ANNUAL REPORT
2015 – 16

KRISHI VIGYAN KENDRA
BURDWAN

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PROFORMA FOR ANNUAL REPORT 2015 (April 2015 to March 2016)

1. GENERAL INFORMATION ABOUT THE KVK

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

Name: **KrishiVigyan Kendra, Burdwan**

Address	Telephone		E mail
Bud Bud, Burdwan-713 403. West Bengal	Office - 0343 2513651	Fax - 0343 2513651	kvkburdwan@gmail.com **Web:** www.kvkcrijaf.org.in

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

Name of Host organization: **ICAR-Central Research Institute for Jute and Allied Fibres**

Address	Telephone		E mail
	Office	Fax	
Barrackpore Kolkata- 700 120. West Bengal	033-25356124	033- 25350415	crijaf-wb@nic.in

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

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. D. Ghorai (I/C)	033-25772766	09433122515	dipankarghoraikvk@gmail.com

1.4. Year of sanction: 2005 vide order No. 5-24 / 2002 – AE – I, dated April 01, 2005

1.5. Staff Position (as on 1st April, 2016)

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	VACANT						
2	Subject Matter Specialist	Dr. Dipankar Ghorai	I/C PC and SMS	Agriculture	Rs. 15600-39100 GP – 6600, Basic – Rs. 29600	26.04.2006	**Permanent**	GEN
3	Subject Matter Specialist	Dr. Golam Ziauddin	SMS	Fisheries	Rs. 15600-39100 GP – 6600, Basic – Rs. 29600	28.04.2006	**Permanent**	GEN
4	Subject Matter Specialist	VACANT						
5	Subject Matter Specialist	Dr. Subrata Sarkar	SMS	Horticulture	Rs. 15600-39100 GP – 6600, Basic – Rs. 29600	04.05.2006	**Permanent**	GEN
6	Subject Matter Specialist	VACANT						
7	Subject Matter Specialist	Dr. Monica S. Singh	SMS	Agril. Extn.	Rs. 15600-39100 GP – 5400, Basic – Rs. 22950	09.07.2012	**Permanent**	GEN
8	Programme Assistant	Mr. Sandipan Garai	Prog. Assistant	Agriculture	Rs. 9300-34800 GP – 4600, Basic – Rs. 18640	18.04.2006	**Permanent**	OBC
9	Computer Programmer	Sk Golam Rasul	Prog. Assistant (Computer)	Computer	Rs. 9300-34800 GP – 4600, Basic – Rs. 18640	10.04.2006	**Permanent**	GEN
10	Farm Manager	Mr. Soumya Sarathi Kundu	Prog. Assistant (Farm Manager)	Agriculture	Rs. 9300-34800 GP – 4600, Basic – Rs. 17560	06.01.2007	**Permanent**	GEN
11	Accountant / Superintendent	VACANT						
12	Stenographer	Mr. Sushanta Dey	Stenographer Gr - III	--	Rs.5200-20200 GP – 2400, Basic – Rs. 12970	20.03.2006	**Permanent**	GEN
13.	Driver	Mr. Joydeep Pal	Driver – cum - mechanic	--	Rs.5200-20200 GP – 2400, Basic – Rs. 11030	06.07.2006	**Permanent**	GEN
14.	Driver	Mr. Santi Nath Pal	Driver– cum - mechanic	--	Rs.5200-20200 GP – 2400, Basic – Rs. 11030	10.07.2006	**Permanent**	OBC
15.	Supporting staff	Mr. Shyamal Bhanja	Supporting staff	Peon	Rs. 5200-20200 GP – 1800, Basic - Rs. 9170	25.02.2006	**Permanent**	GEN
16.	Supporting staff	VACANT (from 19.04.2016)						

1.6. Total land with KVK (in ha) : 18 ha

S. No.	Item	Area (ha)
1	Under Buildings	3.5
2.	Under Demonstration Units	2.5
3.	Under Crops	7.0
4.	Orchard/Agro-forestry	2.0
5.	Others (Ponds)	3.0

Total area should be matched with breakup

1.7. Infrastructure Development:

A) Buildings and others

S. No.	Name of building	Not yet started	Completed up to plinth level	Completed up to lintel level	Completed up to roof level	Totally completed	Plinth area (sq.m)	Under use or not*	Source of funding
1.	Administrative Building					√	552	Under use	ICAR
2.	Farmers Hostel					√	306	Under use	ICAR
3.	Staff Quarters (6)					√	400	Under use	ICAR
4.	Piggery unit								
5	Fencing					√	925 m	Under use	ICAR
6	Rain Water harvesting structure					√	7000	Under use	MGNREGA
7	Threshing floor								
8	Farm godown								
9.	Dairy unit								
10.	Poultry unit								
11.	Goatary unit					√	50	Under use	ICAR
12.	Mushroom Lab								
13.	Mushroom production unit								
14.	Greenhouse					√	1008 sqm	Under use	RKVY
15.	Soil test Lab					√	Instrumental support	Under use	ICAR
16	Others								
	Feed preparation Unit					√	Instrumental support	Under use	ATMA
	Integrated farming					√	6000	Under use	ICAR

	system								
	Vermicompost unit					√	60	Under use	ATMA
	Portable carp hatchery					√	30	Operation yet to start	ICAR
	Deep tube well					√	Depth 80 ft.	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 (2014-2015)	Present status
TATA SUMO WB 40 C 9883	01.04.1999	---	24371 km	In working condition
Tractor WB 39 3472	01.04.1999	---	154 hrs	In working condition

C) Equipment & AV aids

Name of equipment	Year of purchase	Cost (Rs.)	Present status	Source of fund
a. Lab equipment				
Flame photometer	2006-07	29813.00	In working condition	ICAR
Spectrophotometer	2006-07	46283.00	Out of order	ICAR
Shaker	2006-07	20756.00	In working condition	ICAR
Hot air oven	2006-07	5344.00	In working condition	ICAR
Hot plate	2007-08	14000.00	Out of order	ICAR
Glass distillation unit	2007-08	28000.00	Out of order	ICAR
Conductivity bridge	2007-08	10000.00	In working condition	ICAR
pH meter	2007-08	9563.00	In working condition	ICAR
Electronic balance	2007-08	12375.00	In working condition	ICAR
Grinder	2007-08	19500.00	In working condition	ICAR
Kjeldahl N analyser	2008-09	250474.00	In working condition	ICAR
Atomic absorption spectrophotometer	2012-13	944832.00	In working condition	ICAR
b. Farm machinery				
Tractor	01.04.1999	--	In working condition	ICAR
Power reaper	2011-12	85476.00	In working condition	ICAR
c. AV Aids				
LCD projector	2008-09	109000.00	In working condition	ICAR
Computer with accessories (2 Nos.)	2009 -10	49920.00	In working condition	ICAR
LCD TV	2010-11	13110.00	In working condition	ICAR
Digital Camera	2010-11	14790.00	In working condition	ICAR

D) Farm implements

Name of equipment	Year of purchase	Cost (Rs.)	Present status	Source of fund
CRIJAF Nail weeder	2012-13	3400.00	In working condition	ICAR
Brush cutter	2011-12	22360.00	In working condition	ICAR
Seed drill	2011-12	66500.00	In working condition	ICAR
Rotovator	2011-12	107120.00	In working condition	ICAR
Sprayer	2011-12	7300.00	In working condition	ICAR
Paddy thresher	2011-12	12000.00	In working condition	ICAR
Castrator for goat	2013-14	4000.00	In working condition	ATMA

1.8. Details SAC meeting* conducted in the year

Sl.No.	Date	Number of Participants	Salient Recommendations	Action taken	If not conducted, state reason
1.	23.09.15	37	• Action taken report should be quantitative.	It was followed.	
			• Inclusion of soil parameters in impact assessment.	Action will be taken in due course.	
			• Change in social parameters of jute farmers using improved technologies to be assessed.	Have been analysed	
			• Azolla to be included in vermicompost production.	Azolla has been partially used in vermicompost production unit on experimental basis. The result is encouraging.	
			• Social fish farming should be stressed upon.	Composite Fish culture has been initiated in different places by providing fish seed under demonstration programmes.	
			• Evaluation of potentiality of annual moringa cultivation in KVK farm.	Action will be taken in due course.	
			• High value vegetables cultivation like broccoli should be done.		Lack of market facilities or demand for broccoli in those areas.
			• Collaborative animal health camps with IVRI, NDRI to be done.	Animal health camps were organized with IVRI, NDRI etc.	
			• Farmers database with requisite data on socio-economic changes to be made.	It has been initiated. Needs more data base on socioeconomic changes.	
			• Integrated technology demonstration on jute should be done.	Has been done in Purbasthali - 1	
			• Success story should be documneted.		
			• Potentiality of cultivation of onion should be explored.	Onion cultivation were explored through FLD and OFT during Kharif as well as rabi season	

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

2.a. District level data on agriculture, livestock and farming situation (2015-16)

Sl. no.	Item	Information
1	Major Farming system/enterprise	Rice production system Dairy –poultry production system Poultry Goatery Duckery Fishery Rice – potato-fodder- livestock production system Rice –vegetable-Rice production system Jute-rice production system Fish-duck-banana production system
2	Agro-climatic Zone	**1. New Alluvium** Average annual rainfall 1300-1600 mm, Soil type- sandy loam, clay and clay loam, Soil depth 4-6 ft with medium to good water holding capacity, **Neutral to acidic soil with good fertility.** **2. Old Alluvium** Average annual rainfall 1300-1500 mm, Soil type- sandy loam and clay loam Soil depth 4-6 ft with medium to good water holding capacity **Neutral to acidic soil with good fertility** **3. Red and Lateritic** Average annual rainfall 1100-1400 mm, Soil type- sandy loam, coarse in texture Undulating land with low soil depth, sometimes hard layer present in sub surface **Medium to highly acidic soil**
3	Agro ecological situation	**Agro ecological sub region 12.3 under the AES 12.0 (Eastern Plateau)** I Chhotonagpur Plateau and Garhjat hills, hot dry sub humid ecosystem with red & laterite soils and LGP 150-180 days covering the blocks of Durgapur & Asansol. Main crops are, paddy, mustard, vegetables, pulse etc. The area covers 186154 ha II. Moist and sub humid ecosystem with alluvial soil with LGP of 180-200 days covering the blocks of Burdwan (N), Burdwan (S), Kalna & Katwa, Main crops paddy, mustard, **sesame, potato, jute, vegetables etc. The area covers 517532 ha**
4	Soil type	**1.Gangetic alluvial – 206423 ha** Soil order is entisols. Sandy loam to clay loam, fine in texture, slightly acidic to neutral in reaction. Rich in potash and medium to rich in available plant nutrients. **2. Vindhya alluvial – 311000 ha** Soil order is entisol Sandy loam to clay loam, fine to moderate coarse in texture, acidic to neutral in reaction. **3. Red and Lateritic – 186054 ha** Soil orders are mainly alfisol and ultisol. Coarse gritty soil blended with rock fragment, mainly acidic in nature, reddish in color due to high level of iron, low in nitrogen, calcium, phosphate and other plant nutrient.

5	Productivity of major 2-3 crops under cereals, pulses, oilseeds, vegetables, fruits and others	Aman paddy – 32.73 Boro paddy – 26.95 Wheat – 21.99 Pulses – 8.80 Oilseeds – 10.01 Jute & other fibres ** - 18.7 lakh bales Potato – 212.49
6	Mean yearly temperature, rainfall, humidity of the district	Mean yearly temperature: Max – 31, Min – 18 Relative humidity : 76 Total rainfall: 1136 mm
7	Production of major livestock products like milk, egg, meat etc.	Milk : 464080 tonnes, 280 kg/year Egg: 2672.40 lakh egg, 85 no. eggs/year Meat : 4000 MT

2.b. Details of operational area / villages (2015-16)

S.N	Taluk	Block	Village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Durgapur	Kanksa, Andal	Keten , Palashboni, sundariya Moira	Paddy, potato, mustard, sesame, lentil, vegetable, cattle, poultry, duck, goat, pig fish Kharif paddy, wheat, mustard, brinjal, cattle, buffalo, goat and poultry	***Bio-physical*** **Low productivity of all major crops** • Non-availability of quality seed / planting materials • Marginal soil • Limited water resources for irrigation • Indiscriminate and inappropriate use of chemical fertilizer **Inadequate descriptive/prolific breed of livestock** **Poor feed resources** ***Socio- economic*** **Lack of credit facilities** **Lack of awareness regarding good agronomic /husbandry practices** **Very restricted livelihood option**	• Integration of good agronomic practices • Providing quality seeds/planting materials • Diversification of land use • Soil health management like organic farming etc. • Livestock productivity improvement and health care • Efficient utilization of water bodies • Entrepreneurship development

2	Durgapur	Galsi-I	Jaguli para , Silla, Ramgopalpur, Atpara, Raipur, GoligramKondaipur Manikbazar-Jharul, Nurkona Nabakhanda	Kharif Paddy, boro paddy, mustard, fodder, cattle, poultry, duck, goat, fish	***Bio-physical*** **Low productivity of all major crops** • Non-availability of quality seed materials • High cost involvement for major crops • Indiscriminate and inappropriate use of chemical fertilizers • Low input of organics & biofertiliser **Lesser extent of crop diversification** **Low productivity of livestock & poultry** **Poor feed resources** ***Socio-economic*** • Lack of credit facilities • Inadequate house hold income generation	• Providing quality seeds/planting material • Diversification of land use • Entrepreneurship development • Organic farming • Health care • Improvement of women led vocations • Popularization of balanced feeding practices
3.	Burdwan North	Galsi-II	Garamba, Pursora	Aus paddy, kharif paddy, jute, potato, mustard, vegetable cattle, poultry, Goat, broiler farming, fish		
4.		Aushgram-I	Dignagar, Woyarishpur	Kharif paddy, Potato, lentil, mustard, til, fodder, cattle, goat, poultry, duck, fish	***Bio-physical*** **Low productivity of all major crops** • Non-availability of quality seed / planting materials • Poor soil health • Limited water resources for irrigation • Indiscriminate and inappropriate use of chemical fertilizer **Inadequate descriptive/prolific breed of livestock** **Poor feed resources** **Inadequate health care** ***Socio- economic*** **Lack of credit facilities** **Lack of awareness regarding good agronomic /husbandry practices** **Very restricted livelihood option**	i. Integration of good agronomic practices ii.Providing quality seeds/planting materials iii.Diversification of land use iv.Restoration of soil health through organic manuring. v.Livestock productivity improvement and health care vi.Efficient utilization of water bodies vii.Entrepreneurship development viii. Promotion of efficient water use technology ix. technology showcasing

5.	Kalna	Kalna	Bhagnapara, Kalna, Durgapur, Nandai	Paddy, jute, onion, fodder, mustard, banana, potato, mango, cattle, sheep, goat, pig, poultry	***Bio-physical*** **Low productivity of all major crops** • Non-availability of quality seed / planting materials • Nutrient Deficient soil • Indiscriminate and inappropriate use of chemical fertilizer/ pesticides **Inadequate descriptive/prolific breed of livestock** **Poor feed resources** **Inadequate health care** ***Socio- economic*** **Lack of credit facilities** **Lack of awareness regarding good agronomic /husbandry practices** **Very restricted livelihood option** **Less of post harvest operation**	Integration of good agronomic practices ii.Production of quality seeds/planting materials in PPP mode iii.Diversification of land use iv.Restoration of soil health through organic manuring. v.Livestock productivity improvement and health care vi.Efficient utilization of water bodies vii.Entrepreneurship development viii. Promotion of efficient water use technology ix. Promotion of Improved post harvest technology

6.		Purbasthali- I	Kurichia	Paddy, jute, onion, fodder, mustard, banana, potato, mango, cattle, sheep, goat, pig, poultry	***Bio-physical*** **Low productivity of all major crops** • Non-availability of quality seed / planting materials • Indiscriminate and inappropriate use of chemical fertilizer/ pesticides • Very low ground water table **Inadequate descriptive/prolific breed of livestock** **Poor feed resources** **Inadequate health care** ***Socio- economic*** • Lack of awareness regarding good agronomic /husbandry practices • Very restricted livelihood option • Less of post harvest operation	Integration of good agronomic practices ii. Production of quality seeds/planting materials in PPP mode iii. Diversification of land use iv. Restoration of soil health through organic manuring. v. Livestock productivity improvement and health care vi. Efficient utilization of water bodies vii. Entrepreneurship development viii. Promotion of efficient water use technology ix. Promotion of Improved post harvest technology of jute and other crops

