

# Action Plan (2015-16)

## Krishi Vigyan Kendra, Katihar

### 1. INTRODUCTION

Krishi Vigyan Kendra, Katihar has been established in March, 2004 at Tingachiya farm in Katihar district of Bihar. It is an innovative centre of Indian Council of Agricultural Research (ICAR), Pusa, New Delhi under the administrative control of Bihar Agricultural University, Sabour, Bhagalpur Bihar. The centre has the mandated activities of conducting on farm testing/trials (OFTs) with emerging advances in agricultural research for assessing, refining and demonstration of recently released technology to develop location specific sustainable production system and dedicated to organize vocational training in agriculture and allied fields for practicing farmers, farm women and rural youth. The Katihar district is quite suitable for cultivation of Jute, Makhana, Banana, Potato, Maize, Rice, Wheat, oil seeds and vegetables crops in different seasons of the year. The productivity enhancement of the field, fiber and horticultural crops with the concept of integrated farming system module are the major arena of thrust for development of agriculture in the district. The main mandates of the KVK, Katihar is :

- Conduct on farm testing/trials (OFTs), for assessing, refining and documenting agricultural technologies to develop location specific sustainable production system.
- Conduct front line demonstration (FLDs) on cereals, oilseeds, pulses and, horticultural crops and for generating production data and feedback.
- Organize vocational training in agricultural and allied sector for practicing farmers, farm women and rural youth with emphasis on learning by doing for self employment and income generation.
- Organize training for in-service extension personnel for updating their knowledge status.

## 2. STAFF POSITION

Name of Post	Sanctioned strength	Present position	Date of joining	Remarks
Programme Coordinator	1	<b>Dr. S.B.Singh</b>	17.03.1991	
Subject Matter Specialist (H.Sc)	1	<b>Smt. Basanti Kumari</b>	20.11.2007	
Subject Matter Specialist (Agronomy)	1	<b>Dr Sushil Kumar Singh</b>	15.06.2009	
Subject Matter Specialist (Hort.)	1	<b>Sri Ajay Kumar Das</b>	16.06.2009	
Subject Matter Specialist (Ext. Education)	1	<b>Sri Pankaj Kumar</b>	16.11.2009	
Subject Matter Specialist (Soil Science)	1	<b>Dr Rama Kant Singh</b>	16.04.2012	
Subject Matter Specialist (Plant Protection)	1	<b>Vacant</b>		
Programme Assistant (lab. Tech.)	1	<b>Smt. Swarna Prabha Reddy</b>	30.10.2012	
Prog. Asstt. (Computer)	1	<b>Sri Amarendra Kumar Vikas</b>	13.05.2013	
Farm Manager	1	<b>Sri Om Prakash Bharti</b>	05.11.2012	
Assistant	1	<b>Sri Mukesh Kumar</b>	09.04.2013	
Jr. Stenographer	1	<b>Sri Abhay Kumar</b>	17.7.2013	
Driver (Jeep )	1	<b>Sri Dharmendra Kumar</b>	11.04.2005	Contractual
Driver (Tractor)	1	<b>Sri Sanjay Kumar</b>	01.03.2014	Contractual
Supporting Staff	1	<b>Sri Arun Kumar Mandal</b>	01.07.2005	Contractual
Supporting Staff	1	<b>Sri Sanjay Yadav</b>	01.02.2015	Contractual

### 3. LAND WITH THE KVK

▪ Cultivable Land	6.00 ha
▪ Land under shed, Go-down, road threshing floor	2.00 ha
▪ Orchard /Agro forestry	5.0 ha
▪ Others	7.0 ha
<b>Total land</b>	<b>20.00 ha</b>

### 4. Location

Krishi Vigyan Kendra, Katihar is situated in the south-eastern portion of North Bihar plain. The district came in existence in 1973 carved out from Purnea. It is located on Tingachhiya farm in the district head quarter of Katihar about 3 KM away from the Katihar Railway Station. The nearest airport is Patna in Bihar and Bagdogra in West Bengal. It lies between Latitude 25 'N to 26'N, Longitude 87' to 88'E with an altitude of 20 m above MSL

### 5. AGRO-CLIMATIC CONDITION

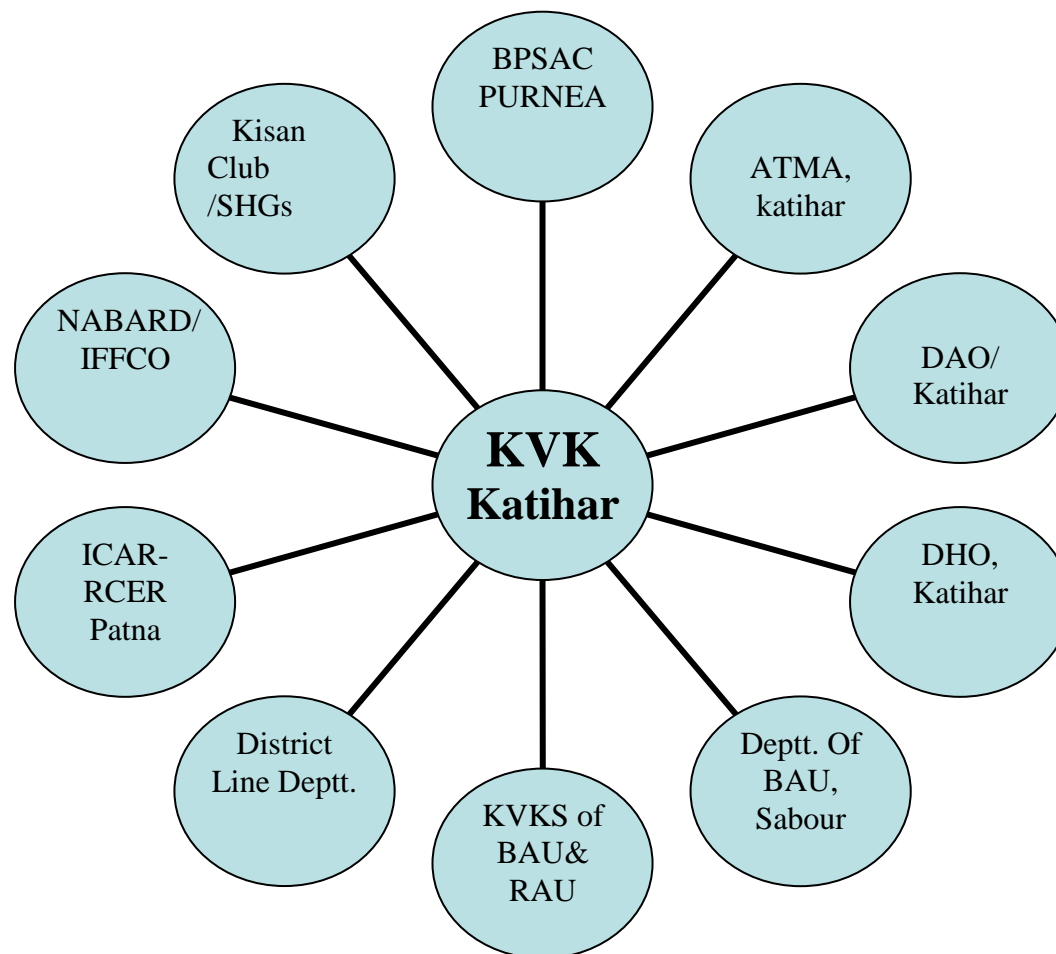
KVK Katihar falls in Agro-climatic Zone-II. The climate is sub-tropical and humid having mean maximum and minimum temperature between 46°C and 4.10°C respectively. The average annual rainfall of the district is about 1298 mm. The maximum rainfall occurs during monsoon period. The soil of the districts generally sandy to sandy loam having alluvial properties due to three major rivers Mahananda, Kosi and Ganga. Low lying areas have clay loam to clay soils. The soils of Katihar district are mostly coarse to medium textured, acidic to neutral in reaction and yellowish white to light gray in color. In basin shaped flood plains, soils are gray colored, medium fine textured and shallow to medium deep soils over sand. The up land coarse textured soils are poor in fertility status as compared to low land soils. The availability of Nitrogen, Phosphorus and Potash is generally low, medium and medium to high respectively. Soils are deficient in Zinc, Sulphar & Boron. The cropping system varies depending on rainfall, land situation and water accumulation in the locality. There are three distinct farming situations viz. Upland, Medium land, low land, Deepwater land having specific characteristic which determine crop sequence/cropping patterns in the district.

