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# KRISHI VIGYAN KENDRA, KATIHAR

## INTRODUCTION

Krishi Vigyan Kendra, Katihar established in March 2004 is situated in the district of Katihar in Kosi Zone in the North-East alluvial plain of North Bihar. The Vigyan Kendra is situated at the premises of Jute Research Station. During short span life of three years Krishi Vigyan Kendra, Katihar has shown its presence in the district by imparting short and long term vocational training to farmers', rural youth and farm women. The recent technologies for sustainable agriculture were disseminated to the extension personal posted in the district. Front Line Demonstration on oilseeds, pulses and other crops were conducted successfully. This K.V.K. will go a long way for extension activities in the district.

## SITUATION

Krishi Vigyan Kendra, Katihar is situated in the south-eastern portion of North Bihar plain between 25°12'E and 88°5'E longitude, 37.6° m above mean sea level and about 3 KM from the Katihar Railway Station which falls with in Agro-climatic Zone-II. The climate is sub-tropical humid having mean maximum and minimum temperature between 46°C and 4.10°C respectively. The average annual rainfall in the district is about 1422 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. Up lands shows micronutrient differences such as zink, sulphur, Boron etc. The cropping system varies depending on rainfall, land situation and water accumulation in the locality. There are three distinct farming situations having specific characteristic which determine crop sequence/cropping pattern which are : Sandy upland : Characteristics by nitrogen deficiency and light texture. This situation needs to exploited and suitable agricultural technologies should be tested. Medium lowland : Water accumulation upto 0.5 meter water coupled with acidic and salinity, alkalinity patches and low availability of phosphate and other nutrient should be identified and steps to eliminate the problem should be chalked out. Diara land of Ganga, Kosi and Mahananda.

Deep Water areas (Chour & tall) and diara areas of Kosi, Mahananda and Ganga should be identified and measures for suitable cropping pattern should be adopted. The low lying areas of this district has already been replaced by Boro Rice. Suitable varieties and fruitful technologies should be tested. Cultivation of Makhana and Waternuts should be popularized and advanced technologies evolved should be adopted and farmers should be made well acquainted by training and demonstrations.

### **PROBLEM IDENTIFIED**

Regional Research Station, Agwanpur, Saharsa organizes Zonal Research and Extension Advisory Committee meeting twice in a year in which Scientists working in Kosi Zone, Extension Officers and Officers of Agricultural Department and progressive farmer's of the zone participate. The problems raised by the farmers and Extension Officers are scrutinized and selected as permandate. New problems identified are tackled by the scientists posted in the zone. Such meetings should also be organized at KVK Katihar and problems raised by farmers should be solved by the scientists of different discipline.

Apart from the above, problems are being identified at district level Kharif and Rabi Workshops organized by the District Agricultural Officer, other department dealing with farmers problems should be identified and regular and close contact is being maintained.

### **THRUST AREA**

- (i) In upland sandy soil area improved technologies, for cultivation of Banana, vegetables, maize, jute, oilseeds and pulses should be introduced.
- (ii) Medium land should be exploited for improved cultivation of cereal crops, cash crops and orchard development including mango, litchi, guava, lemon and pineapple. Beekeeping should also be popularized.
- (iii) Lowland situation is a unique feature of Katihar district. The chour and deep water areas should be exploited for Boro Rice, Makhana and Singhara cultivation. New technologies should be adopted and popularized among the farmers.
- (iv) In diara area of Ganga, Kosi and Mahananda improved methods of cultivation of cucurbits, pulse and oilseeds with summer maize.

**Krishi Vigyan Kendra, Katihar**  
**Abstract of Training Programme : Action Plant (2007-08)**

Discipline	Duration (days)	No. of courses	No. of training days	Participatns		
				Male	Female	Total
<b>A. Practicing farmers</b>						
Agronomy	35	62	2850	325	-	325
Horticulture	49	99	5300	425	-	425
Plant Protection	38	61	3875	375	-	375
Fisheries Science	56	45	2470	400	-	400
Home Science	29	21	2385	-	235	235
<b>Total</b>	<b>207</b>	<b>288</b>	<b>16880</b>	<b>1525</b>	<b>235</b>	<b>1760</b>
<b>B. Rural Youth</b>						
Agronomy	19	51	6075	100	-	100
Horticulture	61	120	17275	400	-	400
Plant Protection	50	100	2075	300	-	300
Fisheries Science	43	26	2860	160	-	160
Home Science	42	27	2350	-	275	275
<b>Total</b>	<b>215</b>	<b>324</b>	<b>30635</b>	<b>960</b>	<b>275</b>	<b>1235</b>
<b>C. Extension Functionaries</b>						
Agronomy	8	24	1920	160	-	160
Horticulture	14	42	2860	280	-	280
Plant Protection	12	08	600	100	-	100
Fisheries Science	14	09	660	80	-	80
Home Science	3	3	225	-	25	25
<b>Total</b>	<b>51</b>	<b>86</b>	<b>6265</b>	<b>620</b>	<b>25</b>	<b>645</b>
<b>Grand Total (A+B+C+D) :</b>	<b>473</b>	<b>698</b>	<b>53780</b>	<b>3105</b>	<b>535</b>	<b>3640</b>

