

Annual Progress Report (April 2011-March 2012)

Krishi Vigyan Kendra, Manpur, Gaya



Directorate of Extension Education



**Bihar Agricultural University, Sabour
Bhagalpur, Bihar**

REVISED PROFORMA FOR ANNUAL REPORT (April 2011 to March 2012)

1. GENERAL INFORMATION ABOUT THE KVK

1.1. Name and address of KVK with phone, fax and e-mail

Address	Telephone		E mail
	Office	FAX	
Krishi Vigyan Kendra Manpur Gaya. - 823003	0631- 2450249		kvkgaya@indiatimes.com.

1.2 .Name and address of host organization with phone, fax and e-mail

Address	Telephone		E mail
	Office	FAX	
Vice-Chancellor, Bihar Agricultural University, Bhagalpur, Sabour	0641-2452606	0641-2452606	vcbausabour@gmail.com

1.3. Name of the Programme Coordinator with phone & mobile No.

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. B.K. Mandal		8289641265	kvkgaya@indiatimes.com

1.4. Year of sanction of KVK: (Reference of Sanction Order) – F.No. 18-13/94-AE-I dt. 24.03.06

1.5. Staff Position (as on 1st April, 2012)

Sl. No.	Sanctioned post	Name of the incumbent	Designation	Discipline	Pay Scale with present basic	Date of joining/ if vacant since when	Permanent /Temporary	Category (SC/ST/ OBC/ Others)
1	Programme Coordinator	Dr. B.K. Mandal	I/C PC	Agril.Ext.Edu.	27400/-	05.09.11	Permanent	OBC
2	Subject Matter Specialist	Dr. Nidhi Sinha	SMS	Home.Sc	25820/-	09.08.2007	Permanent	Others
3	Subject Matter Specialist	Er. Jeetendra Kumar	SMS	Agril.Engg.		12.11.2007	Permanent	OBC
4	Subject Matter Specialist	Dr. Bibha Kumari	SMS	Vety.Sc	22930/-	15.06.2009	Permanent	OBC
5	Subject Matter Specialist	Shri Jitendra Kumar	SMS	Agronomy	22930/-	06.09.2011	Permanent	OBC
6	Subject Matter Specialist						Vacant	
7	Subject Matter Specialist						Vacant	
8	Programme Assistant						Vacant	
9	Computer Programmer	Rajeev Kumar	Computer Operator	DCS	5400/- (consolidated)	31.-1.2007		SC
10	Farm Manager						Vacant	
11	Accountant / Superintendent						Vacant	
12	Stenographer						Vacant	
13	Driver	Akhilesh Kumar	Jeep driver	Matric	5400/- (consolidated)			Gen.
14	Driver							

15	Supporting staff	ShriKokilaNandPandey	Chowkider		4200/- (consolidated)			Gen
16	Supporting staff							

1.6. Total land with KVK (in ha) :10ha

S. No.	Item	Area (ha)
1	Under Buildings	1.2
2.	Under Demonstration Units	-
3.	Under Crops	4.0
4.	Orchard/Agro-forestry	4.0
5.	Others with details	0.8
	Total	10ha

Total area should be matched with breakup

1.7. Infrastructure Development:

A) Buildings

S. No.	Name of building	Not yet started	Completed up to plinth level	Completed up to lintel level	Completed up to roof level	Totally completed	Plinth area (Sq. m)	Source of funding
	Administrative Building					handed Over		ICAR/RAU
2.	Farmers Hostel			Up to lintel				
3.	Staff Quarters (6)		Only 2 staff Quarters	Scientist	PC, FM and supporting staff			
4.	Demonstration Units (2)							
5	Fencing	3900 ^{ft} A approx				Only two side (2200 ^{ft}) Approx		
6	Rain Water harvesting structure							
7	Threshing floor					Handed Over		
8	Farm godown					Handed Over		
9.	Others (NHM)							
	Mali shae					Handed Over		NHM

* If not in use then since when and reason for non-use

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Bolero LX 2WD7STR Non AC BS11	2006	458070.00	134029	Working
Tractor DIJ MF1035 /Mahashakti	2006	386544.00		Working

C) Equipment & AV aids

Name of equipment	Year of purchase	Cost (Rs.)	Present status
1. Disc Harrow	2006		Satisfactory
2. MB plough	2006		
3. Hydraulics trailer	2006		
4. Tiller/cultivator	2006		
5. Cage wheel	2006		
6. Leveler	2006		
7. Zero Till Machine	2011		
8. . Pump Set	2008		
9. Conoweeder	2009		
10. Honey box & Accessories	2011		
11. Steel Dram	2007		
12. Godrej Book selves &Almirah	2007		
13. Computer with accessories	2007		
14. Tube well 5H.P Kiloshker	2008		
15. Inverter	2010		
16. Exide II550 Battery	2011		
17. Index card reader	2010		
18. Punch sealer Machine	2011		
19. weight Machine	2011		
20. P.A System	2011		
21. LCD Projector	2011		
22. Generator	2011		
23. Book self	2011		
24. Zero tillage	2011		
25. Rota vator	2011		
26. Reaper	2011		
27. Seed processing unit	2012		

D) Farm implements

Name of equipment	Year of purchase	Cost (Rs.)	Present status	Source of fund

1.8. A). Details SAC meeting* conducted in the year

Sl.No.	Date	Number of Participants	Salient Recommendations	Action taken
1.	3 rd SAC Meeting held on 8-4-2011	27	<ul style="list-style-type: none"> ‘Training schedule calendar’ to be prepared in the beginning of the year and circulated among all related departments for their timely co-ordination and cooperation Selection of resource person among farmers for training and 	