## **6. THRUST AREA**

- Crop diversification and intensification in Rice- Wheat cropping system.
- Promotion and adoption of Integrated farming system for the district
- Management of Jute, Banana and Makhana based cropping system
- Popularization of quality seed and planting materials production.
- Adoption of Integrated Nutrient Management for sustainable agriculture.
- Farm women empowerment and Income generation

7.

## Linkages



# 7. MAP OF KATI HAR



## 8. Abstract of Training Programme:

### Action Plan (2015-16)

Discipline	Duration (days)	Participants		
		Male	Female	Total
<b>Practicing farmers</b>				
Horticulture	44	450	000	450
Home Science	46	000	450	450
Agronomy	28	241	109	350
Extension Education	44	262	113	375
Soil Science	30	202	073	275
<b>Total(A)</b>	<b>192</b>	<b>1155</b>	<b>745</b>	<b>1900</b>
<b>Rural Youth</b>				
Horticulture	32	191	009	200
Home Science	40	000	250	250
Agronomy	20	085	040	125
Extension Education	16	068	032	100
Soil Science	16	066	034	100
<b>Total(B)</b>	<b>124</b>	<b>410</b>	<b>365</b>	<b>775</b>
<b>Extension Functionaries</b>				
Horticulture	08	96	4	100
Home Science	08	0	100	100
Agronomy	10	97	53	150
Extension Education	09	78	42	120
Soil Science	08	78	42	120
<b>Total(C)</b>	<b>43</b>	<b>349</b>	<b>241</b>	<b>590</b>
<b>Grand Total (A+B+C) :</b>	<b>359</b>	<b>1914</b>	<b>1351</b>	<b>3265</b>

## **9. List of location specific thrust areas:**

### **Discipline: Agronomy**

1. Demonstrations on Seed treatment
2. Application of soil test reports
3. Introduction of new and improved varieties of pulses and oilseed
4. Soil moisture conservation practices, foliar spray of nutrients

### **Discipline: Horticulture**

1. Management of Banana
2. Balanced Nutrient Management in Horticultural Crops
3. Use of improved variety in Vegetables
4. Improvement in production of quality vegetables through nursery management & INM

### **Discipline: Extension Education**

1. Organisation of farmers group and their capacity building
2. Promotion of micro financing, linkages with banks
3. Promotion of concept of 'farmer as resource person'
4. Secondary agriculture and Entrepreneurship development
5. Market intelligence
6. Promotion of agricultural insurance and subsidiary occupations
7. TOT for Knowledge dissemination and boosting rate of adoption of improved technology
8. Establishment, strengthening and utilization of linkages and Use of ICT

### **Discipline: Home Science**

1. To popularize organic nutritional gardening.
2. To aware about vegetable and fruits processing.
3. To reduced laborious work through drudgery reduction technologies.
4. Empowerment of rural women through employment/self employment.

### **Discipline: Soil Science**

1. Awareness & Motivation programme about soil & water testing
2. Promotion of soil test based fertilizer application for efficient nutrient utilization
3. Cost effective nutrient management
4. Soil Management for sustainable Agriculture
5. Converting crop waste into vermi compost



## 10. Training Need

The PRA and other survey methods were implemented in the adopted villages and other survey methods like use interview schedules, questionnaire, secondary data, and discussions with farmers' core group, following conclusions has been drawn

### List of location specific training needs

Sr. No.	Name of Training programme
1.	Crop management in <b>kharif &amp; Rabi</b>
2.	wheat cultivation
3.	Soil and water conservation
4.	Soil and water Testing
5.	Nutrient management in Crops
6.	Vermicompost Production
7.	Awareness and use of market intelligence
8.	Participatory Rural Appraisal techniques for extension functionaries
9.	Skill Development programmes
10.	Subsidiary occupations
11.	ICT in agriculture
12.	Training methods
13.	Public private partnership
14.	Role Performance of Women in Agriculture and Drudgery Reduction
15.	Importance of balance diet and preparation of low cost nutritious recepies
16.	Health and nutrition care of mother and child
17.	Technique of vegetable dehydration
18.	Oyster mushroom cultivation
19.	Storage of food grains
20.	Nursery management and production technology for Brinjal and chilli.
21.	Women self help groups and income generating activity.
22.	Techniques of establishment of nutritional garden.
23.	Awareness on nutritional deficiency among children and growing girl.
24.	Energy saving devices for farm women
25.	Processing techniques and value addition in Fruit Crops
26.	Production technology for off season vegetables
27.	IPDM in wheat

### Details of Training Programme-(2015-16)

Discipline	Qrt No. & Month	Thematic area	Course Title`	Duration (days)	Venue off/on campus	Participants							
						SC		ST		Others		Total	
						M	F	M	F	M	F		
<b>Practicing Farmers &amp; Farm Women</b>													
<b>Horticulture</b>	April to June 15	Seed production	Nursery raising and seed production of vegetable crops	3	ON/OFF	3	-	2	-	20	-	25	
		Training and Pruning	Training & pruning of Horticultural crop	2	ON/OFF	3	-	2	-	20	-	25	
		INM	INM in Fruit & vegetable crops	3	ON/OFF	2	-	3	-	20	-	25	
		Export potential Fruit	Makhana production and processing	3	ON/OFF	3	-	2	-	20	-	25	
		Plant Propagation	Different methods of propagation	3	ON/OFF	3	-	2	-	20	-	25	
	July to Sept.15	Layout and Management of Orchard	Establishment and management of new Orchard.	2	ON/OFF	3	-	2	-	20	-	25	
		Protected cultivation	Cultivation of Vegetable under shed net and poly tunnel.	3	ON/OFF	2	-	3	-	20	-	25	
		Plastic farming	Low cost poly house for small farmers.	3	ON/OFF	3	-	2	-	20	-	25	
		Disease management	IDM of vegetables	2	ON/OFF	3	-	2	-	20	-	25	
		Cultivation of Fruits	Scientific cultivation of Banana	2	ON/OFF	5	-	-	-	20	-	25	
	Oct to Dec 15	Production Technology	Production and management for Medicinal, aromatic plants.	2	ON/OFF	3	-	2	-	20	-	25	
		Seed production	Seed production techniques of potato	3	ON/OFF	3	-	2	-	20	-	25	
		Cultivation of Fruits	Scientific cultivation and protection of banana crops	2	ON/OFF	3	-	2	-	20	-	25	
		Low volume high value crop	Cultivation of flower for income generation	3	ON/OFF	3	-	2	-	20	-	25	
		Nursery Raising	Nursery raising for summer vegetable	3	ON/OFF	3	-	2	-	20	-	25	
	Jan to March 16	Production and management	Scientific cultivation of garlic and spices crops	2	ON/OFF	5	-	-	-	20	-	25	
		Production of crop	Scientific cultivation of summer vegetable	3	ON/OFF	5	-	-	-	20	-	25	
		Layout and management of orchards	Management of Fruit Crops	2	ON/OFF	5	-	-	-	20	-	25	
	<b>TOTAL</b>				<b>46</b>	<b>ON/OFF</b>	<b>60</b>	<b>-</b>	<b>30</b>	<b>-</b>	<b>360</b>	<b>-</b>	<b>450</b>