Action Plan on Training Programmes (April 2007-March 2008)												
Discipline	Qrt No. & Month	Course Title	Course Objectives	Duration (days)	Total no. of course	Total No. of trainee days	Venue off/on campus	Participants trainees (Nos)				
								M	W	M	W	Total
<b>For Practicing Farmers &amp; Farm Women</b>												
<b>Agronomy</b>	<b>I Apr.'07 to Jun'07</b>	1. Commercial cultivation of jute crop	To impart knowledge for scientific cultivation and retting management of Jute	3	5	375	On	5	-	20	-	25
		2. Scientific cultivation of summer pulse crops	To develop skill and knowledge for sustainable cultivation	3	5	375	On	5	-	20	-	25
		3. Water weed and nutrient management of Boro paddy	To develop knowledge regarding boro paddy cultivation	2	3	150	Off	5	-	20	-	25
	<b>II July to Sept.'07</b>	1. Scientific cultivation kharif paddy	To impart knowledge regarding variety, water weed nutrient management of paddy	2	3	150	Off	5	-	20	-	25
		2. Improved cultivation kharif pulse crop	To improve the knowledge regarding pulse cultivation	3	5	375	On	5	-	20	-	25

Action Plan on Training Programmes (April 2007-March 2008)												
Discipline	Qrt No. & Month	Course Title	Course Objectives	Duration (days)	Total no. of course	Total No. of trainee days	Venue off/on campus	Participants trainees (Nos)				
								M	W	M	W	Total
		3. Recent technology for kharif oilseed cultivation	To improve know regarding oilseeds cultivation	3	5	375	On	5	-	20	-	25
	<b>III Oct Dec 07</b>	1. Scientific methods for rabi maize, wheat cultivation	To develop knowledge and skill for rabi maize wheat cultivation	2	3	150	Off	5	-	20	-	25
		2. Commercial cultivation of boro paddy	To impart knowledge and skill for boro paddy cultivation	2	3	150	Off	5	-	20	-	25
		3. Recent method for pulse and oilseed cultivation	To improve knowledge regarding pulse oilseed cultivation	5	15	875	On	5	-	20	-	25
		4. Water, weed and nutrient management of wheat, maize and others cereal crops	To improve skill and knowledge regarding management of water weed nutrient of cereals crops	3	4	300	On	5	-	20	-	25
	<b>IV Jan 07 March 07</b>	1. Land preparation and nutrient management for boro paddy cultivation	To develop know how regarding management of nutrient	2	3	150	off	5	-	20	-	25

Action Plan on Training Programmes (April 2007-March 2008)												
Discipline	Qrt No. & Month	Course Title	Course Objectives	Duration (days)	Total no. of course	Total No. of trainee days	Venue off/on campus	Participants trainees (Nos)				
								M	W	M	W	Total
		2. Scientific cultivation of summer pulses and oilseed crop	To imparting knowledge regarding cultivation of pulse and oilseed crop	3	5	375	Off	5	-	20	-	25
		3. Improved cultivation of jute	To improve knowledge regarding cultivation of Jute crop	2	3	150	Off	5	-	20	-	25
<b>Horti-culture</b>	<b>I April to June 07</b>	1. Scientific cultivation of turmeric and ginger	To develop know how regarding scientific cultivation of turmeric and ginger	3	5	375	On	5	-	20	-	25
		2. Scientific method for oal cultivation in Kosi zone	To impart knowledge and skill for oal cultivation	3	5	375	On	5	-	20	-	25
		3. Land preparation and nutrient management for new orchard development	To improve knowledge and skill regarding soil preparation and nutrient management	3	5	375	On	5	-	20	-	25
		4. IPM on summer vegetable crop to avoid environmental pollution	To improve knowledge for low cost tech of insect control	2	3	150	off	5	-	20	-	25

<b>Action Plan on Training Programmes (April 2007-March 2008)</b>												
<b>Disci- pline</b>	<b>Qrt No. &amp; Month</b>	<b>Course Title</b>	<b>Course Objectives</b>	<b>Dura- tion (days)</b>	<b>Total no. of course</b>	<b>Total No. of trainee days</b>	<b>Venue off/on campus</b>	<b>Participants trainees (Nos)</b>				
								<b>M</b>	<b>W</b>	<b>M</b>	<b>W</b>	<b>Total</b>
	<b>II July to Sept 07</b>	1. Recent advances for banana cultivation in Katihar district	To improve skill and knowledge regarding banana cultivation	2	4	200	Off	5	-	20	-	25
		2. Improve technology for seedling raising and cultivation of early cauliflower	To impart knowledge and skill for early cauliflower cultivation	2	4	200	Off	5	-	20	-	25
		3. Scientific cultivation of kharif vegetables (Nursery to field)	To improve know how for kharif vegetables cultivation	3	6	450	On	5	-	20	-	25
		4. Improved technology for tomato cultivation (nursery to field)	To develop knowledge and skill regarding tomato cultivation	3	5	375	On	5	-	20	-	25
	<b>III Oct to Dec 07</b>	1. Scientific cultivation of rabi vegetable crops	To improve knowledge and skill regarding vegetable production in rabi season	3	6	450	On	5	-	20	-	25
		2. Water, weed and nutrient management of Rabi vegetables	To impart knowledge regarding management of water, weed and nutrient of rabi vegetables	3	5	375	On	5	-	20	-	25