			<p>transfer of technology in mass level.</p> <ul style="list-style-type: none"> • Production of foundation seed at the farm of different crops. • Availability of Papaya seedlings. • Distribution of technical bulletin after completion of training programme • Promotion of Training on water resource management training. • Training on vegetable preservation technology among farmers. • To develop model demonstration unit for SRI technology in different crops. • To organize training programmes for farmer on production and use of herbal pesticides and organic fertilizer • To promote availability of Rhizabium culture and suggest use of green manure among farmers. 	
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** Salient recommendation of SAC in bullet form
Attach a copy of SAC proceedings alongwith list of participants*

2. DETAILS OF DISTRICT (2011-12) : Source of information must be indicated

2.1 Major farming systems/enterprises (based on the analysis made by the KVK)

S. No	Farming system/enterprise
1.	Paddy - Wheat – Moong
2.	Paddy – Lentil – Fallow
3.	Paddy – Rai – Moong
4.	Paddy – Sugarcane
5.	Paddy – Potato - Vegetable
6.	Maize – Potato – Vegetable
7.	Dairy, Poultry, Bee keeping and Fishery are important enterprises adopted by selective farmers.

2.2 Description of Agro-climatic Zone&major agroecological situations (based on soil and topography)

S. No	Agro-climatic Zone	Characteristics
1.	Zone – IIIB	Climate is subtropical having average annual rainfall 944 mm. June is the hottest month when temperature goes up to 49°C while December is the coldest month when temperature goes down to 2°C. Average Relative Humidity is 66%

S. No	Agro ecological situation	Characteristics
1.	Irrigated Plain (Sandy-loam to loam soil)	The geographical area of the district is 493774 ha. Out of which Cultivable land is 198123 ha, comprising upland (49765 ha) medium land

		(110874ha) and low land (37484 ha). Major crop is paddy followed by wheat & vegetables. Among oil seeds & pulses rai, linseed, lentil, gram and red gram are important crops.
2	Rainfed Plain (Sandy Loam, Light to heavy texture Soil)	
3.	Hilly Upland (Rainfed, Undulating topography)	

2.3 Soil type/s

S. No	Soil type	Characteristics	Area in ha
1.	Sandy Loam	Admixture of sand & Clay, predominantly sandy, found alongside the river beds.	
2.	Loamy soil	Found near the hills and formed by rains washings from higher area.	
3.	Sandy soil	Locally known as balui, found near the bank of the river.	
4.	Kewal Soil (Black)	It is a mixture of clay and loam and is very productive acidic in nature.	
5.	Foot hill Balthar Soil (Red)	It is in between the plain and dissected plateau. It is acidic in nature.	

2.4. Area, Production and Productivity of major crops cultivated in the district

S. No	Crop	Area (ha)	Production (Kg)	Productivity (Kg /ha)
Kharif				
1.	Paddy	190955	640153	3352
2.	Maize	6763	6270	927
3.	Marua	308	233	756
4.	Arhar	4386	3874	883
5.	Urad	1438	803	558
6.	Moong	3223	1713	531
7.	Kulthi	78	44	564
8.	Groundnut	892	629	705
9.	Til	956	529	55.3
10.	Castor	89	43	483
11.	Sunflower	86	50	581
Rabi				
1.	Wheat	82729	142956	1728
2.	Maize	2418	4531	1874
3.	Barley	2328	1136	488
4.	Gram	34823	17237	495
5.	Lentil	20686	6247	302
6.	Pea	3045	1248	410
7.	Other Pulses			
8.	Linseed	7071	3924	555
9.	Rai/Sarson	12942	9344	722
10.	Sunflower	161	94	582

2.5. Weather data

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)
		Maximum	Minimum	
April 10	0.0			
May, 10	18.1			
June, 10	56.4	44-49		

July, 10	240.4			
Aug.10	278.6			
Sept, 10	49.2			
Oct, 10	60.5			
Nov. 10	0.0			
Dec., 10	0.0		02-04	
Jan., 11	0.0			
Feb., 11	0.0			
March, 11	0.0			

2.6. Production and productivity of livestock, poultry, fisheries etc. in the district

Category	Population	Production	Productivity
Cattle			
<i>Crossbred</i>	10027		
<i>Indigenous</i>	293436		
Buffalo	254729		
Sheep	18145		
<i>Crossbred</i>			
<i>Indigenous</i>			
Goats	445546		
Pigs	122914		
<i>Crossbred</i>			
<i>Indigenous</i>			
Rabbits			
Poultry	892833		
Hen			
<i>Desi</i>			
<i>Improved</i>			
Duck			
Turkey and others			
Category	Area	Production	Productivity
Fish			
Marine			
Inland			
Prawn			
Scampi			
Shrimp			

2.6 Details of operational area / villages (2011-12)

Sl.No.	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1.		Manpur	Lakhanpur	Paddy, Wheat, Potato, Rai, Vegetables, Maze, Mushroom, gauntness		Seed Production / Vermi compost IPM INM
2.		Chandauti	Rasalpur	Paddy, Wheat, Vegetable,	-do-	-do-
3.		Bodh Gaya	Sekhwara	Vegetable, Paddy, Wheat, Dairy, Vermi compost	-do-	-do-

3.1 Achievements on technologies assessed and refined

A. Details of each On Farm Trial to be furnished in the following format

- **Title of on-farm trials** : Sowing of wheat through SRI technique by seed drill
- Problem diagnosed : High cost of production in SRI Wheat cultivation.
- Details of technologies selected for assessment/refinement.
- Tech.option. Farmers (Farmers Practice) sowing of seed by broadcasting
- Tech.Option-2. Recommended Practice(Sowing by khurpi 8”X8”)
- Tech.Option-3 (Sowing by seed drill by 8”X8”)
- Source of technology:
- Production system and thematic area : Rice wheat cropping system.
- Performance of the technology with performance indicators:

Technology option	No. of trials	Average No. of effective tillers	Yield (q/ha)	Variety	Labour Saving/ha	Time Saving/ha	Net Return	BC ratio
Tech.option-1. Farmers (Farmers Practice)	6	8.00	28.4	PBW -343	-	-	17900	1.71
Tech.Option-2. Recommended Practice(Sowing by khurpi)	6	20	46.5	PBW -343	-	-	34500	2.88
Tech.Option-3 (Sowing by seed drill)	6	22	45.25	PBW -343	16	12	35050	3.43

- Final recommendation for micro level situation:
Result of the trial indicated that use of SRI wheat seed drill resulted slightly decreases in yield which was due to ununiform dropping of seed but at the other side it saved 50% labour and time with higher BC ratio.
- Constraints identified and feedback for research
This seed drill need some improvement in seed dropping mechanism so that it can drop equal No. of seed at regular interval.
- Process of farmers participation and their reaction
If constraint will be removed this technique will be adopted by farmers at large scale.

