KRISHI VIGYAN KENDRA, KATIHAR (BIHAR)

भाकृअनुप
ICAR

ACTION PLAN

(April 2014 -March 2015)

BIHAR AGRICULTURAL UNIVERSITY, SABOUR
BHAGALPUR (BIHAR)

CONTENTS

Action Plan(2014-15)
Krishi Vigyan kendra, katihar

INTRODUCTION

Krishi Vigyan Kendra, Katihar has been established in March, 2004 at Tingachiyaa 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, fibre 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 to :

- 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.

STAFF POSITION

Name of Post	Sanctioned strength	Present position	Date of joining	Remarks
Programme Coordinator	1	Dr. K.M. Singh	24.04.2012	
Subject Matter Specialist (Hort.)	1	Sri Ajay kumar Das	16.06.2009	
Subject Matter Specialist (H.Sc)	1	Smt. Basanti Kumari	20.11.2007	
Subject Matter Specialist (Agronomy)	1	Dr Sushil Kumar Singh	15.06.2009	
Subject Matter Specialist (Ext. Education)	1	Sri Pankaj Kumar	16.11.2009	
Subject Matter Specialist (Soil Science)	1	Dr Rama Kant Singh	16.04.2012	
Subject Matter Specialist (Plant Protection)	1	Vacant		
Programme Assistant(lab. Tech.)	1	Swarna Prabha Reddy	30.102012	
Prog. Asstt. (Computer)	1	Sri Amarendra Kumar Vikas	13.05.2013	
Farm Manager	1	Sri Om Prakash Bharti	05.11.2012	
Assistant	1	Sri Mukesh Kumar	09.04.2013	
Jr. Stenographer	1	Sri Abhay Kumar	17.7.2013	
Driver (Jeep)	1	Sri Dharmendra Kumar	11.04.2005	Contractual
Driver (Tractor)	1	Sri Sanjay Kumar	01.03.2014	Contractual
Supporting Staff	1	Sri Arun Kumar Mandal	01.07.2005	Contractual
Supporting Staff	1	Sri Ajay Kumar	24.01.2014	Contractual
Total	16	15		

LAND WITH THE KVK

▪ Cultivable Land	6.00 ha
▪ Land under shed, godown, road threshing floor	2.00 ha
▪ Orchard /Agro forestry	5.0 ha
▪ Others	7.0 ha
Total land	**20.00 ha**

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-Manihari Road at Tingachhia farm in the district head quarterof 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

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^{o}C and 4.10^{o}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 colour. In basin shaped flood plains, soils are gray coloured, 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, sulphur & 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.

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
- Popularisation of quality seed and planting materials production .
- Adoption of Integrated Nutrient Management for sustainable agriculture.
- Farm women empowerment and Income generation

