ANNUAL REPORT

April 2014 – March 2015

Presented at
Zonal Level Workshop of Krishi Vigyan Kendras
of
Zone – II, ICAR

At
ICAR – Central Inland Fisheries Rsearch Institute,
Barrackpore, 24 Parganas (N), West Bengal

On May 26th. to 27th., 2015

By

Rathindra Krishi Vigyan Kendra
Palli Siksha Bhavana
Visva-Bharati
Sriniketan, P. O. – Sriniketan, Dist. - Birbhum
West Bengal - 731236

CONTENTS

REPORT (April 2014 to March 2015)

1. GENERAL INFORMATION ABOUT THE KVK

1.1. Name and Address of KVK with Phone, Fax and E-Mail

Address	Telephone		E-Mail
Rathindra Krishi Vigyan Kendra, Palli Siksha Bhavana, Visva-Bharati, Sriniketan, P. O. – Sriniketan, Dist. – Birbhum, Pin. – 731236, West Bengal.	**Office**	**FAX**	**rathindrakvk@gmail.com** **rathindrakvk@rediffmail.com**
	03463-264771	03463-264771	

1.2 .Name and Address of Host Organization with Phone, Fax and E-Mail

Address	Telephone		E-Mail
	Office	**FAX**	**Vice-Chancellor:** **vice-chancellor@visva-bharati.ac.in** **Registrar:** **registrar@visva-bharati.ac.in**
Visva-Bharati, Santiniketan, P. O. – Santiniketan, Dist. – Birbhum, Pin. – 731235, West Bengal.	03463-262451	03463-262672	

1.3. Name of the Programme Coordinator with Phone & Mobile No.

Name	Telephone / Contact		
Dr. Dulal Ch. Manna	**Residence:** 03463-264415	**Mobile:** 09434079511	**E-Mail** dcmanna@gmail.com

1.4. Year of sanction of KVK: Memo No. F.2 (2)\ 93-AE-1 of ICAR on 9th October, 1994.

1.5. Staff Position (as on 1st April, 2015)

Sl. No.	Sanctioned post	Name of the incumbent	Designation	Discipline	Pay Scale with present basic	Date of joining	Permanent /Temporary	Category (SC/ST/ OBC/ Others)
1	Programme Coordinator	Dr.Dulal Chandra Manna	Programme Coordinator	Horticulture	PB- 4, Rs.37400-67000+RGP Rs.9000 (Rs.54570/-)	01.08.1996	Permanent	GC
2	Subject Matter Specialist	Mrs. Ruma Addy	Subject Matter Specialist	Home Science	PB- 3 , Rs. 15600-39100/- +GP-Rs.5400/-(Rs. 28440/-)	06.06.1995	Permanent	GC
3	Subject Matter Specialist	Dr.Subrata Mandal	Subject Matter Specialist	Agronomy	PB- 3 , Rs. 15600-39100/- +GP-Rs.5400/-,(Rs.22020/-)	01.08.2004	Permanent	GC
4	Subject Matter Specialist	Sri Sourav Mondal	Subject Matter Specialist	Plant Protection	PB- 3 , Rs. 15600-39100/- + GP-Rs.5400/-(Rs22020/-)	01.08.2004	Permanent	SC
5	Subject Matter Specialist	Dr. Krishna Mitra	Subject Matter Specialist	Fishery	PB- 3 , Rs. 15600-39100/- + GP-Rs.5400/-(Rs.18900/-)	26.05.2012	Permanent	GC
6	Subject Matter Specialist	Dr. Prabuddha Ray	Subject Matter Specialist	Agriculture Extension	PB- 3 , Rs. 15600-39100/- + GP-Rs.5400/-(Rs.16880/-)	19.06.2012	Permanent	GC
7	Subject Matter Specialist	Dr. Madhuchhanda Khan	Subject Matter Specialist	Animal Science	PB- 3 , Rs. 15600-39100/- + GP-Rs.5400/-+ NPA 25% (Rs.15600/-)	10.06.2014	Permanent	GC
8	Accountant / Superintendent	Sri Madhu Sudan Chatterjee	Senior Assistant	-	PB-2, Rs. 9300-34800/- + GP- Rs.4600/-(Rs.20140/-.)	13.04.1995	Permanent	GC
9	Computer Programmer	Sri Suraj Kumar Bhakta	Programme Assistant	-	PB-2 , Rs. 9300-34800/- + GP-Rs.4200/- (Rs. 9300/-)	16.06.2014	Permanent	OBC
10	Farm Manager	Sri Palash Ankure	Programme Assistant	-	PB-2 , Rs. 9300-34800/- + GP-Rs.4200/- (Rs. 9300/-)	18.09.2014	Permanent	SC
11	Programme Assistant	Vacant	Programme Assistant	-	PB-2 , Rs. 9300-34800/- + GP-Rs.4200/-	-	Permanent	-
12	Jr. Stenographer cum Computer Operator	Sri Makbul Ahmed	Jr. Stenographer cum Computer Operator	-	PB-1, Rs. 5200-20200/- + GP-Rs.2400/- (Rs. 10520/-)	13.04.1995	Permanent	GC
13.	Driver-Cum-Mechanic	Sri Krishna Bansi Chatterjee	Driver-Cum-Mechanic	-	PB-2, Rs. 9300-34800/ - + GP- Rs.4200/- (Rs. 10650/-)	06.05.1997	Permanent	GC
14.	Driver-Cum-Mechanic	Sri Bikash Chandra Ghosh	Driver-Cum-Mechanic	-	PB-2, Rs. 9300-34800/ - + GP- Rs.4200/- (Rs. 10210/-)	06.05.1997	Permanent	GC
15.	Supporting staff	Sri Chowdhury Md. Anwar	Supporting Staff	-	PB-1, Rs. 5200-20200/ - + GP- Rs.1900/- (Rs. 8830/-)	13.04.1995	Permanent	GC
16.	Supporting staff	Sri Naran Tudu	Supporting Staff	-	PB-1, Rs. 5200-20200/ - + GP- Rs. 1800/- (Rs. 5630/-)	-	Permanent	ST

1.6. Total land with KVK (in ha):

Sl. No.	Item	Area (ha)
1	Under Buildings	00.550
2.	Under Demonstration Units	00.002
3.	Under Crops	02.000
4.	Orchard/Agro-forestry	00.543
5.	Others with details	12.550
Total		**15.645**

1.7. Infrastructure Development:

A) Buildings and others

Sl. 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)	Under use or not*	Source of funding
1.	Administrative Building					Totally completed	550.00	Under use	ICAR
2.	Farmers Hostel					Totally completed	305.00	Under use	ICAR
3.	Staff Quarters (6)	Not yet started							
4.	Piggery unit	Not yet started							
5.	Fencing	Not yet started							
6.	Rain Water harvesting structure	Not yet started							
7.	Threshing floor					Totally completed	180.00	Under use	ICAR
8.	Farm go-down					Totally completed	46.25	Under use	ICAR
9.	Dairy unit	Not yet started							
10.	Poultry unit					Totally completed	80.00	Under use	ICAR
11.	Goatary unit	Not yet started							
12.	Mushroom Lab	Not yet started							
13.	Mushroom production unit	Not yet started							
14.	Shade house	Not yet started							
15.	Soil test Lab					Totally completed		Under use	ICAR
16.	(Others, Please Specify) Portable Carp Hatchery for Fish Breeding					Totally completed	15.00	Under use	ICAR
17.	(Others, Please Specify) Duckery unit					Totally completed	80.00	Under use	ICAR
18.	(Others, Please Specify) Plant Diagnostic Laboratory					Totally completed	25.00	Under use	ICAR

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

B) Vehicles

Type of Vehicle	Year of purchase	Cost (Rs.)	Total km. Run	Present status
Multi Utility Vehicle (Bolero Plus)	2010	6,00,000.00	72,560	In running condition
Motor Bike (Rajdoot)	1997	32,000.00	39,013	Not in running condition
Moped (Toro Jaz)	1997	12,500.00		Not in running condition

C) Equipment & AV Aids

Name of equipment	Year of purchase	Cost (Rs.)	Present status	Source of fund
a. Lab Equipment				
Desiccators	1995-96	1540.00	Working condition	ICAR
Sewing machine	1995-96	3605.60	Working condition	ICAR
Mixer cum grinder	1995-96	3430.50	Working condition	ICAR
Weighing balance	1995-96	1700.00	Working condition	ICAR
Mixer grinder kenstar	2004-05	5,000.00	Working condition	ICAR
Refrigerator whirlpool	2004-05	16,750.00	Working condition	ICAR
Stibiliser fizi	2004-05	2450.00	Working condition	ICAR
Shaker	2004-05	24500.00	Working condition	ICAR
Oven	2004-05	9000.00	Working condition	ICAR
Kelplus Digestation System Model KES 08L	2004-05	85,719.00	Working condition	ICAR
Kelplus Distillation System elite ex	2004-05	1,38,943.00	Working condition	ICAR
Systronics Micro controller based visible spectro-photometer	2004-05	53,064.00	Working condition	ICAR
Systronics P-H system	2004-05	21,582.00	Working condition	ICAR
Systronics Digital conductivity meter	2004-05	15,444.00	Working condition	ICAR
Systronics Flame photometer Type 128	2004-05	73405.00	Working condition	ICAR
Hotplate with energy regulator	2004-05	2,340.00	Working condition	ICAR
Glass distillation apparatus flux	2004-05	15,617.00	Working condition	ICAR
Physical balance cap.250g with weight box	2004-05	6,310.00	Working condition	ICAR
Shimadzu Electronic Balance	2004-05	66,254.00	Working condition	ICAR
Kjeldal digestion unit	2004-05	6,205.00	Working condition	ICAR
Kjeldal distillation unit	2004-05	10,411.00	Working condition	ICAR
Microscope- Trinocular	2010-11	47,069.00	Working condition	ICAR
Microscope – Stereo	2010-11	21,055.00	Working condition	ICAR
BOD incubator	2010-11	39,132.00	Working condition	ICAR
Autoclave- Vertical	2010-11	21,814.00	Working condition	ICAR
Centrifuge	2010-11	14,200.00	Working condition	ICAR
Microscope Image Projection System (MIPS)	2010-11	31,885.00	Working condition	ICAR
Laminar Flow	2010-11	53,465.00	Working condition	ICAR
Desiccators	2010-11	6,072.00	Working condition	ICAR
Rotary Shaker	2010-11	21,700	Working condition	ICAR
Digital Weighing machine	2010-11		Working condition	ICAR
b. Office Equipments				
Word processor	1995-96	2,100.00	Working condition	ICAR
Canon photo copier	2003-04	69,988.00	Working condition	ICAR
Stabilizer 2KVA	2003-04	4,000.00	Working condition	ICAR
Generator	2008-09	49,500.00	Working condition	ICAR
c. AV Aids				
Overhead Projector	1994-95	24,477.55	Working condition	ICAR
Sony TV	1998-99	20999.00	Working condition	ICAR

Sony audio system	1998-99	5,990.00	Working condition	ICAR
Sharp VCR	1998-99	13,750.00	Working condition	ICAR
Slide projector	2001-02	14,672.00	Working condition	ICAR
PA system			Working condition	ICAR
Amplifier	2001-02	6400.00	Working condition	ICAR
Microphone ASM580	2001-02	2700.00	Working condition	ICAR
Microphone ACM66	2001-02	1300.00	Working condition	ICAR
Speaker	2001-02	2500.00	Working condition	ICAR
DGT stand	2001-02	290.00	Working condition	ICAR
DGN stand	2001-02	490.00	Working condition	ICAR
LCD projector	2008-09	99,990.00	Working condition	ICAR
Camera	2008-09	23,900.00	Working condition	ICAR

D) Farm Implements

Name of equipment	Year of purchase	Cost (Rs.)	Present status	Source of fund
ASPEE Sprayer (10 litres)	1995 - 96	2,050.00	Working condition	ICAR
ASPEE Hand Sprayer	1995 - 96	1,090.00	Working condition	ICAR
Paddy Thresher	1995 - 96	4,000.00	Working condition	ICAR
Hand Rotary Duster	1995 - 96	650.00	Working condition	ICAR
Rotary Shaker	2010 - 11	21,700.00	Working condition	ICAR
Power Ripper	2010 - 11	Free Supply	Working condition	ICAR
Zero Tillage Machine	2010 - 11	Free Supply	Working condition	ICAR
Mounted Offset Disc Harrow	2010 - 11	Free Supply	Working condition	ICAR
Mould Board Plough	2010 - 11	Free Supply	Working condition	ICAR
Cono Weeder	2012 - 13	Free Supply	Working condition	ICAR
Drum Seeder	2012 – 13	Free Supply	Working condition	ICAR

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

Sl. No.	Date	Number of Participants	Salient Recommendations	Action taken	If not conducted, state reason
1	20.03.2015.	18	Fodder cultivation should be popularized and fodder seeds should be distributed to the farmers.	The Fodder cultivation especially High Yielding Green Fodder crops are being empasized with the help of ICAR-NDRI, ERS, Kalyani in the Action Plan of 2015-2016 of the Rathindra KVK.	
2	20.03.2015.		Cultivation of pulses particularly Lentil cultivation should be popularized.	The cultivation of the Pulses especially the Lentil Cultivation is being emphasized with introduction of newer varieties.	
3	20.03.2015.		Mushroom cultivation should be popularized.	The Mushroom Cultivation is being popularized through conducting of Entrepreneurship Development Training Programme of the Rural Youths in the Year 2015 – 2016.	
4	20.03.2015.		Village seed production programme should be emphasized.	Village Seed production would be enhanced through organizing more Seed production programme in 2015 – 2016 as notyed in the Action Plan of 2015 – 2016.	

** Salient recommendation of SAC in bullet form*
Attach a copy of SAC proceedings along with list of participants

2. District Level Data on Agriculture, Livestock and Farming Situation (April, 2014 – March, 2015)

2.1 Major Farming system/enterprise

Sl. No.	Farming System/Enterprise
1	**Upland**- Paddy, red gram, fruit crops
2	**Medium land**- Paddy, mustard, potato, sugarcane, sesame, black gram, vegetables, fruit crops, cow, goat, backyard poultry, fishery
3	**Lowland**- Paddy, sugarcane, wheat, potato, vegetables, duckery, fishery

2.2 Agro-climatic Zone

Agro Ecological Sub Region (ICAR):- Assam And Bengal Plain, Hot Subhumid To Humid (Inclusion Of Perhumid) Eco-Region. (15.1)

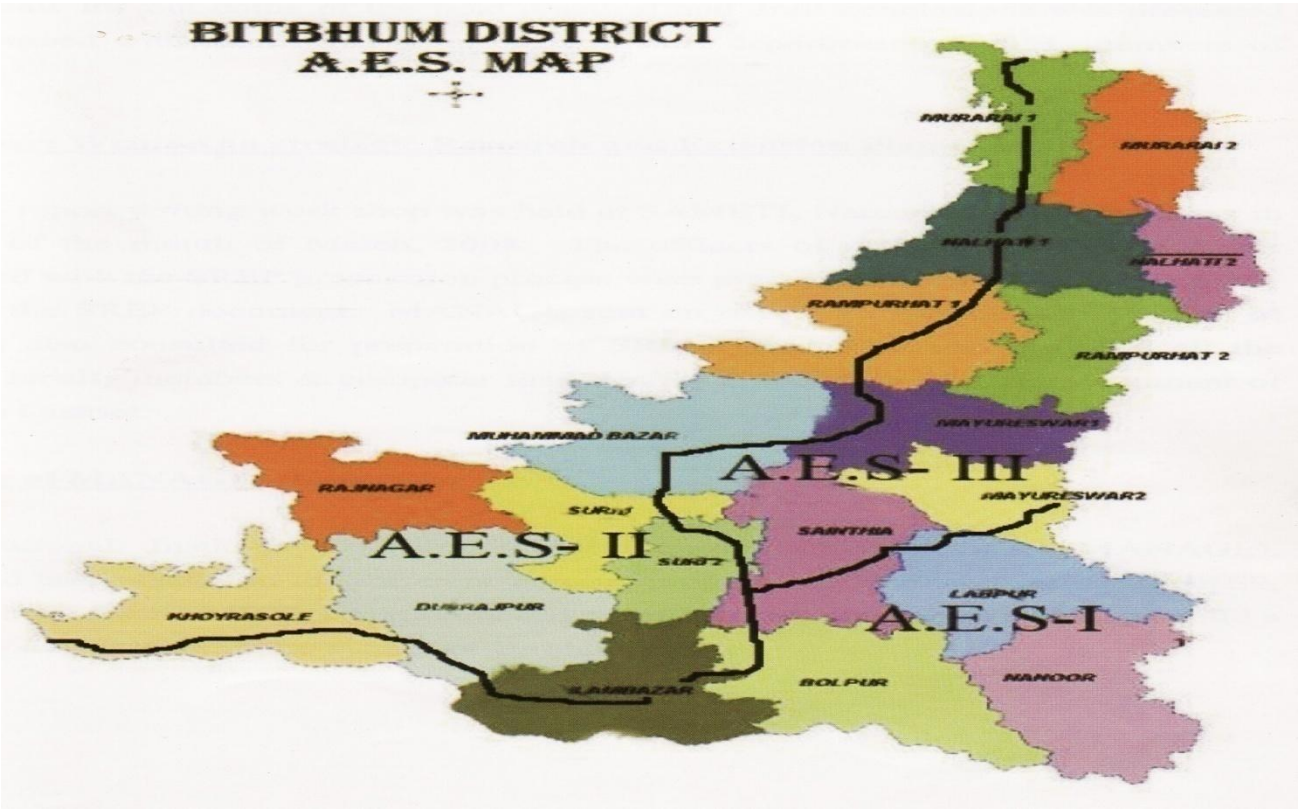
Eastern plateau (chhotanagpur) And Eastern Ghats, Hot Subhumid Eco-Region (12.3)

Agro-Climatic Zone (Planning Commission):- Lower Gangetic Plain Region (III)

Agro Climatic Zone (NARP):- Red and lateritic Zone (WB-5)

2.3 Agro ecological situation

The Birbhum District is divided into three Agro-Ecological Situation viz. AES – I, AES – II and AES – III. The Rathindra KVK is situated in the AES – I. The Map and detailed features of the Ago-ecological Situations of the District of Birbhum are given here under.



Source: - SREP, Birbhum – 2009.

Agro-ecological Situations of the District of Birbhum

Characteristics	AES - I	AES – II	AES – III
Blocks covered	Blocks under this AES are Bolpur-Sriniketan, Nanoor, Sainthia, parts of Mayureswar – I and Mayureswar – II. parts of Labhpur, Illambazar	Blocks under this AES are Rajnagar, Dubrajpur, Khyrasole, parts of Nalhati – I, Rampurhat – I, Murarai – I, Mayureswar – I, Illambazar, Labhpur, Suri – I and Md. Bazar.	Blocks under this AES are Rampurhat – II, parts of Murarai – I, Murarai – II, Nalhati I, Nalhati – II, Md. Bazar, Suri – I and Suri – II.
Soil Type	Fertile loamy clay soil, 60 percent of cultivable area under loam – clay loam soil. pH – 4.5 – 6.5	Sandy to sandy clay soil. 80 percent of cultivable area under clay soil and slightly acidity problem soil. pH – 5.2 – 6.5	Clay to clay loam soil. 70 percent clay soil with 30 percent loam to clay loam soil. pH – 4.8 – 6.5
Irrigation	75 percent of the total cultivable area is under irrigation out of which 51 percent of area is under surface irrigation.	30 percent of the total cultivable area is under irrigation out of which 20 percent of the area is irrigated from surface water and the rest area is irrigated from minor irrigation sources. Ground water is not easily available.	70 percent of the total cultivable area is under irrigation out of which 60 percent of the area is irrigated from available groundwater. Surface irrigation area is only 10 percent. Ground water is easily available for irrigation purpose.
Important River	Ajoy, Mayurakshi, Dwaraka, Kopai	Hinglow, Bakreswar, Shaal, Ajoy, Chandrabhaga	Dwaraka, Brahmani, Mayurakshi, Pagla, Bansloi
Flood / Draught Proneness	Moderate flood prone area	Moderate draught prone area	Flood prone area
Available Water Area for Fish Cultivation	30 percent of ponds of the district of Birbhum are situated. Sweet water is available for fisheries.	20 percent of ponds of the District of Birbhum are under this AES. A vast sweet water resource is available for fish cultivation.	50 percent of the ponds of the District of Birbhum are under this AES. Sweet water area is available for fish cultivation.
Animal Resources	20 percent of the total Milch Cows of the District of Birbhum is available under this AES out of which upgraded Breed percentage is only 5 percent. Only 15 percent of the total Goat population of the District of Birbhum and 30 percent of the Poultry Population of the District of Birbhum are available in this AES.	50 percent of the total Milch Cows of the District of Birbhum is available under this AES out of which upgraded Breed percentage is only 5 percent. 60 percent of the total Goat population of the District of Birbhum and 40 percent of the Poultry Population of the District of Birbhum are available in this AES.	30 percent of the total Milch Cows of the District of Birbhum is available under this AES out of which upgraded Breed percentage is only 5 percent. Only 25 percent of the total Goat population of the District of Birbhum and 30 percent of the Poultry Population of the District of Birbhum are available in this AES.

Major Crops:			
Paddy -	Pre-Kharif, Kharif and Boro Paddy	Pre-Kharif, Kharif and Boro Paddy	Pre-Kharif, Kharif and Boro Paddy
Oil Seeds –	Mustard, Groundnut and Sesame	Mustard and Groundnut and Sesame in limited areas.	Mustard, Groundnut and Sesame
Pulses –	Black and Green Gram, Lentil, Bengal Gram, Kulthi	Khesari, Black and Green Gram, Lentil, Bengal Gram, Kulthi	Black and Green Gram
Vegetables –	Seasonal vegetable round the year	Seasonal vegetables round the year	Seasonal vegetables round the year
Fruits -	Mango, Guava, Citrus, Banana, Coconut	Mango, Guava, Citrus, Banana, Coconut	Mango, Guava, Citrus, Banana, Coconut

Source: - SREP, Birbhum – 2009.

2.4 Soil Type

The predominant soil types are old alluvial and red lateritic with low to medium in organic carbon and phosphate content and medium to high in potash. The soil is acidic in nature with pH. range of 5.0 to 6.5.

This district (Birbhum) is enriched by various types of soil namely, Metal (Clay soil retentive of moisture which is best suited for growing winter paddy, sugarcane, wheat, gram and kalai); Ental (a sticky brownish clay, it is poor soil and is capable of producing paddy only if manured); Bagha Ental (ental having colour or tiger, it is poor soil capable of producing paddy only if manured); Beley (is a whitish loose and poor soil , capable of growing paddy and vegetable); Kankure ((it is a redish, loose laterite soil capable of growing bajra, maize, kurthi, bean and marual); Bastu (it is a blackish friable rich soil and is largely used for rabi crops); Bindi (it is a poor sandy soil which improves with continued cultivation, capable of producing paddy but can also grow rabi crops if irrigated); Reti Rfi (is lighter variant of Pali, it does not grow paddy it is best suited for vegetables, wheat, barley etc.) Pali (deposit of soil is bed of river or in areas subject to riverine inundation; it is very rich soil and is well suited for sugarcane, wheat, gram, potato and other vegetables. It is generally reserved for more valuable crops rather than paddy).

2.5 Productivity of Major 2-3 Crops under Cereals, Pulses, Oilseeds, Vegetables, Fruits and Others

Sl. No.	Year	Crops	Area ('000 ha)	Production ('000 tonnes)	Yield rate (kg.s / ha)
01.	1980-81	Total Cereals	378.8	620.5	1638
02.	1990-91		391.9	838.7	2140
03.	2000-01		345.7	875.3	2532

04.	2008-09		429.4	1311.6	3055
05.	2009-10		392.0	1050.7	2681
06.	2010-11		282.2	836.4	2964
07.	1980-81	Total Pulses	28.9	14.4	498
08.	1990-91		08.6	05.4	626
09.	2000-01		20.2	16.8	832
10.	2008-09		16.3	15.3	937
11.	2009-10		15.8	14.1	891
12.	2010-11		17.0	17.1	1004
13.	1980-81	Total Food-Grains	407.7	634.9	1557
14.	1990-91		400.5	844.1	2108
15.	2000-01		365.9	892.1	2438
16.	2008-09		445.7	1326.9	2977
17.	2009-10		407.8	1064.8	2611
18.	2010-11		299.2	853.5	2852

Source:- Economic Review 2011-2012, Govt. of West Bengal

Yield Rates of Some Selected Crops in the District of Birbhum and West Bengal

(Kilogram per hectare)

Crops	2003-04		2004-05		2005-06		2006-07		2007-08	
	District	West Bengal	District	West Bengal	District	West Bengal	District	West Bengal	District	W.B.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Rice	2981	2504	2805	2574	3029	2509	3128	2593	3098	2573
Wheat	2630	2315	2568	2103	2511	2109	2643	2281	2952	2602
Gram	1262	1026	792	1024	826	911	792	768	1166	984
Jute	3240	2428	3204	2484	3258	2572	3204	2545	3006	2425
Rapeseed & Mustard	1108	928	786	749	934	909	1019	803	1161	888
Potato	21067	24711	19139	22170	20511	21053	8538	12384	22111	24704
Tea	-	1769	-	1891	-	1899	-	2091	-	1983

Sources: - 1. Directorate of Agriculture, Govt. of W.B. 2. BAE&S, Govt. of W.B.. 3. Tea Board of India

Index numbers of Agricultural Area, Production & Productivity in the district of Birbhum

Base: Triennium ending crop year 1981-82 = 100

Year	Area		Production		Productivity	
	Cereals	All Crops combined	Cereals	All Crops combined	Cereals	All Crops combined
(1)	(2)	(3)	(4)	(5)	(6)	(7)
2003-04	**108.31**	**109.66**	**200.34**	**203.56**	**184.97**	**185.63**
2004-05	111.09	112.99	195.79	196.51	176.24	173.92
2005-06	106.20	108.74	203.49	207.82	191.61	191.12

2006-07	110.60	114.08	216.70	213.82	195.93	187.43
2007-08	**113.58**	**115.99**	**220.84**	**232.14**	**194.44**	**200.14**
2008-09	**114.31**	**117.29**	**219.00**	**214.71**	**169.94**	**188.72**
2009-10	**104.35**	**107.64**	**177.34**	**203.14**	**181.99**	**194.76**
2010-11	**75.14**	**82.58**	**136.75**	**160.84**	**145.06**	**146.23**

Source: B.A.E.& S., Govt. of W.B. and Economic Review 2011-2012, Govt. of West Bengal

Coverage and Productivity of Major Crops in the District of Birbhum

Sl. No.	Name of the Crop	Coverage (ha.)		Yield Rate (kg. / ha.)	
		Year 2003 - 04	Year 2011 – 12	Year 2003 -04	Year 2011 - 12
1	Pre-Kharif Paddy	5100	2554	2399	3466
2	Kharif Paddy	300600	326412	2921	4324
3	Boro Paddy	70600	57912	3118	4664
	Total Paddy	376300	386878	2981	4369
4	Wheat	30200	32998	2630	2612
5	Barley	200	15	1310	1217
6	Bhadio Maize		154		1574
7	Rabi Maize		-		-
8	Summer Maize		75		1600
	Total Maize	200	229	1563	1581
9	Kulthi		179		403
10	Mator		122		1178
11	Khesari		1460		1280
12	Kharif Moong		-		-
13	Rabi Moong		-		-
14	Summer Moong		1100		692
	Total Moong		110		692
15	Kharif Maskalai		57		282
16	Rabi Maskalai		-		-
	Total Maskalai		57		282
17	Gram		7147		1076
18	Tur	-	11	-	329
19	Musur		5803		628
	Total Kharif Pulses		507		418

	Total Rabi Pulses		15912		893
	Total Pulses	16500	16419	1092	878
20	Bhadui Til		-		-
21	Winter Til		-		-
22	Summer Til		5422		543
	Total Til		5422		543
23	Rape and Mustard	37400	32282	1108	923
24	Linseed	200	136	58	149
25	Sunflower		44		950
26	Bhadui Groundnut		-		-
27	Rabi Groundnut		7		1400
28	Summer Groundnut		-		-
	Total Groundnut		7		1400
29	Niger		-		-
	Kharif Oilseed		-		-
	Rabi Oilseed		37908		866
	Total Oilseed	39500	37908	1091	866
30	Jute	100	293	18.0	18.7
31	Mesta	-	-	-	-
32	Sunhemp		114		3.4
33	Sugarcane	1000	843	58553	85987
34	Potato	9800	17918	21067	30013

Source:- :- 1. Evaluation Wing, Directorate of Agriculture, Govt. of West Bengal and 2. BAE&S, Govt. of West Bengal

Horticultural Development in Major Crops in Birbhum District in Terms Of Area and Yield

Major fruits and vegetables						
Crops	**2004 -2005**		**2006 - 2007**		**2012 - 2013**	
	Area (ha)	**Productivity (q/ha)**	**Area (ha)**	**Productivity (q/ha)**	**Area (ha)**	**Productivity (q/ha)**
Tomato	1680.00	55.00	1860.00	140.80		
Tomato (Winter)					900.00	164.45
Tomato (Spring)					1050.00	163.81
Cabbage	2370.00	86.00	2550.00	363.60		
Cabbage (Winter)					1200.00	267.00
Cauliflower	2130.00	52.00	2170.00	157.50		
Cauliflower (Winter)					1300.00	184.23
Cauliflower (Spring)					900.00	183.89
Peas					800.00	41.00
Brinjal	6410.00	87.00	6850.00	120.40		
Brinjal (Rainy)					2400.00	116.67
Brinjal (Winter)					5300.00	215.00
Brinjal (Summer)					2600.00	112.39

Cucurbits	8340.00	121.00	8280.00	144.20		
Cucurbits (Rainy)					300.00	100.00
Cucurbits (Winter)					900.00	177.78
Cucurbits (Summer)					8200.00	147.56
Onion	1090.00	70.00	1380.00	72.90	1455.00	112.37
Lady's Finger (Rainy)					1520.00	90.13
Lady's Finger (Winter)					420.00	100.00
Sweet Potato					850.00	220.59
Beans					760.00	31.19
Radish (Winter)					600.00	133.33
Radish (Spring)					1230.00	121.95
Watermelon					1000.00	160.00
Elephant's Foot Yam					830.00	234.94
Arum					750.00	142.67
Leafy Vegetables (Rainy)					50.00	240.00
Leafy Vegetables (Winter)					40.00	200.00
Leafy Vegetables (Spring)					1000.00	70.00
Leafy Vegetables (Summer)					20.00	15.00
Others (Rainy)					4500.00	07.11
Others (Winter)					3900.00	15.77
Others (Spring)					1150.00	15.04
Others (Summer)					3000.00	09.83
Misc. Vegetables	10350.00	14.90	22000.00	51.90		
Total Vegetables	**32370.00**	**56.00**	**45100.00**	**100.60**		
Total Vegetables (Rainy)					**10350.00**	**76.62**
Total Vegetables (Winter)					**15360.00**	**149.98**
Total Vegetables (Spring)					**8230.00**	**136.68**
Total Vegetables (Summer)					**18737.50**	**111.93**
Mango	820.00	120.00	917.00	142.50	1640.00	58.54
Banana	520.00	80.00	650.00	159.50	950.00	137.38
Guava	770.00	110.00	943.00	150.60	1205	146.47
Pine Apple					05.00	180.00
Papaya					615.00	285.90
Jack Fruit					80.00	107.50
Litchi					50.00	48.00
Mandarin Orange						
Other Citrus					620.00	61.29
Sapota					190.00	105.00
Temperate Fruits						
Misc. Fruits	1100.00	140.00	1487.00	148.60	280.00	82.14
Total Fruits	**3210.00**	**45.00**	**3997.00**	**149.50**	**5635.00**	**119.20**
Chilli	240.00	30.00	460.00	89.80		
Ginger	550.00	50.00	710.00	96.80		
Turmeric	320.00	10.00	480.00	35.20		
Total Flower	**6500.00**	**46.20 lakh spikes**	**95430.00**	**69.6 lakh spikes**	**Not Available**	**Not Available**

Source: - Dept. of Horticulture and Food Processing Industries, Govt. of West Bengal.

2.6 Mean Yearly Temperature, Rainfall, Humidity of the District

The climate of the district is generally dry, mild and healthy. The hot weather usually last from the middle of March to the middle of the June, the rainy season from the middle of June to the middle of October, and the cold weather from middle of October to the middle of March. They do not always correspond to this limit. As a rule, the wind is from south-east in summer and from the north-west in winter.

Summer Temperature: Max: 40^0 C

Winter Temperature: Min: 10^0 C

Rain Fall (RF) (Ten Years Average 1998-2007):-

SW Monsoon (June - September): 1196.1 Normal RF (mm)

NE Monsoon (October - December): 152.3 Normal RF (mm)

Winter (January - March): 67.1 Normal RF (mm)

Summer (April - May): 157.4 Normal RF (mm)

Annual: 1572.9 Normal RF (mm)

Normal Onset of Monsoon: 1st. week of June

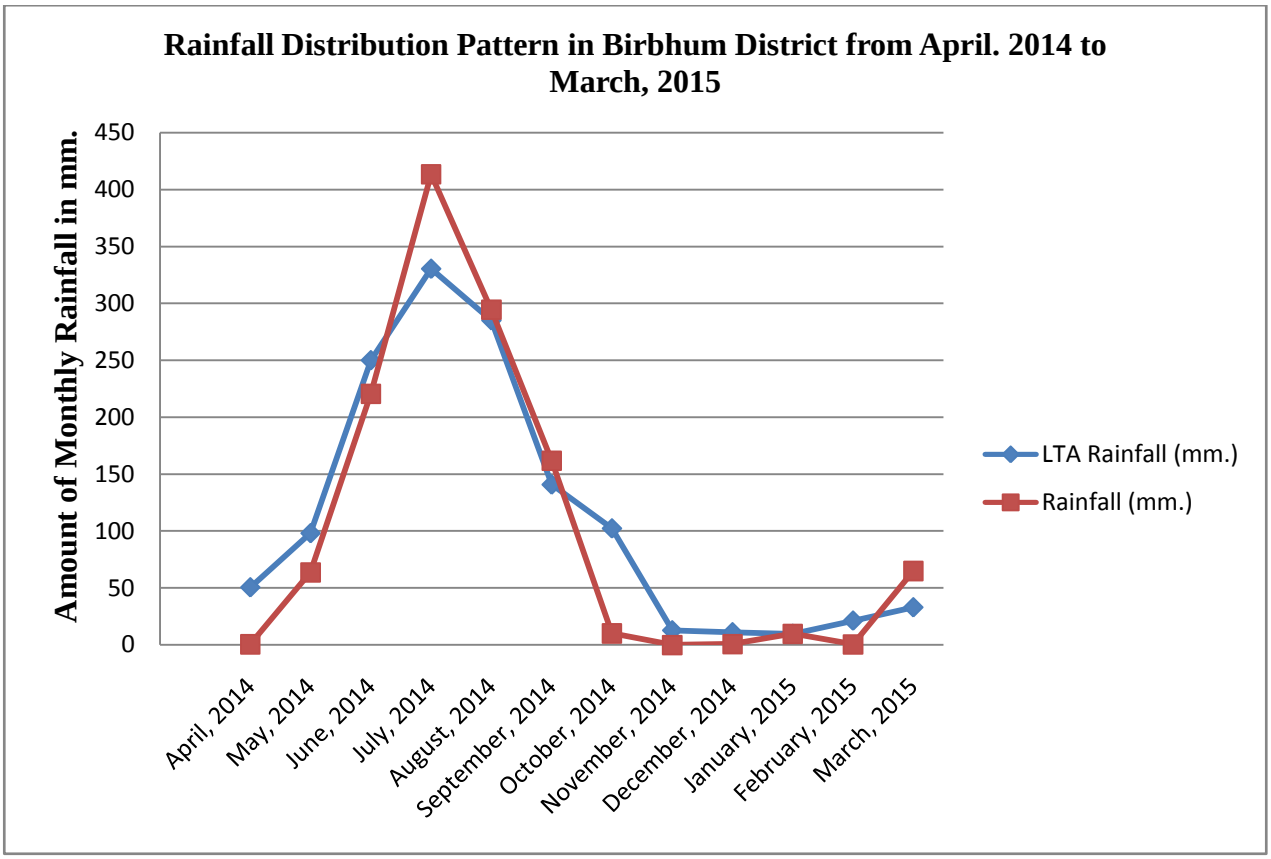
Normal Cessation of Monsoon: 4th. week of September

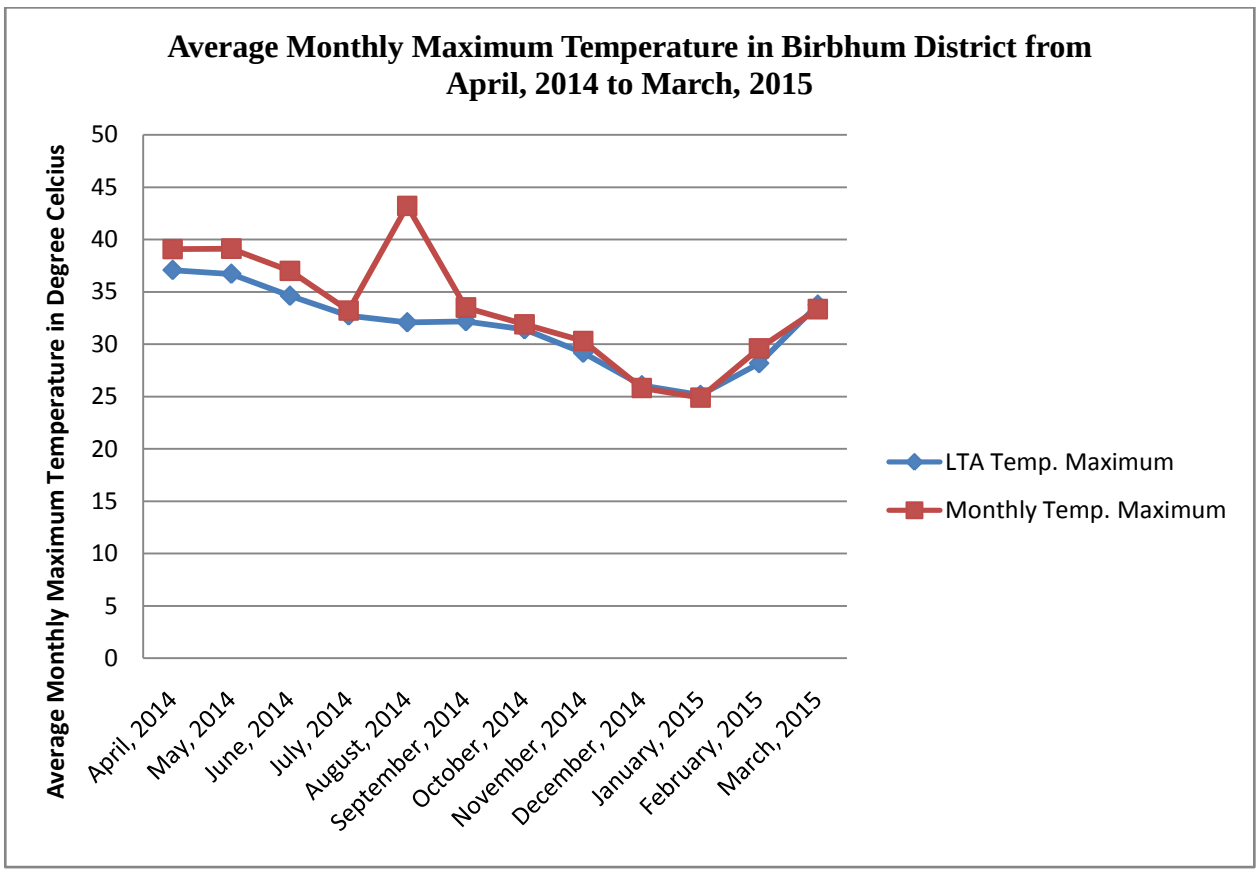
Weather Data

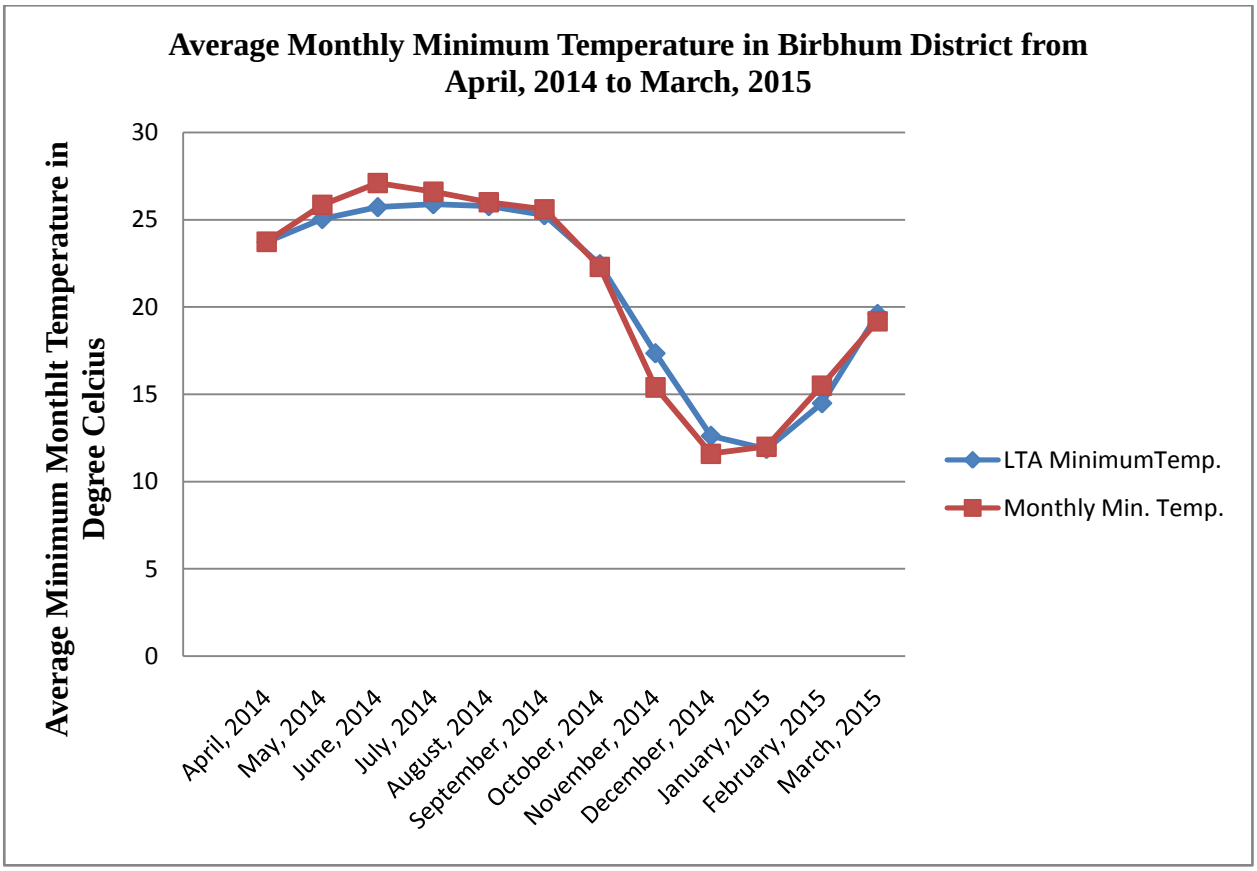
Month	Rainfall (mm.)	LTA Rainfall (mm.)	Temp. (^{0} C)	LTA Temp. (^{0} C)	Temp. (^{0} C)	LTA Temp. (^{0} C)	Relative Humidity (%)		LTA Relative Humidity (%)
			Maximum	Maximum	Minimum	Minimum	At 8.30 AM	At 5.30 PM	Average
April, 2014	00.70	50.52	39.08	37.07	23.74	23.71	55.00	40.00	61.05
May, 2014	63.80	98.09	39.12	36.71	25.86	25.03	64.00	48.00	73.07
June, 2014	220.6	250.09	37.00	34.61	27.10	25.71	78.00	71.00	80.06
July, 2014	413.3	330.47	33.20	32.73	26.60	25.88	87.00	87.00	84.59
August, 2014	294.5	285.13	43.20	32.08	26.00	25.77	86.00	85.00	87.11
September, 2014	161.80	140.80	33.50	32.18	25.60	25.25	83.00	80.00	85.04
October, 2014	10.20	102.29	31.90	31.41	22.30	22.44	80.00	80.00	76.46
November, 2014	00.00	12.71	30.30	29.17	15.40	17.34	72.00	67.00	72.19
December, 2014	00.80	11.02	25.82	26.07	11.60	12.61	80.00	62.00	71.50
January, 2015	09.80	9.61	24.90	25.15	12.00	11.86	82.00	63.00	73.56
February, 2015	00.50	21.25	29.60	28.18	15.50	14.48	75.00	55.00	62.35
March, 2015	65.00	32.96	33.35	33.76	19.19	19.59	59.77	45.35	56.38