Action Plan on Training Programmes (April 2007-March 2008)												
Discipline	Qrt No. & Month	Course Title	Course Objectives	Duration (days)	Total no. of course	Total No. of trainee days	Venue off/on campus	Participants trainees (Nos)				
								M	W	M	W	Total
		3. Water, weed and nutrient management of fruit plants	To improve skill and knowledge regarding management of water weed and nutrient of fruit plants	2	6	300	Off	5	-	20	-	25
		4. Improve technology for harvesting, grading and storage of oal, turmeric and ginger	To develop knowledge for harvesting grading and storage of oal, turmeric, ginger crop	3	5	375	On	5	-	20	-	25
		5. Scientific cultivation of potato	To develop knowledge and skill regarding land preparation and nutrient management of potato cultivation	3	5	375	On	5	-	20	-	25
		6. Recent advances for flower production in Koshi zone	To develop know how for flower production	3	5	375	On	5	-	20	-	25
	<b>IV Jan to March 08</b>	1. Commercial cultivation for onion and garlic crop	To impart knowledge and skill for onion garlic cultivation	2	6	300	Off	5	-	20	-	25
		2. Scientific cultivation of summer vegetable crops	To improve knowledge and skill regarding summer vegetable production (sowing to harvesting	3	6	400	On	5	-	20	-	25

Action Plan on Training Programmes (April 2007-March 2008)												
Discipline	Qrt No. & Month	Course Title	Course Objectives	Duration (days)	Total no. of course	Total No. of trainee days	Venue off/on campus	Participants trainees (Nos)				
								M	W	M	W	Total
		3. Improved technology for cucurbitaceous crop production	To develop knowledge and skill for cucurbitaceous vegetable crop production	2	6	300	Off	5	-	20	-	25
		4. Recent technology for oal cultivation	To develop knowledge regarding oal production	2	6	300	On	5	-	20	-	25
		5. Water, weed and nutrient management of summer vegetables	To develop skill and knowledge regarding water, weed and nutrient in summer vegetable production	2	6	300	Off	5	-	20	-	25
<b>Plant Protection</b>	<b>I April to June 07</b>	1. Insect pest management in cucurbitaceous crops	To acquaint farmers with management of insect of cucurbits	3	5	375	On	5	-	20	-	25
		2. Insect pest management in Boro rice	To increase the skill of farmers about pest management in boro rice	2	4	200	Off	5	-	20	-	25
		3. Storage management of rabi grains	To acquaint the farmers with spoilage of grain in storage and management	2	4	200	On	5	-	20	-	25
		4. Insect and disease management in Bhindi and Brinjal	To increase the skill of farmers about pest and disease management of bhindi and brinjal	3	5	375	On	5	-	20	-	25

**Action Plan on Training Programmes (April 2007-March 2008)**

Discipline	Qrt No. & Month	Course Title	Course Objectives	Duration (days)	Total no. of course	Total No. of trainee days	Venue off/on campus	Participants trainees (Nos)				
								M	W	M	W	Total
	<b>II July to Sept 07</b>	1. Insect and disease management in kharif paddy	To enrich the knowledge of farmers about pest management of kharif paddy	3	5	375	Off	5	-	20	-	25
		2. Insect and disease management in Brinjal	To improve the knowledge of farmers about pest management in brinjal	2	4	200	On	5	-	20	-	25
		3. Management of paddy pests infesting the crop in late stage	To improve the knowledge of farmers about pests management of rice in late stage of the crops	3	4	300	Off	5	-	20	-	25
	<b>III Oct to Dec 07</b>	1. Soil pest management in rabi crops	To acquaint the farmers about soil insects and their management	2	4	200	On	5	-	20	-	25
		2. Insect pest and diseases of rabi oilseed and pulse crops and their management	To improve the knowledge of farmer about pest management in oilseed crops	3	6	450	On	5	-	20	-	25
		3. Insect pest management of rabi vegetables	To enhance the skill of farmers about pest management of rabi vegetables	3	6	450	Off	5	-	20	-	25

Action Plan on Training Programmes (April 2007-March 2008)												
Discipline	Qrt No. & Month	Course Title	Course Objectives	Duration (days)	Total no. of course	Total No. of trainee days	Venue off/on campus	Participants trainees (Nos)				
								M	W	M	W	Total
		4. Insect pest management of fruits with special reference to mango	To impart technical know how about pest management of fruits crops	2	4	200	On	5	-	20	-	25
	<b>IV Jan to March 08</b>	1. Aphid management in oilseed crops	To increase the knowledge of farmers for aphid management	2	4	200	Off	5	-	20	-	25
		2. Pest management in rabi maize	To improve know how about pest disease management of maize	3	3	225	Off	5	-	20	-	25
		3. Insect pest management of rabi vegetables	To improve the knowledge of farmers about pest management in rabi vegetables	3	4	300	On	5	-	20	-	25
		4. Use of herbal insecticides in rabi crops	To increase the use of herbal insecticide for organic farming	2	4	200	On	5	-	20	-	25
<b>Fisheries Science</b>	I April - June, 08	Construction of New Ponds and Renovation of old Ponds	To impart knowledge on scientific considerations to be made for the construction of new ponds and improvement of conditions of old derelict ponds for successful fish culture	3	2	120	OFF	4	-	16	-	20
		-DO-	-DO-	3	2	120	ON	4	-	16	-	20
		Nursery Pond and Rearing Management of Indian Major Carp and Exetic Carps	To impart knowledge and skill on the production of fry and fingerlings of Indian Major Carps & Exotic Carps, one of the most critical inputs in aquaculture	3	2	120	OFF	4	-	16	-	20
		-DO-	-DO-	4	2	160	ON	4	-	16	-	20