B. TECHNOLOGY ASSESSMENT AND REFINEMENT IN DETAIL

3.1A.Problem definition: High cost of production in SRI Wheat cultivation.

Technology assessed: Sowing of wheat through SRI technique by seed drill may save labour and time.

Sowing of wheat through SRI technique is being popularized in Gaya district in which farmers put 2 treated seeds in the soil at a distance of 8"×8" with the help of Khurpi. This practice is labour intensive and takes much time resulting higher cost of production.

KVK, Manpur, Gaya, conducted OFT on sowing of Wheat of through SRI technique by 2 rows manual seed drill.

Table:-3: Trial on SRI wheat seed drill

Technology option	No. of trials	Average No. of effective tillers	Yield (q/ha)	Variety	Labour Saving/ha	Time Saving/ha	Net Return	BC ratio
Tech.option-1. Farmers (Farmers Practice)	6	8.00	28.4	PBW-343	-	-	17900	1.71
Tech.Option-2. Recommended Practice(Sowing by khurpi)	6	20	46.5	PBW-343	-	-	34500	2.88
Tech.Option-3 (Sowing by seed drill)	6	22	45.25	PBW-343	16	12	35050	3.43

Result of the trail indicated that use of SRI wheat seed drill resulted slightly decreases in yield which was due to ununiform dropping of seed but at the other side it saved 50% labour and time. This seed drill need some improvement in seed dropping mechanism and in ground wheel also so that it can drop equal No. of seed at regular interval.

3.1 B. Retooning in oyster mushroom with use of Vermi wash

Problem definition: increasing cost and shortage of storage space for straw.

Technology assessed: Ratooning in Oyster Mushroom with use of vermi wash.

The farmers faces problem of high cost of straw in season as well as proper place of storage of these used straw in off seasons. With the use of present technology farmers not only be able to minimize input cost but they may also be able to get more income by using same bag of mushroom in its second year of production.

Table:-

Technology option	Replication no. of trails	Weight of produced	Quality of produce	No. of cuttings	Value	BC Ratio
Normal fresh bagging in two consecutive year	05 (10 bag) each	160 kg	Pale light yellow normal	6 cutting	8000.00	2.8
Reuse of Dry bag after combing and spraying water in (Second year)	05 (10 bag) each	90kg	Pale light yellow slight small in size	4 cutting	4500.00	3.0
Reuse of mushroom bag after treating it with vermin wash(2%) with tech optII	05 (10 bag) each	150kg	Pale light yellow almost normal in size	6 cutting	7500.00	4.6

*Result of trail indicated that the ratooning of the mushroom bag when get washed with vermiwash(2%) gives almost 60percent more yield in comparison to other reused without any treatment. Futher the table shows that the B.C ration of the mushroom bag used with vermin wash (2%0 is 1.8 fold higher than the normal fresh bagging of mushroom in two consecutive years.

3.1C Title:-Cultivation of Wheat through SRI techniques

Problem definition: Low productivity of tradionlly grown Wheat.

Technology assessed: Cultivation of Wheat through SRI techniques.

Wheat cultivated in Gaya district mainly with conventional/tradional method require seed rate 120-150 kg seed/ ha produces very low yield. Broadcasting method adopted by farmers without seed treated for sowing resulting poor yield.

Source of technology: originated farm Medageskar.

In SRI technique wheat sown with special seed treatment and require 25kg seed/ha.

KVK , Manpur, Gaya conducted OFT on cultivation of Wheat through SRI technique with var. K-9107.

Table: Trial on SRI Wheat

Technological options	No. of Trails	Average No. of effective tillage	Yield (Q/ha)	Variety	Net Return(Rs /ha)	BC ratio
Tech-option-1(Farmers Practice)	5	8.00	24.5	Local	12200	1.77
Tech-Option-2(Recommended Practice)	5	11.8	30.00	K-9107	19120	2.50
Tech-option-3 SRI Wheat	5	18.2	43.5	K-9107	32510	2.90

Sale price of produce @ Rs 1120/quintal

* Result of the trial indicated that SRI wheat produce 0.7 fold increase in yield than recommended practices and 1.02 fold than farmers practices

* since SRI Wheat require more labour for hand dibbling and most suited to small pice of land. This technique need to develop specialized seed dibbler for sowing 1-2 seed per hill for wider adoption to all categories of farmers

3.1.d. Details of each On Farm Trial to be furnished in the following format

- 1) Title of on-farm trials- Management of Post Parturalanoestrous in dairy animal
- 2) Problem diagnose – Post calving anoestrous in dairy animal due to micronutrient deficiency and endoparasite in infection.
- 3) Details of technologies selected for assessment/refinement-use of herbal drug, Min-mix and dewormer
- 4) Source of technology- IVRI Breily
- 5) Production system and thematic area- infertility management
- 6) Performance of the Technology with performance indicators- percentage of animal come in heat and conceived
- 7) Final recommendation for micro level situation:- use of stronafort, Min-mix and fenbendazole together
- 8) Process of farmers participation and their reaction

(B) Technology assessment and refinement in detail

Table title: -effect of Herbal drng nutritional supplements and deworming on management of Post parturalanoestrus in animal

