ANNUAL REPORT
2007 – 08

KRISHI VIGYAN KENDRA
BURDWAN

KRISHI VIGYAN KENDRA
Central Research Institute for Jute & Allied Fibres (ICAR)
Budbud, Burdwan, W.B. 713 403
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GENERAL INFORMATION ABOUT THE KVK

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

Name: Krishi Vigyan Kendra, Burdwan

Address	Telephone		E mail	Website
BudBud, Burdwan-713 403. West Bengal	Office - 0343 2513651	Fax - 0343 2512007	kvkburdwan@gmail.com kvkburdwan@rediffmail.com	www.kvkcrijaf.org

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

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

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

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

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. F. H. Rahman	09433547822	09433586026	fhrahmancal@gmail.com fhrahmancal@rediffmail.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 29th February 2008)

Sl. No.	Sanctioned post	Name of the incumbent	Designation	Discipline	Pay Scale with present basic	Date of joining	Permanent /Temporary	Category (SC/ST/ OBC/ Others)
1	Programme Coordinator	Dr. F. H. Rahman	Prog. Coordinator	Soil Science	Rs. 12000 – 420 – 18300 Basic – Rs. 12000	10.04.2007	-	GEN
2	Subject Matter Specialist	Mr. Dipankar Ghorai	SMS	Agriculture	Rs. 8000-275-13500 Basic – Rs. 8275	26.04.2006	-	GEN
3	Subject Matter Specialist	Mr. Golam Ziauddin	SMS	Fisheries	Rs. 8000-275-13500 Basic – Rs. 8275	28.04.2006	-	GEN
4	Subject Matter Specialist	Dr. Chandrakanta Jana	SMS	AH&VS	Rs. 8000-275-13500 Basic – Rs. 8275	29.04.2006	-	GEN
5	Subject Matter Specialist	Dr. Subrata Sarkar	SMS	Horticulture	Rs. 8000-275-13500 Basic – Rs. 8275	04.05.2006	-	GEN
6	Subject Matter	Mr. Manoj	SMS	Agriculture	Rs. 8000-	09.05.2006	-	OBC

	Specialist	Kumar		Extension	275-13500 Basic – Rs. 8275			
7	Subject Matter Specialist	Ms. Sujata Sethy	SMS	Home Science	Rs. 8000-275-13500 Basic – Rs. 8000	12.03.2007	-	SC
8	Programme Assistant	Mr. Sandipan Garai	Prog. Assistant	Agriculture	Rs. 5500-175-9000 Basic – Rs. 5675	18.04.2006	-	OBC
9	Computer Programmer	Sk. Golam Rasul	Computer Programmer	Computer	Rs. 5500-175-9000 Basic – Rs. 5675	10.04.2006	-	GEN
10	Farm Manager	Mr. Soumya Sarathi Kundu	Farm Manager	Agriculture	Rs. 5500-175-9000 Basic – Rs. 5675	06.01.2007	-	GEN
11	Accountant / Superintendent	Mr. Baidyanath Mukhopadhyay	OSA	--	Rs. 5500-175-9000 Basic – Rs. 5675	15.03.2006	-	GEN
12	Stenographer	Mr. Sushanta Dey	Jr. Steno-cum-Computer Operator	--	Rs. 4000-100-6000 Basic – Rs. 4100	20.03.2006	-	GEN
13	Driver	Mr. Joydeep Pal	Driver – cum - mechanic	--	Rs. 3050-75-3950-80-4590 Basic Rs. 3125	06.07.2006	-	GEN
14	Driver	Mr. Santi Nath Pal	Driver– cum - mechanic	-	Rs. 3050-75-3950-80-4590 Basic Rs. 3125	10.07.2006	-	OBC
15	Supporting staff	Mr. Shyamal Bhanja	Supporting staff	Peon	Rs. 2550-55-2660-60-3200 Basic Rs. 2660	25.02.2006	-	GEN
16	Supporting staff	Mr. Anup Das	Supporting staff	Cook	Rs. 2550-55-2660-60-3200 Basic Rs. 2605	01.03.2006	-	SC

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

1.7. Infrastructural Development:

A) Buildings

S. No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Date	Plinth area (Sq.m)	Expenditure (Rs.)	Starting Date	Plinth area (Sq.m)	Status of construction
1.	Administrative Building	ICAR				2006-07	552	Internal furnishing being done
2.	Farmers Hostel	ICAR				2006-07	306	Internal furnishing being done
3.	Staff Quarters (6)	ICAR				-	400	Under Construction
4.	Demonstration Units (2)	-	-	-	-	-	-	-
5	Fencing	ICAR	08.02.2007	925 m	4.30 lac	-	-	-
6	Rain Water harvesting system	-	-	-	-	-	-	-
7	Threshing floor	-	-	-	-	-	-	-
8	Farm Godown	-	-	-	-	-	-	-

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Kms. Run during the year	Total Kms. Run	Present status
TATA Sumo	01.04.1999	-	3511 km	4140 km Since its possession from PSB KVK Shantiniketan on 08.05.2006	In running condition
Tractor	01.04.1999	-	87 hrs.	114 hrs since its possession from PSB KVK Shantiniketan on 08.05.2006	In running condition.

