ACTION PLAN

Jan. 2023 to Dec. 2023

KRISHI VIGYAN KENDRA, LADA(SAMASTIPUR-II)
Dr. RAJENDRA PRASAD CENTRAL AGRICULTURAL UNIVERSITY, BIHAR
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For the Year 2023

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REVISED PROFORMA FOR ACTION PLAN 2023

1. Name of the KVK: Krishi Vigyan Kendra, LADA, Samastipur-II

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2.Name of host organization :

Address	Telephone		E mail
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3.Training programme to be organized (Jan. 2023 to Dec. 2023)

(a) Farmers and farm women (ON CAMPUS)

Discipline	Thematic Area	Title	Duration	No. of participants			
				SC	ST	Oth.	Total
I Quarter (Jan. 2023 to March 2023)							
Horticulture	Lay out and management of orchard	Management and Rejuvenation of old orchards	2	10	-	40	50
	Production and Mgt. of Tuber crops	Production and management of Turmeric	1	05	-	20	25
AgrilEngg	Repair and maintenance of farm machinery and implements	Operation, care, maintenance of multi-crop thresher	2	10	-	40	50
		Repair and maintenance of Zero-till machine	1	05	-	20	25
Vet. & Ani. Science	Dairy management	Management of dairy animals for better production	2	10	-	40	50
	Disease management	Management of mastitis in dairy animals and their prevention and control	1	05	-	20	25
Home Science	Kitchen gardening	Development of kitchen garden beside house.	2	10	-	40	50
	Minimum cost diet	To prepare nutritious diet by using local food.	1	05	-	20	25

Plant Protection	Integrated Disease Management	Seed Treatment of Paddy : Method & Benefits	2	10	-	40	50
	Bio control of pest and diseases	Use of trichoderma in seed treatment	1	05	-	20	25
Crop Production	Weed Management	Weed management in rabi crops	1	05	-	20	25
	Resource Conservation Technologies	Conservation agriculture	2	10	-	40	50
		Total	18	90		360	450
II Quarter (April 2023 to June 2023)							
Horticulture	Ornamental plants	Propagation techniques of ornamental plants	2	10	-	40	50
	Protective Cultivation (Greenhouses, shade, Net etc.)	Protective Cultivation of capsicum, tomato and cucumber	1	05	-	20	25
Agril Engg	Soil & water management	Importance of soil and water conservation	2	10	-	40	50
	Irrigation water management	Installation, and maintenance of micro irrigation system	1	05	-	20	25
Vet. & Ani. Science	Disease management	Commercial goat farming and entrepreneurship development	2	10	-	40	50
	Feed and fodder management	Backyard Poultry entrepreneurship development	1	05	-	20	25
Home Science	Designing and development of high nutrients deficiency diet	Preparation of nutritious diet for pregnant women	2	10	-	40	50
	Minimization of nutrients loss of processing	Methods of processing to save nutrient loss	1	05	-	20	25
Plant Protection	Mushroom Production	Mushroom production	2	10	-	40	50
	Integrated Pest Management	Pest Management of Paddy : Method & Benefits	1	05	-	20	25
Crop Production	Integrated Farming	Principles of integrated farming	2	10	-	40	50
	Importance of millets	*Kharif* millet cultivation	1	05	-	20	25
		Total	18	90		360	450
III Quarter (July 2023 to Sept. 2023)							
Horticulture	Spices	Scientific cultivation of seed spices	2	10	-	40	50

	Vegetable	Scientific cultivation of Solanaceous crops	1	05	-	20	25
AgrilEngg	Production of small tools and implements	Types of hand hoe and its utility	2	10	-	40	50
	Irrigation management	Irrigation methods for vegetable cultivation	1	05	-	20	25
Vet. & Ani. Science	Feed and fodder management	Dairy Farmingconservation methods of green fodder	2	10	-	40	50
	Dairy management	Causes of infertility and their management	1	05	-	20	25
Home Science	Storage lose minimization lose techniques	Storage techniques of different foods.	2	10	-	40	50
	Women child care	Preparation of weaning food using locally available food material	1	05	-	20	25
Plant Protection	Integrated Pest Management	Integrated pest management of Rabi pulse crops	2	10	-	40	50
	Integrated Disease Management	Integrated Disease Management in potato	1	05	-	20	25
Crop Production	Crop Diversification	Scope of crop diversification in *kharif* season	2	10	-	40	50
	Importance of millets	Importance of cultivation of millets	1	05	-	20	25
		Total	18	90		360	450
	IVquarter (Oct. 2023 to Dec. 2023)						
Horticulture	Cultivation of fruits	Propagation of fruit crops	2	10	-	40	50
	Fruits	Scientific cultivation of Fruits	1	05	-	20	25
AgrilEngg	Repair and maintenance of farm machinery and implements	Care and maintenance of irrigation pumps	2	10	-	40	50
Vet. & Ani. Science	Feed and fodder management	Computation of feed by locally available in gradients for dairy animals	1	05	-	20	25
	Feed and fodder management	Preparation of balance concentrated mixture from locally available feed ingredients	2	10	-	40	50
	Dairy management	Mastitis management among dairy animals.	1	05	-	20	25
Home Science	Women child care	Low cost food preparation for children	2	10	-	40	50
	Capacity building	Cutting stitching and value addition.	1	05	-	20	25
Plant Protection	Bio control of pest and diseases	Use of Bio agents to manage pest of Pulses	2	10	-	40	50