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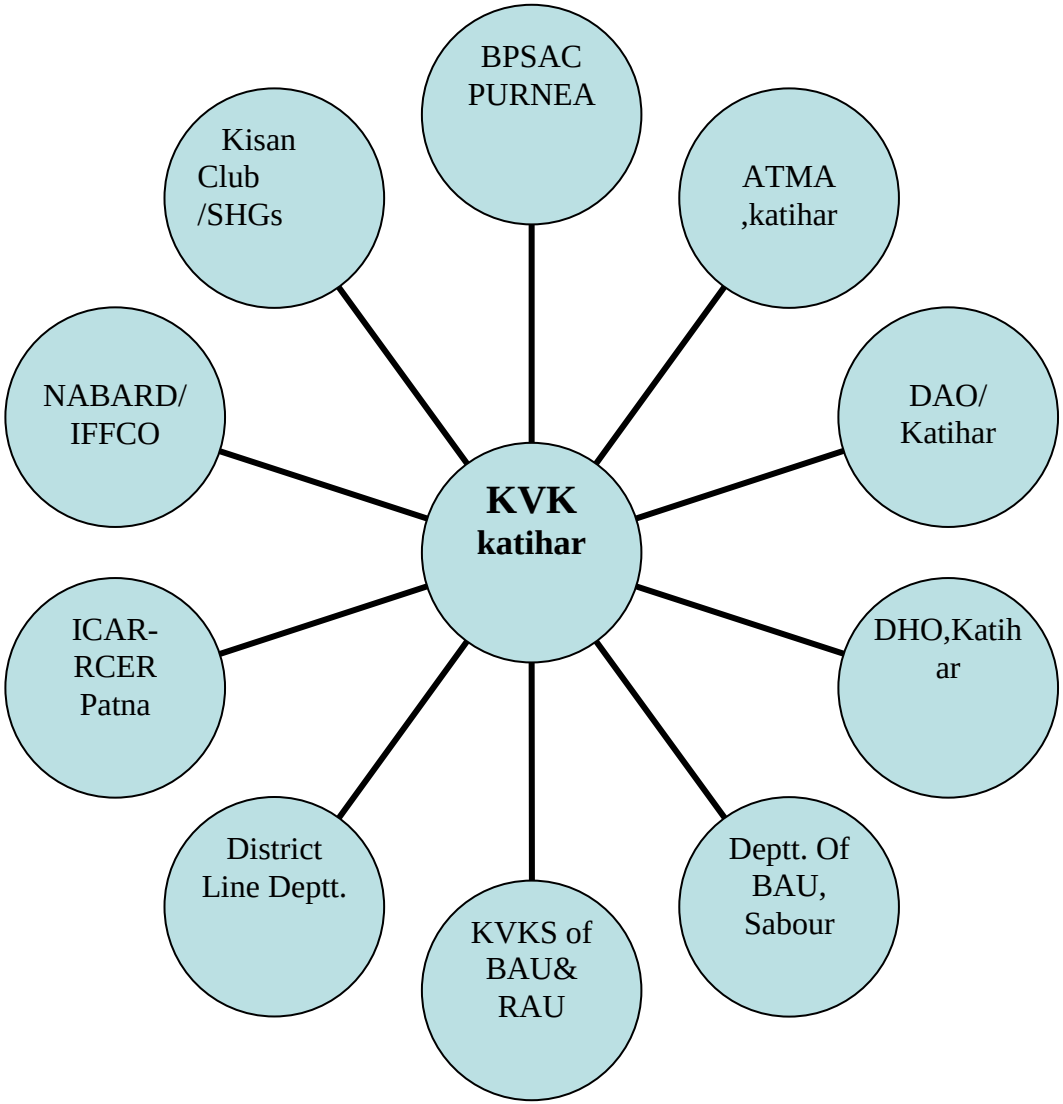
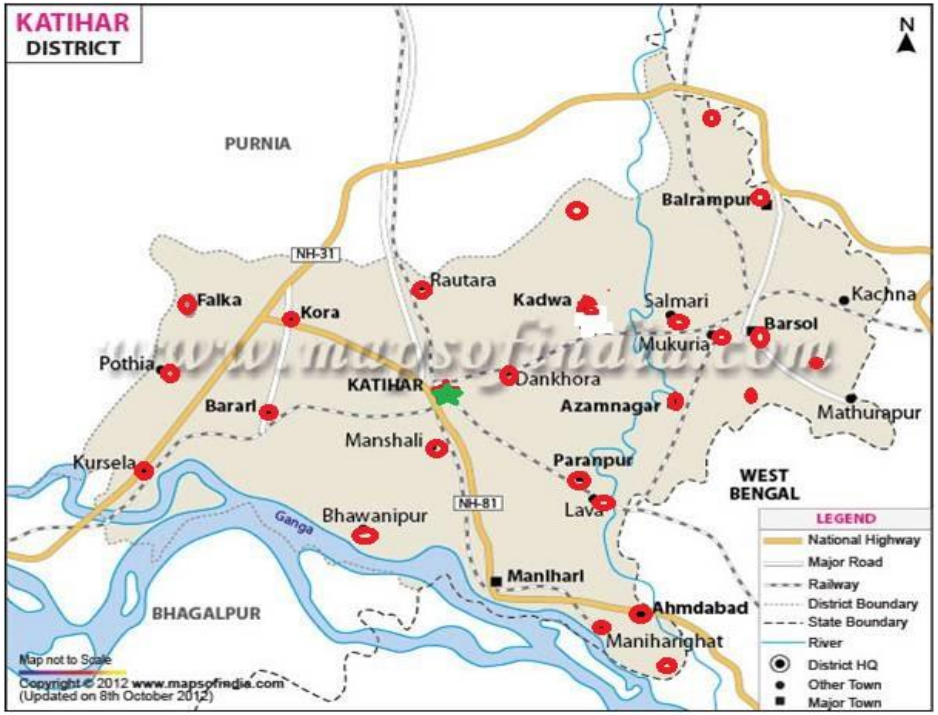
Linkages


BPSAC PURNEA
Kisan Club /SHGs
ATMA ,katihar
NABARD/ IFFCO
DAO/ Katihar
KVK katihar
ICAR-RCER Patna
DHO,Katihar
District Line Deptt.
KVKS of BAU& RAU
Deptt. Of BAU, Sabour



MAP OF KATIHAR

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Krishi Vigyan Kendra, Katihar

Abstract of Training Programme: Action Plan (2014-15)

Discipline	Duration (days)	Participants		
		Male	Female	Total
Practicing farmers				
Horticulture	36	450	000	450
Home Science	51	000	500	500
Agronomy	29	224	101	325
Extension Education	40	262	113	375
Soil Science	32	202	073	275
Total	**188**	**1138**	**787**	**1925**
Rural Youth				
Horticulture	22	143	007	150
Home Science	58	000	500	500
Agronomy	10	068	032	100
Extension Education	18	073	027	100
Soil Science	13	068	032	100
Total	**121**	**352**	**598**	**950**
Extension Functionaries				
Horticulture	10	096	004	100
Home Science	17	000	100	100
Agronomy	08	078	042	120
Extension Education	30	088	032	120

Soil Science	09	088	032	120
Total	**74**	**350**	**210**	**680**
Grand Total (A+B+C) :	**383**	**1840**	**1595**	**3555**

Details of Training Programme-(2014-15)