Technology Adopted	No. of animals under trail	No. of animal come in heat after completion of treatment (observed up to 60 days)	No. of animal conceived	% of conception
T ₁ - Farmer practices (Germinated Wheat)	05	02	0	0
T ₂ - Fenbendazole 10 mg/kg b.wt.+ min-mix(50 gram) for 60 days	05	03	2	40
T ₃ - Fenbendazole 10 mg/kg b.wt.+ min-mix(50 gram) for 60 days and stronafort 2 bolus for 10 last days	05	05	3	60%

Anoestrus is a common problem in Gaya district. The farmers faced unusual economic loss due to loss in production .In first technology animal tried with germinated Wheat(farmers practice), out of 5, two animals come in heat and none of which conceived. In technology II- animal given dewormer(fenbendazole) + Min-Mix, three animals come in heat and two conceived. Tech. –III along with fenbendazole Min-Mixthe Stronafort given for10 days in last 60 days resulted all the five animal come in heat, out of which 3 animal conceived .Tech.-III resulted in higher rate of coming in heat and conception over all practice and most suitable for coming in heat and conception.

3.2 Achievements of Frontline Demonstrations

A.. Details of FLDs implemented during 2011-12 (Information is to be furnished in the following **three tables** for **each category** i.e.cereals, horticultural crops, oilseeds, pulses, cotton and commercial crops.)

Sl. No.	Crop	Thematic area	Technology Demonstrated@	Season and year	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
					Proposed	Actual	SC/ST	Others	Total	
1.	Lentil	YE	KIS 218	Rabi	5	3	2	5	7	
2.	Rai	YE	R. Sufnam	Rabi	5	6	4	10	14	
3.	Wheat	YE	DBW-14	Rabi	5	2	2	3	5	
4.	Moong	YE	PDM-139	Summer	5	6	3	12	15	
5.	Zerotil lag	YE	ZT		2	2	3	4	7	
6.	Maizecob Sheller	DR			10	5	2	3	5	

@ please mention component technology like seed/ fertilizer/ bio-fertilizer/ plant protection or full package

** BCR= GROSS RETURN/GROSS COST

Fisheries

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No. of units	Major parameters		% change in major parameter	Other parameter		*Economics of demonstration (Rs.)				*Economics of check (Rs.)				
					Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR	
Common carps																		
Mussels																		
Ornamental fishes																		
Others (pl. specify)																		
Total																		

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.

** BCR= GROSS RETURN/GROSS COST

Other enterprises

Category	Name of the technology demonstrated	No. of Farmer	No. of units	Major parameters		% change in major parameter	Other parameter		*Economics of demonstration (Rs.) or Rs./unit				*Economics of check (Rs.) or Rs./unit					
				Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR		
Oyster mushroom																		
Button mushroom																		
Vermicompost																		
Sericulture																		
Apiculture																		
Others (pl. specify)																		
Total																		

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.

** BCR= GROSS RETURN/GROSS COST

Women empowerment

Category	Name of technology	No. of KVKs	No. of demonstrations	Name of observations	Demonstration	Check
Women						
Pregnant women						
Adolescent Girl						
Other women						
Children						
Neonatal						
Infants						
Children						

Farm implements and machinery

Name of the implement	Crop	Name of the technology demonstrated	No. of KVKs	No. of Farmer	Area (ha)	Filed observation (output/man hour)		% change in major parameter	Labor reduction (man days)				Cost reduction (Rs./ha or Rs./Unit ect.)				
						Demonstration	Check										
Zero Tillage	Wheat	ZT		5	2.0	-	-		3				1800.00				
Maize cob sheller	Maize			5	1(hr)	14.5kg	3.5kg	24%			4						440 per unit

Plant propagation techniques													
Others, if any													
c) Ornamental Plants													
Nursery Management													
Management of potted plants													
Export potential of ornamental plants													
Propagation techniques of Ornamental Plants													
Others, if any													
d) Plantation crops													
Production and Management technology													
Processing and value addition													
Others, if any													
e) Tuber crops													
Production and Management technology													
Processing and value addition													
Others, if any													
f) Spices													
Production and Management technology													
Processing and value addition													
Others, if any													
g) Medicinal and Aromatic Plants													
Nursery management													
Production and management technology													
Post harvest technology and value addition													
Others, if any													
III Soil Health and Fertility Management													
Soil fertility management													
Soil and Water Conservation													
Integrated Nutrient Management													
Production and use of organic inputs													
Management of Problematic soils													
Micro nutrient deficiency in crops													
Nutrient Use Efficiency													
Soil and Water Testing													
Others, if any													
IV Livestock Production and Management													
Dairy Management	2	68	7	75	9	-	9	-	-	-	77	7	84
Poultry Management	1	23	2	25	9	5	14	-	-	-	32	7	39
Piggery Management													
Rabbit Management													
Disease Management	3	42	5	47	10	-	10	-	-	-	52	5	57
Feed management	1	12	-	12	7	5	12	-	-	-	19	5	24
Production of quality animal products													
Others, if any Goat farming	2	31	10	41	9	4	13	-	-	-	40	14	54
V Home Science/Women empowerment													
Household food security by kitchen gardening and nutrition gardening	1	8	22	30	3	5	8	-	-	-	8	30	38
Design and development of low/minimum cost diet													
Designing and development for high nutrient efficiency diet	1	15	2	17	5	3	8	-	-	-	20	5	25
Minimization of nutrient loss in processing	2	9	37	46	7	9	16	-	-	-	16	46	62
Gender mainstreaming through SHGs	1	3	16	19	1	2	3	-	-	-	4	18	21
Storage loss minimization techniques	1	3	7	10	5	5	10	-	-	-	8	12	20
Value addition	2	12	52	54	-	18	18	-	-	-	12	70	92
Income generation activities for empowerment of rural Women	4	30	76	106	2	25	27	-	-	-	32	101	133
Location specific drudgery reduction technologies													
Rural Crafts													
Women and child care													
Others, if any													
VI Agril. Engineering													
Installation and maintenance of micro irrigation systems	7	169	-	169	22	-	22	-	-	-	191	-	191
Use of Plastics in farming practices	1	15	-	15	4	-	4	-	-	-	19	-	19