C) Equipments & AV aids

Name of the equipment	**Year of purchase**	**Cost (Rs.)**	**Present status**
Photo copier with stabilizer	2006-07	49499.00	In working condition
Flame photometer	2006-07	29813.00	In working condition
Spectrophotometer	2006-07	46283.00	In working condition
Shaker	2006-07	20756.00	In working condition
Hot air oven	2006-07	5344.00	In working condition
Hot plate	2007-08	14000.00	To be installed
Glass distillation unit	2007-08	28000.00	To be installed
Conductivity bridge	2007-08	10000.00	To be installed
pH meter	2007-08	8500.00	To be installed
Refrigerator	2007-08	12350.00	To be installed
Electronic balance	2007-08	12375.00	To be installed

1.8. Details SAC meeting conducted in the year*

S.N	Date	Number of Participants	Salient Recommendations	Action taken
1. 4th SAC Meeting	23.07.07	30	• List of beneficiaries to be prepared for ornamental fish culture. • Reports of PRA should be prepared well before meeting like SAC. • Soil test based fertilizer application should be encouraged among farmers. • Background information for each on farm trials is to be collected and duly reported. • Seed treatment for all crops is to be attained in adopted villages • Trials on scented rice should be done. • Marketing opportunities for all kind of agricultural produce should be explored. • RNMV energized varieties of crops like Arhar, tomato, rice bean besides jute may be promoted. • Proximate composition of animal feed ingredients should be analyzed. • KVK should give emphasis on the value addition of produce in future for better return.	Followed
2. 5th SAC meeting	20.11.2007	21	• List of beneficiaries to be prepared for ornamental fish culture. • Soil test based fertilizer application should be encouraged among farmers. • Background information for each on farm trials is to be collected and duly reported. • Seed treatment for all crops is to be attained in adopted villages • Trials on scented rice should be done. • Marketing opportunities for all kind of agricultural produce should be explored. • RNMV energized varieties of crops like Arhar, tomato, rice bean besides jute may be promoted. • Proximate composition of animal feed ingredients should be analyzed. • KVK should give emphasis on the value addition of produce in future for better return.	Followed

Proceedings of the fourth meeting of Scientific Advisory Committee of Krishi Vigyan Kendra, Burdwan, held on July 23, 2007

The fourth meeting of Scientific Advisory Committee (SAC) for KVK, Burdwan was held at its own location, Bud Bud, Burdwan on July 23, 2007. The meeting was conducted under the Chairmanship of Dr. H. S. Sen, Director, CRIJAF and was attended by representative of Zonal Coordinator, Zone-II, State Govt. officials from line departments, scientists from CRIJAF and representatives of farmers and farm women.

The participants were welcome by Dr. F. H. Rahman, Programme Coordinator, KVK. Afterwards Dr. Rahman presented the action taken report of the previous SAC meeting held on February 23, 2007. He informed the house that two new villages have been shortlisted to be adopted. PRA is being conducted in the villages. Responding to the action taken on fish farming to be integrated with other enterprises like poultry, floriculture, duckery etc., he informed that plan have been chalked out and will be conducted in late rainy season. On the point of enhancing KVK station activity, Dr. Rahman informed that KVK is duly expanding its seed production programme to generate more fund.

On the whole the actions taken were appreciated and approved by the house.

Next Dr. Rahman presented the progress of work and action plan for Kharif – 2007. As per suggestion of respected Chairman, Ms. Sujata Sethy, SMS (Home Sc.) prepared different modules for different farm women groups for holistic implementation on the interventions and was appreciated by the house.

On the matter of training of farm women in ornamental fish culture, Mr. S. Chatterjee, FEO, Kanksa reiterated that if list of beneficiaries is sent, he can arrange for 5 day training in batches.

Regarding on farm trials on paddy, Dr. S. Roy, PAO, Burdwan pointed out that potassium in farmers' practice is too high and might be checked out as mostly farmers are reluctant to use potassium. Mr. Samir Karfa, ADO, Galsi – II supported his views.

Dr. S. Roy, PAO, Burdwan stressed the need for cent percent (100%) seed treatment for all crops in KVK adopted village. He also pointed out for soil testing and micronutrients availability in the village. He encouraged farmers for adoption of hybrid rice for future perspective. He informed the villagers about the utilities of drum seeder and from where the farmers will get the drum seeder.

He also informed the audience about the market opportunities before entering into the new introduction of crop. He gave the example of *Broccoli* in this regard.

He offered all types of support including agricultural machinery for which concerned ADO may be contacted.

Regarding on farm trials Dr. P. Pal, Senior Scientist, ZCU-II commented that background information for each trial should be duly collected and reported. He offered thanks on behalf of ZCU-II unit to Director, CRIJAF and KVK personnel for their excellence performance. He spoke about OFT on varietal trial of newly invented jute.

Next Sk. Golam Rasul (Programme Assistant, Computer) briefly showed the working procedure of the software he developed as per suggestion of Director during previous SAC meeting to keep thorough records and update the data generated on the socio – economic upliftment through the interventions based on the modules. He was immensely lauded for his effort.

Shri. Asim Pan, a representative of the farming community of Keten village expressed his satisfaction about the combined effect of multidisciplinary team work of KVK. He also mentioned that paddy seed treatment with pesticides and bio-fertilizer as shown by the KVK gave a remarkable and visible effect towards villagers in terms of pest and disease control and yield respectively. He also assured on behalf of villagers to continue the practice as guided by the KVK.

Dr. B. Maji, Head, Crop Production, in his remarks, hoped that KVK progress should be enhanced in coming years.

Dr. S. K. Ghosh thanked to KVK staff for module. He stressed upon the KVK to promote RNMV energized varieties for crops like Arhar, tomato, rice bean besides jute which has been generated by him at CRIJAF.

Director, CRIJAF and Chairman of the committee insisted that in future reports of PRA should be prepared well before meeting like SAC, so that the committee can comment on the selection procedure and amend it wherever necessary. He urged upon the KVK personnel to keep records of all kinds as hard copies for reference of any kind. He advocated that KVK should give emphasis on the value addition of each and every crop in future for better return of their produce.