1. Practicing Farmers & Farm Women

Details of training programme-(2014-15)													
Disci-pline	**Qrt No. & Month**	**Thematic area**	**Course Title``**	**Duration (days)**	**Venue off/on campus**	**Participants**							
Practicing Farmers & Farm Women						**SC**		**ST**		**Others**		**Total**
						M	**F**	**M**	**F**	**M**	**F**	
Horticulture	April to June	Nursery raising	Nursery raising 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	1	ON/OFF	2	-	3	-	20	-	25
		Export potential Fruit	Makhana production and processing	3	ON/OFF	3	-	2	-	20	-	25
		Plant Propagation	Air layering in guava, litchi & Citrus	3	ON/OFF	3	-	2	-	20	-	25
	July to Sept.	Layout and Management of Orchard	Orchard Management of Fruiting plants	2	ON/OFF	3	-	2	-	20	-	25
		Protected cultivation	Cultivation of Vegetable and effect of poly tunnel.	3	ON/OFF	2	-	3	-	20	-	25
		Production and management Technonogy	Scientific cultivation of elephant Foot Yam	3	ON/OFF	3	-	2	-	20	-	25
		Cultivation of Fruits	Management of Fruiting Plants	2	ON/OFF	3	-	2	-	20	-	25
		Cultivation of Fruits	Scientific cultivation of Banana	1	ON/OFF	5	-	-	-	-	20	25
	Oct to Dec	Production and Management Technology	Production and management for Medicinal and aromatic plants.	2	ON/OFF	3	-	2	-	20	-	25
		Seed production	Seed production techniques of potato	1	ON/OFF	3	-	2	-	20	-	25
		Cultivation of Fruits	Scientific cultivation and protection of banana crops	2	ON/OFF	3	-	2	-	20	-	25

		Value addition	Preservation of fruit and vegetable production	2	ON/OFF	3	-	2	-	20	-	25
		Nursery Raising	Seed raising for summer vegetable	1	ON/OFF	3	-	2	-	20	-	25
	Jan to March	Production and management	Scientific cultivation of garlic and spices crops	2	ON/OFF	5	-	-	-	20	-	25
		Rejuvenation of old orchard	Rejuvenation of Fruit Crops	2	ON/OFF	5	-	-	-	20	-	25
		Layout and management of orchards	HDP of Fruit crops	1	ON/OFF	5	-	-	-	20	-	25

Agronomy	April to June 14	Nursery Management	Nursery Management in Paddy	2	ON/OFF	9	1	1	4	8	2	25
		Water Management	Irrigation management in boro rice	2	ON/OFF	7	2	1	4	8	3	25
		Cropping system	Management of Rice wheat /maize cropping system	3	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
		ICM	Agronomic management practices of Redgram	2	ON/OFF	7	2	1	4	8	3	25
	July to Sept 14	Crop diversification	Diversification of Rice Wheat Cropping system	3	ON/OFF	9	1	1	4	8	2	25
		Integrated Crop Management	Integrated crop Management in Paddy	2	ON/OFF	7	2	1	4	8	3	25
		Fodder Production	Production technique of Fodder crops	3	ON/OFF	8	2	1	4	8	2	25
	Oct. to	Seed Production	Seed Production of Wheat	2	ON/OFF	9	1	1	4	8	2	25

	Dec. 14	Integrated farming	To increase the skill of farmers about Integrated farming	2	ON/OFF	8	2	1	4	8	2	25
		RCT	Sowing of Wheat by ZTD technology	2	ON/OFF	8	2	1	4	8	2	25
		Weed management	Weed control practices in wheat	1	ON/OFF	9	1	1	4	8	2	25
		ICM	Cultivation of Rabi pulses	1	ON/OFF	9	1	1	4	8	2	25
	Jan to march,15	Integrated crop Management	Agronomic management practices of Green gram	2	ON/OFF	8	2	1	4	8	2	25
		Weed Management	Weed Management on Boro Rice	2	ON/OFF	9	1	1	4	8	2	25
		Production of Organic Input	Production and use of organic manure	3	ON/OFF	8	2	1	4	8	2	25

Extension Education	April - June, 14	Group Dynamics	Formation and management of SHGs	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	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	2	ON/OFF	9	1	1	4	8	2	25
	July - Sept., 14	Mobilization of social capital	Income generation	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
		PRA Technique	Agro ecosystem analysis of adopted village	4	ON/OFF	9	1	1	4	8	2	25
	Oct. - Dec,14	Leadership development	Leadership development for technology dissemination	2	ON/OFF	8	2	1	4	8	2	25
		Production technologies	Production enhancement of field crops	2	ON/OFF	8	2	1	4	8	2	25
		Group Dynamics	Formation and management of SHGs	2	ON/OFF	9	1	1	4	8	2	25
	Jan. - March, 15	Group Dynamics	Formation and Management of SHGs	2	ON/OFF	8	2	1	4	8	2	25
		Leadership development	Leadership development for technology dissemination	5	ON/OFF	9	1	1	4	8	2	25

Home Science	April – June, 14	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
		Capacity building	Increase the knowledge & skill of rural women for subsidiary income	6	ON/OFF	-	5	-	2	-	18	25
	July - Sept, 14	Household food security by kitchen	Importance of Nutritional Kitchen gardening and management	2	ON/OFF	-	10	-	5	-	10	25

		gardening and nutrition gardening										
		Value Addition	Value addition of mango Produts	3	ON/OFF	-	5	-	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		ON/OFF		10	-	5	-	10	25
	Oct. - Dec., 14	Minimization of Nutrient loss in processing	Processing of Makhana and Value addition	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	Tailoring stiching, embriodary for Income generation	2	ON/OFF	-	5	-	5	-	15	25
		Rural crafts	Preparation of soft toys by rural women	2	ON/OFF	-	5	-	5	-	15	25
	Jan. - March, 15	Value addition	Seasonal fruit and vegetable 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
		Location specific drudgery reduction technologies	Location specific drudgery reduction technologies in Agriculture	2	ON/OFF	-	3	-	2	-	20	25