	Integrated Pest Management	Integrated pest management of Fruit crops	1	05	-	20	25
Crop Production	Soil fertility management	Improvement of soil properties through different approaches	2	10	-	40	50
	Cropping Systems	Importance of inclusion of legumes in existing cropping system	1	05	-	20	25
		Total	18	90		360	450

(b) Farmers and farm women (OFF CAMPUS)

Discipline	**Thematic Area**	**Title**	**Duration**	**No. of participants**			
				SC	**ST**	**Oth.**	**Total**
I Quarter (Jan 2023 to March 2023)							
Horticulture	Cultivation of fruits	Management of fruit drop in mango	2	10	-	40	50
	Cultivation of fruits	Management of fruit cracking in Litchi	1	05	-	20	25
AgrilEngg	Farm mechanization	Harvesting equipment for wheat	2	10	-	40	50
	Post harvest technology	Safe storage techniques of grains	1	05	-	20	25
Vet. & Ani. Science	Poultry management	Backyard poultry farming for income generation	2	10	-	40	50
	IFS	Animal based integrated farming system	1	05	-	20	25
Home Science	Capacity building	Upkeeping of woolen garment	2	10	-	40	50
	Capacity building	Weaving of woolen garment	1	05	-	20	25
Plant Protection	Bio control of pest and diseases	Use of tricoderma in seed treatment	2	10	-	40	50
	Integrated Pest Management	IPM in green gram	1	05	-	20	25
Crop Production	Organic inputs production	Production techniques of vermicompost and vermi-culture	2	10	-	40	50
	Soil testing	Soil testing and its importance	1	05	-	20	25
		Total	18	90		360	450
II Quarter (April 2023 to June 2023)							
Horticulture	Nursery raising	Nursery raising of Cole vegetable crop	2	10	-	40	50
	Ornamental Plants	Scientific cultivation of gerbera	1	05	-	20	25
AgrilEngg	Sowing technique	Procedure of DSR cultivation by seed drill	2	10	-	40	50

	Installation, and maintenance of micro irrigation system	Micro-irrigation : Installation and operation	1	05	-	20	25
Vet. & Ani. Science	Goat farming	Feeding management in goat	2	10	-	40	50
	Disease management	Importance of vaccination in animals and vaccination programme for cattle	1	05	-	20	25
Home Science	Capacity building	Upkeeping of silk garment	2	10	-	40	50
	Drudgery reduction	Making smoklesschulha	1	05	-	20	25
Plant Protection	Integrated Disease Management	IDM in paddy	2	10	-	40	50
	Bio control of pest and diseases	Use of Bio agents to manage pest of pigeon pea	1	05	-	20	25
Crop Production	Integrated Farming	Principles of integrated farming	2	10	-	40	50
	Importance of millets	*Kharif* millet cultivation	1	05	-	20	25
		Total	18	90		360	450
III Quarter (July 2023 to Sept. 2023)							
Horticulture	Ornamental plants	Management of potted ornamental plants	2	10	-	40	50
	Ornamental plants	Scientific cultivation of gladiolus	1	05	-	20	25
AgrilEngg	Sowing technique	Advantages of row sowing for rabi crops	2	10	-	40	50
	Repair and maintenance of farm machinery and implements	Operation, care and maintenance of zero-till seed drill	1	05	-	20	25
Vet. & Ani. Science	Goat farming	Care and management of goat and their kids in winter	2	10	-	40	50
	Green fodder production	Azolla culture	1	05	-	20	25
Home Science	Storage loss minimization	Making storage structure by local materials	2	10	-	40	50
Plant Protection	Integrated Disease Management	Integrated Disease Management in potato	1	05	-	20	25
	Bio control of pest and diseases	Use of Bio agents to manage pest of vegetable	2	10	-	40	50
Crop Production	Fodder production	Fodder production technology	1	05	-	20	25
	Soil management	Soil fertility management	2	10	-	40	50
		Total	18	90		360	450

	IVquarter (Oct. 2023 to Dec. 2023)						
Horticulture	Cultivation of fruits	Management of flower drop in litchi	2	10	-	40	50
	Yield Increment	Use of growth hormone to increase the yield in vegetable	1	05	-	20	25
AgrilEngg	Mechanization of orchard	Mechanization of fruit orchard	2	10	-	40	50
	Repair and maintenance of farm machinery and implements	Care and maintenance of farm equipment	1	05	-	20	25
Vet. & Ani. Science	Poultry farming	Broiler management during winter season	2	10	-	40	50
	Poultry farming	Backyard poultry/alternative species faming	1	05	-	20	25
Home Science	Value addition	Preservation of seasonal fruits and vegetable.	2	10	-	40	50
	Capacity building	Upkeeping of house hold	1	05	-	20	25
Plant Protection	Integrated disease management on vegetable crops	Method to control pest and diseases using integrated approaches	2	10	-	40	50
	Integrated disease management on vegetable crops	Method to control pest and diseases using integrated approaches	1	05	-	20	25
Crop Production	Conservation agriculture	Importance of conservation agriculture in context of sustainable agriculture	2	10	-	40	50
	Importance of millets	Rabi millet cultivation	1	05	-	20	25
		Total	18	90		360	450