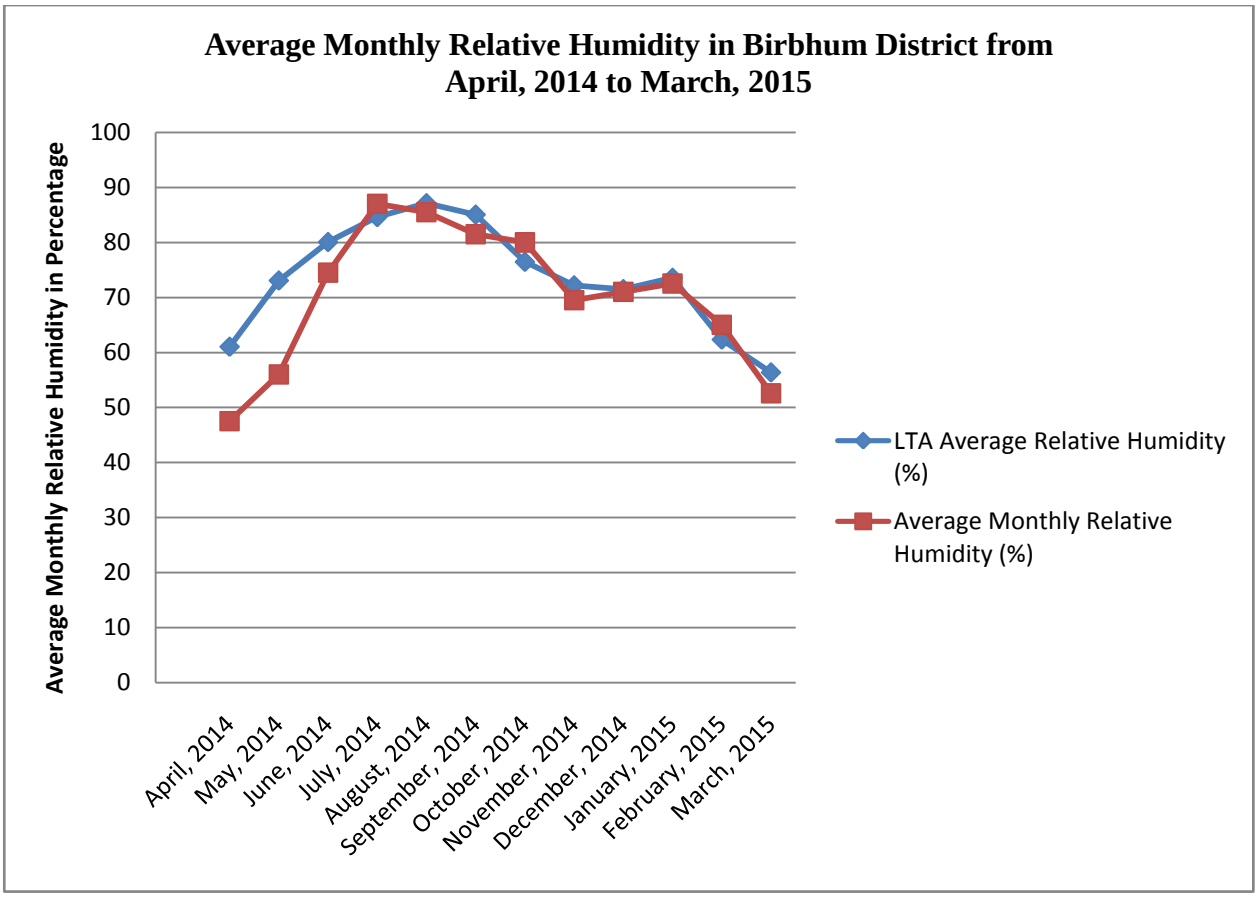
LTA = Long Term Average of 26 Years
Source: - Meteorological Observatory Office, Dept. of Meteorology, Govt. of India, Sriniketan, Birbhum, West Bengal.

Weather Condition in Birbhum District during 2014-15






Average Monthly Minimum Temperature in Birbhum District from April, 2014 to March, 2015
Average Minimum Monthlt Temperature in Degree Celcius
30
25
20
15
10
5
0
April, 2014
May, 2014
June, 2014
July, 2014
August, 2014
September, 2014
October, 2014
November, 2014
December, 2014
January, 2015
February, 2015
March, 2015
LTA MinimumTemp.
Monthly Min. Temp.


Average Monthly Relative Humidity in Birbhum District from April, 2014 to March, 2015
Average Monthly Relative Humidity in Percentage
100
90
80
70
60
50
40
30
20
10
0
April, 2014
May, 2014
June, 2014
July, 2014
August, 2014
September, 2014
October, 2014
November, 2014
December, 2014
January, 2015
February, 2015
March, 2015
LTA Average Relative Humidity (%)
Average Monthly Relative Humidity (%)

2.7 Production of Major Livestock Products like Milk, Egg, Meat etc.

Live-Stock and Poultry in the District of Birbhum

(Number)

Category		Year - 1989	Year - 1994	Year - 1997	Year - 2003	Year - 2007	Year 09-10	Year 10-11	Year 11-12
(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Cattle:								
	Cows	255381	266217	274094	282145	372662			
	Bulls and Bullocks	307844	347593	357919	294845	308308			
	Young Stock	328898	381066	392321	421336	452384			
	Total Cattle	892123	994876	1024334	998326	1133354	1163975	1180031	1196623
2	Buffaloes:								
	Cows	7627	7043	7132	8688	23492			
	Bulls and Bullocks	37258	45182	45753	47100	44088			
	Young Stock	6685	8076	8178	11075	..			
	Total Buffaloes	51570	60301	61063	66863	67580	63120	61002	58955
3	Sheep	163854	189122	189214	186280	216888	229300	235770	242422
4	Goats	598010	736251	816123	728113	941989	1066464	1134740	1207387
5	Horses and ponies	366	96	96	59	39	30	26	23
6	Pigs	77437	77572	83653	57680	49177	46814	45676	44565
7	Other Live-stock	..	..	. .	87735	93849	98391	100786	103280
	Total Live-stock	1783360	2058218	2174483	2125056	2502876	2668094	2758031	2853255
8	Poultry :								
	Fowls	1489187	1506982	1659044	2303418	3071493	3753562	4222424	4805424
	Ducks	828231	1076333	1218849	1274104	1150029	1165248	1097777	1086352
	Others	11275	20416	10514	3135	1609	1591	1582	1573
	Total Poultry	2328693	2603731	2888407	3580657	4223131	4920401	5321783	5893349

Source:- Live-Stock Census Report, Govt. of W. B. and Annual Administrative Reports of Aminal Resources Development Department, Govt. of West Bengal.

Estimated Production of Milk (Cow, Buffalo & Goat) and Egg (Hen & Duck) in Birbhum

Year	Milk (thousand tonnes)		Egg (number in thousands)	
	District	West Bengal	District	West Bengal
(1)	(2)	(3)	(4)	(5)
2003-04	97	3686	169883	2820317

2004-05	99	3790	175916	2887649
2005-06	100	3892	182064	2963720
2006-07	119	3984	233971	3038645
2007-08	119	4077	238117	3057342
2009-10	121.785	4300.17	290847	3697840
2010-11	123.605	4472.20	320083	4001062
2011-12	126.139	4660.23	347536	4337272
2012-13	128.518	4860.02	379785	4707268
2013-14	126.500	4906.21	386015	4746013

Source: - Live-Stock Census Report, Govt. of W.B. and Annual Administrative Reports of Aminal Resources Development Department, Govt. of West Bengal.

Production of Meat and Wool in the District of Birbhum

Sl. No.	Year	Meat Production (Metric Ton)	Wool Production (Metric Ton)
01.	2009-10	22177	108.373
02.	2010-11	23464.05	109.586
03.	2011-12	24775.00	110.846
04.	2012-13	26000.00	112.345
05.	2013-14	26408.00	112.731

Source: - Live-Stock Census Report, Govt. of W.B. and Annual Administrative Reports of Aminal Resources Development Department, Govt. of West Bengal.

Profile of Fisheries in the District of Birbhum

A. Capture

i) Marine

Inland Boat: 5

No. of fishermen: Nil

Boats – Mechanized – Nil **Non-mechanized** - Nil

Nets – Mechanized (Trawl nets, Gill nets) - Nil

Non-mechanized (Shore Seines, Stake and Trap Nets) - Nil

Storage Facilities (Ice plants etc.) - Nil

ii) Inland (**Fish Farmers** - 30112, **Fishermen** - 200747, **FC** - 20, **SHG** - 391)

No. Farmer owned Ponds - 85504 (Tank and Pond)

No. of Reservoirs – 6

No. of Village Tanks – Nil

B. Culture

i) Brackish Water –

Water Spread Area (ha) – Nil
Yield (t/ha) – Nil
Production ('000 tons) - 18 ton Prawn

ii) Fresh Water –

Culturable Area: 15720.62 ha.

Semi-Derelict Area: 1596.57ha.

Derelict Area: 413.54 ha.

Yield (t/ha) – From Ponds under FFDA Scheme = 4.4 t/ha.

Production ('000 tons) - 115174 ton Fish (2008-09)

Source: - NICRA CONTINGENCY PLAN WestBengal 3-Birbhum-31.12.2011.pdf

Fish Seed Production in the District of Birbhum during 2010-11

174.00 million Numbers.

Fish Production in the District of Birbhum during 2010-11

65045.00 tons

Fisher Folk Population in the District of Birbhum in 2010-11

a) Number of fishing Villages :- 483
b) Number of Fisher Folk Families:- 37162
c) Fisher Folk Population: - i. Male: - 113526; ii. Female: - 87221 and iii. Total:- 200747

Number of Privately owned IMC Hatcheries in the District of Birbhum in 2010-11

07 (Seven)

Numbers of Primary Fishermen's Cooperative Societies in the District of Birbhum in 2010-11

10 (Ten)

Source: - Annual Report 2010-11, Department of Fisheries, Govt. of West Bengal.

2.8 (a) Details of Operational Area / Villages (2014-15)

Sl. No	Name of Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified (Crop wise)	Identified Thrust Areas
1.	Sattore	Bolpur - Sriniketan	Srichandrapur	Rice, wheat, mustard, potato, redgram, balckgram etc. Vegetable like brinjal, chilli, tomato, Elephant foot yam, cucurbits, fruit plants like mango, guava, papaya, coconut, banana etc. and dairy, goatery, poultry, duckery, fishery, batique work, decorative candle, post harvest techno-logy of fruits and vegetables, health and nutrition	***Bio physical:*** **Low productivity of all major crops** • Poor and Marginal soil • Low yielding seeds and plants • Limited water resource for irrigation • Imbalanced use of manures and fertilizer • Inappropriate agronomic practices • Inappropriate horticultural practices • Indiscriminate use of chemical pesticide **Poor productivity of livestock** • Inadequate, descriptive and prolific breed • Poor health and management practices • Low quality feed **Poor fish productivity:** • Poor pond management • Poor quality fingerlings **Low income generation of rural women** • Lack of skill on income generating rural crafts • Lack of skill on fruits and vegetable preservation • Lack of skill on establishment of backyard nutrition garden **Poor health condition of women and child** • Lack of nutritious food resources • Lack of skill on establishment of backyard nutrition garden ***Socio Economic:*** • Lack of knowledge about soil testing based fertiliser application • Lack of knowledge on good agronomic and horticultural practices • Lack of knowledge on care handling of plant protection equipments • Lack of knowledge on good dairy, goatery, poultry management practices • Multi ownership of ponds • Tendency to lease out ponds • Lack of knowledge on different income generating programme for women • Lack of knowledge on low cost nutritious food for women and child • Lack of credit facilities	• Soil health management • Quality seeds/seedlings and saplings • Balanced crop nutrition • Good agronomic practices • Good horticultural practices • Appropriate Pest Management • Formation of Self Help Groups • Formation of Farmers Club • Organization of Exposure visits of Practicing Farmers, Farm Women and Rural Youths • Improved Extension Activities like Kissan Mobile Message Services • Improvement of livestock productivity • Enhancement of fish productivity • Improvement of women led vocation • Women and child care • Market led Extension
2.	Sattore	Bolpur - Sriniketan	Bishnubati			
3.	Sattore	Bolpur - Sriniketan	Asadullapur			
4.	Sattore	Bolpur - Sriniketan	Bautizole			
5.	Bahiri Panchshoyaa	Bolpur - Sriniketan	Dhanyasara			
6.	Bahiri Panchshoyaa	Bolpur - Sriniketan	Durgapur			
7.	Bahiri Panchshoya	Bolpur - Sriniketan	Chota Shimulia			

2.8 (b) Details of Village Adoption Programme:

Name of the villages adopted by PC and SMS in 2014-15 for its development and action plan

Name of village	Block	Action taken for development
Choto Shimulia	Bolpur-Sriniketan	**A. Skill development Training Programmes** on Horticultural Crop diversification, Cultivation of Cucurbitaceous Crops, Cultivation of Solanaceous Crops, Lay out and planting of Mango and Guava Orchards, Improved package and practices of Kharif Vegetables, Improved Method of Elephant Foot Yam Cultivation, Improved Production Practices of *Barmasia* Drum Sticks, Improved Production Practices of Low Volume High Value Crops like Capsicum, Broccoli etc. **B. Skill development Training Programme** on Collection Soil Sample for Soil Testing and Green Manuring through *Dhaincha* Cultivation. **C. Skill development Training Programmes** on Integrated Pest, Disease and Weed Management in Cereals, Pulses and Oilseeds and Vegetables.

		D. Knowledge development Training Programmes on Crop Insurance, Kisan Credit Card, Farmers' Clubs, Formation of Self Help Groups (SHGs), Formation of Commodity Interest Groups (CIGs), Marketing Mechanisms and Marketing Channels of Farm Products and Protection of Plant Varieties and Farmers' Rights Act, 2001. **E. Front Line Demonstrations (FLDs)** on (i) Green Gram Var. PDM-84-139; (ii) Black Gram Var. WBU – 108; (iii) *Dhaincha*; (iv) Elephant Foot Yam Var. Bidhan Kusum; (v) Drum Sticks Var. PKM – 1; (vi) Capsicum Var. Bharat and Mahabharat; (vii) Broccoli Var. Green Magic (F_1 Hybrid); (viii) Area Specific Mineral Mixture Supplement for Lactating Deshi Cow; (ix) Fodder Oat Var. Kent; (x) Fodder Berseem Var. – BL – 10. **F. Vaccination Camp** for Cattles and Birds.
Asadullahpur	Bolpur-Sriniketan	**A. Skill development Training Programmes** on Integrated Pest, Disease and Weed Management in Cereals, Pulses and Oilseeds and Vegetables. **B. Women Empowerment** through Skill Development Training on Rural Crafts, Preservation and Value Addition of Fruits and Vegetables, Homestead Kitchen Gardening. **C. Knowledge development Training Programmes** on Crop Insurance, Kisan Credit Card, Farmers' Clubs, Formation of Self Help Groups (SHGs), Formation of Commodity Interest Groups (CIGs), Marketing Mechanisms and Marketing Channels of Farm Products and Protection of Plant Varieties and Farmers' Rights Act, 2001. **D. Awareness Generation** of rural women on Health and Hygiene Issues.
Bautizole	Bolpur-Sriniketan	**A. Skill development Training Programmes** on Horticultural Crop diversification. **B. Skill development Training Programme** on Culture and Use of *Dhaincha* and *Azolla*. **C. Skill development Training Programme** on Nursery Pond Preparation, Composite Fish Culture, Fish Feed Management and Fish Disease Management. **D. Skill development Training Programmes** on Integrated Pest, Disease and Weed Management in Cereals, Pulses and Oilseeds and Vegetables. **E. Women Empowerment** through Skill Development Training on Rural Crafts, Preservation and Value Addition of Fruits and Vegetables, Homestead Kitchen Gardening. **F. Knowledge development Training Programmes** on Crop Insurance, Kisan Credit Card, Farmers' Clubs, Formation of Self Help Groups (SHGs), Formation of Commodity Interest Groups (CIGs), Marketing Mechanisms and Marketing Channels of Farm Products and Protection of Plant Varieties and Farmers' Rights Act, 2001. **G. Front Line Demonstrations (FLDs)** on (i) Mustard Var. Pusa Bahar and Pusa Mahek and (ii) Wheat Var. HD – 2824. **H. On Farm Testing (OFT)** on Assessment of Balanced N-P-K Management for Incresing Yield of Yellow Sarson **I. Awareness Generation** of rural women on Health and Hygiene Issues.
Dhanyasara	Bolpur-Sriniketan	**A. Skill development Training Programmes** on Horticultural Crop diversification, Cultivation of Cucurbitaceous Crops, Cultivation of Solanaceous Crops, Lay out and planting of Mango and Guava Orchards, Improved package and practices of Kharif Vegetables, Improved Method of Elephant Foot Yam Cultivation, Improved Production Practices of *Barmasia* Drum Sticks, Improved Production Practices of Low Volume High Value Crops like Capsicum, Broccoli etc. **B. Skill development Training Programmes** on Collection of Soil Sample for Soil Testing, Sowing and Phosphate Management in *Dhaincha*, Rice Seed Production Technology in Kharif Season and Cultivation of Rabi Crops with Especial Emphasis on Weed Management. **C. Skill development Training Programme** on Nursery Pond Preparation and Composite Fish Culture. **D. Skill development Training Programmes** on Integrated Pest, Disease and Weed Management in Cereals, Pulses and Oilseeds and Vegetables. **E. Women Empowerment** through Skill Development Training on Rural Crafts, Preservation and Value Addition of Fruits and Vegetables, Homestead Kitchen Gardening. **F. Knowledge development Training Programmes** on Crop Insurance, Kisan Credit Card, Farmers' Clubs, Formation of Self Help Groups (SHGs), Formation of Commodity Interest Groups (CIGs), Marketing Mechanisms and Marketing Channels of Farm Products and Protection of Plant Varieties and Farmers' Rights Act, 2001. **G. Front Line Demonstrations (FLDs)** on (i) Green Gram Var. PDM-84-139; (ii) Black Gram Var. WBU – 108; (iii) *Dhaincha*; (iv) Mustard Var. Pusa Bahar and Pusa Mahek; (v) Wheat Var. HD – 2824; (vi) Elephant Foot Yam Var. Bidhan Kusum; (vii) Drum Sticks Var. PKM – 1; (viii) Capsicum Var. Bharat and Mahabharat; (ix) Broccoli

		Var. Green Magic (F_1 Hybrid); (x) Area Specific Mineral Mixture Supplement for Lactating Deshi Cow; (xi) Fodder Oat Var. Kent and (xii) Fodder Berseem Var. – BL – 10. **H. Demonstrations on Various IARI Paddy Varieties.** **I. On Farm Testing (OFT)** on Assessment of Balanced N-P-K Management for Incresing Yield of Yellow Sarson. **J. Awareness Generation** of rural women on Health and Hygiene Issues. **K. Vaccination Camp** for Cattles and Birds. **L. Animal Infertility Treatment Camp.**
Durgapur	Bolpur-Sriniketan	**A. Skill development Training Programmes** on Horticultural Crop diversification, Cultivation of Cucurbitaceous Crops, Cultivation of Solanaceous Crops, Lay out and planting of Mango and Guava Orchards, Improved package and practices of Kharif Vegetables, Improved Method of Elephant Foot Yam Cultivation, Improved Production Practices of *Barmasia* Drum Sticks, Improved Production Practices of Low Volume High Value Crops like Capsicum, Broccoli etc. **B. Skill development Training Programmes** on Collection of Soil Sample for Soil Testing, Sowing and Phosphate Management in *Dhaincha* and Rice Seed Production Technology in Kharif Season. **C. Skill development Training Programme** on Nursery Pond Preparation, Composite Fish Culture, Portable Carp Hatchery, Fish Feed Management and Fish Disease Management. **D. Skill development Training Programmes** on Integrated Pest, Disease and Weed Management in Cereals, Pulses and Oilseeds and Vegetables. **E. Women Empowerment** through Skill Development Training on Rural Crafts, Preservation and Value Addition of Fruits and Vegetables, Homestead Kitchen Gardening. **F. Knowledge development Training Programmes** on Crop Insurance, Kisan Credit Card, Farmers' Clubs, Formation of Self Help Groups (SHGs), Formation of Commodity Interest Groups (CIGs), Marketing Mechanisms and Marketing Channels of Farm Products and Protection of Plant Varieties and Farmers' Rights Act, 2001. **G. Front Line Demonstrations (FLDs)** on (i) Green Gram Var. PDM-84-139; (ii) Black Gram Var. WBU – 108; (iii) *Dhaincha*; (iv) Mustard Var. Pusa Bahar and Pusa Mahek; (v) Sesame Var. Sabitri (SWB–32–10– 1); (vi) Wheat Var. HD – 2824; (vii) Elephant Foot Yam Var. Bidhan Kusum; (viii) Drum Sticks Var. PKM – 1; (ix) Capsicum Var. Bharat and Mahabharat; (x) Broccoli Var. Green Magic (F_1 Hybrid); (xi) Giant Prawn in Composite Fish Culture and (xii) Area Specific Mineral Mixture Supplement for Lactating Deshi Cow. **H. On Farm Testing (OFT)** on **(i)** Assessment of Balanced N-P-K Management for Incresing Yield of Yellow Sarson; (ii) Assessment of Specific Vitamins as Growth Promoters in Carp Spawns and Fry Feed to Increse their Survival Rate to A Profitable Extent and (iii) Evaluation of Performance of Rural Poultry Breed Viz. Deshi, Rhode Island Red (RIR) and Vanaraja under Backyard Management System. **I. Demonstrations on Various IARI Paddy Varieties.** **J. Soil Testing Camp.** **K. Plant Diagnostic Camp.** **L. Awareness Generation** of rural women on Health and Hygiene Issues.
Bishnubati	Bolpur-Sriniketan	**A. Skill development Training Programmes** on Horticultural Crop diversification and Improved Production Practices of Low Volume High Value Crops like Capsicum, Broccoli etc. **B. Skill development Training Programmes** on Sowing and Phosphate Management in *Dhaincha* and Cultivation of Rabi Crops with special Emphasis on Weed Management. **C. Skill development Training Programme** on Nursery Pond Preparation, Composite Fish Culture, Portable Carp Hatchery, Fish Feed Management and Fish Disease Management. **D. Skill development Training Programmes** on Integrated Pest, Disease and Weed Management in Cereals, Pulses and Oilseeds and Vegetables. **E. Women Empowerment** through Skill Development Training on Rural Crafts, Preservation and Value Addition of Fruits and Vegetables, Homestead Kitchen Gardening. **F. Formation of Two (02) Women led Self Help Groups (SHGs).** **G. Knowledge development Training Programmes** on Crop Insurance, Kisan Credit Card, Farmers' Clubs, Formation of Self Help Groups (SHGs), Formation of

		Commodity Interest Groups (CIGs), Marketing Mechanisms and Marketing Channels of Farm Products and Protection of Plant Varieties and Farmers' Rights Act, 2001. **H. Front Line Demonstrations (FLDs)** on (i) Maize Var. HQPM – 1 and HM – 4; (ii) Red Gram Var. ICPL-87-119; (iii) Green Gram Var. PDM-84-139; (iv) Black Gram Var. WBU – 108; (v) *Dhaincha*; (vi) Sesame Var. Sabitri (SWB–32–10– 1); (vii) Wheat Var. HD – 2824; (viii) Capsicum Var. Bharat and Mahabharat; (ix) Broccoli Var. Green Magic (F_1 Hybrid); (x) Giant Prawn in Composite Fish Culture; (xi) Fodder Oat Var. Kent; (xii) Fodder Berseem Var. – BL – 10 and (xiii) Area Specific Mineral Mixture Supplement for Lactating Deshi Cow. **I. On Farm Testing (OFT)** on (i) Evaluation of Performance of Rural Poultry Breed Viz. Deshi, Rhode Island Red (RIR) and Vanaraja under Backyard Management System. **J. Awareness Generation** of rural women on Health and Hygiene Issues. **K. Vaccination Camp** for Cattles and Birds. **L. Animal Health Camp.**
Srichandrapur	Bolpur-Sriniketan	**A. Skill development Training Programme** on Nursery Pond Preparation, Composite Fish Culture, Portable Carp Hatchery, Fish Feed Management and Fish Disease Management. **B. Skill development Training Programmes** on Integrated Pest, Disease and Weed Management in Cereals, Pulses and Oilseeds and Vegetables. **C. Women Empowerment** through Skill Development Training on Rural Crafts, Preservation and Value Addition of Fruits and Vegetables, Homestead Kitchen Gardening. **D. Knowledge development Training Programmes** on Crop Insurance, Kisan Credit Card, Farmers' Clubs, Formation of Self Help Groups (SHGs), Formation of Commodity Interest Groups (CIGs), Marketing Mechanisms and Marketing Channels of Farm Products and Protection of Plant Varieties and Farmers' Rights Act, 2001. **E. Front Line Demonstrations (FLDs)** on (i) Green Gram Var. PDM-84-139; (ii) Mustard Var. Pusa Bahar and Pusa Mahek; (iii) Wheat Var. HD – 2824; (iv) Fodder Oat Var. Kent; (v) Fodder Berseem Var. – BL – 10 and (vi) Giant Prawn in Composite Fish Culture. **F. On Farm Testing (OFT)** on (i) Use of *Azolla* in Fish Feed Preparation and (ii) Evaluation of Performance of Rural Poultry Breed Viz. Deshi, Rhode Island Red (RIR) and Vanaraja under Backyard Management System. **G. Demonstrations on Various IARI Paddy Varieties.** **H. Awareness Generation** of rural women on Health and Hygiene Issues. **I. Vaccination Camp** for Cattles and Birds.

2.8 (c) Sansad Adarsh Gram Yojona

i) Name of the village under Sansad Adarsha Gram Yojona:

ii) Contribution of KVK in the programme:

2.9 Priority Thrust Areas

Sl. No.	Thrust Areas
1.	Crop diversification through introduction of pulses, oilseeds, major millets, horticultural crops like elephant's foot yam, drum stick and high value low volume horticultural products like capsicum, broccoli etc.
2.	Popularization of High Yielding Varieties (HYVs) of major crops like paddy, wheat, mustard, potato etc. as well as traditional varieties of those crop also.
3.	Cultivation of field crops which require least water in the Arid and Semi-Arid regions of the district and cultivation of suitable horticultural crops in those regions.
4.	Popularization of improved managent practices of Animals and Fishes
5.	Market led extension and institutional rural credit flow mechanism
6.	Women empowerment

3. TECHNICAL ACHIEVEMENTS

3. A. Details of target and achievement of mandatory activities by KVK during April, 2014 – March, 2015

OFT				FLD			
Number of OFTs		Number of farmers		Number of FLDs		Number of farmers	
Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement
08	06	66	52	585	589	585	589

Training				Extension activities			
Number of Courses		Number of Participants		Number of activities		Number of participants	
Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement
97	95	3450	3467	705	707	6835	146477

Seed production (q)		Planting material (Nos.)	
Target	Achievement	Target	Achievement
A. Black Gram – 0.10 B. Green Gram – 0.10 C. Lentil – 0.21 D. Mustard (Var. – B – 9) – 1.0 E. Mustard (Var. – Pusa Mahek) – 0.50 F. Mustard (Var. – Pusa Bahar) – 0.70 G. Sesame – 0.50 H. Paddy – 5.0	A. Black Gram (Var. – WBU – 108) – 0.25 B. Green Gram (Var. PDM -84-139) – 0.20 C. Lentil (Var. – WBL – 58) – 0.45 D. Mustard (Var. – B – 9) – 1.50 E. Mustard (Var. – Pusa Mahek) – 0.52 F. Mustard (Var. – Pusa Bahar) – 0.92 G. Sesame (Var. – Sabitri) – 0.70 H. Paddy (Var. – MTU – 7029, MTU – 1010, IET – 4786, PNR – 381, Pusa – 44 and Heera) – 6.0 I. Wheat (Var. HD - 2824) – 1.5 J. Poultry (Breed – Broiler) – 200 No.s K. IMC and Exotic Carps – 2.0	A. Vegetables – 2000	A. Vegetables – i. Broccoli (Var. – F – 1 Hybrid Fiesta) – 1000 ii. Capsicum (Var. – Mahabharat, Bharat) – 2000

3.1. Achievement on technologies assessed and refined

(I)

OFT- 1

1	Title of on-farm trials	Assessment of profitability due to integration of different components under fish based production systems in lateritic soil of Birbhum District
2	Problem diagnose	Lack of knowledge in integration of components in proper way for maximum profit
3	Details of technologies selected for assessment	**Framers practice:** Traditional Fish Farming (1 unit = 0.19 ha pond only + fallow land) **Technology opts. I**: composite fish culture (IMC) + Duck farming (Khaki Campbell 21 nos) + *Azolla* + Pulses (Redgram-Blackgram) (1 unit= 0.19 ha pond + 150 nos. Of poultry + 0.13 ha utilsed land with pulse) **Technology opts. II:** composite fish culture (IMC) + Duck farming (Khaki Campbell 21 nos) + *Azolla* + Vegetables (ladys' finger-capsicum) (1 unit= 0.19 ha pond + 150 nos. Poultry + 0.13 ha utilised land by vegetables)
4	Source of technology	DARE/ICAR Annual Report, 2008-09 Fertiliser News, 46(11)
5	Production system and Thematic area	Fish Based Integrated Farming System
6	Performance of the Technology with Performance indicators	Performance of the technology was found statistically significant Production and Economics of farming systems
7	Final recommendation for micro level situation	Tech. Opt.I i.e composite fish culture (IMC) + Duck farming (Khaki Campbell 21 nos) + *Azolla* + Pulses (Redgram- Blackgram) exhibited higher profit
8	Constraints identified and Feedback for research	Improper monetary transaction in the lean period for better profitability Other components suitable in the lean period may be studied
9	Process of farmers' participation and their reaction	Farmers helped the KVK scientist for data collection and implemented the technology very carefully. Day to day supervisory practices also one of the important participation. Beside this, farmers also invested different cost of cultivation like labour etc.

Thematic area: Integrated Farming System (Summer, 2014)

Problem definition: Lower profitability under fish based production system

Technology assessed: Assessment of profitability due to integration of different components under fish based production systems

Table 1: Profitability under fish based integrated farming system

Technology option	No. of trials	Man days utilized per year	Cost of cultivation (Rs./unit*)	Gross return (Rs./unit)	Net Return (Rs /unit)	BC Ratio
.Farmer's practice: Traditional fish farming	7	16	30200.00	33500.00	3700.00	1.11
I. composite fish culture (IMC) + Duck farming (Khaki Campbell 21 nos) + *Azolla* + Pulses (Redgram- Blackgram)		251	46,150.00	1,11,300.00	65150.00	2.41
II. composite fish culture (IMC) + Duck farming (Khaki Campbell 21 nos) + *Azolla* + Vegetables (ladys' finger-capsicum)		269	68,700.00	1,42,800.00	74100.00	2.08

- FP: 1 unit = 0.19 ha pond only + fallow land
- Opt-1: 1 unit= 0.19 ha pond + 21 nos. of Ducks + 0.13 ha utilsed land with pulse
- Opt-2: 1 unit= 0.19 ha pond + 21 nos. Of Ducks + 0.13 ha 29ocusing land by vegetables

Result:

The result of the trial (Table-1) indicated that Technology Option –I i.e. Composite fish culture +Duck farming +Azolla+ Pulses exhibited higher BC ratio (2.41) than that of Technology Option-II (2.08) and farmers practice (1.11). Here it is to be mentioned that gross return and net return was higher in integrated farming system where vegetable cultivation was one of the component. It might be due to higher value of vegetables than pulses. But due to low cost of cultivation, BC ratio was higher in integrated farming system where pulses were the component. Droppings of duck were also used as feed of fishes in both Technology Option-I and II. But in Technology Option-I, the leftover materials of pulses were also used as feed of fishes and ducks. So integration was more among the components in the Technology Option-I. Moreover, azolla was also used as feed of fish and ducks. Beside that, the azolla was also used as organic manure and bio fertilizer in pulses and vegetables. Further, man day's utilization (269 per year) was slightly higher in Technology Option –II than Technology Option-I (251 per year). In farmers practice, man days utilization was very low (16 per year) and BC ratio was also very low (1.11). Therefore, it may be concluded that integrated farming system with composite fish culture, duck farming, azolla and pulse cultivation in bank of the pond is very effective to integrate the components in profitable manner.

(II)

OFT- 2

1	Title:	Assessment of effect of different herbicides in weed management in summer pulse, blackgram var. WBU-108 in irrigated medium land in lateritic soil
2	Problem diagnose:	The farmers sow pulse seeds by broadcasting. After a few days weeds compete with the crop. No mechanical weeding is possible in broadcasted field.
3	Details of Technology assessment	Farmer's practice: No weeding
		Tech. Option I. Pendimethalin @ 0.75 lit a.i./ha as pre emergence (0-3 DAS)
		Tech. Option II. Quizalofop- P-ethyl @ 50 ml a.i./ha as early post emergence (15-20 DAS)
		Tech. Option III. Fenoxaprop-P-ethyl @ 60 ml a.i./ ha as early post emergence (15-20 DAS)
4	Sources of technology	Annual Reports, 2011-12 and 2012-13, AICRP on Weed Science, Visva-Bharati Centre
5	a.Production System: b. Theamatic area:	Rice- potato/wheat- pulse Weed Management
6	a. Performance of the Technology b. Performance indicators	Performance of the technology was found statistically significant Growth, Yield components, weed population, yield and economics
7	Final recommendation for micro level situation	Technology option –II i.e. Fenoxaprop-P-ethyl @ 60 ml a.i./ ha as early post emergence (15-20 DAS) significantly reduced the weed population and increased yield of black gram Var. WBU 108
8	a. Constraints identified b. Feedback for research	Use of lower dose of the herbicides found very difficult Use of this herbicide may be studied in rainy pulse also
9	Process of farmers participation and their reaction	Farmers incurred all the cost of cultivation except herbicides. They actively participated in counting pest population and collection of data effectively with the KVK scientists.

Thematic area: Weed Management (Summer Season, 2014)

Problem definition: The farmers sow pulse seeds by broadcasting. After a few days weeds compete with the crop. No mechanical weeding is possible in broadcasted field.

Technology to be assessed: Assessment of effect of different herbicides in weed management in summer pulse, blackgram var. WBU-108

Table 2: Effect of different herbicides in weed management in blackgram var. WBU-108

Technology option	No. of trials	Yield Component				Weed Population / m^2 At 45 DAS	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs./ha)	Net Return (Rs /unit)	BC Ratio
		No. of Branches per Plant	No. of Pods /m^2	No. of Seeds per Pod	Test Weight (1000 Seed weight in gm)						
Farmer's practice: No weeding	10	8.22	200.9	6.15	28.00	58.25	6.70	17000.00	26800.00	9800.00	1.58
I. Pendimethalin @ 0.75 lit a.i./ha as pre emergence (0-3 DAS)		10.50	245.6	6.83	30.15	39.10	8.25	18500.00	33000.00	14500.00	1.78
II. Quizalofop- P-ethyl @ 50 ml a.i./ha as early post emergence (15-20 DAS)		11.28	259.5	7.25	32.55	4.12	8.90	19100.00	35600.00	16500.00	1.86
III. Fenoxaprop-P-ethyl @ 60 ml a.i./ ha as early post emergence (15-20 DAS)		11.90	265.4	7.17	32.50	3.50	9.15	19100.00	36600.00	17500.00	1.92
Sem±		0.48	4.46	0.21	0.94	4.93	0.20				
CD(P=0.05)		1.41	12.89	0.61	2.74	14.25	0.58				

Results:

KVK Birbhum, W.B conducted an OFT in summer season, 2014 to assess better weed management practices in summer black gram (Var. WBU-108) in adopted villages. The result of the trial indicated that the Technology Option-III i. E. Use of herbicide Fenoxaprop-P-ethyl @ 60 ml a.i./ ha as early post emergence (15-20 DAS) significantly produced more no. Of branches per plant (11.90), pods/m^2 (265.4), seeds per pod (7.17) and higher yield (9.15 q/ha) than those of other technology options and farmers practice. It was found that at 45 DAT, there was heavy infestation of weed in the field of farmers practice where no weeding is done. Further the fields were almost weed free in Technology option –II and Technology option-III at peak period of crop weed competition. From the economics of cultivation, it was found that use of herbicide is more economical than no weeding. Among the herbicides the Technology Option-III Fenoxaprop-P-ethyl @ 60 ml a.i./ ha as early post emergence (15-20 DAS) fetched the higher BC ratio (1.92) than other technology opotions and farmers practice (1.58).

(III)

OFT- 3

1	Title:	Assessment of location specific bacterial wilt tolerant brinjal varieties during winter season under irrigated medium land situation of Birbhum district
2	Problem diagnose:	Brinjal is very popular vegetable in Birbhum District during *rabi* season for good economic return. The farmers now incur heavy loss due to infestation of bacterial wilt of brinjal
3	Details of Technology assessment	**Farmers Practice :** Local Improved **Technology opt-I.:** Indam-504 (bacterial wilt tolerant hybrid) **Technology opt- II :** Indam-902 (bacterial wilt tolerant hybrid)
4	Sources of technology	Literatures of plant breeders
5	a.Production System: b. Thematic area:	Vegetable-fallow-vegetable Varietal Replacement
6	a. Performance of the Technology b.Performance indicators	Statistically significant Plant height, No. of branches, % of wilt infestation, Yield
7	Final recommendation for micro level situation	Technology opt-II i.e**.** Indam-902 (bacterial wilt tolerant hybrid) produced higher yield of brinjal
8	a. Constraints identified b. Feedback for research	Quality seed of suitable variety for the zone is not available in the local market In summer/rainy season the performance of the variety may be studied
9	Process of farmers' participation and their reaction	Farmers incurred all the cost of cultivation except seed, which was supplied by KVK. Beside this, they participated actively in observing the growth and yield parameters of the crop.