Soil Science	April to Jun'14	Soil and water testing	Methods of soil sampling and analysis	3	ON/OFF	8	2	2	-	14	-	25
		Production and use of organic inputs	Vermicompost Production techniques , and its use in crops and cropping systemTechnique	3	ON/OFF	8	2	1	4	8	2	25
		Production and use of organic inputs	Methods of Biofertiliser production and its use	3	ON/OFF	9	1	1	4	8	2	25
	July to Sept 14	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
	Sept to Nov 14	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
	Dec 14 to march 15	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

2. 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	
Rural Youth												
Horticulture	April to June	Commercial fruit production	Production and Management of Makhana	3	ON/OFF	3	1	1	-	20	-	25
		Commercial fruit production	Production and Management of Banana	3	ON/OFF	3	1	1	-	20	-	25
		Nursery Management	Nursery management of vegetable crop and poly tunnel technology	5	ON/OFF	3	1	2	1	18	-	25
	July to Sept	Planting Material Production	Plant Propagation techniques of fruit crops	3	ON/OFF	3	1	1	-	30	-	25
	Oct to Dec	Protected cultivation	Protected cultivation of vegetable and Fruit crops	3	ON/OFF	3	1	2	-	19	-	25
		Seed Production	Seed Production of vegetables	3	ON/OFF	3	1	2	-	19	-	25
		Value addition	Preservation of seasonal fruits and vegetables	3	ON/OFF	3	1	2	-	19	-	25
	Jan to March	Training and pruning of orchards	Training and pruning of orchards	5	ON/OFF	3	1	2	-	19	-	25
Agronomy	April to June	Vermiculture	Vermicomposting for income generation	3	ON/OFF	7	2	1	4	8	3	25
	July to Sept.	Seed production	Seed Production of Paddy	3	ON/OFF	9	1	1	4	8	2	25
	Oct. to Dec.	Integrated farming	Integrated farmingSystem models	3	ON/OFF	7	2	1	4	8	3	25
		Seed production	Seed plot technique for healthy potato tuber production	3	ON/OFF	3	-			22		25
	Jan to March	Seed production	Seed Production of Jute and green gram	3	ON/OFF	9	1	1	4	8	2	25

Home Science	April - June	Value Addition	Preparation of Potato chip & Papad	3	ON/OFF	-	5	-	3	-	17	25
		Rural Craft	Preparation of decorative items from locally available materials	3	ON/OFF	-	5	-	3	-	17	25
		Tailoring & Stitching	Knitting, stitching, embroidery works on clothes & textile designing	5	ON/OFF	-	5	-	2	-	18	25
	July-Sep..	Mushroom Production	Cultivation of different types of Mushroom	3	ON/OFF	-	5	-	5	-	15	25
		Value addition	Preservation of sesonal fruit and vegetables.	3	ON/OFF	-	3	-	2	-	20	25
		Household Food Security	Importance of Kitchen garden & It Management of Nutrition garden	2	ON/OFF	-	3	-	2	-	20	25
	Oct. - Dec	Rural Craft	Preparation of different types of embroidery/painting works	3	ON/OFF	-	3	-	2	-	20	25
		Mushroom Production	Cultivation of different types of Mushroom	3	ON/OFF	-	5	-	5	-	15	25
		Prod of small tool	Production of small tool for drudgery reduction	2	ON/OFF	-	3	-	2	-	20	25
	Jan. - March	Value addition	Preservation of seasonal fruit andvegetable	3	ON/OFF	-	3	-	2	-	20	25
		Small scale processing	Processin of Makhana	3	ON/OFF	-	3	-	2	-	20	25
		Storage loss minimization	Different methods of grain storage	2	ON/OFF	-	5	-	5	-	15	25
Extension Education	April to June	Entrepreneurial development of farmers/youths	Entrepreneurship Development through dairy	3	ON/OFF	9	1	1	4	8	2	25
	July to Sept	Entrepreneurial development of farmers/youths	Entrepreneurship Development through fisheries	3	ON/OFF	7	2	1	4	8	3	25
	Oct to Dec	Entrepreneurial development of farmers/youths	Entrepreneurship Development through Beekiping	5	ON/OFF	8	2	1	4	8	2	25
	Jan to March	Entrepreneurial development of farmers/youths	Entrepreneurship Development through Poultry	5	ON/OFF	9	1	1	4	8	2	25

Soil science	April to June	Vermiculture	Vermicomposting for income generation	3	ON/OFF	7	2	1	4	8	3	25
	July to Sept.	Bio-fertilizer production	Bio-fertilizer production marketing	3	ON/OFF	9	1	1	4	8	2	25
	Oct. to Dec.	Vermi-compost production	Vermi-compost production and marketing	3	ON/OFF	7	2	1	4	8	3	25
	Jan to March	Organic manures production	Organic manures production techniques	3	ON/OFF	9	1	1	4	8	2	25