Discipline	Qrt No. & Month	Thematic area	Course Title	Duration (days)	Venue off/on campus	Participants							
						SC		ST		Others		Total	
						M	F	M	F	M	F		
<b>Agromony</b>	April to June 15	Nursery Management	Nursery Management of Paddy	2	ON/OFF	7	1	1	4	9	3	25	
		Cropping system	Management of Rice wheat /maize cropping system	2	ON/OFF	9	1	1	4	8	2	25	
		ICM	Agronomic management practices of Jute	2	ON/OFF	7	2	1	4	8	3	25	
	July to Sept 15	Crop diversification	Diversification of Rice Wheat Cropping system	2	ON/OFF	9	1	1	4	8	2	25	
		ICM	Cultivation of Paddy by SRI	2	ON/OFF	7	2	1	4	8	3	25	
		Weed management	Weed management in Kharif Crops	2	ON/OFF	8	2	1	4	8	2	25	
		Water Management	Water management in Paddy	2	ON/OFF	7	2	1	4	8	3	25	
	Oct. to Dec. 15	Seed Production	Seed Production of Wheat	2	ON/OFF	8	1	1	4	9	2	25	
		Weed management	Weed management in Rabi crop	2	ON/OFF	7	1	1	4	10	2	25	
		ICM	Scientific Cultivation of Rabi pulses	2	ON/OFF	9	1	1	4	8	2	25	
		ICM	Scientific Cultivation of Maize	2	ON/OFF	8	2	1	4	8	2	25	
	Jan to march, 16	Integrated crop Management	Agronomic management practices of Boro Paddy	2	ON/OFF	7	2	1	4	9	2	25	
		Weed Management	Weed Management on Boro Rice	2	ON/OFF	9	1	1	4	8	2	25	
		Integrated farming	Development integrated farming practices	2	ON/OFF	8	2	1	4	8	2	25	
	<b>TOTAL</b>				<b>28</b>	<b>ON/OFF</b>	<b>110</b>	<b>21</b>	<b>14</b>	<b>56</b>	<b>117</b>	<b>32</b>	<b>350</b>

Discipline	Qrt No. & Month	Thematic area	Course Title	Duration (days)	Venue off/on campus	Participants						
						SC		ST		Others		Total
						M	F	M	F	M	F	
<b>Extension Education</b>	<b>Practicing Farmers &amp; Farm Women</b>											
	April - June, 15	Group Dynamics	Formation and management of SHGs/JIGS	3	ON/OFF	8	2	1	4	8	2	25
		Group Dynamics	Establishment and strengthening of Farmers Club	3	ON/OFF	9	1	1	4	8	2	25
		Leadership development	Leadership development for technology dissemination	3	ON/OFF	8	2	1	4	8	2	25
		Group Dynamics	Formation and management of SHGs/JIGS	4	ON/OFF	9	1	1	4	8	2	25
		PRA	Agro ecosystem analysis of adopted village	4	ON/OFF	8	2	1	4	8	2	25
		Group Dynamics	Formation and Management of SHGs/JIGS	2	ON/OFF	9	1	1	4	8	2	25
	July - Sept., 15	Mobilization of social capital	Income generation activities among group members	2	ON/OFF	8	2	1	4	8	2	25
		Entrepreneurial development of farmers/youths	Entrepreneurship Development though poultry	3	ON/OFF	9	1	1	4	8	2	25
		WTO and IPR issues	Awareness and use of market intelligence	3	ON/OFF	8	2	1	4	8	2	25
		Entrepreneurial development of farmers/youths	Entrepreneurship Development though poultry	4	ON/OFF	9	1	1	4	8	2	25
	Oct. - Dec, 15	Leadership development	Leadership development for technology dissemination	2	ON/OFF	8	2	1	4	8	2	25
		Production technologies	Productivity enhancement of field crops	2	ON/OFF	8	2	1	4	8	2	25
		Group Dynamics	Formation and management of SHGs/JIGS	2	ON/OFF	9	1	1	4	8	2	25
	Jan. - March, 16	Group Dynamics	Formation and Management of SHGs/JIGS	2	ON/OFF	8	2	1	4	8	2	25
		Entrepreneurial development of farmers/youths	Entrepreneurship Development though poultry	5	ON/OFF	9	1	1	4	8	2	25
	<b>TOTAL</b>			<b>44</b>	<b>ON/OFF</b>	<b>127</b>	<b>23</b>	<b>15</b>	<b>60</b>	<b>120</b>	<b>30</b>	<b>375</b>

Discipline	Month	Thematic area	Course Title	Duration (days)	Venue	Participants							
						SC		ST		Others		Total	
Practicing Farmers & Farm Women						M	F	M	F	M	F		
<b>Home Science</b>	April – June, 15	Income generation activities for empowerment of rural women	Preparation of Potato chips, Badi & Papad	3	ON/OFF	-	5	-	2	-	18	25	
		Value addition	Preservation of seasonal vegetables	2	ON/OFF	-	3	-	2	-	20	25	
		Rural craft	Tie & Dye technology and textile designing	3	ON/OFF	-	5	-	2	-	18	25	
		Leadership development	Leadership development for entrepreneurship character development in rural women	6	ON/OFF	-	5	-	2	-	18	25	
	July - Sept, 15	Household food security by kitchen gardening and nutrition gardening	Importance of Nutritional Kitchen gardening and management	2	ON/OFF	-	10	-	5	-	10	25	
		Value Addition	Value addition of mango Products	3	ON/OFF	-	10	-	5	-	10	25	
		Drudgery Reduction	Drudgery reduction technology for women in agriculture	3	ON/OFF	-	10	-	5	-	10	25	
		Rural crafts	Preparation of Soft toys	3	ON/OFF	-	10	-	5	-	10	25	
	Oct. - Dec., 15	Leadership development of rural women	Leadership development through group formation and technology dissemination	3	ON/OFF	-	3	-	2	-	20	25	
		Design and development of low cost diet	Preparation of weaning food for better child growth	3	ON/OFF	-	5	-	5	-	15	25	
		Women and child care	Balance Nutrition for women and child	3	ON/OFF	-	5	-	5	-	15	25	
		Income generation activities for empowerment of rural women	Stitching, embroidery for Income generation	2	ON/OFF	-	5	-	5	-	15	25	
		Mushroom Cultivation	Mushroom Cultivation and its uses	2	ON/OFF	-	5	-	5	-	15	25	
	Jan. - March, 16	Value addition	Value addition of Seasonal fruits and vegetables preparation	3	ON/OFF	-	3	-	2	-	20	25	
		Minimization of nutrient loss in processing	Preparation of energy efficient diet	2	ON/OFF	-	3	-	2	-	20	25	
		Storage loss minimization technique	To increase knowledge regarding storage of grain	2	ON/OFF	-	5	-	5	-	15	25	
		Drudgery reduction	Location specific drudgery reduction technologies in Agriculture	2	ON/OFF	-	3	-	2	-	20	25	
		Mushroom Cultivation	Mushroom Cultivation and its uses	2	ON/OFF	-	5	-	10	-	10	25	
			<b>TOTAL</b>		<b>46</b>	<b>ON/OFF</b>	<b>-</b>	<b>100</b>	<b>-</b>	<b>71</b>	<b>-</b>	<b>279</b>	<b>450</b>