Thematic area: Variety Replacement (Summer Season, 2014)

Problem definition: The farmers incur heavy loss due to infestation of bacterial wilt of brinjal

Technology to be assessed: Assessment of location specific bacterial wilt tolerant brinjal varieties

Table 2: Performance of different bacterial wilt tolerant brinjal varieties

Technology option	No. of trials	Yield Component			Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs./ha)	Net Return (Rs /unit)	BC Ratio
		Plant height (cm)	No. of branches / plant	Damage due to Infestation of Bacterial wilt (%)					
.Farmer's practice: Local improved	10	72.36	5.26	24	301.75	125500.00	362040.00	236540.00	2.88
I. Indam-504 (bacterial wilt tolerant hybrid)		66.45	7.77	4	408.90	128300.00	490680.00	362380.00	3.82
II.Indam-902 (bacterial wilt tolerant hybrid)		65.32	8.01	-	415.52	128550.00	498600.00	370050.00	3.88
Sem±		1.82	0.42		19.70				
CD(P=0.05)		5.27	1.22		56.95				

Result:

The result of the trial (Table-2) pointed out that Technology Option –II i.e. Indam -902 (bacterial wilt tolerant hybrid) variety of brinjal exhibited significantly higher yield (415.22 q/ha) than that of farmer's practice. It was also observed that Technology Option-I (Indam-504) and Technology Option-II produced at par yield. BC ratio was higher (3.88) with the cultivation of brinjal variety Indam-902 than Indam-504 and local improved (2.88). But in all the component Indam-504 and Indam-902 exhibited at par effect. There was no damage due to infestation of bacterial wilt in brinjal plant, so the yield was more.

(IV)

OFT – 4

1	Title:	Assessment of location specific powdery mildew tolerant cucumber varieties during winter season under irrigated medium land situation of Birbhum district
2	Problem diagnose:	Cumcumber cultivation in Birbhum District is very economical. But presently the farmers now incur heavy loss due to infestation of powdery mildew of cumcumber
3	Details of Technology assessment	**Farmers Practice :** Local Improved **Technology opt-I.:** Snow white (powdery mildew tolerant hybrid) **Technology opt- II :**.Swadisht (powdery mildew tolerant hybrid)
4	Sources of technology	Literatures of plant breeders
5	a.Production System: b. Thematic area:	Vegetable-fallow-vegetable Varietal Replacement
6	a. Performance of the Technology b.Performance indicators	Statistically significant Av. Fruit size, % of powdery mildew infestation, Yield
7	Final recommendation for micro level situation	Technology opt-I i.e**.** Snow white (powdery mildew tolerant hybrid) produced higher yield of cucumber
8	b. Constraints identified b.Feedback for research	Quality seed of suitable variety for the zone is not available in the local market Varieties of green colour and medium fruit size may be tested
9	Process of farmers participation and their reaction	Farmers incurred all the cost of cultivation except seed, which was supplied by KVK. Beside this, they participated actively in observing the growth and yield parameters of the crop.

Thematic area: Variety Replacement (Summer Season, 2014)

Problem definition: The farmers incur heavy loss due to infestation of powdery mildew of cucumber

Technology to be assessed: Assessment of location specific powdery mildew tolerant cucumber varieties

Table 4: Performance of different powdery mildew tolerant cucumber varieties

Technology option	No. of trials	Av. Fruit size (cm)	Damage due to powdery mildew infestation (%)	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs./ha)	Net Return (Rs /unit)	BC Ratio
.Farmer's practice: Local improved	10	10.25	29	127.50	114350.00	255000.00	140650.00	2.23
I. Snow white (powdery mildew tolerant hybrid)		17.56	6	199.75	117140.00	399500.00	282360.00	3.4
II.Swadisht (powdery mildew tolerant hybrid)		15.64	2	192.80	117110.00	385600.00	268490.00	3.29
Sem±		1.22	-	17.08				
CD(P=0.05)		3.55	-	49.37				

Result:

The result of the trial (Table-) revealed that Technology Option –I i.e. Snow White (powdery mildew tolerant hybrid) variety of cucumber exhibited significantly higher yield (199.75 q/ha) than that of farmer's practice. It was also observed that Technology Option-I (Indam-504) produced significantly greater fruit size (17.56 cm) than and those of technology Option-II (Swadisht) and farmers practicd. BC ratio was higher (3.4) with the cultivation of cucumber variety Snow White than Swadist (3.29) and local improved (2.23). But least damage due to powdery mildew infestation was found in the variety Swadist (2%) where as it was 6% in Snow White and 29 % in local improved variety.

(V)

OFT-5

1.	Title of on-farm trials	Weed management in transplanted *kharif* rice under rainfed medium land condition at lateritic soil of Birbhum
2.	Problem diagnose	Only hand weeding cannot control the weeds of transplanted kharif rice. Due to scarcity of labour, hand weeding in proper time is not possible. Control of algal weeds, ferns, broad leaves is more laborious. Beside this, hand weeding is expensive which ultimately increase the cost of cultivation
3.	Details of technologies selected for assessment	Farmer's practice: Hand Weeding **Tech. Option I**: Pyrazosulfuron-ethyl @ 25 g a.i. /ha (1-3 DAT) **Tech. Option II**: Metsulfuron- methyl + chlorimuron- ethyl @ 4 g a.i./ ha (7-12 DAT) **Tech. Option III**: Pretilachlor @ 1.0 lit a.i./ha (1-3 DAT)
4.	Source of the technology	Annual Reports,2011-12 and 2012-13, AICRP on Weed Science, Visva-Bharati Centre
5.	Production system Thematic area	Rice-Mustard –Rice. Weed management
6.	Performance of the Technology Performance indicators	Performance of the technology was found statistically significant Yield components, weed population, yield and economics.
7.	Final recommendation for micro level situation	Technology Option-II i. E. Use of herbicide Metsulfuron-methyl + chlorimuron-ethyl (Sathi) @ 4 g a.i. /ha at 7-12 DAT significantly produced more no. Of effective tillers/ hill, grains/panicle and higher yield than those of other technology options and farmers practice
8.	Constraints identified Feedback for research	Lack of availability of particular herbicide at the farmers' level at proper time hamper the best weed management practices. Farmers are afraid about the dose of herbicide The use of the herbicide may be studied in different micro farming situation
9.	Process of farmers participation and their reaction	Farmers helped the KVK scientist for data collection and implemented the technology very carefully. Day to day supervisory practices also one of the important participation. Beside this, farmers also invested different cost of cultivation except herbicides.

Weed Management (Kharif season, 2014)

Problem definition: Only hand weeding cannot control the weeds of transplanted kharif rice. Due to scarcity of labour, hand weeding in proper time is not possible. Control of algal weeds, ferns, broad leaves is more laborious. Beside this, hand weeding is expensive which ultimately increase the cost of cultivation.

Technology assessed: Weed management in transplanted kharif rice

Table 5: Assessment of different weed management practices in transplanted kharif rice (Var. MTU-7029)

Technology option	No. of trials	Yield Component			No. of weeds / m^2 At 60 DAT	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs./ha)	Net Return (Rs /unit)	BC Ratio
		No. of effective tillers/ hill	No. of grains/ panicle	Test Weight (1000 grain weight, g)						
Farmer's practice: Hand Weeding (2 times, 25 DAT and 45 DAT)	7	22.7	139.9	22.0	-	54.72	61150.00	71136.00	9986.00	1.16
I. Pyrazosulfuron-ethyl @ 25 g a.i. /ha (1-3 DAT)		25.1	140.8	22.3	19.82	56.95	56300.00	74035.00	17735.00	1.32
II. Metsulfuron- methyl + chlorimuron-ethyl @ 4 g a.i./ ha (7-12 DAT)		28.1	146.9	22.3	11.98	58.90	54200.00	76570.00	25555.00	1.41
III. Pretilachlor @ 1.0 lit a.i./ha (1-3 DAT)		21.1	137.7	31.2	25.45	54.90	56625.00	71370.00	14745.00	1.26
Sem±		0.85	1.62	NS	-	0.69				
CD(P=0.05)		2.47	4.68	-	-	2.02				

Results:

KVK Birbhum, W.B conducted an OFT in kharif season, 2014 to assess better weed management practices in kharif rice in adopted villages. The result of the trial indicated that the Technology Option-II i. E. Use of herbicide Metsulfuron-methyl + chlorimuron-ethyl (Sathi) @ 4 g a.i. /ha at 7-12 DAT significantly produced more no. Of effective tillers/ hill (28.1), grains/panicle (146.9) and higher yield (58.90 q/ha) than those of other technology options and farmers practice. It was found that at 60 DAT, there was no weed in the field due to hand weeding at 25 and 45 DAT. But before 25 DAT and 45 DAT the weeds present in the field reduced the grain yield in farmers practice. Further the fields were weed free in between 15 DAT to 5o DAT in Technology option –I and Technology option-II. So, the crop weed competetion was less at peak crop growth stage in those plots. From the economics of cultivation, it was found that use of herbicide is more economical than hand weeding irrespective of herbicide used and crop yield. Among the herbicides the Technology Option-II i. E.Metsulfuron-methyl + chlorimuron-ethyl (Sathi) @ 4 g a.i. /ha at 7-12 DAT fetched the higher BC ratio (1.41) than other technology opotions and farmers practice (1.16). This might be due to higher price of labour engaged in farmers practice. Beside that, the Technology Option- II helped the farmers to come out from the problem of labour scarcity.

(VI)

OFT-6

1	Title of on-farm trials	Assessment of specific vitamins as growth promoters in carp spawn and fry feed to increase the survival rate to a profitable manner
2	Problem diagnose	The survival rate of fish spawn is low in the nursery ponds and as well as rearing ponds. The farmers do not apply regular scientific fish feed supplemented with growth promoters. Therefore, due to malnutrition the fish spawn do not survive up to the level which causes economic losses in fish farming.
3	Details of technologies selected for assessment	Farmer's practice: Irregular feed application without growth promoter
		Tech. Option I: Yeast (2%) + Cobalt Chloride (0.1%) + Scientific feed
		Tech. Option II: Yeast (2 %) + Vitamin C (0.5%) +Scientific feed
		Tech. Option III: Yeast (2%) + Vitamin B complex (0.01%) + Scientific feed
4	Source of technology	Fish and Fisheries of India- V. G. Jhingran
4	Production system Thematic area	Extensive system Fish Nutrition Management
5	Performance of the Technology Performance indicators	Performance of the technology was found statistically significant Survival rate, Growth of fish spawn, Yield of fish and economics
6	Final recommendation for micro level situation	Technology Option –I i.e. application of Yeast (2%) + Cobalt Chloride (0.1%) + Scientific feed in the nursery pond increased significantly the survival rate and growth of fish spawn after 20 days of release and also increased the early growth (fry stage) at 30 days and thus produced higher fish yield and fetched more benefits
7	Constraints identified Feedback for research	Calculation of the amount of vitamins and growth promoters creates fear among the farmers Mustard oil cake may be replaced by *Azolla* or any other ingredients in preparation of scientific fish feed
8	Process of farmers participation and their reaction	Farmers shared the cost of scientific fish feed and participated actively in maintaining the pond carefully and collection of data with KVK scientists effectively

Thematic area: Fish Nutrition Management (Kharif season, 2014)

Problem definition: The survival rate of fish spawn is low in the nursery ponds and as well as rearing ponds. The farmers do not apply regular scientific fish feed supplemented with growth promoters. Therefore, due to malnutrition the fish spawn do not survive up to the level which causes economic losses in fish farming.

Technology assessed: Assessment of specific vitamins as growth promoters in carp spawn and fry feed to increase the survival rate to a profitable manner

Table 6: Effect of growth promoters and vitamins on spawn survivality

Technology option	No. of trials	Survival rate (%) of fish spawn after 20 days	Growth of spawn (fry stage) at 30 days (Kg / ha)	Fish Yield at 6 month (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs./ha)	Net Return (Rs /unit)	BC Ratio
Farmer's practice: Irregular feed application without growth promoter	5	52	825	5.0	45622.00	50000.00	4378.00	1.1
I.Yeast (2%) + Cobalt Chloride (0.1%) + Scientific feed		94	1717	12.4	55297.00	130200.00	74903.00	2.30
II. Yeast (2 %) + Vitamin C (0.5%) +Scientific feed		81	1482	10.1	55745.00	106050.00	50305.00	1.90
III. Yeast (2%) + Vitamin B complex (0.01%) + Scientific feed		78	1422	9.4	55331.00	98700.00	43369.00	1.78
Sem±		3.76	56.21	0.62				
CD(P=0.05)		10.87	126.47	1.8				

Scientific Feed= Rice bran (50%) + Mustard Oil Cake (50%)

Result:

The data from table-6 indicated that the Technology Option –I i.e. application of Yeast (2%) + Cobalt Chloride (0.1%) + Scientific feed in the nursery pond increased significantly the survival rate (94%) of fish spawn after 20 days of release and also increased the early growth (fry stage) at 30 days (1717 kg/ha). In those ponds the achieved fry were disease free and healthy. This might be due to application of growth promoters and vitamins. Further the Technology Option-I produced significantly higher fish yield (12.4 q/ha) at 6 month than those of other options and farmers practice (5.0 q/ha). Accordingly, the BC ratio was also higher (2.30) in the Technology Option –I than others. There was no significant difference between Technology Option –II and Technology Option-III in producing yield and survival rate. But the Technology Option-II fetched slightly higher BC ratio (1.90) than that of Technology Option-III (1.78).

(VII)

OFT-7

1.	Title of on-farm trials	Assessment of performance of different breed of poultry birds under backyard management system
2.	Problem diagnose	The poor body weight, poor egg production and poor egg weight of rural poultry birds
3.	Details of technologies selected for assessment	Farmer's practice: Deshi Poultry bird
		Tech. Option I: Rhode Island Red (RIR)
		Tech. Option II:. Vanraja
4.	Source of technology	Extension Literature, Project Directorate on Poultry, Hyderabad
5.	Production system Thematic area	Backyard Breed replacement of poultry
6.	Performance of the Technology Performance indicators	Performance of the technology was found statistically significant. Body weight, Egg weight, Egg production and economics
7.	Final recommendation for micro level situation	Trial is going on.
8.	Constraints identified Feedback for research	Trial is not completed.
9.	Process of farmers participation	Farmers are actively managing the breeds to get the actual results.

Thematic area: Breed Replacement of Poultry (Post rainy season, 2014)

Problem definition: The poor body weight, poor egg production and poor egg weight of rural poultry birds

Technology assessed: Assessment of performance of different breed of poultry birds under backyard management system

Table 7: Performance of different breed of poultry birds

Technology option	No. of trials	Body weight			Age at first egg (day)	Egg weight at 26 th week (gm)	Cost of cultivation (Rs./ha)	Gross return (Rs./ha)	Net Return (Rs /unit)	BC Ratio
		At 6 th Week (gm)	At sexual maturity (gm)							
			Female	Male						
Farmer's practice: Deshi Poultry bird	7	248.6	753.3	1332.7	187	31.3	Economics of the trial will be submitted after completion of the trial			
I.Rhode Island Red (RIR)		439.7	1423.7	2421.6	176	47.5				
II. Vanraja		666.3	2185.3	2726.3	189	44.0				
Sem±		51.29	178.19	81.57	-	3.28				
CD(P=0.05)		148.23	514.98	235.74	-	8.52				

Result:

The data from table-7 indicated that the Technology Option –II i.e. Improved Rural Poultry Bird Vanaraja significantly produced Better body weight at 6th week (666.3 g), at sexual maturity (2185.3 g) than those of Technology Option-I (RIR) and Farmer's practice (Deshi). At present it was observed that Egg weight was significantly greater in both the improved breed as compared to Deshi. The experiment is going on. Other observations will be noted later on.

(VIII)

OFT -8

1	Title of on-farm trials	Assessment of balanced NPK management for increasing yield of Yellow Sarson var. B-9
2	Problem diagnose	Imbalanced use of NPK particularly higher dose of nitrogen causes poor yield of yellow Sarsoon under irrigated lateritic soil.
3	Details of technologies selected for assessment	Farmer's practice: 80:20:20 Kg N, P_2O_5 , K_2O/ ha using the source of 10:26:26 and Urea
		Tech. Option I: State recommendation (60:30:30 Kg N, P_2O_5 , K_2O/ ha) using the source of Urea, SSP and MOP
		Tech. Option II: Soil Testing Based NPK management using the source of Urea, SSP and MOP • Nutrients in Technology Option –I and II were applied irrespective of 42ulphur as the source of phosphate like SSP contains 42ulphur
4	Source of technology	Ph. D thesis, Soil Testing Laboratory, Palli Siksha Bhavan, Visva-Bharati, Srniketan
5	a. Production system b. Thematic area	Rice-mustard-rice, Rice-mustard-green gram Nutrient Management
6	Performance of the Technology b. Performance indicators	Performance of the technology was found statistically significant Yield components, aphid infestation, yield & economics
7	Final recommendation for micro level situation	Technology Option-II i.e. Soil Testing Based NPK management significantly increased the number of branches/ plant, number of siliquae/ plant, Test Weight, yield and economics of yellow sarsoon
8	a. Constraints identified b. Feedback for research	i. Lack of availability of cane crushing facility during early winter. ii. Lack of knowledge Further studies with large container
9	Process of farmers participation and their reaction	Farmers helped the KVK scientists for data collection and implemented the technologies very carefully. Day to day supervisory practices also one of the important participation. Beside this, farmers also invested other cost of cultivation except seeds and 42ulphur42er.

Thematic area: Nutrient Management (Rabi Season, 2014-15)

Problem definition: Imbalanced use of NPK particularly higher dose of nitrogen causes poor yield of yellow sarsoon under irrigated lateritic soil.

Technology assessed: Assessment of balanced NPK management for increasing yield of Yellow Sarson var. B-9

Table 8: Effect of balanced NPK management in yellow sarson var. B-9

Technology option	No. of trials	Yield Component			Aphid infestation (%)	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs./ha)	Net Return (Rs /unit)	BC Ratio
		No. of branches / plant	No. of siliquae / plant	Test Weight (1000 grain weight, g)						
.Farmer's practice: 80:20:20 Kg N, P_2O_5 , K_2O/ ha using the source of 10:26:26 and Urea	15	8.9	135.1	3.12	29	5.92	12670.00	23680.00	11010.00	1.86
I. State recommendation (60:30:30 Kg N, P_2O_5 , K_2O/ ha) using the source of Urea, SSP and MOP		9.4	153.2	3.41	11	8.11	13438.00	32440.00	19002.00	2.41
II. Soil Testing Based NPK management using the source of Urea, SSP and MOP		12.1	169.4	3.48	4	9.50	13800.00	38000.00	24200.00	2.75
Sem±		0.65	4.08	0.09		0.38				
CD(P=0.05)		1.89	11.81	0.25		1.09				

- Nutrients in Technology Option –I and II were applied irrespective of sulphur, as the source of phosphate like SSP contains 43ulphur

Result:

KVK Birbhum, W.B conducted an OFT in rabi season, 2013-14 to assess the effect of balanced NPK management through soil testing in yellow sarsoon var. B-9. Farmers use higher nitrogen than phosphorus and potassium in the form of 10:26: 26 and urea. In this case no sulfur is used. But in the case of Technology Option –I and II nutrients were applied through Urea, SSP and MOP. The sulfur present in the SSP mitigated the demand of sulfur nutrients. Through the soil testing, generally it was found that more phosphate and potassium are required in the Technology Option-II than Technology Option-I and farmers practice. Therefore more SSP was used in Technology Option-II which means more sulfur application. Now, the perusal of the data (Table-4) revealed that significantly higher number of branches/ plant (12.1), number of siliquae/ plant (169.4), Test Weight (3.48g) and yield (9.50 q/ha) was obtained from Technology Option-II i.e. Soil Testing Based NPK management than those of State recommendation and farmers practice. Though the cost of cultivation was slightly higher in Technology Option-II, but due to higher yield it fetched higher BC ratio (2.75) than farmers' practice (1.86) and state recommendation (2.41).

(IX)

OFT-9

1	Title:	Assessment of location specific bacterial wilt tolerant brinjal varieties during winter season under irrigated medium land situation of Birbhum district
2	Problem diagnose:	Brinjal is very popular vegetable in Birbhum District during *rabi* season for good economic return. The farmers now incur heavy loss due to infestation of bacterial wilt of brinjal
3	Details of Technology assessment	**Farmers Practice :** Local Improved **Technology opt-I.:** Indam-504 (bacterial wilt tolerant hybrid) **Technology opt- II :** Indam-902 (bacterial wilt tolerant hybrid)
4	Sources of technology	Literatures of plant breeders
5	a.Production System: b. Thematic area:	Vegetable-fallow-vegetable Varietal Replacement
6	a. Performance of the Technology b.Performance indicators	Statistically significant Plant height, No. of branches, % of wilt infestation, Yield
7	Final recommendation for micro level situation	Technology opt-II i.e**.** Indam-902 (bacterial wilt tolerant hybrid) produced higher yield of brinjal
8	c. Constraints identified b. Feedback for research	Quality seed of suitable variety for the zone is not available in the local market. In summer/rainy season the performance of the variety may be studied
9	Process of farmers' participation and their reaction	Farmers incurred all the cost of cultivation except seed, which was supplied by KVK. Beside this, they participated actively in observing the growth and yield parameters of the crop.

Thematic area: Variety Replacement (Summer Season, 2015)

Problem definition: The farmers incur heavy loss due to infestation of bacterial wilt of brinjal

Technology to be assessed: Assessment of location specific bacterial wilt tolerant brinjal varieties

Table 2: Performance of different bacterial wilt tolerant brinjal varieties

Technology option	No. of trials	Yield Component			Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs./ha)	Net Return (Rs /unit)	BC Ratio
		Plant height (cm)	No. of branches / plant	Damage due to Infestation of Bacterial wilt (%)					
.Farmer's practice: Local improved	10	74.26	8.16	26	304.95	138050.00	398244.00	260194.00	2.88
I. Indam-504 (bacterial wilt tolerant hybrid)		68.25	10.17	00	411.80	141130.00	539748.00	398698.00	3.82
II.Indam-902 (bacterial wilt tolerant hybrid)		67.12	11.00	00	418.42	141405.00	548460.00	407055.00	3.88
Sem±		1.92	0.52		19.80				
CD(P=0.05)		5.37	1.32		57.05				

Result:

The result of the trial (Table-2) pointed out that Technology Option –II i.e. Indam -902 (bacterial wilt tolerant hybrid) variety of brinjal exhibited significantly higher yield (418.42 q/ha) than that of farmer's practice. It was also observed that Technology Option-I (Indam-504) and Technology Option-II produced at par yield. BC ratio was higher (3.88) with the cultivation of brinjal variety Indam-902 than Indam-504 and local improved (2.88). But in all the component

Indam-504 and Indam-902 exhibited at par effect. It was to be noted that there was no damage due to infestation of bacterial wilt in brinjal plants Variety Indam – 504 and Indam – 902 whereas in the Local Improved Variety, the damage due to infestation of Bacterial Wilt was 26.00 %.

(X) **OFT – 10**

1	Title:	Assessment of location specific powdery mildew tolerant cucumber varieties during winter season under irrigated medium land situation of Birbhum district
2	Problem diagnose:	Cumcumber cultivation in Birbhum District is very economical. But presently the farmers now incur heavy loss due to infestation of powdery mildew of cumcumber
3	Details of Technology assessment	**Farmers Practice :** Local Improved **Technology opt-I.:** Snow white (powdery mildew tolerant hybrid) **Technology opt- II :**.Swadisht (powdery mildew tolerant hybrid)
4	Sources of technology	Literatures of plant breeders
5	a.Production System: b. Thematic area:	Vegetable-fallow-vegetable Varietal Replacement
6	a. Performance of the Technology b.Performance indicators	Statistically significant Av. Fruit size, % of powdery mildew infestation, Yield
7	Final recommendation for micro level situation	Technology opt-I i.e**.** Snow white (powdery mildew tolerant hybrid) produced higher yield of cucumber.
8	d. Constraints identified b.Feedback for research	Quality seed of suitable variety for the zone is not available in the local market. Varieties of green colour and medium fruit size may be tested
9	Process of farmers participation and their reaction	Farmers incurred all the cost of cultivation except seed, which was supplied by KVK. Beside this, they participated actively in observing the growth and yield parameters of the crop.

Thematic area: Variety Replacement (Summer Season, 2015)

Problem definition: The farmers incur heavy loss due to infestation of powdery mildew of cucumber

Technology to be assessed: Assessment of location specific powdery mildew tolerant cucumber varieties

Table 3: Performance of different powdery mildew tolerant cucumber varieties

Technology option	No. of trials	Av. Fruit size (cm)	Damage due to powdery mildew infestation (%)	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs./ha)	Net Return (Rs /unit)	BC Ratio
.Farmer's practice: Local improved	10	10.25	40	118.50	125785.00	280500.00	154715.00	2.23
I. Snow white (powdery mildew tolerant hybrid)		17.00	00	181.00	128854.00	439450.00	310596.00	3.4
II.Swadisht (powdery mildew tolerant hybrid)		15.11	00	186.00	128821.00	424160.00	295339.00	3.29
Sem+		1.20	-	16.58				
CD(P=0.05)		3.50	-	49.00				

Result:

The result of the trial (Table-) revealed that Technology Option –I i.e. Snow White (powdery mildew tolerant hybrid) variety of cucumber exhibited significantly higher yield (181.00 q/ha) than that of farmer's practice. It was also observed that Technology Option-I (Indam-504) produced significantly greater fruit size (17.00 cm) than and those of technology Option-II (Swadisht) and farmers practicd. BC ratio was higher (3.4) with the cultivation of

cucumber variety Snow White than Swadist (3.29) and local improved (2.23). It was to be noted that there was no damage due to powdery mildew infestation in the variety Snow White as well as in the Variety Swadisht whereas in the Local Improved Variety the damage due to Powdery Mildew was 40.00 %.

3.2 Achievements of Frontline Demonstration (FLD)

A. Details of FLDs conducted during April, 2014 – March, 2015

Cereals

Sl. No	Crop	Thematic area	Technology Demonstrated with Detailed Treatments	Area (ha)		No. of farmers/demonstration				Reasons for short fall in Achievement
				Proposed	Actual	SC	ST	Others	Total	
1	**Wheat (Rabi – 2013 – 14)**	Varietal replacement	**Improved variety-HD-2824**	-	2.7	6	5	2	13	-
2	**Maize (Kharif, 2014)**	Crop Diversification	**Improved Variety HQPM-1**	2.5	2.5	5	12	8	25	-
3	**Paddy (Kharif – 2014)**	Integrated Pest Management	**Seed Treatment with *Trichoderma viridae* in paddy variety MTU-7029**	10	10	21	7	47	75	-
4	**Wheat (Rabi-2014-15)**	Varietal replacement	**Improved variety- HD 2824**	6.0	6.0	5	15	17	37	-

B. Details of farming situation

Sl. No.	Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
					N	P_2O_5	K_2O					
1	**Wheat**	Rabi, 2013-14	Irrigated Medium Land	Sandy loam	M	L	M	Short duration paddy	25th Nov.,- 20th Dec., 2013	25th March-15th April, 2014	73.1	08
2	**Maize**	Kharif, 2014	Rainfed/ Irrigated medium/ Upland	Sandy loam	M	L	M	Sesame	28th July- 7th August, 2014	15th -25th November,2014	484.2	47
3	**Paddy**	Kharif, 2014	Irrigated / Rainfed Medium Land	Sandy loam, clay loam	M	L	M	Fallow	1-10thAugust, 2014	2-5th Dec., 2014	466.5	45
4	**Wheat**	Rabi, 2014-15	Irrigated Medium Land	Sandy loam	M	L	M	Short duration paddy	25th Nov.,- 20th Dec., 2014	24th. March, 2015	11.1	06

C. Performance of FLD

Oilseeds

Frontline Demonstrations on Oilseed Crops

Crop	Thematic Area	Name of the technology demonstrated	No. of farmers	Area (ha)	Yield (q/ha)		% increase	* Economics of demonstration (Rs/ha)				* Economics of check (Rs/ha)			
					Demonstration	Check		Gross cost	Gross return	Net return	** BCR	Gross cost	Gross return	Net return	** BCR
Sesame, Summer, 2014	Varietal Replace-ment	SWB-32-10-1	52	4.0	10.5	8.6 (Tilottoma)	22.1	12670	31500.	18830	2.49	11950	25800	13850	2.2
Mustard, Rabi, 2014-15	Varietal Replace-ment	Pusa Bahar	30	2.5	11.8	9.9 (B-9)	19.2	13000	35400	22400	2.72	12100	29700	17600	2.45
Total			82	6.5											

Pulses

Frontline Demonstration on Pulse Crops

Crop	Thematic Area	Name of the technology demonstrated	No. of farmers	Area (ha)	Yield (q/ha)		% increase	* Economics of demonstration (Rs/ha)				* Economics of check (Rs/ha)			
					Demonstration	Check		Gross cost	Gross return	Net return	** BC ratio	Gross cost	Gross return	Net return	** BC ratio
Green gram, Summer, 2014	Varietal Replacement	PDM 84-139	65	5.0	11.7	9.4 (B-105)	24.5	19514	58500	38986	2.99	18000	47000	18375	2.6
Black gram, Summer, 2014	Varietal Replacement	WBU-108	37	4.0	9.2	7.1 (B-76)	29.4	18514	46000	27486	2.48	18225	35500	17275	1.94
Redgram, Kharif, 2014	Varietal Replacement	ICPL-87-119	25	5.0	15.8	11.9 (Sweta)	32.8	19700	63200	43500	3.21	18200	47600	29400	2.61
Total			127	14.0											

* Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

Other Crops

Crop	Thematic Area	Name of the technology demonstrated	No. of farmers	Area (ha)	Yield (q/ha)		% increse in yield	Other parameters			* Economics of demonstration (Rs/ha)				* Economics of check (Rs/ha)			
					Demonstration	Check			Demo	Check	Gross cost	Gross return	Net return	** BCR	Gross cost	Gross return	Net return	** BCR
Wheat Rabi, 2013-14	Varietal replacement	HD 2824	13	2.7	39.8	32.9	20.1	No. of tillers / hill	11.2	8.9	19100	47760	28660	2.5	18000	39480	21480	2.1
								No. of grains/ ear	55.45	48.7								
Drumstick (Kharif, 2013-14)	Varietal replacement	PKM – 1	64	2.0	37.50	17.00	120.6	Length of Fruits (cm)	74.3	58.8	27000	75000	48000	2.78	24000	34000	13000	1.42
Dhaincha Pre kharif, 2014	Soil Health Manage-ment	Green Manuring in rainy season paddy var. MTU-7029	27	4.0	59.8 (Paddy yield)	50.9 (Paddy yield)	17.4	No. of panicles/ m^2	392	359	56120	76830	20710	1.36	57250	67080	9830	1.17
								No. of grains/ panicle	149	133								
Paddy Seed treatment, Kharif, 2014	IPM	Seed Treatment with Trichoderma viride in paddy var. MTU-7029	75	10	55.6	50.9	9.2	No. of panicles/ m^2	378	358	60150	77840	17690	1.29	62250	71260	9010	1.14
								No. of grains/ panicle	142	135								
Drumstick (Kharif, 2014-15)	Varietal replacement	PKM – 1	64	2.0	At early Flowering Stage.													

Elephant's Foot Yam Kharif, 2014	Varietal Replace-ment	Bidhan Kusum	20	0.14	685.0	199.1	244	Corm Size (cm)	26.8	10.3	5,25,000	13,70,000	8,45,000	2.61	2,29,000	3,98,200	1,69,2000	1.73
Maize, Kharif, 2014	Crop diversification	HQPM-1	25	2.5	57.2	39.1 (Early composite)	46	Grains/cob	420.3	395.4	27500	51480	23980	1.87	22000	35190	13190	1.59
								Test Weight (g)	277.1	269.5								
Paddy, Kharif, 2014	Seed treatment ,	Seed treatment with Trichoderma Viridae ,Var. MTU-7029	75	10	64.1	57.1 (Without seed treatment)	12.3	No. of tillers / hill	24.5	20.1	42000	83330	41330	1.98	45000	74230	29230	1.64
								No. of grains/ ear	139.5	110.2								
								No. of tillers / hill	11.2	8.9								
								No. of grains/ ear	55.45	48.7								
Capsicum Rabi, 2014-2015	Varietal Replacement	Bharat	15	0.85	45.1	24.9 (California wonder)	81	No. of branches/ plant	40.2	18.7	90500	1,80,400	89900	1.99	75200	99,600	24,400	1.32
								No. of fruits / plant	26.0	11.5								
								Weight of fruits (gm)	148. 5	84.4								
Broccoli, Rabi, 2014-2015	New Crop Introduction	Fiesta	15	0.85	12.50	-	-	Av. Height (cm)	63.5	-	1,60,000	3,12,500	1,52,000	1.95	-	-	-	-
								No. of leaves / plant	16.0	-								
								Curd Size (cm)	22.45	-								
								Weight of Fruits (gm)	720.0	-								
Green Fodder, Oat , Rabi, 2014-15	New Introduction	Kent	5	0.1	319.8	73.7 (Local grass in grazing land)	339.1	CP (%)	9.12	2.56	11250	16955	5705	1.50	_	_	_	_
Green Fodder, Berseem, Rabi, 14-15	New Introduction	BL-10	5	0.1	189.8	-	-	CP (%)	26.2	-	11400	22776	11376	1.99	-	-	-	-

Wheat, Rabi, 2014 – 15	Varietal Replacement	HD – 2824	37	6.0	40.6	33.3	21.92	No. of Tillers / Hill	12.1	8.8	21010	48720	27710	2.32	19800	39960	20160	2.02
								No. of Grains / Ear	57.2	49.0								
Total			440	41.24														

* Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

Livestock

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**
Dairy																	
Cow	Feed Management	Area Specific Mineral Mixture for Lactating Cow (Breed – Deshi Cow)	10	20	A. Milk Yield (ml / day / Cow) B. Fat Percentage of Milk C. Solid Not Fat (SNF) of Milk D. Lactatation Length (Days) E. Inter-Calving Period (Days)	A. Milk Yield (ml / day / Cow) B. Fat Percentageof Milk C. Solid Not Fat (SNF) of Milk D. Lactatation Length (Days) E. Inter-Calving Period (Days)	The Preogramme is going on.										
Total			10	20													

* Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.
** 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 (B:C Ratio)	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																	
Others (pl.specify)																	
Others (pl. specify) Prawn (Rabi, 2013-14)	Giant prawn in Composite Fish Culture	Productivity-*Macrobrachium rosenberghi* (Galda) with composite fish	9	9 (1000 prawns per 0.1 ha)	492.75 (prawn) +3015 (carp)	5275 (carp)	20	-	-	298000	598700	209700	2.01	247500	370230	122730	1.49
Total			9	9													

* Economics to be worked out based on 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	Enterprise development															
Button mushroom																
Vermicompost																
Sericulture																
Apiculture																
Others (pl.specify)																
Total																

* Economics to be worked out based on 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 demonstrations	Observations		Remarks
			Demonstration	Check	
Farm Women					
Pregnant women					
Adolescent Girl					
Other women					
Children					
Neonatal					
Infants					

Farm Implements and Machinery

Name of the implement	Crop	Name of the technology demonstrated	No. of Farmer	Area (ha)	Filed observation (output/man hour) q/man hour		% change in major parameter	Labor reduction (man days/ha)		Cost reduction (Rs./ha or Rs./Unit)	
					Demonstration	Check		Demonstration	Check	Demonstration	Check
Drum Seeder	Kharif Paddy Var. MTU – 1010	Direct Seeding of Rice in Lines	7	4.53	6.15	4.13	48.91	60	-	12,000.00	-

*** Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.**
**** BCR= GROSS RETURN/GROSS COST**

D. Demonstration Details on Crop Hybrids

Crop	Name of the Hybrid	No. of farmers	Area (ha)	Yield (kg/ha) / major parameter			Economics (Rs./ha)			
Cereals				Demo	Local check	% change	Gross Cost	Gross Return	Net Return	BCR
Bajra										
Maize	HQPM-1	25	2.5	57.2	39.1	46	27,500	51480	23980	1.87
Paddy										
Sorghum										

Wheat										
Others (pl.specify)										
Total										
Oilseeds										
Castor										
Mustard										
Safflower										
Sesame										
Sunflower										
Groundnut										
Soybean										
Others (pl.specify)										
Total										
Pulses										
Greengram										
Blackgram										
Bengalgram										
Redgram										
Others (pl.specify)										
Total										
Vegetable crops										
Bottle gourd										
Capsicum										
Cucumber										
Tomato										
Brinjal										
Okra										
Onion										
Potato										
Field bean										
Others (pl.specify)										
Total										
Commercial crops										

Cotton										
Coconut										
Others (pl.specify)										
Total										
Fodder crops										
Napier (Fodder)	Hybrid Napier Var. Co - 4	10	0.17	20189	7330 (Local Grass)	63.69	11,340.00	17,380.00	6040.00	1.87
Maize (Fodder)										
Sorghum (Fodder)										
Others (pl.specify)										
Total										

E. Technical Feedback on the demonstrated technologies

Sl. No.	Crop	Feed Back
1.	**Prawn (2013 – 2014)**	The rearing of Fresh water Giant Prawn (*Macrobrachium rosenberghi*) along with Carps in Composite Fish Culture is accepted by the farmers. The growth of Prawns is satisfactory (80 -90 grams in 6 months) when the bottom dwelling carps are not stocked in Ponds.
2.	**Wheat (Rabi 2013 – 2014)**	The Wheat Variety HD – 2824 gives an average yield of 39.8 q/ha over the Local Check Variety Sonalika which gives an average yield of 32.9 q/ha which indicates a 20.1 % increase in Yield from the cultivation of the Wheat Variety HD – 2824.
3.	**Drumstick (Kharif, 2013 – 2014)**	The *Baramasia* Drumstick Var. – PKM -1 in rain-fed up-land fetched very good economic return in Rainy Season as well as in Winter Season in addition to the normal yield in Summer Season.
4.	**Sesame (Summer, 2014)**	The cultivation of summer sesame effectively utilized the residual fertility of potato fields. The Sesame Variety – SWB-32-10-1 produced more yields. It is very remunerative alternative crop of Boro Paddy. The use of Urea, SSP and MOP increased the yield of Sesame than that of the complex fertilizers like 10-26-26.
5.	**Black gram (Summer, 2014)**	Most of the Year the fields except the Summer Paddy area are kept vacant in Summer season. But the Short Duration Crop like Black Gram was found acceptable by the farmers due to easy cultivation and low cost of cultivation. The height of the Crop is not much more. But due to heavy branching, the crop covered the field very quickly and also acted as a cover Crop. The growth, yield, colour and shape of the seeds of the Variety WBU – 108 are very much preferable by the farmers. So, this Variety is suitable for better utilization of lands in Summer Season and very much profitable.
6.	**Green Gram (Summer, 2014)**	In the absence of adequate Rainfall, the Crop of Green Gram, Var. – PDM – 84 – 139 was very much successful both in the agronomic and economic parameters. It also fetches a good price in the market sometimes better than the Paddy which it replaces as the field crop in contingent situations.
7.	**Dhaincha (Pre kharif, 2014)**	After cultivation of Dhaincha, no Nitrogenous fertilizers were required in the next Paddy cultivation in the same field.
8.	**Seed Treatment with *Trichoderma viridae* (Kharif, 2014)**	Seed treatment of Paddy Variety MTU – 7029 with *Trichoderma viridae* decreased the infestation of Sheath Blight and use of the pesticides in the main field was less.
9.	**Elephant Foot Yam (Kharif, 2014)**	Elephant's Foot Yam Var. – Bidhan Kusum, is more or less six months crop, its yield is higher than local varieties and its culinary effects are smooth. If more short duration Variety is developed then in medium land situation, two crops can be grown during Kharif Season. It is a remunerative crop and its growth mainly depends on organic manure.
10.	**Black gram (Kharif, 2014)**	In the absence of adequate Rainfall, the Crop of Black Gram, Var. – WBU – 108 was very much successful both in the agronomic and economic parameters. It also fetches a good price in the market sometimes better than the Paddy which it replaces as the field crop in contingent situations.
10.	**Maize (Kharif, 2014)**	In Rain-fed Medium land and in low rainfall condition, cultivation of Maize Var. HQPM – 1 and HM- 4 performed successfully as a diversified crop in Rainy season.
11.	**Red Gram (Kharif, 2014)**	In Rain-fed Upland condition, Red Gram Var. ICPL 87-119 produced very noticeable Pulse Yield and Maximum benefit than other crops like Maize, Paddy, Black Gram in Khasrif Season.
12.	**Drumstick (Kharif, 2014)**	The Programme is going on.
13.	**Capsicum (Rabi, 2014-15)**	The Capsicum Variety – Bharat and Mahabharat is dwarf in type, its branching is more, fruiting setting is more and average fruit sizes are also more than locally available Varieties. The Capsicum Variety – Bharat and Mahabharat gives satisfactory yields even in late planted cases.
14.	**Broccoli (Rabi, 2014-15)**	The Crop of Broccoli is a new crop in the District of Birbhum and it has a great potential both in horticultural as well as in economic terms.
15.	**Wheat (Rabi, 2014-15)**	The Wheat Variety HD – 2824 gives an average yield of 40.6 q/ha over the Local Check Variety Sonalika which gives an average yield of 33.3 q/ha which indicates a 21.92 % increase in Yield from the cultivation of the Wheat Variety HD – 2824 particularly in Lateritic Acid soil.
16.	**Mustard (Rabi, 2014-15)**	The Mustard Var. Pusa Bahar and Pusa Mahek performed better in producing higher yield and benefits than existing Var. B – 9 which was also susceptible to Club Root in irrigated

		medium land condition.
17.	**Fodder Oat (Rabi, 2014 – 2015)**	The Fodder Oat Var. – Kent gives an yield of 319.8 q / ha in comparison to Local Grass in grazing field yield of 73.7 q/ha and Oat gives a Crude Protein Percentage of 9.12 in comparison to Crude Protein Percentage of 2.56 of Local Grass as a result of which the general health of the feeding cattle as well as their milk productivity increases to a significant extent.
18.	**Fodder Berseem (Rabi, 2014 – 2015)**	The Fodder Berseem Var. – BL – 10 gives an yield of 189.8 q / ha and Berseem gives a great Crude Protein Percentage of 26.2 as a result of which the general health of the feeding cattle as well as their milk productivity increases to a significant extent.
19.	**Area Specific Mineral Mixture for Lactating Deshi Cow**	The Programme is going on.
20.	**Hybrid Napier**	The Fodder Hybrid Napier Var. – Co - 4 gives an yield of 201.89 q / ha over the Local Grass Yield of 73.30 q / ha and this higher Yield ensures greater supply of Green Fodder to Cattles as a result of which the general health of the feeding cattle as well as their milk productivity increases to a significant extent.