3. Training for Extension Functionaries

Discipline	**Qrt No. & Month**	**Thematic area**	**Course Title**	**Dura-tion (days)**	**Venue off/on campus**	**Participants trainees (Nos)**						
Extension Functionaries						**SC**		**ST**		**Others**		**Total**
						M	**F**	**M**	**F**	**M**	**F**	
Horticulture	April to July	Planting Material Production	Plant Propogration techniques in fruit crop	2	ON/OFF	2	1	2	-	22	-	25
	Aug to Sept	Layout and management of Orchard	Lay out and Mgt 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 Fruit Orchard	2	ON/OFF	3	1	2	-	19	-	25
Agronomy	April to June	Productivity enhancement in field crops	Productivity enhancement in field crops through SRI	2	ON/OFF	7	2	1	4	11	5	30
	April to June	Seed Production	Seed production of paddy	2	ON/OFF	7	2	1	4	11	5	30
	July to Sept.	Integrated pest Management	Integrated pest Management in Kharif crops	2	ON/OFF	8	2	1	4	11	4	30
	Oct. to Dec.	Integrated	Integrated farming system	2	ON/OFF	7	2	1	4	11	5	30

		farming system										
	Jan. to March	Integrated pest Management	Integrated pest Management in boro rice crop	2	ON/OFF	8	2	1	4	11	4	30
Home Science	April to June	Household food security	Nutritional backyard kitchen gardening.	2	ON/OFF	-	5	-	3	-	18	25
	July to Sept	Women and Child care	Balanced nutrition of women and child for good health	2	ON/OFF	-	5	-	3	-	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	-	3	-	18	25
	Jan to March	Gender main streaming	Entrepreneurship development and women empowerment	2	ON/OFF	-	5	-	3	-	18	25
Extension Education	April to June	Formation and Management of SHGs	Formation and Management of kissan club and SHGs	2	ON/OFF	7	2	1	4	11	5	30
	July to Sept	Leadership development	Leadership development for agrotech dissemination	2	ON/OFF	8	2	1	4	11	4	30
	Oct to Dec	Information networking among farmers	Marketled extention	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
Soil science	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 mannuring 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 vermicompost Production and its use in crops	2	ON/OFF	8	2	1	4	11	4	30

Thematic Area	Title	Duration (days)	Venue	No. of Participants					
				SC	ST	Others	M	F	Total
(4)Sponsored									
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
Integrated pest Mgt	Management of diseases and pest in kharif crops	3	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 microirrigation 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 for women Empowerment	2	ON/OFF	5	2	23	30		30
Enterpreneurship Development	Enterpreneurship Development through poultry	4	ON/OFF	5	2	23	30		30
(5)Vocational									
Seed Production	Seed production of paddy and Wheat		ON/OFF	5	2	23	25	5	30
Planting material Production	Techniques of Graft , gooty	7	ON/OFF	5	2	23	25	5	30
Seed Production	Seed Plot 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	Sustainable Beekeeping	3	ON/OFF	5	2	23	25	5	30
Mushroom Production	Mushroom Production technology	4	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 ,gooties 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	Textile designing, Stitching ,embroidery works on clothes	10	6	5	2	23	0	30	30
Value Addition	Preservation of seasonal fruits and vegetables	5	10	5	2	23	0	30	30

7. Frontline demonstration

Season	Crop/Enterprise	Component/Variety	No. of demonstration	No. of area (ha)
Kharif	Paddy	Sabour Surbhit	15	5
	Paddy	Sabour Ardhjal	15	5
	Paddy	RM-1/R.Sweta	15	5
	Jute	JRO128	15	5
	Arahar	NDA-1	15	5
	Banana	G-9	10	0.4
	Rainy season vegetables	-	10	01
	Paddy	BGA/Azolla	10	05
	Dhaincha green mannuring		10	02
	Wheat	HD-2733	15	8
	Azotobactor, PSB and R.Culture		10	05
Rabi	ZTT	HD-2985/DBW-14	15	8
	Mustard	R.Suphlam	20	10
	Tomato	Sel-1	20	02
	Cauliflower	Sabour Agrim	10	01
	Pea	Prabhat/Harbhajan	10	01
Zaid	Strawberry	Sweetcharlei/Chandler	10	0.4
	Green gram	Samrat	10	05
	Bottle Gourd	Naveen	10	02

	Bhindi	Kashi Pragati	10	01
	Nutritional Garden	Saplings of Banana, Drumstick, Papaya and vegetables	100 families	
	Vegetable Preservation	Sodium benzoate	25 family	

- Seed and planting material production

Seed Production			Plantation Material production		
Crop	Variety	Area(ha)	Crop	No. of graft gooty	Variety
Pigeonpea	NDA-1	2 .0	Mango	5000	-
Mustard	R.Suphlam	1.0	Guava	3000	-
			Litchi	1000	-
			Lemon	1000	-

Extension Activities

Name of Extension Activities	No.	Participants
Field Day	10	500
KisanMela	02	1000
KisanGhosthi	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	360	360
Diagnostic visits	40	450
Exposure visits	02	100
Ex-trainees Sammelan	01	50

Soil health Camp	01	50
Animal Health Camp	02	100
Self Help Group Conveners meetings	02	80
Celebration of important days (specify), World food day, Women in Agriculture day, Parthenium Awareness week, Kisan Diwas	04	200
Total	**568**	**7085**

ON FARM TRIAL(Agronomy)

SN	Particulars	Description
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 (No weeding) 2 Handweeding at 15 and 35 DAS 3 Pritilachlor @ 1kg ai/ha pre emergence + Use of Nail weeder at 25 DAS 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, Fertilizers, Chemicals
13.	Perform indicator	**Technical observations** **Crop: Plant height, no of branches, fibre weight,yield** **Weed: No of weeds/m^2 ,weed flora,**

		Economic Indicator Gross return, Net return, BC ratio
		Farmers' reaction/ feedback

OFT (Horticulture)