Discipline	Qrt No. & Month	Thematic area	Course Title	Duration (days)	Venue off/on campus	Participants							
						SC		ST		Others		Total	
<b>Practicing Farmers &amp; Farm Women</b>						M	F	M	F	M	F		
<b>Soil Science</b>	April to Jun15	Soil and water testing	Methods of soil sampling and analysis	3	ON/OFF	8	2	2	-	14	-	25	
		Production and use of organic inputs	Vermi compost Production techniques, and its use in crops and cropping system Technique	3	ON/OFF	8	2	1	4	8	2	25	
		Production and use of organic inputs	Methods of Bio fertilizer production and its use	3	ON/OFF	9	1	1	4	8	2	25	
	July to Sept15	Soil fertility management	Fertilizer management in Paddy	3	ON/OFF	9	1	1	4	8	2	25	
		Micro nutrient deficiency in crops	Micro nutrient deficiency symptoms and its management in crops	2	ON/OFF	8	2	1	4	8	2	25	
		INM	INM in Paddy	3	ON/OFF	9	1	1	4	8	2	25	
	Oct to DEC15	INM	INM in Maize	3	ON/OFF	9	1	1	4	8	2	25	
		Nutrient use efficiency	Soil & Crop management practices to increase NUE	2	ON/OFF	8	2	1	4	8	2	25	
	Jan15 to march 16	Organic farming	To develop knowledge and understanding of organic farming	3	ON/OFF	9	1	2	3	8	2	25	
		Soil and water testing	Soil health Management in crops on Soil test basis	3	ON/OFF	9	1	2	3	8	2	25	
		Soil fertility Management	Fertilizer management in Boro paddy	2	ON/OFF	8	2	1	4	8	2	25	
	<b>TOTAL</b>				<b>30</b>	ON/OFF	<b>94</b>	<b>15</b>	<b>14</b>	<b>38</b>	<b>94</b>	<b>20</b>	<b>275</b>

## B. Training for Rural Youth

Discipline	Qrt No. & Month	Thematic area	Course Title	Duration (days)	Venue off/on campus	Participants trainees (Nos)							
						SC		ST		Others		Total	
						M	F	M	F	M	F		
<b>Rural Youth</b>													
<b>Horticulture</b>	April to June	Commercial fruit production	Production, Management and processing of Makhana	4	ON/OFF	3	1	1	-	20	-	25	
		Commercial fruit production	Production, care and Management of Banana	4	ON/OFF	3	1	1	-	20	-	25	
		Nursery Management	Nursery management of vegetable crop and poly tunnel technology	4	ON/OFF	3	1	2	1	18	-	25	
	July to Sept	Planting Material Production	Plant Propagation techniques of fruit crops	4	ON/OFF	3	1	1	-	20	-	25	
	Oct to Dec	Protected cultivation	Protected cultivation of vegetable and Fruit crops	4	ON/OFF	3	1	2	-	19	-	25	
		Seed Production	Seed Production of vegetables	4	ON/OFF	3	1	2	-	19	-	25	
		Rejuvenation of orchard	Rejuvenation of old mango orchard	4	ON/OFF	3	1	2	-	19	-	25	
	Jan to March	Training and pruning of orchards	Training and pruning of orchards	4	ON/OFF	3	1	2	-	19	-	25	
	<b>TOTAL</b>				<b>32</b>	<b>ON/OFF</b>	<b>24</b>	<b>08</b>	<b>13</b>	<b>01</b>	<b>154</b>	<b>0</b>	<b>200</b>

Discipline	Qrt No. & Month	Thematic area	Course Title	Duration (days)	Venue off/on campus	Participants trainees (Nos)						
						Rural Youth		ST		Others		Total
						M	F	M	F	M	F	
<b>Agronomy</b>	April to June15	Crop diversification	Diversification of Rice Wheat Cropping system	4	ON/OFF	9	1	1	4	8	2	25
	July to Sept 15	Seed production	Seed Production of Paddy	4	ON/OFF	7	2	1	4	8	3	25
	Oct. to Dec. 15	Seed production	Seed Production of wheat	4	ON/OFF	7	2	1	4	8	3	25
		ICM	Agronomic management practices of Maize	4	ON/OFF	9	1	1	4	8	2	25
	Jan to March16	Integrated farming System	Integrated farming System	4	ON/OFF	8	2	1	4	8	2	25
	<b>TOTAL</b>				20	ON/OFF	40	08	05	20	40	12

<b>Home Science</b>	April to June 15	Value Addition	Preparation of Potato chip & Papad	4	ON/OFF	-	5	-	3	-	17	25
		Rural Craft	Preparation of decorative items from locally available materials	4	ON/OFF	-	5	-	3	-	17	25
		Tailoring & Stitching	Knitting , Stitching, embroidery works on clothes & Textile Designing	4	ON/OFF	-	5	-	2	-	18	25
	July to Sept15	Mushroom Production	Cultivation of Different types of Mushroom	4	ON/OFF	-	5	-	5	-	15	25
		Value Addition	Preservation of seasonal fruit and vegetable	4	ON/OFF	-	3	-	2	-	20	25
		House hold Food Security	Importance of Kitchen garden & Management of Nutrition garden	4	ON/OFF	-	3	-	2	-	20	25
	Oct. to Dec. 15	Rural Craft	Preparation of different types of embroidery/ painting works	4	ON/OFF	-	5	-	5	-	15	25
		Mushroom Production	Cultivation of different types of Mushroom	4	ON/OFF	-	5	-	5	-	15	25
	Jan to March 16	Value Addition	Preservation of seasonal fruit and vegetables	4	ON/OFF	-	3	-	2	-	20	25
		Storage Loss Minimization	Different methods of grains storage	4	ON/OFF	-	5	-	4	-	16	25
<b>TOTAL</b>				40	ON/OFF	-	44	-	33	-	173	250



Discipline	Qrt No. & Month	Thematic area	Course Title	Duration (days)	Venue off/on campus	Participants trainees (Nos)							
						SC		ST		Others		Total	
<b>Rural Youth</b>						M	F	M	F	M	F		
<b>Extension Education</b>	April to June15	Entrepreneurial development of farmers/youths	Entrepreneurship Development through dairy	4	ON/OFF	9	1	1	4	8	2	25	
		Entrepreneurial development of farmers/youths	Entrepreneurship Development through Beekeeping	4	ON/OFF	8	2	1	4	8	2	25	
	July to Sept15	Entrepreneurial development of farmers/youths	Entrepreneurship Development through dairy	4	ON/OFF	9	1	1	4	8	2	25	
		Entrepreneurial development of farmers/youths	Entrepreneurship Development through fisheries	4	ON/OFF	8	2	1	4	8	2	25	
	Oct to Dec15	Entrepreneurial development of farmers/youths	Entrepreneurship Development through Beekeeping	4	ON/OFF	8	2	1	4	8	2	25	
		Entrepreneurial development of farmers/youths	Entrepreneurship Development through Poultry	4	ON/OFF	9	1	1	4	8	2	25	
	Jan to March16	Entrepreneurial development of farmers/youths	Entrepreneurship Development through fisheries	4	ON/OFF	8	2	1	4	8	2	25	
		Entrepreneurial development of farmers/youths	Entrepreneurship Development through Poultry	4	ON/OFF	9	1	1	4	8	2	25	
	<b>TOTAL</b>				32	ON/OFF	68	12	8	32	64	16	200