(c) Rural youths

Discipline	Thematic Area*	Title	Duration	No. of participants			
				SC	ST	Oth.	Total
I Quarter (Jan. 2023 to March 2023)							
Horticulture	Nursery management of horticulture crops	Gardening and nursery management of ornamentals	4	05	-	20	25
AgrilEngg	Custom hiring	Custom hiring of farm mechanization	4	05	-	20	25
Vet. & Ani. Science	Goat farming	Scientific goat rearing for self employment	4	05	-	20	25
Home Science	Rural craft	Fabric Painting	4	05	-	20	25
Plant	IPM & IDM	Management of pest and	4	05	-	20	25

Protection		diseases in farmers field					
Crop Production	**Integrated farming**	**Integrated farming**	4	05	-	20	25
		Total	**24**	**25**	**-**	**100**	**125**
	II Quarter (April 2023 to June 2023)						
Horticulture	Nursery management of horticulture crops	Nursery raising techniques vegetables and fruit	4	05	-	20	25
AgrilEngg	Irrigation technique	Solar irrigation pump system	4	05	-	20	25
Vet. & Ani. Science	Poultry	How to establish a poultry farm for employment generation	4	05	-	20	25
Home Science	Rural craft	Preparation of soft toys and value addition	4	05	-	20	25
Plant Protection	Mushroom Production	Techniques of all type of mushroom production	4	05	-	20	25
Crop Production	Integrated nutrient management	Integrated nutrient management	4	05	-	20	25
		Total :	**24**	**25**	**-**	**100**	**125**
	III Quarter (July 2023 to Sept. 2023)						
Horticulture	Commercial fruit production	Commercial fruit production	4	05	-	20	25
Agril. Engg	Small scale entrepreneurship	Fabrication hand tools including hoe	4	05	-	20	25
Vet. & Ani. Science	IFS	Different models of IFS based on animal husbandry	4	05	-	20	25
Home Science	Capacity building	Mithila painting	4	05	-	20	25
Plant Protection	Bee keeping	Management of bee colony in different seasons	4	05	-	20	25
Crop Production	Production of organic inputs	Vermicomposting	4	05	-	20	25
		Total	**24**	**25**	**-**	**100**	**125**
	IVquarter (Oct. 2023 to Dec. 2023)						
Horticulture	Training and pruning of orchard	Training and pruning of orchard	4	05	-	20	25
Agril. Engg	Custom hiring	Custom hiring of agro based sprayer in orchards	4	05	-	20	25
Vet. & Ani. Science	Dairy farming	Dairy management of animals	4	05	-	20	25
Home Science	Capacity building	Cutting & stitching of lady garments	4	05	-	20	25
Plant Protection	Mushroom Production	Techniques of all type of mushroom production	4	05	-	20	25
Crop Production	Soil testing	Soil sampling, testing and soil health management	4	05	-	20	25

	Total	**24**	**25**	**-**	**100**	**125**

(d) Extension Functionaries

Discipline	Thematic Area*	Title	Duration	No. of participants			
				SC	ST	Oth.	Total
I Quarter (Jan. 2023 to March 2023)							
Horticulture	Protected cultivation technology	Protected cultivation of horticultural crops	1	05	-	20	25
AgrilEngg	Post harvest technology	Advances in harvesting equipments	1	05	-	20	25
Vet. & Ani. Science	Feed and Fodder management	Scientific fodder production during kharif season	1	05	-	20	25
Home Science	Women and child care	How to prepare low cost weaning food	1	05	-	20	25
Plant Protection	Integrated Pest Management	New molecules for pest management in Kharif crops	1	05	-	20	25
Crop Production	Integrated nutrient management	Integrated nutrient management	1	05	-	20	25
	Total		**6**	30		120	150
	II Quarter (April 2023 to June 2023)						
Horticulture	Value addition	Value addition of ornamental crops	1	05	-	20	25
AgrilEngg	Sowing mechanization	Promotion of DSR using seed drill and hand hoe	1	05	-	20	25
Vet. & Ani. Science	Dairy management	Scientific dairy farming	1	05	-	20	25
Home Science	Women and child care	Care of low weight baby	1	05	-	20	25
Plant Protection	Integrated Pest Management in Paddy	New molecules for pest management in Paddy	1	05	-	20	25
Crop Production	Weed management	Integrated weed management	1	05	-	20	25
	Total		**6**	30		120	150
	III Quarter (July 2023 to Sept. 2023)						
Horticulture	Landscaping	Landscaping of public places	1	05	-	20	25
Agril. Engg	Farm mechanization	Types of hand hoe and its utility	1	05	-	20	25
Vet. & Ani.	Management in	Vaccination schedule	1	05	-	20	25