F. Extension and Training Activities under FLD

Sl. No.	Activity	Date	No. of Activities Organized	Number of Participants	Remarks
1.	Field days	16.08.2014; 21.08.2014; 23.08.2014; 23.09.2014; 24.09.2014; 25.09.2014; 27.09.2014; 01.10.2014; 19.11.2014; 06.01.2015; 20.01.2014; 08.02.2014	12	450	
2.	Farmers' Training	10.07.2014 to 11.07.2014; 14.08.2014; 16.08.2014; 18.09.2014 to 21.09.2014; 22.09.2014 to 25.09.2014; 30.10.2014; 30.10.2014; 28.11.2014; 15.12.2014	09	272	
3.	Media coverage	22.05.2014; 06.09.2014; 15.11.2014; 12.02.2015; 24.03.2015 17.09.2014; 29.10.2014; 22.11.2015; 15.12.2014; 18.12.2014; 24.12.2014; 27.02.2015; 06.03.2015	A.I.R – 05 T. V. – 08	-	
4.	Training for extension functionaries	24.11.2014; 27.11.2014	02	89	

3.3. Achievements on training (including the sponsored and FLD training programmes):

A. Farmers and farm women (on campus)

Thematic Area	No. of Courses	No. of participants											
		Others			SC			ST			Grand Total		
		M	F	T	M	F	T	M	F	T	M	F	T
I Crop Production													
Weed Management	0	0	0	0	0	0	0	0	0	0	0	0	0
Resource Conservation Technologies	0	0	0	0	0	0	0	0	0	0	0	0	0
Cropping Systems	0	0	0	0	0	0	0	0	0	0	0	0	0
Crop Diversification	2	20	00	20	06	0	06	04	46	50	30	46	76
Integrated Farming	0	0	0	0	0	0	0	0	0	0	0	0	0
Water management	0	0	0	0	0	0	0	0	0	0	0	0	0
Seed production	1	11	0	11	09	0	09	16	0	16	36	0	36

Nursery management	1	12	0	12	03	0	03	10	0	10	25	0	25
Integrated Crop Management	4	49	0	49	26	0	26	13	0	13	88	0	88
Fodder production	2	14	0	14	22	0	22	05	0	05	41	0	41
Production of organic inputs	3	45	0	45	15	0	15	30	0	30	90	0	90
Others, if any (Sowing and Phosphate Management in *Dhaincha*)	1	15	0	15	14	0	14	1	0	1	30	0	30
Thematic Area	**No. of Courses**	**No. of participants**											
		Others			**SC**			**ST**			**Grand Total**		
		M	**F**	**T**	**M**	**F**	**T**	**M**	**F**	**T**	**M**	**F**	**T**
II Horticulture													
a) Vegetable Crops													
Integrated Nutrient management													
Water management	0	0	0	0	0	0	0	0	0	0	0	0	0
Enterprise development	0	0	0	0	0	0	0	0	0	0	0	0	0
Skill development	0	0	0	0	0	0	0	0	0	0	0	0	0
Yield increment													
Production of low volume & high value crops	2	32	0	32	24	0	24	04	0	04	60	0	60
Off-season vegetables	1	18	00	18	06	00	06	07	02	09	31	02	33
Nursery raising	0	0	0	0	0	0	0	0	0	0	0	0	0
Export potential vegetables	0	0	0	0	0	0	0	0	0	0	0	0	0
Grading and standardization	0	0	0	0	0	0	0	0	0	0	0	0	0
Protective cultivation (Green Houses, Shade Net etc.)	0	0	0	0	0	0	0	0	0	0	0	0	0
Others, if any (Crop Diversification)	1	09	0	09	05	0	05	00	0	00	14	0	14
b) Fruits													
Training and Pruning	0	0	0	0	0	0	0	0	0	0	0	0	0
Layout and Management of Orchards	1	17	0	17	12	0	12	01	0	01	30	0	30
Cultivation of Fruit				0			0			0	0	0	0
Management of young plants/orchards	1	15	0	15	14	0	14	01	0	01	30	0	30
Rejuvenation of old orchards	0	0	0	0	0	0	0	0	0	0	0	0	0
Export potential fruits	0	0	0	0	0	0	0	0	0	0	0	0	0
Micro irrigation systems of orchards	0	0	0	0	0	0	0	0	0	0	0	0	0
Plant propagation techniques	0	0	0	0	0	0	0	0	0	0	0	0	0
Others, if any	0	0	0	0	0	0	0	0	0	0	0	0	0
c) Ornamental Plants													
Nursery Management	0	0	0	0	0	0	0	0	0	0	0	0	0
Management of potted plants	0	0	0	0	0	0	0	0	0	0	0	0	0
Export potential of ornamental plants	0	0	0	0	0	0	0	0	0	0	0	0	0
Propagation techniques of Ornamental Plants	0	0	0	0	0	0	0	0	0	0	0	0	0
Others, if any	0	0	0	0	0	0	0	0	0	0	0	0	0
d) Plantation crops													
Production and Management technology	0	0	0	0	0	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0	0	0	0	0	0
Others, if any	0	0	0	0	0	0	0	0	0	0	0	0	0
e) Tuber crops	0	0	0	0	0	0	0	0	0	0	0	0	0
Production and Management technology	1	08	00	08	08	00	08	10	02	12	26	02	28
Processing and value addition	0	0	0	0	0	0	0	0	0	0	0	0	0
Others, if any	0	0	0	0	0	0	0	0	0	0	0	0	0
f) Spices													
Production and Management technology	0	0	0	0	0	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0	0	0	0	0	0
Others, if any	0	0	0	0	0	0	0	0	0	0	0	0	0
g) Medicinal and Aromatic Plants													
Nursery management	0	0	0	0	0	0	0	0	0	0	0	0	0
Production and management technology	0	0	0	0	0	0	0	0	0	0	0	0	0
Post harvest technology and value addition	0	0	0	0	0	0	0	0	0	0	0	0	0
Others, if any	0	0	0	0	0	0	0	0	0	0	0	0	0
III Soil Health and Fertility Management													

Soil fertility management													
Soil and Water Conservation	1	17	0	17	09	0	09	10	0	10	36	0	36
Integrated Nutrient Management													
Production and use of organic inputs	0	0	0	0	0	0	0	0	0	0	0	0	0
Management of Problematic soils	0	0	0	0	0	0	0	0	0	0	0	0	0
Micro nutrient deficiency in crops	0	0	0	0	0	0	0	0	0	0	0	0	0
Thematic Area	**No. of Courses**	**No. of participants**											
		Others			**SC**			**ST**			**Grand Total**		
		M	**F**	**T**	**M**	**F**	**T**	**M**	**F**	**T**	**M**	**F**	**T**
Nutrient Use Efficiency	0	0	0	0	0	0	0	0	0	0	0	0	0
Soil and Water Testing	0	0	0	0	0	0	0	0	0	0	0	0	0
Others, if any	0	0	0	0	0	0	0	0	0	0	0	0	0
IV Livestock Production and Management													
Dairy Management	0	0	0	0	0	0	0	0	0	0	0	0	0
Poultry Management	1	00	06	06	00	00	00	00	15	15	00	21	21
Piggery Management	0	0	0	0	0	0	0	0	0	0	0	0	0
Rabbit Management	0	0	0	0	0	0	0	0	0	0	0	0	0
Disease Management	2	24	00	24	15	00	15	17	00	17	56	00	56
Feed management	1	04	00	04	15	00	15	02	00	02	21	0	21
Production of quality animal products	0	0	0	0	0	0	0	0	0	0	0	0	0
Others, if any (Duckery)	1	00	06	06	00	00	00	00	14	14	00	20	20
Others, if any (Goatery)	1	06	0	06	04	0	04	00	0	00	10	00	10
V Home Science/Women empowerment													
Household food security by kitchen gardening and nutrition gardening	0	0	0	0	0	0	0	0	0	0	0	0	0
Design and development of low/minimum cost diet	0	0	0	0	0	0	0	0	0	0	0	0	0
Designing and development for high nutrient efficiency diet	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimization of nutrient loss in processing	0	0	0	0	0	0	0	0	0	0	0	0	0
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0	0	0	0	0	0
Storage loss minimization techniques	0	0	0	0	0	0	0	0	0	0	0	0	0
Enterprise development				0			0			0	0	0	0
Value addition	2	00	21	21	00	10	10	00	05	05	00	36	36
Income generation activities for empowerment of rural Women	0	0	0	0	0	0	0	0	0	0	0	0	0
Location specific drudgery reduction technologies	0	0	0	0	0	0	0	0	0	0	0	0	0
Rural Crafts	0	0	0	0	0	0	0	0	0	0	0	0	0
Capacity building	0	0	0	0	0	0	0	0	0	0	0	0	0
Women and child care	0	0	0	0	0	0	0	0	0	0	0	0	0
Others, if any	0	0	0	0	0	0	0	0	0	0	0	0	0
VI Agril. Engineering													
Installation and maintenance of micro irrigation systems	0	0	0	0	0	0	0	0	0	0	0	0	0
Use of Plastics in farming practices	0	0	0	0	0	0	0	0	0	0	0	0	0
Production of small tools and implements	0	0	0	0	0	0	0	0	0	0	0	0	0
Repair and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0	0	0	0
Small scale processing and value addition	0	0	0	0	0	0	0	0	0	0	0	0	0
Post Harvest Technology	0	0	0	0	0	0	0	0	0	0	0	0	0
Others, if any	0	0	0	0	0	0	0	0	0	0	0	0	0
VII Plant Protection													
Integrated Pest Management	3	65	0	65	33	0	33	13	0	13	111	0	111
Integrated Disease Management	2	46	0	46	27	0	27	08	0	08	81	0	81
Bio-control of pests and diseases	0	0	0	0	0	0	0	0	0	0	0	0	0
Production of bio control agents and bio pesticides	0	0	0	0	0	0	0	0	0	0	0	0	0

Others, if any	0	0	0	0	0	0	0	0	0	0	0	0	0
VIII Fisheries													
Integrated fish farming	0	0	0	0	0	0	0	0	0	0	0	0	0
Carp breeding and hatchery mgt.	0	0	0	0	0	0	0	0	0	0	0	0	0
Carp fry and fingerling rearing	0	0	0	0	0	0	0	0	0	0	0	0	0
Composite fish culture & fish disease	1	07	0	07	07	0	07	10	0	10	24	0	24
Thematic Area	**No. of Courses**	**No. of participants**											
		Others			**SC**			**ST**			**Grand Total**		
		M	**F**	**T**	**M**	**F**	**T**	**M**	**F**	**T**	**M**	**F**	**T**
Fish feed preparation & its application to fish ponds like nursery, rearing & stocking pond	1	08	0	08	05	0	05	12	0	12	25	0	25
Hatchery management and culture of freshwater prawn	0	0	0	0	0	0	0	0	0	0	0	0	0
Breeding and culture of ornamental fishes	0	0	0	0	0	0	0	0	0	0	0	0	0
Portable plastic carp hatchery	0	0	0	0	0	0	0	0	0	0	0	0	0
Pen culture of fish and prawn	0	0	0	0	0	0	0	0	0	0	0	0	0
Shrimp farming	0	0	0	0	0	0	0	0	0	0	0	0	0
Edible oyster farming	0	0	0	0	0	0	0	0	0	0	0	0	0
Pearl culture	0	0	0	0	0	0	0	0	0	0	0	0	0
Fish processing and value addition	0	0	0	0	0	0	0	0	0	0	0	0	0
Others, if any	0	0	0	0	0	0	0	0	0	0	0	0	0
IX Production of Inputs at site													
Seed Production	0	0	0	0	0	0	0	0	0	0	0	0	0
Planting material production	0	0	0	0	0	0	0	0	0	0	0	0	0
Bio-agents production	0	0	0	0	0	0	0	0	0	0	0	0	0
Bio-pesticides production	0	0	0	0	0	0	0	0	0	0	0	0	0
Bio-fertilizer production	0	0	0	0	0	0	0	0	0	0	0	0	0
Vermi-compost production	0	0	0	0	0	0	0	0	0	0	0	0	0
Organic manures production	0	0	0	0	0	0	0	0	0	0	0	0	0
Production of fry and fingerlings	0	0	0	0	0	0	0	0	0	0	0	0	0
Production of Bee-colonies and wax sheets	0	0	0	0	0	0	0	0	0	0	0	0	0
Small tools and implements	0	0	0	0	0	0	0	0	0	0	0	0	0
Production of livestock feed and fodder	0	0	0	0	0	0	0	0	0	0	0	0	0
Production of Fish feed	0	0	0	0	0	0	0	0	0	0	0	0	0
Others, if any	0	0	0	0	0	0	0	0	0	0	0	0	0
X Capacity Building and Group Dynamics													
Leadership development	0	0	0	0	0	0	0	0	0	0	0	0	0
Group dynamics	1	24	0	24	08	0	08	07	0	07	39	0	39
Formation and Management of SHGs	1	43	03	46	14	00	14	04	00	04	61	03	64
Mobilization of social capital	0	0	0	0	0	0	0	0	0	0	0	0	0
Entrepreneurial development of farmers/youths	0	0	0	0	0	0	0	0	0	0	0	0	0
WTO and IPR issues	1	69	0	69	21	0	21	10	0	10	100	0	100
Others, if any (Crop Insurance)	1	25	0	25	08	0	08	02	0	02	35	0	35
Others, if any (Marketing Mechaniswm)	2	49	04	53	21	00	21	07	45	52	77	49	126
XI Agro-forestry													
Production technologies	0	0	0	0	0	0	0	0	0	0	0	0	0
Nursery management	0	0	0	0	0	0	0	0	0	0	0	0	0
Integrated Farming Systems	0	0	0	0	0	0	0	0	0	0	0	0	0
XII Others (Pl. Specify)	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	**43**	**652**	**40**	**692**	**351**	**10**	**361**	**204**	**129**	**333**	**1207**	**179**	**1386**

B. Rural Youth (on campus)

Thematic Area	No. of Courses	No. of participants											
		Others			SC			ST			Grand Total		
		M	F	T	M	F	T	M	F	T	M	F	T
Mushroom Production	0	0	0	0	0	0	0	0	0	0	0	0	0
Bee-keeping	0	0	0	0	0	0	0	0	0	0	0	0	0
Integrated farming	0	0	0	0	0	0	0	0	0	0	0	0	0
Seed production **(FISH)**	1	07	0	07	08	0	08	00	0	00	15	0	15
Production of organic inputs	0	0	0	0	0	0	0	0	0	0	0	0	0
Integrated Farming	0	0	0	0	0	0	0	0	0	0	0	0	0
Planting material production	0	0	0	0	0	0	0	0	0	0	0	0	0
Vermi-culture	0	0	0	0	0	0	0	0	0	0	0	0	0
Sericulture	0	0	0	0	0	0	0	0	0	0	0	0	0
Protected cultivation of vegetable crops	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial fruit production **(Friends of Coconut Trees – FOCT)**	1	11	0	11	07	0	07	02	0	02	20	0	20
Repair and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0	0	0	0
Nursery Management of Horticulture crops	1	15	0	15	12	0	12	01	0	01	28	0	28
Training and pruning of orchards	0	0	0	0	0	0	0	0	0	0	0	0	0
Value addition	0	0	0	0	0	0	0	0	0	0	0	0	0
Production of quality animal products	0	0	0	0	0	0	0	0	0	0	0	0	0
Dairying	0	0	0	0	0	0	0	0	0	0	0	0	0
Sheep and goat rearing	0	0	0	0	0	0	0	0	0	0	0	0	0
Quail farming	0	0	0	0	0	0	0	0	0	0	0	0	0
Piggery	0	0	0	0	0	0	0	0	0	0	0	0	0
Rabbit farming	0	0	0	0	0	0	0	0	0	0	0	0	0
Poultry production	1	05	0	05	05	0	05	00	0	00	10	0	10
Ornamental fisheries	0	0	0	0	0	0	0	0	0	0	0	0	0
Para vets	0	0	0	0	0	0	0	0	0	0	0	0	0
Para extension workers	0	0	0	0	0	0	0	0	0	0	0	0	0
Composite fish culture	0	0	0	0	0	0	0	0	0	0	0	0	0
Freshwater prawn culture	0	0	0	0	0	0	0	0	0	0	0	0	0
Shrimp farming	0	0	0	0	0	0	0	0	0	0	0	0	0
Pearl culture	0	0	0	0	0	0	0	0	0	0	0	0	0
Cold water fisheries	0	0	0	0	0	0	0	0	0	0	0	0	0
Fish harvest and processing technology	0	0	0	0	0	0	0	0	0	0	0	0	0
Fry and fingerling rearing	0	0	0	0	0	0	0	0	0	0	0	0	0
Small scale processing	0	0	0	0	0	0	0	0	0	0	0	0	0
Post Harvest Technology	0	0	0	0	0	0	0	0	0	0	0	0	0
Tailoring and Stitching	0	0	0	0	0	0	0	0	0	0	0	0	0
Rural Crafts	0	0	0	0	0	0	0	0	0	0	0	0	0
Others, if any (Soil Testing)	1	19	0	19	07	0	07	01	0	01	27	0	27
TOTAL	**5**	**57**	**00**	**57**	**39**	**00**	**39**	**04**	**00**	**04**	**100**	**00**	**100**

C. Extension Personnel (on campus)

Thematic Area	No. of Courses	No. of participants											
		Others			SC			ST			Grand Total		
		M	F	T	M	F	T	M	F	T	M	F	T
Productivity enhancement in field crops	1	24	0	24	02	0	02	01	0	01	27	0	27
Value addition	0	0	0	0	0	0	0	0	0	0	0	0	0
Integrated Pest Management	0	0	0	0	0	0	0	0	0	0	0	0	0
Integrated Nutrient management	0	0	0	0	0	0	0	0	0	0	0	0	0
Rejuvenation of old orchards	0	0	0	0	0	0	0	0	0	0	0	0	0
Protected cultivation technology	0	0	0	0	0	0	0	0	0	0	0	0	0
Formation and Management of SHGs	0	0	0	0	0	0	0	0	0	0	0	0	0
Group Dynamics and farmers organization	0	0	0	0	0	0	0	0	0	0	0	0	0
Information networking among farmers	0	0	0	0	0	0	0	0	0	0	0	0	0
Capacity building for ICT application	0	0	0	0	0	0	0	0	0	0	0	0	0
Care and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0	0	0	0
WTO and IPR issues	0	0	0	0	0	0	0	0	0	0	0	0	0
Management in farm animals	0	0	0	0	0	0	0	0	0	0	0	0	0
Livestock feed and fodder production	0	0	0	0	0	0	0	0	0	0	0	0	0
Household food security	0	0	0	0	0	0	0	0	0	0	0	0	0
Women and Child care	0	0	0	0	0	0	0	0	0	0	0	0	0
Low cost and nutrient efficient diet designing	0	0	0	0	0	0	0	0	0	0	0	0	0
Production and use of organic inputs	0	0	0	0	0	0	0	0	0	0	0	0	0
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0	0	0	0	0	0
Any other (Pl. Specify)													
TOTAL	**1**	**24**	**00**	**24**	**02**	**00**	**02**	**01**	**00**	**01**	**27**	**00**	**27**

D. Farmers and farm women (off campus)

Thematic Area	No. of Courses	No. of participants											
		Others			SC			ST			Grand Total		
		M	F	T	M	F	T	M	F	T	M	F	T
I Crop Production													
Weed Management	0	0	0	0	0	0	0	0	0	0	0	0	0
Resource Conservation Technologies	0	0	0	0	0	0	0	0	0	0	0	0	0
Cropping Systems	0	0	0	0	0	0	0	0	0	0	0	0	0
Crop Diversification	0	0	0	0	0	0	0	0	0	0	0	0	0
Integrated Farming	0	0	0	0	0	0	0	0	0	0	0	0	0
Water management	0	0	0	0	0	0	0	0	0	0	0	0	0
Seed production	1	33	0	33	13	0	13	00	0	00	46	0	46
Nursery management	0	0	0	0	0	0	0	0	0	0	0	0	0
Integrated Crop Management	0	0	0	0	0	0	0	0	0	0	0	0	0
Fodder production	0	0	0	0	0	0	0	0	0	0	0	0	0
Production of organic inputs	2	39	0	39	28	0	28	00	0	00	67	0	67
Others	0	0	0	0	0	0	0	0	0	0	0	0	0
II Horticulture													
a) Vegetable Crops													
Integrated Nutrient management	0	0	0	0	0	0	0	0	0	0	0	0	0
Water management	0	0	0	0	0	0	0	0	0	0	0	0	0
Enterprise development	0	0	0	0	0	0	0	0	0	0	0	0	0
Skill development	0	0	0	0	0	0	0	0	0	0	0	0	0
Yield increment	3	37	57	94	39	05	44	24	05	29	100	67	167

Production of low volume and high value crops	0	0	0	0	0	0	0	0	0	0	0	0	0
Off-season vegetables	0	0	0	0	0	0	0	0	0	0	0	0	0
Thematic Area	**No. of Courses**	**No. of participants**											
		Others			**SC**			**ST**			**Grand Total**		
		M	**F**	**T**	**M**	**F**	**T**	**M**	**F**	**T**	**M**	**F**	**T**
Nursery raising													
Export potential vegetables	0	0	0	0	0	0	0	0	0	0	0	0	0
Grading and standardization	0	0	0	0	0	0	0	0	0	0	0	0	0
Protective cultivation (Green Houses, Shade Net etc.)	0	0	0	0	0	0	0	0	0	0	0	0	0
Others, if any (Crop Diversification)	5	53	01	54	44	0	44	13	48	61	145	49	194
Others, if any (nutrition gardening)	2	00	00	00	00	00	00	00	43	43	00	43	43
b) Fruits													
Training and Pruning	0	0	0	0	0	0	0	0	0	0	0	0	0
Layout and Management of Orchards	0	0	0	0	0	0	0	0	0	0	0	0	0
Cultivation of Fruit	0	0	0	0	0	0	0	0	0	0	0	0	0
Management of young plants/orchards	0	0	0	0	0	0	0	0	0	0	0	0	0
Rejuvenation of old orchards	0	0	0	0	0	0	0	0	0	0	0	0	0
Export potential fruits	0	0	0	0	0	0	0	0	0	0	0	0	0
Micro irrigation systems of orchards	0	0	0	0	0	0	0	0	0	0	0	0	0
Plant propagation techniques	0	0	0	0	0	0	0	0	0	0	0	0	0
Others, if any	0	0	0	0	0	0	0	0	0	0	0	0	0
c) Ornamental Plants													
Nursery Management	0	0	0	0	0	0	0	0	0	0	0	0	0
Management of potted plants	0	0	0	0	0	0	0	0	0	0	0	0	0
Export potential of ornamental plants	0	0	0	0	0	0	0	0	0	0	0	0	0
Propagation techniques of Ornamental Plants	0	0	0	0	0	0	0	0	0	0	0	0	0
Others, if any	0	0	0	0	0	0	0	0	0	0	0	0	0
d) Plantation crops													
Production and Management technology	0	0	0	0	0	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0	0	0	0	0	0
Others, if any	0	0	0	0	0	0	0	0	0	0	0	0	0
e) Tuber crops													
Production and Management technology	0	0	0	0	0	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0	0	0	0	0	0
Others, if any	0	0	0	0	0	0	0	0	0	0	0	0	0
f) Spices													
Production and Management technology	0	0	0	0	0	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0	0	0	0	0	0
Others, if any	0	0	0	0	0	0	0	0	0	0	0	0	0
g) Medicinal and Aromatic Plants													
Nursery management	0	0	0	0	0	0	0	0	0	0	0	0	0
Production and management technology	0	0	0	0	0	0	0	0	0	0	0	0	0
Post harvest technology and value addition	0	0	0	0	0	0	0	0	0	0	0	0	0
Others, if any	0	0	0	0	0	0	0	0	0	0	0	0	0
III Soil Health and Fertility Management													

Soil fertility management	0	0	0	0	0	0	0	0	0	0	0	0	0
Soil and Water Conservation	0	0	0	0	0	0	0	0	0	0	0	0	0
Integrated Nutrient Management	1	26	0	26	06	0	06	01	0	01	33	0	33
Production and use of organic inputs	0	0	0	0	0	0	0	0	0	0	0	0	0
Management of Problematic soils	0	0	0	0	0	0	0	0	0	0	0	0	0
Micro nutrient deficiency in crops	0	0	0	0	0	0	0	0	0	0	0	0	0
Nutrient Use Efficiency	0	0	0	0	0	0	0	0	0	0	0	0	0
Soil and Water Testing	2	46	0	46	58	0	58	02	0	02	106	0	106
Others, if any	0	0	0	0	0	0	0	0	0	0	0	0	0
IV Livestock Production and Management													
Dairy Management	0	0	0	0	0	0	0	0	0	0	0	0	0
Poultry Management	1	01	00	01	10	15	25	08	07	15	19	22	41
Piggery Management	1	14	00	14	00	00	00	36	00	36	50	00	50
Rabbit Management	0	0	0	0	0	0	0	0	0	0	0	0	0
Disease Management	0	0	0	0	0	0	0	0	0	0	0	0	0
Feed management	0	0	0	0	0	0	0	0	0	0	0	0	0
Production of quality animal products	0	0	0	0	0	0	0	0	0	0	0	0	0
Others, if any (Goatery Management)	4	43	06	49	54	27	81	20	16	36	117	49	166
Others, if any (Duckery Management)	1	01	10	11	00	36	36	00	00	00	01	46	47
V Home Science/Women empowerment													
Household food security by kitchen gardening and nutrition gardening	1	00	13	13	00	41	41	00	00	00	00	54	54
Design and development of low/minimum cost diet	1	00	31	31	00	19	19	00	12	12	00	31	31
Designing and development for high nutrient efficiency diet	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimization of nutrient loss in processing	0	0	0	0	0	0	0	0	0	0	0	0	0
Gender mainstreaming through SHGs	1	00	00	00	00	00	00	00	35	35	00	35	35
Storage loss minimization techniques	0	0	0	0	0	0	0	0	0	0	0	0	0
Enterprise development	0	00	00	00	00	00	00	00	00	00	00	00	00
Value addition	0	0	0	0	0	0	0	0	0	0	0	0	0
Income generation activities for empowerment of rural Women	1	00	08	08	00	42	42	00	00	00	00	50	50
Location specific drudgery reduction technologies	0	0	0	0	0	0	0	0	0	0	0	0	0
Rural Crafts	1	04	00	04	00	21	21	00	00	00	00	25	25
Capacity building	0	0	0	0	0	0	0	0	0	0	0	0	0
Women and child care	2	00	27	27	00	26	26	00	50	50	00	103	103
Others, if any	0	0	0	0	0	0	0	0	0	0	0	0	0
VI Agril. Engineering													
Installation and maintenance of micro irrigation systems	0	0	0	0	0	0	0	0	0	0	0	0	0
Use of Plastics in farming practices	0	0	0	0	0	0	0	0	0	0	0	0	0
Production of small tools and implements	0	0	0	0	0	0	0	0	0	0	0	0	0
Repair and maintenance of	0	0	0	0	0	0	0	0	0	0	0	0	0

farm machinery and implements													
Small scale processing and value addition	0	0	0	0	0	0	0	0	0	0	0	0	0
Post Harvest Technology	0	0	0	0	0	0	0	0	0	0	0	0	0
Others, if any	0	0	0	0	0	0	0	0	0	0	0	0	0

Thematic Area	No. of Courses	No. of participants											
		Others			SC			ST			Grand Total		
		M	F	T	M	F	T	M	F	T	M	F	T
VII Plant Protection													
Integrated Pest Management	4	120	0	120	52	0	52	28	0	28	200	0	200
Integrated Disease Management	2	64	0	64	24	0	24	12	0	12	100	0	100
Bio-control of pests and diseases	0	0	0	0	0	0	0	0	0	0	0	0	0
Production of bio control agents and bio pesticides	0	0	0	0	0	0	0	0	0	0	0	0	0
Seed treatment	0	0	0	0	0	0	0	0	0	0	0	0	0
VIII Fisheries													
Integrated fish farming	1	15	0	15	35	0	35	01	0	01	51	0	51
Carp breeding and hatchery mgt.	0	0	0	0	0	0	0	0	0	0	0	0	0
Carp fry and fingerling rearing	0	0	0	0	0	0	0	0	0	0	0	0	0
Composite fish culture & fish disease	1	20	0	20	22	0	22	00	0	00	42	0	42
Fish feed preparation & its application to fish ponds like nursery, rearing & stocking pond	0	0	0	0	0	0	0	0	0	0	0	0	0
Hatchery management and culture of freshwater prawn	1	12	00	12	31	03	34	03	00	03	46	03	49
Breeding and culture of ornamental fishes	0	0	0	0	0	0	0	0	0	0	0	0	0
Portable plastic carp hatchery	0	0	0	0	0	0	0	0	0	0	0	0	0
Pen culture of fish and prawn	0	0	0	0	0	0	0	0	0	0	0	0	0
Shrimp farming	0	0	0	0	0	0	0	0	0	0	0	0	0
Edible oyster farming	0	0	0	0	0	0	0	0	0	0	0	0	0
Pearl culture	0	0	0	0	0	0	0	0	0	0	0	0	0
Fish processing and value addition	0	0	0	0	0	0	0	0	0	0	0	0	0
Others, if any (Fish based Integrated Farming)	1	03	0	03	36	00	36	02	0	02	41	0	41
IX Production of Inputs at site													
Seed Production	0	0	0	0	0	0	0	0	0	0	0	0	0
Planting material production	0	0	0	0	0	0	0	0	0	0	0	0	0
Bio-agents production	0	0	0	0	0	0	0	0	0	0	0	0	0
Bio-pesticides production	0	0	0	0	0	0	0	0	0	0	0	0	0
Bio-fertilizer production	0	0	0	0	0	0	0	0	0	0	0	0	0
Vermi-compost production	0	0	0	0	0	0	0	0	0	0	0	0	0
Organic manures production	0	0	0	0	0	0	0	0	0	0	0	0	0
Production of fry and fingerlings	0	0	0	0	0	0	0	0	0	0	0	0	0
Production of Bee-colonies and wax sheets	0	0	0	0	0	0	0	0	0	0	0	0	0
Small tools and implements	0	0	0	0	0	0	0	0	0	0	0	0	0
Production of livestock feed and fodder	0	0	0	0	0	0	0	0	0	0	0	0	0
Production of Fish feed	0	0	0	0	0	0	0	0	0	0	0	0	0
Others, if any	0	0	0	0	0	0	0	0	0	0	0	0	0
X Capacity Building and Group Dynamics													
Leadership development	0	0	0	0	0	0	0	0	0	0	0	0	0
Group dynamics	1	16	00	16	07	03	10	14	11	25	37	14	51
Formation and Management of SHGs	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobilization of social capital	0	0	0	0	0	0	0	0	0	0	0	0	0
Entrepreneurial development of farmers/youths	0	0	0	0	0	0	0	0	0	0	0	0	0
WTO and IPR issues	0	0	0	0	0	0	0	0	0	0	0	0	0

Others, if any (Market led Extension)	1	16	0	16	12	0	12	07	0	07	35	0	35
XI Agro-forestry													
Production technologies	0	0	0	0	0	0	0	0	0	0	0	0	0
Nursery management	0	0	0	0	0	0	0	0	0	0	0	0	0
Integrated Farming Systems	0	0	0	0	0	0	0	0	0	0	0	0	0
XII Others (Pl. Specify)	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	**42**	**563**	**153**	**716**	**471**	**238**	**709**	**171**	**227**	**398**	**1236**	**591**	**1827**

E. Rural Youth (off campus)

Thematic Area	No. of Courses	No. of participants											
		Others			SC			ST			Grand Total		
		M	F	T	M	F	T	M	F	T	M	F	T
Mushroom Production	0	0	0	0	0	0	0	0	0	0	0	0	0
Bee-keeping	0	0	0	0	0	0	0	0	0	0	0	0	0
Integrated farming	0	0	0	0	0	0	0	0	0	0	0	0	0
Seed production	0	0	0	0	0	0	0	0	0	0	0	0	0
Production of organic inputs	0	0	0	0	0	0	0	0	0	0	0	0	0
Integrated Farming	0	0	0	0	0	0	0	0	0	0	0	0	0
Planting material production	0	0	0	0	0	0	0	0	0	0	0	0	0
Vermi-culture	0	0	0	0	0	0	0	0	0	0	0	0	0
Sericulture	0	0	0	0	0	0	0	0	0	0	0	0	0
Protected cultivation of vegetable crops	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial fruit production	0	0	0	0	0	0	0	0	0	0	0	0	0
Repair and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0	0	0	0
Nursery Management of Horticulture crops	0	0	0	0	0	0	0	0	0	0	0	0	0
Training and pruning of orchards	0	0	0	0	0	0	0	0	0	0	0	0	0
Value addition	0	0	0	0	0	0	0	0	0	0	0	0	0
Production of quality animal products	0	0	0	0	0	0	0	0	0	0	0	0	0
Dairying	0	0	0	0	0	0	0	0	0	0	0	0	0
Sheep and goat rearing	0	0	0	0	0	0	0	0	0	0	0	0	0
Quail farming	0	0	0	0	0	0	0	0	0	0	0	0	0
Piggery	0	0	0	0	0	0	0	0	0	0	0	0	0
Rabbit farming	0	0	0	0	0	0	0	0	0	0	0	0	0
Poultry production	0	0	0	0	0	0	0	0	0	0	0	0	0
Ornamental fisheries	0	0	0	0	0	0	0	0	0	0	0	0	0
Para vets	0	0	0	0	0	0	0	0	0	0	0	0	0
Para extension workers	0	0	0	0	0	0	0	0	0	0	0	0	0
Composite fish culture	0	0	0	0	0	0	0	0	0	0	0	0	0
Freshwater prawn culture	0	0	0	0	0	0	0	0	0	0	0	0	0
Shrimp farming	0	0	0	0	0	0	0	0	0	0	0	0	0
Pearl culture	0	0	0	0	0	0	0	0	0	0	0	0	0
Cold water fisheries	0	0	0	0	0	0	0	0	0	0	0	0	0
Fish harvest and processing technology	0	0	0	0	0	0	0	0	0	0	0	0	0
Fry and fingerling rearing	0	0	0	0	0	0	0	0	0	0	0	0	0
Small scale processing	0	0	0	0	0	0	0	0	0	0	0	0	0
Post Harvest Technology	0	0	0	0	0	0	0	0	0	0	0	0	0
Tailoring and Stitching	0	0	0	0	0	0	0	0	0	0	0	0	0
Rural Crafts	0	0	0	0	0	0	0	0	0	0	0	0	0
Others, if any (Cattle Feed Preparation)	1	11	04	15	00	00	00	02	02	04	13	06	19
TOTAL	**1**	**11**	**04**	**15**	**00**	**00**	**00**	**02**	**02**	**04**	**13**	**06**	**19**

F. Extension Personnel (off campus)

Thematic Area	No. of Courses	No. of participants											
		Others			SC			ST			Grand Total		
		M	F	T	M	F	T	M	F	T	M	F	T
Productivity enhancement in field crops	0	0	0	0	0	0	0	0	0	0	0	0	0
Value addition	0	0	0	0	0	0	0	0	0	0	0	0	0
Integrated Pest Management	0	0	0	0	0	0	0	0	0	0	0	0	0
Integrated Nutrient management	0	0	0	0	0	0	0	0	0	0	0	0	0
Rejuvenation of old orchards	0	0	0	0	0	0	0	0	0	0	0	0	0
Protected cultivation technology	0	0	0	0	0	0	0	0	0	0	0	0	0
Formation and Management of SHGs	0	0	0	0	0	0	0	0	0	0	0	0	0
Group Dynamics and farmers organization	0	0	0	0	0	0	0	0	0	0	0	0	0
Information networking among farmers	0	0	0	0	0	0	0	0	0	0	0	0	0
Capacity building for ICT application	0	0	0	0	0	0	0	0	0	0	0	0	0
Care and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0	0	0	0
WTO and IPR issues	0	0	0	0	0	0	0	0	0	0	0	0	0
Management in farm animals	0	0	0	0	0	0	0	0	0	0	0	0	0
Livestock feed and fodder production	0	0	0	0	0	0	0	0	0	0	0	0	0
Household food security	0	0	0	0	0	0	0	0	0	0	0	0	0
Women and Child care	0	0	0	0	0	0	0	0	0	0	0	0	0
Low cost and nutrient efficient diet designing	0	0	0	0	0	0	0	0	0	0	0	0	0
Production and use of organic inputs	0	0	0	0	0	0	0	0	0	0	0	0	0
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0	0	0	0	0	0
Any other (Pl. Specify) (Crop Diversification of Horticultural Crops)	2	55	0	55	32	0	32	02	0	02	89	0	89
TOTAL	**02**	**55**	**00**	**55**	**32**	**00**	**32**	**02**	**00**	**02**	**89**	**00**	**89**

Consolidated table (ON and OFF Campus)

G. Farmers and farm women (on and off campus)

Thematic Area	No. of Courses	No. of participants											
		Others			SC			ST			Grand Total		
		M	F	T	M	F	T	M	F	T	M	F	T
I Crop Production													
Weed Management	0	0	0	0	0	0	0	0	0	0	0	0	0
Resource Conservation Technologies	0	0	0	0	0	0	0	0	0	0	0	0	0
Cropping Systems	0	0	0	0	0	0	0	0	0	0	0	0	0
Crop Diversification	2	20	00	20	06	0	06	04	46	50	30	46	76
Integrated Farming	0	0	0	0	0	0	0	0	0	0	0	0	0
Water management	0	0	0	0	0	0	0	0	0	0	0	0	0
Seed production	2	44	0	44	22	0	22	16	0	16	82	0	82
Nursery management	1	12	0	12	03	0	03	10	0	10	25	0	25
Integrated Crop Management	4	49	0	49	26	0	26	13	0	13	88	0	88
Fodder production	2	14	0	14	22	0	22	05	0	05	41	0	41
Production of organic inputs	5	84	0	84	43	0	43	30	0	30	157	0	157
Others, if any (Sowing and Phosphate Management in *Dhaincha*)	1	15	0	15	14	0	14	1	0	1	30	0	30
II Horticulture													

a) Vegetable Crops													
Integrated Nutrient management													
Water management	0	0	0	0	0	0	0	0	0	0	0	0	0
Enterprise development	0	0	0	0	0	0	0	0	0	0	0	0	0
Skill development	0	0	0	0	0	0	0	0	0	0	0	0	0
Yield increment	5	69	57	126	63	05	68	28	05	33	160	67	227
Production of low volume and high value crops	1	18	00	18	06	00	06	07	02	09	31	02	33
Off-season vegetables	0	0	0	0	0	0	0	0	0	0	0	0	0
Nursery raising													
Export potential vegetables	0	0	0	0	0	0	0	0	0	0	0	0	0
Grading and standardization	0	0	0	0	0	0	0	0	0	0	0	0	0
Protective cultivation (Green Houses, Shade Net etc.)	0	0	0	0	0	0	0	0	0	0	0	0	0
Others, if any (Crop Diversification)	6	62	01	63	49	0	49	13	48	61	145	49	194
Others, if any (nutrition gardening)	2	00	00	00	00	00	00	00	43	43	00	43	43
b) Fruits													
Training and Pruning	0	0	0	0	0	0	0	0	0	0	0	0	0
Layout and Management of Orchards	1	17	0	17	12	0	12	01	0	01	30	0	30
Cultivation of Fruit	0	0	0	0	0	0	0	0	0	0	0	0	0
Management of young plants/orchards	1	15	0	15	14	0	14	01	0	01	30	0	30
Rejuvenation of old orchards	0	0	0	0	0	0	0	0	0	0	0	0	0
Export potential fruits	0	0	0	0	0	0	0	0	0	0	0	0	0
Micro irrigation systems of orchards	0	0	0	0	0	0	0	0	0	0	0	0	0
Plant propagation techniques	0	0	0	0	0	0	0	0	0	0	0	0	0
Others, if any	0	0	0	0	0	0	0	0	0	0	0	0	0
c) Ornamental Plants	0												
Nursery Management	0	0	0	0	0	0	0	0	0	0	0	0	0
Management of potted plants	0	0	0	0	0	0	0	0	0	0	0	0	0
Export potential of ornamental plants	0	0	0	0	0	0	0	0	0	0	0	0	0
Propagation techniques of Ornamental Plants	0	0	0	0	0	0	0	0	0	0	0	0	0
Others, if any	0	0	0	0	0	0	0	0	0	0	0	0	0
d) Plantation crops	0												
Production and Management technology	0	0	0	0	0	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0	0	0	0	0	0
Others, if any	0	0	0	0	0	0	0	0	0	0	0	0	0
e) Tuber crops													
Production and Management technology	1	08	00	08	08	00	08	10	02	12	26	02	28
Processing and value addition	0	0	0	0	0	0	0	0	0	0	0	0	0
Others, if any	0	0	0	0	0	0	0	0	0	0	0	0	0
f) Spices													
Production and Management technology	0	0	0	0	0	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0	0	0	0	0	0
Others, if any	0	0	0	0	0	0	0	0	0	0	0	0	0

Thematic Area	**No. of Courses**	**No. of participants**											
		Others			**SC**			**ST**			**Grand Total**		
		M	**F**	**T**	**M**	**F**	**T**	**M**	**F**	**T**	**M**	**F**	**T**
g) Medicinal and Aromatic Plants													
Nursery management	0	0	0	0	0	0	0	0	0	0	0	0	0
Production and management technology	0	0	0	0	0	0	0	0	0	0	0	0	0
Post harvest technology and value addition	0	0	0	0	0	0	0	0	0	0	0	0	0
Others, if any	0	0	0	0	0	0	0	0	0	0	0	0	0
III Soil Health and Fertility Management	0												
Soil fertility management													