Action Plan on Training Programmes (April 2007-March 2008)												
Discipline	Qrt No. & Month	Course Title	Course Objectives	Duration (days)	Total no. of course	Total No. of trainee days	Venue off/on campus	Participants trainees (Nos)				
								M	W	M	W	Total
		Fish harvesting methods	To impart knowledge on the methods of fish harvesting involving less effort and less quality degradation of fish and also to create awareness on the degradation of the aquatic environment by the prevailing practice of the use of chemical toxicants to catch fish	2	1	40	OFF	4	-	16	-	20
		Prestocking Management of Fish Ponds	To impart knowledge and skill on the management of fish ponds prior to stocking of fish seed to get optimum fish production	2	2	80	OFF	4	-	16	-	20
	II July - Sept., 08	Stocking of fish seed and post stocking management of fish pond	To impart knowledge and skill on the scientific way of stocking of fish seed and management of fish ponds afterwards to get optimum fish production	2	2	80	Off	4	-	16	-	20
		- Do-	- Do -	3	2	120	Off	4	-	16	-	20
		Composite Fish Culture	To impart knowledge on the culture of Indian Major Carps and Exotic Carps involving scientific management practices	3	3	180	Off	4	-	16	-	20
		- Do -	- Do -	4	3	240	On	4	-	16	-	20
		Integrated culture of Fish and Freshwater prawn	To impart knowledge on the culture of Fresh Water Giant Prawn with Indian Major carps and Exotic Carps	3	4	240	-	4	-	16	-	20

Action Plan on Training Programmes (April 2007-March 2008)												
Discipline	Qrt No. & Month	Course Title	Course Objectives	Duration (days)	Total no. of course	Total No. of trainee days	Venue off/on campus	Participants trainees (Nos)				
								M	W	M	W	Total
		Paddy cum fish culture	To impart knowledge on the culture of fast growing species of fish compatible with paddy to generate additional source of income through fish production in deep water paddy fields.	2	2	80	Off	4	-	16	-	20
		Integration of aquaculture with livestock	To impart knowledge on how to integrate livestock production systems (cattle, pig, poultry, duck) with aquaculture so that by-products of these farming components can be utilized as a valuable input for fish production resulting in minimisation of input cost in fish culture	4	4	320	Off	4	-	16	-	20
	III. Oct. - Dec,08	Importance of water quality parameters in fish ponds	To impart knowledge on the different water quality parameters affecting fish production and how to maintain them within optimal range	2	1	40	-	4	-	16	-	20
		Management of fish ponds in winter months	To impart knowledge on the management measures to be adopted for fish ponds during declining temperature of winter months	2	1	40	-	4	-	16	-	20
		Measures for the prevention of fish diseases	To impart knowledge on the management of fish ponds so that disease occurrence in fishes can be prevented	2	2	80	Off	4	-	16	-	20

Action Plan on Training Programmes (April 2007-March 2008)												
Discipline	Qrt No. & Month	Course Title	Course Objectives	Duration (days)	Total no. of course	Total No. of trainee days	Venue off/on campus	Participants trainees (Nos)				
								M	W	M	W	Total
		Fish Disease Diagnosis and Control	To impart knowledge on the signs and symptoms of different fish diseases and measures to be adopted to control them	2	2	80	Off	4	-	16	-	20
	IV. Jan. - March, 09	Post winter management of fish ponds	To impart knowledge on how to do water management, manuring and feeding practices to get maximum growth of fishes after winter season	2	3	120	Off	4	-	16	-	20
		Breeding of Common Carp	To impart knowledge and skill on how to obtain hatchling of Common Carp through Induced and Natural breeding in hapa	5	3	300	Off	4	-	16	-	20
<b>Home Science</b>	I. April – June, 08	Preparation of Potato chips, Badi & papad	To develop knowledge and skill of trainees regarding	4	4	480	ON/OFF	-	15	-	15	30
			i) Preparation of Potato chips									
			ii) Preparation of Badi									
		Use of Tomato	To develop knowledge and skill on better utilization of perishable Tomato	3	3	225	ON/OFF	-	9	-	16	25
			i) Preparation of Tomato sauce									
			ii) Preparation of Tomato Pickle									

Action Plan on Training Programmes (April 2007-March 2008)												
Discipline	Qrt No. & Month	Course Title	Course Objectives	Duration (days)	Total no. of course	Total No. of trainee days	Venue off/on campus	Participants trainees (Nos)				
								M	W	M	W	Total
		Preparation of Pickle	To develop knowledge and skill of trainees regarding different types of seasonal pickle making	3	2	150	ON/OFF	-	10	-	15	25
	II. July - Sept, 08	Preparation of Jam/Jellies of mango fruit	To develop knowledge and skill of trainees regarding	3	3	225	ON/OFF	-	10	-	15	25
			i) Preparation of Mango Jam									
			ii) Preparation of Mango Jellies									
		Preparation of Jam/Jellies of Papita & Guava	To develop knowledge and skill of trainees regarding	3	3	225	ON/OFF	-	10	-	15	25
			Preparation of Jellies of Guava									
			Preparation of Jam of Papita									
	III. Oct. - Dec., 08	Care of children and preparation of some nutritional recipes like weaning food	To develop knowledge and understanding of farm women about preparation of weaning food & care of children	3	3	225	ON/OFF	-	9	-	16	25
		Making of macreme work & flower making	To develop knowledge of farm women regarding macreme work & flower making	4	4	480	ON/OFF	-	15	-	15	30



