	**0**	**0**	**0**	**209**	**131**	**340**

Extension functionaries

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Productivity enhancement in field crops	1	0	0	0	25	5	30	0	0	0	25	5	30
Integrated Pest Management													
Integrated Nutrient management													
Rejuvenation of old orchards													
Value addition													
Protected cultivation technology													
Formation and Management of SHGs													
Group Dynamics and farmers organization													
Information networking among farmers													

Capacity building for ICT application													
Care and maintenance of farm machinery and implements													
WTO and IPR issues													
Management in farm animals													
Livestock feed and fodder production													
Household food security													
Women and Child care													
Low cost and nutrient efficient diet designing													
Production and use of organic inputs													
Gender mainstreaming through SHGs													
Crop intensification													
Others if any	1	0	0	0	15	15	30	0	0	0	15	15	30
TOTAL	**2**	**0**	**0**	**0**	**40**	**20**	**60**	**0**	**0**	**0**	**40**	**20**	**60**

4. Frontline demonstration to be conducted*

FLD 1:

- **Crop**: Jute
- **Thrust Area**: Augmentation of productivity of field crops
- **Thematic Area**: Improved production technology
- **Season**:Pre Kharif 2022
- **Farming Situation**: Irrigated medium upland

FLD 2:

- **Crop**: Rice (Kharif)
- **Thrust Area**: Augmentation of productivity of field crops
- **Thematic Area**: Seed production
- **Season**:Kharif 2022
- **Farming Situation**: Irrigated medium upland

FLD 3 (CFLD):

- **Crop**: Mustard
- **Thrust Area**: Augmentation of productivity of field crops
- **Thematic Area**: Secondary and micronutrient management
- **Season**:Rabi 2022
- **Farming Situation**: Irrigated medium upland

FLD 4 (CFLD):

- **Crop**: Lentil
- **Thrust Area**: Augmentation of productivity of field crops
- **Thematic Area**: Secondary and micronutrient management
- **Season**:Rabi 2022
- **Farming Situation**: Irrigated medium upland

FLD 5 (CFLD):

- **Crop**: Chickpea
- **Thrust Area**: Augmentation of productivity of field crops
- **Thematic Area**: Secondary and micronutrient management
- **Season**:Rabi 2022

- **Farming Situation**: Irrigated medium upland

FLD 6 :

- **Crop**: Rice (Boro)
- **Thrust Area**: Augmentation of productivity of field crops
- **Thematic Area**: Seed production
- **Season**:Rabi 2022
- **Farming Situation**: Irrigated medium upland

FLD 7 (CFLD):

- **Crop**: Sesame
- **Thrust Area**: Augmentation of productivity of field crops
- **Thematic Area**: Secondary and micronutrient management
- **Season**:Summer 2022
- **Farming Situation**: Irrigated medium upland

FLD 8

- Crop: Rice and Sesame
- Thrust Area : Natural farming
- Thematic area: Zero budget natural farming
- Season: Kharif 2022 and Summer 2022
- Area: 1 acre each

FLD 9

- **Crop**: Tissue cultured Banana
- **Thrust Area**: Production Technology
- **Thematic Area**: Cultivation of Fruit
- **Season**: Kharif
- **Farming Situation**: Irrigated Medium/ upland

FLD 10

- **Crop**: Onion
- **Thrust Area**: Yield increment
- **Thematic Area**: Cultivation of Vegetable
- **Season**: Kharif
- **Farming Situation**: Irrigated Medium/ upland

FLD 11

- **Crop / Enterprise:** Tomato
- **Thrust Area**: Use of multiple disease resistance newly release hybrid variety
- **Thematic Area**: Cultivation of Vegetable
- **Season**: Rabi
- **Farming Situation**: Irrigated Medium/ upland

FLD 12

- **Crop**: Oyster Mushroom
- **Thrust Area**: Augmentation of productivity
- **Thematic Area**: Improved production technology
- **Season**: December, 2022
- **Farming Situation**: Conventional method

FLD 13

- **Crop**: Brinjal
- **Thrust Area**: Augmentation of productivity
- **Thematic Area**: Integrated Pest management
- **Season**:Rabi (November 2021)
- **Farming Situation**: Irrigated medium/ upland

Details of FLDs:

Sl. No.	Crop & variety / Enterprises	Proposed Area (ha)/ Unit (No.)	Technology package for demonstration	Parameter (Data) in relation to technology demonstrated	Cost of Cultivation (Rs.)			No. of farmers / demonstration								
					Name of Inputs	Demo	Local	SC		ST		Other		Total		
								M	F	M	F	M	F	M	F	T
1	Jute; JRO 204	10	Seed treatment+ Use of seed drill/cycle weeder+ 60:30:30 NPK+retting with CRIJAF SONA	Plant height, base diameter, yield	Seed	72000	73500	25	0	0	0	0	0	25	0	25
2	Rice; MTU 7029	10	16-18 day old seedling + 10'x10' spacing + chemical weeding + 80:40:40:20 NPKS	No. of tiller/hil, test weight, yield	Seed, Fertilizers	55000	54000	25	0	0	0	0	0	25	0	25
3	Mustard; JD 6/Keshari	10	Soil test based N, P, K + 30 kg S/ha+ two foliar spray of boron along with micronutrient mixture (Aquacal)	No. of pods/plant, test weight, oil content yield	Seed, Sulfur, boron	32000	30500	10	0	0	0	15	0	25	0	25

4	Lentil; WBL 77	10	Treatment of seed with rhizobium; 15:40:20 N:P:K and 30 kg S/ha; Soil application of $ZnSO_4$ @ 10 kg/ha; 2 foliar spray of boron @ pre and post flowering	No. of pods/plant, yield	Seed, sulfur, micronutrient	29000	27500	10	0	0	0	15	0	25	0	25
5	Chickpea, NBEG 45	10	Improved variety (NBEG 45) + Application of sulfur @ 30 kg/ha along with soil test basis NPK+ aqualcal (micronutrient mixture of Fe, Zn, B, Ca, Mo) spray 2 times pre and post flowering at an interval of 10 days	No. of pods/plant, yield		35000	34000	10	0	0	0	15	0	25	0	25
6	Sesame, RT 346	10	Improved variety (RT 346) + Application of sulfur @ 30 kg/ha along with soil test basis NPK+ aqualcal (micronutrient mixture of Fe, Zn, B, Ca, Mo) spray 2 times pre and post flowering at an interval of 10 days	No. of pods/plant, yield		37000	38000	10	0	0	0	15	0	25	0	25
7	Rice, GB 3	50	Modified SRI (2-3 leafstage seedling transplanting + 10'x10' spacing + chemical weeding + 80:40:40:20 NPKS	No. of tiller/hil, test weight, yield		59000	60000	115	10	0	0	0	0	115	10	125
8	Tissue cultured Banana Var. Grand Naine	2	Tissue cultured plantlets (Var. Grand Naine)	Yield, B:C ratio	Tissue cultured plantlets	160000	135000	5	10	0	0	0	0	5	10	15
9	Onion, Var Agrifound Dark Red	3	Variety (Seeds) (Var. Agrifound Dark Red)	Yield, B:C ratio	Seeds	105000	Replacement of upland and medium land paddy	10	10	0	0	0	0	10	10	20
10	Tomato	1	Variety (Seeds) (Var. Arka Samrat)	Leaf curl incidence, Yield, B:C ratio	Seeds	135000	162000	5	10	0	0	0	0	5	10	15
11	Mushroom Var. Oyster	20 nos.	**Treatment of paddy straw:@3**0 kgs of machine cut, dry paddy straw dipped with 100 litres of clean water, mixed with 100 ml formaldehyde + 10 gm Carbendazim + 30 gm Calcium hyoxide	Yield, B: C ratio	Mushroom spawn, machine cut paddy straw, poly packets, chemicals	5500	5000	10	10	0	0	0	0	10	10	20
12	Brinjal Var. Local	1 ha	Integrated pest management on *Leucinodes orbonalis* 1. Install pheromone traps 10/acre for mass trapping at 10 m distance from 20 DAT, the pheromone	Yield, B:C ratio	Pheromone trap 10/ acre for mass trapping	52000	49000	15	5					15	5	20

			septa should be changed at regular interval. 2. Spray azadirachtin 0.03% (300 ppm) neem oil based WSP @ 1000-2000 ml in 200-400 l of water/acre. 3. Need based application of Chemical pesticides (Cartap hydroloride 50% SP) @ 1gm/ L of water applied at 60 DAT and 75 DAT.)		and spray azadirach tin 0.03% neem oil Need based application of Chemical pesticides (Cartap hydroloride 50% SP) @ 1gm/ L of water applied at 60 DAT and 75 DAT.)											
TOTAL								**250**	**55**	**0**	**0**	**60**	**0**	**310**	**55**	**365**