Soil and Water Conservation	1	17	0	17	09	0	09	10	0	10	36	0	36
Integrated Nutrient Management	1	26	0	26	06	0	06	01	0	01	33	0	33
Production and use of organic inputs	0	0	0	0	0	0	0	0	0	0	0	0	0
Management of Problematic soils	0	0	0	0	0	0	0	0	0	0	0	0	0
Micro nutrient deficiency in crops	0	0	0	0	0	0	0	0	0	0	0	0	0
Nutrient Use Efficiency													
Soil and Water Testing	2	46	0	46	58	0	58	02	0	02	106	0	106
Others, if any	0	0	0	0	0	0	0	0	0	0	0	0	0
IV Livestock Production and Management													
Dairy Management	0	0	0	0	0	0	0	0	0	0	0	0	0
Poultry Management	2	01	06	07	10	15	25	08	07	15	19	43	62
Piggery Management	1	14	00	14	00	00	00	36	00	36	50	00	50
Rabbit Management	0	0	0	0	0	0	0	0	0	0	0	0	0
Disease Management	2	24	00	24	15	00	15	17	00	17	56	00	56
Feed management	1	04	00	04	15	00	15	02	00	02	21	0	21
Production of quality animal products	0	0	0	0	0	0	0	0	0	0	0	0	0
Others, if any (Duckery)	2	01	16	17	00	36	36	00	14	14	01	66	67
Others, if any (Goatery)	5	49	06	55	58	27	85	20	16	36	118	49	167
V Home Science/Women empowerment													
Household food security by kitchen gardening and nutrition gardening	1	00	13	13	00	41	41	00	00	00	00	54	54
Design and development of low/minimum cost diet	1	00	31	31	00	19	19	00	12	12	00	31	31
Designing and development for high nutrient efficiency diet	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimization of nutrient loss in processing	0	0	0	0	0	0	0	0	0	0	0	0	0
Gender mainstreaming through SHGs	1	00	00	00	00	00	00	00	35	35	00	35	35
Storage loss minimization techniques	0	0	0	0	0	0	0	0	0	0	0	0	0
Enterprise development	0	0	0	0	0	0	0	0	0	0	0	0	0
Value addition	2	00	21	21	00	10	10	00	05	05	00	36	36
Income generation activities for empowerment of rural Women	1	00	08	08	00	42	42	00	00	00	00	50	50
Location specific drudgery reduction technologies	0	0	0	0	0	0	0	0	0	0	0	0	0
Rural Crafts	1	04	00	04	00	21	21	00	00	00	00	25	25
Capacity building	0	0	0	0	0	0	0	0	0	0	0	0	0
Women and child care	2	00	27	27	00	26	26	00	50	50	00	103	103
Others, if any	0	0	0	0	0	0	0	0	0	0	0	0	0
VI Agril. Engineering													
Installation and maintenance of micro irrigation systems	0	0	0	0	0	0	0	0	0	0	0	0	0
Use of Plastics in farming practices	0	0	0	0	0	0	0	0	0	0	0	0	0
Production of small tools and implements	0	0	0	0	0	0	0	0	0	0	0	0	0
Repair and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0	0	0	0
Small scale processing and value addition	0	0	0	0	0	0	0	0	0	0	0	0	0
Post Harvest Technology	0	0	0	0	0	0	0	0	0	0	0	0	0
Others, if any (Use of Rotavator)													

Thematic Area	**No. of Courses**	**No. of participants**											
		Others			**SC**			**ST**			**Grand Total**		
		M	**F**	**T**	**M**	**F**	**T**	**M**	**F**	**T**	**M**	**F**	**T**
VII Plant Protection													
Integrated Pest Management	7	185	0	185	85	0	85	41	0	41	311	0	311
Integrated Disease	4	110	0	110	51	0	51	20	0	20	181	0	181

Management													
Bio-control of pests and diseases													
Production of bio control agents and bio pesticides	0	0	0	0	0	0	0	0	0	0	0	0	0
Others, if any	0	0	0	0	0	0	0	0	0	0	0	0	0
VIII Fisheries													
Integrated fish farming	1	15	0	15	35	0	35	01	0	01	51	0	51
Carp breeding and hatchery mgt.	0	0	0	0	0	0	0	0	0	0	0	0	0
Carp fry and fingerling rearing	0	0	0	0	0	0	0	0	0	0	0	0	0
Composite fish culture & fish disease	2	27	0	27	29	0	29	10	0	10	66	0	66
Fish feed preparation & its application to fish ponds like nursery, rearing & stocking pond	1	08	0	08	05	0	05	12	0	12	25	0	25
Hatchery management and culture of freshwater prawn	1	12	00	12	31	03	34	03	00	03	46	03	49
Breeding and culture of ornamental fishes	0	0	0	0	0	0	0	0	0	0	0	0	0
Portable plastic carp hatchery	0	0	0	0	0	0	0	0	0	0	0	0	0
Pen culture of fish and prawn	0	0	0	0	0	0	0	0	0	0	0	0	0
Shrimp farming	0	0	0	0	0	0	0	0	0	0	0	0	0
Edible oyster farming	0	0	0	0	0	0	0	0	0	0	0	0	0
Pearl culture	0	0	0	0	0	0	0	0	0	0	0	0	0
Fish processing and value addition	0	0	0	0	0	0	0	0	0	0	0	0	0
Others, if any (Fish based Integrated Farming)	1	03	0	03	36	00	36	02	0	02	41	0	41
IX Production of Inputs at site	0												
Seed Production	0	0	0	0	0	0	0	0	0	0	0	0	0
Planting material production	0	0	0	0	0	0	0	0	0	0	0	0	0
Bio-agents production	0	0	0	0	0	0	0	0	0	0	0	0	0
Bio-pesticides production	0	0	0	0	0	0	0	0	0	0	0	0	0
Bio-fertilizer production	0	0	0	0	0	0	0	0	0	0	0	0	0
Vermi-compost production													
Organic manures production	0	0	0	0	0	0	0	0	0	0	0	0	0
Production of fry and fingerlings	0	0	0	0	0	0	0	0	0	0	0	0	0
Production of Bee-colonies and wax sheets	0	0	0	0	0	0	0	0	0	0	0	0	0
Small tools and implements	0	0	0	0	0	0	0	0	0	0	0	0	0
Production of livestock feed and fodder	0	0	0	0	0	0	0	0	0	0	0	0	0
Production of Fish feed	0	0	0	0	0	0	0	0	0	0	0	0	0
Others, if any	0	0	0	0	0	0	0	0	0	0	0	0	0
X Capacity Building and Group Dynamics													
Leadership development	0	0	0	0	0	0	0	0	0	0	0	0	0
Group dynamics	2	40	0	40	15	03	18	21	11	32	76	14	90
Formation and Management of SHGs	1	43	03	46	14	00	14	04	00	04	61	03	64
Mobilization of social capital	0	0	0	0	0	0	0	0	0	0	0	0	0
Entrepreneurial development of farmers/youths	0	0	0	0	0	0	0	0	0	0	0	0	0
WTO and IPR issues	1	69	0	69	21	0	21	10	0	10	100	0	100
Others, if any (Market led Extension)	1	16	0	16	12	0	12	07	0	07	35	0	35
Others, if any (Crop Insurance)	1	25	0	25	08	0	08	02	0	02	35	0	35

Others, if any (Marketing Mechaniswm)	2	49	04	53	21	00	21	07	45	52	77	49	126
XI Agro-forestry													
Production technologies	0	0	0	0	0	0	0	0	0	0	0	0	0
Nursery management	0	0	0	0	0	0	0	0	0	0	0	0	0
Integrated Farming Systems	0	0	0	0	0	0	0	0	0	0	0	0	0
XII Others (Pl. Specify)													
TOTAL	**85**	**1215**	**193**	**1408**	**822**	**248**	**1070**	**375**	**341**	**716**	**2420**	**770**	**3190**

H. Rural Youth (on and off campus)

Thematic Area	No. of Courses	No. of participants											
		Others			SC			ST			Grand Total		
		M	F	T	M	F	T	M	F	T	M	F	T
Mushroom Production	0	0	0	0	0	0	0	0	0	0	0	0	0
Bee-keeping	0	0	0	0	0	0	0	0	0	0	0	0	0
Integrated farming	0	0	0	0	0	0	0	0	0	0	0	0	0
Seed production (Fish)	1	07	0	07	08	0	08	00	0	00	15	0	15
Production of organic inputs	0	0	0	0	0	0	0	0	0	0	0	0	0
Integrated Farming	0	0	0	0	0	0	0	0	0	0	0	0	0
Planting material production	0	0	0	0	0	0	0	0	0	0	0	0	0
Vermi-culture	0	0	0	0	0	0	0	0	0	0	0	0	0
Sericulture	0	0	0	0	0	0	0	0	0	0	0	0	0
Protected cultivation of vegetable crops	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial fruit production (FOCT)	1	11	0	11	07	0	07	02	0	02	20	0	20
Repair and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0	0	0	0
Nursery Management of Horticulture crops	1	15	0	15	12	0	12	01	0	01	28	0	28
Training and pruning of orchards	0	0	0	0	0	0	0	0	0	0	0	0	0
Value addition	0	0	0	0	0	0	0	0	0	0	0	0	0
Production of quality animal products	0	0	0	0	0	0	0	0	0	0	0	0	0
Dairying	0	0	0	0	0	0	0	0	0	0	0	0	0
Sheep and goat rearing	0	0	0	0	0	0	0	0	0	0	0	0	0
Quail farming	0	0	0	0	0	0	0	0	0	0	0	0	0
Piggery	0	0	0	0	0	0	0	0	0	0	0	0	0
Rabbit farming	0	0	0	0	0	0	0	0	0	0	0	0	0
Poultry production	1	05	0	05	05	0	05	00	0	00	10	0	10
Ornamental fisheries	0	0	0	0	0	0	0	0	0	0	0	0	0
Para vets	0	0	0	0	0	0	0	0	0	0	0	0	0
Para extension workers	0	0	0	0	0	0	0	0	0	0	0	0	0
Composite fish culture	0	0	0	0	0	0	0	0	0	0	0	0	0
Freshwater prawn culture	0	0	0	0	0	0	0	0	0	0	0	0	0
Shrimp farming	0	0	0	0	0	0	0	0	0	0	0	0	0
Pearl culture	0	0	0	0	0	0	0	0	0	0	0	0	0
Cold water fisheries	0	0	0	0	0	0	0	0	0	0	0	0	0
Fish harvest and processing technology	0	0	0	0	0	0	0	0	0	0	0	0	0
Fry and fingerling rearing	0	0	0	0	0	0	0	0	0	0	0	0	0
Small scale processing	0	0	0	0	0	0	0	0	0	0	0	0	0
Post Harvest Technology	0	0	0	0	0	0	0	0	0	0	0	0	0
Tailoring and Stitching	0	0	0	0	0	0	0	0	0	0	0	0	0
Rural Crafts	0	0	0	0	0	0	0	0	0	0	0	0	0
Others, if any (Soil Testing)	1	19	0	19	07	0	07	01	0	01	27	0	27
Others, if any (Cattle Feed Preparation)	1	11	04	15	00	00	00	02	02	04	13	06	19
TOTAL	**06**	**68**	**04**	**72**	**39**	**00**	**39**	**06**	**02**	**08**	**113**	**06**	**119**

I. Extension Personnel (on and off campus)

Thematic Area	No. of Courses	No. of participants											
		Others			SC			ST			Grand Total		
		M	F	T	M	F	T	M	F	T	M	F	T
Productivity enhancement in field crops	1	24	0	24	02	0	02	01	0	01	27	0	27
Value addition	0	0	0	0	0	0	0	0	0	0	0	0	0
Integrated Pest Management	0	0	0	0	0	0	0	0	0	0	0	0	0
Integrated Nutrient management	0	0	0	0	0	0	0	0	0	0	0	0	0
Rejuvenation of old orchards	0	0	0	0	0	0	0	0	0	0	0	0	0
Protected cultivation technology	0	0	0	0	0	0	0	0	0	0	0	0	0
Formation and Management of SHGs	0	0	0	0	0	0	0	0	0	0	0	0	0
Group Dynamics and farmers organization	0	0	0	0	0	0	0	0	0	0	0	0	0
Information networking among farmers	0	0	0	0	0	0	0	0	0	0	0	0	0
Capacity building for ICT application	0	0	0	0	0	0	0	0	0	0	0	0	0
Care and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0	0	0	0
WTO and IPR issues	0	0	0	0	0	0	0	0	0	0	0	0	0
Management in farm animals	0	0	0	0	0	0	0	0	0	0	0	0	0
Livestock feed and fodder production	0	0	0	0	0	0	0	0	0	0	0	0	0
Household food security	0	0	0	0	0	0	0	0	0	0	0	0	0
Women and Child care	0	0	0	0	0	0	0	0	0	0	0	0	0
Low cost and nutrient efficient diet designing	0	0	0	0	0	0	0	0	0	0	0	0	0
Production and use of organic inputs	0	0	0	0	0	0	0	0	0	0	0	0	0
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0	0	0	0	0	0
Any other (Pl. Specify) (Crop Diversification of Horticultural Crops)	2	55	0	55	32	0	32	02	0	02	89	0	89
TOTAL	**03**	**79**	**00**	**79**	**34**	**00**	**34**	**03**	**00**	**03**	**116**	**00**	**116**

J. Vocational training programmes for Rural Youth

Crop / Enterprise	Identified Thrust Area	Training title*	Duration (days)	No. of Participants			Self employed after training			Number of persons employed else where
				Male	Female	Total	Type of units	Number of units	Number of persons employed	
Soil health and fertility management	Soil health management	Routine analysis of soil using Soil Testing Kits	22	27	00	27	Soil Testing Kit	05	05	-
Vegetables, Flower and Fruit Crops	Quality seeds/seedlings and saplings	Nursery and its management	30	28	00	28	Vegetable Nursery, Fruit Nursery, Flower and Ornamental Nursery etc.	3	3	2
Coconut Trees	Good Horticultural Practices	Training programme on "Friends of Coconut Trees (FOCT)"	06	20	00	20	Master Trainer on Use of Coconut Climbing Machine	2	18	1
Fish	Enhancement of fish productivity	Breeding of IMC and hatchery management	30	15	00	15	Hapa and Chinese Hatchery Breeding	2	2	-

Cattles	Feed Management	Cattle Feed Management	1	13	06	19	-	-	-	-
Broiler	Poultry Production	Broiler Management	07	10	00	10	-	-	-	-

K. Sponsored Training Programmes

Sl. No.	Title	Thematic area	Month	Duration (days)	Client PF/RY/EF	No. of courses	No. of Participants									Sponsoring Agency
							Male			Female			Total			
							Others	SC	ST	Others	SC	ST	Others	SC	ST	Total	
1.	Friends of Coconut Trees (FoCT)	Commercial Fruit Production	August	06	RY	01	11	07	02	00	00	00	11	07	02	20	Coconut Development Board, Kolkata Centre
2.	Training Programme on Creation of Awareness among Farmers and Other Stakeholders about the Provisions of Protection of Plant Varieties and Farmers' Rights Act – 2001	WTO and IPR Issues	January	01	PF	01	69	21	10	00	00	00	69	21	10	100	PPV & FR AUTHORITY, Ministry of Agriculture, Govt. of India
3.	Crop Diversification in Birbhum District	Crop Diversification	February	01	PF & PFW	01	12	06	03	00	00	46	12	06	49	67	ATMA, Birbhum
4.	Poultry Management	Animal Resource Development	February	01	PF	01	46	07	07	00	00	00	46	07	07	60	ATMA, Birbhum

3.4. A. Extension Activities (including activities of FLD programmes)

Nature of Extension Activity	No. of activities	Farmers			Extension Officials			Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Field Day	13	411	69	480	05	02	07	416	71	487
Kisan Mela	02	617	106	723	46	07	53	663	113	776
Kisan Ghosthi										
Exhibition	01	527	95	622	05	02	07	532	97	629
Film Show	08	101	88	189	05	02	07	106	90	196
Method Demonstrations	03	00	96	96	05	02	07	05	98	103
Farmers Seminar	01	37	00	37	07	02	09	44	02	46
Group meetings										
Lectures delivered as resource persons	06									
Advisory Services										
Scientific visit to farmers field	132	431	162	593	05	02	07	436	164	600
Farmers visit to KVK	126	322	86	408	05	02	07	327	88	415
Diagnostic visits										
Exposure visits										

Ex-trainees Sammelan										
Soil health Camp	**06**	**46**	**00**	**46**	**05**	**02**	**07**	**51**	**02**	**53**
Animal Health Camp	**11**	**388**	**26**	**414**	**05**	**02**	**07**	**393**	**28**	**421**
Plant Diagnostic Camp	**01**	**14**	**00**	**14**	**05**	**02**	**07**	**19**	**02**	**21**
Agri mobile clinic										
Soil test campaigns										
Farm Science Club Conveners meet										
Self Help Group Conveners meetings										
Mahila Mandals Conveners meetings										
Celebration of important days (specify)										
Any other (Specify) Farmers-Scientists Interactions	**04**	**132**	**00**	**132**	**05**	**02**	**07**	**137**	**02**	**139**
Any other (Specify) Awareness Camps	**03**	**93**	**00**	**93**	**05**	**02**	**07**	**98**	**02**	**100**
Any Other (Specify) "SWACCH BHARAT" Campaign	**10**	**341**	**210**	**551**	**05**	**02**	**07**	**346**	**212**	**558**
Any Other (Specify) School Level Awareness on Elementary Knowledge about Agriculture	**02**	**21**	**138**	**159**	**05**	**02**	**07**	**26**	**140**	**166**
Any Other (Specify) Swine Flu Awareness Campaign	**06**	**229**	**167**	**396**	**05**	**02**	**07**	**234**	**169**	**403**
Any Other (Specify) Farmer to Farmer Technology Dissemination	**01**	**50**	**00**	**50**	**05**	**02**	**07**	**55**	**02**	**57**

Any Other (Specify) Mobile Advisory Service through Farmers Portal	**291**	**101112**	**38695**	**139807**	**00**	**00**	**00**	**101112**	**38695**	**139807**
Total	**630**	**104872**	**39938**	**144810**	**128**	**39**	**167**	**105000**	**39977**	**144977**

B. Other Extension activities

Nature of Extension Activity	No. of activities	Farmers			Extension Officials			Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Newspaper coverage	**08**									
Radio talks	**21**									
TV talks	**33**									
Popular articles										
Extension Literature	**15**	**870**	**580**	**1493**	**40**	**10**	**50**	**910**	**590**	**1500**
Total	**77**									

3.5 Production and supply of Technological products

A. Village Seed

Crop	Variety	Quantity of Seed (q)	Value (Rs)	Number of Farmers Provided
Paddy	PNR – 381, Pusa – 44, Pusa – Sugandh 5, Lalat, MTU-1010,IET-4786, IR-64, Rajendra Masuri, Pratiksha, MTU-7029, ESR-101	276.00	Yet to be sold	-
Wheat	HD 2733, HD 2824, PBW 343, HP 1761, HD 2985, HI 1563, PBW 373, HW 2045	180.00	5,76,000.00	480
Black Gram	WBU – 108	55.00	2,20,000.00	785
Lentil	WBL- 58	17.5	Yet to be sold	-
Sesame	Improved Selection – 5/ Sabitri	57.0	1,43,500.00	853
Total		**585.50**	**9,38,500.00**	**2093**

B. KVK Farm

Crop	Variety	Quantity of Seed (q)	Value (Rs)	Number of Farmers Provided
Black Gram	WBU – 108	0.25	2,000.00	10 and a small quantity kept in KVK Go-down.
Lentil	WBL – 58	0.45	2,250.00	Kept in KVK go-down
Green Gram	PDM-84-139	0.20	1,600.00	Kept in KVK Go-down
Mustard	B – 9	1.50	7,500.00	Kept in KVK go-down
	Pusa Mahek	0.52	2,600.00	Kept in KVK go-down
	Pusa Bahar	0.92	4,600.00	Kept in KVK go-down
Sesame	Sabitri	0.70	5,200.00	50
Paddy	Heera, MTU – 1010,	6.00	18,000.00	Kept in KVK Go-down

	MTU – 7029, IET – 4786, Pusa – 44, PNR – 381			
Wheat	HD - 2824	1.5	5,250.00	Kept in KVK Go-down
Grand Total		**12.04**	**49,000.00**	**60**

C. Production of planting materials by the KVK

Crop	Variety	Quantity of Seed (q)	Value (Rs)	Number of Farmers Provided
Vegetable seedlings				
Cauliflower				
Cabbage				
Tomato				
Brinjal				
Chilli				
Onion				
Others				
Broccoli	F – 1 Hybrid Fiesta	1000 in numbers	2,000.00	15
Capsicum	Bharat, Mahabharat	2000 in numbers	4,000.00	35
Fruits				
Mango				
Guava				
Lime				
Papaya				
Banana				
Others				
Ornamental plants				
Medicinal and Aromatic				
Plantation				
Spices				
Turmeric				
Tuber				
Elephant's Foot Yams				
Fodder crop saplings				
Forest Species				
Others, pl.specify				
Total		3,000	6,000.00	50

D. Production of Bio-Products

Bio Products	Name of the bio-product	Quantity Kg	Value (Rs.)	No. of Farmers
Bio Fertilizers	*Azolla*	300.00	9,000.00	20
Bio-pesticide	-	-	-	-
Bio-fungicide	-	-	-	-
Bio Agents	Earth-worm (*Eisenia foetidae*)	1400 No.	700.00	05
Others	Vermi-Compost	180.00	1,440.00	12
Total			11,140.00	37

E. Production of Livestock Materials

Particulars of Live Stock	Name of the Breed	Number	Value (Rs.)	No. of Farmers
Dairy animals				
Cows				
Buffaloes				
Calves				
Others (Pl. specify)				
Poultry	Broiler	200	Rs. 27,000.00	-
Broilers				
Layers				
Duals (broiler and layer)				
Japanese Quail				
Turkey				
Emu				
Ducks				
Others (Pl. specify)				
Piggery				
Piglet				
Others (Pl. specify)				
Fisheries				
Indian carp		1.5 qt.	7,600.00	-
Exotic carp		0.5 qt.	2,400.00	-
Others (Pl. specify)				
Grand Total			37,000.00	-

3.6. Literature Developed / Published and HRD

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

Item	Title	Authors' Names	Number	Circulation
Research paper	**1.** ***Studies on Screening and Histochemical Localisation of Phytochemicals in the Medicinal Plant Barleria lupulina*** **Lindl., Published in the International Journal of Pharmaceutical Development & Technology (e ISSN – 2248 – 910X; Print ISSN – 2248), Vol. – 4, No. – 2, 2014, Page No. – 95 – 97.**	**1.** Sudipa Mandal and **Subrata Mandal**	-	-
	2. ***A Review Work on Origin and History, Botanical Description and Agro-Technology of the Medicinal Plant Sinduri (Bixa orellana*** **L.), published in the** ***International Research Journal of Natural and Applied Sciences*** **(ISSN – 2349 – 4077), Vol. – 1, Issue – 6, November, 2014, Page No. 27 – 32.**	2. Dr. Sudipa Nag and **Dr. Subrata Mandal**	-	-
	3. ***Efficacy evaluation of Baulinia variegate*** **L.** ***stem bark powder as adjunct therapy in chronic Staphylococcus aureus*** **mastisis** ***in goat,*** **published in Pharmacognosy Magazine, Vol. – 10, Issue – 39, 2014, Page No. – S 12 – S 18.**	3. Jeevan Ranjan Dash, Tapas Kumar Sar, Indranil Samanta, Subodh Pal, **Madhuchanda Khan,** Nimai Charan Patra, Uttam Sarkar, Asit Kumar Maji and Tapan Kumar Mandal	-	-

	4. ***Disposition kinetics of Sparfloxacin under different pathological condition in Black Bengal Goat following single intravenous administration, Indian Journal of Animal Sciences,*** **Vol. – 84, No. 8, August, 2014, Page No. 833 – 838.**	**4**. Abul Hasan Md. Abidur Rahaman, **Madhuchhanda Khan** and Tapan Kumar Mandal	-	-
Seminar/ conference / symposia papers	**1.** ***Imbalance in Fertilizer Application in India and the Role to be Played by the Indian Agricultural Extension Agencies***; published and presented in ***the National Conference on Indigenous Innovation and Foreign Technology Transfer in Fertilizer Industry: Needs, Constraints and Desired Simplification,*** **organized by the Society for Fertilizers and Environment and Raman Centre for Applied and Interdisciplinary Sciences in collaboration with ICAR-Central Research Institute for Jute and Allied Fibres (CRIJAF) and FICCI (-India Innovation Growth Programme)** at the ICAR-CRIJAF, Nilgunj, Barrackpore, Kolkata, West Bengal – 700120 on 17.01.2015, Paper Code P – 13, Page No. – 45 – 46 of Book of Abstracts.	**1. Prabuddha Ray, Subrata Mandal and Dulal Chandra Manna**	-	-
	2. ***Simplification of Balanced Fertilization in Summer Paddy Cultivation under Lateritic Soil;*** published and presented in ***the National Conference on Indigenous Innovation and Foreign Technology Transfer in Fertilizer Industry: Needs, Constraints and Desired Simplification,*** **organized by the Society for Fertilizers and Environment and Raman Centre for Applied and Interdisciplinary Sciences in collaboration with ICAR-Central Research Institute for Jute and Allied Fibres (CRIJAF) and FICCI (-India Innovation Growth Programme)** at the ICAR-CRIJAF, Nilgunj, Barrackpore, Kolkata, West Bengal – 700120 on 17.01.2015, Paper Code P – 18, Page No. – 48 – 49 of Book of Abstracts.	**2. Subrata Mandal, Prabuddha Ray and Dulal Chandra Manna**		
	3. ***Communication and Knowledge Sharing in Watershed Management – Some Thoughts,*** published in the ***Electronic Full Proceedings of the 10th. All India People's Technology Congress*** organized by the **Forum of Scientists, Engineers & Technologists (FOSET)** at the Rajabazar Science College Campus, Calcutta University, Kolkata from 6th. February, 2015 to 7th. February, 2015, **Serial No. 10, Paper Code No. – 010-AGB-03 of Sub-congress: Agriculture & Bio-Technology.**	**3. Dr. Prabuddha Ray** and Prof. Sarthak Chowdhury		
	4. ***MGNREGS – The Road Ahead,*** published in the ***Electronic Full Proceedings of the 10th. All India People's Technology Congress*** organized by the **Forum of Scientists, Engineers & Technologists (FOSET)** at the Rajabazar Science College Campus, Calcutta University, Kolkata from 6th. February, 2015 to 7th. February, 2015, **Serial No. 14, Paper Code No. – 014-AGB-05 of Sub-congress: Agriculture & Bio-Technology.**	**4. Dr. Prabuddha Ray** and Prof. Sarthak Chowdhury		

	5. ***Popularizing Grape Cultivation and Wine Production in India- Some Relevant Issues,*** published in ***National Symposium on "Food and Nutrition: Need for the Future"*** organized by the **THE AGRICULTURAL SOCIETY OF INDIA, Department of Agronomy, Institute of Agricultural Science, University of Calcutta,** 35 Ballygaunge Circular Road,Kolkata-700019 during 25-27 February, 2015 at the Institute of Agricultural Science, 51/2, Hazra Road, Kolkata-700019 in the Session – IV Horticulture and nutrient impact, post-harvest technology and value addition on February 26, 2015 at 12 noon.	**5. Dr. Prabuddha Ray** and Prof. Sarthak Chowdhury,		
Books	-	-	-	-
Bulletins	-	-	-	-
News letter	-	-	-	-
Popular Articles	-	-	-	-
Book Chapter	**1. Chapter (No. 17) titled, *"Fish Based Integrated Farming System – A New Approach to Farming in the Red Lateritic Zone of Birbhum District,;*** In Prof. Pranab Kumar Chattopadhyay edited ***"Growth and Diversification – Aspects of Rural Development",*** 2014, ISBN No. 978-93-81274-78-1, **New Delhi Publishers, New Delhi,** in the Year 2014, Page No. – 219 – 226. **2. Chapter (No. 19) titled, *"Influence of the Socio-Personal Traits of the Vegetable Growers on their Knowledge Index regarding the Judicious Use of Pesticides in Brinjal Cultivation";*** In Prof. Pranab Kumar Chattopadhyay edited ***"Growth and Diversification – Aspects of Rural Development",*** 2014, ISBN No. 978-93-81274-78-1, **New Delhi Publishers, New Delhi,** in the Year 2014, Page No. – 253 – 265. **3. Chapter (No. 23) titled, *"Krishi Vigyan Kendras (KVKs) in the context of Agricultural Research and Extension System – An Assessment";*** In Prof. Pranab Kumar Chattopadhyay edited ***"Growth and Diversification – Aspects of Rural Development",*** 2014, ISBN No. 978-93-81274-78-1, **New Delhi Publishers, New Delhi,** in the Year 2014, Page No. – 297 – 313. **4. *"Phytochemical, diversified application, yield and market trend of medicinal plant, Sinduri (Bixa orellana* L.*) – a review";*** In P. S. Munsi, S. K. Ghosh, N. Bhowmick and P. Dev edited **"*Innovative Horticulture*", New Delhi Publishers,** New Delhi, Page No. – 85 – 92.	**1. Prabuddha Ray, Subrata Mandal, Krishna Mitra and Dulal Chandra Manna** 2. Sarthak Chowdhury and **Prabuddha Ray** 3. Sarthak Chowdhury and **Prabuddha Ray** **4**. Sudipa Nag and **Subrata Mandal**	**-**	-

Extension Pamphlets/ literature	1. Conservation and Revitalization of Traditional Paddy Varieties (*Dhaner Deshiya Jater Sangrakshan abong Punarajibbom*) 2. Easy Technology for Azolla Cultivation (*Azolla Chasher Sahaj Prajukti)*	**Dr. Subrata Mandal**	**15 (Eleven)**	**1500 (One thousand five hundred)**
	3. Fish Feed Preparation and Application (*Macher Paripurak Khabar Prastuti abong Prayog*)	**Dr. Krishna Mitra**		
	4. Important Infectious Diseases of Domestic Animals and Its Prophylactic Vaccination (*Grihapalit Pashu Pakhir Guratwapurna Sankkramak Rog abong Tar Pratishedhak Tikakaran*)	**Dr. Madhuchhanda Khan**		
	5. Integrated Pest Management Practices of Oilseed Crops (*Sushanghata Upaye Taila Bijer Rog Poka Niyantran*) 6. Integrated pest Management Practices of Potato Crops (*Sushanghata Upaye Aloor Rog Poka Niyantran*) 7. Mushroom Cultivation Technology (*Sahaj Paddhatitey Mushroom Chash)*	**Mr. Sourav Mondal**		
	8. Child Nutrition and Health (Up-to 1 Year) [*Shishur Pushti abong Sasthya (Janma Thekey 1 Batsar Parjanta*)] 9. Processing of Vegetables and Fruits (*Sabji abong Phaler Prakriyakaran*)	**Smt. Ruma Addy**		
	10. Rathindra Krishi Vigyan Kendra – A Unique Journey Since 1994 11. Rathindra Krishi Vigyan Kendra – Glimpses of Activities 12. Farmers' Interest Group – A New Path of Agricultural Development [*Krishi Unnayaner Natun Path – Sadharan Sarthabahi Krishak Gosthi – Farmers' Interest Group (FIG) Gathan*] 13. Preparation for Fighting Natural Disasters for Saving Lives and Properties (*Prakitik Biparjoy Mokabilay Prastut Hon – Jibon abong Sampatti Raksha Karun*) 14. Enlist Names in Farmers Portal for Inclusion in the New Horizon of Agricultural Development (*Krishak Potaley Naam Nathibhukta Karan – Krishi Unnayaner Natun Digantey Samil Hon*) 15. Protection of Plant Varieties and Farmers'Rights Act – 2001 (*Phasaler Jat oo Krishaker Adhikar Sankrakshan Aain – 2001 abong Krishaker Adhikar*)	**Dr. Prabuddha Ray**		
Technical reports	1. Annual Progress Report (April, 2013 – March, 2014) of Rathindra KVK 2. A Brief Report for April, 2013 to March, 2014 of Rathindra KVK 3. Status of the Rathindra KVK, Palli Siksha Bhavana, Visva-Bharati, Sriniketan, Dist. – Birbhum, Pin. – 731236 (West Bengal) 4. Action Taken Report (ATR) regarding Current Weather Situation for the Months of June to September, 2014 5. Improved Method of Elephant's Foot Yam Cultivation: A Successful Initiative taken up by the Rathindra KVK, Birbhum 6. Swachh Bharat" Campaign organized by Rathindra Krishi Vigyan Kendra, Palli Siksha Bhavana, Visva-Bharati, Sriniketan Birbhm from 25th Sept,2014 to 2nd Oct,2014	**Rathindra KVK**	**Seventeen (17)**	Among all the concerned.

	7. Report of Organic Farming 8. Report of Resource Generation and Revenue Generation of Rathindra KVK, Birbhum 9. Annual Report on Extension Activities of Rathindra KVK for 2013 – 2014 10. Information on 1000 Progressive Farmers for Messaging 11. Submission of Report on Training on PPV & FR Act – 2001 12. Report on FAI-APP-Soil Health Enhancement Programme through Balanced Fertilisation-2013-14 through A 3 Plot Demonstrations On Summer Paddy 2014 13. Report on Approaching Rural Schools for Imparting Elementary Knowledge of Agriculture 14. Report on Organizing Campaign for Prevention of Swine Flu 15. Report on Visit of Prof. Bromley to Rathindra Krishi Vigyan Kendra 16. Report on Visit of Prof. Kasturirangan to Rathindra KVK 17. Significant Interventions of Rathindra KVK			
Electronic Publication (CD/DVD etc)	1. *Preservation and Value Addition of Fruits and Vegetables*	**Rathindra KVK**	**01 (One)**	**-**
TOTAL	**46**			

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

(B) Details of HRD Programmes undergone by KVK Personnel:

Sl. No.	Name of Programme	Name of KVK Personnel and Designation	Date and Duration	Organized by
1.	"State Level Workshop of Krishi Vigyan Kendras of West Bengal and Andaman and Nicobar Islands to Review the Achievements"	Dr. Dulal Chandra Manna, Programme Coordinator	04.04.2015 to 05.04.2015. (02 Days)	Zonal Project Directorate, ICAR, Zone II, Salt Lake, Kolkata
2.	"Annual Zonal Workshop on Krishi Vigyan Kendras of Zone II, ICAR"		02.06.2014 – 03.06.2014. (02 Days)	Zonal Project Directorate, ICAR, Zone II, Salt Lake, Kolkata
3.	World Coconut Day Celebration		02.09.2014. (01 Day)	Coconut Development Board, Ministry of Agriculture, Govt. of India
4.	Workshop on "Value Education of Professionals"	Dr. Subrata Mandal, Subject Matter Specialist (Agronomy)	05.09.2014 (01 Day)	Ministry of Culture, Govt of India at the B. C. College, Rahara, 24 Parganas (North), Ramakrishna-Vivekananda University.
5.	Training Programme on "Organic Farming and Certification"		17.11.2014 to 19.09.2014 (03 Days)	State Agricultural Management and Extension Training

				Institute (SAMETI) and Agricultural Training Centre (ATC), Ramakrishna Mission Aashrama, Narendrapur, Kolkata – 700103.
6.	Programme on "Sustaining Soil Health through Balanced Fertilization – Need for Reforms in Fertilizer Sector"		09.01.2015 (01 Day)	Fertilizer Association of India, 3 Lake Road, Kolkata – 700029.
7.	**National Conference on Indigenous Innovation and Foreign Technology Transfer in Fertilizer Industry: Needs, Constraints and Desired Simplification**		17.01.2015 (01 Day)	**Society for Fertilizers and Environment and Raman Centre for Applied and Interdisciplinary Sciences in collaboration with ICAR-Central Research Institute for Jute and Allied Fibres (CRIJAF) and FICCI (-India Innovation Growth Programme)** at the ICAR-CRIJAF, Nilgunj, Barrackpore, Kolkata, West Bengal – 700120
8.	"State Level Workshop of Krishi Vigyan Kendras of West Bengal and Andaman and Nicobar Islands to Review the Achievements"	Dr. Prabuddha Ray, Subject Matter Specialist (Agricultural Extension)	04.04.2015 to 05.04.2015. (02 Days)	Zonal Project Directorate, Zone – II, ICAR, Kolkata
9.	"Annual Zonal Workshop on Krishi Vigyan Kendras of Zone II, ICAR"		02.06.2014 – 03.06.2014. (02 Days)	Zonal Project Directorate, ICAR, Zone II, Salt Lake, Kolkata
10.	**"Training Programme on Planning, Implementation, Monitoring and Evaluation of Micro-enterprises"**		21.07.2014 to 25.07.2014. (05 Days)	National Institute of Rural Development (NIRD), Ministry of Rural Development, Govt. of India, Rajendranagar, Hyderabad, Andhra Pradesh – 500 030, India, at the State Institute of Panchayat and Rural Development (SIPRD), Benoy Bhawan, Kalyani, Nadia, West Bengal
11.	**Master Trainers' Training on "ICT based Extension through Farmers"**		25.08.2014 to 27.08.2014 (03 Days)	State Agricultural Management and Extension Training Institute (SAMETI), Narendrapur, Kolkata – 700103 at the State Agricultural

				Management and Extension Training Institute (SAMETI) and Agricultural Training Centre (ATC), Ramakrishna Mission Aashrama, Narendrapur, Kolkata – 700103.
12.	"Sensitization Workshop on Protection of Plant Varieties anf Farmers' Rights"		15.10.2014. (01 Day)	Zonal Project Directorate, Zone – II, ICAR, Kolkata
13.	**National Conference on Indigenous Innovation and Foreign Technology Transfer in Fertilizer Industry: Needs, Constraints and Desired Simplification**		17.01.2015 (01 Day)	**Society for Fertilizers and Environment and Raman Centre for Applied and Interdisciplinary Sciences in collaboration with ICAR-Central Research Institute for Jute and Allied Fibres (CRIJAF) and FICCI (-India Innovation Growth Programme)** at the ICAR-CRIJAF, Nilgunj, Barrackpore, Kolkata, West Bengal – 700120
14.	**10th. All India People's Technology Congress**		06.02.2015 to 07.02.2015 (02 Days)	**Forum of Scientists, Engineers and Technologists (FOSET) [15 N Nelli Sengupta Sarani, New CMC Building (5th floor), Kolkata - 700 087.**
15.	**Master Trainers' Training on "ICT based Extension through Farmers"**	Sri Suraj Bhakta, Programme Assistant (Computer Programmer)	25.08.2014 to 27.08.2014 (03 Days)	State Agricultural Management and Extension Training Institute (SAMETI), Narendrapur, Kolkata – 700103 at the State Agricultural Management and Extension Training Institute (SAMETI) and Agricultural Training Centre (ATC), Ramakrishna Mission Aashrama, Narendrapur, Kolkata – 700103.
16.	**Training Programme on the**		07.01.2015 to 27.01.2015 (21 Days)	ICAR – National Bureau of Soil

	Advances in Land Resource Inventory for Enhancing Productivity through Agro-Technology Transfer			Survey & Land Use Planning Regional Centre Block-DK, Sector-II Salt Lake, Kolkata – 700 091 West Bengal
17.	**Training Programme of Assistants of KVKs**	Sri Madhusudan Chatterjee, Senior Assistant	10.03.2015 to 11.03.2015 (02 Days)	Zonal Project Directorate, Zone – II, ICAR, Salt Lake City, Kolkata
18.	Training Programme on "Organic Farming and Certification"	Sri Palash Ankure, Programme Assistant (Farm Manager)	17.11.2014 to 19.09.2014 (03 Days)	State Agricultural Management and Extension Training Institute (SAMETI) and Agricultural Training Centre (ATC), Ramakrishna Mission Aashrama, Narendrapur, Kolkata – 700103.
19.	Orientation Training Programme on "Commercial Farming with Integrated Approach"		12.03.2015 to 13.03.2015 (02 Days)	Directorate of Extension Education, Bidhan Chandra Krishi Viswavidyalaya

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

A. Fresh Water Giant Prawn in Composite Fish Culture:

A tribal self help group of village Kankutia, Birbhum showed interest in culture of giant prawn along with carp. In this regard a front line demonstration programme was undertaken. This tribal group of 25 members headed by Sri Kanka Soren was motivated by training to undertake this programme. Giant Prawn juvenile were introduced along with carps (except bottom dwellers). A number of 1000 prawn juveniles were stocked in the pond area of 0.13 ha. After a period of 6 months the prawns attained an average size of 90 g. The group sold a stock of 65 kg of prawn @ Rs. 300 per Kg with the gross return of Rs.19,500/- only from prawn. Another Rs. 16,000/- was obtained from selling carps. The cost of prawn juvenile and feed was found only Rs. 4,500/-. The result of prawn culture along with composite fish motivated other farmers for prawn culture. The farmers from other villages are now showing interest in prawn culture in the next year.

Photographs on Fresh Water Giant Prawn in Composite Fish Culture

B. Cultivation of Broccoli- a Huge Success:

Widespread adoption of Broccoli, a high end, high value vegetable crop in the adopted villages of Rathindra KVK is transforming lives of many small scale farmers and marginal subsistence farmers of the Birbhum District, West Bengal. Farmers like Sri Monotosh Ghosh, Sri Tapan Ghosh, Sri Sadai Mete and Sri Goutam Mete of village Bishnubati, Community Development Block Bolpur-Sriniketan, District- Birbhumpoint to the success as a result of untiring effort of the scientist of Rathindra KVK. Sri Monotosh Ghosh fetched a profit of Rs. 15,000 /- from a plot of 10 kathas (0.067 ha) while Sri Tapan Ghosh earned a profit of Rs. 12,200/- from a plot of 8 kathas(0.053 ha). Marginal farmers like Sri Sadai Mete and Sri Goutam Mete also earned a profit of Rs. 4,300/- and Rs. 5,300/- from their plots of 5 kathas (0.033 ha) and 4 kathas (0.027 ha) respectively. These Broccoli cultivators got a market price of Rs. 8/- to Rs. 12/- per pieces of Broccoli. This high value crop has a huge potential to be grown all over the District of Birbhum, as this crop has a heavy demand from the large chains of Shopping Malls, Restaurants, Hotels as well as common people.