Action Plan on Training Programmes (April 2007-March 2008)												
Discipline	Qrt No. & Month	Course Title	Course Objectives	Duration (days)	Total no. of course	Total No. of trainee days	Venue off/on campus	Participants trainees (Nos)				
								M	W	M	W	Total
	IV. Jan. - March, 09	Proper utilization of Amla	To develop the knowledge and skill of preparation of Amla murabba & pickles	3	3	225	ON/OFF	-	10	-	15	25
	Kitchen garden	To enhance knowledge & skill for subsidiary family income and to improve the health of family members	3	2	150	ON/OFF	-	9	-	16	25	

**Action Plan on Training Programmes (April 2007-March 2008)**

Discipline	Qrt No. & Month	Course Title	Course Objectives	Duration (days)	Total no. of course	Total No. of trainee days	Venue off/on campus	Participants trainees (Nos)				
								M	W	M	W	Total
<b>For Rural Youth</b>												
<b>Agronomy</b>	<b>I April 07 to June07</b>	1. Seed production of paddy	To impart knowledge and skill for production technologies of seed for income generation	5	12	1500	On	5	-	20	-	25
	<b>II July to Sept 07</b>	1. Recent technology for seed production of maize	To improve knowledge and skill regarding seed production	5	12	1500	On	5	-	20	-	25
	<b>III Oct to Dec 07</b>	1. Improve technology for seed production of pulse crop	To develop know how regarding seed production of pulse crops	5	15	1875	On	5	-	20	-	25
	<b>IV Jan to March 08</b>	1. Scientific method for seed production oilseed crop	To improve skill and knowledge for seed production technology of oilseeds	4	12	1200	On	5	-	20	-	25

**Action Plan on Training Programmes (April 2007-March 2008)**

Discipline	Qrt No. & Month	Course Title	Course Objectives	Duration (days)	Total no. of course	Total No. of trainee days	Venue off/on campus	Participants trainees (Nos)				
								M	W	M	W	Total
Horticulture	I April to June 07	1. Nursery and orchard development establishment management of fruit plants	To impart knowledge and skill regarding establishment of nursery and orchard development	5	15	1875	On	5	-	20	-	25
		2. Fruit preservation	To improve knowledge and skill for fruit presentation	6	18	2700	On	5	-	20	-	25
	II July to Sept 07	1. Recent advances in seedling raising, land preparation and nutrient management and varieties of kharif vegetable production	To develop knowledge and skill for kharif vegetable production	3	6	450	On	5	-	20	-	25
		2. Recent technology for early cauliflower and tomato production	To develop skill and knowledge regarding early cauliflower and tomato production	3	6	450	On	5	-	20	-	25
		3. Different method of propagation of litchi guava and lemon	To develop know how regarding production of fruit plants	3	6	450	On	5	-	20	-	25
		4. Scientific cultivation of medicinal and aromatic plants	To improve knowledge and skill regarding production of medicinal and aromatic	3	6	450	On	5	-	20	-	25
		5. Scientific production and establishment of vermicompost unit	To develop knowledge for production of vermin compost	3	6	450	On	5	-	20	-	25

**Action Plan on Training Programmes (April 2007-March 2008)**

Discipline	Qrt No. & Month	Course Title	Course Objectives	Duration (days)	Total no. of course	Total No. of trainee days	Venue off/on campus	Participants trainees (Nos)				
								M	W	M	W	Total
	<b>III Oct to Dec. 07</b>	1. Recent technology for seed production of vegetable	To develop skill and knowledge for rabi vegetable production	3	6	450	On	5	-	20	-	25
		2. Recent awareness of orchard management	To improve knowledge and skill for orchard management	2	4	200	On	5	-	20	-	25
		3. Potato cultivation through TPS	To impart knowledge and skill regarding production through TPS	3	6	450	On	5	-	20	-	25
		4. Scientific seed production of vegetable crops										
		5. Scientific cultivation of mushroom	To develop knowledge regarding mushroom production	3	6	450	On	5	-	20	-	25
	<b>IV Jan to March 08</b>	1. Scientific seed production of vegetable crops	To develop knowledge and skill for vegetable production	3	6	450	On	5	-	20	-	25
		2. INM and IWM of summer vegetable crop	To improve skill and knowledge for INM and IWM in vegetable production	3	6	450	On	5	-	20	-	25
		3. Preservation of vegetable and its production	To develop knowledge regarding preservation vegetables	6	18	2700	On	5	-	20	-	25

Action Plan on Training Programmes (April 2007-March 2008)												
Discipline	Qrt No. & Month	Course Title	Course Objectives	Duration (days)	Total no. of course	Total No. of trainee days	Venue off/on campus	Participants trainees (Nos)				
								M	W	M	W	Total
		4. Establishment of apiary and its seasonal management	To develop skill and knowledge regarding honey production	6	18	2700	On	5	-	20	-	25
		5. Scientific methods for flower production in Koshi zone	To develop knowledge and skill regarding scientific flower production	6	18	2700	On	5	-	20	-	25
<b>Fisheries Science</b>	I. April - June, 08	Nursery and Rearing pond management of Indian Major Carps and Exotic Carps	To impart knowledge and skill on the production of fry and fingerlings of Indian Major Carps and Exotic Carps, one of the most critical input in aquaculture.	4	2	160	On	4	-	16	-	20
		Composite Fish culture	To impart knowledge on culture of Indian Major Carps with Exotic Carps involving scientific management practices	7	4	560	On	4	-	16	-	20
	II. July - Sept., 08	Integrated culture of fish with livestock	To impart knowledge on how to integrate livestock production (cattle, pig, poultry and duck) with aquaculture so that cost of fish production can be minimised through utilization of by-products of these farming components as inputs	7	4	560	On	4	-	16	-	20