The farm women from Jagulipara, Galsi-I Block informed that village women are interested to learn handicrafts and tailoring.

The points emanated out of the meeting are listed below,

1. List of beneficiaries to be prepared for ornamental fish culture.
2. Reports of PRA should be prepared well before meeting like SAC.
3. Soil test based fertilizer application should be encouraged among farmers.
4. Background information for each on farm trials is to be collected and duly reported.
5. Seed treatment for all crops is to be attained in adopted villages
6. Trials on scented rice should be done.
7. Marketing opportunities for all kind of agricultural produce should be explored.
8. RNMV energized varieties of crops like Arhar, tomato, rice bean besides jute may be promoted.
9. Proximate composition of animal feed ingredients should be analyzed.
10. KVK should give emphasis on the value addition of produce in future for better return.

The meeting ended with a vote of thanks, offered by Shri D. Ghorai, to the chair.

List of participants in 4th SAC Meeting:

Sl. No.	**Name**	**Designation**	**Status**
1.	Dr. H. S. Sen	Director, CRIJAF, Barrackpore	Chairman
2.	Dr. S. Roy	Principal Agricultural Officer	Member

3.	Dr. P.P. Pal	Senior Scientist, ZCU, Salt Lake	Member
4.	Dr. B. Maji	Pr. Scientist & Head, Crop Production. CRIJAF, Barrackpore	Special Invitee
5.	Dr. S. K. Ghosh	Pr. Scientist & Head, Crop Protection. CRIJAF, Barrackpore	Special Invitee
6.	Dr. A. Saha	Pr. Scientist CRIJAF, Barrackpore	Special Invitee
7.	Dr. D. Kumar	Pr. Scientist CRIJAF, Barrackpore	Special Invitee
8.	Dr. S. Sarkar	Sr. Scientist CRIJAF, Barrackpore	Special Invitee
9.	Dr. T. N. Kar	Dist. Vety. Officer Burdwan	Member
11.	Dr. B. Maity	Dy. Director (Micro)	Member
12.	Dr. S. K. Dutta	Dy. Director (ARD) Purta Bhavan, Burdwan	Member
13.	Mr. S. Karfa	ADO Galsi-II, Burdwan	Member
14.	Dr. S. Kundu	Galsi-I, Burdwan	Member
15.	Dr. H. Chowdhury	Scientist in Charge CSRSJAF, Bud Bud	Member
16.	Dr. F. H. Rahman	Programme Coordinator KVK Burdwan	Member Secretary
17.	Shri Dipankar Ghorai	SMS (Agri.) KVK Burdwan	Invitee
18.	Dr. Subrata Sarkar	SMS (Hort.) KVK Burdwan	Invitee
19.	Shri Manoj Kumar	SMS (Agril. Extn.) KVK Burdwan	Invitee
20.	Dr. Chandrakanta Jana	SMS (Vet. Sc.) KVK Burdwan	Invitee
21.	Shri Golam Ziauddin	SMS (Fisheries) KVK Burdwan	Invitee
22.	Ms. Sujata Sethy	SMS (Home Sc.) KVK Burdwan	Invitee
22.	Sk. Golam Rasul	Programme Assistant (Comp.) KVK Burdwan	Invitee
23.	Shri Sandipan Garai	Programme Assistant KVK Burdwan	Invitee
24.	Shri Soumya Sarathi Kundu	Farm Manager KVK Burdwan	Invitee
25.	Shri Asim Pan	Farmer' representative Keten, Kanksa Block	Member
26.	Shri Uday Ghosh	Farmers' representative Keten, Kanksa Block	Member
27.	Shri. Bimal Kanti Ghosh	Farmers' representative Keten, Kanksa Block	Invitee
28.	Sk Nijamul Haque	Jagulipara, Glasi-I Block	Member
29.	Sk Obedul Haque	Farmers' representative Jagulipara, Glasi-I Block	Invitee
30.	Jyotsna Chowdhury	Farm Woman Jagulipara, Glasi-I Block	Member
	Media Persons	Anandabazar Patrika, Doinik Jagaran, Shilpanchal and Banga Darpan	

Proceedings of the fifth meeting of Scientific Advisory Committee of Krishi Vigyan Kendra, Burdwan, held on November 20, 2007

The fifth meeting of Scientific Advisory Committee (SAC) for KVK, Burdwan was held at its own location, Bud Bud, Burdwan on November 20, 2007. The meeting was conducted under the Chairmanship of Dr. H. S. Sen, Director, CRIJAF and was attended by State Govt. officials from line departments and representatives of farmers and farm women, detailed list of which is given in Annexure-I.

After welcoming the participants, Dr. F. H. Rahman, Programme Coordinator, KVK, presented the action taken report (Annexure – II) of the previous SAC meeting held on July 23, 2007. As desired by respected Chairman and Director, CRIJAF, he presented the reports of the PRA of two villages, namely Jagulipara in Galsi – I block and Garamba-Bhasapur in Galsi–II block, and proposed to the House to comment on their adoption by KVK. Among other points, marketing potential of agricultural produces was deliberated at length. Dr. Rahman informed the house that KVK has made good progress in formation of Farmers' Club and distribution of Kisan Credit Cards to the farmers of Keten village. On the point of promotion of RNMV energized varieties of crops like arhar, tomato, rice bean, jute, developed at CRIJAF, Dr. C. Jana, SMS (AH&VS) informed the assembly that performance of energized rice bean as fodder crop was much better than check as found in an on station trial. Mr. D. Ghorai, SMS (Agro) added that

energized variety of jute was tried under front line demonstration in Keten village. Although yield and quality attributing characters like plant height, base diameter of the energized jute (JRO 524E) was better than its non-energized counterpart (JRO 524), it's performance could not be ascertained in terms of fibre yield as none of the farmers could harvest the crop due to gross submergence during harvesting. Chairman urged upon the SMSs of the KVK to take up other energized varieties as well duly in on station or on farm trial. He informed the house that two new villages have been shortlisted to be adopted. PRA is being conducted in the villages. Responding to the action taken on fish farming to be integrated with other enterprises like poultry, floriculture, duckery etc., he informed that plan have been chalked out and will be conducted in late rainy season. On the point of enhancing KVK station activity, Dr. Rahman informed that KVK is duly expanding its seed production programme to generate more fund.