Science	farm animal	and procedure					
Home Science	Women and child care	Nutrition for child care	1	05	-	20	25
Plant Protection	Integrated Pest Management	New molecules for pest management in Kharif crops	1	05	-	20	25
Crop Production	Soil fertility management	Technologies for improving soil health	1	05	-	20	25
		Total	**6**	30		120	150
	IVquarter (Oct. 2023 to Dec. 2023)						
Horticulture	Flower production	Commercial production of flower crops	1	05	-	20	25
AgrilEngg	Farm mechanization	Ploughs and ploughing methods for summer ploughing	1	05	-	20	25
Vet. & Ani. Science	Low cost and nutrient efficient diet designing	Food for old age people.	1	05	-	20	25
Home Science	Women and child care	How to prepare low cost weaning food	1	05	-	20	25
Plant Protection	Integrated Pest Management	New molecules for pest management in Summer crops	1	05	-	20	25
Crop Production	Production of organic inputs	Vermicomposting	1	05	-	20	25
		Total	**6**	30		120	150

(e) Vocational

Discipline	**Thematic Area***	**Title**	**Duration**	**No. of participants**			
				SC	**ST**	**Others**	**Total**
Horticulture	Ornamental crops	Commercial cultivation of loose flowers (rose, marigold, tuberose)	5	05	-	20	25
Agril. Engg	Farm mechanization	Farm machinery operation & maintenance	5	05	-	20	25
Vet. & Ani. Science	Dairy management	Feeding of dairy animals during pregnancy	5	05	-	20	25
Home Science	Income generation	Bangle making from lah	5	05	-	20	25
Plant Protection	IPM	Integrated pest and disease management	5	05	-	20	25
Crop Production	Integrated nutrient management	Integrated nutrient management	5	05	-	20	25

	Total	30	30		120	150

Frontline demonstration to be conducted

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	Fruit fly trap in Mango Orchard	4.0	Fruit fly Trap	Yield,B:C ratio	Fruit fly Trap	15000		4	1	-	-	15	5	19	6	25
2	Demonstration of Pheromone trap in brinjal field against fruit and shoot borer	4.0	Pheromone trap	Yield,B:C ratio	Pheromone Trap	20000		4	1	-	-	15	05	19	6	25
3	Poultry	500 Nos	Poultry backyard	Mortality, B;C ratio	Vanraja chicks & pre starter	25000		05	05	-	-	10	05	15	10	25
4	Goatery	50 Nos	Mineral supplement in Goats	Body Growth	Mineral Mixture formulated for goats	18000		5	2			15	3	20	5	25
5	Bhima Super (Onion variety)	1.0	Varietal	Yield, B:C ratio	Seed	10000		03	02	-	-	10	05	13	07	20
6	Kashi Lalima(Okra)	1.0	Varietal	Yield, B:C ratio	Seed	10000		02	01	-	-	15	12	17	13	30
7	Improved CIAE sickle for manual harvesting of crops	1.0	Improved CIAE sickle for manual harvesting of crops	Yield, B:C ratio	Machine demo	10000		03	02	-	-	15	05	18	07	25
8	Grubber for weeding operation	1.0	Grubber for weeding operation	Yield, B:C ratio	Machine demo	10000		03	02	-	-	15	05	18	07	25
9	Nutrigarden	6.0	Bag Method	Yield, B:C ratio	Bag method	10000		03	02	-	-	15	05	08	07	25

10	Mushroom production	25	Oyster Mushroom production	Yield, B:C ratio	Mushroom bag	15000		03	02	-	-	15	05	18	07	25
11	Biofortified wheat (Rajendra gehu 2	2.5	Varietal evaluation	Yield, B:C ratio	Seed	20000		03	02	-	-	15	05	18	07	25
12	Barley(DWR B-137)	2.5	Varietal evaluation	Yield, B:C ratio		20000		05	-	-	10	05	15	10	25	05
					Total :	183000		43	22		10	160	75	193	107	280

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	-	12	Farmers farm women	01	Off	60	60			180	180	240	240	480
Field day	-	112	Farmers farm women	01	Off	120	120			300	300	420	420	840

* Repeat the above tables and information in Point no. 4 for EACH FLD being proposed.

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

Name of the Crop / Enterprise	Variety / Type	Period	Area (ha.)	Details of Production				
				Type of Produce	Expected Production (quintals)	Cost of inputs (Rs.)	Expected Gross income (Rs.)	Expected Net Income (Rs.)
Paddy		From 01.01.2022 to 31.12.2022	3.0	FS	120.0	-	-	-
Paddy			5.0	CS	200.0	-	-	-
			0		0	-	-	-
			0		0	-	-	-
Wheat			5	FS	150.0	-	-	-
			0	FS	0	-	-	-

Lentil			3	CS	24	-	-	-
Total			**16**		**494.0**			

Sl No.	**Planting material target**	
	Crop	**No.**
1	Paddy	400q
2	Wheat	
3	Lentil	
4	Vegetable seedling	25000
Total		

b) Village Seed Production Programme: As per university target NA

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.)**
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-