Photographs on Broccoli Cultivation

C. Commercial Cultivation of Capsicum- a success story:

Capsicum, a high value (both financially and nutritionally) vegetable crop has a immense potential to be grown on a large scale commercial basis as this crop has a heavy national and state demand from shopping malls, restaurants, hotels and general people . Rathindra KVK has successfully spread the cultivation of this crop in the mandate District. The successes of the farmers like Sri Monotosh Ghosh, Sri Tapan Ghosh, Sri Pitambar Ghosh and Sri Bakul Mete of the village Bishnubati, Bolpur –Sriniketan Block, Birbhum supported the claim. Sri Monotosh Ghosh and Sri Tapan Ghosh earned a profit of Rs. 13,000/- and Rs. 8,390/- from the plot size of 5 katha(0.033 ha) and 3 kathas (0.02 ha) respectively. Sri Pitambar Ghosh a small farmer earned a huge profit of Rs. 14,250/- from a mere plot size of 4 kathas (0.027 ha), while a smaller plot of a size of 2 kathas gave a profit of Rs. 7,400/- to Sri Bakul Mete. Growers of capsicum fetched a market price of Rs. 30 to 35 /- per kilogram of capsicum on an average. Their production ranged from 6 quintals to 3 quintals. So, large scale commercial cultivation of capsicum can transform the agricultural scenario of the Tagore –land.

Photographs on Capsicum Cultivation

D. Preparation of Agar-Batti:

During agro-ecosystem analysis by the Rathindra KVK at village Digha, Nimgaria and Meherpur of the Birbhum District some women showed their interest for formation of self help group. Smt. Tapati Thakur, Village – Digha, P.O. – Nimgaria was one of them. According to the need of the village women, two groups were formed at village Digha. Smt Thakur is one of the group leaders. Through agro –ecosystem analysis it was found that the main source of income of the villages is agriculture. But most of the women are house wives.

According to the need of the house wives, the Home Science unit of RKVK planned for imparting some skill oriented training programmes. Among these training programmes "Preparation of Agarbati" was organised in the year 2006 and Smt Tapati Thakur was one of the trainees. She completed the training very successfully and she trained the other 5 members of her group. After that Smt Thakur and the other 5 members of her group planned to produce agarbati. For this purpose Tapati came to KVK for raw material KVK arranged for her bank loan and raw material from Kolkata.

After collection of raw materials she started to produce agarbati with the help of other 5 members from January, 2007. She gives the charge to other members Rs.20 per kg of sticks. Now, she is earning Rs. 850/- per month apart from all expenses. The other members are also earning Rs. 15/- to 20/- per day by producing 1 kg sticks. In this way she is using her leisure time and earning money to help her family as house wife. Already she had repaid her first loan and applied for 2nd loan for large scale production.

Seeing her success the other house wives in the villages are encouraged.

E. Small Scale Seed Production:

Use of good quality seed is necessary to achieve satisfactory crop yield. Seed replacement rate is still behind the recommended rate for most of the crops. Similar situation exists in Birbhum district. The farmers do not get good seed at reasonable rate. They are often cheated by the malpractices of seed sellers. Seed production and seed replacement rate are correlated. In this context, Rathindra KVK arranged training programmes to train the farmers to produce quality seeds of different crops. After completion the training programmes Sri Jogen Ghosh, a small farmer of village Kartik Danga, P.O. Raipur, Dist. Birbhum, produced seeds of paddy, wheat, sesame, black gram, green gram of different varieties as per the instruction of the KVK scientists and sold nearly 1065 kg pure seeds as TL seeds to different farmers of 10 different villages in the year 2006-07. In this way he earned extra Rs. 15,700.00 from seeds beside the normal production of different crops. Now, he is popular as an honest seed producer among the farmers. Regional Training Centre, NABARD, Bolpur also presented him as a successful farmer in a Workshop held at RTC, Bolpur on. Seeing his success, other farmers showed their interest to produce seeds for extra earning.

Crop	Variety	Quantity sold (Kg.)	Amount earned (Rs.)
Paddy	Khitish	700	7000.00
	Niranjana	100	1000.00
Wheat	Sonalika	50	1000.00
Black gram	WBU 108	55	1650.00
Green gram	PDM-84-139	70	2800.00
Mustard	RW-351	60	1500.00
Sesame	B-67	30	750.00
Total		1065	15700.00

F. Nursery and its Management:

Rathindra Krishi Vigyan Kendra organizes the long duration skill-oriented entrepreneurship development-training programme for the rural youths. Nursery and its management is an entrepreneurship training programme for rural youths. The Kendra organized a training programme on Nursery and its management in the year 2005. Sri Anil Das son of Sri Hiralal Das, vill- Palashdanga, P.O.- Konarpur, Block- Sainthia, Dist- Birbhum. Before the training, he had no idea about the multiplication as well as production of planting materials. In the year, 2006 he produced 18000 nos planting materials in his nursery. After sale of the planting materials (fruit plants like papaya, limes, lemons etc., forest saplings like sonajhuri, sissoo etc., and vegetables seedlings like brinjal, chlli, cauliflower, cabbage, tomato etc.) he got Rs. 21000.00 as net profit. Again in the year 2007, there was 25000 nos. plants were produced in his nursery and after sale of the planting materials he had obtained Rs.34000.00 as net profit.

Beside these, he trained 4 persons who worked with him in his nursery. Out of these four people, 2 persons were women. These women belonged to two Self Help Groups called Maa Durga Swanirbhar Dal and Maa Sitala Swanirbhar Dal. These SHGs produced 28000 numbers of plants and supplied to their local Panchayats. They earned a good amount of money.

G. Small Scale Vermin-Compost Production:

At present, the demand of high quality organic manure like vermicompost is very high. But availability in the market is very less. In this context, Rathindra KVK organised **training programme on preparation and use of vermin-compost** in the year 2006-07. After completion of training programme, Sri Biren Saha, a small farmer of village Raipur, P.O.- Raipur, Birbhum started vermin-composting with two small units each having the size of 2.5 ft X 2.0 ft X 3.0 ft. Initially he invested Rs.- 1000.00/- for installation this unit. Sri Saha used all the homestead organic wastes. After one month he harvested his first product. For the next production he needs only Rs. 100.00 for the cost of cow dung for each unit. Every time he harvested one quintal of vermicompost from each unit. Within one year he produced ten times from both the units. Thus the total production was 20 quintal in a year. The cost and return in one year is given below.

	Total Cost (Rs.)		**Total Return (Rs)**
Installation Cost (One time)	1000.00	Vermicompost 20 q. @ Rs. 400.00/ q.	8000.00
Cost for Worm (One time)	400.00	Worms 5000 nos @ Rs. 50.00/100	2500.00
Total cost for cow dung	2000.00		
Total	**3400.00**	**Total**	**10500.00**
Net return in the initial year: 10500.00 – 3400.00 = 7100.00			

After this success Sri Biren Saha likes to invest more for medium scale production. Seeing his success many farmers started to produce Vermin-compost in small scale with their homestead organic wastes.

H. Introduction of Giant Prawn (*Macrobrachium rosenbergii)* as A New Component of Composite Fish Culture

Sri Dilip Dolui, aged about 35 Years, a resident of the Village – Durgapur, P. O. – Panchshoya, Gram Panchayat – Siyan, Community Development Block- Bolpur-Sriniketan, Pin. – 731240, Dist. – Birbhum, Mobile Phone No. – 9153404954 is a partner Farmer of the Front Line Demonstration Programme of the Rathindra KVK for the last 2 Years in the Introduction of Giant Prawn as a Component of Composite Fish Culture. Apart from being a partner farmer of the Rathindra KVK's FLD Programmes, Sri Dolui has undergone 3 Courses of intensive skill development Training Programme on Introduction of Giant Prawn in the Composite Fish Culture organized by the Rathindra KVK and 1 number of Course organized by the Block Development Officer, Bolpur-Sriniketan Development Block, Sriniketan, Birbhum.

Now Sri Dolui, a member of the disadvantageous Scheduled Caste Community is commercially producing Giant Prawn along with one of the Indian Major Carps i.e. Katla in the Composite Fish Culture System in an area of 0.267 ha of water-body. He has already produced nearly 100 Kilo Grams of Giant Prawn and 200 Kilo Grams of Katla in a Year. Sri Dolui has sold the Giant Prawns in the markets of Bolpur Town on a price of R. 500.00 per Kilo Gram and the Katla fishes on an average price of Rs. 200.00 per Kilo Gram. Thus Sri Dolui has earned nearly Rs. 50,000.00 (Rupees Fifty Thousands) only from selling his produce of Giant Prawn and Rs. 40,000.00 (Rupees Forty Thousands) only from selling his produce of Katla. Sri Dolui has spent Rs. 5,000.00 (Rupess Five Thousands) only for fish feeds and maintenance of the ponds. Thus Sri Dolui has already earned a Net Profit of Rs. 85,000.00 (Rupees Eighty Five Thousand) only from his tiny water-body of 0.267 ha in a single year and this extra earning gives him a kind of economic security in the times of lean period.

Sri Dilip Dolui (Left) harvesting his produce of Giant Prawn along with Carps in a Composite Fish Culture System from his Pond

Sri Dilip Dolui with his produce of Giant Prawn in a Composite Fish Culture System from his Pond

I. Crop Diversification through Cultivation of Broccoli

1. Sri Mahadev Sarkar, aged about 50 Years, a resident of the Village – Baro Shimulia, P. O. – Panchshoya, Gram Panchayat – Bahiri-Panchshoya, Community Development Block- Bolpur-Sriniketan, Pin. – 731240, Dist. – Birbhum, Mobile Phone No. – 8670077649 is a partner Farmer of the Front Line Demonstration Programme of the Rathindra KVK for the last 2 Years in Broccoli cultivation.

Now Sri Sarkar is commercially cultivating Broccoli in an area of 0.13 ha of land. He is producing more than 8,000 pieces of Broccoli which is fetching a Market Price of Rs. 40,000.00 (Rupees Forty thousands) only from the Bolpur Town wholesale and retail markets in Winter Season. The Total Cost of production of Broccoli in 0.13 ha of land is nearly Rs. 10,000.00 (Rupees Ten thousands) only. Thus Sri Sarkar is earning a Net Profit of Rs. 30,000.00 (Rupees Thirty thousand) only from his tiny plot of 0.13 ha of land and this extra earning gives him a kind of economic security in the times of lean period.

Sri Mahadev Sarkar (Centre) along with other farmers in his Field of Broccoli

Broccoli Field of Sri Mahadev Sarkar

2. Sri Nilu Das, aged about 38 Years, a resident of the Village – Baro Shimulia, P. O. – Panchshoya, Gram Panchayat – Bahiri-Panchshoya, Community Development Block- Bolpur-Sriniketan, Pin. – 731240, Dist. – Birbhum, is a partner Farmer of the Front Line Demonstration Programme of the Rathindra KVK for the last 2 Years in Broccoli cultivation.

Now Sri Das is commercially cultivating Broccoli in an area of 0.08 ha of land. He is producing more than 4,800 pieces of Broccoli which is fetching a Market Price of Rs. 24,000.00 (Rupees Twenty four thousands) only from the Bolpur Town wholesale and retail markets in Winter Season. The Total Cost of production of Broccoli in 0.08 ha of land is nearly Rs. 6,000.00 (Rupees Six thousands) only. Thus Sri Das is earning a Net Profit of Rs. 18,000.00 (Rupees Eighteen thousand) only from his tiny plot of 0.08 ha of land and this extra earning gives him a kind of economic security in the times of lean period.

Sri Nilu Das in his Field of Broccoli

Sri Nilu Das in his Field of Broccoli

J. Improved Method of Commercial Seed Production of Green Gram

Seed is the basic input in any cultivation of crops. Use of good quality seed is necessary to achieve satisfactory crop yield. The farmers of the developing countries generally do not get good quality seeds at an affordable price, in their nearby areas and at ease. They are often misguided by unscrupulous seed merchants. The situation of the Birbhum District, West Bengal is not too different from this overall third world phenomenon. Here, the seed replacement rate is lower than recommended rates especially for the Pulse crops. As a result, the productivity of almost all the Pulse are low as seed production rate is correlated.

To address this problem, the Rathindra KVK has initiated Village Seed Production Programme on Pulses especially on Green Gram through organizing Front Line Demonstration, On and Off Campus Skill Development Trainings, Field Days, Mass Media Campaigns etc.

One of the Trainees of such a training Programme way back in 2005-06 organized for the partner Farmers for the FLD Programme on Green Gram Seed Production Technology by the Rathindra KVK, Sri Jogen Ghosh, a resident of Village:- Kartick Danga, P.O.- Raipur, P.S.-Bolpur, District:- Birbhum, Pin-731304, West Bengal (Mobile Phone No:- 8016895658); aged about 50 years and having Educational Qualification upto Madhyamik level, is a small Farmer having 00.80 hectares of Farm land under his possession. But, Sri Ghosh is very much interested in Farm intensification, adopting modern technologies and diversifying into commercial production of seeds of various crops specially Pulse Crops. He is in the Farming Practice for the last 20 years.

Sri Jogen Ghosh is one of the first few trainees who have undergone intensive skill development training Programme for improved practices for commercial seed production technology of Green Gram [Var. PDM 84-139 (Samrat)] in 2005-06 as well as he is one the first few partner farmers with the Rathindra KVK in its Front Line Demonstration (FLD) Programme for Seed Production of Green Gram in 2005-06. Since then, Sri Ghosh has been continuing the commercial seed production of Green Gram in an area of about 0.13 hectares of Farm land every year. He has especially selected his irrigated medium land farming situation for this purpose of Green Gram Seed Production on a commercial scale. The Production of Green Gram Seed in the pre-Kharif season is being preceded by cultivation of Mustard or Potato in the Rabi season and succeded by cultivation of Paddy in the Kharif season.

In the last financial year of 2014-15, Sri Jogen Ghosh has produced 140.00 Kilo Grams of Green Gram TL seeds in tiny plot of 0.13 hectares. He has sold the seeds of Green Gram var. PDM 84-139 (Samrat) on an average sale price of Rs. 80.00 / Kilo Gram. More importantly till date Sri Ghosh has been successful to increase the productivity of Green Gram from 600 Kilo Grams/ heactares of land in 2005-06 to nearly 1050 Kilo Grams/ hectare of land in 2014-15. Now Sri Ghosh is earning Rs. 11,200 (Rupees Eleven thousand two hundred) only through selling of Green Gram seeds to other farmers. His net income from this Crop is nearly Rs. 7,000.00 to 8,000.00. This additional income from a tiny plot of 0.13 hectares land moreover in a lean season gives him the economic strength for better preparation for the next coming Kharif season Paddy cultivation as well as the soil fertility status of the Paddy fields gets enriched through the cultivation of Green Gram.

Sri Ghosh has been selling the improved Samrat Variety seed of Green Gram to the Farmers of nearby 100 numbers of Villages since 2005-06. As aresult of this initiative, the horizontal spread of this Agricultural Technology along the adjoining and contiguous land mass has become possible. The Bankers' Institute of Rural Development, NABARD, Bolpur, Birbhum, West Bengal has already acknowledged him as a good TL seed producers of different field crops for Village seed production programme.

Now Sri Jogen Ghosh is giving his full focus on commercializing the seed production of Green Gram var. PDM 84-139 (Samrat) with the active and constant health and guidance provided by the Rathindra KVK.

Sri Jogen Ghosh (Left) in his field of Green Gram Seed Production

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

Monitoring and Evaluation of the FLDs and OFTs: Concept and Approach

In India, performance of agricultural development programs/projects has mixed response in attaining the desired objectives. It has been observed that even well conceived agricultural projects have suffered from implementation problems. Partial or complete failure of these projects/programs is attributed to a number of reasons such as absence of meticulous planning and non-adherence to the plan in terms of the agreed processes, lack of sufficient preparatory time before initiation of field work, insufficient fund and delays in disbursement and procurement; institutional weaknesses, delayed staff recruitment and frequent transfers, absence of an effective and efficient coordination mechanism (applicable especially in case of multi-disciplinary and multi-implementation-agency projects), lack of ownership among line departments, traditional mind set of bureaucracy, poor research-extension linkage, inadequate attention to social issues and poor beneficiary/government interaction, lack of involvement of the ultimate stakeholders in planning and implementation leading to absence of ownership among them, and low priority given to monitoring and evaluation of project activities.

Of late, it has been realized that an effective monitoring and evaluation mechanism is an essential component for the success of any project both at the top and field level and the target group consists of diverse categories of disadvantaged people. It is also

necessary because a number of institutional and operational mechanisms, which require effective vertical and horizontal integration as well as systemization aiming towards, decentralized well-coordinated decision making and functioning.

Monitoring in the present KVK context was mainly to keep an eye, which, with the help of mind, can see, observe, interpret, analyze and provide feedback on the implementation of activities. Since various functionaries are involved in the implementation process, monitoring takes the form of Performance Monitoring (performance in terms of physical achievements) and adoption of desired processes. Monitoring and evaluation (M&E) mainly focuses on both (1) the progress monitoring (input-output monitoring or target-achievement monitoring) and (2) process monitoring.

The progress monitoring emphasizes on physical achievements vis-à-vis targets i.e. performance of associated institutions/agencies with respect to activities they are supposed to carry out and the output they are expected to generate. While the process monitoring focuses on the steps being followed by them in carrying out these tasks while progress monitoring focuses on the achievement with respect to established milestones of physical and financial targets, quality of services and process adherence. All these helped the project in providing feedback to the top management for timely corrective measures to keep the project on right track.

Evaluation may also be concurrent or terminal. The concurrent evaluation system allows mid-way interventions (in terms of introducing required strategic changes) in project implementation along with providing an assessment of degree of attainment of project objectives. While terminal evaluation system provides an assessment of achievements of the project interventions in terms of project targets/goals and objectives, but after completion of the implementation leaving no room for initiating corrective measures.

Effective Monitoring and Evaluation system helps in indicating the path of progress of the project through the project implementation process and puts the project on right track by facilitating timely corrective measures, while the evaluation system provides information on whether the project has reached the right destination (in terms of 95ocusing95ze of objectives) and in timely fashion, cost effective way, and through right route. This also provides better alternative routes to reach the same destination in a more cost effective manner.

Tools and Methods

In case of both the FLD and OFT projects of Rathindra KVK, M & E is based on simple and easily measurable indicators that can describe or measure change (both process and progress) in various activities/components across locations and over time. Finally, they provide useful relevant information about the performance of the project in achieving the intended objective as end result. These indicators provide valuable insights to the project implementing agency like a 95ocusing that how far the project has travelled and how far still it has to travel and by which route to achieve the desired result in specified time. Indicators used in these projects are both qualitative and quantitative, reflecting achievements of physical and financial targets and improvement in the quality of services delivered by the project interventions.

The relevant information for estimating the values of indicators are collected through specifically designed format and code sheets by qualified and well-trained field functionaries (Project Assistants, volunteers from adopted villages of Rathindra KVK and trained by the Rathindra KVK on nitty-gritty of M&E) fully acquainted with the area and has interest to spent adequate time in the field. Besides, active cooperation of the field project staff and regular interaction with Project Co-ordination Unit (PCU) as well as Project In-charge are also maintained. The information collected from the field are regularly 95ocusing95zed to develop data base through MIS so that required information can be obtained easily and well in time to make necessary changes in the direction of the

project implementation process. Monitoring and evaluation is being carried out by a combination of various methods including review of progress reports, on-site crosscheck, interactive discussion with implementers and the recipient group, sample household survey, and PRA with especial focus on participatory monitoring and evaluation approach.

In brief, for carrying out concurrent project implementation monitoring following steps/processes is being adopted:

• Designing of activity schedules for each and every project activity with details of responsible person/agency, time requirement, and resource allocation.

• Development of performance indicators (qualitative and quantitative) and format for data collection in the field on the basis of activity schedule Periodic review with special focus on time and quality adherence in the execution of project activities and identification of gaps and constraints faced by the field staff in carrying out their task.

• Regular and timely reporting of short and detailed observation to the Project In-charge concerned functionaries and top management i.e. Project Co-ordination Unit (PCU).

• Such report is primarily action-oriented report and contains specific action point/area of corrective measures required by concerned person. The issues requiring immediate attention of the project management are indicated through a brief note, exclusively prepared for urgent action and given to the Project In-charge with a copy to PCU for follow up action.

• In the next visit these actions are again reminded to the Project In-charge and PCU s as well as discussed in the monthly meeting of all the Scientists being organized at the KVK level.

• The compliances of line departments are reviewed and further action is taken on pending observations requiring attention.

• Performance/functioning of new mechanisms/interventions as well as success stories are also properly documented.

• Regular dialogue between Programme Co-ordinator of the KVK, Project In-charge and Project Coordination Unit are maintained and findings are personally discussed in regular meetings with field functionaries and PCU staff.

However, it was noticed that rigid M&E system do not work for the types of FLD and OFT projects that involves innovative processes with considerable flexibility leading to day-to-day changes in implementation methodology depending upon location-specific problems.

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)

Sl. No.	Crop / Enterprise	ITK Practiced	Purpose of ITK
1.	Paddy	20 gm paste of Wood Apple leaves or Cow dung slurry mixed with one liter of water	Reducing the infestation of Bacterial Leaf Blight (BLB) of Paddy
2.	Paddy	Mixing kerosene oil with urea and applying at the time of last land preparation	Reducing Stem Borer attack in Paddy.
3.	Dairy Product	Use of green lemon leaves during preparation of ghee is effective to preserve the ghee for long time	For preservation of Ghee
4	Paddy	Mixing paste of Neem leaf and bark with Urea and applying for top-dressing in Paddy	Increasing N use efficiency

3.10 Indicate the specific training need analysis tools/methodology followed by the KVK

Need Assessment of Rathindra KVK Clientele

i. Practicing Farmers and Farm Women: - Rathindra KVK family coordinates the work of all scientists for smooth functioning of the KVK as well as for the benefit of the rural people of that particular area. Programme Co-ordinator is liaisoning with other line departments for coordination and effective implementation of different programs of the KVK in the adopted village. Rathindra KVK tried to adopt a Cluster of 4 to 6 economically, culturally and technologically backward villages situated within 10-20 Kms

radius of the KVK. These villages are not too small or too large. Before adoption a detailed survey of the village was conducted to study the socio-economic and cultural status of that village. Now-a-days Participatory Rural Appraisal (PRA) tool was used to conduct the survey in which the village people are actively participated in the process.

The village map was drawn by the help of different colour by the villagers themselves and different prominent structures of the village such as school, temple, river, club etc. were depicted in that map. These structures will help the scientists to conduct the survey easily and smoothly. Basing upon the survey the field crop maps, animal resource map and other ancillary maps were prepared for future use. After the survey work detailed plan of work was chalked out and depending upon the requirement different activities was undertaken in different areas by the Rathindra KVK scientists.

ii. Rural Youth: - Rathindra KVK assesses the needs of the Rural Youth mainly through Participatory Tools like Resource map, Transact map, Employment Opportunity Analysis, Job Availability Matrix, Job Choice Matrix, Un-Employment Problem Cause Diagram etc. and also administering them a Structured Question Schedule regarding the needs of the Rural Youth prepared by the Rathindra KVK in consultation with other experts of ICAR and Visva-Bharati.

iii. Extension Functionaries: - Rathindra KVK assesses the need of the Extension Functionaries mainly through questioning the respective clientele about their needs and their job needs and the needs of their sponsoring agencies. Here mainly PRA tools like problem – cause diagram, Resource map, Organizational Diagram, Job Analysis, Job Satisfaction Matrix etc. are used.

3.11. A. Details of Equipment Available in Soil and Water Testing Laboratory

Sl. No	Name of the Equipment	Qty.
1.	Mixer grinder Kenstar	2 nos.
2.	Refrigerator Whirlpool	2 nos.
3.	Stabilizer Fizi	2 nos.
4.	Shaker	1 no
5.	Oven	1 no
6.	Kelplus Elect Digestation System Model KES 08L	1 no
7.	Kelplus Elect Distillation System Elite Ex	1 no
8.	Systronics Micro controller based visible Spectrophotometer	2 nos.
9.	Systronics P-H system	2 nos.
10.	Systronics Digital Conductivity Meter	2 nos.
11.	Systronics Flame Photometer Type 128	2 nos.
12.	Hotplate with energy regulator	1 no.
13.	Glass Distillation apparatus flux	3 nos.
14.	Physical Balance Cap.250g with weight box	4 nos.
15.	Shimadzu Electronic Balance	2 nos.
16.	Kjeldal digestion unit	2 nos.
17.	Kjeldal distillation unit	2 nos.
Total		**32 nos.**

3.11.B. Details of Samples Analyzed So Far:

Details	No. of Samples	No. of Farmers	No. of Villages	Amount realized
Soil Samples	332	332	36	Soil samples were analyzed for routine analysis for conducting OFT and FLD/programmes as well as Free Soil Health Camps

				organized by the Rathindra KVK.
Water Samples	36	36	6	Water samples were analyzed for pH only for OFT and FLD programmes
Total	**368**	**368**	**42**	

3.12. Activities of rain water harvesting structure and micro irrigation system: Not Applicable

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

3.13 Technology week celebration: 23.02.2015 to 27.02.2015

Type of activities	No. of activities	Number of participants	Related crop/livestock technology
Technical Session	**13**	**622**	1. Possibility of Crop Diversification in Birbhum District 2. Production Technology of *Azolla* and Its Use as Green Manure, Bio-fertilizer and Animal Feed 3. Popularization of Fodder Cultivation through Food-Fodder Intercropping 4. Profit Maximization through Diversification in Pisciculture 5. Diversification in Vegetable Cultivation through Production of EFY, Broccoli, Capsicum and French Bean 6. Eco-friendly and Organic Methods of Poultry Farming 7. Proper Marketing of Agricultural Products 8. Production of High Quality and Alternative organic manure : Vermi-compost 9. Importance of Fruit and Flower Cultivation in Dry Land Draught Prone Area 10. Mushroom Cultivation and Its Prospects 11. Integrated Management Practices of "Black Bengal" Goat rearing in Dry Land and Draught Prone Area 12. Balance Diet for Different Ages of Human Beings and Importance of Home-stead Kitchen Garden 13. Fluoride and Arsenic Pollution in Irrigation Water and Socio-economic Condition of Farmers
Farmers-Scientists Interaction	**04**	**132**	1. Farmers-Scientists Interactions on Crop Diversification in Summer and Rainy Seasons 2. Farmers-Scientists Interactions on Integrated Pest Management Practices in Summer Cultivation of Crops 3. Farmers-Scientists Interaction on Swine Flu, Bird Flu etc. 4. Farmers-Scientists Interaction on Fish based Integrated Farming System
Video Show	**08**	**189**	1. Quality Maize Production; 2. *Azolla* Production Technique 3. Year round Fodder Production 4. Freshwater Prawn Hatcheries 5. Animal Health Care and Disease Prevention 6. Mineral Mixture for Increased Animal Productivity 7. Organic Farming for Sustainability and Profitability 8. Water Resource Management under Rain-fed Farming
Live Demonstration of Methods of Fruit Processing: Jam, Jelly, Sauce etc. Preparation	**03**	**95**	1. Preparation of Coriander Chutney 2. Preparation of Brinjal Prickle 3. Preparation of Orange Squash
Agricultural Fair	**01**	**622**	1. Stalls of the Rathindra KVK showcasing the cutting edge Technologies of the ICAR through A. displaying Seeds and Planting Materials; B. displaying Improved Agricultural and Farm Implements and C. free distribution of Extension Literatures. 2. Stalls of Agricultural Input Companies 3. Stalls of local Self Help Groups producing Organic Agricultural products.

3.14 RAWE Programme – Is KVK Involved? Yes, the Rathindra KVK is involved in the RAWE Programme.

No. of Students /ARS Trained	No. of Days Stayed
46	3 days*
*As they are the student of Palli Siksha Bhavana (PSB), Visva-Bharati, so the students' hostels of PSB are used.	

3.15 List of VIP visitors (MP / MLA / DM / VC / Zila Sabhadhipati / Other Head of Organization / Foreigners)

Date	Name of the Person	Purpose of Visit
12.04.2014	Prof. Y. Kasturirangan, Honourable Member of Planning Commission and Honourable Member of the Rajyasabha	To gain a firsthand experience on the different aspects of Work undertaken by the Rathindra KVK as well as the way of functioning of different Farm Science Centres.
29.05.2014	Prof. Nasima Joarder, Department of Botany, Rajshahi University, Bangladesh	To know about the procedures of research, demonstration and extension of agricultural and related field technologies adopted by the Rathindra KVK
29.05.2014	Prof. O. I. Joarder, Vice-Chancellor, First Capital University of Bangladesh	To know about the fields of works undertaken by the Rathindra KVK to meet the challenges of ever increasing food production for an ever increasing size of population in India.
21.08.2014	Dr. Khokan Debnath, Director, Coconut Development Board, West Bengal State Centre, Salt Lake City, Kolkata	To attend the Training Programme of the Rural Youths on "Friends of Coconut Trees (FOCT)"
22.01.2015.	Prof. Sushanta Dattagupta, Vice-Chancellor, Visva-Bharat	To inaugurate the Training Programme on Creation of Awareness among Farmers and Other Stakeholders about the Provisions of Protection of Plant Varieties and Farmers' Rights Act – 2001
09.01.2015.	Prof. Ray Bromley, Vice Provost for International Education of the State University of New York, University at Albany Campus, Albany, New York, USA	To know about the nitty-gritty of the modus operandi of the Rathindra KVK as well as the uniqueness of the concept of the Krishi Vigyan Kendras as a whole.
09.01.2015.	Mr. S. Ghosh, DDM, NABARD, Birbhum	To further strengthen the coordination already existed between Rathindra KVK and NABARD, Birbhum for harnessing newer areas rural development issues
09.02.2015.	Dr. S. Garai, Scientist, ICAR-NDRI, ERS, Kalyani	To attend the Collaborative Animal Health Camp being jointly organized by the Rathindra KVK and ICAR-NDRI and to further strengthens the linkage.
09.02.2015	Dr. Somnath Dutta, Scientist, ICAR-NDRI, ERS, Kalyani	To attend the Collaborative Animal Health Camp being jointly organized by the Rathindra KVK and ICAR-NDRI
23.02.2015.	Dr. S. K. Ray, Principal Scientist, ZPD, Zone – II, ICAR, Kolkata	To attend the Inauguration and Technical Sessions of the Technology Week – 2015 organized by the Rathindra KVK.
09.03.2015.	Sri Bikash Roy Chowdhury, Sabhadhipati, Birbhum Zillah Parishad, Suri, Birbhum	To inaugurate the Training Programme on Mushroom Cultivation being organized by the Department of Food Processing Industries and Horticulture, Govt. of West Bengal, Suri, Birbhum at the Rathindra Krishi Vigyan Kendra
31.03.2015.	Sri Bikash Roy Chowdhury, Sabhadhipati, Birbhum Zillah Parishad, Suri, Birbhum	To inaugurate the Kisan Mela – 2015 being organized by the Rathindra KVK and to hand over the 16 Liters Capacity Knapsack Sprayers to 33 Numbers of Practicing Farmers and Farm Women of the Scheduled Tribe Community from various areas of the District of Birbhum at the Rathindra Krishi Vigyan Kendra

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)
Seed Production of Paddy	70	85.72	Rs. 67,080.00 per ha	Rs. 1,03,200.00 per ha
Seed Production of Pulses	230	52.18	Rs.31,600.00 per ha	Rs.66,500.00 per ha
Varietal Replacement of Mustard	170	88.24	Rs. 23,520.00 per ha	Rs. 73,800.00 per ha

with Improved Mustard Variety RW – 351				
Improved Method of Elephant's Foot Yam Cultivation	207	89.00	Rs. 2,36,250.00 per ha	Rs. 14,17,500.00 per ha
Low Cost Fish Feed Preparation	51	49.02	Rs. 20,000.00 per Year	Rs. 96,000.00 per Year
Kantha Stitch Work	71	56.34	Nil	Rs. 12,000.00 to Rs. 36,000.00 per Year
Preparation and Use of Vermin-Composting	290	62.07	Nil	Rs. 19,000.00 per 2.5 ft X 2.0 ft X 3.0 ft area /year

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

Horizontal Spread of Technologies	
Technology	**Horizontal spread**
Seed Production of Paddy	60 farmers Trained in the Rathindra KVK on various aspects of Paddy Seed Production adopted the Technology and from them the Technology was spreaded with culminating effect of adoption among another 120 numbers of farmers of whom 32 numbers of farmers resided within 0.1 – 5 kms. Radius of the Rathindra KVK; 40 numbers of farmers resided within 5.1 – 10 kms. Radius of the Rathindra KVK; 24 farmers resided within 10.1 – 15 kms. Radius of the Rathindra KVK and the rest 24 numbers of the farmers resided within 15.1 kms and above radius of the Rathindra KVK.
Seed Production of Pulses	120 farmers Trained in the Rathindra KVK on various aspects of Pulse Seed Production adopted the Technology and from them the Technology was spreaded with culminating effect of adoption among another 70 numbers of farmers of whom 19 numbers of farmers resided within 0.1 – 5 kms. Radius of the Rathindra KVK; 23 numbers of farmers resided within 5.1 – 10 kms. Radius of the Rathindra KVK; 14 farmers resided within 10.1 – 15 kms. Radius of the Rathindra KVK and the rest 14 numbers of the farmers resided within 15.1 kms and above radius of the Rathindra KVK.
Varietal Replacement of Mustard with Improved Mustard Variety RW – 351	150 farmers Trained in the Rathindra KVK on various aspects of Cultivation of Improved Mustard Variety RW – 351 adopted the Technology and from them the Technology was spreaded with culminating effect of adoption among another 100 numbers of farmers of whom 27 numbers of farmers resided within 0.1 – 5 kms. Radius of the Rathindra KVK; 34 numbers of farmers resided within 5.1 – 10 kms. Radius of the Rathindra KVK; 20 farmers resided within 10.1 – 15 kms. Radius of the Rathindra KVK and the rest 19 numbers of the farmers resided within 15.1 kms and above radius of the Rathindra KVK.
Improved Method of Elephant's Foot Yam Cultivation	185 farmers Trained in the Rathindra KVK as well as 110 of them were involved in the FLD Programmes of Rathindra KVK on various aspects of improved method of Elephant's Foot Yam Cultivation adopted the Technology and from them the Technology was spreaded with culminating effect of adoption among another 118 numbers of farmers of whom 31 numbers of farmers resided within 0.1 – 5 kms. Radius of the Rathindra KVK; 39 numbers of farmers resided within 5.1 – 10 kms. Radius of the Rathindra KVK; 24 farmers resided within 10.1 – 15 kms. Radius of the Rathindra KVK and 20 numbers of the farmers resided within 15.1 kms and above radius of the Rathindra KVK. **It was necessary to mention here that 4 numbers of farmers of the neighbouring Dumka District of the Jharkhand State also adopted the above mention Technology through the horizontal spread of the Technology.**
Low Cost Fish Feed Preparation	25 farmers Trained as well as getting involved in the FLD Programmes of the Rathindra KVK on various aspects of low cost fish feed preparation adopted the Technology and from them the Technology was spreaded with culminating effect of adoption among another 12 numbers of farmers of whom 03 numbers of farmers resided within 0.1 – 5 kms. Radius of the Rathindra KVK; 04 numbers of farmers resided within 5.1 – 10 kms. Radius of the Rathindra KVK; 02 farmers resided within 10.1 – 15 kms. Radius of the Rathindra KVK and the rest 03 numbers of the farmers resided within 15.1 kms and above radius of the Rathindra KVK.
Replacement of Deshi Poultry Breed by Rhode Island Red Breed (RIR)	309 farmers Trained as well as getting involved in the FLD Programmes of the Rathindra KVK on various aspects of replacement of local Deshi Poultry Breed by introduction of High Yielding Poultry Breed viz. Rhode Island Red (RIR) adopted the Technology and from them the Technology was spreaded with culminating effect of adoption among another 512 numbers of farmers of whom 302 numbers of farmers

	resided within 0.1 – 5 kms. Radius of the Rathindra KVK; 109 numbers of farmers resided within 5.1 – 10 kms. Radius of the Rathindra KVK; 23 farmers resided within 10.1 – 15 kms. Radius of the Rathindra KVK and the rest 78 numbers of the farmers resided within 15.1 kms and above radius of the Rathindra KVK.
Kantha Stitch Work	40 farm women and female rural youths Trained in the Rathindra KVK on various aspects of Kantha Stitch Work adopted the Technology and from them the Technology was spreaded with culminating effect of adoption among another 25 numbers of farm women and female rural youths of whom 07 numbers resided within 0.1 – 5 kms. Radius of the Rathindra KVK; 08 numbers resided within 5.1 – 10 kms. Radius of the Rathindra KVK; 05 numbers of farm women and female rural youths resided within 10.1 – 15 kms. Radius of the Rathindra KVK and the rest 05 numbers of the farm women and female rural youths resided within 15.1 kms and above radius of the Rathindra KVK.
Preparation and Use of Vermin-Composting	180 farmers Trained in the Rathindra KVK on various aspects of preparation and use of Vermin-Composting adopted the Technology and from them the Technology was spreaded with culminating effect of adoption among another 110 numbers of farmers of whom 29 numbers of farmers resided within 0.1 – 5 kms. Radius of the Rathindra KVK; 37 numbers of farmers resided within 5.1 – 10 kms. Radius of the Rathindra KVK; 22 farmers resided within 10.1 – 15 kms. Radius of the Rathindra KVK and the rest 22 numbers of the farmers resided within 15.1 kms and above radius of the Rathindra KVK.

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

Over All Impact of Rathindra KVK

A. Rationale

The Rathindra KVK used the working definition of "impacts" as "sustained changes in people/farmers' lives brought about by specific interventions". Therefore, impact analysis presented here referred not to any immediate outputs or effects of a programme but to the everlasting and sustained changes brought about. In light of the above, impact assessment is therefore, an evaluation of how, and to what extent change had occurred. This required an understanding of the perspectives of various stakeholders particularly the local population.. The Rathindra KVK has taken up initiatives such as organizing women and men farmers providing technologies for Crop Diversification , promoting activities to supplement peoples income and relevant infrastructure, developing entrepreneurships for Rural Youths so that, collectively the Rathindra KVK can achieve the KVK mandate and the goals of social, economic and institutional development. The Process of impact assessment examined the factors of efficiency, effectiveness and consistency of the interventions. The specific activities implemented based on the mandate of KVK were already explained in detail in the previous chapters.

B. Institutional / Social Impacts

The Rathindra KVK provided the much needed organizational and institutional base in the form of Farm Science Clubs, Farmers' Clubs and Self Help Groups (SHGs) to the women and men farmers and rural youths. Later the Rathindra KVK got involved in building social and technical awareness, transfer of technology, empowering communities and brings about economic and social change. The primary target group is practicing farmers, farm women and rural youths, who have become the core of delivery system. Over **30,880** practicing farmers, farm women, rural youths and extension functionaries have been trained in knowledge and skill aspects of various technologies in the operational area of the Rathindra KVK.

Right from the beginning, the Rathindra KVK has paid much attention to intensify the involvement of the practicing farmers, farm women and rural youth at village level and develop necessary skills to build up the capacity among these stakeholders. These clientele of the Rathindra KVK are partners in development in the truest sense for they are involved in the practical implementation of the training programmes The participatory approach in imparting the trainings have developed self confidence in the Trainees.

Role of the Rathindra KVK in helping the vulnerable sections of the Rural Population viz. SC, ST, Minorities, Women and Rural Youth:-

The main thrusts of the Rathindra KVK is the human resource building at the grass-root level for effective and area specific transfer of technology and promote its adoption at the micro level. Keeping in view the primary necessities of the above mentioned vulnerable target group, the mandate of the Rathindra KVK have been designed to "help people to help themselves" in acquiring the skills to meet their needs. As agricultural labourers and small cultivators have no steady income, trainings are imparted in various appropriate income generation programmes like low volume high value horticulture, vermin culture, fishery, poultry and duckery, handi-crafts, kantha stitch, Batique work methods etc. Location specific trainings are given to the women farmers so as to upgrade their existing available natural resources. To bridge the gap between research and extension, demonstrations form an integral part of trainings to expose farmers to latest management practices in agriculture. On farm trails have been conducted on the cultivators' fields to create awareness about the latest management methods and dissemination of proven technology. This has helped in establishing feedback mechanism between the scientists and society resulting in modification of the technology to suit to the locality, socio-economic and cultural situations.

Further, KVK investigators have interviewed a group of 200 randomly selected men and women ex-trainees of the Rathindra KVK about their perception of change over a period of time in 2014 -2015. They came out with the following information:-

i. All their children are attending schools more regularly.

ii. Health and sanitation improvements have become possible.

iii. Perception of own wellbeing and better-off living conditions was felt by the trainees..

iii. The trainees clearly perceived positive changes in quality of life due to increased productivity, support availability and income improvement.

iv. The trainees also felt that the quality of diet and nutritional security had improved than before.

v. Last but not the least the Trainees clearly perceived that there was a huge improvement in technical knowledge and skills regarding farming and related activities as well as non-farming activities.