Extension and Training activities under FLD:

Activity	**Title of Activity**	**No.**	**Clientele**	**Duration**	**Venue On/Off**	**No. of Participants**								
						SC		**ST**		**Other**		**Total**		
						M	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**T**
Training	Improved production technology of jute	1	PF	1 day	Off	10	0	0	0	15	0	25	0	25
	Seed production of rice	1	PF	1 day	Off	10	0	0	0	15	0	25	0	25
	Nutrient management of mustard	2	PF	1 day	Off	20	10	0	0	50	10	70	20	90
	Production technology on lentil	1	PF	1 day	Off	20	10	0	0	20	0	40	10	50
	Production technology on chickpea	1	PF	1 day	Off	20	10	0	0	20	0	40	10	50
	Production technology on sesame	1	PF	1 day	Off	20	10	0	0	20	0	40	10	50
	Improved cultivation of tissue culture banana	1	PF	1 day	Off	15	15	0	0	0	0	15	15	30
	Improved production technology of kharif onion	1	PF	1 day	Off	15	15	0	0	0	0	15	15	30
	Improved production technology of Oyster mushroom	1	RY	1	Off	10	10	0	0	0	0	10	10	20
Field visits	Field visit	20	PF	Half day each	Off	190	65	0	0	310	10	500	75	575
Field day	Feld day on all crops	12	PF	Half day each	Off	228	78	0	0	372	12	600	90	690
	Field day on Banana, Onion , Tomato	3	PF	3 days	Off	15	10	0	0	45	0	60	10	70

	Oyster mushroom	1	RY	1	Off	20	10	0	0	0	0	20	10	30

5. a) Seed and planting material production by utilization of instructional farm (Crops / Enterprises)

Name of the Crop / Enterprise	Variety / Type	Period From…… to ……..	Area (ha.)	Details of Production				
				Type of Produce	Expected Production (quintals)	Cost of inputs (Rs.)	Expected Gross income (Rs.)	Expected Net Income (Rs.)
Rice (Boro)	GB3	Dec 2021 – May 2022	2	Foundation seed	8 0	200000	500000	300000
Rice	MTU 7029	June – Dec, 2022	4	Foundation seed	210	400000	1000000	600000
Rice	Hasant/Satabdi	June – Dec, 2022	1	Foundation seed	20	40000	100000	60000
Sunnhemp	Improved CRIJAF variety	June – Dec, 2022	0.5	TL seed	3	13000	15000	2000
Fruit saplings	Mango, Guava, Citrus	June to Sept	-	Saplings	4000 nos	55000	300000	200000
Turmeric Seeds	Suguna	April to Feb	0.14	Seed rhizome	8	15000	40000	25000
Bhindi seeds	Kashi Kranti	March to Aug	0.14	Seed	0.3	5000	15000	10000

b) Village Seed Production Programme

Name of the Crop / Enterprise	Variety / Type	Period From…… to ……..	Area (ha.)	No. of farmers	Details of Production				
					Type of Produce	Expected Production(q)	Cost of inputs (Rs.)	Expected Gross income (Rs.)	Expected Net Income (Rs.)
Rice	MTU 7029	June – Dec, 2021	100	250	TL seed	4500	4800000	9000000	4200000

6. Extension Activities

Sl. No.	Activities/ Sub-activities	No. of activities proposed	Farmers				Extension Officials			Total		
			M	F	T	SC/ ST (% of total)	Male	Female	Total	Male	Female	Total
1.	Field Day	7	200	100	300	30	4	0	4	200	100	300
2.	Kisan Mela											
3.	Kisan Ghosthi											
4.	Exhibition											
5.	Film Show											

6.	Method Demonstrations	2	30	4	34	40				30	4	34
7.	Farmers Seminar											
8.	Workshop											
9.	Group meetings	4	100	30	130	60				100	30	130
10.	Lectures delivered as resource persons	4	70	10	80	30	90	30	120	160	40	200
11.	Advisory Services	20	50000	9000	59000	30	0	0	0	50000	9000	59000
12.	Scientific visit to farmers field	12	300	50	350	30	0	0	0	300	50	350
13.	Farmers visit to KVK											
14.	Diagnostic visits	10	54	13	67	21	0	0	0	54	13	67
15.	Exposure visits											
16.	Ex-trainees Sammelan											
17.	Soil health Camp	6	273	9	282	15	10	3	13	283	12	295
18.	Animal Health Camp											
19.	Agri mobile clinic											
20.	Soil test campaigns											
21.	Farm Science Club Conveners meet											
22.	Self Help Group Conveners meetings											
23.	Mahila Mandals Conveners meetings											
24.	Celebration of important days (specify)	2	80	20	100	100	0	0	0	80	20	100
25.	Sankalp Se Siddhi											
26.	Swatchta Hi Sewa											
27.	Mahila Kisan Diwas											
28.	Any Other (Specify)											
	Total	**67**	**51007**	**9206**	**60213**		**104**	**33**	**137**	**51107**	**9239**	**60346**