**Action Plan on Training Programmes (April 2007-March 2008)**

Discipline	Qrt No. & Month	Course Title	Course Objectives	Duration (days)	Total no. of course	Total No. of trainee days	Venue off/on campus	Participants trainees (Nos)				
								M	W	M	W	Total
		Fresh Water Prawn culture	To impart knowledge on the culture of Giant Freshwater Prawn, one of the most valuable products of aquaculture	4	4	320	On	4	-	16	-	20
	III. Oct - Dec., 08	Management of fish ponds in winter months	to impart knowledge and skill on the management measures to be taken up in fish ponds to obtain optimum growth of fish	4	3	240	On	4	-	16	-	20
		Paddy cum Fish culture	To impart knowledge and skill on the culture of fast growing species of fish compatible with paddy to generate additional source of income through fish production in deep water paddy fields	3	3	180	On	4	-	16	-	20
	IV. Jan. - March, 09	Breeding of Common Carp	To impart knowledge and skill on how to obtain hatchlings of Common Carps through induced and natural breeding in hapa	7	3	420	On	4	-	16	-	20
		Hapa Breeding of Indian Major Carps and Exotic Carps	To impart knowledge and skill on the breeding of Indian Major Carps and Exotic Carps through low cost method of breeding in hapas and fibre glass pools.	7	3	420	Off	2	-	8	-	20

Action Plan on Training Programmes (April 2007-March 2008)												
Discipline	Qrt No. & Month	Course Title	Course Objectives	Duration (days)	Total no. of course	Total No. of trainee days	Venue off/on campus	Participants trainees (Nos)				
								M	W	M	W	Total
Home Science	I April - June, 2008	Tie and Dye	To develop knowledge & skill for subsidiary family income from Tie & Dye	8	2	400	ON	-	10	-	15	25
		Painting (Mithila Painting on cloth)	To develop knowledge & skill for subsidiary family income from painting	4	3	300	OLY	-	8	-	17	25
		Preparation of different types of pickles	To increase knowledge about better nutrition and use of vegetables at the time of glut	3	2	150	ON/OFF	-	10	-	15	25
	II. July - Sept., 08	Preparation of Jam & Jellies	To increase knowledge and skill about better use of fruits & vegetable at the time of glut	3	3	225	ON/OFF	-	8	-	17	25
		Lack of Nutrition and disease caused by them	To increase knowledge about better nutrition and use of vegetable at the time of glut	3	2	150	ON/OFF	-	10	-	15	25
	III. Oct. - Dec., 08	Cutting & Stitching of ladies garments	To increase the knowledge & skill and for subsidiary income	3	3	225	ON/OFF	-	9	-	16	25
		Importance of Kitchen garden & its Management	To increase knowledge & skill for subsidiary income	3	3	225	ON/OFF	-	8	-	17	25
	IV) Jan. - March, 09	Making of Amla Murabba & Pickle	To make more value added products for higher net return	3	2	150	ON	-	10	-	15	25

**Action Plan on Training Programmes (April 2007-March 2008)**

Discipline	Qrt No. & Month	Course Title	Course Objectives	Duration (days)	Total no. of course	Total No. of trainee days	Venue off/on campus	Participants trainees (Nos)				
								M	W	M	W	Total
		Preparation of potato chips, Badi & Pickles	To develop knowledge and skill of trainees regarding Badi, Chips & Pickles	3	3	225	ON/OFF	-	11	-	14	25
		Care of child & preparation of nutritional recipies for children	to develop knowledge and understanding of rural youth about									
			i) Care of children	3	2	150	ON/OFF	-	10	-	15	25
			ii) Making simple nutritional recepies for developing children	3	2	150	ON/OFF	-	10	-	15	25



## Extension Functionaries

<b>Action Plan on Training Programmes (April 2007-March 2008)</b>												
Discipline	Qrt No. & Month	Course Title	Course Objectives	Duration (days)	Total no. of course	Total No. of trainee days	Venue off/on campus	Participants trainees (Nos)				
								M	W	M	W	Total
<b>Agronomy</b>	<b>April to June 07</b>	1. Recent advances in scientific production of paddy	To develop knowledge about scientific paddy production	2	6	480	On	10	-	30	-	40
	<b>July to Sept 07</b>	Recent technology for land preparation seedling raising water management of paddy crop	To develop knowledge for paddy cultivation	2	6	480	On	10	-	30	-	40
	<b>Oct to Dec 07</b>	Recent advances in scientific production of rabi crop	To enrich knowledge for rabi crop production	2	6	480	On	10	-	30		40
	<b>Jan to March 08</b>	Recent technology for scientific harvesting of rabi crops		2	6	480	On	10	-	30		40
<b>Horticulture</b>	<b>April to June 07</b>	1. use of bio-pesticide and herbal pesticide in insect pest disease management	To impart knowledge and skill regarding insect pest management	2	6	480	On	10	-	30	-	40
		2. Recent advances for nursery orchard establishment and orchard development	To improve knowledge and skill for nursery and orchard develop and management	2	6	480	On	10	-	30	-	40