Protected cultivation of vegetable crops													
Commercial fruit production													
Repair and maintenance of farm machinery and implements	3	51	-	51	9	-	9	-	-	-	60	-	60
Nursery Management of Horticulture crops													
Training and pruning of orchards													
Value addition	1	2	17	19	3	5	8	-	-	-	5	22	27
Production of quality animal products													
Dairying	2	38	4	42	6	-	6	-	-	-	44	4	48
Sheep and goat rearing	1	20	2	22	5	-	5	-	-	-	25	2	27
Quail farming													
Piggery													
Rabbit farming													
Poultry production													
Ornamental fisheries													
Para vets													
Para extension workers													
Composite fish culture													
Freshwater prawn culture													
Shrimp farming													
Pearl culture													
Cold water fisheries													
Fish harvest and processing technology													
Fry and fingerling rearing													
Small scale processing	2	9	37	46	6	9	15	-	-	-	15	46	61
Post Harvest Technology	1	5	13	18	-	3	3	-	-	-	5	16	21
Tailoring and Stitching													
Rural Crafts													
Others, if any													
TOTAL	15	190	88	278	47	31	78				235	124	359
(C) Extension Personnel													
Productivity enhancement in field crops	4	166	6	172	21	-	21	-	-	-	187	6	193
Integrated Pest Management													
Integrated Nutrient management													
Rejuvenation of old orchards													
Protected cultivation technology	2	112	12	124	15	3	18	-	-	-	127	15	142
Formation and Management of SHGs													
Group Dynamics and farmers organization	2	64	-	64	5	-	5	-	-	-	69	-	69
Information networking among farmers													
Capacity building for ICT application													
Care and maintenance of farm machinery and implements	4	136	5	141	15	-	15	-	-	-	151	5	156
WTO and IPR issues													
Management in farm animals	1	22	-	22	6	-	6	-	-	-	28	-	28
Livestock feed and fodder production	1	12	9	21	1	-	1	-	-	-	13	10	23
Household food security													
Women and Child care	1	7	21	28	3	-	3	-	-	-	10	21	31
Low cost and nutrient efficient diet designing													
Production and use of organic inputs													
Gender mainstreaming through SHGs	1	15	5	20	2	4	6	-	-	-	17	9	26
Any other (Pl. Specify)													
TOTAL	16	534	58	592	68	7	75				602	65	667

Please furnish the details of training programmes as **Annexure in the proforma** given below

Date	Clientele	Title of the training programme	Duration in days	Venue (Off / On Campus)	Number of participants			Number of SC/ST		
					Male	Female	Total	Male	Female	Total

(D) Vocational training programmes for Rural Youth

Crop / Enterprise	Identified Thrust	Training	Duration	No. of Participants	Self employed after training	Number of
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Agri mobile clinic										
Soil test campaigns										
Farm Science Club Conveners meet										
Self Help Group Conveners meetings										
MahilaMandals Conveners meetings										
Celebration of important days (specify)										
Any Other (Specify)										
KishiVikashUtsab	2									Mass
Technical bulletin	3									Mass
Total										

3.5 Production and supply of Technological products

Village seed

Crop	variety	Quantity of seed (q)	Value (Rs)	Number of farmers provided
Cereals				
Oilseeds				
Pulses				
Commercial crops				
Vegetables				
Flower crops				
Spices				
Fodder crop seeds				
Fiber crops				
Forest Species				
Others				
Total				

KVK farm

Crop	variety	Quantity of seed (q)	Value (Rs)	Number of farmers provided
Cereals				
Wheat	DBW-14	18.80		
	K-9107	14.39		
Paddy	Sahbhagi	52.72		
	Kasturi	19.43		
Oilseeds				
Rai	Varuna	0.93		
Toria	R.A.U-TS-17	3.62		
Pulses				
Chick pea	P-256	1.61		
	P-372	1.35		
Linseed	Garima	0.55		
Lentil	Arun	3.67		
	HUL-57	0.88		
Commercial crops				
Vegetables				
Flower crops				
Spices	Coriander	0.36		
Fodder crop seeds				
Fiber crops				
Forest Species				
Others				
Dhaicha	Local	4.75		
Total				

Production of planting materials by the KVKs

Crop	variety	Quantity of seed (q)	Value (Rs)	Number of farmers provided
Commercial				
Vegetable seedlings				
Fruits				
Guava		22.5 kg	180.00	8
Amla		22.5 kg	360.00	06
Mango		09kg	1440.00	09
Ornamental plants				
Medicinal and Aromatic				
Plantation				
Nimbu		18 Plants	435.00	08
Spices				
Tuber				
Banana (Furit)		139.3	1636.00	29
Ponch		14 Ponch	70.00	08
Fodder crop saplings				
Forest Species				
Others				
Total				

Production of Bio-Products

Bio Products	Name of the bio-product	Quantity	Value (Rs.)	No. of Farmers	No. of KVKs
		Kg			
Bio Fertilisers					
Bio-pesticide					
Bio-fungicide					

Bio Agents					
Others					
Total					

Production of livestock materials

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	No. of Farmers	No. of KVKs
Dairy animals					
Cows					
Buffaloes					
Calves					
Others (Pl. specify)					
Poultry					
Broilers					
Layers					
Duals (broiler and layer)					
Japanese Quail					
Turkey					
Emu					
Ducks					
Others (Pl. specify)					
Piggery					
Piglet					
Others (Pl. specify)					
Fisheries					
Indian carp					
Exotic carp					
Others (Pl. specify)					
Total					

3.6. Literature Developed/Published (with full title, author & reference)

(A) KVK News Letter ((Date of start, Periodicity, number of copies distributed etc.)