Discipline	Qrt No. & Month	Thematic area	Course Title	Duration (days)	Venue off/on campus	Participants trainees (Nos)							
						Rural Youth		ST		Others		Total	
						M	F	M	F	M	F		
<b>Soil science</b>	April to June	Vermiculture	Vermi composting for income generation	4	ON/OFF	7	2	1	4	8	3	25	
		Organic manures production	Organic manures production techniques	4	ON/OFF	9	1	1	4	8	2	25	
	July to Sept.	Vermi-compost production	Vermi-compost production and marketing	4	ON/OFF	7	2	1	4	8	3	25	
		Bio-fertilizer production	Bio-fertilizer production marketing	4	ON/OFF	9	1	1	4	8	2	25	
	Oct. to Dec.	Vermi-compost production	Vermi-compost production and marketing	4	ON/OFF	7	2	1	4	8	3	25	
		Vermiculture	Vermi composting for income generation	4	ON/OFF	7	2	1	4	8	3	25	
	Jan to March	Bio-fertilizer production	Bio-fertilizer production marketing	4	ON/OFF	9	1	1	4	8	2	25	
		Organic manures production	Organic manures production techniques	4	ON/OFF	9	1	1	4	8	2	25	
	<b>TOTAL</b>				32	ON/OFF	64	12	08	32	64	20	200

## C. Training for Extension Functionaries

Discipline	Qrt No. & Month	Thematic area	Course Title	Duration (days)	Venue off/on campus	Participants trainees (Nos)						
						SC		ST		Others		Total
Extension Functionaries						M	F	M	F	M	F	
<b>Horticulture</b>	April to July	Planting Material Production	Plant Propagation techniques in fruit crop	2	ON/OFF	2	1	2	-	22	-	25
	Aug to Sept	Layout and management of Orchard	Lay out and Management of High Density Orchard	2	ON/OFF	2	1	2	-	20	-	25
	Oct to Dec	Protected cultivation	Protected cultivation in horticulture	2	ON/OFF	3	1	2	-	19	-	25
	Jan to March	Rejuvenation of old Orchard	Rejuvenation of Orchard	2	ON/OFF	3	1	2	-	19	-	25
<b>Agronomy</b>	April to June	ICM	Agronomic management practices of Jute	2	ON/OFF	7	2	1	4	11	5	30
		Seed Production	Seed production of paddy	2	ON/OFF	7	2	1	4	11	5	30
	July to Sept.	Integrated weed Management	Integrated weed Management in paddy	2	ON/OFF	8	2	1	4	11	4	30
	Oct. to Dec.	RCT	Sowing of Wheat by technology	2	ON/OFF	7	2	1	4	11	5	30
	Jan. to March	Integrated farming system	Integrated farming system	2	ON/OFF	8	2	1	4	11	4	30

<b>Home Science</b>	April to June	Household food security	Nutritional kitchen gardening.	2	ON/OFF	-	5	-	2	-	18	25
	July to Sept	Women and Child care	Balanced nutrition of women and child for good health	2	ON/OFF	-	5	-	2	-	18	25
	Oct to Dec	Design and development of high nutrient efficient diet	Preparation of quality diet and QPM products for balanced feeding	2	ON/OFF	-	5	-	2	-	18	25
	Jan to March	Preservation of seasonal fruit & vegetable	Entrepreneurial development through preservation of seasonal fruit and vegetable	2	ON/OFF	-	5	-	2	-	18	25
<b>Extension Education</b>	April to June	Formation and Management of SHGs	Formation and Management of kisan club and SHGs and JLGS	2	ON/OFF	7	2	1	4	11	5	30
	July to Sept	Leadership development	Leadership development for Agro tech dissemination	2	ON/OFF	8	2	1	4	11	4	30
	Oct to Dec	Information networking among farmers	ICT practices for information and networking among farmers	2	ON/OFF	7	2	1	4	11	5	30
	Jan to March	Entrepreneurial development of farmers/youths	Entrepreneurial development of farmers/youths	3	ON/OFF	8	2	1	4	11	4	30
<b>Soil science</b>	April to June	Soil and Water Testing	Methods of soil sampling and analysis	2	ON/OFF	7	2	1	4	11	5	30
	July to Sept	INM	INM in crops and cropping system	2	ON/OFF	7	2	1	4	11	5	30
	Oct. to Dec.	INM	Green manuring and use of bio fertilizer	2	ON/OFF	8	2	1	4	11	4	30
	Jan. to March	Production and use of organic inputs	Methods of vermi compost Production and its use in crops	2	ON/OFF	8	2	1	4	11	4	30
<b>Grand Total</b>				43	ON/OFF	107	50	21	60	221	131	590

Thematic Area	Title	Duration (days)	Venue	No. of Participants					
				SC	ST	Others	M	F	Total
<b>( D ) Sponsored</b>									
Integrated crop management	Productivity enhancement through SRI	2	ON/OFF	5	2	23	30		30
Integrated crop management	Agronomic Managements Practices of oilseeds and pulses	3	ON/OFF	5	2	23	30		30
Integrated crop management	Agronomic Managements Practices of Jute	2	ON/OFF	5	2	23	30		30
Production of low vol high value crop	Cultivation of cool season vegetables	3	ON/OFF	5	2	23	30		30
Installation and maintenance of micro irrigation system	Use of low energy water application devices in horticultural crops for high profitability	3	ON/OFF	5	2	23	30		30
women Empowerment	Income generation activities though mushroom cultivation & value Addition	2	ON/OFF	5	2	23	30		30
Entrepreneurship Development	Entrepreneurship Development through poultry	4	ON/OFF	5	2	23	30		30
<b>( E ) Vocational</b>									
Seed Production	Seed production of paddy and Wheat	5	ON/OFF	5	2	23	25	5	30
Planting material Production	Techniques of Graft , gouty	7	ON/OFF	5	2	23	25	5	30
Seed Production	Seed Production technique of Potato	3	ON/OFF	5	2	23	25	5	30
Vermiculture	Vermicompost production	7	ON/OFF	5	2	23	25	5	30
Beekeeping	Entrepreneurship Development through Beekeeping	7	ON/OFF	5	2	23	25	5	30
Mushroom Production	Mushroom Production technology	3	ON/OFF	5	2	23	25	5	30
Repair & Maintenance	Repair and Maintenance of plant protection equipments	3	ON/OFF	5	2	23	25	5	30
Planting Material Production	Techniques of graft, gouty in propagation of fruit plants.	5	10	5	2	23	25	5	30
Seed production	Seed production of vegetables	4	6	5	2	23	25	5	30
Tailoring and Stitching	Women dress designing	6	6	5	2	23	0	30	30
Value Addition	Preservation of seasonal fruits and vegetables	3	10	5	2	23	0	30	30

## 11. Frontline demonstration

Season	Crop/Enterprise	Component/Variety	No. of demonstration	No. of area (ha)
<b>Kharif</b>	Paddy	R. Sweta	10	04
	Rainy season vegetables	-	10	01
	Azotobactor & PSB	Culture	10	2
	Dhaincha		10	2
	Zinc & Boron	Micro nutrients	10	2
	Poultry	Vanraja	10	10 Farmers
<b>Rabi</b>	Wheat	HD-2985	10	04
	Rizobium , Azotobactor & PSB	Culture	10	2
	Cauliflower	Sabour Agrim	10	01
	Green gram	Samrat	10	05
<b>Zaid</b>	Bhindi	Kashi Pragati	10	01
	Nutritional Garden	Saplings of Banana, Drumstick, Papaya and vegetables	100 families	
			101	