Action Plan on Training Programmes (April 2007-March 2008)												
Discipline	Qrt No. & Month	Course Title	Course Objectives	Duration (days)	Total no. of course	Total No. of trainee days	Venue off/on campus	Participants trainees (Nos)				
								M	W	M	W	Total
	<b>July to Sept 07</b>	1. Recent advances for kharif vegetable production	To develop knowledge and skill regarding vegetable production	2	6	480	On	10	-	30	-	40
		2. IPM in kharif crop	IPM in kharif crop	2	6	480	On	10	-	30		40
	<b>Oct to Dec 07</b>	1. Recent technology for rabi vegetable production	To improve knowledge and skill regarding rabi vegetable production	2	6	480	On	10	-	30		40
		2. Recent technology for potato production through TPS	To develop knowledge and skill for potato production through TPS	2	6	480	On	10	-	30	-	40
	<b>Jan to March 08</b>	1. Recent advances for summer tomato and radish production in Kosi Zone	To improve knowledge and skill regarding tomato and radish production. In summer season	2	6	480	On	10	-	30	-	40
		2. Recent advances for water, weed and nutrient management in orchard	To impart knowledge and skill regarding management of water, weed and nutrient in orchard	2	6	480	On	10	-	30	-	40
		3. IPM in summer crop production	To improve knowledge regarding IPM of summer crops	2	6	480	On	10	-	30	-	40

**Action Plan on Training Programmes (April 2007-March 2008)**

Discipline	Qrt No. & Month	Course Title	Course Objectives	Duration (days)	Total no. of course	Total No. of trainee days	Venue off/on campus	Participants trainees (Nos)				
								M	W	M	W	Total
<b>Plant Protection</b>	<b>I April 07 to June08</b>	Plant Protection measures in Summer Crops	To impart knowledge on the plant protection measures of different Summer Crops	3	2	150	On	-	10	-	15	25
	<b>II July to Oct. 08</b>	Plant Protection measures in Kharif Crops	To impart knowledge on the plant protection measures of different Kharif Crops	3	2	150	On	-	10	-	15	25
	<b>III Nov. to Dec 08</b>	Plant Protection measures in RabiCrops	To impart knowledge on the plant protection measures of different Rabi Crops	3	2	150	On	-	10	-	15	25
	<b>IV Jan to March 09</b>	Plant Protection measures in Horticultural Crops	To impart knowledge on the plant protection measures of different Horticultural Crops	3	2	150	On	-	10	-	15	25

Action Plan on Training Programmes (April 2007-March 2008)												
Discipline	Qrt No. & Month	Course Title	Course Objectives	Duration (days)	Total no. of course	Total No. of trainee days	Venue off/on campus	Participants trainees (Nos)				
								M	W	M	W	Total
<b>Fisheries Science</b>	I April – June, 08	Nursery and rearing pond management of Indian Major Carps	To Impart knowledge on the production of fry and fingerlings of Indian Major Carps and Exotic Carps, one of the most critical input in aquaculture	3	2	120	ON	4	–	16	–	20
	II July – Sept., 08	Composite Fish culture	To impart knowledge on the scientific way of stocking of fish seed and management of fish ponds to get maximum fish production	3	2	120	ON	4	–	16	–	20
	III Oct. – Dec., 08	Preventive and Curative methods against fish diseases	To impart knowledge on the measures to be adopted in ponds for preventing occurrence of fish diseases in fish ponds and methods to cure different fish diseases.	3	2	120	ON	4	–	16	–	20
	IV Jan. - March, 08	Breeding of common Carp	To impart knowledge and skill on the breeding of Common carp through Induced and Natural breeding	5	3	300	ON	4	–	16	–	20

Action Plan on Training Programmes (April 2007-March 2008)												
Discipline	Qrt No. & Month	Course Title	Course Objectives	Duration (days)	Total no. of course	Total No. of trainee days	Venue off/on campus	Participants trainees (Nos)				
								M	W	M	W	Total
Home Science		Health & Hygiene of children 1. Immunization in Children	To increase the knowledge about health	3	3	225	ON		10		15	25
		2. Safe use of drinking water										
		3. How to avoid diarrhoea in the summer season										

**Note : In this Krishi Vigyan Kendra there is need to establish a HOME SCIENCE laboratory for proper functioning of Home Science Department**

# Krishi Vigyan Kendra, Katihar

## Action Plan of Front Line Demonstration on Oilseeds and Pulses crops for the year 2007-08

Sl. No.	crops	Season	Previous crop and cropping systems			Farming situation	Area (ha)	Sowing time	Items components	Cost inputs in Rs.
			Kharif	Rabi	Summer					
<b>A. Pulse</b>										
1.	Red gram (P-9)	Kharif	Vegetables	Lentil	Fallow	Rainfed	5.0	June-July	Seed + Plant protection input + R. culture	10000.00
2.	Lentil (PL-4)	Rabi	Paddy	Linseed	Vegetable	Irrigated	5.0	October	Seed + Plant protection input + R. culture	10000.00
3.	Chickpea T 44/pts 4256	Rabi	Paddy	Linseed	Vegetable	Irrigated	5.0	October	Seed + Plant protection input + R. culture	10000.00
4.	Green gram CML 668	Summer	Maize	Mustard	Boro paddy	Irrigated	5.0	Oct-Nov	Seed + Plant protection input + R. culture	10000.00
<b>B. Oilseeds</b>										
1.	Sesame (Krishna)	Kharif	Vegetables	Chickpea	Fallow	Rainfed	5.0	June-July	Seed + Plant protection input + R. culture	10000.00
2.	Mustard Pusa Sufalam	Rabi	Maize	Wheat	Green gram	Irrigated	5.0	November	Seed + Plant protection input + R. culture	8000.00
3.	Linseed Subhra T 397	Rabi	Maize	Wheat	Fallow	Irrigated	5.0	November	Seed + Plant protection input + R. culture	8000.00
4.	Sunflower (Surya)	Summer	Paddy	Linseed	Boro paddy	Irrigated	5.0	Oct-Nov	Seed + Plant protection input + R. culture	10000.00
									<b>Total :</b>	<b>81000.00</b>