On the whole the actions taken were appreciated and approved by the house.

Next Dr. Rahman presented the progress of work Kharif-2007 and action plan for Rabi- 2007.

On the matter of training of farm women in ornamental fish culture, Mr. B. N. Gorai District Fishery Officer, Burdwan Kanksa reiterated that if list of beneficiaries is sent, he can arrange for 5 day training in batches.

Dr. S. Dutta Deputy Director Animal Resource Department discussed about animal health camps and support from state government for conducting vaccination camps, infertility camps etc.

Next Mr. Shital Kiskoo, Lead district manager discussed about Kisan Credit Card scheme to overcome financial problem for scientific cultivation. Mr. B. Subba Rao, Regional Manager, Central Bank of India and Mr. A. K. Saha, Agricultural and rural development officer also discussed about different financial and other facilities available to the farmers by the banks and NABARD.

Shri Asim Pan, a representative of the farming community of Keten village expressed his satisfactory comment about the combined effect of multidisciplinary team work of KVK. He also mentioned that paddy seed treatment with pesticides and bio-fertilizer as shown by the KVK gave a remarkable and visible effect towards villagers in terms of pest and disease control and yield respectively. He also assured on behalf of villagers to continue the practice as guided by the KVK.

Dr. H. S. Sen Director, CRIJAF, and Chairman of the committee appreciated the activities of KVK and suggested farmers to adopt value addition practices for all farm products. He also suggested KVK scientists to conduct more programmes on this topic. He urged upon the KVK personnel to keep records of all kinds as hard copies for reference of any kind. The farm women from Jagulipara, Galsi-I Block informed that village women are interested to learn handicrafts and tailoring.

The points emanated out of the meeting are listed below,

1. List of beneficiaries to be prepared for ornamental fish culture.
2. Soil test based fertilizer application should be encouraged among farmers.
3. Background information for each on farm trials is to be collected and duly reported.
4. Seed treatment for all crops is to be attained in adopted villages
5. Trials on scented rice should be done.
6. Marketing opportunities for all kind of agricultural produce should be explored.
7. RNMV energized varieties of crops like Arhar, tomato, rice bean besides jute may be promoted.
8. Proximate composition of animal feed ingredients should be analyzed.
9. KVK should give emphasis on the value addition of produce in future for better return.

The meeting ended with a vote of thanks, offered by Shri D. Ghorai, to the chair.

List of participants

S.N.	Name	Designation	Status
1.	Dr. H. S. Sen	Director, CRIJAF, Barrackpore	Chairman
2.	Dr. F. H. Rahman	Programme Coordinator	Member Secretary
3.	Dr. S. K. Dutta	Dy. Director (ARD), Purta Bhavan, Burdwan	Member
4.	Sh. B.N. Ghorai	District Fisheries Officer, Purta Bhavan, Burdwan	Member
5.	Sh. Shital Kiskoo	Lead District Manager, UCO Bank, Burdwan	Member
6.	Sh. A.K.Saha	Regional Manager, Agriculture and Rural	Member

		Development, CBI	
7.	Sh. B. Subba Rao	Regional Manager, CBI	Special Invitee
8.	Sh. T. K. Roy	Branch Manager, CBI, Budbud	Member
9	Shri Dipankar Ghorai	SMS (Agri.), KVK Burdwan	Invitee
10.	Dr. Subrata Sarkar	SMS (Hort.), KVK Burdwan	Invitee
11.	Shri Manoj Kumar	SMS (Ag. Extn.), KVK Burdwan	Invitee
12.	Dr. Chandrakanta Jana	SMS (Vet. Sc.), KVK Burdwan	Invitee
13.	Shri Golam Ziauddin	SMS (Fisheries), KVK Burdwan	Invitee
14.	Ms. Sujata Sethy	SMS (H Sc.), KVK Burdwan	Invitee
15.	Sk. Golam Rasul	Prog. Asst. (Comp.), KVK	Invitee
16.	Shri Sandipan Garai	Programme Assistant, KVK Burdwan	Invitee
17.	Shri Soumya Sarathi Kundu	Farm Manager, KVK Burdwan	Invitee
18.	Shri Asim Pan	Farmer' representative, Keten, Kanksa Block	Member
19.	Sk Nijamul Haque	Farmers' representative Jagulipara, Glasi-I Block	Member
20.	Parvati Bauri	Farm Woman, Keten, Kanksa Block	Member
21.	Jyotsna Chowdhury	Farm Woman, Jagulipara, Glasi-I Block	Member
	Media Persons	ABP, Doinik Jagaran, Shilpanchal and Banga Darpan	

Recommendation and Action taken report of recommendations of fourth SAC meeting held on July 23, 2007