## 12. Seed and planting material production

Seed Production			Plantation Material production		
Crop	Variety	Area(ha)	Crop	No. of graft gooty	Variety
Paddy	Prabhat	3.0	Litchi	1000	
Wheat	HD – 2985/HD-2967	4.0	Lemon	1000	
Sesamum	Shekhar	1.0	Mango	3000	-
			Guava	1000	-

### 13. Extension Activities

Name of Extension Activities	No.	Participants
Field Day	10	500
Kisan Mela	01	1000
Kisan Ghosthi	12	600
Kisan Chaupal	40	2000
Exhibition	1	203
Film Show	10	542
Method Demonstrations	2	150
Farmers Seminar	1	150
Workshop	1	150
Group meetings	5	200
Scientific visit to farmers field	72	200
Farmers visit to KVK	3000	3000
Diagnostic visits	40	450
Exposure visits	02	100
Ex-trainees Sammelan	01	50
Soil health Camp	05	250
Animal Health Camp	02	100
Self Help Group Conveners meetings	05	250
Celebration of important days (specify), World food day, Women in Agriculture day, Parthenium Awareness week, Kisan Diwas)	05	250
<b>Total</b>	<b>3215</b>	<b>10145</b>

#### **14. Dissemination of Agriculture information through Mobile Message**

Language for Message: Hindi Language.

2400 SMS pack has been activated this year Mobile SMS service provider to send SMS.

##### **Objectives**

1. To give necessary Agriculture information to farmers through mobile message.
2. To strengthen the contact with farmers in operational area

##### **Content of Mobile SMS service:**

- Pest and disease forecasting
- Effective control measures
- Nutrient management schedule
- Hormonal applications
- Venue and Schedule of the training
- Critical situation management
- Commodity prices
- Animal Vaccination schedules
- Services available at KVK
- Weather forecasts
- Alerts



**ON FARM TRIAL (Agronomy)**

<b>SN</b>	<b>Particulars</b>	<b>Description</b>
1.	Intervention	Agronomy
2.	Title	Integrated weed management in paddy
3.	Micro farming situation	Medium to Low land
4.	Production system	Rice-Wheat
5	Thematic area	Weed management
6.	Problem	Paddy crop is heavily infested with common weeds during the crop growth period and delayed hand weeding by manual labour resulting in poor crop growth and loss in yield of crop.
7.	Potential solution	The integrated method of weed management practices through chemical and mechanical ways helps in reducing weed population and also reduces cost of cultivation.
8.	Source of technology	DWSR, Jabalpur
9.	Technology option	To-1: Farmers Practice (Hand weeding at 35 DAT) To -2 Hand weeding at 20 DAT To -3: Pretilachlore @ 1kg ai/ha pre emergence To -4 Bispyribac sodium @25 a.i. gm /ha at 20 DAT
10.	Plot Size	0.10 ha
11	No of farmer	10
12.	Critical input	Seed, Chemicals
		Technical observations Plant height, No of tillers/m <sup>2</sup> , Straw yield and Grain yield
13.	Perform indicator	Economic Indicator Gross return, Net return, BC ratio
		Farmers' reaction/ feedback

**ON FARM TRIAL (Agronomy)**

<b>SN</b>	<b>Particulars</b>	<b>Description</b>
1.	Intervention	Agronomy
2.	Title	Integrated weed management in Jute
3.	Micro farming situation	Medium to Low land
4.	Production system	Rice-Wheat
5	Thematic area	Weed management
6.	Problem	Jute crop is heavily infested with common weeds during the crop growth period resulting in to poor crop growth and loss in yield of crop.
7.	Potential solution	The integrated method of weed management practices through chemical and mechanical ways helps in reducing weed population and also reduces cost of cultivation.
8.	Source of technology	CRIJAF, Kolkata
9.	Technology option	1 Farmers Practice (Hand weeding at 30 DAS) 2 Hand weeding at 15 and 35 DAS 3 Pretilachlore @ 1kg ai/ha pre emergence 4 Quizalofop ethyl @60 gm a.i /ha at 25 DAS
10.	Plot Size	0.10 ha
11	No of farmer	10
12.	Critical input	Seed, Chemicals
13.	Perform indicator	Technical observations Crop: Plant height, no of branches, fibre weight, yield Weed: No of weeds/m <sup>2</sup> ,weed flora,
		Economic Indicator Gross return, Net return, BC ratio
		Farmers' reaction/ feedback

### OFT-(Agronomy)

SN	Particulars	Description
1.	Intervention	Agronomy
2.	Title	Evaluation of intercropping system in maize
3.	Micro farming situation	Medium to Low land
4.	Production system	Rice-Wheat/Maize
5	Thematic area	Integrated crop management
6.	Problem	Rabi maize is grown in katihar district as a sole crop and space between two rows are not utilized properly which is heavily infested with common weeds during the crop growth period resulting in poor crop growth and loss in yield of crop.
7.	Potential solution	Row spacing of maize helps in better utilization of land if one or two rows of selected crops may be grown between two rows of maize as intercrop would be a bonus and not lowered pure maize yield and also helps in reducing weed growth in early growth stage of maize.
8.	Source of technology	IARI,NEW Delhi
9.	Technology option	1 Farmers Practice (sole maize) 2 Maize + radish (1:2) 3 Maize + coriander (1:2)
10.	Plot Size	0.10 ha
11	No of farmer	10
12.	Critical input	Seed
13.	Perform indicator	Technical observations Maize: Crop: Plant height, no of grains/cob, and grain yield q/ha) Intercrop: Maize equivalent yield of radish, Maize equivalent yield of coriander
		Economic Indicator Gross return, Net return, BC ratio
		Farmers' reaction/ feedback

### OFT (Agronomy)

SN	Particulars	Description
1.	Intervention	Agronomy
2.	Title	Assessment of wheat varieties in Katihar District in timely sown condition
3.	Micro farming situation	Medium to Low land
4.	Production system	Rice-Wheat/Maize
5.	Thematic area	Integrated crop management
6.	Problem	Wheat is the major crop of Katihar district, but farmers were unaware about the recently developed varieties and they are dependent on old varieties which results in low net return from the crop.
7.	Potential solution	Assessment of suitable varieties is the potential solution for getting higher net return from the paddy crop
8.	Source of technology	BAU, Sabour
9.	Technology option	1 Farmers Practice(PBW 343 ) 2 HD 2733 3 HD 2967
10.	Plot Size	0.10 ha
11.	No of farmer	10
12.	Critical input	Seed
13.	Perform indicator	Technical observations
		Crop: Plant height, no of tillers/m <sup>2</sup> , straw yield and grain yield
		Economic Indicator Gross return, Net return, BC ratio
		Farmers' reaction/ feedback

**ON FARM TRIAL (Soil Science)**

<b>SN</b>	<b>Particulars</b>	<b>Description</b>
1.	Intervention	Soil Science
2.	Title	<b>To assess the effect of integrated nutrient management practices on Yield, quality and economics of Jute (<i>Corchorous olitorius</i>) production.</b>
3.	Micro farming situation	Low land
4.	Production system	Rice-wheat
5	Thematic area	INM
6.	Problem	Low yield of Jute due to Inadequate and Imbalance Nutrient management practices followed by farmers.
7.	Potential solution	Increase the yield and qualities of jute
8.	Source of technology	JRS Katihar
9.	Technology option	TO1 : Farmers practice (40:20:20, N:P:K kg/ha) TO2 : 60:30:30, N:P:K kg/ha(RDF) TO3 : RDF+OM (5 t/ha F.Y.M)+ biofertilizer (azotobacter+psb seed treatment) TO4 : N:P:K kg/ha (75%) + fym(25%) (amount/dose of nutrients requirement of crop is recommended based on nutrient status of soil)
10.	Plot Size	0.10 ha
11	No of farmer	10
12	Critical input	Seed, organic and inorganic fertilizers, biofertilizers, chemicals etc
13.	Perform indicator	<b>Technical observation</b> Plant height, Plant diameter,
		<b>Economic Indicator</b> Gross return, Net return, BC ratio
		<b>Farmers' reaction/ feedback</b>