7		Memari-I & II	Satchachia, Debupur, Khanro,	Paddy, onion, fodder, mustard, banana, potato, mango, cattle, sheep, goat, pig, poultry	***Bio-physical*** **Low productivity of all major crops** • Non-availability of quality seed / planting materials • Nutrient Deficient soil • Indiscriminate and inappropriate use of chemical fertilizer/ pesticides **Inadequate descriptive/prolific breed of livestock** **Poor feed resources** **Inadequate health care** ***Socio- economic*** • Lack of credit facilities • Lack of awareness regarding good agronomic /husbandry practices • Very restricted livelihood option • Less of post harvest operation	Integration of good agronomic practices ii. Production of quality seeds/planting materials in PPP mode iii. Diversification of land use iv. Restoration of soil health through organic manuring. v. Livestock productivity improvement and health care vi. Efficient utilization of water bodies vii. Entrepreneurship development viii. Promotion of efficient water use technology ix. Promotion of Improved post harvest technology

8		Monthe swar	Bhelia, Bheti	Paddy, onion, fodder, mustard, banana, potato, mango, cattle, sheep, goat, pig, poultry	***Bio-physical*** **Low productivity of all major crops** • Non-availability of quality seed / planting materials • Nutrient Deficient soil • Indiscriminate and inappropriate use of chemical fertilizer/ pesticides **Inadequate descriptive/prolific breed of livestock** **Poor feed resources** **Inadequate health care** ***Socio- economic*** **Lack of credit facilities** **Lack of awareness regarding good agronomic /husbandry practices** **Very restricted livelihood option** **Less of post harvest operation**	Integration of good agronomic practices ii.Production of quality seeds/planting materials in PPP mode iii.Diversification of land use iv.Restoration of soil health through organic manuring. v.Livestock productivity improvement and health care vi.Efficient utilization of water bodies vii.Entrepreneurship development viii. Promotion of efficient water use technology ix. Promotion of Improved post harvest technology

2. c. Details of village adoption programme:

Name of the villages adopted by PC and SMS in 2015-16 for its development and action plan

Name of village	Block	Action taken for development
Kasba	Galsi-I	• Training programmes on different aspects of Horticulture • OFT on varietal trial on cauliflower FLD on improved variety of tomato • OFT and FLD of kharif and rabi onion • Awareness camp on horticulture and agriculture • field day and exposure visit of farmers
Bamunia	Memari -II	• PRA data collection • Awareness camp, informal discussion
Barmuria	Galsi- II	• PRA data collection • Training, informal discussion
Kuricha	Purbasthali-I	• On farm trial and demonstration on improved production technology on jute • Integrated farming system involving jute has been done • On farm trial and demonstration on improved production technology of paddy • Culmination of improved jute production technology through OFT, FLD, field day and exposure visit of farmers

		• Formation of farmers club • Awareness camp on family nutrition
Debipur	Memari-I	• Skill development programme of tribal farmers and farm women • Technology demonstration in the theme of region specific mineral mixture supplementation to deshi cow • Technology assessment through OFT in nutrient management of duck • Animal health camp and awareness camp. • Diagnostic field visit of SMSs • Technology guidance through Farmers, portal
Warishpur	Ausgram II	• Formation of farmers club • Awarness Camp • Diagnostic field visit of SMSs • Technology guidance through Farmers, portal • Training to farmers and Farm women

2. d. SansadAdarsh Gram Yojona

i) Name of the village under SansadAdarsha Gram Yojona: Siddhabari, Salanpur block
ii) Contribution of KVK in the programme:
- Skill development programme of tribal farmers and farm women
- Technology demonstration in the theme of region specific mineral mixture supplementation to deshi cow
- Animal health camp and awareness camp.
- Cage fishery culture in collaboration with CIFRI
- Diagnostic field visit of SMSs
- Technology guidance through Farmers, portal
- Jai Kisan Jai Vigyan Diwas celebration

2.1 Priority thrust areas

S. No	Thrust area
1.	Integration of good agronomic practices for cultivation of field and vegetable crops for vertical agricultural growth
2.	Production of quality seeds/planting materials for major agricultural crops like rice, jute, mustard and vegetable and fruit crops
3.	Diversification of land use through cultivation of vegetables and other horticultural crops
4.	Soil health management through organic farming, balanced and integrated fertilization etc.
5.	Livestock productivity improvement and health care
6.	Efficient utilization of water bodies through composite fish culture and improved management practices
7.	Efficient resource utilization and output maximization through integrated farming system approach
8.	Entrepreneurship development for family income generation
9.	Empowerment of women through post harvest operation
10	Strengthening of animal feed resources through fodder production/ quality fodder seed production
11	Use of ICT in agriculture in area of climate based agro advice, disease diagnosis, SMS service

3. TECHNICAL ACHIEVEMENTS

3. A. Details of target and achievement of mandatory activities by KVK during 2015-16

OFT				FLD			
Number of OFTs		Number of farmers		Number of FLDs		Number of farmers	
Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement
6	6	62	62	15	15	180	738

Training				Extension activities			
Number of Courses		Number of Participants		Number of activities		Number of participants	
Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement
125	106	3000	2529	75	80	4780	5000

Seed production (q)		Planting material (Nos.)	
Target	Achievement	Target	Achievement
250	250	50000	50000

3.1 Achievements on technologies assessed and refined

OFT-1

1.	Title of On farm Trial	**Assessment of effectiveness of different bio-fertilisers on productivity of lentil**
2.	Problem diagnosed	Low productivity of lentil
3.	Details of technologies selected for assessment/refinement	**Farmers' practice:** Only inorganics (20:50:20 N:P:K) **Technology - 1**: FP + PSB **Technology - 2**: FP + rhizobium **Technology - 3**: FP + PSB + rhizobium
4.	Source of Technology	IIPR, Kanpur
5.	Production system and thematic area	Rice based production system; Technology
6.	Performance of the Technology with performance indicators	**Results indicated that application of combination of PSB and Rhizobium (seed treatment) was significantly more effective than single application. Application of biofertilizer can increase productivity significantly over farmers' practice.**
7.	Final recommendation for micro level situation	Farmers should apply PSB and rhizobium for lentil cultivation
8.	Constraints identified and feedback for research	Nil
9.	Process of farmers participation and their reaction	Training and awareness; Farmers were highly satisfied with performance of improved cultivars

Thematic area: Integratd nutrient management

Problem definition: Low productivity of lentil

Technology assessed: Application of biofertilizer

Table:

Technology option	No. of trials	Yield(q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
Farmers' practice: Only inorganics (20:50:20 N:P:K)	5	7.4	12250	31080	18830	2.54
Technology - 1: FP + PSB		8.2	13100	34440	21340	2.63
Technology - 2: FP + Rhizobium		8.6	13100	36120	23020	2.76
Technology - 3: FP + PSB + Rhizobium		10.1	13950	42420	28470	3.04
LSD at 5%		0.73				

Results: **Results indicated that application of combination of PSB and Rhizobium (seed treatment) was significantly more effective than single application. Application of biofertilizer can increase productivity significantly over farmers' practice.**

OFT-2

1.	Title of On farm Trial	**Evaluation of effectiveness different retting methodologies on yield and economics of jute**
2.	Problem diagnosed	Inappropriate retting of jute leading to low grade fibre and hence low return
3.	Details of technologies selected for assessment/refinement	**Farmers′ practice**: Conventional retting **Technology - 1 to be assessed:** Steeping of jute jak with sand bag **Technology - 2 to be assessed:** TO2 + CRIJAF Sona
4.	Source of Technology	CRIJAF, Barrackpore
5.	Production system and thematic area	Rice based production system; Technology
6.	Performance of the Technology with performance indicators	Evaluation of effectiveness of different retting methodologies on yield and economics of jute revealed that retting of jute using sand bag only and sand bag combined with CRIJAF SONA resulted in higher return for fibres being of better quality in comparison to FP (av. of Rs 4450/- per qtl in case of using sand bag with CRIJAF sona, Rs. 4164/- in case of sand bag only in comparison to FP which fetched Rs. 3750/- per qtl.). There was no significant difference in yield.
7.	Final recommendation for micro level situation	Farmers are recommended to use sand bag for steeping of jute *jak* and application of CRIJAF SONA and in case of non availability of CRIJAF SONA they should use sand bag for must in case of jute retting
8.	Constraints identified and feedback for research	Farmers use to rett jute in community pond where everyone giving jute for retting should use the above technology. This is often a constraint since all the farmers can not be made aware of the problem at one go.
9.	Process of farmers participation and their reaction	Training and awareness; Farmers were highly satisfied with performance of improved cultivars

Thematic area: Post harvest management

Problem definition: Inappropriate retting of jute leading to low grade fibre and hence low return

Technology assessed: Improved retting technology for jute

Table:

Technology option	**No. of trials**	**Yield (q/ha)**	**Cost of cultivation (Rs./ha)**	**Gross return (Rs/ha)**	**Net return (Rs./ha)**	**BC ratio**
Farmers' practice: Conventional retting	7	29.4	44500	110250	65750	2.48
Technology - 1 to be assessed: Steeping of jute jak with sand bag		30.2	46250	125753	79503	2.72
Technology - 2 to be assessed: TO2 + CRIJAF Sona		31.5	47000	140175	93175	2.98
		ns				

Results:
Evaluation of effectiveness of different retting methodologies on yield and economics of jute revealed that retting of jute using sand bag only and sand bag combined with CRIJAF SONA resulted in higher return for fibres being of better quality in comparison to FP (av. of Rs 4450/- per qtl in case of using sand bag with CRIJAF sona, Rs. 4164/- in case of sand bag only in comparison to FP which fetched Rs. 3750/- per qtl.). There was no significant difference in yield.

OFT-3

1.	Title of On farm Trial	Evaluation of performance of different varieties of early cauliflower
2.	Problem diagnosed	Poor curd formation leading to reduction in yield during early cauliflower cultivation in the farmer's field due to selection of inappropriate varieties.
3.	Details of technologies selected for assessment/refinement	**FP:** Local variety **TO 1:** Trisha **TO 2 :** Barsati **TO 3 :** Dawn 175
4.	Source of Technology	BCKV
5.	Production system and thematic area	Irrigated vegetable based production system
6.	Performance of the Technology with performance indicators	Result indicated that Trisha as well as Dawn 175 showed better responds in terms of early curd initiation. Trisha was best in curd compactness and yield.
7.	Final recommendation for micro level situation	Trisha should be cultivated as early cauliflower.
8.	Constraints identified and feedback for research	Availability of any variety in a particular area depends on local dealers. More varieties should be tried for selection of better quality of curd.
9.	Process of farmers participation and their reaction	Through training and field level demonstration. Farmers were satisfied with the performance of the technology.

Thematic area: Varietal trial

Problem definition: Poor curd formation leading to reduction in yield during early cauliflower cultivation

Technology assessed: Different varieties like Trisha, Barsati, Dawn 175

Table 3A: Results

Technology option	No. of trials	Yield component			Disease/ insect pest incidence (%)	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		No. of effective tillers/hill	No. of spikelet per panicle	Test wt. (100 grain wt.)						
FP: Local variety	8					197	57900	108500	50600	1.87
TO 1: Trisha						247	59600	137000	77400	2.29
TO 2 : Barsati						209	59600	118000	58400	1.98
TO 3 : Dawn 175						235	59600	127600	68000	2.14
CD(0.05)						22.6				

Results: Result indicated that Trisha as well as Dawn 175 showed better responds in terms of early curd initiation. Trisha was best in curd compactness and yield.

OFT-4

1.	Title of On farm Trial	Evaluation of performance of different varieties of Rabi onion
2.	Problem diagnosed	Cultivation of days old varieties of onion with poor bulb formation capacity leading to reduction in yield of rabi onion in the farmer's field of Burdwan district
3.	Details of technologies selected for assessment/refinement	**FP:** Sukhsagar **TO 1:** Agrifound Light Red **TO 2 :** NSC 301B
4.	Source of Technology	BCKV
5.	Production system and thematic area	Irrigated vegetable based production system
6.	Performance of the Technology with performance indicators	Result indicated that Agrifound Light Red showed better performance in terms of yield and economy followed by NSC 301B in comparison to commonly practiced Sukhsagar.
7.	Final recommendation for micro level situation	Agrifound Light Red should be cultivated for rabi season.
8.	Constraints identified and feedback for research	Availability of any variety in a particular area depends on local dealers. Their keeping qualities need to be studied
9.	Process of farmers participation and their reaction	Through training and field level demonstration. Farmers were satisfied with the performance of the technology.

Thematic area: Varietal trial

Problem definition: Cultivation of days old varieties of onion with poor bulb formation capacity leading to reduction in yield of rabi onion

Technology assessed: Different varieties like Sukhsagar, Agrifound Light Red and NSC 301B

Table 4A: Results

Technology option	No. of trials	Yield(q/ ha)	Cost of cultivation(Rs. /ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
FP: Sukhsagar	15	195	81500	165500	84000	2.03
TO 1: Agrifound Light Red		210	82800	185500	102700	2.24
TO 2 : NSC 301B		203	83500	172500	89000	2.06
CD(0.05)		21.6				

Results: Result indicated that Agrifound Light Red showed better performance in terms of yield and economy followed by NSC 301B in comparison to commonly practiced Sukhsagar. Though their keeping qualities need to be studied.

OFT-5

1.	Title of On farm Trial	**Effect of different supplementary feed application methods in fish ponds in Burdwan**
2.	Problem diagnosed	Lack of awareness of fish farmers regarding usefulness of feed application methods in fish ponds leading to poor environments for fish ponds.
3.	Details of technologies selected for assessment/refinement	**FP:** Occasional use of feed by broadcasting fish feed **TO 1:** application of feed by rope and bag **TO 2:** application of feed by pole and bag
4.	Source of Technology	ICAR-CIFA,BBSR
5.	Production system and thematic area	semi intensive fish based production system and composite fish culture management practice
6.	Performance of the Technology with performance indicators	Feeding by pole and bag performed better in terms of growth rate and total yield at this farming situation
7.	Final recommendation for micro level situation	Regular checking of water pH is recommended along with application of lime.
8.	Constraints identified and feedback for research	Lack of Awareness of application of fish feed in fish ponds.
9.	Process of farmers participation and their reaction	Through training and field level demonstration. Farmers were satisfied with the performance of the technology.

Problem definition: ***low fish*** production of IMC is due to lack of awareness regarding application of fishfeed in fish ponds.

Technology assessed or refined (as the case may be): evaluation of fish production by application of fishfeed by different system.

Fish production by application of fishfeed were evaluated under semiintensive management practices by fishers of Burdwan district. The trial was conducted with fingerlings of IMC. The trial is very successful in farming condition of Burdwan 8 months fish production data have been presented but results of this trial is very much encouraging to the farmers.

Table 5A. : Effect of different technology options on productivity of fish and economic parameters

Technology Assessed	**Production per unit** (Avg. fish production in t/ha/yr)	**Cost of production (Rs./ha)**	**Gross return (Rs./ha)**	**Net Return (Profit) in Rs./ha/yr)**	**B:C Ratio (Gross return : cost)**
FP: Occasional use of feed by broadcasting fish feed	1.9	50575	58161	7586	1.15
TO 1: application of feed by rope and bag.	2.5	62843	84838	21995	1.35
TO 2: application of feed by pole and bag	3.4	75315	106947	31632	1.42

Table 5B. : Effect of different technology options on fish production.

Technology options	**Production per unit** (Avg. fish production in t/ha/yr)	**Length (cm)**	**Wt of fish (kg)**
FP: Occasional use of feed by broadcasting fish feed	1.9^{c}	7.2^{b}	0.45^{c}
TO 1: application of feed by rope and bag.	2.5^{b}	9.0^{b}	0.58^{b}
TO 2: application of feed by pole and bag	3.4^{a}	12.5^{a}	0.89^{a}

a b c values with different superscripts in a row differ significantly ($p<0.05$).

Fish is the predominantly major crop of Burdwan. Feed application methods among farmers are grossly unbalanced because of lack of knowledge. Fish farmers do not get adequate yield owing to unscientific management practices. Traditionally the farmers cast the feed mixture into the ponds for easy operation (production- 1.9 t/ha). The pole and bag methods (demand bag feeding) comes out as the best option of feeding fishes as far as IMC is concerned (3.4 t/ha). The rope and bag methods are seen as second best feeding methods which gives max. production of fish (2.5 t/ha).