SN	Particulars	Description
1.	Intervention	Horticulture
2.	Title	Assessment of different rooting media for air layering in litchi
3.	Micro farming situation	Upland
4.	Production system	Horticulture based
5	Thematic area	.Planting Material Propagation
6.	Problem	Lacking of quality rooting media for making planting materials and poor survival percentage.
7.	Potential solution	Availability of quality planting materials at economical price and a source of income for nursery men.
8.	Source of technology	BAU, Sabour .
9.	Technology option	**1.** NAA 5000 ppm **2.** 1BA 5000 ppm **3.** Sphaganum moss **4.** River bed soil (Farmers Practice)
10.	Plot Size	100 saplings /treatment
11	No of farmer	10
12	Critical input	Rooting Media, Polythene wrapper Lanolin paste
13	Performance indicator	**Technical observations**
	Economic Indicator	Gross Return, Net return Rs/ha B C ratio
		Farmers' reaction/ feedback

OFT Horticulture

SN	Particulars	Description
1.	Intervention	Horticulture
2.	Title	Assessment of Potato + Mustard Intercropping system on productivity and profit
3.	Micro farming situation	Upland/ Medium land
4.	Production system	Maize-Potato/Mustard
5	Thematic area	Crop diversification
6.	Problem	Stagnation of yield and lacking of proper cropping system and Pattern.
7.	Potential solution	Adoption of cropping system and pattern by farmers can uplift the income.
8.	Source of technology	BAU, Sabour and CPRI, Shimla.
9.	Technology option	**1.** Sole Potato(Farmers Practice) **2.** Sole Mustard(Farmers Practice) **3.** Potato + Mustard(5:3) **4.** Potato + Mustard(5:2) **5.** Sole Potato at Recommended geometry(60X20 cm)
10.	Plot Size	0.2 ha
11	No of farmer	05
12	Critical input	Seed, fertilizer and Plant protection chemical
13.	Performance indicator	**Technical observations** **Potato** (A) Plant Population/Sq meter (B) Number of tuber /plant(C) Tuber weight/ plant(D) Tuber Yield/ ha **Mustard** (A) Plant Population/ Sq meter(B) No. of Branches /plant (C) No. of pods/plant(D) No. of seed /Siliqua (E) Test Weight(F) yield/ha.
	Economic Indicator	Gross Return, Net return Rs/ha B C ratio
		Farmers' reaction/ feedback

OFT Agronomy

S.N.	Particulars	Description
1.	Intervention	Agronomy
2.	Title	Assessment of Rice -Wheat Cropping System in Katihar District
3.	Micro farming situation	Medium Irrigated Land
4.	Production system	Rice Wheat
5	Thematic area	Cropping System
6.	Problem	Delayed harvesting of long duration Paddy variety (MTU 7029) facilitates delayed planting and results in poor yield of wheat
7.	Potential solution	Selection of suitable paddy variety will provide sufficient environment for timely sowing of wheat
8.	Source of technology	BAU, Sabour
9.	Technology option	**1.** Farmers Practice (Paddy(MTU 7029) - wheat) **2.** Medium duration Paddy (Sahbhagi) - wheat **3.** .Medium duration Paddy (hybrid Rice) - wheat
10.	Plot Size	0.10 ha
11	No of farmer	10
12	Critical input	Seed ,fertilizer
13.	Performance indicator	Yield and yield attributing characters,Maturity Period,Plant Height
	Economic Indicator	Gross Return, Net return Rs/ha B C ratio
		Farmers' reaction/ feedback

OFT Agronomy

SN	Particulars	Description
1.	Intervention	
2.	Title	Assessment of the sowing time of rabi hybrid maize in Katihar District.
3.	Micro farming situation	Medium irrigated land.
4.	Production system	Rice-Maize/Wheat
5	Thematic area	ICM
6.	Problem	Rabi maize sown in mid-October is facing problems of non grain setting
7.	Potential solution	Shifting in the sowing time of rabi maize may increase grain settingand thereby yield.
8.	Source of technology	R.A.U, Pusa.
9.	Technology option	1. Farmers practice (sowing of rabi maize between 15-25 October. 2. Sowing of rabi maize on 30 October. 3. Sowing of rabi maize on 10 November.
10.	Plot Size	0.20 ha
11	No of farmer	8
12	Critical input	Seed (Hybrid Maize)
13.	Perform indicator	**Technical observations** 1. No. of Cobs/Plant 2. No. of Grains/Cob 3. Grain Yield(q/ha)
		Economic Indicator 1. Cost of Cultivation (Rs./ ha) 2. Gross return (Rs./ha),Net return(Rs/ha) **3.** B:C ratio
		Farmers' reaction/ feedback

ON FARM TRIAL (Home Science)

SN	Particulars	Description
1.	Intervention	Home Science
2.	Title	Assessment of Pre and Post harvest treatment for storage of Onion.
3.	Micro farming situation	Upland/ medium land
4.	Production system	Maize-Poato/Onion
5	Thematic area	Grading and standardization
6.	Problem	Farmers grow onion with good tonnage but cannot get reasonable price due to heavy losses in storage. Onion comes in sprouting very soon after harvesting.
7.	Potential solution	Sprouting and duration of storage may be checked with the suitable spray of chemicals on onion bulb.
8.	Source of technology	BAU,Sabour
9.	Technology option	1. Foliar spray of MH @ 1500 ppm at 15 days before harvesting. 2. Foliar spray of MH @ 1500 ppm at 15 days after harvesting. 3. Foliar spray of Sodium Chloride @ 10 % at 15 days before harvesting. 4. Farmers practice(Holding irrigation at 15 days before harvesting/No treatment).
10.	Plot Size	0.2 ha
11	No of farmer	8
12	Critical input	Chemicals
13.	Perform indicator	**Technical observations** (1) Time of Sowing, (2) Time of Harvesting, (3) Yield (Qtl/ha), (4) weight loss after 150 days of harvesting, (5) Rotting %, (6) Sprouting %
	Economic Indicator	Net return, B:C ratio
		Farmers' reaction/ feedback