**ON FARM TRIAL (Soil Science)**

<b>SN</b>	<b>Particulars</b>	<b>Description</b>
1.	Intervention	Soil Science
2.	Title	<b>Assess the real time of required nitrogen application in Paddy</b>
3.	Micro farming situation	Micro farming situation
4.	Production system	Paddy-wheat
5.	Thematic area	INM
6.	Problem	Indiscriminate uses of fertilizer
7.	Potential solution	Application of required fertilizers at real time
8.	Source of technology	CRRI
9.	Technology option	TO1 – Farmer Practices (80:40: 0 :: N:P:K Basal + 50 kg N at 25 DAT+ 50 kg N at 50 DAT) TO2 –RDF (Basal 60:60:40 kg N:P:K + 30 kg N at 30 DAT+30 kg N at 60 DAT) TO3 – RDF (Basal 60:60:40 NPK + Real Time Application of balance N by using Customised Leaf Colour Chart)
10.	Plot Size	0.10 ha
11	No of farmer	10
12	Critical input	Seed, Fertilizers
13.	Perform indicator	<b>Technical observations</b> Initial and final soil analysis, Plant height, No of tiller, No of grains per panicle, grain and straw yield
		<b>Economic Indicator</b> Net return, B:C ratio
		<b>Farmers' reaction/ feedback</b>

**ON FARM TRIAL (Soil Science)**

<b>SN</b>	<b>Particulars</b>	<b>Description</b>
1.	<b>Intervention</b>	<b>Soil Science</b>
2.	Title	<b>Assess the Effect of Brown Manuring and real time nitrogen management in Paddy</b>
3.	Micro farming situation	Micro farming situation
4.	Production system	Paddy-wheat
5.	Thematic area	INM
6.	Problem	Indiscriminate uses of fertilizer, No use of FYM
7.	Potential solution	Application of brown manuring (if standing water is not available), basal doses of fertilizers application and Use of Customized Leaf Colour Chart for real time nitrogen application
8.	Source of technology	CRRI, Cuttack (Odisha)
9.	Technology option	TO <sub>1</sub> – Farmer Practices (80:40: 20 :: N:P:K Basal + 50 kg N at 25 DAT+ 50 kg N at 50 DAT) TO <sub>2</sub> – RDF (Basal 60:60:40 kg N:P:K + 45 kg N at 30 DAT+ 45 kg N at 60 DAT) + knock down of Dhaincha by 2,4-D at 25-30 DAS. TO <sub>3</sub> – RDF (Basal 60:60:40 NPK + Real Time Application of balance N by using Customised Leaf Colour Chart) + knock down of Dhaincha by 2,4-D at 25-30 DAS.
10.	Plot Size	0.10 ha
11.	No of farmer	10
12.	Critical input	Seed, Fertilizers, chemical
13.	Perform indicator	Technical observations Initial and final soil analysis, Plant height, No of tiller, No of grains per panicle, grain and straw yield
		Economic Indicator Net return, B:C ratio
		<b>Farmers' reaction/ feedback</b>

**ON FARM TRIAL (Soil Science)**

<b>SN</b>	<b>Particulars</b>	<b>Description</b>
1.	Intervention	Soil Science
2.	Title	<b>Assess the effect of Zn and application method of Fertilizers in Rabi maize</b>
3.	Micro farming situation	Micro farming situation
4.	Production system	Paddy-maize/wheat
5.	Thematic area	INM
6.	Problem	Indiscriminate method of fertilizer application
7.	Potential solution	Application of required fertilizers at proper time
8.	Source of technology	SAUAST Jammu
9.	Technology option	TO <sub>1</sub> – Farmer Practices (60:0: 0 :: N:P:K Basal + 50:40:20 N:P:K at 30 DAS+ 30 kg N at 60 DAS) TO <sub>2</sub> –RDF (Basal 60:60:40 :: N:P:K + 40 kg N at 30 DAS+40 kg N at 60 DAS) TO <sub>3</sub> – RDF (Basal 60:60:40:25 :: N:P:K:Zn + 40 kg N at 30 DAS + 40 kg N at 60 DAS)
10.	Plot Size	0.10 ha
11.	No of farmer	10
12.	Critical input	Seed, Fertilizers
13.	Perform indicator	<b>Technical observations</b> Initial and final soil analysis, Plant height, No of grains per cob, grain and straw yield
		<b>Economic Indicator</b> Net return, B:C ratio
		<b>Farmers' reaction/ feedback</b>



**OFT (Horticulture)**

<b>SN</b>	<b>Particulars</b>	<b>Description</b>
1.	Intervention	Horticulture
2.	Title	Effect of chemicals and PGR on pollination and fruit set for better yield on Mango.
3.	Micro farming situation	Medium and Up land
4.	Production system	Fruit Cultivation
5.	Thematic area	Crop Improvement
6.	Problem	Excess fruit drop in initial steg
7.	Potential solution	To control the fruit drop percentage with the application of chemical and PGR.2.Increase the furit set % with the help of polliantion
8.	Source of technology	BAU,Sabour
9.	Technology option	Opt. I-Farmers practice(use insecticide) Opt. II- Calcium nitrate (0.06%)+Boric acid(0.02%). Opt.III- Calcium nitrate (0.06%)+Sorbitol(2.0%). Opt.IV- Boric acid(0.02%)+Sorbitol(2.0%). Opt.V- NAA 50 ppm
10.	Plot Size	25 (plant)
11	No of farmer	05
12	Critical input	Chemical & PGR
13	Performance indicator	1)Fruit sting 2) Fruit drop (at 15 day interval till maturity) 3) Fruit Weight 4) Fruit yield (q/Plant) 5) Size of Fruit (mm) 6) TSS and 7) Acidity
	Economic Indicator	B C ratio
		Farmers' reaction/ feedback

### ON FARM TRIAL (Horticulture)

SN	Particulars	Description		
1.	Intervention	Horticulture		
2.	Title	INM in Potato based cropping system (Potato+Cowpea+Paddy) for better return.		
3.	Micro farming situation	Medium upland		
4.	Production system	Vegetable		
5.	Thematic area	Integrated Nutrient Management to sustain in the productivity		
6.	Problem	Farmer cannot follow proper cropping system for better return.		
7.	Potential solution	Cropping system can improve the health of soil and farmer will be able to take quality yield		
8.	Source of technology	BAU, Sabour, Bihar		
9.	Technology option	1. Opt. I- 100% RDF 2. Opt. II- 75% RDF+25% vermicompost 3. Opt. II- 50% RDF+50% vermicompost 4. Opt. II- 25% RDF+75% vermicompost		
10.	Plot Size	1 acre		
11.	No of farmer	06		
12.	Critical input	Seed, Fertilizer+ Vermicompost		
13.	Design	Randomized Block Design(RBD)		
14.	Technology observation	<b>Potato</b>	<b>Cowpea</b>	<b>Paddy</b>
		Initial and final analysis of soil Plant Height(Cm) Number and Weight of Tuber plant Yield(q/ha)	No. of Pod Plant Height Number and weight of pod per plant Yield(q/ha)	Plant height Yield (q/ha)
	Economic Indicator	B C ratio		
		Farmers' reaction/ feedback		