OFT-6

1.	Title of On farm Trial	Constraint analysis of Burdwan farmers regarding low adoption of SRI
2.	Problem diagnose	Very low adoption of SRI technology
3.	Details of technologies selected for assessment/refinement	FP: Farmers knowing regarding SRI TO1: Farmers practicing SRI Technology TO2: Farmers discontinued practicing SRI Technology
4.	Source of Technology	-
5.	Production system and thematic area	Constraint analysis
6.	Performance of the Technology with performance indicators	Physical Constraints, Psychological Constraints and Technological Constraints
7	Final recommendation	FarmI had more physical constraints. Farmers who had discontinued practicing SRI htechnological constraints. Farmers who didn't practice SRI had mostly psychological constraints.
8.	Constraints identified and feedback for research	-
9	Process of farmers participation and their reaction	Through structured interview

Thematic area: Constraint Analysis

Problem definition: Very low adoption of SRI technology
Technology assessed:
FP: Farmers knowing regarding SRI
TO1: Farmers practicing SRI Technology
TO2: Farmers discontinued practicing SRI Technology

Sr. No	Item	Response		
		To I	TO 2	FP

		Yes No %	No	Yes	No	Yes	No
I	**Physical Reasons**						
1	Unavailability of Labour	4 (26.67 %)	11 (73.33%)	12 (80.00%)	3 (20.00%)	15 (100%)	0
	Irregularity in canal water supply	9 (60.00%)	6 (40.00%)	13 (86.67%)	2 (13.33%)	15 (100%)	0
3	Washing out of transplanted seedlings due to heavy rain	2 (13.33 %)	13 (86.67%)	13 (86.67%)	2 (13.33%)	15 (100%)	0
4	Unavailability of hybrid seeds in time	2 (13.33 %)	13 (86.67%)	4 (26.67 %)	11 (73.33%)	4	11
5	Requirement of large quantity of FYM/Compost	11 (73.33%)	4 (26.67%)	14 (93.33%)	1 (6.67%)	14 (93.33%)	1 (6.67%)
6	Non availability of Cono Weeder	2 (13.33 %)	13 (86.67%)	8 (53.33%)	7 (46.67 %)		
7	Uncontrolled water situation in low lands during kharif	15 (100.00%)	0	11 (73.33%)	4 (26.67%)	15 (100%)	0
II	**Psychological reasons**						
1	Fear for loss of crop	7 (46.67 %)	8 (53.33%)	9 (60.00%)	6 (40.00%)	15 (100%)	0
2	No faith in one seedling/hill concept	9 (60.00%)	6 (40.00%)	5 (33.33%)	10 (66.67%)	14 (93.33%)	1 (6.67%)
3	Fear for transplanting young seedlings	6 (40.00%)	9 (60.00%)	11 (73.33%)	4 (26.67%)	15 (100%)	0

4	Fear for transplanted seedling mortality	9 (60.00 %)	6 (40.00%)	11 (73.33%)	4 (26.67%)	15 (100%)	0
5	Fear for handling new technology	4 (26.67 %)	11 (73.33%)	8 (53.33%)	7 (46.67 %)	11 (73.33%)	4 (26.67%)
III	**Technological reason**						
1	Complex Nursery management	8 (53.33%)	7 (46.67 %)	13 (86.67%)	2 (13.33%)	13 (86.67%)	2 (13.33%)
2	Unable to transplant young seedlings	7 (46.67%)	8 (53.33%)	13 (86.67%)	2 (13.33%)	14 (93.33%)	1 (6.67%)
3	Complication in using markers	14 (93.33%)	1 (6.67%)	14 (93.33%)	1 (6.67%)		
4	Handling of cono weeder is tiresome	9 (60.00%)	6 (40.00%)	11 (73.33%)	4 (26.67%)		
5	Unable to maintain alternate dry n wet spell	11 (73.33%)	4 (26.67)	13 (86.67%)	2 (13.33%)		
6	Difficult to manage weeds	13 (86.67%)	2 (13.33%)	14 (93.33%)	1 (6.67%)		
7	Manage of disease and pest is hard	4 (26.67%)	11 (73.33%)	9 (60.00%)	6 (40.00%)		

The study revealed that farmers who were practicing SRI faced constraints such as uncontrolled water situation during monsoon in low land (100%) followed by complication in using markers (93.33%), difficulties in management of weeds (86.67%) and requirement of large amount of FYM/Compost (73.33%). If farmers who have discontinued practicing SRI were seen it was brought to notice that they faced physical constraints such as requirement of large quantity of FYM/Compost (93.33%) and Irregularity in canal water supply and Washing out of transplanted seedlings due to heavy rain both (86.67%). They also faced psychological constraints such as

fear for transplanting youg seedling and seedling mortality (73.33%). Regarding technological constraints 93.33% farmers faced constraints such as complication using markers and difficulty in managing weeds. In respect to farmers knowing regarding SRI but not adopting it every one faced physical and psychological constraints. In technological constraints are seen they were not having any as they had not practically done SRI.

3.2 Achievements of Frontline Demonstrations

A. Details of FLDs conducted during 2015-16

Cereals

Sl. No.	Crop	Thematic area	Technology Demonstrated with detailed treatments	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
				Proposed	Actual	SC/ST	Others	Total	
1.	Jute	Varietal	Improved cultivar (cv. CO 58) Local Chk. JRO 524	10	10	23	33	56	
2.	Jute	Post harvest management	Improved retting with 'CRIJAF SONA'	6	6	16	44	60	
3.	Mustard	Nutrient management	Sulfur and boron nutrition	30	30	45	67	112	
4.	Lentil	Nutrient management	Integrated nutrient management	20	20	56	69	125	
5	Green gram	Varietal	Improved variety	15	15	34	75	109	
6	Chick pea	Nutrient management	Integrated nutrient management	5	5	21	3	24	

7	Sesame	Nutrient management	Sulfur and boron nutrition	30	42	34	126	160	
8	Onion	Introduction in Kharif season	Agrifound Dark Red	1	1	12	3	15	
9	Tomato	Improve variety	Abhilash	2	2	11	4	15	
10	Banana	Tissue cultured	Tissue cultured plantlets of variety Grand Naine	1	1	1	6	7	
11	Brinjal	Improve variety	Bhangar	-	1	9	6	15	
12	Oat as fodder	Improved agronomic practices	Improved variety and method of sowing Var. Kent	0.3	0.3	-	5	5	
13	Berseem	Package of demonstration	Improved variety, time of sowing, nutrient management , feeding practice	0.3	0.3		5	5	
14	Kitchen Garden (cucurbits, brinjal, chilli, tomato, okra, bean and GLV)	Supplementation of diversified vegetables to farm families through kitchen garden	Diversified vegetable (cucurbits, brinjal, pumpkin radish, chilli, tomato, okra, bean and GLV) + manuring	0.2	0.4	20	0	20	

Details of farming situation

Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil (Kg/ha)			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
				N	P_2O_5	K_2O					
Jute	Pre kharif	Irrigated	Loamy	240	32	220	Rice/potato	April 4th – 13th, 2015	July 17 – 30, 2015		
Jute	Pre kharif	Irrigated	Loamy	--	--	--	Rice/potato	April 4 , 2015	July 19 – 2015		
Mustard	Rabi 15-16	Irrigated	Clay loam to loamy	263	42	208	Rice	Nov. 3 – 13, 2015	Feb 2 – 20, 2016		
Lentil	Rabi 15-16	Irrigated	Clay loam to loamy	215	39	189	Rice	Nov. 15 – 20, 2015	Feb. 15 – Mar 1 2016		
Green gram	Summer 16	Irrigated	Loamy	262	56	234	Potato	Feb 24 – Mar 5, 2016	--		
Chick pea	Rabi 15-16	Irrigated	Sandy loam	237	45	214	Rice	Nov. 25 – 26, 2015	Feb. 21 – Feb 25 2016		
Sesame	Summer 16	Irrigated	Clay loam to loamy	220	42	250	Potato	Feb 24 – Mar 5, 2016	--		
Onion	Kharif	Irrigated	Loam	240	56	190	Vegetables	Jul. 8-15, 2015	Oct. 18, 2015 – Nov.10,2015		
Tomato	Rabi	Irrigated	Loam	230	52	210	Vegetables	Sept. 1-10, 2015	Dec. 15, 2015 – Feb.20,2016		
Banana	Year round	Irrigated	Loam	210	50	190	Vegetables	July 7-14, 2014	Aug 1-30, 2015		
Brinjal	Rabi	Irrigated	Loam	230	50	200	Vegetables	Aug 15-19, 2015	Dec. 6, 2015 –		

									Feb.11,2016		
Oat as fodder	Rabi 2015	Irrigated	Sandy loam to clay loam	210	50	190	Kharif paddy	19.12.15-25.12.15	1.1.15-10.1.15: 1.3.16, 8.3.16		
Berseem	Rabi, 2015	Irrigated	Sandy loam to clay loam	210	50	180	Kharif paddy	18.12.15-22.12.15	28.1.16. - 4.2.16: 1.3.16, 8.3.16		
Kitchen Garden	Year round	Irrigated	Sandy loam to clay loam	210	50	180		Dec, 15			

In both the Tables, information of same crop should be provided. For example, if in Table 3.2A crops are mentioned as a,b,c,d etc., in the table for Details of farming situation, the same crop should be mentioned in the identical sequence.

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)			
					Demo	Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Mustard	Nutrient managment	Sulphur and boron nutrition	112	30	12.7	11.1	14.4	21250	42573	21323	2.00	23400	53167	29767	2.27
Sesame	Nutrient managment	Sulphur and boron nutrition	160	42	--										
Total			272												

* 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

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 check (Rs./ha)				*Economics of demonstration (Rs./ha)			
					Demo	Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Lentil	Disease management	IDM	126	20	7.8	7.1	9.85	12250	30580	18330	2.50	12950	34320	21370	2.65
Chick pea	Disease management	IDM	25	5	11.0	8.2	34.1	15500	37160	21660	2.40	18600	46290	27690	2.49
	Total		251	25											

* 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 Farmer	Area (ha)	Yield (q/ha)		% change 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
Jute	Improved variety	CO 58 Local Chk. JRO 524	56	10	31.4	28.4	10.6	1. PL. ht. 354 cm 2. BD. 1.32 cm	PL. ht. 331 cm BD. 1.44 cm	44650	119320	74670	2.67	44650	107920	63270	2.42
Jute	Improved retting	CRIJAF SONA retting consortium	62	8	28.8	28.6	0.70	Grade: 4-5	Grade: -3	47800	126720	78920	2.65	43500	107250	63750	2.47
Rice	Nutrient management	Split application of fertilizer	15	2	68.2	54.7	24.7	1. EBT 19.4	1. EBT 11.8	44600	92070	47470	2.06	43500	73845	30345	1.70
Onion	Introduction in Kharif season	Agrifound Dark Red	15	1	190	No existing variety	-	-	-	115000	298000	183000	2.59	-	-	-	-
Tomato	Improved variety (F1)	Abhilash	15	2	316	265	19.2	-	-	69500	148000	78500	2.12	65500	112000	46500	1.70
Banana	Tissue cultured plant	Grand Naine	7	1	720	530	26.4	-	-	92000	234000	142000	2.54	105000	195500	90500	1.86

Brinjal	Improve variety	Bhangar	15	1	248	220	12.7	-	-	76000	169000	93000	2.22	75000	149000	74000	1.98
Oat as fodder	Improved agronomic practices	Improved variety and method of sowing Var. JHO-822	5	0.3	422	396	6.56	Dry matter 14.47 %	Dry matter 13.98 %	10820	20850	10030	1.93	11220	18150	6930	1.62
Berseem	Package of demonstration	Improved var. Mascavi	5	0.3	516	464	11.20	DM-12.3 %	DM-12.1 %	11300	23350	12050	2.07	11000	19480	8480	1.77
Kitchen Garden	Supplementation of diversified vegetables to farm families through kitchen garden		20	0.4	182.70	158.6	15.19	-	-	72000	150800	78800	2.09	64500	109800	45300	1.70
	Total																

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																	
Buffalo																	
Poultry																	
Rabbitry																	
Pigerry																	
Sheep and goat																	
Duckery																	
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

Fisheries

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No.of units	Major parameters		% change in major parameter	Other parameter		*Economics of demonstration (Rs.)				*Economics of check (Rs.)			
					Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Others	Package practice	Monosex culture of tilapia	10	10	2.66 t/ha	2 /ha	26.6	-	-	88516	163755	75239	1.85	68589	106313	37724	1.55

* 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)		% change in major parameter	Labor reduction (man days)				Cost reduction (Rs./ha or Rs./Unit)			
					Demonstration	Check									

*** 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**

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										
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	Abhilash	15	2	31600	26500	19.2	69500	148000	78500	2.12
Brinjal										
Okra										
Onion										
Potato										
Field bean										
Others (pl.specify)										
Total										
Commercial crops										

Cotton										
Coconut										
Others (pl.specify)										
Total										
Fodder crops										
Napier (Fodder)										
Maize (Fodder)										
Sorghum (Fodder)										
Others (pl.specify)										
Total										

Technical Feedback on the demonstrated technologies

S. No	Crop	Feed Back
1	Jute (varietal)	Seed of improved variety like CO-58 to made available in local market
2	Jute (Retting)	CRIJAF SONA should be made available in commercial basis
3	Mustard	Sulfur and boron containing fertilizer should be readily available in market
4	Lentil	Trichiderma and pseudomonas should be made available and should have viable count
5	Green gram	--
6	Chick pea	Trichiderma and pseudomonas should be made available and should have viable count
7	Sesame	--
8	Onion	Unpredictable rainfall and flood like situation is the major concern of kharif onion cultivation.
9	Tomato	Improved cultivar of tomato (Abhilash) should be available in local market
10	Banana	It showed better growth in comparison to local one
11	Brinjal	Improved cultivar of Brinjal (Bhangar) should be available in local market for cultivation in rabi season

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									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
I. Crop Production													
Weed Management													
Resource Conservation Technologies													
Cropping Systems													
Crop Diversification													
Integrated Farming													
Water management													
Seed production													
Nursery management													
Integrated Crop Management													
Fodder production													
Production of organic inputs													
Others, (cultivation of crops)													
II. Horticulture													
a) Vegetable Crops													
Integrated nutrient management													
Water management													
Enterprise development													
Skill development													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Yield increment													
Production of low volume and high value crops													
Off-season vegetables													
Nursery raising													
Export potential vegetables													
Grading and standardization													
Protective cultivation (Green Houses, Shade Net etc.)													
Others, if any (Cultivation of Vegetable)													
Training and Pruning													
b) Fruits													
Layout and Management of Orchards													
Cultivation of Fruit													
Management of young plants/orchards													
Rejuvenation of old orchards													
Export potential fruits													
Micro irrigation systems of orchards													
Plant propagation techniques													
Others, if any(INM)													
c) Ornamental Plants													
Nursery Management													
Management of potted plants													
Export potential of ornamental plants													
Propagation techniques of Ornamental Plants													
Others, if any													
d) Plantation crops													
Production and Management technology													
Processing and value addition													
Others, if any													
e) Tuber crops													
Production and Management technology													
Processing and value addition													
Others, if any													
f) Spices													
Production and Management technology													
Processing and value addition													
Others, if any													
g) Medicinal and Aromatic Plants													
Nursery management													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Production and management technology													
Post harvest technology and value addition													
Others, if any													
III. Soil Health and Fertility Management													
Soil fertility management													
Soil and Water Conservation													
Integrated Nutrient Management													
Production and use of organic inputs	2	0	0	0	0	0	0	55	5	60	55	5	60
Management of Problematic soils													
Micro nutrient deficiency in crops													
Nutrient Use Efficiency													
Soil and Water Testing													
Others, if any													
IV. Livestock Production and Management													
Dairy Management													
Poultry Management													
Piggery Management	1	0	0	0	0	0	0	30	0	30	30	0	30
Rabbit Management													
Disease Management													
Feed management													
Production of quality animal products	1	0	0	0	0	0	0	30	0	30	30	0	30
Others, if any Goat farming	1	0	0	0	0	0	0	30	0	30	30	0	30
V. Home Science/Women empowerment													
Household food security by kitchen gardening and nutrition gardening													
Design and development of low/minimum cost diet													
Designing and development for high nutrient efficiency diet													
Minimization of nutrient loss in processing													
Gender mainstreaming through SHGs													
Storage loss minimization techniques													
Enterprise development													
Value addition													
Income generation activities for empowerment of rural Women													
Location specific drudgery reduction technologies													
Rural Crafts													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Capacity building													
Women and child care													
Others, if any													
VI. Agril. Engineering													
Installation and maintenance of micro irrigation systems													
Use of Plastics in farming practices													
Production of small tools and implements													
Repair and maintenance of farm machinery and implements													
Small scale processing and value addition													
Post Harvest Technology													
Others, if any													
VII. Plant Protection													
Integrated Pest Management													
Integrated Disease Management													
Bio-control of pests and diseases													
Production of bio control agents and bio pesticides													
Others, if any													
VIII. Fisheries													
Integrated fish farming													
Carp breeding and hatchery management													
Carp fry and fingerling rearing													
Composite fish culture & fish disease													
Fish feed preparation & its application to fish pond, like nursery, rearing & stocking pond													
Hatchery management and culture of freshwater prawn													
Breeding and culture of ornamental fishes													
Portable plastic carp hatchery													
Pen culture of fish and prawn													
Shrimp farming													
Edible oyster farming													
Pearl culture													
Fish processing and value addition													
Others, if any													
IX. Production of Inputs at site													
Seed Production													
Planting material production													
Bio-agents production													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Bio-pesticides production													
Bio-fertilizer production													
Vermi-compost production													
Organic manures production													
Production of fry and fingerlings													
Production of Bee-colonies and wax sheets													
Small tools and implements													
Production of livestock feed and fodder													
Production of Fish feed													
Others, if any													
X. Capacity Building and Group Dynamics													
Leadership development													
Group dynamics													
Formation and Management of SHGs													
Mobilization of social capital													
Entrepreneurial development of farmers/youths													
WTO and IPR issues													
Others, if any													
XI Agro-forestry													
Production technologies													
Nursery management													
Integrated Farming Systems													
XII. Others (Pl. Specify)													
TOTAL	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**145**	**5**	**150**	**145**	**5**	**150**