5. 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	12	310	100	410	43	15	05	20	325	105	430
2.	KisanMela	02	500	200	700	76	50	10	70	550	210	760
3.	KisanGhosthi	10	310	100	410	43	15	05	20	325	105	430
4.	Exhibition	02	15	05	20	2	02	0	02	17	05	22
5.	Film Show	10	15	05	20	2	02	0	02	17	05	22
6.	Method	05	15	05	20	2	02	0	02	17	05	22

	Demonstrations											
7.	Farmers Seminar	02	50	10	60	7	10	05	15	60	15	75
8.	Workshop	01	50	10	60	7	10	05	15	60	15	75
9.	Group meetings	02	15	05	20	2	02	0	02	17	05	22
10.	Lectures delivered as resource persons	40	352	154	506	52	12	8	20	364	162	526
11.	Advisory Services	315	150	30	180	21	20	10	30	170	40	210
12.	Scientific visit to farmers field	430	546	217	763	80	28	15	43	574	232	806
13.	Farmers visit to KVK	1050	998	665	1663	170	35	14	49	1033	679	1712
14.	Diagnostic visits	20	354	98	452	49	32	15	47	386	113	499
15.	Exposure visits	02	50	10	60	7	10	05	15	60	15	75
16.	Ex-trainees Sammelan	02	50	10	60	7	10	05	15	60	15	75
17.	Soil health Camp	05	50	10	60	7	10	05	15	60	15	75
18.	Animal Health Camp	02	50	10	60	7	10	05	15	60	15	75
19.	Agri mobile clinic											
20.	Soil test campaigns	15	310	100	410	43	15	05	20	325	105	430
21.	Farm Science Club Conveners meet	-	-	-	-	-	-	-	-	-	-	-
22.	Self Help Group Conveners meetings	-	-	-	-	-	-	-	-	-	-	-
23.	MahilaMandals Conveners meetings	02	50	10	60	7	10	05	15	60	15	75
24.	Celebration of important days (specify)	15	310	100	410	43	15	05	20	325	105	430
25.	Swatchta Hi Sewa	01	310	100	410	43	15	05	20	325	105	430
26.	MahilaKisanDiwas	01	50	10	60	7	10	05	15	60	15	75
	Total	1946	4910	1964	6874	727	340	137	487	5250	2101	7351

6. Revolving Fund (in Rs.)

Opening balance of 2022-2023	**Amount proposed to be invested during 2023**	**Expected Return**
763171	250000.00	300000.00

7. **Expected fund from other sources and its proposed utilization**

Project	Source	Amount to be received (Rs. in lakh)
-	-	-
-	-	-

OFT -1 (Plant Protection)

1	**Title of On Farm Trial**	**Assessment of bio-intensive management practices for major pests in Tomato**
2	**Problem Diagnose**	**use of chemical pesticides**
3	**Details of Technologies selected for assessment/refinement**	**Farmer practice: use of chemical pesticides** **TO1** **• Application of Bio consortia of IIHR (Soil application)** **• Seed treatment by P. fluorescens@10 g/kg** **• Nursery bed treatment by P. fluorescens@20 g/ m2** **• Soil application P. fluorescens@5 kg/ha mixed with 500 kg vermi-compost/ha at 30 days after transplanting** **• Spray of HNPV @ 250 LE /ha** **TO2** **• Soil application of Bio consortia of IARI** **• Seed treatment by Trichoderma viride @10 g/kg** **• Nursery bed treatment by Trichoderma viride @50 g/ m2** **• Soil application Trichoderma viride @5 kg/ha mixed with 500 kg vermi-compost/ha at 30 days after transplanting** **• Spray of HNPV@ 250 LE /ha**
4	**Source of Technology**	**IIHR**
5	**Replication**	**07**
6	**Production System & Thematic Area**	0.5
7	**Performance of Technology with performance indicator**	**Integrated Disease and Pest Management**
8	**Constraints identified and feedback for research**	**Late blight, Whitefly, Yield attributes and B:C ratio**
9	**Process of farmers participation and their reaction**	Lack of knowledge among farmers about technology.

OFT -2 (Plant Protection)

1	**Title of On Farm Trial**	**Assessment of management practices for Red banded caterpillar in Mango**
2	**Problem Diagnose**	**Farmer practice: spray of chlorpyriphos as and when when symptoms appear**
3	**Details of Technologies selected for assessment/refinement**	**TO1:** **• Collection and destruction of all fallen fruits** **• Spray deltamethrin 0.0028 % (deltamethrin 2.8 EC@ 1ml/lit) at marble size and repeat after two weeks** **TO2:** **• Two sprays of thiacloprid 21.7 SC 0.04 % (@ 2ml/lit) at 25-30 days interval.** **Note: All spray during morning hours**
4	**Source of Technology**	**IIHR**
5	**Replication**	**07**
6	**Production System & Thematic Area**	0.5
7	**Performance of Technology with performance indicator**	**Integrated Disease and Pest Management**
8	**Constraints identified and feedback for research**	**Yield attributes and B:C ratio**
9	**Process of farmers participation and their reaction**	Lack of knowledge among farmers about technology.