S.N.	Action proposed	Action Taken
1	Reports of PRA should be prepared well before meeting like SAC	PRA conducted & Report prepared of the two new villages of Galsi I & Galsi II Block for adoption
2	Soil test based fertilizer application should be encouraged among farmers	Farmers have been shown the benefits and have adopted to some degree
3	Background information for each on farm trials is to be collected and duly reported	Information is being collected
4	List of beneficiaries to be prepared for ornamental fish culture	Interested farmers have been enlisted for training
5	Seed treatment for all crops is to be attained in adopted villages	Adoption level regarding practice of seed treatment in potato, mustard and rice is increased among farmers in adopted village
6	Trials on scented rice should be done	Will be under taken in future
7	Marketing opportunities for all kind of agricultural produce should be explored	Approach has been initiated through formation of Farmers' club
8	RNMV energized varieties of crops like Arhar, tomato, rice bean besides jute may be promoted.	Energized varieties have been evaluated as 'on station trial'
9	Proximate composition of animal feed ingredients should be analyzed	Proximate composition of locally available feed stuff namely broken rice, rice polish, tree leaves were analyzed
10	KVK should give emphasis on the value addition of produce in future for better return.	Training on value addition of jute fibre, egg has been conducted

2. DETAILS OF DISTRICT (2007-08)

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

S. No	Farming system/enterprise
1.	Rice production system
2.	Fishery
3.	Poultry
4.	Goatary
5.	Duckery
6.	Rice –vegetable-Rice production system
7.	Jute-rice production system

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

S. No	Agro-climatic Zone	Characteristics
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

(Source: Dept. of Agriculture, Govt. of W.B.)

S. N	Agro ecological situation	Characteristics
1.	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

(Source: NBSS&LUP, Nagpur)

2.3 Soil type/s

S. No	Soil type	Characteristics	Area in ha
1.	Gangetic alluvial	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.	206423
2	Vindhya alluvial	Soil order is entisol Sandy loam to clay loam, fine to moderate coarse in texture, acidic to neutral in reaction.	311000
3	Red and Lateritic	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.	186054

(Source: Dept. of Agriculture, Govt. of W.B.)

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

S. No	Crop	Area ('000 ha)	Production ('0000 q)	Productivity (q/ha)
01	Aus paddy	17.1	52.1	30.45
02	Aman pady	416.7	123.4	29.55
03	Boro paddy	200.4	609.4	30.41
04	Wheat	4.9	10.1	20.55
05	Pulses	1.5	1.3	8.58
06	Oilseeds	56.2	40.8	7.28
07	Jute & other fibres	12.7	223.5	31.6
08	Potato	42.4	1132.5	267.0

(Source: District statistical handbook, 2005, Bureau of Applied Economics & Statistics, Govt. of West Bengal)

2.5. Weather data

Month	Rainfall (mm)	Temperature ^{0} C		Relative Humidity (%)
		Maximum	Minimum	
April 07	52.1	35.60	23.61	88
May 07	47.6	38.23	26.85	85
June 07	135.6	37.65	29.56	83
July 07	468.5	36.54	24.52	89
August 07	235.1	32.12	21.50	92
September 07	523.6	33.4	25.7	94
Oct 07	91.1	33.9	21.5	86
November 07	17.5	28.9	15.0	85
December 07	11.9	23.3	9.0	78
January 08	16.2	20.5	7.5	75
February 08	19.8	24.6	9.8	78
March 08	12.5	29.5	16.5	80

(Source: Agricultural Directorate, Burdwan Dist)

2.6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle			
Crossbred	182149	464080 tonnes milk	280 kg milk /year
Indigenous	1473755		
Buffalo	127539	--	--
Sheep			
Crossbred			
Indigenous	140873	61.887 kg (wool)	
Goats	127184	4000 MT (meat)	
Pigs			
Crossbred			
Indigenous	120994	420 MT (Meat)	
Rabbits			
Poultry			
Hens			
Desi	3141669	2672.40 lakh egg	85 no. eggs/year
Improved			
Ducks	1835094		
Turkey and others			

(Source: Livestock population, W.B., Animal Resources Development Department, 2006)

Category	Area (ha)	**Production** (mt)	**Productivity** (kg/ha)
Fish			
Marine			
Inland	50448.19	36029.787	3250
Prawn			
Scampi			
Shrimp			

(Source: Annual report published by Office of the Assistant Director of Fisheries, Meen bhavan, Burdwan)

2.6 Details of Operational area / Villages (2006-07)

Sl. No	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Durgapur	Kanksa	Keten	Paddy, potato, mustard, sesame lentil, vegetable, cattle, poultry, duck, goat, fish,	• Non-availability of quality seed / planting materials • Low productivity of major crops • Limited water resources for irrigation • Indiscriminate and inappropriate use of chemical fertilizers • Inadequate cross bred animal • Poor feed resources • Lack of credit facilities	• Popularization of improved agronomic practices • Production of quality seeds/planting material • Diversification of land use • Breed up gradation of animal resources • Efficient utilization of water bodies • Entrepreneurship development • Organic farming
2	Durgapur	Galsi-1	Jaguli para	Kharif Paddy, boro paddy, mustard, cattle, poultry, duck, goat, fish	• Non-availability of quality seed materials • High cost involvement for major crops • Indiscriminate and inappropriate use of chemical fertilizers • Low input of organic manures and biofertiliser • Poor feed resources	• Production of quality seeds/planting material • Diversification of land use • Entrepreneurship development • Organic farming • Health care
3.	Burdwan North	Galsi-II	Garamba-Bhasapur	Aus paddy, kharif paddy, jute, potato, mustard, vegetable cattle, poultry, goat, fish	• Non-availability of quality seed materials • Low productivity of major crops • Indiscriminate and inappropriate use of chemical fertilizers • Inadequate cross bred animal • Poor feed resources	• Popularization of improved agronomic practices • Production of quality seeds/planting material • Breed up gradation of animal resources • Organic farming • Diversification of land use through vegetable cultivation