(A) KVK News Letter

Date of start	Periodicity	Number of copies distributed
Against Season wise	Quarterly	1500

(B) Literature developed/published

Item	Title	Authors name	Number
Research papers	1. Models on communication behavior of Paddy growers 2. Proximate principle adequacy of diet: a comparative study of children under ICDS, Patna Block. 3. Effect of shape of pegs on power	Dr. B.K. Mandal et al Dr. Nidhi Sinha	Indian Journal of Ext. edu (Communicated) Maharashtra journal of Ext. Edu.

	wheat thresher 4. Development of GIUH model for a watershed of DVC, Hazaribagh 5. Influence of packing on Physico-chemical & sensory quality of chicken	Kumar, Jeetendra Kumar, Jeetendra K. Bibha et. Al	AMA Journal Indian J. Soil Conserv. Indian veterinary journal
Technical reports	1. Quinquennial Report (2006-2010) KVK, Manpur, Gaya 2. Annual report (April 2011-March 12) of KVK, Manpur, Gaya 3. Quarterly report (April 11- March 12) 4. Action Plan (April 11- March 12) 5. Extension Council meeting report. 6. Review meeting report 7. SAC Meeting report 2011		
News letters	Krisak Samachar (Vol 4)		
Technical bulletins	मशरूम प्रसंस्करण ऑवला एक गुणकारीफल बकरीपालन आधुनिक ब्रायलरपालन रोटावेटर, खेत की तैयारी के लिए आधुनिक यंत्र जीरोटिलेज-मशीन से गेंहूँ की बुआई	SinhaNidhi SinhaNidhi KumariBibha KumariBibha Kumar Jeetender Kumar Jeetendra	
Popular articles			
Extension literature			
Others (Pl. specify)			
TOTAL			

N.B. Please enclose a copy of each. In case of literature prepared in local language please indicate the title in English

(C) Details of Electronic Media Produced

S. No.	Type of media (CD / VCD / DVD / Audio-Cassette)	Title of the programme	Number

(D) Details of HRD programmes undergone:

S. No.	Name of programme	Date and Duration	Organized by

3.7. Success stories/Case studies, if any (two or three pages write-up on each case with suitable action photographs)

1. Success story of Progressive Women Rinki Kumari of Amwa Village of Bodhgaya

Mrs. Rinki Kumari is a young social worker of village Amwa of Bodhgaya block. She is at present organizing 10-20 women self help groups of women in Bodhgaya. She is regularly involving herself as well as SHG members in different training programmes conducted by KVK through out the year. She herself worked as trainer as well as adopted various enterprisies like mushroom vermicomposting, Jam, Jelly, Pickles & Paped etc. some other income generating activities like

embroidery, patch work, soft toymaking, tie & die method of fabric painting under active guidance of KVK scientist and also act as source of inspiration to other member of SHG from adoption of Mushroom enterprises she is generating 4000 to 5000 Rupees per month for her self. She has recently developed a choumin production unit for employment generation.



2. Success story of Mushroom grower MrsSunita Devi

MrsSunitadevi wife of Sri Surya dev Mehta village Punwa is simply house wife in KVK adopted village of Wazierganj block, generating no income. After training by the scientist of KVK she has adopted mushroom cultivation along with her husband as a quick profit making enterprise and earning (20-22kg) 5000 to 6000 additional income in just three months. People of village and nearby village have been enthusiastic to go for mushroom cultivation on commercial scale. About 20 percent women of the village have taken up the cultivation as a group activity for their income generation. She along with her husband also established a commercial mushroom spawn unit in the village by taking technical guidance for university scientist (Pusa)



3. Use of Paddy Seeder

Sri Suryadev Mehta is a small holding farmer of Punawa Village of block Wazirgang, Gaya district, Bihar. He was growing paddy crop by transplanting manually which needs a large no. of labour, takes much seed and time too. He came to know about the implement for direct seeding of paddy and contacted KVK, Manpur, Gaya from where he got detail of its application in field. He grown paddy successfully, using 8 rows manually operated paddy seeder under the supervision of KVK scientist. The paddy seed was water soaked for 24 hours then after taking it out, seed treatment was performed and these sprouted seed was filled in boxes of the seeder. Before, soaking the seed, puddling of the field was completed. The implement was pulled in the puddled field by one man who placed the paddy seed at 20 cm row distance. It saved seed, labour cost of transplanting, weeding cost and taken less time in paddy sowing and the crop matured 10 days in advance and he observed 10 percent yield increase. Thus, total income from growing paddy using this technology increased to the tune of Rs. 2500/- per acre.



4. Use of Zero Tillage Technology in sowing Wheat

Sri Baban Kumar Singh of village Chapardah of Nagar block, Gaya district, Bihar was sowing wheat traditionally in late condition. After investing a lot of money, his profit was consistently low. He came to know about zero tillage technology of wheat sowing and after discussion with KVK, Manpur, Gaya he started sowing of treated seed by this technology successfully. Now, with this technology he sown wheat 8-10 days in advance. As there is no need of land preparation, he saved the cost of 3-4 ploughing and labour cost in seed and fertilizer broadcasting. He also saved seed and fertiliser at the time of sowing. In the time of first irrigation, it took less water and less time in irrigation. After harvesting, he observed that even he used less seed, fertilizer and irrigation water, yield increased by 10 percent. Thus, in total by adopting zero tillage technology, Mr. Singh increased his income by Rs. 3000/- per acre. The success of this technology influenced the other farmers of the district.



5. Success Story of Dairy farmer Santosh Kumar

Shri Santosh Kumar son of Shri Baldev Yadav Village Shekhwara Block- Bodh Gaya a successful dairy farmer initially started it with four cows about five year ago. He increases its strength to ten than forty getting benefit from it. Now he has 70 cows and 35 calves. He has a good methodology of feeding by concentrate mixture formation which include wheat, maize darra, gram, lentil chunni, ricebran, cake of rai, tisi, benola, cotton, badam, mineral mixture & salt. He adopted the principle of greed fodder availability whole round year to the animal by cultivating annual leguminous and

non-leguminous grasses as well as perennial grass. He is guided



Farmers visiting the dairy farm



Scientist of KVK monitoring the calves



Cool chamber(1000 liter capacity) at the farm.