Rural Youth (on campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Mushroom Production													
Bee-keeping													
Integrated farming													
Seed production													
Production of organic inputs													
Integrated Farming													
Planting material production													
Vermi-culture													
Sericulture													
Protected cultivation of vegetable crops													
Commercial fruit production													
Repair and maintenance of farm machinery and implements	14	217	0	217	56	0	56	84	0	84	357	0	357

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Nursery Management of Horticulture crops													
Training and pruning of orchards													
Value addition													
Production of quality animal products													
Dairying													
Sheep and goat rearing													
Quail farming													
Piggery													
Rabbit farming													
Poultry production													
Ornamental fisheries													
Enterprise development													
Para vets													
Para extension workers													
Composite fish culture													
Freshwater prawn culture													
Shrimp farming													
Pearl culture													
Cold water fisheries													
Fish harvest and processing technology													
Fry and fingerling rearing													
Small scale processing													
Post Harvest Technology													
Tailoring and Stitching													
Rural Crafts													
TOTAL	**14**	**217**	**0**	**217**	**56**	**0**	**56**	**84**	**0**	**84**	**357**	**0**	**357**

Extension Personnel (on campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Productivity enhancement in field crops													
Value addition													
Integrated Pest Management													
Integrated Nutrient management													
Rejuvenation of old orchards													
Protected cultivation technology													
Formation and Management of SHGs													
Group Dynamics and farmers organization													
Information networking among farmers													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Capacity building for ICT application													
Care and maintenance of farm machinery and implements													
WTO and IPR issues													
Management in farm animals	14	0	16	16	0	8	8	0	6	6	0	30	30
Livestock feed and fodder production													
Household food security													
Women and Child care													
Low cost and nutrient efficient diet designing													
Production and use of organic inputs													
Gender mainstreaming through SHGs													
TOTAL	**14**	**0**	**16**	**16**	**0**	**8**	**8**	**0**	**6**	**6**	**0**	**30**	**30**

Farmers and farm women (off campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
I. Crop Production													
Weed Management													
Resource Conservation Technologies	1	28	2	30	0	0	0	0	0	0	28	2	30
Cropping Systems	1	0	0	0	0	0	0	8	17	25	8	17	25
Crop Diversification	1	0	0	0	0	0	0	23	2	25	23	2	25
Integrated Farming													
Water management	1	0	0	0	0	0	0	25	0	25	25	0	25
Seed production	7	0	0	0	0	0	0	157	39	196	157	39	196
Nursery management													
Integrated Crop Management													
Fodder production													
Production of organic inputs													
Others, (cultivation of crops)	1	30	0	30	0	0	0	0	0	0	30	0	30
II. Horticulture													
a) Vegetable Crops													
Integrated nutrient management													
Water management													
Enterprise development													
Skill development													
Yield increment													
Production of low volume and high value crops													
Off-season vegetables													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Nursery raising													
Export potential vegetables													
Grading and standardization													
Protective cultivation (Green Houses, Shade Net etc.)	1	0	0	0	0	0	0	14	16	30	14	16	30
Others, if any (Cultivation of Vegetable)	2	0	0	0	0	0	0	38	22	60	38	22	60
Training and Pruning													
b) Fruits													
Layout and Management of Orchards	3	0	0	0	0	0	0	49	26	75	49	26	75
Cultivation of Fruit													
Management of young plants/orchards													
Rejuvenation of old orchards													
Export potential fruits													
Micro irrigation systems of orchards													
Plant propagation techniques	2	0	0	0	0	0	0	60	0	60	60	0	60
Others, if any(INM)													
c) Ornamental Plants													
Nursery Management													
Management of potted plants													
Export potential of ornamental plants													
Propagation techniques of Ornamental Plants													
Others, if any													
d) Plantation crops													
Production and Management technology													
Processing and value addition													
Others, if any													
e) Tuber crops													
Production and Management technology													
Processing and value addition													
Others, if any													
f) Spices													
Production and Management technology													
Processing and value addition													
Others, if any													
g) Medicinal and Aromatic Plants													
Nursery management													
Production and management technology													
Post harvest technology and													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
value addition													
Others, if any													
III. Soil Health and Fertility Management													
Soil fertility management													
Soil and Water Conservation													
Integrated Nutrient Management													
Production and use of organic inputs													
Management of Problematic soils													
Micro nutrient deficiency in crops													
Nutrient Use Efficiency													
Soil and Water Testing													
Others, if any													
IV. Livestock Production and Management													
Dairy Management													
Poultry Management													
Piggery Management													
Rabbit Management													
Disease Management													
Feed management													
Production of quality animal products													
Others, if any Goat farming													
V. Home Science/Women empowerment													
Household food security by kitchen gardening and nutrition gardening													
Design and development of low/minimum cost diet													
Designing and development for high nutrient efficiency diet													
Minimization of nutrient loss in processing													
Gender mainstreaming through SHGs													
Storage loss minimization techniques													
Enterprise development													
Value addition	3	0	0	0	0	0	0	9	66	75	9	66	75
Income generation activities for empowerment of rural Women													
Location specific drudgery reduction technologies	3	0	9	9	0	0	0	0	77	77	0	86	86
Rural Crafts													
Capacity building	1	0	10	10	0	20	20	0	0	0	0	30	30
Women and child care													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Others, if any													
VI. Agril. Engineering													
Installation and maintenance of micro irrigation systems													
Use of Plastics in farming practices													
Production of small tools and implements													
Repair and maintenance of farm machinery and implements													
Small scale processing and value addition													
Post Harvest Technology													
Others, if any													
VII. Plant Protection													
Integrated Pest Management	1	29	0	29	1	0	1	0	0	0	30	0	30
Integrated Disease Management													
Bio-control of pests and diseases													
Production of bio control agents and bio pesticides	1	24	0	24	6	0	6	0	0	0	30	0	30
Others, if any													
VIII. Fisheries													
Integrated fish farming													
Carp breeding and hatchery management													
Carp fry and fingerling rearing	3	0	0	0	0	0	0	70	20	90	70	20	90
Composite fish culture & fish disease	5	0	0	0	0	0	0	106	24	130	106	24	130
Fish feed preparation & its application to fish pond, like nursery, rearing & stocking pond													
Hatchery management and culture of freshwater prawn	2	0	0	0	0	0	0	42	18	60	42	18	60
Breeding and culture of ornamental fishes													
Portable plastic carp hatchery													
Pen culture of fish and prawn													
Shrimp farming													
Edible oyster farming													
Pearl culture													
Fish processing and value addition													
Others, if any													
IX. Production of Inputs at site													
Seed Production	3	0	0	0	0	0	0	56	29	85	56	29	85
Planting material production													
Bio-agents production													
Bio-pesticides production													
Bio-fertilizer production													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Vermi-compost production	8	0	0	0	0	0	0	139	76	215	139	76	215
Organic manures production													
Production of fry and fingerlings													
Production of Bee-colonies and wax sheets													
Small tools and implements													
Production of livestock feed and fodder													
Production of Fish feed													
Others, if any													
X. Capacity Building and Group Dynamics													
Leadership development													
Group dynamics	1	0	0	0	0	0	0	0	25	25	0	25	25
Formation and Management of SHGs	2	0	0	0	0	0	0	0	50	50	0	50	50
Mobilization of social capital													
Entrepreneurial development of farmers/youths	1	0	0	0	0	0	0	22	3	25	22	3	25
WTO and IPR issues													
Others, if any (Crop Insurance)	4	0	0	0	0	0	0	65	35	100	65	35	100
XI Agro-forestry													
Production technologies													
Nursery management													
Integrated Farming Systems													
XII. Others (Pl. Specify)													
TOTAL	**58**	**111**	**21**	**132**	**7**	**20**	**27**	**883**	**545**	**1428**	**1001**	**586**	**1587**

RURAL YOUTH (Off Campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Mushroom Production													
Bee-keeping													
Integrated farming													
Seed production													
Production of organic inputs	1	34	1	35	0	0	0	0	0	0	34	1	35
Integrated Farming	2	49	0	49	6	4	10	1	0	1	56	4	60
Planting material production													
Vermi-culture													
Sericulture													
Protected cultivation of vegetable crops	3	66	11	75	7	0	7	5	8	13	78	17	95
Commercial fruit production													
Repair and maintenance of farm machinery and implements													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Nursery Management of Horticulture crops													
Training and pruning of orchards													
Value addition													
Production of quality animal products													
Dairying													
Sheep and goat rearing													
Quail farming													
Piggery													
Rabbit farming													
Poultry production													
Ornamental fisheries													
Para vets													
Para extension workers													
Composite fish culture	1	23	0	23	7	0	7	0	0	0	30	0	30
Freshwater prawn culture													
Shrimp farming													
Pearl culture													
Cold water fisheries													
Fish harvest and processing technology													
Fry and fingerling rearing	1	32	0	32	3	0	3	0	0	0	35	0	35
Small scale processing													
Post Harvest Technology													
Tailoring and Stitching													
Rural Crafts	7	0	0	0	0	0	0	0	140	140	0	140	140
Others, if any													
TOTAL	**15**	**204**	**12**	**214**	**23**	**4**	**27**	**6**	**148**	**154**	**233**	**162**	**395**

Extension Personnel (Off Campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Productivity enhancement in field crops													
Integrated Pest Management													
Integrated Nutrient management													
Rejuvenation of old orchards													
Protected cultivation technology													
Formation and Management of SHGs													
Group Dynamics and farmers organization													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Information networking among farmers													
Capacity building for ICT application													
Care and maintenance of farm machinery and implements													
WTO and IPR issues													
Management in farm animals													
Livestock feed and fodder production													
Household food security													
Women and Child care													
Low cost and nutrient efficient diet designing													
Production and use of organic inputs													
Gender mainstreaming through SHGs													
Crop intensification													
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Consolidated table (ON and OFF Campus)

Farmers & Farm Women

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
I. Crop Production													
Weed Management													
Resource Conservation Technologies	1	28	2	30	0	0	0	0	0	0	28	2	30
Cropping Systems	1	0	0	0	0	0	0	8	17	25	8	17	25
Crop Diversification	1	0	0	0	0	0	0	23	2	25	23	2	25
Integrated Farming													
Water management	1	0	0	0	0	0	0	25	0	25	25	0	25
Seed production	7	0	0	0	0	0	0	157	39	196	157	39	196
Nursery management													
Integrated Crop Management													
Fodder production													
Production of organic inputs													
Others, (cultivation of crops)	1	30	0	30	0	0	0	0	0	0	30	0	30
II. Horticulture													
a) Vegetable Crops													
Integrated nutrient management													
Water management													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Enterprise development													
Skill development													
Yield increment													
Production of low volume and high value crops													
Off-season vegetables													
Nursery raising													
Export potential vegetables													
Grading and standardization													
Protective cultivation (Green Houses, Shade Net etc.)	1	0	0	0	0	0	0	14	16	30	14	16	30
Others, if any (Cultivation of Vegetable)	2	0	0	0	0	0	0	38	22	60	38	22	60
Training and Pruning													
b) Fruits													
Layout and Management of Orchards	3	0	0	0	0	0	0	49	26	75	49	26	75
Cultivation of Fruit													
Management of young plants/orchards													
Rejuvenation of old orchards													
Export potential fruits													
Micro irrigation systems of orchards													
Plant propagation techniques	2	0	0	0	0	0	0	60	0	60	60	0	60
Others, if any(INM)													
c) Ornamental Plants													
Nursery Management													
Management of potted plants													
Export potential of ornamental plants													
Propagation techniques of Ornamental Plants													
Others, if any													
d) Plantation crops													
Production and Management technology													
Processing and value addition													
Others, if any													
e) Tuber crops													
Production and Management technology													
Processing and value addition													
Others, if any													
f) Spices													
Production and Management technology													
Processing and value addition													
Others, if any													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
g) Medicinal and Aromatic Plants													
Nursery management													
Production and management technology													
Post harvest technology and value addition													
Others, if any													
III. Soil Health and Fertility Management													
Soil fertility management													
Soil and Water Conservation													
Integrated Nutrient Management													
Production and use of organic inputs	2	0	0	0	0	0	0	55	5	60	55	5	60
Management of Problematic soils													
Micro nutrient deficiency in crops													
Nutrient Use Efficiency													
Soil and Water Testing													
Others, if any													
IV. Livestock Production and Management													
Dairy Management													
Poultry Management													
Piggery Management	1	0	0	0	0	0	0	30	0	30	30	0	30
Rabbit Management													
Disease Management													
Feed management													
Production of quality animal products	1	0	0	0	0	0	0	30	0	30	30	0	30
Others, if any Goat farming	1	0	0	0	0	0	0	30	0	30	30	0	30
V. Home Science/Women empowerment													
Household food security by kitchen gardening and nutrition gardening													
Design and development of low/minimum cost diet													
Designing and development for high nutrient efficiency diet													
Minimization of nutrient loss in processing													
Gender mainstreaming through SHGs													
Storage loss minimization techniques													
Enterprise development													
Value addition	3	0	0	0	0	0	0	9	66	75	9	66	75
Income generation activities for empowerment of rural Women													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Location specific drudgery reduction technologies	3	0	9	9	0	0	0	0	77	77	0	86	86
Rural Crafts													
Capacity building	1	0	10	10	0	20	20	0	0	0	0	30	30
Women and child care													
Others, if any													
VI. Agril. Engineering													
Installation and maintenance of micro irrigation systems													
Use of Plastics in farming practices													
Production of small tools and implements													
Repair and maintenance of farm machinery and implements													
Small scale processing and value addition													
Post Harvest Technology													
Others, if any													
VII. Plant Protection													
Integrated Pest Management	1	29	0	29	1	0	1	0	0	0	30	0	30
Integrated Disease Management													
Bio-control of pests and diseases													
Production of bio control agents and bio pesticides	1	24	0	24	6	0	6	0	0	0	30	0	30
Others, if any													
VIII. Fisheries													
Integrated fish farming													
Carp breeding and hatchery management													
Carp fry and fingerling rearing	3	0	0	0	0	0	0	70	50	90	70	20	90
Composite fish culture & fish disease	5	0	0	0	0	0	0	106	24	130	106	24	130
Fish feed preparation & its application to fish pond, like nursery, rearing & stocking pond													
Hatchery management and culture of freshwater prawn	2	0	0	0	0	0	0	42	18	60	42	18	60
Breeding and culture of ornamental fishes													
Portable plastic carp hatchery													
Pen culture of fish and prawn													
Shrimp farming													
Edible oyster farming													
Pearl culture													
Fish processing and value addition													
Others, if any													
IX. Production of Inputs at site													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Seed Production	3	0	0	0	0	0	0	56	29	85	56	29	85
Planting material production													
Bio-agents production													
Bio-pesticides production													
Bio-fertilizer production													
Vermi-compost production	8	0	0	0	0	0	0	139	76	215	139	76	215
Organic manures production													
Production of fry and fingerlings													
Production of Bee-colonies and wax sheets													
Small tools and implements													
Production of livestock feed and fodder													
Production of Fish feed													
Others, if any													
X. Capacity Building and Group Dynamics													
Leadership development													
Group dynamics	1	0	0	0	0	0	0	0	25	25	0	25	25
Formation and Management of SHGs	2	0	0	0	0	0	0	0	50	50	0	50	50
Mobilization of social capital													
Entrepreneurial development of farmers/youths	1	0	0	0	0	0	0	22	3	25	22	3	25
WTO and IPR issues													
Others, if any	4	0	0	0	0	0	0	65	35	100	65	35	100
XI Agro-forestry													
Production technologies													
Nursery management													
Integrated Farming Systems													
XII. Others (Pl. Specify)													
TOTAL	**61**	**111**	**21**	**132**	**7**	**20**	**27**	**1028**	**580**	**1608**	**1146**	**591**	**1737**

RURAL YOUTH (On and Off Campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Mushroom Production													
Bee-keeping													
Integrated farming													
Seed production													
Production of organic inputs	1	34	1	35	0	0	0	0	0	0	34	1	35
Integrated Farming	2	49	0	49	6	4	10	1	0	1	56	4	60
Planting material production													
Vermi-culture													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Sericulture													
Protected cultivation of vegetable crops	3	66	11	75	7	0	7	5	8	13	78	17	95
Commercial fruit production													
Repair and maintenance of farm machinery and implements	14	217	0	217	56	0	56	84	0	84	357	0	357
Nursery Management of Horticulture crops													
Training and pruning of orchards													
Value addition													
Production of quality animal products													
Dairying													
Sheep and goat rearing													
Quail farming													
Piggery													
Rabbit farming													
Poultry production													
Ornamental fisheries													
Para vets													
Para extension workers													
Composite fish culture	1	23	0	23	7	0	7	0	0	0	30	0	30
Freshwater prawn culture													
Shrimp farming													
Pearl culture													
Cold water fisheries													
Fish harvest and processing technology													
Fry and fingerling rearing	1	32	0	32	3	0	3	0	0	0	35	0	35
Small scale processing													
Post Harvest Technology													
Tailoring and													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Stitching													
Rural Crafts	7	0	0	0	0	0	0	0	140	140	0	140	140
Enterprise development													
TOTAL	**29**	**421**	**12**	**433**	**79**	**4**	**83**	**90**	**148**	**238**	**590**	**162**	**752**