2.7 Priority thrust areas

Sl. No	Thrust area
1	Popularization of improved agronomic practices for cultivation of field and vegetable crops for vertical agricultural growth
2	Production of quality seeds for major agricultural crops like rice, jute, mustard and vegetable crops
3	Production of quality planting materials for fruit and vegetable crops
4	Diversification of land use through introduction of floriculture in resource rich areas, and medicinal and aromatic plants on degraded lands
5	Breed upgradation of animal resources and improving its productivity through health care and feed management
6	Efficient utilization of water bodies through composite fish culture and improved management practices
7	Entrepreneurship development for family income generation through end-to-end approach, for lateral economic support
8	Development of sustainable agricultural practices with focus on organic farming

7. **TECHNICAL ACHIEVEMENTS**

3.1. A. Abstract of interventions undertaken

S. No	Thrust area	Crop/ Enterprise	Identified Problem	Interventions					
				Title of OFT if any	**Title of FLD if any**	**Title of Training if any**	**Title of training for extension personnel if any**	**Extension activities**	**Supply of seeds, planting materials etc.**
1.	Improved agronomic practice	Mustard	Low yield	• Management of mustard aphid and saw fly • Soil test crop response based fertilizer application in rice-mustard-Jute crop sequence	Package demonstration of mustard	• Improved production technology of mustard • Disease and insect management of mustard	-		Certified seed of var. B-9, plant protection chemicals
		Lentil	Low yield	Assessment of rice-lentil-vegetable crop sequence through supplementation of bio-based plant nutrient	Package demonstration of lentil	Improved production technology of lentil	-		Certified seed of var. B-256
		Potato	High late blight disease incidence and low yield	Management of late blight of potato	--	• Seed treatment of potato • Identification of production problem of potato and their management	-	-	Certified seed of var. Kufri Pokhraj, plant protection revalenc
		Jute	Low yield of system	Soil test crop response based fertilizer application in rice-mustard-Jute crop sequence	Improved production practices	• Application of seed drill for sowing	-	-	Certified seed of JRO 524E, fertiliser
		Paddy	Low yield of system	Assessment of rice-lentil-vegetable crop sequence through supplementation of bio-based plant nutrient	--	• Pest and disease management of paddy	--	--	Biofertiliser

		Okra	Low yield of system	Assessment of rice-lentil-vegetable crop sequence through supplementation of bio-based plant nutrient	--	•	--	--	Biofertiliser
2.	Organic farming	Horticultural crops	--	--	--	• Preparation of organic pesticides and it's utilization • Vermicompost production technology	• Organic pesticide-its impact and utilization in horticultural crops • Vermicompost production technology	--	--
3.	Crop diversification	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--
4.	Production of quality planting materials	Vegetable seedling	Lack of quality materials	--	--	• Nursery management in vegetable crops	--	--	--
5.	Livestock productivity improvement	Cattle	Low milk yield and infertility; disease revalence	Mineral content-based feed supplementation in cow	--	• Care of new born calf • Cattle shed management and sanitation • Cultivation of maize as fodder • Seed treatment of maize with biofertiliser • Method of stool sample collection	Vaccination schedule for ruminants	Health camp	Vaccine
		Goats and sheep	Malnutrition and mortality	--	--	•Procedure of medication in animal	--	Vaccination camp against PPR	Vaccine

		Poultry (Quail)	Under weight and thin shelled egg		Grower ration	• Procedure of medication in birds • Quail production technique	--	Vaccination camp	Vaccine
		Duck	Poor egg production	Evaluation of formulated duck feed using locally available feed ingredients	--	• Care of day old duckling • Management of growing duckling • Shed disinfection to control bird flu	--	Vaccination camp	Vaccines, feed
6.	Composite fish culture	IMC	Poor fish production	Standardization of manuring for enhancement of fish yield	--	Nutrient management in freshwater fish ponds	--	--	--
7.	Efficient utilization of water bodies		Poor fish production	-	--	--	--	--	--
8.	Entrepreneurship development	Rural crafts	Lack of skilled	--	--	• Preparation of Jute handicrafts • Preparation of kantha stitch	--	--	Raw materials
		Mushroom	Lack of knowledge and skilled	--	--	Mushroom cultivation practices	--	--	Spawn

3.1. B. Details of each On Farm Trial to be furnished in the following format
(Total number of OFT conducted - 11 No)

OFT 1:

1	Title of On farm Trial	**Assessment of rice-lentil-vegetable crop sequence through supplementation of bio-based plant nutrition**
2	Problem diagnose	Rice based cropping system prevails in the district of Burdwan among which rice-lentil-okra is a major one. Farmers are under impression that they are not getting desired yield of the system as they would get earlier.
3	Details of technologies selected for **assessment**/ refinement	**Rice:** T1: Farmers practice (60:60:45 kg NPK/ha) T2: Recommended dose of fertilizer (80: 40:40 kg NPK/ha) T3: Seedling treatment with *Azotobacter / Azospirillum* + 75% recommended dose of NPK **Lentil:** T1: Farmers practice (15:30:0 kg NPK /ha) T2: Recommended dose of fertilizer (20: 40: 20 kg NPK /ha) T3: Seed treatment with *Rhizobium* + 75% recommended dose of NPK **Okra:** T1: Farmers practice (60:30:30 kg NPK /ha) T2: Recommended dose of fertilizer (80:40:40 kg NPK /ha) T3: Seed treatment with *Azotobacter / Azospirillum* + 75% recommended dose of NPK
4	Source of Technology	ICAR
5	Production system and thematic area	Rainfed rice based production system
6	Performance of the Technology with performance indicators	Rice production was better when supplemented with biofertiliser
7	Final recommendation for micro level situation	Farmers should be recommended for using biofertiliser along with inorganic fertiliser
8	Constraints identified and feedback for research	Restricted availability of selective biofertiliser
9	Process of farmers participation and their reaction	Through training and field level demonstration. Farmers were satisfied with the performance of the technology.