C. Economic Impacts

Economic impact of the Rathindra KVK has come about through

i. Adoption of yield raising technologies i.e. FLDs/OFTs and other extension activities supported by the Rathindra KVK budget.

ii. Training and capacity building activity contributed in implementing value added activities through Income generating activities – micro enterprises at individual level and group level.

iii. Technologies transferred to project area are manifold which can broadly be listed into the following:-

a. Introduction of new varieties particularly in high volume low cost horticultural crops like Elephant Foot Yam, Drumsticks and low volume high cost vegetables like Capsicum and Broccoli, agronomic crops like Pulses like Black Gram, Green Gram etc. and Oilseeds Crops like Sesame, Lentil, Rape Seeds, Mustard etc.

b. Skills in grafting and nursery

c. Mixed Fish farming with Indian Major Carps along with Giant Prawns

d. Integrated Poultry Management

e. Integrated Goatery Management based on **Black Bengal Breed**

f. Scientific Dairy Management

c. Integrated Pest Management (IPM)

d. Integrated Nutrition Management (INM) based Soil Testing

The fact that the Rathindra KVK follows group oriented strategies, KVK's activities have got intertwined to give a **synergy** to productivity increases in the area through technology transfer. The cropping intensity in the project area i.e. the District of Birbhum has gone up from less than 80 percent in the pre-independence era to 161.88 percent in 2011 – 2012. Thus, the overall impact and its benefits in Birbhum District (Targeted area) are manifold.

D. Technology Impacts

The Rathindra KVK conducted a group exercise of participatory nature with ex-trainees in Kankutia, Senkapur, Deuli, Kartickdanga, Srichandrapur and Bishnubati villages of the District of Birbhum to ascertain the impact created by activities of the Rathindra KVK. The following table describes the process using the participatory tool called trend analysis to obtain the results.

The Methodology

KVK invited those ex-trainees who participated at least in one of the Two Days On Campus and in one of the Three Days Off Campus Training Programmes conducted by the Rathindra KVK. The farmers (187 in numbers belonging to various villages) were given tamarind seeds and the staff explained the purpose of exercise. The impact/ learning outcomes were listed as knowledge, information, adoption and economic benefit. The ex-trainee was expected to give a rating for before (before the intervention of the Rathindra KVK) and present periods, 'then' and 'now'. Depending on their assessment, they placed a number of tamarind seeds. As could be seen in the Table, there was multifold improvement in every aspect as assessed by the farmers of Kankutia, Senkapur, Deuli, Kartickdanga, Srichandrapur and Bishnubati villages adopted by the Rathindra KVK over the last decade and this exercise was conducted in the Year 2014 – 2015.

Impact of the activities of the Rathindra KVK as assessed by the 187 farmers

Sl. No.	Impacts	Average Impact as perceived by the Trainees (Then)	Average Impact as perceived by the Trainees (Now)	Percentage of Change as perceived by the Trainees
01.	**Impact on Knowledge**	000	00000000	266.67
02.	**Impact on Information**	00	0000000	350.00
03.	**Impact on Adoption**	0	000000	600.00
04.	**Economic Impact**	**0000**	**000000**	**150.00**

N.B.:- Here "0" means a Tamarind Seed.

4.4 Details of Innovations recorded by the Rathindra KVK

Thematic area	Resource Conservation Technologies
Name of the Innovation	Innovative Portable SRI Marker (4 Rows)
Details of Innovators	The Innovative Portable Marker (4 Rows) developed by Sri. Tapan Ghosh, son of Late Narayan Chandra Ghosh, aged about 38 Years (Mobile Phone No. – 09531786564) and Sri. Monotosh Ghosh, son of Sri. Haradhan Ghosh, aged about 38 Years, (Mobile Phone No.- 08670443344) , residents of the Village:- Bishnubati, P. O. - Sattore, Police Station:- Parui, Dist. – Birbhum, Pin. – 731236, West Bengal with active help and supervision of the Rathindra Krishi Vigyan Kendra, Palli Siksha Bhavana, Visva-Bharati, Sriniketan, P. O. – Sriniketan, Dist. – Birbhum, Pin. – 731236, West Bengal, India has shown remarkable results both in the field trials and as well as in day-to-day use also.
Back Ground of Innovation	SRI is an acronym for System of Rice Intensification. This improved method of rice cultivation was developed in 1983 in Madagaskar and has now spread to many parts of the world. SRI is not a new variety or a hybrid. It is only a method of cultivation. SRI is

	showing promising results in all rice varieties – local or improved. Marking the plot before transplantation to ensure proper rows and spacing, and weeding are necessitating development of appropriate implements. Transplanting at wider spacing (10 x 10 inches or 25 x 25 cm)allows enough sunlight to reach the leaves of each rice plant thus reducing competition for water, space and nutrients resulting in the spread of roots and healthy growth of plants (the distance can be increased depending on soil fertility). Preparation of the main field in SRI is the same as in conventional method. Field should be evenly 104ocusin and there should not be standing water in the field during transplantation. In SRI method, seedlings are widely spaced (10 x 10 inch or 25 x 25cm) and only one seedling is transplanted per hill (3-4 seedlings per hill in conventional system). SRI method can accommodate only 16 hills /sq. meters as against 33-40 hills/ square meter in conventional method. Uniform spacing is also required for easy weeding by implements. To maintain uniform spacing, different methods can be employed. Small pegs can be tied to a rope at 25 cm or 10 inch distance and by using this rope; row after row transplantation can be done. Different types of 'Markers' are being developed for this purpose. These markers need to be run over the prepared field lengthwise and width wise. Transplanting at the marked intersection gives the required 25 x 25 cm spacing. Some of the newly developed markers draw 8 rows and columns simultaneously. These markers need to be pulled at an even pace for proper marking. To have the lines straight, it is advisable to tie a rope and pull the marker alongside the rope. For smooth transplantation, field operations like bunding, 104ocusing and marking with marker should be completed a day before the transplantation.
Technology Details	• Adjustable Plant Spacing of Paddy Seedlings (25 cm X 25 cm and 30 cm X 30 cm) can be marked using the Innovative Portable SRI Marker. • In case of 25 cm X 25 cm Plant Spacing – 4 rows of Paddy Seedlings can be marked. • In case 30 cm X 30 cm Plant Spacing – 3 rows of Paddy Seedlings can be marked. • This Innovative SRI Marker is light weight, made of locally available GI pipes and iron rods. • The Innovative SRI Marker (4 Rows) is easily dismantlable and transportable. • This is a very low cost implement, costing only Rs. 2,400.00 (Rupees Two thousand four hundred) only. • The maintenance cost of this Implement is also low. • The Working Efficiency of the Innovative Portable SRI Marker is 0.3 – 0.4 ha per day (8 hours). • The Cost of transplanting 1 ha area using this implement is Rs. 2,730.00 (cost of Labour and Seeds) • Cost of transplanting 1 ha area in traditional method is Rs. 6,300.00 only (cost Labour and Seeds).
Practical Utility of Innovation	This Innovative Portable SRI Marker is a very low cost locally made Implement costing about Rs. 2,400.00 only. This Implement is a labour and time saving device. In Traditional Method, 40 labours are required for Transplanting Paddy Seedlings, while using the Innovative SRI portable Marker only 18 labours are required. It is also of utmost importance that in the Traditional Method, 7.5 kgs. Of Paddy Seedlings is required while using this Implement, only 1 kg of Paddy Seed is required for 1 ha of Paddy Fields. It is to be noted that the Cost of transplanting 1 ha area using this implement is Rs. 2,730.00 (cost of Labour and Seeds); while the cost of transplanting 1 ha area in traditional method is Rs. 6,300.00 only (cost Labour and Seeds). The savings using this Innovative Implement is Rs. 3,570.00 which is higher than the actual cost of the Implement i.e. Rs. 2,400.00 only. So this Innovative Portable SRI Marker is highly economic and viable in the field level functioning.

4.5 Details of Entrepreneurship Development

Entrepreneurship development	
Name of the enterprise	Commercial Pisciculture
Name & complete address of the entrepreneur	**A. Name:- Sri Abhijeet Mondal.** **B. Age:- 24 Years** **C. Address:- Village – Balta, P. O. – Batikar, P. S. – Parui, Dist. – Birbhum, Pin. – 731147, West Bengal, India.** **D. Mobile Phone No.:- 07797640384** **E. E-Mail ID.:- Not available**
Intervention of KVK with quantitative data support:	Sri Abhijeet Mondal's pisciculture unit got a boost when he got 02 (Two) Numbers of Trainings: 01 (One) training of 4 days duration on **"Carp Fry and Fingerling Rearing"** in July, 2010 and another of 1 Month (One month) duration residential Training Programme for Rural Unemployed Youths on **"Carp Breeding and Hatchery Management"** in September – October, 2010 in the Financial Year of 2010 – 11 and 01 (One) Number of Training of One (01) month Duration Residential Training Programme for Rural Unemployed Youths on **"Fish Breeding and Hatchery Management"** in July – September, 2011 from Rathindra Krishi Vigyan Kendra, Palli Siksha Bhavana, Visva-Bharati, Sriniketan, P. O. – Sriniketan, Dist. – Birbhum, Pin. – 731236, West Bengal, India.
Time line of the entrepreneurship development	Sri Abhijeet Mondal started commercial pisciculture in the year 2006, after establishing a Submersible Shallow Tube Well for cultivating field crops at a cost of Rs. 50,000 /- (Rupees Fifty thousand) only. At that time he got a leasehold of a water body of 0.33 Acres of area nearby the Submersible Shallow Tube Well at a cost of Rs. 5,000 /- (Rupees Five thousand) only of yearly lease value. He started use his newly dug Submersible shallow Tube Well for irrigating his leased in water body also. In 2006 A.D., when Sri Abhijeet Mondal started his fishery unit through leasing in a water body of only 0.33 Acres, his initial investment was Rs. 5,000 /- (Rupees Five thousand) only as Yearly Lease Rent and Rs. 7,500 /- (Rupees Seven thousand five hundred) only for preparing the water body, fish fingerlings, fish feeds, medicines, labour costs etc. and he sold his products in the local fish market at a total price of Rs. 25,000 /- earning a Net Profit of Rs. 12,500 /- (Rupees Twelve thousand five hundred) only in an year without any training. After getting trainings from Rathindra Krishi Vigyan Kendra, Birbhum, Sri Abhijeet Mondal is now producing Fish Fingerlings and Table Fishes such as Indian Major Carps (Rohu, Katla and Mrighel) and Foreign Major Carps (Grass Carp, Cyprinus and Silver Carp) in a water body of 13.2 Acres through Intensive Fish Fingerling Production System and Intensive Mixed Pisciculture. After getting Training from Rathindra KVK, Birbhum, Sri Abhijeet Mondal is now growing fish fingerlings and Table fishes in a total area of 13.2 Acres of Water body, a major portion (nearly 90 percent) of which is leased in and a minor portion (only 10 percent) is co-owner. Now he is spending Rs. 1,50,000 (Rupees One lakh fifty thousand) only for Lease Rent, Rs. 25,000 /- (Rupees Twenty five thousand) only for Fish Medicines, Rs. 50,000 /- (Rupees Fifty thousand) only for Fish Feeds such as Mustard Cake, Mohuya Cake etc. and Rs. 50,000 /- (Rupees Fifty thousand) only for Labour Charges in an Year, summing up to an expenditure of Rs. 2,75,000 /- (Rupees Two lakhs seventy five thousand) only in an Year. Now he is producing 3 – 3.5 Quintals of Table Fishes and 20 Quintals of Fish Fingerlings in a year. Half of the Fish Fingerlings produced is used by Sri Mondal himself for further breeding and rest half of the fish fingerlings is sold among the villagers. **Now Sri Mondal sold his produce (both Fish Fingerlings and Table Fishes) in local Markets as well as Markets of Municipal areas such as Bolpur, Suri etc. at a Total Price of Rs. 4,00,000 /- (Rupees Four lakhs) only in an Year. Thus now Sri Mondal is earning a Net Income of Rs. 1,25,000 /- (Rupees One lakh twenty five thousand) only in a year which is a big jump from a meager Yearly Income of Rs. 12,500 /- (Rupees Twelve thousand five hundred) only just 6 (six) years back.**
Technical Components of the Enterprise	After getting trainings from Rathindra Krishi Vigyan Kendra, Birbhum, Sri Abhijeet Mondal is now producing Fish Fingerlings and Table Fishes such as Indian Major Carps (Rohu, Katla and Mrighel) and Exotic Carps (Grass Carp, Cyprinus and Silver Carp) in a water body of 13.2 Acres through Intensive Fish Fingerling Production System and Intensive Mixed Pisciculture. After getting Training from Rathindra KVK, Birbhum, Sri Abhijeet Mondal is now growing fish fingerlings and Table fishes in a total area of 13.2 Acres of Water body, a major portion (nearly 90

	percent) of which is leased in and a minor portion (only 10 percent) is co-owner. Now he is spending Rs. 1,50,000 (Rupees One lakh fifty thousand) only for Lease Rent, Rs. 25,000 /- (Rupees Twenty five thousand) only for Fish Medicines, Rs. 50,000 /- (Rupees Fifty thousand) only for Fish Feeds such as Mustard Cake, Mohuya Cake etc. and Rs. 50,000 /- (Rupees Fifty thousand) only for Labour Charges in an Year, summing up to an expenditure of Rs. 2,75,000 /- (Rupees Two lakhs seventy five thousand) only in an Year. Now he is producing 3 – 3.5 Quintals of Table Fishes and 20 Quintals of Fish Fingerlings in a year. Half of the Fish Fingerlings produced is used by Sri Mondal himself for further breeding and rest half of the fish fingerlings is sold among the villagers.
Status of entrepreneur before and after the enterprise	**Now Sri Mondal sold his produce (both Fish Fingerlings and Table Fishes) in local Markets as well as Markets of Municipal areas such as Bolpur, Suri etc. at a Total Price of Rs. 4,00,000 /- (Rupees Four lakhs) only in an Year. Thus now Sri Mondal is earning a Net Income of Rs. 1,25,000 /- (Rupees One lakh twenty five thousand) only in a year which is a big jump from a meager Yearly Income of Rs. 12,500 /- (Rupees Twelve thousand five hundred) only just 6 (six) years back.**
Present working condition of enterprise in terms of raw materials availability, labour availability, consumer preference, marketing the product etc. (Economic viability of the enterprise):	After getting Training from Rathindra KVK, Birbhum, Sri Abhijeet Mondal is now growing fish fingerlings and Table fishes in a total area of 13.2 Acres of Water body, a major portion (nearly 90 percent) of which is leased in and a minor portion (only 10 percent) is co-owner. Now he is spending Rs. 1,50,000 (Rupees One lakh fifty thousand) only for Lease Rent, Rs. 25,000 /- (Rupees Twenty five thousand) only for Fish Medicines, Rs. 50,000 /- (Rupees Fifty thousand) only for Fish Feeds such as Mustard Cake, Mohuya Cake etc. and Rs. 50,000 /- (Rupees Fifty thousand) only for Labour Charges in an Year, summing up to an expenditure of Rs. 2,75,000 /- (Rupees Two lakhs seventy five thousand) only in an Year. Now he is producing 3 – 3.5 Quintals of Table Fishes and 20 Quintals of Fish Fingerlings in a year. Half of the Fish Fingerlings produced is used by Sri Mondal himself for further breeding and rest half of the fish fingerlings is sold among the villagers. **Now Sri Mondal sold his produce (both Fish Fingerlings and Table Fishes) in local Markets as well as Markets of Municipal areas such as Bolpur, Suri etc. at a Total Price of Rs. 4,00,000 /- (Rupees Four lakhs) only in an Year.** **The enterprise is now economically viable as we can find out that Sri Mondal is earning a Net Income of Rs. 1,25,000 /- (Rupees One lakh twenty five thousand) only in a year which is a big jump from a meager Yearly Income of Rs. 12,500 /- (Rupees Twelve thousand five hundred) only just 6 (six) years back.**
Horizontal spread of enterprise	12 farmers in and around the villages of Sri Abhijit Mondal have taken up commercial fish cultivation in a large scale seeing the success of Sri Mondal.

4.6 Any other Initiative taken by the Rathindra KVK

Minikit Demonstrations of different Varieties of Wheat and Paddy under IARI Outreach Programme, PUSA, Samastipur

Crop	Thematic Area	Name of the varieties	No. of farmers	Area (ha)	Yield (q/ha)		% increase in yield
					Demo	Check	
Wheat Rabi, 2013-14	Varietal replacement	1.HD 2733 2.HD2824 3. HD 2985 4. HI 1563 5. HD 2967 6. HW 2045 7. HI 1544	20	4.0	31.1 38.1 26.9 26.3 26.9 28.4 26.6	 24.4 (Sonalika)	27.5 56.0 10.2 10.1 10.2 33.9 10.1
Paddy Kharif, 2014	Varietal replacement	1. Pusa - 44 (130 days) 2. Pusa Sugandh -5 (110 days) 3. PNR - 381 (120 days)	30	2.4	43.98 38.91 32.52	42.1 (MTU 7029) 30.1 (IR36) 30.1 (IR 36)	4.4 29.2 8.0

Wheat **Rabi, 2014-15**	Varietal replacement	1. HD2733 2.HD2824 3.HD2967 4. HI1544 5.HI1563 6.HD2985 7.HW2045 8.HD2888	14	4.0	36.2 41.0 35.7 35.2 34.8 35.9 35.8 34.7	33.3 (Sonalika)	8.7 23.1 7.2 5.7 4.5 7.8 7.5 4.2

5.0 LINKAGES

5.1 Functional Linkage with Different Organizations

Name of Organization	Nature of Linkage
Palli Sanghatana Vibagh, Visva-Bharati, Sriniketan, Birbhum	This linkage is mainly focusing on organizing joint Training programmes for the villagers as well as giving exposure to the clientele of the Rathindra KVK as about the field level situation
All India Radio, Santiniketan Kendra, Birbhum, West Bengal	Broadcasting of different Rathindra KVK activities as well as live Phone –In Programmes are being organized. As a result a vast number of farmers, farm women and rural youth are being exposed to multiple information sources regarding multiple issues. This is necessary to mention that already AIR, New Delhi has awarded three adopted farmers and regular listeners of AIR Programmes of the Rathindra KVK for their excellent contribution to farming activities.
Doordarshan, Santiniketan Kendra, Birbhum, West Bengal	Telecasting of different Rathindra KVK activities as well as live phone –In Programmes are being organized. As a result a vast number of farmers, farm women and rural youth are being exposed to multiple information regarding multiple issues. This is necessary to mention that the viewers of these Programmes have been immensely benifited by viewing Method Demonstration on various new Technologies.
Bidhan Chandra Krishi Viswavidyalaya, West Bengal	This linkage is mainly on the following aspects:- - Conducting regular basis Human Resource Development Training Programme in different discipline. - Facilitate for Annual Action Plan Development. - Facilitate On Farm Testing .Modules. - Provide different location specific germ-plasm. All the linkage activities profoundly help the Rathindra KVK clientele in updating their knowledge, skill and attitude.
IARI, Regional Station, Samastipur, Bihar	The linkage is mainly based on Collaborative Demonstration Programmeon

	newer Wheat and Paddy varieties. As a result of this linkage, the farmers of Birbhum District are being exposed to nearly Thirty (30) newer varieties of Wheat anf Four (04) varieties of scented as well as non-scented paddy varieties. Some varieties have shown very good potential for future introduction in the District. - Provide Weather related for Crop based Action Plan Development.
Protection of Plant Varieties and Farmers' Rights Authority, Ministry of Agriculture, Department of Agriculture and Co-operation, Govt. of India, New Delhi	**This Linkage is basically for organizing Training Programme on "Creation of Awareness among the Farmers and Other Stakeholders about the Provisions of PPV & FR Act – 2001" to** make the stakeholders aware about the Provisions of the PPV & FR Act – 2001 and for encouraging the farmers to register their traditional, extinct crop varieties with the Authority.
IIT, Kharagpur, West Bengal	**This Linkage mainly focuses on bringing and testing cutting edge Hi-Tech Technologies and for organizing Collaborative Training Programme on Green House Technologies and Micro-Irrigation System based Precision Farming.**
CIFRI, Barackpur, 24 Parganas (North), West Bengal	• This linkage is basically focussed on getting Technical Support on Glass Jar Hatchery and low cost Fish Feed Preparation. Utilizing this linkage a farmer named Sri Sunil Das, Village – Srichandrapur, P. O. – Sattore, Dist. – Birbhum, West Bengal (Mobile Phone No. – 09679885667) prepared a model of Glass Jar Hatchery using low cost materials. This innovative approach was sent to ICAR. The Model of Low Cost Glass Jar Hatchery innovated by Sri Sunil Das was detailed in the Compilation titled, "Farm Innovators", published by the ICAR in October, 2010 (Page No. – 148).
ICAR-NDRI, ERS, Kalyani, West Bengal	This Linkage is basically for organizing the Collaborative Animal Health Camps, Cattle Infertility Treatment Camps, Hybrid Napier Distribution Camps and for organizing Front Line Demonstrations on improved varieties of Fodder Crops like Berseem, Oat etc.
Line Departments like Agriculture, Horticulture and Food Processing Industries, Animal Resource Development, Fisheries etc. Of the Govt. Of West Bengal, Birbhum, West bengal	This linkage is basically on Technological back-stopping.
National Research Centre on Weed Control, Jabbalpur, Madhya Pradesh	The linkage is now focusing on Technical Support for organizing Training and Awareness Camps for controlling weeds specifically weeds like Parthenium. The farmers of this District get immense benefit as they get exposure on Parthenium and other weeds through participating in "Parthenium Control Week Programme".

ATMA, Birbum, West Bengal	The linkage is now 109ocusing on Orientation Farmers' training and Programme Training for Head Master / Achiever Farmer. Various Short Term Researches on Topics related with Fishery, Agronomy etc. Are also being performed utilizing these linkages Programme.
NABARD, Birbhum, West Bengal	The linkage mainly focuses on formation of Farmers Club, organizing Training for vulnerable areas, Organizing Technology Weeks etc. Some Farmers' Clubs are doing excellent work and they are benefitted from this Linkage. Besides above mentioned Linkages, NABARD, Birbhum sponsored the Technology Week – 2015, organized by the Rathindra KVK in its Campus from 23.02.2015 to 27.02.2015 for exposing the Practicing Farmers, Farm Women, Rural Youths and Extension Functionaries on cutting edge Agricultural and related field technologies.
State Agricultural Management, Extension and Training Institute (SAMETI), Narendrapur, 24 Parganas (South), West Bengal.	This linkage is mainly on the following aspects - Conducting regular basis Human Resource Development Training Programme in different discipline for Scientists of the Rathindra KVK. - All the linkage activities profoundly help the Rathindra KVK clientele in updating their knowledge, skill and attitude.
IFFCO, Kolkata, West Bengal	The linkage basically focuses on Training and Visit of the farmers' fields. The farmers get benefit through getting information on nutritional status of the soil as well as the proper fertilizer and manuring procedures.
Fertilizer Association of India (FAI), Kolkata, West Bengal	The linkage basically focuses on performing various Short Term Research on various crop nutrition and related issues, Training and Visit of the farmers' fields. The farmers get benefit through getting information on nutritional status of the soil as well as the proper fertilizer and manuring procedures..
Coconut Development Board, State Centre, Salt Lake City, Kolkata, West Bengal	• This linkage is basically giving Residential Training to selected Rural Youths on "Friends of Coconut Trees (FOCT)" and d popularizing Innovative Machine for rising up in the Coconut Trees. The second of this Type Training has been organized in collaboration with nRathindra KVK at the Rathindra KVK this Year. 20 unemployed Rural Youths were trainees in the Six Days Residential Training Programme on "Friends of Coconut Trees (FOCT)" jointly organized by the Coconut Development Board, State Centre, West Bengal, Salt Lake City, Kolkata and Rathindra Krishi Vigyan Kendra at the Rathindra Krishi Vigyan Kendra Campus from 21.08.2014 to 26.08.2014 and now they are performing as **Master Trainers** throughout the State.
TATA Rallis India Ltd., Kolkata, West Bengal	This linkage is basically focuses on Capacity Build Up Training for clientele of Rathindra KVK on Wheat, Potato, Mustard and Rabi Vegetables Crop Management.
Tagore Society For Rural Development,	This linkage gives importance as well as focuses on Training and

Santiniketan, Birbhum West Bengal	Demonstration for stakeholders for far flung areas of Birbhum District where normal working linkage of KVK with villagers of those areas are very weak.
Luthern World Services, Kolkata, West Bengal	This linkage gives importance as well as focuses on Training and Demonstration for stakeholders for far flung areas of Birbhum District, especially areas bordering Jharkhand State where normal working linkage of KVK with villagers of those areas are very weak.
Asansol Burdwan Seva Kendra, Burdwan, West Bengal	This linkage gives importance as well as focuses on joint Training and Demonstration for stakeholders for various non-adopted villages of Birbhum District as well as far flung areas of Birbhum District, especially areas where normal working linkage of KVK with villagers of those areas are very weak.
Manab Jamin, Birbhum, West Bengal.	This linkage gives importance as well as focuses on joint Training and Demonstration for stakeholders for various non-adopted villages of Birbhum District.
Development Research Communication and Service Centre, Kolkata, west Bengal.	This linkage mainly emphasizes on giving quality Training to the Rural Youth getting admitted in the Community College run by this NGO at Bolpur through delivering Lectures and giving exposures to hands-on field level situation by the experts from the Rathindra KVK who work as Resource Persons on various subjects like fishery, soil testing, horticulture etc.
IMSE, 195 Jodhpur Park, Kolkata - 700008	This linkage gives importance as well as focuses on joint Training and Demonstration for stakeholders for various non-adopted villages of Birbhum District as well as far flung areas of Birbhum District, especially areas where normal working linkage of KVK with villagers of those areas are very weak.
Bolpur Krishija Samabay Samity, Bolpur, Birbhum, West Bengal	This linkage is basically focuses on supply of quality agricultural inputs for various FLD and OFT Programmes of the Rathindra KVK undertakes. As a result, the clientele of the Rathindra KVK is immensely benefitted through experiencing newer and better quality agricultural inputs.
Comprehensive Area Development Corporation (CADC) KVK, Sonamukhi, Bankura, West Bengal	This linkage is basically focuses on supply of quality breeder and foundation seeds of Pulses and Oilseeds for various FLD and OFT Programmes of the Rathindra KVK undertakes. As a result, the clientele of the Rathindra KVK is immensely benefitted through experiencing newer and better quality seeds.
Comprehensive Area Development Corporation (CADC), Ranaghat – II, Arangghata, Nadia, West Bengal	This linkage is basically focuses on supply of quality breeder and foundation seeds of Pulses for various FLD and OFT Programmes of the Rathindra KVK undertakes. As a result, the clientele of the Rathindra KVK is immensely benefitted through experiencing newer and better quality seeds.
National Seed Corporation, Kolkata, West Bengal	This linkage is basically focuses on supply of quality breeder and foundation seeds of various Crops for various FLD and OFT Programmes of the Rathindra KVK undertakes. As a result, the clientele of the Rathindra KVK is immensely benefitted through experiencing newer and better quality seeds.
West Bengal State Seed Corporation, Kolkata, West Bengal	This linkage is basically focuses on supply of quality breeder and foundation seeds of various Crops for various FLD and OFT Programmes of the Rathindra KVK undertakes. As a result, the clientele of the Rathindra KVK is immensely benefitted through experiencing newer and better quality seeds.

Panchayati Raj Institutions (PRIs), Birbhum, West Bengal	This linkage helps the Rathindra KVK to get base-line information for choosing Target Areas both on Geographical Terms as well as on Technological Terms by going through various surveys and reports generated by the PR Institutions of the Birbhum District.
Other Krishi Vigyan Kendras (KVKs)	This linkage helps the farmers of various Districts to have an exposure and visit to Rathiondra KVK and exchange ideas and experiences with farmers of the District of Birbhum and Scientists of the Rathindra KVK.

5.2. List special programmes undertaken during 2014-15 by the KVK, which have been financed by ATMA/ Central Govt./ State Govt./NABARD/NHM/NFDB/Other Agencies (information of previous years should not be provided)

A) Programmes for Infrastructure Development

Name of the Programme/Scheme	Purpose of Programme	Date/ Month of Initiation	Funding Agency	Amount (Rs.)
Short Term Research	To find out the performance of different sources of vermin-composting	08.02.2014.	ATMA, Birbhum	1,24,000.00
Total				1,24,000.00

N. B. The Vermin-Composting Unit is under construction.

(B) Programme for other activities (Training, FLD, OFT, Mela, and Exhibition etc.)

Name of the Programme/Scheme	Purpose of Programme	Date/ Month of Initiation	Funding Agency	Amount (Rs.)
Three Plot Demonstration on "Soil Test based Balanced Fertilizer Application including Secondary and Micro-Nutrients in Boro Paddy"	To educate farmers through first and second hand method as well as result demonstration on the effectiveness of balanced fertilizer application including Secondary and Micro-Nutrient Application	January, 2014	Fertilizer Association of India, Kolkata	The total cost of the Programme was borne by the funding agency.
Residential Training of Rural Youths on "Friends of the Coconut Trees (FOCT)"	To develop knowledge, information and skill of the trainees on different aspects of Coconut Cultivation and maintenance of the coconut trees as well.	21.08.2014 to 26.08.2014.	Coconut Development Board, West Bengal State Centre, Salt Lake City, Kolkata	**Rs. 33,000.00**
District Level Seminar on "Making Small Scale Farming Viable"	To orient the Participants on ways to make the small scale farming ecologically sustainable and economically viable	26.09.2014	IMSE, 195 Jodhpur Park, Kolkata - 700008	The total cost of the programme was borne by the funding agency.

Collaborative Training Programme on "Micro-Irrigation and Green House Technology"	To inform and develop knowledge of the Trainees on modern practices for Micro-Irrigation Systems and Green House Technologies for different Crops	16.12.2014	Precision Farming Development Centre, Agricultural and Food Engineering Department, IIT, Kharagpur; NCPAH, Ministry of Agriculture, Govt. of India and SHM, Govt. of west Bengal	The total cost was borne by the funding agency.
Training Programme on "Creation of Awareness among the Farmers and Other Stakeholders about the Provisions of PPV & FR Act – 2001"	To make the stakeholders aware about the Provisions of the PPV & FR Act – 2001	22.01.2015	Protection of Plant Varieties and Farmers' Righ's Authority, Ministry of Agriculture, Department of Agriculture and Co-operation, Govt. of India	**Rs. 80,000.00**
Animal Health Camp	To treat diseases, provide Mineral Mixtures, De-worming, provide Vitamins and requisite Medicines for Cattles	09.02.2015	ICAR-NDRI, ERS, Kalyani	The Medicines, Vitamins and Vaccines were provided by the ICAR-NDRI, ERS, Kalyani
Infertility Treatment Camp	To treat infertile Cows	09.02.2015	ICAR-NDRI, ERS, Kalyani	The requisite Medicines were provided by the ICAR-NDRI, ERS, Kalyani
Hybrid Napier (Fodder) Cutting Distribution Camp	To encourage the Farmers to cultivate High Yielding Improved Quality Fodder Crops	09.02.2015	ICAR-NDRI, ERS, Kalyani	The cuttings of Hybrid Napier were provided by the ICAR-NDRI, ERS, Kalyani
Technology Week - 2015	To expose the Practicing Farmers, Farm Women and Rural Youths to the cutting edge Agricultural and related Sectors Technology for modernization of agriculture and related sectors and enhancement of productivity for more income generation from a limited resource base	23.02.2015 to 27.02.2015	NABARD, Birbhum, West Bengal	Rs. 93,500.00

Exposure Visit of Practicing Farmers and Farm Women mainly from Scheduled Tribe Communities of Md. Bazar CD Block, Birbhum, West Bengal in the Technology Week – 2015 organized by the Rathindra KVK, Birbhum	To give the farmers an exposure about the activities of The Rathindra KVK and various Agriculture and related topics relevant for the farmers and farm women and various cutting edge technologies developed by the ICAR and demonstrated by the Rathindra KVK	24.02.2015	NABARD, Birbhum, West Bengal	The total cost of the programme was borne by the funding agency.
Exposure Visit of Practicing Farmers and Farm Women mainly from Scheduled Tribe Communities of Mayureswar – I and Mayureswar - II CD Blocks, Birbhum, West Bengal in the Technology Week – 2015 organized by the Rathindra KVK, Birbhum	To give the farmers an exposure about the activities of The Rathindra KVK and various Agriculture and related topics relevant for the farmers and farm women and various cutting edge technologies developed by the ICAR and demonstrated by the Rathindra KVK	26.02.2015	NABARD, Birbhum, West Bengal	The total cost of the programme was borne by the funding agency.

6. PERFORMANCE OF INFRASTRUCTURE IN KVK

6.1 Performance of demonstration units (other than instructional farm): Nil

Sl. No.	Name of demo Unit	Year of estt.	Area (Sq. mt)	Details of production			Amount (Rs.)		Remarks
				Variety/breed	Produce	Qty.	Cost of inputs	Gross income	
1.									
2.									
3.									
4.									
5.									
6.									
7.									
	Total								

6.2 Performance of instructional farm (Crops)

Name of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty.(q)	Cost of inputs	Gross income	
Black	10.09.2014.	27.11.2014.	0.03	WBU - 108	Pulse	0.25	Rs. 600.00	-	Kept in KVK

Gram					Seeds				Go-down
Lentil	18.11.2014.	21.02.2015.	0.05	WBL - 58	Pulse Seeds	0.45	Rs. 350.00	-	Kept in KVK go-down
Green Gram	15.03.2014.	27.05.2014.	0.02	PDM – 84-139	Pulse Seeds	0.20	Rs. 500.00	-	Kept in KVK Go-down
Mustard	07.11.2014.	15.02.2015.	0.17	B - 9	Oil Seeds	1.50	Rs. 1200.00	-	Kept in KVK go-down
	09.11.2014.	04.03.2015.	0.07	Pusa Mahek	Oil Seeds	0.52	Rs. 580.00	-	Kept in KVK go-down
	08.11.2014.	25.02.2015.	0.13	Pusa Bahar	Oil Seeds	0.92	Rs. 670.00	-	Kept in KVK go-down
Sesame	03.03.2014.	07.06.2014.	0.13	Sabriti	Oil Seeds	0.70	Rs. 700.00	-	Totally exhausted
Paddy	02.08.2014 to 15.08.2014.	24.11.2014 to 04.12.2014	0.20	MTU – 7029, MTU – 1010, IET – 4786, PNR – 381, Pusa – 44 and Heera	Cereal Seeds	6.0	Rs. 12000.00	-	Kept in KVK go-down
Wheat	29.12.2014.	24.03.2015.	0.06	HD - 2824	Cereal Seeds	1.5	Rs. 3500.00	-	Kept in KVK go-down

6.3 Performance of Production Units (bio-agents / bio-pesticides/ bio fertilizers etc.)

Sl. No.	Name of the Product	Qty (Kg)	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	
1.	*Azolla*	300.00	Rs. 300.00	-	80 kgs. of *Azolla* was supplied to 20 numbers of the farmers and rest was kept in the KVK ponds.
2.	Vermi-Compost	180.00	Rs. 400.00	-	55 kg.s of Vermin-Compost was supplied to 12 numbers of the farmers and the rest amount was kept in the KVK.
3.	Earth-worm	1400 Numbers	-	Rs. 700.00	1400 Numbers of the Earth-worm was supplied to 05 numbers of the farmers.

6.4 Performance of instructional farm (livestock and fisheries production):

Sl. No	Name of the animal / bird / aquatics	Details of production			Amount (Rs.)		Remarks
		Breed	Type of Produce	Qty.	Cost of inputs	Gross income	
1.	**Poultry**	**Broiler**	**Bird**	**200 No.**	**26,000.00**	**27,000.00**	**Net Profit Rs. 1,000.00**
2.	**IMC and Exotic Carps**		**Table Fish**	**2.0 qt.**	**8,000.00**	**10,000.00**	**Net Profit Rs. 2,000.00**

6.5 Utilization of hostel facilities

Accommodation available (No. of beds) 27

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
April, 2014	09	08	**N. A.**
May, 2014	07	14	**N. A.**
June, 2014	01	01	**N. A.**
July, 2014	74	1079 (1 Day + 30 Days + 11 Days)	**N.A.**
August, 2014	76	761 (1 Day + 6 Days + 4 Days + 19 Days)	**N. A.**
September, 2014	31	525 (9 Days + 19 Days)	**N.A.**
October, 2014	01	02 (02 Days)	**N.A.**
November, 2014	23	23 (13 Days)	**N.A.**
December, 2014	31	31 (20 Days)	**N.A.**
January, 2015	26	26 (12 Days)	**N. A.**
February, 2015	39	99 (16 Days + 07 Days)	**N.A.**
March, 2015	18	18 (06 Days)	**N. A.**
Total :	**336**	**2587 (176 Days)**	**N. A.**

(For whole of the year)

6.6 Utilization of staff quarters

Whether staff quarters has been completed: Not yet started

No. of staff quarters:

Date of completion:

Occupancy details:

Months	Q I	QII	Q III	Q IV	Q V	Q VI

7. FINANCIAL PERFORMANCE

7.1 Details of KVK Bank accounts

Bank account	Name of the bank	Location	Account Number
Visva-Bharati University A/c. Krishi Vigyan Kendra A/c. No. 10598447180	**State Bank of India**	**Santiniketan, P. O. – Santiniketan, Dist. – Birbhum, Pin. – 731235, West Bengal.**	**10598447180**

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

Item	Released by ICAR		Expenditure		Unspent balance as on 1st. April, 2015
	Kharif	Rabi	Kharif	Rabi	
	Nil	Nil	Nil	Nil	Rs. 6,320.56
	Nil	Nil	Nil	Nil	
	Nil	Nil	Nil	Nil	
	Nil	Nil	Nil	Nil	

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

Item	Released by ICAR		Expenditure		Unspent balance as on 1st April 2015
	Kharif	Rabi	Kharif	Rabi	
	Nil	Nil	Nil	Nil	Rs. 13,296.58
	Nil	Nil	Nil	Nil	

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

Item	Released by ICAR		Expenditure		Unspent balance as on 1st April 2015
	Kharif	Rabi	Kharif	Rabi	
	Nil	Nil	Nil	Nil	Nil
TOTAL	Nil	Nil	Nil	Nil	Nil

7.5 Utilization of KVK funds during the year 2014 -15 (un audited) Rs. In Lakhs

Sl. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	Pay & Allowances	81.00	81.00	92.224
2	Traveling allowances	00.27	00.27	00.265
3	HRD	00.09	00.09	00.087
3	Contingencies	07.19	-	-
A	Stationery, Telephone, Postage and Other	02.86	02.86	02.86
B	POL, repair of vehicle, truck & equipt.			
C	Training of farmers	02.60	02.60	02.598
D	Training material			
E	Training of extension functionaries			
F	Training of rural youth			
G	Front Line Demonstration	00.95	00.95	00.954
H	On Farm Testing	00.43	00.43	00.43
I	Tribal Sub Plan	00.50	00.50	00.50
4	Maintenance of Building	00.35	00.35	00.346
TOTAL (A)		89.05	89.05	100.264
B. Non-Recurring Contingencies				
1	Works	Nil	Nil	Nil
2	Vehicle	Nil	Nil	Nil
3	Equipment, Furniture & Furnishing	Nil	Nil	Nil
4	Soil Water Testing Lab	Nil	Nil	Nil
5	Library	Nil	Nil	Nil
TOTAL (B)		Nil	Nil	Nil
C. REVOLVING FUND		Nil	Nil	Nil
GRAND TOTAL (A+B+C)		89.05	89.05	100.264

***Due from Council under Pay & Allowances is Rs. 11.214 lakhs during 2014-15.**

7.6. Status of revolving fund (Rs. in lakh) for last three years

Year	Opening balance as on 1st April	Income during the year	Expenditure during the year	Net balance in hand as on 1st April of each year (Kind + cash)
2012-13	**2.17**	**0.20**	**0.18**	**2.19**
2013-14	**2.19**	**0.22**	**0.08**	**2.33**
2014-15	**2.33**	**0.654**	**0.655**	**2.329**

7.7.(i) Number of SHGs formed by KVKs (ii) association of KVKs with SHGs formed by other organizations indicating the area of SHG activities:- 02 (Two) SHGs were formed by the Rathindra KVK mainly for women economic empowerment through establishing rural handicrafts enterprises and "Kantha Stitch" works.

7.8 Details of marketing channels created for the SHGs: A bi-weekly KVK Haat ("Kisan Bazar") is being organized by the Rathindra KVK in its premises for opening up a marketing avenue to the producers of Self Help Groups starting from 31.03.2015.