ON FARM TRIAL (Home Science)

SN	Particulars	Description
1.	Intervention	Home Science
2.	Title	Assessment of different artificial practices for ripening of banana
3.	Micro farming situation	Backyard
4.	Production system	Horticulture based
5	Thematic area	Value addition
6.	Problem	Health hazard due to use of calcium carbide as a ripening agent
7.	Potential solution	The process of hydrocooling and safe treatment may solve the problem concerned.
8.	Source of technology	BAU, Sabour
9.	Technology option	1. Farmer practice (Use of calcium carbide) 2. Hydrocooling + etheral treatment 150 PPM 3. Etheral treatment (coating of Etheral solution on central steam)
10.	Plot Size	3 bunch from one family
11	No of farmer	10
12	Critical input	Chemicals , Hydrocooling, raw material
13.	Perform indicator	**Colour** **Taste** **Selflife at room temperature** **Period and rate of ripening**
14.	**Economic Indicator**	Net return, B:C ratio
		Farmers' reaction/ feedback

OFT (Soil Science)

SN	Particulars	Description
1.	Intervention	Soil Science
2.	Title	Assessment of micronutrient application on growth and yield of Paddy (*Oryza sativa* L.)
3.	Micro farming situation	Medium land
4.	Production system	Paddy- wheat
5	Thematic area	Integrated Nutrient Management
6.	Problem	Farmers generally go for fertilizer containing NPK application with no use of micronutrients. In Koshi region, micronutrient deficiency, including zinc & B in rice is causing substantial yield losses.
7.	Potential solution	The application of micronutrients especially Zn and B through right dose and source may increase the growth and yield of Paddy.
8.	Source of technology	BAU, Sabour
9.	Technology option	TO_1= Farmers Practice (100:40:20 kg N: P_2O_5: K_2O /ha through urea,DAP, and Muriate of Potash) TO_2= TO_1 + Zinc Sulphate @ 25 $kgha^{-1}$ TO_3= TO_1 + Borax @ 15 $kgha^{-1}$ TO_4= TO_1 + Zinc Sulphate @ 25 $kgha^{-1}$ + Borax @ 15 $kgha^{-1}$
10.	Plot Size	0.10 ha
11	No of farmer	10
12	Critical input	Seed ,Fertilizers,Micronutrients
13.	Perform indicator	**Technical observations** **Growth,Yield Attributes,Maturity,Soil Test before and After Trial,**
		Economic Indicator 4. Cost of Cultivation (Rs./ ha) 5. Gross return (Rs./ha) **6.** B:C ratio
		Farmers' reaction/ feedback

On Farm Trail (Soil Science) 2014-15

SN	Particulars	Description
1.	Intervention	
2.	Title	Effect of Integrated Nutrient Management practices on yield of Mustard (*Brassica juncea* L.)
3.	Micro farming situation	Medium irrigated land
4.	Production system	Rice-Wheat
5	Thematic area	INM
6.	Problem	Low yield of Mustard due to Imbalance Nutrient Application
7.	Potential solution	To improve yield performance of mustard by the use of recommended doses on soil test based recommended doses of fertilizers
8.	Source of technology	BAU, Sabour
9.	Technology option	TO_1 = Farmer Practices (Urea 25 kg, 50 kg DAP, 25 kg MOP) TO_2 = RDF through SSP TO_3 = Soil Test Based Fertilizers Application TO_4 = Soil Test Based Fertilizers Application (75 % throughchemical fertilizers + 25 % through organic fertilizers)
10.	Plot Size	0.10 ha
11	No of farmer	10
12	Critical input	Seed ,Fertilizer
13.	Perform indicator	**Technical observations** 1. Soil analysis 2. Growth attributes 3. Yield attributes 4.Yield
		Economic Indicator 1. Cost of Cultivation (Rs./ ha) 2. Gross return (Rs./ha) **3.** B:C ratio
		Farmers' reaction/ feedback

ON FARM TRIAL (Soil Science)

SN	Particulars	Description
1.	Intervention	Soil Science
2.	Title	Effect of integrated nutrient management practices on yield and quality of Jute (*Corchorous olitorius*) p
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 by application of INM practices.
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+Org.Manure (5 t/ha F.Y.M)+ Biofertilizer (seed treatment with azotobacterand PSB) TO4 : N:P:K (75%) + FYM(25%) on STV
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	**Technical observation** Plant height, Plant diameter, quality, fibre Yield
		Economic Indicator Gross return, Net return, BC ratio
		Farmers' reaction/ feedback

ON FARM TRIAL (Soil Science)