### ON FARM TRIAL (Horticulture)

SN	Particulars	Description
1.	Intervention	Horticulture
2.	Title	<b>Management and economic analysis of shoot borer in Brinjal for koshi region in Bihar</b>
3.	Micro farming situation	Micro farming situation
4.	Production system	Vegetable-vegetable
5	Thematic area	Plant protection
6.	Problem	Fruit and shoot borer highly infested the crop and farmer faces marketable losses
7.	Potential solution	Uses of Insecticides
8.	Source of technology	BAU, Sabour
9.	Technology option	TO1 – Farmer Practices (Use of Rogar) TO2 – Trizophos + Delta methrin @ 2ml/l water TO3 - Emamectin benzoate 5% @ 0.4 gm/lit TO4 – Spinosad 45 SC @ ½ ml/l water
10.	Plot Size	40 sq mt
11	No of farmer	6
12	Critical input	Seed, chemicals
13.	Perform indicator	<b>Technical observations</b> Initial and final soil analysis, shoot damage %, fruit damage on weight and number basis (%), marketable fruit yield.
		<b>Economic Indicator</b> Net return, B:C ratio
		<b>Farmers' reaction/ feedback</b>

### ON FARM TRIAL (Home Science)

SN	Particulars	Description
1.	Intervention	Home Science
2.	Title	<b>Assessment of different artificial ripening on post harvest quality of Banana</b>
3.	Production system	Horticulture based
4.	Thematic area	Value addition
5.	Problem	Health hazard due to use of calcium carbide as a ripening agent
6.	Potential solution	The process of hydro cooling and safe treatment may solve the problem concerned.
7.	Source of technology	BAU, Sabour
8.	Technology option	TO <sub>1</sub> = Farmer practice (Use of calcium carbide ) TO <sub>2</sub> = Hydrocooling + etheral treatment 150 PPM TO <sub>3</sub> = Etheral treatment (coating of Etheral solution on central stem)
9.	Plot Size	4(hand) bunch of Banana,
10.	No of farmer	10
11.	Critical input	Chemicals , Raw material
12.	Perform indicator	Days to change in Colour, Taste, Self life at room temperature , Days of ripening
13.	<b>Economic Indicator</b>	Net return, B:C ratio

### ON FARM TRIAL (Home Science)

SN	Particulars	Description
1.	Intervention	Home Science
2.	Title	<b>Assessment of efficacy of different type of sickles on the harvesting of paddy crop in Katihar district.</b>
3.	Production system	Agricultural based
4.	Thematic area	drudgery reduction
5	Problem	Drudgery of women in terms of more time and energy consumption.
6.	Potential solution	Save energy and time
7.	Source of technology	CIAE, Bhopal, BSKKV
8.	Technology option	TO <sub>1</sub> = Farmer practice Harvesting of crop by traditional sickle TO <sub>2</sub> = Naveen sickle TO <sub>3</sub> = Vaibhav sickle
9.	Plot Size	01 Acre
10.	No of farmer	10
11	Critical input	Sickle
12	Perform indicator	Work Done Area, Output Area Labour our Segment
13.	<b>Economic Indicator</b>	B:C

**ON FARM TRIAL (Home Science)**

<b>SN</b>	<b>Particulars</b>	<b>Description</b>
1.	Intervention	Home Science
2.	Title	<b>Value addition of Tomato</b>
3.	Micro farming situation	Backyard
4.	Production system	Horticulture based
5	Thematic area	<b>Value addition</b>
6.	Problem	<b>Wastage of tomato when there is surplus production</b>
7.	Source of technology	<b>BAU, Sabou</b>
8.	Technology option	TO <sub>1</sub> = Farmer practice <b>Consume tomato as salad and vegetables</b> TO <sub>2</sub> = <b>Puree with Sodium Benzoate(100mg/kg) finished products</b> TO <sub>3</sub> = <b>puree with Sodium Benzoate(200mg/kg) finished products</b> TO <sub>4</sub> = <b>Puree with Sodium Benzoate(300mg/kg) finished product</b>
9.	No of farmer	10
10.	Critical input	<b>Pulpur, Raw material, Chemical, Container, Glass bottle</b> <b>Performance indicator: Colour, Taste, Keeping quality</b>
11	Perform indicator	
12	<b>Economic Indicator</b>	

**ON FARM TRIAL (Home Science)**

<b>SN</b>	<b>Particulars</b>	<b>Description</b>
1.	Intervention	Home Science
2.	Title	<b>Value addition of banana</b>
3.	Production system	Horticulture based
4.	Thematic area	<b>Value addition</b>
5	Problem	<b>Banana is not uses as versatile product of preservation</b>
6.	Source of technology	<b>BAU, Sabour</b>
7.	Technology option	TO <sub>1</sub> = Farmer practice <b>Consume as vegetables and ripening</b> TO <sub>2</sub> = <b>Peeling + slice cutting + sun drying</b> TO <sub>3</sub> = <b>peeling + slice cutting + treatment with citric acid 1gm/lit +salt+ sun drying</b> TO <sub>4</sub> = <b>Peeling + slice cutting + treatment with citric acid 1gm/lit + salt + KMS + Sun drying finished product</b>
8.	Plot Size	4 Bunch of Banana in each farmer
9.	No of farmer	10
10.	Critical input	<b>Pulpur, Raw material, Chemical, Container,</b>
11	Perform indicator	<b>Colour</b> <b>Taste</b> <b>Keeping quality</b>
12	<b>Economic Indicator</b>	

## ON FARM TRIAL (Extension Education)

### 1.Attributes and impact of technology intervened through Front Line Demonstration (FLD)

<b>Title</b>	<b>Impact of major training programmes conducted by KVK, Katihar</b>
Specific Objective	To study the training effectiveness To study training satisfaction to study the impact of training
Locale	Katihar District
Research design	Exploratory and Diagnostic design of social research
sampling plan	Population study 100 trained farmers

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### Attributes and impact of technology intervened through Front Line Demonstration

Title	<b>Attributes and impact of technology intervened through Front Line Demonstration (FLD)</b>
Specific Objectives	1. To study the perceived attributes of the technology intervened through FLD demonstrated by KVK, Katihar
	2. To study impact of the FLD demonstrated by KVK, Katihar
Locale	Katihar District
Research design	Exploratory and diagnostic
Sampling plan	Population study (100 beneficiaries of 10 FLD by KVK, Katihar)



### 3. Identification and documentation of ITK:

Title	Identification and documentation of ITK
Specific Objectives	1. To identify the ITK possessed by the farmers about agriculture and allied fields in Katihar District
	2. To document the ITKs identified according to different areas/system in agriculture and allied fields
	3. To undertake validation of the identified ITKs on the basis of scientific knowledge
	4. To disseminate the validated ITKs to the intended users
Locale	Katihar District
Research design	Exploratory
Sampling plan	Total 100 respondents (20 from each <i>block</i> )

### 15. Scientific Advisory Committee

Date of SAC meeting held during 2015-16	Proposed date
	08.10.2015

### 16. Soil and water testing

	No. of samples to be analyzed
Soil	<b>1000</b>
Plant	-
Manure	-

### 17. Status of infrastructure

Infrastructure	Complete	Under construction	Not started	Reasons, if not started
Administrative building			Not started	Not Sanctioned
Trainees' hostel	Completed			
Staff quarter	Completed			
Demonstrations: I) IFS II) Mushroom Cultivation Unit	Complete			