7. Revolving Fund (in Rs.)

Opening balance of 2021-22 (As on 01.04.2021)	Amount proposed to be invested during 2022-23	Expected Return
	870000	**1610000**

8. Expected fund from other sources and its proposed utilization

Project	Source	Amount to be received (Rs. in lakh)
CSISA	CIMMYT	160000
ATMA Purba Bardhaman	Govt. of West Bengal	500000
ATMA Paschim Bardhaman	Govt. of West Bengal	500000
DAMU	IMD	1500000

9. On-farm trials to be conducted*

OFT 1:

Sl no.	Particulars	Details
1	**Season**	Rabi 2021 -22
2	**Title of the OFT**	**Assessment of application of Zinc and Boron in winter rice under medium upland situation of Burdwan district**
3	**Thematic Area**	Nutrient management
4	**Problem Diagnosed**	Deficiency of Zn and Boron limiting crop productivity
5	**Important Cause**	Deficiency of Zn and B in soil
6	**Production System**	Rice based production system
7	**Micro farming System**	Conventional rice production
8	**Technology for Testing**	Zn and Boron management
9	**Existing Practice**	Non application of Zn and B
10	**Hypothesis**	Application of secondary and micronutrient will augement productivity due to synergistic effect
11	**Objective(s)**	Improve crop productivity of boro rice
12	**Treatments:**	Farmers' practice: 100:50:50 NPK Technology - 1 to be assessed: 100:50:50 NPK with 25 kg $ZnSO_4$ and 10 kg Borax per ha Technology - 2 to be assessed: 100:50:50 NPK with 40 kg $ZnSO_4$ and 15 kg Borax per ha Technology - 2 to be assessed: 100:50:50 NPK with spraying of chelated Zn and 20% B two times each at 45 and 70 DAT
13	**Critical Inputs**	$ZnSO_4$, chelated Zn, borax
14	**Unit Size**	0.13 ha
15	**No of Replications**	5
16	**Unit Cost**	Rs. 1460
17	**Total Cost**	Rs. 7300

18	**Monitoring Indicator**	Productivity, benefit:cost ratio
19	**Source of Technology**	ICAR-NRRI, Cuttack

OFT 2 :

Sl no.	Particulars	Details
1	**Season**	Summer 2022
2	**Title of the OFT**	**Evaluation of application of different doses of sulfur on productivity of sesame under medium upland situation of Paschim Bardhaman**
3	**Thematic Area**	Nutrient management
4	**Problem Diagnosed**	Non application of sulfur limiting productivity of sesame
5	**Important Cause**	Deficiency of sulfur in soil causing low uptake
6	**Production System**	Rice based production system
7	**Micro farming System**	Broadcasted sesame production
8	**Technology for Testing**	Application of sulfur in different doses
9	**Existing Practice**	Non application of sulfur in sesame
10	**Hypothesis**	Application of sulfur should lead to augmented productivity
11	**Objective(s)**	Increasing productivity of sesame
12	**Treatments:**	Farmers' practice: 80:40:40 NPK Technology - 1 to be assessed: 80:40:40 NPK with 20 kg elemental S per ha Technology - 2 to be assessed: 80:40:40 NPK with 30 kg elemental S per ha Technology - 2 to be assessed: 80:40:40 NPK with 40 kg elemental S per ha
13	**Critical Inputs**	sulfur
14	**Unit Size**	0.13 ha
15	**No of Replications**	5
16	**Unit Cost**	Rs. 1120
17	**Total Cost**	Rs. 5600
18	**Monitoring Indicator**	Yield
19	**Source of Technology**	ICAR- DOR, Hyderabad

OFT 3:

Sl no.	Particulars	Details
1	**Season**	Rabi
2	**Title of the OFT**	Weed management of onion