OFT 2:

1	Title of On farm Trial	**Soil test crop response based fertilizer application in rice- mustard-Jute crop sequence**
2	Problem diagnose	Rice-mustard-jute is an important cropping system among the rice oriented cropping systems those are generally practiced in Burdwan. Farmers have a general complaint that they are not getting sufficient yield in respect of all these crops as they used to get earlier. One of the reasons may be unbalanced use of fertilizer coupled with fertilizer application not based on soil test.
3	Details of technologies selected for **assessment**/ refinement	**Rice:** T1: Farmers practice (60:60:45 kg NPK/ha) T2: Recommended dose of fertilizer (80: 40:40 kg NPK/ha) T3: Application of NPK for a targeted yield of 60 q/ha T4: Application of NPK for a targeted yield of 65 q/ha **Mustard:** T1: Farmers practice (50:50:20 kg NPK/ha) T2: Recommended dose of fertilizer (80: 40:40 kg NPK/ha)

		T3: Application of NPK for a targeted yield of 15 q/ha T4: Application of NPK for a targeted yield of 20 q/ha **Jute:** T1: Farmers practice (50:40:50 kg NPK/ha) T2 : Recommended dose of fertilizer (60:30:30 kg NPK/ha) T3 : Application of NPK for a targeted yield of 35 q/ha T4: Application of NPK for a targeted yield of 40 q/ha
4	Source of Technology	ICAR
5	Production system and thematic area	Rainfed rice based production system
6	Performance of the Technology with performance indicators	Rice production was better than recommended dose in case of soil test based application
7	Final recommendation for micro level situation	Farmers should apply fertilizer on soil test basis
8	Constraints identified and feedback for research	Lack of soil testing facility
9	Process of farmers participation and their reaction	Through training and field level demonstration. Farmers were satisfied with the performance of the technology

OFT 3:

1	Title of On farm Trial	**Assessment of IPM and chemical measures against fruit and shoot borer, phomopsis blight and bacterial wilt of brinjal**
2	Problem diagnose	Several insect, pest and disease invasion is one of the prime factors for low productivity in brinjal. Excess use of pesticides and fungicides without judging their specificity is a very common practice by the brinjal growers. As a result farmers are increasing the amount and frequency of pesticides but not getting any positive result.
3	Details of technologies selected for **assessment**/ refinement	T1 : Farmers practice T_2 : Selective chemicals T_3 : IPM approach
4	Source of Technology	ICAR
5	Production system and thematic area	Medium land under irrigated condition, pest and disease management through IPM approach
6	Performance of the Technology with performance indicators	Better than the conventional in respect to pest and disease control and yield
7	Final recommendation for micro level situation	Use of IPM by minimizing the use of chemicals
8	Constraints identified and feedback for research	Restricted availability of *Trichoderma* in many places.
9	Process of farmers participation and their reaction	Through training and field level demonstration. Use of selected chemicals along with combination of integrated approach acted better than the conventional one in minimizing pest and disease incidence with minimum cost

OFT 4:

1	Title of On farm Trial	**Exploitation of yield potential of garden pea through seed inoculation with *Rhizobium* culture and application of micronutrients**
2	Problem diagnose	Low yield of garden pea is one of the common problems to the farmers. They don't have any idea about nodule formation or biofertilizer inoculation for increasing the uptake of nitrogen. Another problem associated with pea is the poor seed setting and small size of grain.
3	Details of technologies selected for **assessment**/ refinement	T_1 = Farmers practice (40:20:20 NPK per ha) T_2 Recommended dose of NPK (40:60:40 NPK per ha) T_3 = = Seed inoculation with Bio-fertilizer + 75% of recommended dose of nitrogen T_4 = Seed inoculation with Bio-fertilizer + 75% of recommended dose of

		nitrogen + Foliar spray of micronutrient
4	Source of Technology	ICAR
5	Production system and thematic area	Medium land under irrigated condition, *Rhizobium* inoculation increase the nitrogen uptake of plant and application of micro-nutrient improves the seed setting as well as grain weight
6	Performance of the Technology with performance indicators	Better than the conventional in respect to yield and shelling percentage
7	Final recommendation for micro level situation	*Rhizobium* inoculation is essential in pea for better nitrogen uptake of plant and application of micro-nutrient for improvement of the seed setting as well as grain weight
8	Constraints identified and feedback for research	Restricted availability of specific *Rhizobium* culture in many places.
9	Process of farmers participation and their reaction	Through training and field level demonstration. They were convinced about the positive results of biofertilizers and micronutrients in pea.

OFT 5:

1	Title of On farm Trial	**Mineral content-based feed supplementation in cow**
2	Problem diagnose	Dairy raiser often complains about infertility, prolong calving interval and low milk yield in deshi cow reason being deficiency of minerals leading to poor animal performance like growth, milk production, and reproduction.
3	Details of technologies selected for **assessment**/refinement	T_1 = Farmers' practiced (only common salt -50g/d/h) T_2 = Formulated mineral mixture with chloride salt (25 g/d/h) T_3 = Formulated mineral mixture with chloride + sulphate salt (25 g/d/h)
4	Source of Technology	West Bengal University of Animal and Fishery Sciences
5	Production system and thematic area	Semi-intensive, productivity improvement through mineral supplementation
6	Performance of the Technology with performance indicators	Daily supplementation of mineral mixture @25 gm per deshi cow gave better milk yield with higher fat % in compare to traditional practice.
7	Final recommendation for micro level situation	Daily supplementation of mineral mixture (composed of salt of calcium, phosphorus, , copper, zinc, manganese, cobalt and iodine) @ 25 g improved milk yield in deshi cow
8	Constraints identified and feedback for research	Most of beneficiaries expressed that milk yield and taste of milk were improved with daily supplementation of area specific mineral mixture after 10 days of first supplementation in ration.
9	Process of farmers participation and their reaction	Through training and health camp