7.9 Special programme on Food and Nutrition: Nil

7.10 Joint activity carried out with line departments and ATMA

Name of Activity	Season	With Line Department	With ATMA	Both
Farmer to Farmer Technology Dissemination on Performance of SRI in Boro Paddy	Pre-Kharif Season	-	With ATMA	-
05 (Five) Numbers of Animal Health Camps organized by the Rathindra KVK at different villages of the District of Birbhum	Kharif Season	With Line Department	-	-
Training of Extension Functionaries of Suri – I Block, Birbhum District on Diversification of Horticultural Crops	Winter Season	With Line Department	-	-
Training of Extension Functionaries of Suri – I Block, Birbhum District on Diversification of Horticultural Crops	Winter Season	With Line Department	-	-
Trainig of Practicing Farmers on Crop Diversification in Birbhum District	Winter Season	-	With ATMA	-
Training of Practicing Farmers on Poultry Farming	Winter Season	-	With ATMA	-
Resource Person in Bringing Green Revolution in Eastern India (BGRIEI) Training Programme organized by the Assistant Director of Agriculture, Govt. of West Bengal, Suri – I, Birbhum	Winter Season	With Line Department	-	-
Resource Person in Pulse Crop Training Programme organized by the Assistant Director of Agriculture, Govt. of West Bengal, Nanoor, Birbhum	Winter Season	With Line Department	-	-
Resource Person in Field Crop Training Programme in the Krishi Mela organized by the Assistant Director of Agriculture, Govt. of West Bengal, Md. Bazar, Birbhum	Winter Season	With Line Department	-	-

Resource Person in National Mission on Oilseeds and Pulses Training Programme organized by the Assistant Director of Agriculture, Govt. of West Bengal, Bolpur-Sriniketan, Birbhum	Winter Season	With Line Department	-	-
Farmers-Scientists Interaction on IPM in Summer Crop Cultivation for Practicing Farmers of Birbhum District	Winter Season	-	With ATMA	-
Farmers-Scientists Interaction on Fish based Integrated Farming System for Practicing Farmers of Birbhum District	Winter Season	-	With ATMA	-
Training Programme on Mushroom Cultivation for Farmers of Bolpur Sub-Division, Birbhum District	Winter Season	With Line Department	-	-
06 (Six) Numbers of Animal Health Camps organized by the Rathindra KVK at different Villages of the District of Birbhum	Winter Season	With Line Department	-	-
Resource Person in the FLD Programme on Green Gram organized by the Assistant Director of Agriculture, Govt. of West Bengal, Nanoor, Birbhum	Summer Season	With Line Department	-	-
Resource Person in the FLD Programme on Sesame organized by the Assistant Director of Agriculture, Govt. of West Bengal, Nanoor, Birbhum	Summer Season	With Line Department	-	-

8 Other information

8.1. Prevalent diseases in Livestock/Crops

Name of the disease	Crop/animal	Date of outbreak	Number of death/ % crop loss	Number of animals vaccinated

8.2. Nehru Yuva Kendra (NYK) Training: Not Applicable

Title of the training programme	Period		No. of the participant		Amount of Fund Received (Rs)
	From	To	M	F	

8.3. PPV & FR Sensitization Training Programme:

Date of organizing the programme	Resource Person	No. of participants	Registration (crop wise)	
			Name of crop	No. of registration
22.01.2015.	i. **Dr. Amitava Paul,** Associate Professor and Former Head of the Dept. of CIhAB, Palli Siksha Bhavana, Visva-Bharati	**100**	**1. Paddy - Var. Kalamkathi** **2. *Ekangi* -**	**In the Process**

	ii. **Dr. Pratik Satya** Senior Scientist, Crop Improvement Division, Central Research Institute for Jute & Allied Fibres (ICAR), Barrackpore, Kolkata 700120, West Bengal iii. **Prof. Dilip Kumar De,** Dean, College of Agriculture, Burdwan and Former Head of the Dept. of Genetics and Plant Breeding, Bidhan Chandra Krishi Viswavidyalaya iv. **Dr. Subhra Mukherjee,** Associate Professor, Department of Genetics and Plant Breeding, Bidhan Chandra Krishi Viswavidyalaya v. **Prof. P. C. Kole,** Dept. of CIHAB, Palli Siksha Bhavana, Visva-Bharati	.	**Var. Deshi** **3. Black Mustard - Var. Deshi** **4. Black Gram - Var. Kali – 50** **5. Turmeric - Var. Deshi** **6. Yam - Var. Deshi** **7. Onion - Var. Kanthali** **8. Paddy - Var. Laghushal** **9. Elephant Foot Yam – Var. Deshi (Senkapur)** **10. Arum - Var. Gobinda** **12. Banana - Var. Deshi**	

8.4. SMS PORTAL [List of One thousand one hundred farmers was submitted and Registration of of the Rathindra KVK with www.farmers.gov.in was authorized from the designated Authorities.]

Date of start of functioning of SMS portal: 07.04.2014

No. of messages	No. of calls	No. of farmers covered	Types of messages (No.)					
			Crop	Livestock	Weather	Marketing	Awareness	Other
291	139807	1100	116	50	03	28	81	13

8.5 Observation of Swachh Bharat Programme

Date of Observation	Activities undertaken
25.09.2014.	All the staff of the Rathindra KVK has taken a whole hearted effort to clean the Office Building Complex of the KVK through cleaning the dusts, cob webs, weeding out the weeds etc. through manual work by the staff members of the Rathindra KVK.
26.09.2014.	All the staff of the Rathindra KVK has tried their level best to clean the dust and debris of the Trainees' Hostel as well as the grown weeds in and around the Trainees' Hostel Campus were also destroyed through the manual hand weeding.
27.09.2014	The Instructional Farm of the Rathindra KVK like Orchard, Crop Cafeteria, Nursery etc. and Demonstration Units like the Fish Breeding Unit, the Poultry and Duckery Units etc.

	were thoroughly cleaned, the weeds were manually up-rooted and the farm wastages and the crop residues were used as input in the Vermi-Composting Unit of the Rathindra KVK. In this Operational procedure, the Threshing Floor of the Instructional Farm and the Medicinal Plants Garden of the Rathindra KVK was thoroughly cleaned and the Farm debris was utilized as input material for the Vermi-Composting Unit of the Rathindra KVK.
28.09.2014	The Rathindra KVK has taken initiatives to clean the Sriniketan Campus of the Visva-Bharati University, Sriniketan, Birbhum giving a need based, focused on most derelict, abandoned and garbage-dumped areas of Sriniketan Campus involving the manual labour force of Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) of the local Ruppur Gram Panchayat (GP) of Bolpur-Sriniketan Community Development (CD) Block as well as the Panchayat Samity of the District of Birbhum.
29.09.2014	The Rathindra KVK has organized an Awareness Camp for the practicing farmers, farm women and rural youths of Birbhum district on the *Theme "Cleanliness is next to Godliness"* – the famous slogan coined by Mahatma Gandhi in the pre-independence era of Indian polity. A total of 30 (thirty) numbers of various sections of the farming society were present in the day long Awareness Camp Programme organized by the Rathindra KVK in the Seminar Hall of the Rarthindra KVK. Of the total 30 (thirty) numbers of participants present in that Awareness Camp, 06 (Six) numbers of persons were from the Scheduled Caste Communities. The issue of proper utilization of the crop residues as well as the issue of farm hygiene was given extreme importance by all the speakers of this Awareness Camp. A lively discussion through a panel of the lectures given by the scientists of the Rathindra KVK followed by a long Question-Answer Session was held in this Awareness Camp.
30.09.2014	The Rathindra KVK has organized Two (02) numbers of the Awareness Camps at the Bishnubati Village, P. O. – Sattore, Police Station – Parui, Community Development (CD) Block – Bolpur-Sriniketan, Pin. – 731236, Dist. – Birbhum. One Awareness Camp was organized at the Integrated Children Development Scheme (ICDS) Centre or *Anganwadi* Centre of the Bishnubati Village for *women Self Help Group (SHG)* members mainly from the Scheduled Caste and Scheduled Tribe Community. In the Awareness Camps organized at the Bishnubati Village *Anganwadi* Centre, 31 (thirty one) numbers of the participant farm women, members of different women led *Self Help Groups (SHGs)* attended the Awareness Camp and among the participants, 12 (twelve) numbers of participants were from the Scheduled Caste

	community and another 19 (nineteen) numbers of participants were from the Scheduled Tribe community. The other Awareness Camp organized at the *Bishnubati Farmers' Club*, 69 (Sixty Nine) numbers of the participants were present out of which 31(thirty one) numbers of participants were from the Scheduled Caste community and another 15 (fifteen) numbers of participants were from the Scheduled Tribe community. In both these Awareness Camps, general importance of the cleanliness in the day to day life as well as the importance of the call of the Father of the Nation, Mahatma Gandhi as well as the point of view expressed by the present Union Government headed by the Honorable Prime Minister, Sri Narendra Bhai Modi were discussed in details with special emphasis on farm cleanliness practices by the scientists of the Rathindra KVK. The conceptual discussion was followed by a lively question-answer session which was succeeded by a series of concrete actions such as cleaning of the *Farmers' Club building,* cleaning of the *Anganwadi* Centre, weeding out the weeds grown in and around these campuses were spontaneously taken up by the participants present in the both Awareness Camps.
01.10.2014	Rathindra KVK has organized a Mobile Publicity Programme regarding the "*SWACHH BHARAT CAMPAIGN"* through utilizing the Office Jeep of the Rathindra KVK. The Jeep went to various Villages of the District of Birbhum, i.e. the mandate District of the Rathindra KVK and spreaded the message about the need and importance of the cleanliness in the day to day life as well as in all the Agricultural and related activities. This programme of the Rathindra KVK invoked a great response among the Villagers in all the places where this Mobile Jeep went. One of the villages was Sri Chandrapur, P. O. – Sattore, Police Station – Parui, Community Development (CD) Block–Bolpur-Sriniketan, Pin. – 731236, Dist. – Birbhum.
02.10.2014	Rathindra KVK has organized the "*SWACHHTA SHAPATH"* (The Cleanliness Pledge) programme at the Office. All the Staff of the Rathindra KVK has taken the Oath to keep their environment neat and clean and making cleanliness one of the mottos of their life. In this programme, the Oath was ceremonially administered by the Programme Co-ordinator of the Rathindra KVK. Also in this programme the life and ideals of Mahatma Gandhi was discussed threadbare, at the same time, the programmes and Schemes related with cleanliness and hygiene being launched by the Govt. of India under the able Prime Ministership of Sri Narendra Modi to commensurate the 150th birth anniversary of

	Mahatma Gandhi has been discussed in details. The issue of proper utilization of the crop residues of the Demonstration Units of the Rathindra KVK was discussed among the Scientific Staff of this KVK in details.
01.02.2015 to 02.02.2015	All the staff of the Rathindra KVK has taken a whole hearted effort to clean the Office Building Complex of the KVK through cleaning the dusts, cob webs, weeding out the weeds etc. through manual work by the staff members of the Rathindra KVK.
05.02.2015 to 07.02.2015	All the staff of the Rathindra KVK has tried their level best to clean the dust and debris of the Trainees' Hostel as well as the grown weeds in and around the Trainees' Hostel Campus were also destroyed through the manual hand weeding.
09.02.2015 to 10.02.2015.	Rathindra KVK has organized a Mobile Publicity Programme regarding the "*SWACHH BHARAT CAMPAIGN"* through utilizing the Office Jeep of the Rathindra KVK. The Jeep went to various Villages of the District of Birbhum, i.e. the mandate District of the Rathindra KVK and spreaded the message about the need and importance of the cleanliness in the day to day life as well as in all the Agricultural and related activities. This programme of the Rathindra KVK invoked a great response among the Villagers in all the places where this Mobile Jeep went.
10.03.2015	All the staff of the Rathindra KVK has taken a whole hearted effort to clean the Office Building Complex of the KVK through cleaning the dusts, cob webs, weeding out the weeds etc. through manual work by the staff members of the Rathindra KVK.

8.6 Observation of National Science day

Date of Observation	Activities undertaken

8. 7.Programme with Seema Suraksha Bal (BSF) Not Applicable

Title of Programme	Date	No. of participants

8.8 Agriculture Knowledge in rural school:

Name and address of school	Date of visit to school	Areas covered	Teaching aids used
Surul Junior High School Vill. – Surul, P. O. – Sriniketan, Dist. - Birbhum, Pin. – 731236, West Bengal.	**28.02.2015.**	**Elementary knowledge about Agriculture and Allied Sectors; Role of Agriculture and allied sectors in everyday lives.**	**Laptop Computer, LCD Projector, Black Board, Chalk, Specimens**
Binuria Sumitra Girls School Vill. – Binuria, P. O. – Binuria, Dist. - Birbhum, Pin. – 731224, West Bengal.	**03.03.2015.**	**Elementary knowledge about Agriculture and Allied Sectors; Role of Agriculture and allied**	**Laptop Computer, LCD Projector, Black Board, Chalk, Specimens**

		sectors in everyday lives; **Role of the Rathindra KVK in Agricultural and rural development in the District of Birbhum;** **Scope of Women empowerment of the girl students through future involvement in Rathindra KVK activities as well as broad agricultural and allied sector activities.**	

N. B. The programme is going on.

8.9 Report on Citizens' Client Charter (attending the requests seeking guidance on agricultural Technology and technology products)

Sl. No.	Services/ Transaction	Process	Service Standard	No. of such services attended by KVKs and ATICs during the year	No. of such services pending with KVK/ATIC beyond 30 days
1.	Guidance on Agricultural technology and technology products	Personal contact by the Service Sectors with the responsible person of KVK/ATIC	30 Days*	**391**	**Nil**

* The request of the service sector needs to be attended / disposed before 30 working days.

8.10 Community Radio Station

Date of establishment:

Amount of fund received yearwise:

Source of fund:

Achievements:

Sr. no	Community Radio Stations (CRS)	No of programmes in the year	Total broadcast hrs in a month	Please specify details of the broadcasts

Sr. no	Community Radio Stations (CRS)	No of programmes in the year	Total broadcast hrs in a month	Please specify details of the broadcasts
A.	Agricultural broadcasts • Talks/interviews/discussions with experts, PG students/ and farmers on Agricultural technologies • Agroclimatic conditions, weather and marketing advisory • Phone–in programme of interface with experts • Phone-in programme with interface of progressive/innovative farmers • Success stories of progressive farmers • Success stories in FLD/OFT/ Trainings /Extension activities • Women in agriculture programme • Discussions on current issues in agriculture and allied sectors. • KVK happenings • Agricultural University professors. • Any other(please specify)			
B.	Community development broadcasts Please specify the programmes like rural development, educational, health, environment, public service broadcasts, sports etc.			

8.11 No. of Progressive/Innovative/Lead farmer identified (category wise)
Progressive Farmers – 151; Innovative Farmers – 16; Lead Farmers - 23

8 .12 Utilization of HRD Fund (Rs 0.15 Lakh provided to KVKs)

Training programme/ Seminar/ Symposia/ Workshop etc attended	Duration	Name of the participants	Designation	Organizer of the training Programme	Amount spent for the purpose (Rs.)
Training Programme on "Organic Farming and Certification"	17.11.2014 to 19.09.2014 (03 Days)	Sri Palash Ankure	Programme Assistant (Farm Manager)	State Agricultural Management and Extension Training Institute (SAMETI) and Agricultural Training Centre (ATC), Ramakrishna Mission Aashrama, Narendrapur, Kolkata – 700103.	879.00
Programme on "Sustaining Soil Health through Balanced Fertilization – Need for	09.01.2015	Dr. Subrata Mandal	Subject Matter Specialist	Fertilizer Association of India, 3, Lake Road, Kolkata – 700029.	958.00

Reforms in Fertilizer Sector"			(Agronomy)		
National Conference on Indigenous Innovation and Foreign Technology Transfer in Fertilizer Industry: Needs, Constraints and Desired Simplification	17.01.2015 (01 Day)	Dr. Subrata Mandal	Subject Matter Specialist (Agronomy)	Society for Fertilizers and Environment and Raman Centre for Applied and Interdisciplinary Sciences in collaboration with ICAR-Central Research Institute for Jute and Allied Fibres (CRIJAF) and FICCI (-India Innovation Growth Programme) at the ICAR-CRIJAF, Nilgunj, Barrackpore, Kolkata, West Bengal – 700120	3,038.00
National Conference on Indigenous Innovation and Foreign Technology Transfer in Fertilizer Industry: Needs, Constraints and Desired Simplification	17.01.2015 (01 Day)	Dr. Prabuddha Ray	Subject Matter Specialist (Agricultural Extension)	Society for Fertilizers and Environment and Raman Centre for Applied and Interdisciplinary Sciences in collaboration with ICAR-Central Research Institute for Jute and Allied Fibres (CRIJAF) and FICCI (-India Innovation Growth Programme) at the ICAR-CRIJAF, Nilgunj, Barrackpore, Kolkata, West Bengal – 700120	2,720.00
10th. Al[1] India People's Technology Congress	06.02.2015 to 07.02.2015 (02 Days)	Dr. Prabuddha Ray	Subject Matter Specialist (Agricultural Extension)	Forum of Scientists, Engineers and Technologists (FOSET) [15 N Nelli Sengupta Sarani, New CMC Building (5th flo[or]), Kolkata - 700 087.	Rs. 975.00
Grand Total					Rs. 8,570.00

8.13 Revenue generation:

SL. No.	Name of Head	Income (Rs.)	Sponsoring agency
1.	Revolving Fund (Sale of Paddy Seeds, Wheat Seeds, Mustard Seeds, Live Earth-Worms, Vermin-Compost produced at the Instructional Farm)	39,000.00	ICAR
2.	Revolving Fund (Sale of Mosambi Fruits, Capsicum Seedlings, Broccoli Seedlings, Elephant Foot Yam Seeds produced at the Instructional Farm)	21,850.00	ICAR
3.	Revolving Fund (Sale of Broiler Poultry Birds produced at the Instructional Farm)	4,467.00	ICAR
4.	Trainees' Hostel Rent	55,200.00	ICAR
5.	Seminar Hall Rent	1,500.00	ICAR
Total		**1,22,017.00**	

8.14 Resource Generation:

SL. No.	Name of the programme	Purpose of the programme	Sources of fund	Amount (Rs. Lakhs)	Infrastructure created
01.	Training Programme on Creation of Awareness among Farmers and Other Stakeholders about the Provisions of Protection of Plant Varieties and Farmers' Rights Act – 2001	To sensitize the Farmers and make them aware about the objectives and opportunities of the Protection of Plant Varieties and Farmers' Rights Act – 2001	Protection of Plant Varieties and Farmers' Rights Authority, Ministry of Agriculture, Govt. of India	**00.80**	-
02.	Skill Development Training Programme of Rural Youths on Friends of Coconut Trees (FoCT) Programme	To provide an alternative source of rural self-emloyment to the rural youths through a residential skill development training programme on various aspects of commercial cultivation and management practices for Coconut Trees.	Coconut Development Board, Minstry of Agriculture, Govt. of India	**00.33**	-
03.	Technology Week – 2015	To expose the Practicing Farmers, Farm Women, Rural Youths and Extension Functionaries on cutting edge Agricultural and related field technologies.	NABARD, Birbhum, West Bengal	**00.935**	-
04.	Technology Week – 2015	To expose the Practicing Farmers, Farm Women, Rural Youths and Extension Functionaries on cutting edge Agricultural and related field technologies.	Stall Rent at the Technology Week – 2015 from International Health Care Ltd., Tata Chemicals, Rallis India Ltd. and GMS Agritech Pvt. Ltd.	**00.22**	-
05.	Technology Week – 2015	To expose the Practicing Farmers, Farm Women, Rural Youths and Extension Functionaries on cutting edge Agricultural and related field technologies.	Administration Charges for conducting Exposure Visits of Practicing Farmers and Farm Women from Amgoria Srijani Siksha Niketan and Najrul Sukanta Farmers' Club, Mayureswar, Birbhum	**00.03**	-
Total				**02.315**	

8.15 Performance of Automatic Weather Station in KVK

Date of establishment	Source of funding i.e. IMD/ICAR/Others (pl. specify)	Present status of functioning

8.16. IPNI Trail (Applicable for KVKs identified under IPNI trial)

- **I Name of Crop**
- **II No. of farmers involved**
- **III Area (ha.)**
- **IV Date of sowing**
- **V Crop Season**
- **VI Result of trial with photographs however detailed results/observation should be sent as per performance after crop harvest**
- **VII Amount Spent**

8.17. Achievement under TSP Project

Name of the village adopted under TSP	Block	Population of the village			ST Population of the village			Percentage of ST population to total population
		M	F	T	M	F	T	
Dhanyasara Adivasi Para	Bolpur-Sriniketan	577	521	1098	245	219	464	42.26
Kankutia	Bolpur-Sriniketan	810	772	1582	291	264	555	35.08
Halsidanga	Bolpur-Sriniketan	821	801	1622	219	203	422	26.02
Ballabhpur	Bolpur-Sriniketan	885	862	1747	380	373	753	43.10
Mahuli	Bolpur-Sriniketan	209	204	413	107	99	206	49.88
Bisnubati	Bolpur-Sriniketan	303	297	600	149	134	283	47.17
Asdullapur	Bolpur-Sriniketan	236	214	450	235	214	449	99.78
Durgapur	Bolpur-Sriniketan	345	304	649	196	171	367	56.55
Bautizole	Bolpur-Sriniketan	295	275	570	156	124	280	49.12

Asset created under TSP: 33 (Thirty three) Numbers of 16 Litres Capacity Knapsack Sprayers worth Rs. 29,700.00 (Rupees. Twenty nine thousands seven hundreds) only distributed among 33 Practising Farmers and Farm Women of the Scheduled Tribe Community on 31.03.2015.

Fund received under TSP in 2014-15: 00.50 lakh

8.18 PROGRESS REPORT OF NICRA KVK (Technology Demonstration component) 2014-15
(Applicable for KVKs identified under NICRA)
Natural Resource Management

Name of intervention undertaken	Numbers under taken	No of units	Area (ha)	No of farmers covered / benefitted	Remarks

Crop Management

Name of intervention undertaken	Area (ha)	No of farmers covered / benefitted	Remarks

Livestock and fisheries

Name of intervention undertaken	Number of animal covered	Number of units	Area (ha)	No of farmers covered / benefitted	Remarks

Institutional interventions

Name of intervention undertaken	No of units	Area (ha)	No of farmers covered / benefitted	Remarks

Capacity building

Thematic area	No. of Courses	No. of beneficiaries		
		Males	Females	Total

Extension activities

Thematic area	No. of activities	No. of beneficiaries		
		Males	Females	Total

Detailed report should be provided in the circulated Performa

8.19. National Initiative on Fodder Technology Demonstration (NIFTD)

(Applicable for KVKs identified under NIFTD)

Name of the fodder crop	Date of sowing	Area (ha)	No. of farmers involved	Demonstration Yield (q/ha)			Check Yield			% increase
				H	L	A	H	L	A	

Economic of Demonstration

Name of the fodder crop	Demonstration Cost/Rs/ha			Check Cost (Rs/ha)		
	Gross cost	Gross return	BC ratio	Gross cost	Gross return	BC ratio

8.20. A. Awards/Recognition received by the KVK

Sl. No.	Name of the Award	Year	Conferring Authority	Amount	Purpose

B. Awards received by Farmers from the KVK district

Sl. No.	Name of the Award	Name of the Farmer	Year	Conferring Authority	Amount	Purpose
01.	Sequel to the listening of "Kishanvani Programme"	Sri Debesh Mitra	2008	Director General of All India Radio, Prasar Bharati, Broadcasting Corporation of India		For disseminating modern agricultural techniques and encouraging fellow farmers as a sequel to the listening of "Kishanvani Programme"
02.	Sequel to the listening of "Kishanvani Programme"	Sri Jogen Ghosh	2008	Director General of All India Radio, Prasar Bharati, Broadcasting Corporation of India		For disseminating modern agricultural techniques and encouraging fellow farmers as a sequel to the listening of "Kishanvani Programme"
03.	Sequel to the listening of "Kishanvani Programme"	Sri Mahadeb Ghosh	2008	Director General of All India Radio, Prasar Bharati, Broadcasting Corporation of India		For disseminating modern agricultural techniques and encouraging fellow farmers as a sequel to the listening of "Kishanvani Programme"
04.	"Certificate of Appreciation" for contribution and participation in the National Farm Innovators' Meet – 2010 held at the JSS Krishi Vigyan Kendra, Suttur, Mysore, Karnataka.	Sri Sunil Das	2010	Dr. S. Ayappan, Honourable Director General, ICAR		Sri Sunil Das's effort was lauded as an encouragement for reshaping the farmer oriented farm technologies across the country.
05.	A memento from the Indian Council of Agricultural Research (ICAR)	Sri Sunil Das	2010	The Honourable President of India		Sri Sunil Das, the innovative farmer, obtained a memento from the Indian Council of Agricultural Research (ICAR) for his innovative approach on Glass Jar Hatchery.

06.	First Prize in the Krishi Mela organized by the Bolpur – Sriniketan Community Development Block Office, Govt. of West Bengal in 2010 for Giant Prawn Cultivation	SUHRIT, a Self Help Group consisting of mainly Schedule Tribe Community members of Village:- Kankutia, P. O. – Raipur, Dist. – Birbhum	2010	The Bolpur – Sriniketan Community Development Block Officer, Govt. of West Bengal in 2010 for Giant Prawn Cultivation		Popularization of Giant Prawn Cultivation in a commercial basis.
07.	The "Mahindra Samriddhi Agri Award - 2014–	Sri Abhishek Mondal	2014	Sri Anand Mahindra		To popularize Mechanization in Potato Planting
08.	KRISHAK RATNA	Sri Sristidhar Mete	2014 - 15	Assistant Director of Agriculture, Dept. of Agriculture, Govt. of West Bengal, Bolpur-Sriniketan Community Development Block, Birbhum, West Bengal		For adopting and popularizing modern agricultural techniques and encouraging fellow farmers to adopt and diseeminate modern agro-technologies.
09.	KRISHAK RATNA	Sri Jamal Khan	2014 - 15	Assistant Director of Agriculture, Dept. of Agriculture, Govt. of West Bengal, Bolpur-Sriniketan Community Development Block, Birbhum, West Bengal		For adopting and popularizing modern agricultural techniques and encouraging fellow farmers to adopt and diseeminate modern agro-technologies.
10.	KRISHAK RATNA	Sri Muktipada Mondal	2014 - 15	Assistant Director of Agriculture, Dept. of Agriculture, Govt. of West Bengal, Bolpur-Sriniketan Community Development Block, Birbhum, West Bengal		For adopting and popularizing modern agricultural techniques and encouraging fellow farmers to adopt and diseeminate modern agro-technologies.
11.	KRISHAK RATNA	Sri Mangal Mahato	2014 - 15	Assistant Director of Agriculture, Dept. of Agriculture, Govt. of West Bengal, Bolpur-Sriniketan Community Development Block, Birbhum, West Bengal		For adopting and popularizing modern agricultural techniques and encouraging fellow farmers to adopt and diseeminate modern agro-technologies.
12.	KRISHAK RATNA	Sri Hiranmoy Mondal	2014 - 15	Assistant Director of Agriculture, Dept. of Agriculture, Govt. of West Bengal, Bolpur-		For adopting and popularizing modern agricultural techniques and encouraging fellow farmers to adopt and diseeminate modern agro-technologies.

				Sriniketan Community Development Block, Birbhum, West Bengal		
13.	KRISHAK RATNA	Sri Samir Saha	2014 - 15	Assistant Director of Agriculture, Dept. of Agriculture, Govt. of West Bengal, Bolpur-Sriniketan Community Development Block, Birbhum, West Bengal		For adopting and popularizing modern agricultural techniques and encouraging fellow farmers to adopt and diseeminate modern agro-technologies.
14.	KRISHAK RATNA	Sri Nirmal Ghosh	2014 - 15	Assistant Director of Agriculture, Dept. of Agriculture, Govt. of West Bengal, Bolpur-Sriniketan Community Development Block, Birbhum, West Bengal		For adopting and popularizing modern agricultural techniques and encouraging fellow farmers to adopt and diseeminate modern agro-technologies.
15.	KRISHAK RATNA	Sri Seikh Kamaluddin	2014 - 15	Assistant Director of Agriculture, Dept. of Agriculture, Govt. of West Bengal, Bolpur-Sriniketan Community Development Block, Birbhum, West Bengal		For adopting and popularizing modern agricultural techniques and encouraging fellow farmers to adopt and diseeminate modern agro-technologies.
16.	KRISHAK RATNA	Sri Asish Sue	2014 - 15	Assistant Director of Agriculture, Dept. of Agriculture, Govt. of West Bengal, Bolpur-Sriniketan Community Development Block, Birbhum, West Bengal		For adopting and popularizing modern agricultural techniques and encouraging fellow farmers to adopt and diseeminate modern agro-technologies.
17.	KRISHAK RATNA	Sri Ramkrishna Laha	2014 - 15	Assistant Director of Agriculture, Dept. of Agriculture, Govt. of West Bengal, Bolpur-Sriniketan Community Development Block, Birbhum, West Bengal		For adopting and popularizing modern agricultural techniques and encouraging fellow farmers to adopt and diseeminate modern agro-technologies.
18.	KRISHAK RATNA	Sri Sanatan Masat	2014 - 15	Assistant Director of Agriculture, Dept. of		For adopting and popularizing modern agricultural techniques and

				Agriculture, Govt. of West Bengal, Nanoor Community Development Block, Birbhum, West Bengal		encouraging fellow farmers to adopt and diseeminate modern agro-technologies.

Annexure – I

Details of Training Programmes

Date	Clientele	Title of the Training Programme	Duration	Venue ON/OFF	Number of participants			Number of SC/ST					
									SC			ST	
					M	F	T	M	F	T	M	F	T
AGRONOMY													
07.04.2014 to 08.04.2014.	PF	Collection of Soil Sample	2	OFF	53	0	53	29	0	29	01	0	01
19.04.2014	PF	Culture and Use of *Dhaincha* and *Azolla*	1	OFF	20	0	20	20	0	20	00	0	00
28.04.2014 to 29.04.2014	PF	Preparation of Soil Sample for Testing and Interpretation	2	OFF	53	0	53	29	0	29	01	0	01
06.05.2014.	PF	Sowing and Phosphate Management in *Dhaincha*	1	ON	30	0	30	14	0	14	1	0	1
16.06.2014 to 17.06.2014	PF	Rice Seed Production Technologies in Kharif Season (Phase – I)	2	ON	36	0	36	09	0	09	16	0	16
04.07.2014	PF	Improved Agronomic Practices for *Ekangi* Cultivation	1	ON	09	0	09	00	0	00	01	0	01
08.08.2014	EF	Integrated Crop Management Practices as a Part of the Contingent Planning	1	ON	27	0	27	02	0	02	01	0	01
11.08.2014 to 12.08.2014	PF	Preparation and Use of Vermin-compost (Phase - I)	2	ON	30	0	30	04	0	04	10	0	10
14.08.2014	PF	Improved Variety and Sowing of Maize (FLD)	1	ON	25	0	25	05	0	05	12	0	12
16.08.2014	PF	Land Preparation and Sowing of Red Gram (FLD)	1	ON	25	0	25	03	0	03	10	0	10
18.08.2014 to 19.08.2014	PF	Multiplication of *Azolla*	2	ON	30	0	30	07	0	07	10	0	10
25.08.2014 to 26.08.2014	PF	Preparation and Use of Vermin-compost (Phase - II)	2	ON	30	0	30	04	0	04	10	0	10
28.08.2014 to 18.09.2014	RY	Routine Analysis of Soil Using Soil Testing Kits	22	ON	27	0	27	07	0	07	01	0	01
21.09.2014	PF	Cultivation of Rabi Crops with Especial Emphasis on Weed Management	01	ON	38	0	38	09	0	09	00	0	00
28.11.2014	PF	Improved Cultivation Practices of Wheat (FLD)	01	ON	09	0	09	05	0	05	01	0	01
15.12.2014	PF	Improved Cultivation Practices of Mustard	01	ON	16	0	16	07	0	07	00	0	00

		(FLD)											
16.12.2014	PF	Micro-Irrigation and Green House Technology	01	ON	36	0	36	09	0	09	10	0	10
17.12.2014	PF	Balanced Nutrient Management for Sustainable Crop Production for Bringing Green Revolution in Eastern India	01	OFF	33	0	33	06	0	06	01	0	01
22.12.2014	PF	Approaching New Sources of Organic Manure for Bringing Green Revolution in Eastern India	01	OFF	47	0	47	08	0	08	00	0	00
14.01.2015.	PF	Seed Production Technology for Black Gram and Green Gram	01	OFF	46	0	46	13	0	13	00	0	00
23.02.2015	PF & PFW	Crop Diversification in Birbhum District	01	ON	21	46	67	06	0	06	03	46	49
HORTICULTURE													
17.04.2014	PF	Crop Diversification of Different Horticultural Crops	01	OFF	50	0	50	15	0	15	06	0	06
18.04.2014	PF & PFW	Crop Diversification of Different Horticultural Crops	01	OFF	46	1	47	11	0	11	01	0	01
21.04.2014	PF	Crop Diversification of Different Horticultural Crops	01	OFF	49	0	49	18	0	18	06	0	06
22.04.2014	PF	Cultivation of Cucurbitaceous Crops	01	OFF	53	0	53	22	0	22	09	0	09
24.04.2014	PF	Cultivation of Solanaceous Crops	01	OFF	47	0	47	17	0	17	15	0	15
25.04.2014	PFW	Cultivation of Kharif Vegetables	01	OFF	00	67	67	00	05	05	00	05	05
30.06.2014 to 01.07.2014	PF	Layout and planting of Mango orchard	02	ON	30	0	30	12	0	12	01	0	01
03.07.2014 to 04.07.2014	PF	Management of Mango and Guava Orchard	02	ON	30	0	30	14	0	14	01	0	01
10.07.2014 to 11.07.2014	PF & PFW	Cultivation of Drumstick	02	ON	31	2	33	06	0	06	07	2	09
18.07.2014; 19.07.2014 ;21.07.2014 and 21.07.2014	PF & PFW	Layout and planting of Elephant Foot Yam	04	ON	26	2	28	08	0	08	10	2	12
21.07.2014 to 20.08.2014	RY	Nursery and Its Management	30	ON	28	0	28	12	0	12	01	0	01
21.08.2014 to 26.08.2014	RY	Friends of Coconut Trees (FoCT)	06	ON	20	0	20	07	0	07	02	0	02

11.09.2014	PFW	Nutrition Garden	01	OFF	00	24	24	00	0	00	0	24	24
12.09.2014	PFW	Nutrition Garden	01	OFF	00	19	19	00	0	00	0	19	19
18.09.2014 to 21.09.2014	PF	Improved Cultural Practices of Capsicum and Broccoli	04	ON	30	0	30	12	0	12	02	0	02
22.09.2014 to 25.09.2014	PF	Improved Cultural Practices of Capsicum	04	ON	30	0	30	12	0	12	02	0	02
24.11.2014	EF	Diversification of Horticultural Crops	01	OFF	67	0	67	26	0	26	00	0	00
27.11.2014	EF	Diversification of Horticultural Crops	01	OFF	22	0	22	06	0	06	01	0	01
30.11.2014	PF	Diversification of Horticultural Crops	01	ON	14	0	14	05	0	05	00	0	00
04.12.2014	PFW	Crop Diversification of Horticultural Crops	01	OFF	00	19	19	00	0	00	00	19	19
05.12.2014	PFW	Crop Diversification of Horticultural Crops	01	OFF	00	29	29	00	0	00	00	29	29
PLANT PROTECTION													
22.05.2014 and 24.05.2014	PF	Different Components of IPM	02	OFF	50	0	50	12	0	12	06	0	06
02.06.2014 to 03.06.2014	PF	Integrated Pest Management in Kharif Paddy (Phase - I)	02	OFF	50	0	50	12	0	12	06	0	06
O6.06.2014	PF	Integrated Disease & Weed Management in Kharif Paddy (Phase - I)	01	OFF	50	0	50	12	0	12	06	0	06
05.07.20914 to 07.07.2014	PF	Integrated Pest Management in Kharif Paddy (Phase - II)	02	ON	30	0	30	07	0	07	03	0	03
15.07.2014 and 17.07.2014	PF	Integrated Disease & Weed Management in Kharif Paddy (Phase - II)	02	ON	30	0	30	07	0	07	03	0	03
25.08.2014	PF	Pest Management in Early Rabi Vegetables	01	ON	51	0	51	20	0	20	05	0	05
26.08.2014	PF	Disease Management in Early Rabi Vegetables	01	ON	51	0	51	20	0	20	05	0	05
18.09.2014	PF	Pest Management on Rabi Seasonal Pulse and Oil Seeds	01	OFF	50	0	50	16	0	16	10	0	10
19.11.2014 to 20.11.2014	PF	IPM on Solanaceous Crops	02	ON	30	0	30	06	0	06	05	0	05
22.11.2014	PF	IPM on Wheat and Sugarcane	01	OFF	50	0	50	12	0	12	06	0	06
23.11.2014	PF	IDM on Wheat and Sugarcane	01	OFF	50	0	50	12	0	12	06	0	06
ANIMAL SCIENCE													
27.06.2014	PF & PFW	Management Practices of Backyard Poultry	01	OFF	19	22	41	10	15	25	08	7	15
02.07.2014	PF & PFW	Goatery Management	01	OFF	40	18	58	11	3	14	16	15	31

28.08.2014 to 29.08.2014	PF	Identification and Control of Poultry Diseases with Especial Reference to Bird Flu	02	ON	26	0	26	04	0	04	10	0	10
22.08.2014	PF & PFW	Goatery Management	01	OFF	30	24	54	09	20	29	00	0	00
20.09.2014	PFW	Intensive Duck Farming	01	ON	00	20	20	00	0	00	00	14	14
23.09.2014	PFW	Poultry Management	01	ON	00	21	21	00	0	00	00	15	15
19.10.2014	RY	Cattle Feed Preparation	01	OFF	13	06	19	00	0	00	02	2	04
20.10.2014	PF & PFW	Extensive Duck Farming	02	OFF	01	46	47	00	36	36	00	0	00
30.10.2014	PF	Fodder Cultivation Practices (FLD)	01	ON	21	0	21	15	0	15	02	0	02
30.10.2014	PF	Cattle Feed Preparation and Mineral Mixture Preparation	01	ON	21	0	21	15	0	15	02	0	02
28.11.2014 to 29.11.2014	PF	Piggery Management	02	OFF	50	0	50	00	0	00	36	0	36
11.12.2014	PF	Identification and Control of Diseases in Dairy Animals	04	ON	30	0	30	11	0	11	07	0	07
17.12.2014	PFW	Animal Resource Development	01	OFF	00	19	19	00	0	00	00	19	19
10.01.2015	PF	Goatery Management	15	ON	10	0	10	04	0	04	00	0	00
07.02.2015	PF & PFW	Scientific Goat Farming with Especial Reference to Black Goat Farming in Dry and Draught Prone Area of Birbhum	01	OFF	25	05	30	12	04	16	04	01	05
09.02.2015	PF & PFW	Scientific Goat Farming in Dry and Draught Prone Area of Birbhum	01	OFF	22	02	24	22	00	22	00	00	00
10.02.2015	PF	Quality Fodder Cultivation	01	ON	20	00	20	07	0	07	03	0	03
12.02.2015 to 19.02.2015	RY	Broiler Management	07	ON	10	0	10	05	0	05	00	0	00
FISHERY													
09.05.2014; 10.05.2014; 12.05.2014 and 13.05.2014	PF	Culture and Management of IMC and Exotic Carps	04	OFF	51	0	51	35	0	35	01	0	01
12.06.2014 and 13.06.2014	PF & PFW	Carp Hatchery Management and Production of Carp Spawns	02	OFF	46	03	49	31	03	34	03	0	03
01.07.2014 to 30.07.2014	RY	Breeding of IMC and Hatchery Management	30	ON	15	0	15	08	0	08	00	0	00
19.08.2014; 21.08.2014; 22.08.2014 and	PF	Low Cost Fish Feed Preparation	04	ON	25	0	25	05	0	05	12	0	12

23.08.2014													
08.09.2014; 09.09.2014; 11.09.2014 to 13.09.2014	PF	Composite Fish Culture with Giant Prawn	05	ON	24	0	24	07	0	07	10	0	10
16.09.2014	PF	Composite Fish Culture	01	OFF	42	0	42	22	0	22	00	0	00
17.11.2014 to 20.11.2014	PF	Fish based Integrated Farming	04	OFF	41	0	41	36	0	36	02	0	02
HOME SCIENCE													
21.04.2014	PFW	Value Addition & Preservation of Tomato	01	ON	00	11	11	00	01	01	00	04	04
09.05.2014	PFW	Nutrition Gardening	01	OFF	00	54	54	00	41	41	00	00	00
20.06.2014	PFW	Management of Poultry Birds	01	OFF	00	50	50	00	42	42	00	00	00
27.06.2014	PFW	Care and Management of Pregnant and Lactating Mothers	01	OFF	00	53	53	00	26	26	00	00	00
04.07.2014	PFW	Nutritional Requirement of Pre-School Children	01	OFF	00	50	50	00	00	00	00	50	50
11.08.2014; 12.08.2014; 14.08.2014; 16.08.2014 and 19.08.2014	PFW	Value Addition and Preservation of Mango	05	ON	00	25	25	00	09	09	00	01	01
26.09.2014	PFW	Design of Low Cost and High Nutritious Diet	01	OFF	00	31	31	00	19	19	00	12	12
30.10.2014 and 31.10.2014	PFW	Formation of New SHG	01	OFF	00	35	35	00	00	00	00	35	35
17.11.2014 to 18.11.2014 and 20.11.2014 to 22.11.2014	PFW	Tie and Dye Work	05	OFF	00	25	25	00	21	21	00	00	00
AGRICULTURAL EXTENSION													
06.06.2014 to 07.06.2014	PF	Mechanism & Use of Kisan Credit Card	02	ON	35	0	35	12	0	12	07	0	07
12.06.2014 to 14.06.2014	PF	Formation of Commodity Interest Group	03	OFF	39	0	39	08	0	08	07	0	07
18.07.2014 to 19.07.2014	PF & PFW	Formation of Farmers' Clubs	02	OFF	37	14	51	07	03	10	14	11	25
22.01.2015	PF	Training Programme on Creation of Awareness among Farmers and Other Stakeholders about the Provisions of Protection of	01	ON	100	0	100	21	0	21	10	0	10

		Plant Varieties and Farmers' Rights Act - 2001											
13.03.2015	PF	Crop Insurance	01	ON	35	0	35	08	0	08	02	0	02
14.03.2015	PF & PFW	Marketing Mechanism of Farm Produce	01	ON	21	45	66	01	00	01	04	45	49
17.03.2015	PF & PFW	Formation of Self Help Groups (SHGs) among Fish Farmers	01	ON	61	03	64	14	00	14	04	00	04
20.03.2015	PF & PFW	Development of Marketing Channel for SHG Products	01	ON	56	04	60	20	00	20	03	00	03
		Total	**254**		**2672**	**795**	**3467**	**895**	**248**	**1143**	**383**	**377**	**760**