Extension Personnel (On and Off Campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Productivity enhancement in field crops													
Integrated Pest Management													
Integrated Nutrient management													
Rejuvenation of old orchards													
Value addition													
Protected cultivation technology													
Formation and Management of SHGs													
Group Dynamics and farmers organization													
Information networking among farmers													
Capacity building for ICT application													
Care and maintenance of farm machinery and implements													
WTO and IPR issues													
Management in farm animals	14	0	16	16	0	8	8	0	6	6	0	30	30
Livestock feed and fodder production													
Household food security													
Women and Child care													
Low cost and nutrient efficient diet designing													
Production and use of organic inputs													
Gender mainstreaming through SHGs													
TOTAL	**14**	**0**	**16**	**16**	**0**	**8**	**8**	**0**	**6**	**6**	**0**	**30**	**30**

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

Discipline	Clientele	Title of the training programme	Duration in days	Venue (Off / On Campus)	Number of participants			Number of SC/ST		
					Male	Female	Total	Male	Female	Total
Agriculture	PF	Rice cultivation through SRI	1	Off	28	2	30	0	0	0
	PF	INM in paddy	1	Off	30	0	30	0	0	0
	PF	IPM in boro rice	1	Off	30	0	30	1	0	1
	PF	Paddy Seed Production	7	Off	157	39	196	157	39	196
	PF	Vermicompost Production	8	Off	139	76	215	139	76	215
	RY	Production of Pulse Crop	1	Off	23	2	25	23	2	25
	RY	Vermicompost Production	1	Off	34	1	35	0	0	0
	RY	Cropping intensity	1	Off	8	17	25	8	17	25
Horticulture	PF	Protective cultivation of vegetables	1	Off	14	16	30	14	16	30
	PF	Layout and Management of Orchards	3	Off	49	26	75	49	26	75
	PF	Plant propagation techniques of sub-tropical fruit crops	2	Off	60	0	60	60	0	60
	PF	Vegetable seed production	3	Off	56	29	85	56	29	85
	PF	Improved production technology of potato	2	Off	38	22	60	38	22	60
	PF	Organic pesticide production and its use	2	On	55	5	60	55	5	60
	PF	Organic pesticide production and its use	1	Off	30	0	30	6	0	6
	PF	Integrated farming system	2	Off	56	4	60	7	4	11
	RY	Protective cultivation of vegetables	3	Off	78	17	95	12	8	20
Animal Husbandry	PF	Fodder Production	1	On	30	0	30	30	0	30
	PF	Goat rearing	1	On	30	0	30	30	0	30
	PF	Pig rearing	1	On	30	0	30	30	0	30
	EF	Pranimitra training of Burdwan district	14	On	0	30	30	0	14	14
Fishery	PF	Hatchery Management	2	Off	42	18	60	42	18	60
	PF	Carp fry and fingerling rearing	3	Off	70	20	90	70	20	90
	RY	Preparation and management of nursery pond	1	Off	35	0	35	3	0	3

	RY	Disease management & prophylactic measures in composite fish culture pond	1	Off	30	0	30	7	0	7
	PF	Composite fish culture	5	Off	106	24	130	106	24	130
Home Science	PF	Kantha Stitch Production	7	Off	0	140	140	0	140	140
	PF	Strategy for reduction of drudgery among farm women	2	Off	0	56	56	0	56	56
	PF	Location specific drudgery reduction technologies	1	Off	0	30	30	0	21	21
	PF	Capacity building of rural women	1	Off	0	30	30	0	20	20
	PF	Value addition of Rice	3	Off	9	66	75	9	66	75
Agril. Extension	PF	Formation and management of self-help groups	2	Off	0	50	50	0	50	50
	PF	Group dynamics	1	Off	0	25	25	0	25	25
	PF	Crop insurance	4	Off	65	35	100	65	35	100
	PF	Entrepreneurial development of farmers/youths	1	Off	22	3	25	22	3	25
	PF	Water management	1	Off	25	0	25	25	0	25
	RY	Package of agriculture machinery for paddy cultivation	14	On	357	0	357	140	0	140

(D) Vocational training programmes for Rural Youth

Details of 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	
Kantha Stitch	Entrepreneurship development	Kantha Stitch Production	7	0	140	140	Individuals			

*training title should specify the major technology /skill transferred

(E) Sponsored Training Programmes

Sl. No	Title	Thematic area	Month	Duration (days)	Client	No. of courses	No. of Participants										Sponsoring Agency
							Male			Female			Total				
					PF/ RY/ EF		Others	SC	ST	Others	SC	ST	Others	SC	ST	Total	
1.	Disease management technology of potato	Disease management	Feb, 2016	1	RY	1	7	1	5	9	0	8	16	1	13	30	**NABARD, Burdwan**
2.	SRI	Resource Management	Feb, 2016	1	PF	1	28	0	0	2	0	0	30	0	0	30	**NABARD, Burdwan**
3.	Vermi compost production	Production of organic inputs	Feb, 2016	1	RY	1	34	0	0	1	0	0	35	0	0	35	**NABARD, Burdwan**
4.	Preparation and management of nursery pond	Composite fish culture	Feb, 2016	1	PF	1	32	3	0	0	0	0	32	3	0	35	**NABARD, Burdwan**
5.	Production of organic Pesticides	Production of organic inputs	Feb, 2016	1	PF	1	24	6	0	0	0	0	24	6	0	30	**NABARD, Burdwan**

6.	Disease management of fish culture	Composite fish culture	Feb, 2016	1	RY	1	23	7	0	0	0	0	23	7	0	30	**NABARD, Burdwan**
7.	Nutrient management in rice and other crops	Nutrient management	Feb, 2016	1	PF	1	30	0	0	0	0	0	30	0	0	30	**NABARD, Burdwan**
8.	Integrated farming	Integrated farminf	Feb, 2016	1	RY	2	49	6	1	0	4	0	49	10	1	60	**NABARD, Burdwan**
9.	Vegetable production	Vegetable production	Mar, 2016	1	RY	1	35	0	0	0	0	0	35	0	0	35	**NABARD, Burdwan**
10.	IPM in boro rice	IPM	Mar, 2016	1	PF	1	29	1	0	0	0	0	29	1	0	30	**NABARD, Burdwan**
11.	Capacity building of rural women	Capacity Building	Mar, 2016	1	PF	1	0	0	0	10	20	0	10	20	0	30	**NABARD, Burdwan**
12	Location specific drudgery reduction technologies	Location specific drudgery reduction technologies	Mar, 2016	1	PF	1	21	0	9	0	0	0	21	0	9	30	**NABARD, Burdwan**

13.	Package of agriculture machinery for paddy cultivation	Repair and maintenance of farm machinery and implements	Feb, 2016	7	RY	7	91	0	77	0	0	0	91	0	77	168	**SMAM, DAC, Burdwan District**
14.	Package of agriculture machinery for paddy cultivation	Repair and maintenance of farm machinery and implements	Mar, 2016	7	RY	7	126	56	7	0	0	0	126	56	7	189	**SMAM, DAC, Burdwan District**

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	7	175	70	245	33	2	35	208	72	280
KisanMela	3	397	53	450	15	3	18	412	56	468
KisanGhosthi				0			0	0	0	0
Exhibition	3	3200	900	4100	70	20	90	3270	920	4190
Film Show	35	925	275	1200	45	0	45	970	275	1245
Method Demonstrations	4	87	20	107	9	4	13	96	24	120
Farmers Seminar	4	95	18	113	18	4	22	113	22	135
Workshop				0			0	0	0	0
Group meetings	4	78	21	99	13	2	15	91	23	114
Lectures delivered as resource persons	21	754	67	821	0	0	0	754	67	821
Advisory Services	756	975	73	1048	0	0	0	975	73	1048
Scientific visit to farmers field	187	1278	324	1602	0	0	0	1278	324	1602
Farmers visit to KVK	354	3521	654	4175	0	0	0	3521	654	4175
Diagnostic visits	47	34	13	47	0	0	0	34	13	47
Exposure visits	7	90	20	110	0	0	0	90	20	110
Ex-trainees Sammelan	2	50	10	60			0	50	10	60
Soil health Camp	7	210	0	210	18	0	18	228	0	228
Animal Health Camp	4	215	65	280	0	0	0	215	65	280
Agri mobile clinic	24	625	45	670	0	0	0	625	45	670
Soil test campaigns	3	134	0	134	0	0	0	134	0	134
Farm Science Club Conveners meet	10	105	10	115	12	0	12	117	10	127
Self Help Group Conveners meetings	8	48	111	159	0	0	0	48	111	159
MahilaMandals Conveners meetings	3	0	45	45	0	0	0	0	45	45
Celebration of important days (Republic Day, Independence Day, World Vet. Day)	7	275	105	380	0	0	0	275	105	380
Any Other (Awareness Camp)	5	278	252	530	10	4	14	288	256	544
Any Other (Technology Week)	1	148	52	200	12	3	15	160	55	215
Total	**1506**	**13697**	**3203**	**16900**	**255**	**42**	**297**	**13952**	**3245**	**17197**

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	3									
Radio talks	4									
TV talks										
Popular articles	2									
Extension Literature	5	525	55	580	00	00	00	525	55	580
	14	525	50	580	00	00	00	525	55	580

3.5 Production and supply of Technological products

Village seed

Crop	Variety	Quantity of seed (q)	Value (Rs)	Provided to number of farmers
Paddy	MTU 7029	420		Not yet distributed
Onion	Agrifound Dark Red, Sukhsagar	6		Not yet distributed
Total		426		

KVK farm

Crop	variety	Quantity of seed (q)	Value (Rs)	Provided to number of farmers
Rice	MTU 7029	215		Not yet sold
Sorghum (as fodder)	MP Chari	0.7	-	Supply for demonstration under NIFTD
Grand Total				

Production of planting materials by the KVKs

Crop	Variety	No. of planting materials	Value (Rs)	Provided to number of farmers
Vegetable seedlings				
Cauliflower	Trisha, Barsati	10000	-	15
Cabbage				
Tomato	Abhilash	30000	-	20
Brinjal	Bhangar	10000	-	15

Chilli				
Onion				
Others				
Fruits				
Mango				
Guava				
Lime				
Papaya				
Banana				
Others				
Ornamental plants				
Medicinal and Aromatic				
Plantation				
Spices				
Turmeric				
Tuber				
Elephant yams				
Fodder crop saplings				
Forest Species				
Others, pl.specify				
Total		50000		50

Production of Bio-Products

Name of product	Quantity	Value (Rs.)	No. of Farmers
	Kg		
Bio Fertilisers			
Bio-pesticide			
Bio-fungicide			
Bio Agents (Vermicompost)	3 tonnes	--	Used in seed production in KVK farm
Others			
Total	3 tonnes		

Production of livestock materials

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	No. of Farmers
Goatery	Black Bengal	3	6400	3
Fisheries				
Grand Total		3	6400	3

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

Item	Title	Authors name	Number	Circulation

Research paper	Sex determination of *Anabas testudineus* of external morphological characters.	Golam Ziauddin, Samarendra Behera, Sanjeev Kumar, Rinku Gogoi, Olik Jomang and Snigdha Baksi	International Journal of Current Research Vol. 7, Issue, 07, pp.18057-18059.	Impact Factor – 6.226
	Morphomertical and Gonadal Studies of A Threatened Fish, *Anabas testudineus w*ith Respect to Seasonal Cycle.	Golam Ziauddin1, Samarendra Behera2, Sanjeev Kumar2*, Rinku Gogoi2, Olik Jomang2 and Snigdha Baksi2	International Journal of Fisheries and Aquaculture Sciences. Volume 6, Number 1 (2016), pp. 7-14.	Impact factor-0.448
	Studies on changes of gonadal materials of *Anabas testudineus* on the basis of histology during non breeding season	Samarendra Behera, Golam Ziauddin, Sanjeev Kumar, Rinku Gogoi, Olik Jomang and Snigdha Baksi	National journal of life sciences	Naas rating 4.01
Seminar/conference/ symposia papers	Air breathing fish breeding pave the way for its culture in village ponds of DakshinDinajpur district of West Bengal	B. Goswami[1], A. Mondal[2], G. Ziauddin[3] and A. Nayek[4]	International Conference on Aqquatic resources and sustainable management (ICARSM,2016) By Central Calcutta Science & Culture Organisation for Youth	
	Prospects and challenges of *hentak* - a semi fermented fish paste and *ngari* - an ethno fermented fish product of Manipur.	Y. Bedajit Singh, Sujata Sapam & G. Ziauddin.	National Seminar on Integrating Agri-Horticultural and Allied Research for Food and Nutritional Security in the Era of Global Climate Disruption March 4-6, 2016 Imphal, Manipur	
Books				
Bulletins				
News letter				
Popular Articles				

Book Chapter				
Extension Pamphlets/ literature				
Technical reports				
Electronic Publication (CD/DVD etc)				
TOTAL				

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:

S. No.	Name of programme	Name of course	Name of KVK personnel and designation	Date and Duration	Organized by
1.	Summer School	Aquaculture diversification towards boosting pond productivity and farm income	Dr. Golam Ziauddin, SMS, Fishery SC.	21 Days (08 july, 2015 to 28 july, 2015)	Aquaculture production and environment division, ICAR-CIFA, Bhubaneswar

3.7. Success stories/Case studies, if any (two or three pages write-up on each case with suitable action photographs) - None

3.8. Give details of innovative methodology or innovative technology of Transfer of Technology developed and used during the year - None

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

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

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

3.11. a. Details of equipment available in Soil and Water Testing Laboratory

Sl. No	Name of the Equipment	Qty.
1.	Flame photometer	One (Out of order)
2.	Spectrophotometer	One **(Out of order)**
3.	Shaker	One
4.	Hot air oven	One
5.	Hot plate	One
6.	Glass distillation unit	One **(Out of order)**
7.	Conductivity bridge	One
8.	pH meter	One
9.	Electronic balance	Two
10.	Grinder	One
11.	Kjeldahl N analyser	One
12.	Atomic absorption spectrophotometer	One

3.11.b. Details of samples analyzed so far

Details	No. of Samples	No. of Farmers	No. of Villages	Amount realized
FLD field samples	71	61	7	--
OFT field samples	34	19	5	
Farmers field samples	1020	915	26	
Total	1125	995	38	

3.12. Activities of rain water harvesting structure and micro irrigation system

No of training programme	No of demonstrations	No of plant material produced	Visit by the farmers	Visit by the officials
6	4	120	230	6

3.13 Technology week celebration

Type of activities	No. of activities	Number of participants	Related crop/livestock technology
Farmers training	10	420	Different ones
Live demonstration	7	380	Different ones
TV show	1		
Self help group meeting	3	160	
Farmer-Scientist interaction	6	290	

3.14. RAWE programme - is KVK involved?

No of student/ARS trained	No of days stayed

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

Date	Name of the person	Purpose of visit
23.09.2015	Dr. H. S Sen, Former Director, CRIJAf, BKP	To visit kvk for office work
28.12.2015	Mr.Gaur Ch. Mandol, MLA	To visit KVK stall at Krishi Mela at Mahakali Vidyalaya.
19.01.2016	Mr. Purnendu Basu, MIC Agriculture	To visit stall at mati Utsav at burdwan
10.02.2016	Sunil Kr. Mondol, MP, Co-Chairman for Parliamentary committee on food consumer affair	To inaugurate the technology week at kvk bud bud.
	DDG, IMD, New Delhi	To discuss about the proposition to establish mini weather station at kvk

		Burdwan
19.03.2016	Dr. Ganendra Singh, PS, IARI, New Delhi	To visit stall at Krishi Unnati Mela
19.03.2016	Prof. S. K. Singh, Div. of Fruit & Hort. Tech, IARI, New Delhi	To visit stall at Krishi Unnati Mela

4.0 IMPACT

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

KVK took up impact assessment study in two villages where KVK has been working over 5 years, namely Keten in Kanksa block and Jagulipara in Galsi-I block. The detailed study of the two villages are annexed.