SN	Particulars	Description
1.	Intervention	Soil Science
2.	Title	Assessment of the effect of sulphur on Onion Production
3.	Micro farming situation	Medium land
4.	Production system	Vegetables - Vegetables
5	Thematic area	Fertilizer Management
6.	Problem	Low Yield of Onion due to no use of sulphur
7.	Potential solution	Increase the yield and qualities of onion through application of sulphur nutrient.
8.	Source of technology	ZREAC (Zonal Research and Extension Advisory Council,) Jaipur
9.	Technology option	TO 1 = Farmers Practice (Urea 50 kg , DAP 50 kg) TO2 = 100:50:100::N:P_2O_5:K_2O kg/ha + 4 q/ha Zypsum as basal application TO3 =100:50:100::N:P_2O_5:K_2O kg/ha + 10 kg sulphur 80% WDG / ha through top dressing
10.	Plot Size	0.10 ha
11	No of farmer	10
12	Critical input	Seed, organic and inorganic fertilizers, chemicals
13.	Perform indicator	**Technical observation** Fresh weight (qt/ha), Dry weight (qt/ha), Bulb diameter (cm), Neck diameter (cm), Number of splitted bulb (per sq mt)
		Economic Indicator Gross return, Net return, BC ratio
		Farmers' reaction/ feedback

Title	**Impact Analysis of major training programmes conducted by KVK, Katihar**	
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	
Methodology	Variables and their measurements:	
	Profile of the trainees:	**Measurement**
	Education	No. of standards of formal schooling passed
	Experience	No. of years for intervened crop cultivation
	Farm size	Total land possessed by the beneficiary (ha.)
	Annual income	Total income generated in the study year
	Socio-economic status	Scale developed by Thakare, 2004 (appendix II, Sr. No. 1)
	Innovativeness	Scale developed by Singh, 1972 (appendix II, Sr. No. 2)
	Scientific orientation	Scale developed by Supe, 1969 (appendix II, Sr. No. 3)
	Economic motivation	Scale developed by Supe, 1969 (appendix II, Sr. No. 4)
	Risk preference	Scale developed by Supe, 1969 (appendix II, Sr. No. 5)
	Training satisfaction indicators:	The responses for each item will be sought on three point continuum as fully satisfied, partially satisfied and not satisfied by assigning the score of 2, 1 and 0
	Technical competence Facilities provided Communication Mode	Respectively (appendix II, Sr. No. 6). The sum raw scores for each of the training satisfaction parameter will be converted into index
	Training effectiveness indicators:	
	Topics covered Utility of topics Relevance of lectures Fulfillment of expectation Practical Orientation Relevance of study material Quality of training	The responses for each item will be sought on three point continuum as applicable and the scoring will be done accordingly (appendix II, Sr. No. 7). The sum raw scores will be converted into training effectiveness index
	Impact	The average change in following impact indicators will be the Training Impact Score

	Common Impact Indicators	Applicable for all training programmes Test will be developed in line to the objectives and content of the trainings. Same test will be administered before and after the training. Responses will e sought on continuum applicable and Scoring will be done accordingly. Raw scores will be converted into indices. Per cent change over before will be calculated.
	Change in knowledge	
	Change in attitude	
	Change in skills	
	Specific Impact indicators	
	Change in Area	Applicable for specific training programmes The data will be calculated before and after the training. The per cent change over before will be calculated.
	Change in Production	
	Change in Productivity	
	Change in Employment	

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

Title	**Attributes and impact of technology intervened through Front Line Demonstration (FLD)**
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
Methodology:	
Variables and their measurements	
Profile of beneficiaries	**Measurement**
Education	No. of standards of formal schooling passed
Experience	No. of years for intervened crop cultivation
Farm size	Total land possessed by the beneficiary (ha.)
Area under enterprise	Actual total Land put under the enterprise by the beneficiary
Annual Income	Total income generated in the study year
Socio-economic status	Trivedi scale with minor modification
Innovativeness	Suitable Scale to be identified
Scientific orientation	Suitable Scale to be identified
Economic motivation	Suitable Scale to be identified
Risk preference	Suitable Scale to be identified
Attributes of technology	
Relative Advantage	The responses for each item will be sought on continuum as stated in the scale and scoring will be done as per the

Compatibility Complexity Observability	norms of the scale The sum raw scores will be converted into perceived Attribute Index
Impact	The average change in following impact indicators will be the Training Impact Score
Change in Knowledge Change in Attitude Change in Adoption	Test will be developed in line to the objectives and content of the FLD. Same test will be administered before and after the training. Responses will be sought on continuum applicable and Scoring will be done accordingly. Raw scores will be converted into indices Per cent change over before will be calculated.
Change in area Change in production Change in productivity Change in income Change in employment	The data will be calculated before and after the training. The per cent change over before will be calculated.
Statistical methods:	
Index	$\text{Index} = \frac{\text{Actual obtained score}}{\text{Maximum obtainable score}} \times 100$
Per cent change over before	$\text{\% change over before} = \frac{\text{Score (after)} - \text{Score (before)}}{\text{Score (before)}} \times 100$
Composite Impact Index	Composite Impact Index will be calculated statistically using methodology stated by Prem Narain, 1991 (appendix III)
Categorization	The categorization will be made on the basis of equal interval method using minimum and maximum obtainable scores
Distributional analysis Relational analysis Other statistical test	Mean, Standard Deviation, Frequency, categorization

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 *block*)**
Methodology:	
Identification of ITKs	Personal interviews with the respondents
Documentation of ITKs	According to: different areas and systems in agri. and allied areas like Agriculture, Horticulture, Dairying, Home Science, Post Harvest Technology

11. Scientific Advisory Committee

Date of SAC meeting held during 2014-15	Proposed date
01	

12. Soil and water testing

	No. of samples to be analyzed
Soil	500
Plant	-
Manure	-

15. Status of infrastructure

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