## Frontline Demonstration in Fisheries

Sl. No.	Crop	Season	Previous crop and cropping systems			Farming situation	Area (ha)	Sowing time	Species	Cost inputs in Rs.		
										Items	Qt.	Rs
01.	Fish seed (fry)	Kharif	-	-	-	Rainfed/Irrigated	0.7	June to Aug	Rahu, Catla & Mrigal			
										Hatchling	4 lacs	3200.00
										Lime	5 Kg	25.00
										Mustard oil cake	93 Kg	930.00
										Rice Bran	33 Kg	330.00
										Soap	1 Kg	100.00
										Oil	4 litres	240.00
										KMnO4	10 gms	20.00
			<b>Total</b>		<b>4845.00</b>							

**Hence total requirement for FLD Programme = 81000.00 + 4845.00 = 85845.00**

# Krishi Vigyan Kendra, Katihar

## Action Plan of Front Line Demonstration on other than Oilseeds and Pulses for the year 2007-08

### Crop Production

Sl. No.	crops	Previous crop and cropping systems			Farming situation	Area (ha)	Sowing time	Items components	Cost inputs in Rs.
		Kharif	Rabi	Summer					
<b>A. Cereals</b>									
1.	Paddy Sakuntala	Boro paddy	Paddy	Mustard	Rainfed	5.0	June 07	Seed + Plant protection measures	8000.00
2.	Boro paddy Prabhat/Boro Basmati	Boro paddy	Fallow	Wheat	Irrigated	5.0	Nov'07 seedling raising	-do-	10000.00
3.	Maize Shaktiman-4				Irrigated	5.0	Oct'07 Transplanting	-do-	8000.00
<b>B. Horticulture</b>									
1.	Cowpea Pusa lobia	Fallow	Radish	Cauliflower	Rainfed	1.0	Jan.-Feb.	Seed + Plant protection measures	2000.00
2.	Cauliflower Pant Subhra	Kerela	Radish	Mustard	Irrigated	1.0	Aug.-Sept.	-do-	3000.00
3.	Bhindi Arka Abhey	Bhindi	Brinjal	-	Irrigated	1.0	Jan.-Feb.	-do-	2000.00
4.	Oal R. Oal	Fallow	Brinjal	-	Rainfed	0.5	Feb.-March 07	Seed	1000.00







## FISHERIES

Name of the Trial – Efficacy of different Manural Practices in Nursery Pond Management

Hypothesis – Fish seed is a critical input for aquaculture activity. There are different manural practice advocated for quality fish seed production. There is need to test the efficacy of these manural practices in the agroclimatic condition of Katihar as the most suited practice observed will be advocated to the farmers.

Design of Experiment :- There will be three treatments with three replicates

<b>Treatments</b>	<b>Manural Practices</b>	<b>Replicates</b>	<b>Pond area</b>
T <sub>1</sub>	Cowdung	R <sub>1</sub>	0.036 ha
		R <sub>2</sub>	-do-
		R <sub>3</sub>	-do-
T <sub>2</sub>	Mustard Oil Cake + Cowdung + SSP	R <sub>1</sub>	-do-
		R <sub>2</sub>	-do-
		R <sub>3</sub>	-do-
T <sub>3</sub>	Groundnut Oil Cake + Cowdung + SSP	R <sub>1</sub>	-do-
		R <sub>2</sub>	-do-
		R <sub>3</sub>	-do-

# Extension Activities

Sl. No.	Activities Sub-activities	Annual	Beneficiaries No.						No. of Participants		
			SC		ST		Others		M	F	Total
			M	F	M	F	M	F			
1.	Field Days	12	60	10	60	10	240	60	360	80	440
2.	Kisan Mela	1	200	90	100	50	500	150	800	290	1090
3.	Horticulture show	1	150	50	100	50	600	300	850	400	1050
4.	Any other (specify)										
5.	(a) Scientist, visit to farmer's field	60	70	30	50	20	200	100	320	150	470
	(b) Farmer's visit to KVK farm	300	40	10	25	10	185	30	250	50	300
	(c) Farm Science Club	3	10	5	5	2	120	24	135	31	166
	(d) Farmer's Meeting	3	30	10	15	5	100	30	145	45	190
	(e) Advisory/enquiry	20	30	20	20	10	80	30	130	60	190
	(f) Radio Talk	10									
	(g) Health Camp	2	20	10	15	5	50	20	85	35	120
	(h) TV/Talk	40									
6.	Popular Articles	5									
7.	Pamphlet & Bulletin	5									

**T.O.  
KVK, Katihar**

**D.E.E.  
R.A.U., Pusa**