4.2 Cases of large scale adoption

(Please furnish detailed information for each case)

Horizontal spread of technologies	
Technology	Horizontal spread
Seed treatment for crops	Farmers in this region were not used to treat seeds of different crops while sowing before KVK intervention. After intervention of KVK, not only the farmers in the adopted village but farmers in the adjoining villages as well are now practicing seed treatment for crops like paddy, jute, pulses, potato etc. The technology has spread to as much as 18 blocks of the district.
Azolla production for livestock feeding and green manuring	i) A low cost azolla production unit was established in KVK farm and maintained (*Azolla microphylla*) throughout the year. ii)A TV programme was conducted which was broadcasted in eTV Annadada programme for several times and after that many officers and progressive farmers made telephonic quarries about the availability of culture. iii)In our adopted villages, 25 production units were set up for multipurpose use specially as livestock and poultry feed. iv)In this year, Block Livestock Development Officer of Galsi-I indented the culture and technical know-how for 50 demonstrations in his block. v) A training programme was conducted on the theme area of azolla production and its use as green manure in rice field in collaboration with ICAR-IARI, New Delhi. vi) Recently, Durgapur State Poultry farm, ARD established one large scale production unit with the technical support from our SMS (A.H. & V. S)

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

Impacts of the different efforts by the KVK during 2015-16 which are hereunder:

1. Replacement of older varieties of the crops like jute, Mustard etc by Improved varieties of CO 58, JRO 2407, and KASHINATH respectively
2. System of Rice Intensification – better yield, less labour & cost effective - Wide coverage of MODIFIED SRI technology
3. Integrated Farming System– More return from per unit land -Widespread dissemination of Integrated Farming System approach
4. Region specific mineral mixture - Improved milk yield, fat % and reproductive performance and better performance of *Deshi cow* through supplementation of this - Widespread dissemination of this technology
5. Seed replacement rate enhanced and Seed treatment of different crops has been come in practice
6. Use of biofertilizer and biopesticide has been increased
7. Crop diversification i.e. introduction of jute, vegetables in the cropping system
8. Cultivation of off season vegetable – came into practice
9. Soil test based fertilizer application – came into practice
10. Preparation of Jute handicraft – Six of the trainees (Five female and one male) are generating income through handicraft preparation
11. Preparation of Kantha Stitch - Five of the trainees (female) are supplementing family income
12. Vermicompost production – Eight village level production units have been formed
13. Mushroom cultivation – Twenty village level production units have been formed for domestic consumption
14. Self help group – Fifty four (54) SHGs have been formed and actively working in collaboration with KVK and NABARD
15. Seed Village Programme initiated in different blocks of Burdwan which covers around 300 ha area under paddy seed cultivation.

4.4 Details of innovations recorded by the KVK

Thematic area	Hatchery

Name of the Innovation	CHANDRA HATCHERY
Details of Innovator	Chandra Narayan Bairagya Village: Khano Block Memari-I
Back ground of innovation	In view of the enhanced cost of operation and hatchling mortality, the present innovation was made.
Technology details	In stead of two pools as required in the conventional Chinese hatchery, which apart from enhancing cost is a bit difficult to operate, Mr. Bairagya has innovated a one chambered Bundh-cum-Hatching pool with modified water circulatory system.
Practical utility of innovation	The modified hatchery is easy to operate, suitable for small farmers and diminishes hatchling mortality as well.

4.5 Details of entrepreneurship development

Entrepreneurship 1

Entrepreneurship development	
Name of the enterprise	Vermiculture
Name & complete address of the entrepreneur	Chowdhury Amirul Haque, Jagulipara Block: Galsi-I
Intervention of KVK with quantitative data support:	In view of the deteriorating soil quality, application of good quality organic matter is the need of the hour. KVK intervened through hand on training on vermicompost production in the adopted villages. The above mentioned farmer has developed one vermicompost unit in his backyard with a capacity of roundabout 3 tonne. The vermicompost he produces is being used in his farm of about 3 ha. Apart from this he has developed expertise in vermiculture as well. He regularly sell the earthworm to various public ad private bodies, like NABARD; dept. of agriculture, Burdwan; NGOs whereby he earns substantial additional income to run the enterprise profitably.
Time line of the entrepreneurship development	2008: Obtained training from KVK. Got exposure to some profitable vermicompost production agencies. 2009: Constructed one vermicompost unit with subsidized funding from RKVY through KVK. 2012: Apart from regularly using vermicompost produced in his fields, got expertise in vermiculture. 2013: Generates an additional income in the range of 4200 - 8600/month from selling of earthworms. 2014: He is being regularly hired by various private and public bodies as expert in the field. 2015: Apart from regularly using vermicompost produced in his fields, generates an additional income in the range of 5200 - 7600/month from selling of earthworms.
Technical Components of the Enterprise	--
Status of entrepreneur before and after the enterprise	Generates an additional income in the range of 4200 -8600/month from selling of earthworms, apart from the remuneration received as expert to different fora.

Present working condition of enterprise in terms of raw materials availability, labour availability, consumer preference, marketing the product etc. (Economic viability of the enterprise):	The enterprise is extremely viable economically.
Horizontal spread of enterprise	Following his suite, 17 other rural youths in 5 villages under KVK operational area have started vermiculture.

Entrepreneurship 2

Entrepreneurship development	
Name of the enterprise	Kantha stitch
Name & complete address of the entrepreneur	Aminara Bagam Atapara, Galsi – I Burdwan
Intervention of KVK with quantitative data support:	KVK imparted 7 days training on preparing various kantha stitch. Also KVK has tried to explosure various selling channels for marketing her products. KVK also helped her for procuring loan from bank.
Time line of the entrepreneurship development	She got training in September, 2013. After that she motivated 5 more girls to work for her. In December she started to prepare various katha stich products like kurta, saree, purses etc.
Technical Components of the Enterprise	The enterprise is household enterprise where self labour is the critical input.
Status of entrepreneur before and after the enterprise	As the enterprise is in initial stage she gets a net profit of 2-3 thousand rupees every month. Before then her primary source of family income was from farming which her husband it. She herself didn't contribute to family income.
Present working condition of enterprise in terms of raw materials availability, labour availability, consumer preference, marketing the product etc. (Economic viability of the enterprise):	The business is gradually growing. She gets her raw materials from bolpur which is nearby Burdwan and is very famous for Kantha Stitch. She has employed five local girls to work for her. Sanjoy Kantha Stich from Brahamandihi (Bhedia) purchase her finished products. KVK also herped her to sell her product in Mati Utsav-15 and Technology Week-15 by keeping it in KVKs stall
Horizontal spread of enterprise	No horizontal spread till now

4.6 Any other initiative taken by the KVK

MATI Utsav -2016

ICAR-CRIJAF-KVK Burdwan participated in Mati Utsav-2016 which was organized by Govt. of West Bengal at Burdwan Agricultural Farm from 19th to 25th January, 2016 with a moto to display agricultural technology and rural handicraft of West Bengal on large scale and for mass awareness of the same. The Utsav was inaugurated by Honarable Chief Minister of West Bengal Smt. Mamata Banerjee. KVK exhibited stall

showcasing latest and relevant technologies in agricultural & allied Fields. CRIJAF technologies such as nail weeder, microbial consortium for jute getting etc. were also displayed in the stall which caught the interest of the visitors. The center of attraction for the stall was various crop seed display; outstanding farm produces innovative farm models and jute and katha handicraft display. Various live specimens of plant and animal were also exhibited in the stall. Around 1500 farmers were benefitted from the stall. KVK also distributed many extension literatures to the farmers. Various dignitaries from state government, research institutes and state agricultural university visited the stall and appreciated the efforts of KVK.

Awareness camps on NFSM & Tribal Sub plan (TSP)

As per instructions received from ICAR, two awareness camps were organized in two adopted villages of KVK on improved pulse production technology dated 10.03. 2016 and 15.03.2016 at Bhatar, Bhatar block and Kasba, Galsi I respectively.
Another awareness camp for tribal farmers was conducted at Bhalki, Ausgram II on 28.03.2016 on different aspects of agriculture & allied fields.

Awareness camps on 'Clean India Campaign'

As per directives of ICAR, KVKs all over the district have been directed to keep the agricultural environment clean as much as possible. In this direction KVK CRIJAF has conducted series of such awareness camps in adopted villages, apart from keeping office and farm area of the KVK clean, to realize Mahatma Gandhi's dream of a clean India. Farmers were made aware of different activities those can be undertaken, like conversion of agricultural wastes into organic manures, maintaining hygienic cattle and other livestock environment, regular pond management etc.

Observance of 'jai kisan jai vigyan divas' at Sansad adarsh gram sidhabari

JaI Kisan Jai Vigyan Diwas was celebrated in the Sansad Adarsh Gram to commemorate birthday of imminent figures like Shri Atal Bihari Bajpayee. About 90 farmers of the Adarsh Gram and adjoining villages participated in the programme. The importance of scientific agriculture towards livelihood security was discussed by

Kisan Sammelan

Two Kisan Sammelans, pre-kharif and pre-rabi were organized on 09.07.2015 & 10.02.2016 respectively at KVK campus to demonstrate various profitable technologies to practicing farmers, farm women and rural youths of the district. Mr. N. Chakraborty, Krishi Karmadakhya, Burdwan Zila Parishad and Hon'ble Member of Parliament, Burdwan East inaugurated pre-kharif and pre-rabi sammelan respectively.Total of 500 farmers attended the programmes alongwith several officials from line departments. One awareness programme on effect of global warming and climate change on agriculture and allied sectors was also organized on this occasion participated by nearly 200 farmers.

Exposure visit

Three numbers of exposure visit of farmers were conducted by KVK, Burdwan. Selected farmers of different blocks were participated in these exposure visits.

Date	Place	To visit
18.01.2016	SFDC and CIFE, Kolkata	Live demonstration on fisheries, specially ornamental fish

29.01.2016	State Horticultural Farm, Taldagra	Different horticultural crops, hi-tech production technologies etc
05.02.16	NDRI, Kalyani	Live demonstration on livestock and their nutrition management

5.0 LINKAGES

5.1 Functional linkage with different organizations

Sl. No.	Name of organization	Nature of linkage
1.	Deptt. Of Agril., GOWB, Burdwan	CDAP and SREP preparation, Training, RKVY
2.	Deptt. Of Horti., GOWB, Burdwan	RKVY, Training
3.	Deptt. Of A.R.D., GOWB, Burdwan	Training, Vaccination camp, Supply of chicks, ducklings
4.	Deptt. Of Fishery., GOWB, Burdwan	Training
5.	ATMA, Burdwan	SREP preparation, Training, exposure visit
6.	MGNREGS, Burdwan	Convergence programme with KVK, Integrated Farming System (IFS) model
7.	Regional Station for Forage Production & Demonstration, MoAg., GOI, Kalyani	Training.
8.	ICAR-CRRI, Cuttak, Orissa	Exposure visit
9.	BCKV, Mohanpur, Nadia	Technological support, exposure visit & training
10.	ICAR-CIFA, Bhubaneswar, Orissa	Exposure visit
11.	WBUAFS, Kolkata	Training, inputs
12.	Directorate of Research on Women in Agriculture, Odisha	Training
13.	ANGRAU, Hyderabad	Breeder seed collection
14.	CIFE Reg. Centre (ICAR), Saltlake	Training
15.	CIFA Reg. Centre (ICAR), Kalyani	Technology support
16.	OUAT, Bhubaneswar, Orissa	Exposure visit
17.	State Agricultural Management and Extension Training Institute (*SAMETI*), Narendrapur, Kolkata	Training
18.	ERS-IVRI, Kolkata	Training, Animal health camp, Disease reporting, sample diagnosis
19.	ERS NDRI, Kalyani	Exposure visit, Joint FLD, fodder seed collection, infertility camp.
20.	Indian Society of Agribusiness Professionals (ISAP), Asansol	Imparted training, technology support to the society
21.	ATMA, Katihar, Bihar	Exposure visit & Training
22.	Indian Agriculture Research Institute, New Delhi	Collaborative programme on scented rice production,

		Impact analysis, Institute- post office linkage
23.	ICAR-IGFRI, Jhansi	NIFTD programme, fodder seed collection
24.	ICAR-CIFRI, Barrackpore	Technology support, expert sharing etc.
25.	CIAE, Bhopal	Collection of maize Sheller for FLD on drudgery reduction
26.	ICAR-CARI, Bhubaneswar	Exposure visit, technology sharing
27.	NGOs like Men at Work, Ujjiban, SSSNS, Meghdhoot Welfare Society, Sonar Bangla Farmers' Club, Birbhum Malrampur Krishak Kalyan Sansthan	Training, collaborative programme
28.	NABARD, Burdwan	Sponsored programme

5.2. List of special programmes undertaken during 2015-16 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.)

(b) Programme for other activities (training, FLD,OFT, Mela, Exhibition etc.)

Total				
Name of the programme/scheme	Purpose of programme	Date/ Month of initiation	Funding agency	Amount (Rs.)
NABARD	Training, demo etc	Nov. 2015	NABARD	1.45
SMAM	Creating awareness on farm mechanization	Mar., 2016	DAC	**2.00**
NFSM	Demo on pulse crop	Nov., 2015	DAC	**3.00**
NMOOP	Demo on oilseed	Oct., 2015	DAC	**3.30**

6. PERFORMANCE OF INFRASTRUCTURE IN KVK

6.1 Performance of demonstration units (other than instructional farm)

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.)		Rema
				Variety	Type of Produce	Qty.(q)	Cost of inputs	Gross income	
Paddy	18.07.15	16.11.15	5	MTU7029	Foundation seed	24.5	5.5 lakh	10.00 lakhs (expected)	Not yet sold
Banana	Ratoon crop	10.05.15 to 15.7.15	0.3	Grand Naine	Fruits	147 bunch	4000	14000	
Mango	-	-	0.5	Langra, Himsagar	Fruits	1	500	2000	

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.	Vermicompost	3000	3000	-	Used for paddy seed production

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	Goat	Black Bengal	Kid	3	2000	6400	

6.5 Utilization of hostel facilities

Accommodation available (No. of beds)

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
April, 2015	14	15	-
Total :			

(For whole of the year)

6.6 Utilization of staff quarters

Whether staff quarters has been completed: yes
No. of staffquarters: 06 nos
Date of completion: Handover of quarter on 31.01.2013 and completion of road and electrical work on 31.03.13

Occupancy details:

Months	Q I	QII	Q III	QIV	Q V	QVI
From April 2013 onwards	All staff quarters have been occupied by official staff					

7. FINANCIAL PERFORMANCE

7.1 Details of KVK Bank accounts

Bank account	Name of the bank	Location	Account Number
ICAR UNIT CRIJAF	SBI Barrackpre Rly Stn Branch	1 BT Road, Chiria More, Barrackpore	10391779335

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

Item	Released by ICAR		Expenditure		Unspent balance as on -
	Kharif	Rabi	Kharif	Rabi	
Mustard		180000		180000	Nil
Sesame		150000		150000	Nil

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

Item	Released by ICAR		Expenditure		Unspent balance as on 1st April 2013
	Kharif	Rabi	Kharif	Rabi	

Lentil		150000		150000	Nil
Greengram		112500		112500	Nil
Chickpea		37500		37500	Nil

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

Item	Released by ICAR		Expenditure		Unspent balance as on 1st April 2012
	Kharif	Rabi	Kharif	Rabi	
TOTAL					

7.5 Utilization of KVK funds during the year 2015-16(Not audited)

S. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	Pay & Allowances	96.50	96.50	86.85
2	Traveling allowances	1.00	1.00	0.97
3	Contingencies			
A	General	12.00	12.00	10.04
B	TSP	4.00	4.00	3.91
C				
D				
E				
F				
TOTAL (A)		113.50	113.50	101.77
B. Non-Recurring Contingencies				
1	Vehicle (Motorcycle – 2 nos.)	1.20	1.20	Nil
2	Equipment, furniture and furnishing (Biometric)	0.30	0.30	Nil
3				
4				
TOTAL (B)		1.50	1.50	Nil
C. REVOLVING FUND				
GRAND TOTAL (A+B+C)		115.00	115.00	101.77

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)
2013-14	225860	673485	627730	271615
2014-15	271615	773310	891760	

2015-16	153165	877375	890977	139560 + 250 q paddy seed worth approx. 10 lakh)

7.6.(i) Number of SHGs formed by KVKs (ii) association of KVKs with SHGs formed by other organizations indicating the area of SHG activities. 79 nos.

7.7 Details of marketing channels created for the SHGs

KVK mobilized the marketing channel for the SHG, especially women SHGs, associated with the production of rural and other handicrafts, by linking them with yearly Krishi melas, rural fairs and town based cooperatives dealing with selling of crafts etc. KVK has also connected SHG doing katha stich with traders from Bolpur.
KVK has created financial opportunity for many of the SHGs formed by linking them with NABARD, rural banks etc.

7.8. Special programme on Nutrition :

The Nutrition day was celebrated on 1st September, 2015.The awareness programme was held at Kasba village of Galsi-I block with an initiative to combat the problem of malnutrition or under nutrition among children and women especially in rural areas. Supervisors, Anganwadi workers of ICDS scheme, ASHA (Accredited Social Health Activists) workers, panchayat members, teachers, village women, pregnant and lactating women , adolescents girls and school students were participated. Different programme related to nutrition like video shows, demonstration of rice based weaning food preparation, cheap nutritional recipes using locally available resources etc. were also organized. Around 140 farm women and farmers were benefited from it.