Hip of concentrate mixture for

the animals by the KVK for most scientific technique and grow annual production. He has installed a 1000 liter capacity cool chamber at dairy farm and manufacture of some processed product like lassi, ghee, Paneer etc. Beside this he is integrated to fishery, backyard poultry and agriculture cropping. His annual income is 5 to 6 lacks and in future he is planning to use the dung obtained from the animals in vermi-compost formation for which he initiated manufacture of vermi unit in 35000 sqft area for production of 3000 tone vermi compost annually. His dairy (Nandni Dairy) has impressive impact on the farmers of Gaya district as well as for Bihar State. Time to time farmers visited his farm and trained by him.

6.Success Story of Mahendra Kumar

Sri Mahendra Kumar Singh S/o late HorilMahtoGarmBhaghr Block Barachatti starting a goatry unit of 20 animals from last year after getting training and orientation from the KVK. Dry climate and late rain fall condition of last two years pasimate him in cropping. KVK has suggested for supporting agriculture like goat rearing as ATM for farmers. He has Black Bangal, crossed goat and one Black bangal&Jmunapari buck which reared in semi intensive feeding habits. Now he earns Rs.2000/ month from this small unit. He is planning to extend it and going to increase its number

Barbari goats having intensive feeding habit.



Farmers with his goats

MLA Baracjatti visiting his goatry unit

3.8. Give details of innovative methodology or innovative technology of Transfer of Technology developed and used during the year

3.9 Give details of indigenous technology practiced by the farmers in the KVK operational area which can be considered for technology development (in detail with suitable photographs)

S. No.	Crop / Enterprise	ITK Practiced	Purpose of ITK

3.10 Indicate the specific training need analysis tools/methodology followed for

- Identification of courses for farmers/farm women
- Rural Youth
- In-service personnel

3.11 Field activities

- i. Number of villages adopted : 05
- ii. No. of farm families selected
- iii. No. of survey/PRA conducted

3.12. Activities of Soiland Water Testing Laboratory

Status of establishment of Lab

- 1. Year of establishment :
- 2. List of equipments purchased with amount :

Sl. No	Name of the Equipment	Qty.	Cost

3. Details of samples analyzed so far :

Details	No. of Samples	No. of Farmers	No. of Villages	Amount realized
Soil Samples				
Water Samples				
Total				

3.13 Activities of rain water harvesting structure and micro irrigation system

No of training programme	No of demonstrations	No of plant material produced	Visit by the farmers	Visit by the officials

3.14 Technology week celebration

Type of activities	No. of activities	Number of participants	Related crop/livestock technology

3.15 RAWE programme

Is KVK is involved?

No of student/ARS trained	No of days stayed

3.16 NICRA Project

Programme implemented	No of village covered	No of beneficiary covered	Amount of fund received	Amount of fund utilized

3.17. List of visitors including the officials of ZPD and DEE

Date	Name of the person	Purpose of visit
08.04.11	ShriUday Kumar, ADM Gaya	SAC Meeting
	Smt. JyotiManjhi, Women leader H'ble MLA	SAC Meeting
	Dr. R. N. Sharma, Regional Director ARI, Patna	SAC Meeting
	Dr. SR Singh, DEE, BAU, Sabour	SAC Meeting
22.05.11	Shri Sanjay Singh, Nodal Officer, Government of Bihar	Certificate distribution of KisanSalakhar
30.07.11	Sri R.S. Mol AGM (NABARD) and ShriSardaNath DDM, (NABARD)	Extension personnel's training
20.08.11	Madam Elena Madronal. Director Monserrat-19-6 Valencia Spain	KVK Visit
20.08.11	Yashaspati Mishra, Senior deputy collector, Gaya	KVK Visit
22.09.11,23.09.11	Dr. Ravindra Kr. Parang, Principal, Scientist, Agricultural extension Division, IARI, Delhi	Research study.
21.10.11	Dr. S.R. Sing, HOD, Extension, Saharsa Agricultural collage	KVK farm visit

4.0 IMPACT**4.1. Impact of KVK activities (Not to be restricted for reporting period).**

Name of specific technology/skill transferred	No. of participants	% of adoption	Change in income (Rs.)	
			Before (Rs./Unit)	After (Rs./Unit)
SRI Technique		60-70%		
Use of Rhizobium		60%		
Change in cropping system		42%		
Deworoning in animal		10%		
FDM in animal		20%		
Formulation of balance diet		17%		
Value- addition of fruits		5%		

&vegetable				
Women empowerment and income generation through Mushroom production		10%		
Sprinkler method of irrigation		55%		
Zero tillage		45%		

NB: Should be based on actual study, questionnaire/group discussion etc. with ex-participants.

4.2. Cases of large scale adoption (Please furnish detailed information for each case)

4.3 Details of impact analysis of KVK activities carried out during the reporting period

- Vocational training started in goatry, dairy, poultry mushroom etc. after the training 4 goatry unit up gradation in dairy unit and poultry unit and 4 mushroom commercial unit have been started through SHG.
- Different varieties of Banana being ieAlpan, Robaasta, Bhos, Kachkal etc. popularized and made available to the farmers of district.
- Popularization of SRI technique in Paddy, Wheat vegetable and oil seeds.
- About 5 quintals of Dhaicha seed produced and sold among the farmers to maintain soil health during reported period.
- Science this district is water scare the performance of short duration high yielding variety of Paddy iesahbhagi tried at farm field to introduced among farmers,
- This Kendra has popularized Rai Var. R. Suflam and R. Anukaul, Linseed-Garima, Lentil-KLS218 under low water and low fertilizer condition.
- Orientation for improvement of local breed of goat by crossing them to increase the weight of kids.
- Popularization of ectoparasiticids on dairy animals for disease management increasing milk production & health of dairy animal
- Popularization of Papad making Machine
- Popularization of sprinkler irrigation method for rabi crops.
- Popularization of zero tillage technique for sowing wheat.
- Popularization of reaper for crop harvesting.