OFT – 3 (Agri. Engineering)

1	**Title of On Farm Trial**	Assessment of low-cost Mulching in Vegetable Crop Production
2	**Problem Diagnose**	Weeding operation required more labor, reducing crop yield, and low profitability
3	**Details of Technologies selected for assessment/refinement**	FP: No mulch TO1: Banana leaf mulch TO2: Crop Residue mulch
4	**Source of Technology**	RPCAU, Pusa

5	**Replication**	Weeding problems in vegetables and moisture conservation
6	**Production System & Thematic Area**	Number of irrigation, weed control, Soil temperature, Soil moisture, Cost of Cultivation, Yield, B:C ratio and Soil testing
7	**Performance of Technology with performance indicator**	yield target to be maximized
8	**Constraints identified and feedback for research**	Social ignorance regarding mulching process
9	**Process of farmers participation and their reaction**	Training, demonstration.

OFT -4 (Agri. Engineering)

1	**Title of On Farm Trial**	Assessment of different weeding tools in paddy crop
2	**Problem Diagnosed**	Weeding problems in paddy crop
3	**Details of Technologies selected for assessment/refinement**	FP: Manually by local hand tools TO1: Manual inter culturing with grubber TO2: Inter culturing with power weeder
4	**Source of Technology**	RPCAU, Pusa
5	**Replication**	Weeding in paddy crop and ergonomic evaluation of operators
6	**Size of plot of each replication**	Field capacity, Weeding efficiency, Cost of interculturing, Pulse rate, ECG, Oxygen level, Yield and B:C ratio
7	**Production System & Thematic Area**	Ergonomics of the subjects to be improved
8	**Performance of Technology with performance indicator**	Limitation of line sowing practices limits the use of machineries
9	**Constraints identified and feedback for research**	Training, Demonstration
10	**Process of farmers participation and their reaction**	RPCAU, Pusa

OFT -5 (Home Science)

1	**Title of OFT**	**Development and quality evaluation of honey based carrot candy**
2	**Problem diagnosed**	Children are consuming locally available candies which have poor nutritive value
3	**Detail of technologies selected for assessment**	**Farmer's Practice:- Children consume fresh carrot as such as vegetables or juice.** **T.O.1: Preparation of Carrot candy** **Honey- 750g + carrot-1000g**

		T.O.2: Honey-1000g + carrot-1000g
4	**Source of technology**	Aligarh Muslim University
5	**Replication**	7
6	**Production system/Thematic area**	Value Addition
7	**Performance of tech. with performance indicator**	Sensory Evaluation of the developed Carrot Candy for its acceptability, BC Ratio
8	**Constraints identified & feedback for farmers**	Short lectures Demonstrations
9	**Process of farmers participation and their reaction**	

OFT -6 (Home Science)

1	**Title of OFT**	**Assessment of the effectiveness of Mittens for soybean harvesting**
2	**Problem diagnosed**	Problems faced by farm workers while performing harvesting of Soybean
3	**Detail of technologies selected for assessment**	**Farmer's Practice:- Soybean harvesting is performed manually with the help of sickle.** **T.O.1 Using locally available gloves for cutting, collecting and bundling plants manually.** **T.O.2: Using protective mittens developed by AICRP FRM, College of Home Science, VNMKV Parbhani for soybean harvesting**
4	**Source of technology**	AICRP Family Resource Management, College of Home Science, VNMKV Parbhani
5	**Replication**	7
6	**Production system/Thematic area**	Drudgery Reduction
7	**Performance of tech. with performance indicator**	Soybean harvesting efficiency (%) , overall discomfort rate, Musculo-skeletal problem, Drudgery index

OFT-7 (Veterinary Science)

1.	**Title of On Farm Trial**	Effect of feeding Complete Feed Block on performance in Dairy Animals
2.	**Problem Diagnose**	High transportation cost and is one of reasons for Field Burning of Straw Problems in **storage** leads to Mould contamination and mycotoxins risk in feed to food chain Balanced Ration for livestock
3.	**Details of Technologies selected for assessment**	
		T.O.1 Wheat straw and concentrate feeding
		T.O. 2: Compressed feed Block
		T.O. 3: Total Mixed ration Feeding
		T.O.4: Compressed feed Block with additives
4.	**Source of Technology**	ICAR-IVRI
5.	**Replication**	07
6.	**Production System & Thematic Area**	Dairy management/Feed management
7.	**Performance of Technology with performance indicator**	• DMI increase • Milk production • Ease of storage • Mycotoxins control
8.	**Constraints identified and feedback for research**	Feed Block compressor
9.	**Process of farmers participation and their reaction**	• Training • Demonstration • Feeding trial and Parameter assessment

OFT- 8 (Veterinary Science)

1.	**Title of On Farm Trial**	Effect of feeding hydroponic wheat and maize green fodders on milk production in dairy animals
2.	**Problem Diagnose**	Nutritional deficiency in Dairy animals and High feed cost
3.	**Details of Technologies selected for assessment**	**TO-1**- Farmer's Practice: No idea of producing hydroponic fodder
		TO-2- Capacity building on hydroponic maize fodder production
		TO-3- Capacity building on hydroponic wheat fodder production