7.9. Joint activity carried out with line departments and ATMA

Name of activity	Number of activity	Season	With line department	With ATMA	Both
Technology week & Krishi Mela	01	Rabi, 2015	DDA, Burdwan	ATMA, Burdwan	Both
SMAM	02	Rabi, 2015	DDA, Burdwan	ATMA, Burdwan	Both
Vaccination camp	01	Year round	Animal husbandry dept., Burdwan, West Bengal	-	-
Seed production	01	Kharif 2015	Dept. of Agriculture, West Bengal	-	-
Kisan Sammelan	02	Kharif and Rabi, 2015	Dept. of Agriculture, West Bengal	-	-
SAC	01	Kharif, 2015	All line dept., west Bengal	-	-
Farmers training	01	Year round	All line dept., west Bengal		

8. Other information

8.1. Prevalent diseases in Livestock/Crops/Fishery

Name of the disease	Crop/animal	Date of outbreak	Number of death / % commodity loss	Number of animals vaccinated
Late blight	Potato	10.1.16	10%	
PPR	Goat	17.7.15	200 nos	600 goats are vaccinated in nearby villages

8.2. Nehru YuvaKendra(NYK) Training-- N/A

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

8.4. SMS PORTAL

Date of startof functioning of SMS portal

No. of messages	No. of calls	No. of farmers covered	Types of messages (No.)					
			Crop	Livestock	Weather	Marketing	Awareness	Other
77	3120	132859	30	15	25	2	-	5

8.5 Observation of Swacha Bharat Programme

Date of Observation	Activities undertaken
25.07.15	Cleaning of the kvk adopted village
07.08.15	Cleaning of the Admin building

02.10.15	Cleaning of the premises farmers hostel, animal shed, farm area, green house and fish ponds along with some visiting farmers.
08.12.15	Cleaning of the Surrounding of Adm building & road
09.01.16	Cleaning of the Stores in Adm building & at hostel
10.02.16	Cleaning of the Residential quarters T-III & Surroundings

8.6 Observation of National Science day

Date of Observation	Activities undertaken

8.7.Programme with SeemaSurakshaBal (BSF)

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
Bud Bud Hindi School, BudBud, Burdwan, W.B.	12.11.2015	General sensitization of school children on prospect and contribution of agriculture in our livelihood	Presentation, Live crop cafeteria, Live demonstration unit

8.9. Details of Kharif and Rabi Sammelan (Information should be provided in two separate tables – one for Kharif and another for Rabi Sammelan)

Name of the state	Name of district/ KVK	Date on which conducted	Number of participants		Name of public representative	Details of Technology Demonstrated and other programmes organized
			Farmers	Others		
West Bengal	Burdwan	09.07.15	165	25	N. Chakroborty, Krishi Karmadhakshya	Awareness camp, live cafeteria, demonstration units, rural crafts and farmers exhibits.
West Bengal	Burdwan	10.02.16	175	15	S. Mondal, MP	Awareness camp, live cafeteria, demonstration units,

						rural crafts and farmers exhibits.

8.10. Details of Pradhan Mantri Fasal BimaYojana programme organized

Name of the state	Name of district/ KVK	Date on which conducted	Number of participants		Name of public representative	Details of awareness created and other programmes organized
			Farmers	Others		
West Bengal	Burdwan	05.04.16	75	6	NA due to MCC	Awareness camp, live cafeteria, demonstration units, rural crafts and farmers exhibits.

8.11. Contingent crop planning

Name of the state	Name of district/ KVK	Thematic area	Number of programmes organized	Number of Farmers contacted	A brief about contingent plan executed by the KVK

8.12. 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	146665	**NIL**

8.13. 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
A.	Agricultural broadcasts • Talks/interviews/discussions with experts, PG students/ and farmers on Agricultural technologies • Agro-climatic 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			
B.	• Agricultural University professors. • Any other(please specify) Community development broadcasts Please specify the programmes like			

Sr. no	Community Radio Stations (CRS)	No of programmes in the year	Total broadcast hrs in a month	Please specify details of the broadcasts
	rural development, educational, health, environment, public service broadcasts, sports etc.			

8.14 No. of Progressive/Innovative/Lead farmer identified (category wise)

Agriculture: 5
Horticulture: 6
Animal Science: 7
Fisheries: 12

8.15 HRD programmes organized by the KVK

Training programme/ Seminar/ Symposia/ Workshop etc attended	Duration	Name of the participants	Designation	Organizer of the training Programme

8.16. Revenue generation:

SL.No.	Name of Head	Income(lakh Rs.)	Sponsoring agency
1.	Paddy seed	10.00 (approx; yet to be sold)	
2.	Banana	0.14	
3.	Goat	0.06	
4.			

8.17. Resource Generation:

SL.No.	Name of the programme	Purpose of the programme	Sources of fund	Amount (Rs. lakhs)	Infrastructure created

1	NABARD	Training, demo etc	NABARD	1.45	--
2	SMAM	Creating awareness on farm mechanization	DAC	**2.00**	--
3	NFSM	Demo on pulse crop	DAC	**3.00**	--
4	NMOOP	Demo on oilseed	DAC	**3.30**	--

8.18. Performance of Automatic Weather Station in KVK

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

8.19. 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

9. 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	
Payarigunge	Kanksa	250	235	485	220	215	435	85%

Asset created under TSP: Vermicompost pit, nail weeder

Fund received under TSP in 2015-16: 4.00 lakh

10.PROGRESS REPORT OF NICRA KVK (Technology Demonstration component) 2015-16 (**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

11. 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

12. Awards/Recognition received by the KVK

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

Award received by Farmers from the KVK district

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

13. Any significant achievement of the KVK with facts and figures as well as quality photograph

14. Any other programme organized by KVK not covered above

Annexure – I

Proceedings of the Twelfth Scientific Advisory Committee Meeting held on September 23, 2015

The XIIth meeting of Scientific Advisory Committee (SAC) for KVK, Burdwan was held at KVK on September 23rd, 2015. The meeting was conducted under the chairmanship of Dr. P.G. Karmarkar, Director, CRIJAF and was illuminated by the presence of Dr. H. S. Sen, Former Director, ICAR-CRIJAF and Guest of Honour for the occassion, Dr. R. K. Mandal, Ex-Head of Division, CRIJAF, Dr. B. Maji, Head, CSSRI, Canning, Dr. T. K. Dutta, Head, NDRI, ERS, Kalyani, Dr. S. Satpathy, Head, Crop Protection and Headquarter Incharge for KVK, CRIJAF, Dr. D. K. Kundu, Head, Crop Production, CRIJAF, Dr. S. Sarkar, Incharge Agril Extn, CRIJAF, Dr. S. K. Mondal, Pr. Scientist, ATARI, Kolkata, Dr. Subrata Biswas, Scientist-in-charge, CSRSJAF, Bud Bud, Dr. B. C. Das, Pr. Scientist, ERS-IVRI, Kolkata, Mr. Jagannath Chtterjee, DDA (admin), Burdwan and many other line department officials apart from representatives of farmers and farm women.

Dr. D. Ghorai, Programme Coordinator (I/C) of KVK formally welcomed all the delegates. With the permission of Chair, Dr. Ghorai presented the action taken report on the recommendations given during the previous SAC meeting. Dr. Supratik Maitra, DHO, Burdwan asked for the feasibility report of high density planting of fruit crops so that his department can also take up necessary measures in this regard across the district. Regarding impact assessment of activities, Dr. B. Maji suggested that some suitable soil parameters, and the changes in those parameters therein, be also included in the impact assessment. This was followed by presentation of KVKs Progress Report of 2014-15 and Action Plan for the year 2015-16.

It was then followed by general discussion and recommendation session. First of all, farmers were invited to speak their minds up regarding the activities of KVK and the changes it has brought in their socio-economic status. Sri Sudhir das, one small jute farmer informed the house that application of CRIJAF SONA has fetched much higher return (Rs. 470/- per qtl) for jute and the technology should be promoted throughout the area. Chairman urged upon the KVK to assess the changes in social parameters brought about by jute cultivation using improved methodologies. He also urged that since the KVK is about to complete 10 years of working, one publication containing

the achievements be prepared. Regarding vermicomposting, Dr. Sen argued that use of water hyacinth in vermicompost preparation be done with caution since water hyacinth contains heavy metals. Dr. T.K. Dutta opined that instead of water hyacinth, azolla can be used (20 – 30%) in vermicompost production.

Mr. J. Chatterjee, DDA observed that the improved technologies of rice production, like, drum seeder, SRI are not getting disseminated well enough and requested the KVK to explore the reasons behind. Mr. Pradip Mondal, ADA (Seed certification) suggested to explore the possibilities of jute seed production in the western belt of the district.

Regarding animal husbandry activities, Dr. Rana, DVO opined that business mindedness need to be inculcated among the animal growers and KVK may take necessary measures in this regard. Dr. S. K. Mandal, PS, ATARI emphasized that although SMS (AH&VS) has left, activities in this field must not be fully stopped and progressive farmers, other extension functionaries should be hired to fulfill the mandated activities. Regarding fishery activities, DFO, Burdwan suggested that social fish farming should be given adequate stress and all the water bodies in adopted villages should be brought under fish cultivation.

Dr. Das, PS, ERS-IVRI assured the KVK on collaboration in conducting vaccination camps and trainings on animal husbandry. He requested the KVK to take expert farmers in exposure visit to the goat farm they have developed at Kalyani. Dr. Dutta, Head, ERS-NDRI put forth many useful suggestions regarding activities of animal husbandry which included promotion of azolla production, short term training at NDRI, collaborative animal health camps etc.

Dr. S. K. Mamdal, ATARI urged upon KVK to prepare action taken report quantitatively, in lieu of only qualitative reporting. Feasibility study for high density planting of fruit crops should be studied in villages other than that under SAGY.

Dr. S. Satpathy put forward some very meaningful suggestions like, formation of farmers database, integrated approach for jute, animal husbandry activities in the western part through TSP, due stress on fodder production, potential cultivation of annual moringa, promotion of high value vegetables like red cabbage, brocolli etc., documentation of success stories, approaching NJB for fund support regarding long term training on jute.

Dr. H. S. Sen, Guest of honour, besides praising the KVK for the diverse activities, remarked that linking farmers to suitable markets should be stressed upon

Dr. P.G. Karmarkar, Chairman, in his concluding remarks, urged upon the KVK to identify successful farmer's model for small and marginal farmers in the district and replicate them in areas wherever feasible. He stressed on documenting success stories properly. He also emphasized to use gender perspective in extension. He informed the house that in view of the increasing necessity of proper marketing of agricultural produces, KVKs are likely to get one specialist in the field of agriculture marketing during the XIIth plan.

The meeting was concluded with vote of thanks from Dr. M. S. Singh, SMS, KVK. Following are the recommendations given by the committee,

- Action taken report should be quantitative.
- Inclusion of soil parameters in impact assessment.
- Change in social parameters of jute farmers using improved technologies to be assessed.
- Azolla to be included in vermicompost production.
- Social fish farming should be stressed upon.
- Evaluation of potentiality of annual moringa cultivation in KVK farm.
- High value vegetables cultivation like broccoli should be done.
- Collaborative animal health camps with IVRI, NDRI to be done.
- Farmers database with requisite data on socio-economic changes to be made.
- Integrated technology demonstration on jute should be done.
- Success story should be documneted.
- Potentiality of cultivation of onion should be explored.

List of participants:

Sl. No.	Name	Designation & Address
1.	Dr. H. S. Sen	Former Director, ICAR-CRIJAF
2.	Dr. P.G.Karmakar	Director, ICAR-CRIJAF, Barrackpore
3.	Dr. R. K. Mondal	Ex-Pr. Scientist, ICAR-CRIJAF
4.	Dr. S. K. Mandal	Pr. Scientist, ICAR-ATARI, Kolkata
5.	Dr. T. K. Dutta	Head, ERS-ICAR-NDRI, Kalyani
6.	Dr. B. Maji	Head, ICAR-CSSRI-RRI, Canning
7.	Dr. B. C. Das	Pr. Scientist, ERS-ICAR-IVRI, Kolkata

8.	Dr. S. Satpathy	Head, Crop. Protection, ICAR-CRIJAF
9.	Dr. D.K. Kundu	Head, Crop Production, ICAR-CRIJAF
11.	Dr. S. Biswas	Scientist In-charge, CSRSJAF, Bud Bud
12.	Dr. J. Mitra	Head, Crop Improvement, ICAR-CRIJAF
13.	Dr. Sitangshu Sarkar	Incharge, Agril.Ext. ICAR-CRIJAF
14.	Dr. Ritesh Saha	Sr. Scientist, AO, ICAR-CRIJAF
15.	Dr. Debashis Langal	DFO, Burdwan
16.	Dr. Bikas Ch. Rana	DVO, Burdwan
17.	Dr. J. Chatterjee	DDA (Admin.), Burdwan
18.	Dr. S. Ghatak	ADA (PP), Burdwan
19.	Dr. S. Maitra	DHO, Burdwan
20.	Mr. Pradip Mondal	ADA (Seed Certification), Burdwan
21.	Dr. Dipankar Ghorai	I/C Prog. Coordinator, KVK Burdwan
22.	Sk Jonab Ali	Farmer representative, Atpara
22.	Sk Amir Md	Progressive Farmer, Atapara
23.	Mahendra Mandi	Progressive Farmer, Deara
24.	Sarfaraj Ali Sk	Progressive Farmer, Deulpara
25.	Amalesh Chowdhury	Progressive Farmer, Rasulpur
26.	Sk Sohraboddin	Progressive Farmer, Khetura
27.	Sk Soyeb Hossain	Progressive Farmer, Jagulipara
28.	Chowdhury Amirul Haque	Progressive Farmer, Jagulipara
29.	Bipul Mallick	Progressive Farmer, Harindanga
30.	Bablu Tudu	Progressive Farmer, Harindanga
31.	Bhaskar Deasi	Progressive Farmer, Nurkona
32.	Sudhir Das	Progressive Farmer, Kuricha
33.	Nurjahan Khatun	Farm women representative
34.	Dr. Subrata Sarkar	SMS (Hort.), KVK Burdwan
35.	Dr. M. S.Singh	SMS (Ag. Extn), KVK Burdwan
36.	Sk. Golam Rasul	Prog. Asstt. (Comp.) , KVK Burdwan
37.	Mr. Sandipan Garai	Programme Assistant, KVK Burdwan

.