4.5 Details of innovations recorded by the KVK : Mushroom

4.6 Details of entrepreneurship development by the KVK

4.7 Any other initiative taken by the KVK : SRI Oil seed & Vegetable

4.8 Area not covered by the above or constraints or new proposal for XII plan

5.0 LINKAGES

5.1 Functional linkage with different organizations

Name of organization	Nature of linkage
1. District Agriculture Officer, Gaya	Training to farmers & Extension functionaries
2. Agricultural Technology Management Agency (ATMA), Gaya	Training, Field day, KisanMela
3. District Horticulture Office, Gaya	Training
4. Bihar State Forest Development Corporation, Gaya	Training
5. Sugarcane Development Department, Gaya/Patna.	Training / Exhibition / Seminar
6. District Soil Conservation Department, Gaya.	Training
7. National Fertilizer Limited, Gaya.	Seminar, Field day, Training
8. Indian Farmers Fertilizer Co. (IFFCO) Gaya.	Field day, Seminar, Training
9. Tata Chemical Ltd., Gaya.	Seminar, Training,

March 2012			

(For whole of the year)

6.5 Utilization of staff quarters**Whether staff quarters has been completed:****No. of staffquarters:****Date of completion:****Occupancy details:**

Months	Q I	QII	Q III	QIV	Q V	QVI
April 2011						
March 2012						

7. FINANCIAL PERFORMANCE**7.1 Details of KVK Bank accounts**

Bank account	Name of the bank	Location	Account Number
With Host Institute			
With KVK	Punjab National Bank	Dhami Tola, Gaya	0179000100225627(Main) 0179000100225636(R/F)

7.2 Utilization of funds under FLD on Oilseed (Rs. In Lakhs) Na

Item	Released by ICAR		Expenditure		Unspent balance as on 1 st April 2012
	Kharif 2011	Rabi 2011-12	Kharif 2011	Rabi 2011-12	
Inputs					
Extension activities					
TA/DA/POL etc.					
TOTAL					

7.3 Utilization of funds under FLD on Pulses (Rs. In Lakhs)Na

Item	Released by ICAR		Expenditure		Unspent balance as on 1 st April 2012
	Kharif	Rabi	Kharif	Rabi	
Inputs					
Extension activities					
TA/DA/POL etc.					
TOTAL					

7.4 Utilization of funds under FLD on Cotton (Rs. In Lakh)

Item	Released by ICAR		Expenditure		Unspent balance as on 1 st April 2012
	Kharif	Rabi	Kharif	Rabi	
Inputs					
Extension activities					
TA/DA/POL etc.					
TOTAL					

7.5 Utilization of KVK funds during the year 2011 -12(estimated)

S. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	Pay & Allowances and 6th CPC	3900000.00		
2	Traveling allowances	80000.00		
3	Contingencies			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	550000.00		
B	POL, repair of vehicles, tractor and equipments			
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)			
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)			
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)			
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)			
G	Training of extension functionaries			
H	Maintenance of buildings			
I	Establishment of Soil, Plant & Water Testing Laboratory			
TOTAL (A)		4530000.00		
B. Non-Recurring Contingencies				
1	Works	1039000.00		
2	Equipments including SWTL & Furniture	975000.00		
3	Vehicle (Four wheeler/Two wheeler, please specify)			
4	Library (Purchase of assets like books & journals)	10000.00		
TOTAL (B)		2024000.00		
C. REVOLVING FUND				
GRAND TOTAL (A+B+C)				

7.5 Status of revolving fund (Rs. in lakh) for last years(estimated)

Year	Opening balance as on 1 st April	Income during the year	Expenditure during the year	Net balance in hand as on 1 st April of each year (Kind + cash)
April 2011 to March 2012	259043.85	155099.00	252833.00	161309.85

7.6 Any other significant achievements (provide full details with action photograph)

7.7 Number of SHGs formed by KVKs/associated with SHGs formed by other organizations indicating the area of SHG activities.

7.8 Details of marketing and financial opportunity created for the SHGs

7.9 Special programme on Food and Nutrition :

i) On farm trials conducted on food and nutrition:

Title, results, no. of beneficiaries and other information.

ii) FLD conducted on food and nutrition

Title, results, no. of beneficiaries and other information

iii) Awareness programme conducted on food and nutrition for Anganwadi workers and others

iv) Total Anganwadi workers trained indicating area of training:

v) Number of exhibition, fair, workshops organized on food and nutrition:

7.10 Community Radio Station :

i) Date of start of Community Radio Station

ii) Details of programme aired through Community Radio Station and frequency of such programme

iii) Whether any proposal is pending for establishment of CRS at KVK, if yes, date of submission of proposal

7.11 KMAS Service

Mobile Advisory								
No. of calls	No. of farmers covered	No. of messages	Type of messages					
			Crop (no.)	Livestock	Weather	Marketing	Awareness	Other enterprise

7.12 Performance of Automatic Weather Station/ Weather Station in KVK

i) Parameters are being recorded

ii) Advisory service based on weather data being provided to

a) Number of farmers

b) Departments with name and number

c) Other agency with name and number

7.13 Joint activity carried out with line departments and ATMA

Name of activity	Season	With line department	With ATMA	Both
KharifMahatsov	Kharif	District Agriculture Department		
Rabi Mahatsov	Rabi	-do-		
KishanSamagam		-do-		
UdaynMahatsov		-do-		
KisanMela		-do-		
KrishiyathrickaranMela		-do-		

Programme coordinator