4.	**Source of Technology**	ICAR-NDRI
5.	**Replication**	7
6.	**Production System & Thematic Area**	Feed Management
7.	**Performance of Technology with performance indicator**	• Milk yield (kg/ cow/ day) • Cost of feed (Rs. / cow/ day) • Feed cost/ kg milk production (Rs.) • Gross return from milk (Rs. / cow/ day) • Net profit (Rs. / cow/ day) • BC ratio
8.	**Constraints identified and feedback for research**	
9.	**Process of farmers participation and their reaction**	• Awareness campaign • Field Visit • Trial and Demonstration

OFT- 9 (Horticulture)

1.	Title of On-farm Trial	Assessment of microbial consortia against wilting in Brinjal
2.	Problem diagnosed	Farmers were using only chemical pesticides to control wilting and they were unaware of IDM practices
3.	Details of technologies selected for assessment/refinement	**FP:** Chemical pesticides **TO_1:** IIHR consortia (Arka microbial consortia) **TO_2:** NRC Litchi consortia
4.	Source of Technology	ICAR- IIHR, Bengaluru, NRC-Litchi
5.	Production system and thematic area	Vegetable crops, IDM
6.	Performance of the Technology with performance indicators	Yield, number of fruits, and B: C ratio.
7	Process of farmers participation and their reaction	• Group discussion • Interaction with farmers
8	**Observation to be recorded**	• Initial plant population • First wilt incidence (days after transplanting) • Wilting percentage at 15, 30, 45, 60, and 75 DAT • Yield (q/ha) • Economics (Rs. /ha

OFT- 10 (Horticulture)

1	Title of On-Farm Trial	Assessment of organic inputs for papaya cultivation
2	Problem Diagnose	Low production and leaf curl virus major problems
3	Details of Technologies selected for assessment	**FP:** FYM/Compost **TO_1:** VC (2 kg)/FYM (10 kg) + IIHR consortia **TO_2:** VC (2 kg) + Coimbatore consortia **TO_3:** VC (2 kg) + Ghanjeevaamrit + liquid solutions of non edible oil cake (500 g/plant- 5 drenching
4	Source of Technology	ICAR – ATARI, Patna
5	Production System & Thematic Area	Fruit Crop and IPM
6	Performance of Technology with a performance indicator	Quality fruit production with higher productivity
7	Process of farmers' participation and their reaction	• Group discussion • Interaction with farmers
8	**Observation to be recorded**	• Plant height (m) • Number of fruits per plant • Average fruit weight (g) • Yield per tree • Economics (Rs. /ha)

OFT- 11 (Crop Production)

1	**Title of On Farm Trial**	**Improvement of Nitrogen use efficiency in wheat**
2	**Problem Diagnose**	Excessive use of chemical fertilizer and Spiraling price of urea leads to increase in cost of cultivation
3	**Details of Technologies selected for assessment/refinement**	**Technological Options: Technology Details** **Farmer Practice**: RDF (100:40:20) Kg/ha **Technological Option 1**: 50% of RDN & 100% PK + nano urea @4ml/lt. water (Single spray at 35 DAS). **Technological Option 2**: 50% of RDN & 100% PK + 2 sprays of Nano Urea at (35 DAS) and (60-65DAS) @ 4 ml/lt water.

		(**Timely sown variety of BAU Sabour. BAU Ranchi and RPCAU, Pusa, ICAR RCER, Patna**)
4	**Source of Technology**	House of the OFT finalization workshop, BAU, Sabour
5	**Replication**	07
6	**Production System & Thematic Area**	Crop production (improvement of Nitrogen use efficiency)
7	**Performance of Technology with performance indicator**	➢ Soil data before and after (pH, EC, OC, NPK,), ➢ Yield data ➢ No. of effective tillers/ m^2, ➢ 1000 grain wt. ➢ Panicle wt. ➢ Straw yield and Economics.
8	**Constraints identified and feedback for research**	-
9	**Process of farmers participation and their reaction**	Training and Field Day.

OFT- 12 (Crop Production)

1	**Title of On Farm Trial**	**Improvement of Nitrogen use efficiency in rice**
2	**Problem Diagnose**	Excessive use of chemical fertilizer and Spiraling price of urea leads to increase in cost of cultivation
3	**Details of Technologies selected for assessment/refinement**	**Technological Options: Technology Details** **Farmer Practice:** RDF (100:40:20) Kg/ha **Technological Option 1:** 50% of RDN & 100% PK + nano urea @4ml/lt. water (Single spray at pre flowering stage). **Technological Option 2:** 50% of RDN & 100% PK + 2 sprays of Nano Urea at (25 to 30 days) and (60-65 days) @ 4 ml/lt water
4	**Source of Technology**	House of the OFT finalization workshop, BAU, Sabour
5	**Replication**	07
6	**Production System & Thematic Area**	Crop production (improvement of Nitrogen use efficiency)
7	**Performance of Technology with performance indicator**	➢ Soil data before and after (pH, EC, OC, NPK,) ➢ Yield data ➢ No. of effective tillers/m^2 ➢ 1000 grain weight ➢ Panicle weight ➢ Grain and Straw yield

		➢ Economics.
8	**Constraints identified and feedback for research**	-
9	**Process of farmers participation and their reaction**	Training and Field Day.