3	**Thematic Area**	Production technology
4	**Problem diagnosed**	Weed infestation is a major problem in onion cultivation particularly at the early stage of crop growth leading to reduction in yield
5	**Important Cause**	Lower return due to high cost of manual hand weeding operation
6	**Production system**	Jute-Paddy- vegetable cropping system
7	**Micro farming system**	Irrigated Medium Land
8	**Technology for Testing**	ICAR- CRIJAF Nail Weeder and Cycle weeder
9	**Existing Practice**	Hand weeding
10	**Hypothesis**	Use of ICAR- CRIJAF Nail Weeder and Cycle weeder may reduce cost of cultivation and improve B:C ratio
11	**Objective(s)**	Significant yield improvement as well as increase in income
12	**Treatments:**	**Farmers Practice (FP):** Three hand weeding **Technology option-I (TO-I):** One hand weeding + weeding by ICAR- CRIJAF Nail Weeder (2 times) **Technology option-II (TO-II):** One hand weeding + weeding by ICAR- CRIJAF Cycle Weeder (2 times) **Technology option-III (TO-III):** Application of Pre emergence herbicides (Pendimethalin) + weeding by ICAR- CRIJAF Cycle weeder (2 times)
13	**Critical Inputs**	ICAR- CRIJAF Nail Weeder, Cycle weeder and pendimethalin
14	**Unit Size**	0.1 ha
15	**No of Replications**	5
16	**Unit Cost**	4000
17	**Total Cost**	Rs.40000
18	**Monitoring Indicator**	Yield, no of man days for weeding, cost benefit ratio
19	**Source of Technology (ICAR/ AICRP/ SAU/ Other, please specify)**	ICAR- CRIJAF

OFT 4:

Sl no.	**Particulars**	**Details**
1	**Season**	Rabi
2	**Title of the OFT**	Assessment of sulphur and boron application on curd quality and yield in cauliflower
3	**Thematic Area**	Vegetable cultivation
4	**Problem diagnosed**	Browning and hollow stem is common problem in cauliflower associated with lower yield with lack of flavor
5	**Important Cause**	Browning and hollow stem is common problem in cauliflower due to boron deficiency and lower yield with lack of flavor is also common due to sulphur deficiency

6	**Production system**	Vegetable- Jute-rice cropping system
7	**Micro farming system**	Irrigated Medium Land
8	**Technology for Testing**	Sulphur and boron
9	**Existing Practice**	Application of only primary fertilizers
10	**Hypothesis**	Application of Sulphur improves the yield and flavor of the curds and boron can considerably check browning or hollow stem in cauliflower
11	**Objective(s)**	Control of browning with increase yield and quality of curd.
12	**Treatments:**	**Farmers Practice (FP):** Recommended dose of NPK **Technology option-I (TO-I):** Recommended dose of NPK+ Sulphur 20 Kg/ha as basal **Technology option-II (TO-II):** Recommended dose of NPK+ Sulphur 20 Kg/ha as basal+ 10 kg borax/ha as basal **Technology option-III (TO-III):** Recommended dose of NPK+ Sulphur 20 Kg/ha as basal+ Foliar spray of boron(3 times)
13	**Critical Inputs**	Sulphur, borax and boron for foliar spray
14	**Unit Size**	0.1 ha
15	**No of Replications**	10
16	**Unit Cost**	1800
17	**Total Cost**	18000
18	**Monitoring Indicator**	Percent of browning/hollow stem, curd yield and B:C ratio
19	**Source of Technology (ICAR/ AICRP/ SAU/ Other, please specify)**	TNAU

***** Fry were provided with supplementary feed consisting of powdered mixture of rice bran (45%), groundnut oil cake (45%), but with a restricted ration than that followed in normal fingerling rearing programme.

OFT 5:

Sl no.	**Particulars**	**Details**
1	**Season**	Rabi
2	**Title of the OFT**	Efficacy of some insecticides against pod borer in Chickpea
3	**Thematic Area**	Insect management
4	**Problem diagnosed**	About 25-30 % yield losses due to infestation of Pod Borer
5	**Important Cause**	Lower yield due to infestation of Pod Borer
6	**Production system**	Paddy- Chickpea
7	**Micro farming system**	Irrigated Medium Land
8	**Technology for Testing**	Selective chemicals for the insect management
9	**Existing Practice**	Conventional days old chemicals or as directed by the local pesticides dealers
10	**Hypothesis**	Specific and selective use of chemicals may improve yield
11	**Objective(s)**	Significant yield improvement as well as increase in income