ANNEXURE-II

Impact assessment of KVK activities in Jagulipara village

Table IA: Distribution of respondents on basis of sex

Category	No	%
Male	21	84.00
Female	4	16.00
	25	100.00

Table IIA : Distribution of respondents on basis of Age

Category	No	%
31 and below	3	12.00
32-50	17	68.00
51 and above	5	30.00
	25	100.00

Table IIIA : Distribution of respondents on basis of education

Category	No	%
Illiterate	0	0.00
Primary	16	64.00
Secondary	7	28.00
Higher secondary	1	4.00
Degree	1	4.00
	25	100.00

Table IVA : Distribution of respondents on basis of family size

Category	No	%
3 and below	4	16.00
4-6	15	60.00
7 and above	6	24.00
	25	100.00

Table VA : Distribution of respondents on basis of land holding

Category	No	%
Landless	3	12.00
Marginal (<1ha)	13	52.00
Small (1-2 ha)	4	16.00
Semi- medium (2-4 ha)	5	20.00
Medium (4-10 ha)	0	0.00
Large (>10 ha)	0	0.00
	25	100.00

Table VIA: Distribution of respondents on basis of following attributes

Type of house owned	Kaccha House		Pacca House		Total	
	No	%	No	%	No	%
	9		16			100.00
Particulars	Yes		No		Total	
	No	%	No	%	No	%
Availability of Pond	12	48.00	13	52.00	25	100.00
Availability of horticultural garden	15	60.00	10	40.00	25	100.00
Availability of Cattle	18	72.00	7	28.00	25	100.00
Availability of Paddy Thresher	17	68.00	8	32.00	25	100.00
Availability of Pump set	17	68.00	8	32.00	25	100.00
Availability of Bicycle	21	84.00	4	16.00	25	100.00
Availability of of Motor bike	14	56.00	11	44.00	25	100.00
Availability of radio set	3	12.00	22	88.00	25	100.00
Availability of TV	23	92.00	2	8.00	25	100.00
Availability of mobile	25	100.00	0	0.00	25	100.00
Availability of Sprayers	20	80.00	5	20.00	25	100.00

Table VIIA: Distribution of respondents on basis of Frequency of meeting with KVK

Category	No	%
Daily	0	0.00
Weekly	7	28.00
Monthly	18	72.00
Quarterly	0	0.00
Once in season	0	0.00
	25	100.00

Table VIIIA: Sources of information

Source	Attribute (%)				
	Reliability	Regularity	Quality	Relevance	Timeliness
KVK	100	100	100	100	100
Neighbour/Friends	92	56	54	72	100
Relative	92	48	56	60	56
ADO/ ADA	96	92	92	84	92
TV	72	44	68	52	28

Table IXA: Cropping pattern

Crop	Before KVK			After KVK		
	Area (ha)	Area under improved varieties	Yield/ ha	Area (ha)	Area under improved varieties	Yield/ ha
Paddy	360	-	45-50q	360	50	60-70 q
Mustard	27	-	8-9 q	30	15	11q
Onion				15	15	60q
Tomato				7	7	230q
Brinjal				3	3	226q
Tissue Cultured Banana	1	-	400q	1.5	1.5	760q
Fodder				2	2	213q

Table XA: Impact of FLD

Demonstrated technology	Crop	Productivity			No of Beneficiary	% change			% of adoption	Impact at farm (%)	
		CP	Demo	% change		Knowledge	Skill	Attitude		Yield	Income
Production technology of variety B – 9	Mustard	10.2 (q/ha)	11.3 (q/ha)	11	30	78	69	61	48	11	12
IPM	Mustard	10.25	13.75	34.20	5	39	26	19	23	34.20	24.51
Package demonstration of MTU-7029	Paddy	40.85	44.26	8	7	87	85	85	100	8	11
SRI	Paddy	53.6	71.6	34	15	48	23	24	34	34	18.97
Late blight disease management	Potato	250	280	12	10	65	62	58	43	7	11.81
Fodder Production	Ricebean (Bidhan 1)	187.4	232	23.7	5	78	72	34	16	23.7	15.4
Component demonstration	Brinjal	213.7	226.5	6	8	44	38	31	13	8	12
Pheromone Trap	Brinjal	231	246	6.7	6	56	32	19	4	6	13
Package demonstration G-9	Banana	414	782	88.9	5	23	18	18	28	88.9	20.3
Thrips management	Chilli	76.5	96	25.5	2	56	48	40	32	25.5	18.0
Livestock											
Mineral Mix	Cattle	291.7	410.9	40.8	10	87	85	88	38	37.5	7
Khaki Cambell	Duck	180	210	16.6	5	84	78	77	27	12	8
Fish	Jayanti rohu	9.20	9.77	6	5				19	5	10
Fish	*Pangus*	3.1	4.0	29	7	68	65	63	23	7	9
Fish	Tilapia	5.0	5.95	19	10	45	35	35	11	10	7

Table XIA: Impact of training

Sl. No	Subject of training	Crop	% change due to training				Yield (q/ha)			% change in income			No of beneficiary
			Knowledge	Skill	Attitude	Adoption	Before training	After training	% change	Before training Net [profit	After training	% change	
1	Weed Management	Rice	78	65	47	13	50	58	16	31450	35380	12.49	40
2	Water management	Rice	48	42	26	5	50	61	22	31450	37369	18.82	40
3	Seed production	Rice	59	43	53	7	50	60	20	31450	36740	16.82	60
4	Nursery management	Rice	83	79	77	28	50	57	14	31450	33853	7.64	60
5	Integrated Crop Management	Rice	36	24	19	7	50	54	8	31450	33149	5.40	40
6	Seed Treatment	Rice	100	100	100	100	50	55	10	31450	35480	11.35	90
7	SRI	Rice	87	53	39	30	50	75	50	31450	49000	55.80	90
8	Production technology of vegetables	Vegetables	67	54	48	16	213	234	10	47750	58946	23.45	40
9	Layout and Management of Orchards	Banana	39	38	23	3	414	782	88.9	90500	184000	103.00	20
10	Plant propagation techniques		19	15	13	1	-	-	-	-	-	-	20
11	Production of organic inputs	Vermicompost, Vermiwash	36	34	27	3	-	-	-	-	20000	100.00	20

12	Fodder production	Ricebean	21	17	16	2	194	240	23.71	3895	6100	56.00	30
13	Nursery raising for vegetables	Onion, brinjal, Tomato	17	14	13	4	218	249	14.22	38900	57800	48.58	20
14	Dairy Management	Cow	83	79	74	68	293	432.5	47.6	510	2189	329.21	60
15	Poultry Management	Hen	85	82	78	72				20000	60000	200.00	45
16	Disease Management	Animal	87	78	73	70	Mortality decreased by 31%						100
17	Household food security by kitchen gardening and nutrition gardening		34	27	21	7	140	210	50	56100	93500	66.67	20
18	Formation of SHG		68	59	57	36	7 SHG formed						60
19	Composite Fish culture	IMC	55	48	35	63	30	45	50	3900000	585000	50%	90
20	Disease management and prophylacting measures of IMC	IMC	47	45	39	57	22	26.4	20	242000	343200	41.81	60
21	Integrated Farming		5 integrated faring model has been developed by KVK in the village									120000	40

Table XIIA: Impacts of extension activities

Sl. No.	Technology	% change in area under new crops		% change in area under new varieties		Yield (q/ha)		Income	
		Before	After	Before	After	Before	After	Before	After
1	Integrated farming		4						120000
2	SRI					4.0	7.2	26000	49000
3	TCB			0.5	1.5	414	782	90500	184000
4	Vermicompost	No of earthworm/year					1.5 lakh		120000
Livestock									
1	Backyard Poultry	No of birds				50	1000		60000
2	RIR breed	No of birds				0	1050		
		No of egg/bird				90	210	540	1260
3	Introduction of Kakhi Cambell	No of ducks				30	800		
		No of egg/duck				90	180	540	1080
4	Mineral Mixture	Milk yield per cow				284.35	402.83	4549	6445
5	Cross breeding	No of cross breed cow				10	350	3500	6800
6	Mass vaccination	Mortality rate decreased by 31%							
7	Use of fish fingerling as fish seed	Area of ponds (ha.)		6.67	18.67	31.5	52.5	409500	525000

What are the activities carried out by KVK in your village?

a. Demonstration
b. Training
c. Vaccination
d. Soil Testing
e. Formation of seed village
f. Exposure Visit
g. Distribution of seeds and critical input

Changes in village due to KVK intervention

a. Increase in use of new variety:

The use of rice variety Swarna Sub1, PAC-831 hybrid, Gothra BidanI has increased during last 5 year.

More area has been brought into cultivation of mustard variety B-54, T-9, WBBBN-1

Cultivation of tissue cultured banana

b. Crop diversification

Earlier only rice was grown in the village. With KVKs intervention more area is brought under cultivation of vegetables, tissue cultured banana, fodder cultivation and production of paddy seed

c. Knowledge about improved techniques of crop production

System of Rice intensification, Zero Tillage, Soil Testing, Vermi composting, Integrated Farming, IPM, INM, Backyard poultry, Nutritional garden

d. Knowledge about improved dairy techniques

Using of mineral mixture to increase milk yield

Using homemade feed to increase milk yield

Cultivation of different fodder crops

Vaccination

e. Increase in employment opportunities due to entrepreneurial training

Two women entrepreneur have been developed in field of Katha Stitch

One farmer has started vermicompost enterprise

20 farmers have started fish seed business

f. Community initiatives

Formation of one farmers club

Formation of seven Self Help Group

Suggestion to improve KVKs approach

a. Availability of certified seed from KVK
b. Frequent diagnostic visit to farm
c. Disease management of Crops and animals
d. Distribution of new varieties
e. Distribution of critical input
f. Technology guidance

Impact assessment of KVK activities in Ketan village

Table IB: Distribution of respondents on basis of sex

Category	No	%
Male	25	100.00
Female	0	0.00
	25	100.00

Table IIB : Distribution of respondents on basis of Age

Category	No	%
23 and below	5	20.00
24-52	15	60.00
53 and above	5	20.00
	25	100.00

Table IIIB : Distribution of respondents on basis of education

Category	No	%
Illiterate	1	4.00
Primary	8	32.00
Secondary	14	56.00
Higher secondary	0	0
Degree	2	8.00
	25	100.00

Table IVB : Distribution of respondents on basis of family size

Category	No	%
2 and below	0	0.00
3-7	19	76.00
98 and above	6	24.00
	25	100.00

Table VB : Distribution of respondents on basis of category

Category	No	%
SC	8	32.00
ST	1	4.00
Others	16	64.00
2	25	100.00

Table VIB : Distribution of respondents on basis of land holding

Category	No	%
Landless	1	4.00
Marginal (<1ha)	17	68.00
Small (1-2 ha)	6	24.00
Semi- medium (2-4 ha)	1	4.00
Medium (4-10 ha)	0	0
Large (>10 ha)	0	0
	25	100.00

Table VIIB: Distribution of respondents on basis of following attributes

Type of house owned	Kaccha House		Pacca House		Total	
	No	%	No	%	No	%
	12		13		25	100.00
Particulars	Yes		No		Total	
	No	%	No	%	No	%
Availability of Pond	11	44.00	14	56.00	25	100.00
Availability of horticultural garden	5	20.00	20	80.00	25	100.00
Availability of Cattle	10	40.00	15	60.00	25	100.00
Availability of tractor	2	8.00	23	92.00	25	100.00
Availability of Paddy Thresher	19	76.00	6	24.00	25	100.00
Availability of Pump set	16	64.00	9	36.00	25	100.00
Availability of Bicycle	23	92.00	2	8.00	25	100.00
Availability of of Motor bike	7	28.00	18	72.00	25	100.00
Availability of radio set	11	44.00	14	56.00	25	100.00
Availability of TV	17	68.00	8	32.00	25	100.00
Availability of mobile	15	60.00	10	40.00	25	100.00
Availability of Sprayers	21	84.00	4	16.00	25	100.00

Table VIIIB: Distribution of respondents on basis of Frequency of meeting with KVK

Category	No	%
Daily	0	0.00
Weekly	2	8.00
Monthly	23	92.00
Quarterly	0	0.00
Once in season	0	0.00
	25	100.00

Table IXB: Sources of information

Source	Attribute				
	Reliability	Regularity	Quality	Relevance	Timeliness
KVK	100.00	100.00	100.00	100.00	100.00
Neighbour	56.00	40.00	48.00	48.00	76.00
Friend	56.00	28.00	28.00	28.00	28.00
ADO/ ADA	92.00	88.00	88.00	88.00	88.00
TV	64.00	40.00	36.00	36.00	24.00

Table XB: Cropping pattern

Crop	Before KVK			After KVK		
	Area (ha)	Area under improved varieties	Yield/ ha (q)	Area (ha)	Area under improved varieties	Yield/ ha (q)
Kharif						
Paddy	214	-	35	214	28	60-65
Vegetables	24	-	180	26	21	200
Rice bean				0.5	0.5	210
		-				
Rabi-						
Wheat	9	-	17	11		19.6
Mustard	27	-	7-8	25	25	10-11
Lentil	5	-	9.2	9	6	11.5
Potato				27	19	270
Vegetables	34	-	200	39	36	240
Summer						
Vegetable	10	-	175	10	10	190

Table XIB: Impact of FLD

Demonstrated technology	Crop	Productivity q/ha			No of Beneficiary	% change			% of adoption	Impact at farm (%)	
		CP	Demo	% change		Knowledge	Skill	Attitude		Yield	Income
Production technology of variety B – 9	Mustard	8.2	11.0	34.14	30	64	58	53	42	34.14	12
IPM	Mustard	10.25	13.75	34.20	5	32	24	22	21	34.20	24.51
Package demonstration of MTU-7029	Paddy	37.65	44.26	17.4	7	87	85	85	83	17.4	11
SRI	Paddy	52.6	71.6	34	15	43	21	20	18	34	18.97
Package technology on Lentil	Lentil	9.5	11.2	17.89	18	63	59	52	22	17.89	15.53
Late blight disease management	Potato	250	285	14	10	68	65	61	58	14	11.81
Fodder Production	Ricebean (Bidhan 1)	187.4	232	23.7	5	63	58	45	11	23.7	15.4
Component demonstration	Brinjal	213.7	226.5	6	8	54	43	39	38	8	12
Pheromone Trap	Brinjal	231	246	6.7	6	48	37	26	6	6	13
Livestock											
Mineral Mix	Cattle	291.7	410.9	40.8	10	76	74	75	42	37.5	7
Khaki Cambell	Duck	180	210	16.6	5	84	78	77	27	12	8
Fish	Jayanti rohu	9.10	9.77	6	05	64	61	57	19	6	10
Fish	*Pangus*	3.1	4.0	29	07	68	65	63	23	29	9
Fish	Tilapia	5.0	5.95	19	10	45	35	35	11	19	7

Table XIIB: Impact of training

Sl. No	Subject of training	Crop	% change due to training				Yield (q/ha)			% change in income			No of beneficiary
			Knowledge	Skill	Attitude	Adoption	Before training	After training	% change	Before training Net profit	After training	% change	
	Weed Management	Rice	81	67	48	15	45	50	11.11	23560	28140	19.43	40
	Water management	Rice	58	42	34	6	45	55	22.22	23560	32370	37.39	45
	Seed production	Rice	67	54	53	9	45	54	20	23560	31800	34.97	60
	Nursery management	Rice	87	83	82	34	45	49	8.89	23560	27680	17.48	60
	Integrated Crop Management	Rice	36	24	19	7	45	50	11.11	23560	29000	23.08	40
	Seed Treatment	Rice	100	100	100	1000	45	52	15.55	23560	29980	27.24	
	SRI	Rice	68	59	56	54	45	75	66.66	23560	40530	72.03	90
	Production technology of vegetables	Vegetables	67	54	48	16	213	234	10	47750	58946	23.45	40
	Plant propagation techniques		19	15	13	1	-	-	-	-	-	-	20
	Production of organic inputs	Vermicompost, Vermiwash	36	34	27	3	-	-	-	-	20000	100.00	20
	Fodder production	Ricebean	21	17	16	2	194	240	23.71	3895	6100	56.00	30
	Nursery raising for vegetables	Onion, brinjal, Tomato	17	14	13	4	218	249	14.22	38900	57800	48.58	20
	Dairy Management	Cow	83	79	74	68	293	432.5	47.6	510	2189	329.21	60
	Poultry	Hen	85	82	78	72				20000	60000	200.00	45

	Management												
	Disease Management	Animal	87	78	73	70	-	-	-	-	-		100
	Gender mainstreaming through SHGs		58	57	52	49							30
	Household food security by kitchen gardening and nutrition gardening		34	27	21	7	140	210	50	56100	93500	66.67	20
	Composite Fish culture	IMC	55	48	35	63	30	45	50	3900000	585000	50.00	90
	Disease management and prophylacting measures of IMC	IMC	47	45	39	57	22	26.4	20	242000	343200	41.81	60

Table XIIIB: Impacts of extension activities

Sl. No.	Technology	% change in area under new crops		% change in area under new varieties		Yield (q/ha)		Income	
		Before	After	Before	After	Before	After	Before	After
1	SRI					4.0	7.2	26000	49000
2	Mushroom					600gm/ bed	900gm /bed	-	12000
Livestock									
1	Backyard Poultry	No of birds				65	1500	-	62000
2	RIR	No of birds					800		
		No of egg/bird				90	210	540	1260
3	Kaki Cambell	No of duck					600		
		No of eggs/duck				90	180	540	1080
4	Mineral Mixture	Milk yield per cow				250	400	4549	6445
5	Cross breeding	No of cross breed cow				7	180	2000	6000
6	Mass vaccination	Mortality rate decreased by 29%							
7	Use of fish fingerling as fish seed	Area of ponds (ha.)		4.48	12.37	29.5	47.5	383500	617500

What are the activities carried out by KVK in your village?

h. On Farm Testing
i. Demonstration
j. Training
k. Vaccination
l. Soil Testing
m. Formation of seed village
n. Exposure Visit
o. Distribution of seeds and critical input

Changes in village due to KVK intervention

g. Increase in use of new variety:

The use of rice variety Swarna Sub1, PAC-831 hybrid has increased during last 5 year.

More area has been brought into cultivation of mustard variety T-9, WBBBN-1

More area has been brought under cultivation of brinjal Bhangar variety

Area under Abhilash variety of tomato has increased.

WBL 81 variety of lentil was introduced

h. Crop diversification

Earlier only rice and bit vegetable was grown along with marginal mustard and wheat was grown in the village. With KVKs intervention more area is brought under cultivation of off season vegetables, fodder cultivation and production of paddy seed

i. Knowledge about improved techniques of crop production

System of Rice intensification, Zero Tillage, Soil Testing, Vermi composting, Integrated Farming, IPM, INM, Backyard poultry, Nutritional garden, Oyster mushroom production

j. Knowledge about improved dairy techniques

Using of mineral mixture to increase milk yield

Using homemade feed to increase milk yield

Cultivation of different fodder crops

Vaccination

Suggestion to improve KVKs approach

g. Frequent diagnostic visit to farm
h. Disease management of Crops and animals
i. Distribution of seeds of new varieties
j. Distribution of critical input
k. Conducting exposure visit