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	CFLD on Oil seed under NFSM	
2	CFLD on Pulses under NFSM	
3	CSISA- KVK survey work	
4	Doubling farmers income	
	Total :	

11. No. of success stories proposed to be developed with their tentative titles : 05

12. Scientific Advisory Committee

Date of SAC meeting held during 2020-21	Proposed date during 2023
22.10.2021	**July 2023**

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	2000	200	100	-	-	1400	300	1600	400	2000	30	2000
Water Samples	-	-	-	-	-	-	-	-	-	-	-	-
Other (Please specify)	-	-	-	-	-	-	-	-	-	-	-	-
Total	**2000**	**200**	**100**	**-**	**-**	**1400**	**300**	**1600**	**400**	**2000**	**30**	**2000**

14. Fund requirement and expenditure (Rs.)*

	Expenditure (last year) (Rs in Lakh.) 2022-23	Expected requirement (Rs.) 2023
Recurring		
Pay & allowance	10395288.00	3000000.00
Contingency	250000.00	
TA + HRD	75000+15000 = 90000.00	

Total	**10735288.00**	3000000.00
Non-recurring (specify)		
i) Work (Staff quarter & Demo units)	-	-
ii)Equipment, furniture & furnishing	-	-
iii)Soil water & testing	-	-
iv) Boundary wall for administrative building	-	-
v) Farm equipment shed	-	-
vi)Pump house	-	-
vii)New official vehicle	-	-
Total	-	-
G.Total	-	-

* Any additional requirement may be suitably justified.

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

Round-the-year vegetable seedlings production in low-cost poly house

Introduction

Vegetable production in Bihar is significantly influenced by seasonality and weather conditions. The productivity of vegetable crops is very low due to diverse climatic conditions and number of factors like abiotic stresses like high rainfall during the rainy season, moisture stresses during summer, frost during the winter season, poor soil nutrients due to losses resulting from the process of leaching and biotic stresses. Protected cultivation provides the best alternative for the regulation/modification of the above factors as per the requirement of the crops to realize the maximum potential. They also have the advantage of off-season production to get higher prices.

High-value vegetable crops: The major crops have been identified for the production of seedlings under low-cost poly house as tomato, capsicum, chili, cauliflower and cabbage.

Construction of low-cost poly house: The low-cost poly house of 100 m^2 area can be constructed by using transparent, UV stabilized and 200-micron thickness polythene sheet and locally available materials like bamboo for framing and tied with the help of a wire. During the summer season, there is a need to use 60% shading net for protection against scorching sunlight. The total estimated cost for a 100 m^2 area will be about Rs. 10,000. There is no need for a heating and cooling system.

Benefits of low-cost poly house

1) It is cheaper to build. While the cost of making a regular Poly house is around 1500 -2000 Rs per Sq. meter. the cost of making the bamboo poly house is just 100-150 Rs per Sq. meter.
2) It provides a protected environment for seedlings growth from adverse climatic conditions.
3) It can produce high quality seedlings.
4) In poly house temperature is nearly 6-10^{o} C higher than outside which makes favourable for growth of the seedlings.
5) Under bamboo poly house, the use of space is very efficient and more seedlings can easily grow in a minimum area giving a maximum profit.
6) **Details about seedling production in 100 m^2 area**
7)

S.No	**Seedlings**	**Month**	**Cost (Rs)**	**Income (Rs)**	**Net income (Rs)**
1	Brinjal	June - July	11500	32500	21000
2	Cauliflower	July – Aug.	18 500	38250	19750
3	Tomato	Aug. – Sept.	12500	32500	20000
4	Bottle gourd	Dec.- Jan.	18500	55500	37000
5	Chilli	Feb. – Mar.	10800	32500	21700
Total			**71800**	**191250**	**119450**
B.C Ratio: 2.66					

Impact factor: Round-the-year vegetable seedlings production in low-cost poly house very much benefitted around 30 small and marginal farmers after conducting awareness training and showing demonstration unit of KVK, Lada.

Low-cost poly house- At KVK, Lada Samastipur -II farm

Training of farmers regarding benefits of Low cost poly house

Low-cost poly house at Farmer's field

दैनिक भास्कर समस्तीपुर भास्कर 27-10-2022

दैनिक भास्कर ताजपुर • कल्याणपुर • पूसा • वारिसन

कार्यक्रम • किसानों को प्रबंधन सुरक्षा व रोगों के प्रकोप से बचाव से संबंधित जानकारी से अवगत कराया

सामुदायिक स्तर पर सब्जियों की पौधशाला में पौधा तैयार कर आमदनी बढ़ाएं किसान

खेती करने के दौरान पौधे को किट के प्रकोप से बचाने के बारे में भी दी गई जानकारी

सिंघिया केंद्र की तकनीकी सहयोग से मोरवाड़ा में निर्माण की गई पौधशाला और सिंघिया पौधशाला निर्माण की प्रायोगिक जानकारी देते वैज्ञानिक।

News Paper Coverage

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