12	**Treatments:**	**Farmers Practice (FP):** Use of Chlorpyriphos / Prophenophos. **Technology option-I (TO-I):** Spraying of Flubendiamide 39.5 S,C. @ 100 ml/ha after 1 st initiation of pest. **Technology option-II (TO-II):** Spraying of Chlorantaniliprole 18.5 S.C. @ 120 ml/ha after 1 st initiation of pest.
13	**Critical Inputs**	Plant protection chemicals
14	**Unit Size**	0.5 ha
15	**No of Replications**	7
16	**Unit Cost**	1000
17	**Total Cost**	15000
18	**Monitoring Indicator**	No. of infested pod/m^2, Yield, Net return, B:C ratio
19	**Source of Technology (ICAR/ AICRP/ SAU/ Other, please specify)**	ICAR-IIPR, Kanpur

OFT 6:

Sl no.	**Particulars**	**Details**
1	**Season**	Rabi
2	**Title of the OFT**	Biocontrol of Fruit fly infestation in Mango
3	**Thematic Area**	Insect management
4	**Problem diagnosed**	About 20-30 % yield losses due to infestation of Fruit fly
5	**Important Cause**	Lower yield due to infestation of Fruit fly
6	**Production system**	Mango
7	**Micro farming system**	Irrigated Medium Land
8	**Technology for Testing**	Biological control for the insect management
9	**Existing Practice**	Conventional days old chemicals or as directed by the local pesticides dealers
10	**Hypothesis**	Reduction of infestation of fruit fly in mango
11	**Objective(s)**	Significant yield improvement as well as increase in income
12	**Treatments:**	**Farmers Practice (FP):** Use of conventional insecticide like Imidachloprid. **Technology option-I (TO-I):** Use of bait splash on the trunk once or twice at weekly interval by mixing 100 gm Jaggery in 1 litre of water and add 1 ml of Deltamethrin by using old broom **Technology option-II (TO-II):** Setting of fly trap @ 10 no./ha, using Methyl eugenol. Prepare Methyl eugenol 1 ml per litre of water + 1 ml of Malathion solution
13	**Critical Inputs**	Plant protection chemicals & Traps
14	**Unit Size**	12 acre
15	**No of Replications**	8
16	**Unit Cost**	500

17	**Total Cost**	13000
18	**Monitoring Indicator**	i) No of marketable fruits/plant, ii) No of damaged fruits/plant, iii) % reduction in fruit fly infestation iv) Yield/ Unit area v) Net return vi) Benefit Cost Ratio
19	**Source of Technology (ICAR/ AICRP/ SAU/ Other, please specify)**	NIPHM, Hyderabad

10. List of Projects to be implemented by funding from other sources (other than KVK fund)

Sl. No.	Name of the project	Fund expected (Rs.)
1	Cereal System Initiative for South Asia	160000

11. No. of success stories proposed to be developed with their tentative titles

- Sustainable production and income augmentation from mustard cultivation
- Seed production of paddy in seed village mode

12. Scientific Advisory Committee

Date of SAC meeting held during 2021	Proposed date during 2022
30th March, 2021	**January 2022**

13. Soil and water testing

Details	No. of Samples	No. of Farmers									No. of Villages	No. of SHC distributed
		SC		ST		Other		Total				
		M	F	M	F	M	F	M	F	T		
Soil Samples	100	200	0	0	0	300	0	500	0	500	20	500
Water Samples												
Other (Please specify)												
Total	100	200	0	0	0	300	0	500	0	500	20	500

14. Fund requirement and expenditure (Rs.)*

Heads	Expenditure (last year) (Rs.) up to 31.12.2021	Expected fund requirement (Rs.)
Recurring		
i. Pay & allowance	**126,00,000.00**	**170,00,000.00**
ii. Contingency	**17,00,000.00**	**26,00,000.00**

iii. TA	**30,000.00**	**1,50,000.00**
iv. HRD	**0.00**	**30,000.00**
Non-recurring (specify)		
i. Works (Road, threshing floor, drying yard, vehicle and implement shed, irrigation system etc.)	**--**	**3,00,000.00**
iv. Furniture & Equipment	**0.00**	**7,00,000.00**
v. Vehicle and tractor	**--**	**8,00,000.00**
TOTAL	**1,43,30,000.00**	**2,42,80,0000.00**

15. * Every KVK should bring a brief write-up supported by quality photographs about the technology having wide acceptability among the farming community of the district with factual data

(Sr. Scientist and Head)
Krishi Vigyan Kendra
Bud Bud, Purba Bardhaman