OFT 6:

1	Title of On farm Trial	**Evaluation of formulated duck feed using locally available feed ingredients**
2	Problem diagnose	Duck rearing is a common practice among small and marginal farmers of Burdwan. Ducks used to fed mainly on aquatic flora and fauna, kitchen waste etc. Farmers are encountering problem of providing adequate feed to the ducks during summer and winter as most of aquatic bodies become dry and resulting in small and thin shelled egg production.
3	Details of technologies selected for **assessment**/refinement	T_1- Farmers' practice T_2- Economic feeding of formulated feed (50gm/d/layer + 2-4 hrs foraging) T_3- Formulated feed with vitamins (100gm/d/layer)
4	Source of Technology	West Bengal University of Animal and Fishery Sciences
5	Production system and thematic area	Semi-intensive, Nutrition management
6	Performance of the Technology with performance indicators	Production performance is very good but hatchability of egg under broody hen is same as like as farmers' practice

7	Final recommendation for micro level situation	Feeding of 50 g formulated feed daily along with 2-4 hrs foraging is economically profitable feeding practice.
8	Constraints identified and feedback for research	Predator attack of foraging duck, Farmers are happy with the number and size of egg production
9	Process of farmers participation and their reaction	Through training and health camp

OFT 7:

1	Title of On farm Trial	**Standardization of manuring for enhancement of fish yield**
2	Problem diagnose	The ponds of ketan in Burdwan district having problem of water scarcity round the year. The primary productivity of those ponds is very low. This may be the reason for poor fish productivity in domestic small and medium sized pond.
3	Details of technologies selected for **assessment**/refinement	**T_1= Farmers' practice (Stocking density 7500 nos fish/ha) with indiscriminate use of cowdung** **T_2 = Stocking density 7500 nos fish/ha + cowdung (5 t/ha)** **T_3 = Stocking density 7500 nos fish/ha + cowdung (10 t/ha)**
4	Source of Technology	CIFA, Bhubaneswar
5	Production system and thematic area	Modified extensive system, nutrient management
6	Performance of the Technology with performance indicators	The final productivity of ponds increased, the plankton production also increased
7	Final recommendation for micro level situation	application of cowdung in proper doses would increase the productivity of fish
8	Constraints identified and feedback for research	Introduction of predatory and weed fish in culture ponds, The farmers are happy with the technology.
9	Process of farmers participation and their reaction	Trainings and demonstration.

OFT 8:

1	Title of On farm Trial	**Supplementation of diversified vegetables to farm families through kitchen garden**
2	Problem diagnose	In India per capita availability is around 135 gm against the minimum requirement of about 300 gm for a balance diet. It is now well conceived that by simply adding greens and other vegetables to the available food grains, the diet of the average Indians can substantially be upgraded and there is a scope for using the unutilized land adjacent to the household.
3	Details of technologies selected for **assessment**/ refinement	T_1 – Farmers' practice(only cucurbits) T_2 – Diversified vegetables (cucurbits ,brinjal, chilli, tomato, okra, bean) without manuring T_3 – Diversified vegetables (cucurbits, brinjal, chilli, tomato, okra, bean) + Manuring
4	Source of Technology	ICAR
5	Production system and thematic area	Semi intensive, adjacent to the household , Increase production of the garden and nutritious vegetables improve diet of farm women
6	Performance of the Technology with performance indicators	Better than the conventional in respect to total yield and availability of diversified vegetables
7	Final recommendation for micro level situation	Diversified vegetables should be grown with good manuring
8	Constraints identified and feedback for research	Problem of grazing and availability of quality seed
9	Process of farmers participation and their reaction	Through training and awareness camp

OFT 9:

1	**Title**	**Effectiveness of different storage structures for evaluation of shelf life of locally available and seasonal vegetables and fruits**

2	Problem diagnose	Spoilage of freshly harvested vegetables and fruits is a serious problem in the village. There are different perishable vegetables and fruits like ridge guard, bitter guard, carrot, cabbage, cauliflower and mango grown in large quantity in the village. To avoid the rush selling and to fetch better price in the market it is very important to store the produce in better storage condition. Cool storage can prolong the shelf life of fresh produce but refrigeration equipment is expensive to buy, run and maintain. So there is a great need for low cost storage conditions for the village.
3	Details of technologies selected for **assessment**/ refinement	**T_1 – Farmers' practice** **T_2 – Bamboo iceless refrigerator** **T_3 – Zero energy cool chamber**
4	Source of Technology	ICAR
5	Production system and thematic area	Household condition under intensive manual care Post harvest management
6	Performance of the Technology with performance indicators	The programme in progress
7	Final recommendation for micro level situation	The programme in progress
8	Constraints identified and feedback for research	-
9	Process of farmers participation and their reaction	Through training and awareness camp

*** Treatment details**

Farmers' Practice: Storing vegetables and fruits in a corner of the house or in a bamboo basket.

Bamboo iceless refrigerator: Big Bamboo basket with a lid will be covered by a wet gunny bag and watering it frequently. The vegetables can be stored in plastic crates in side the bamboo basket.

Zero Energy cool chamber: This is a double walled brick structure and in between two walls river sand can be used and the sand should keep wet to retain the moisture. The chamber can be covered by a frame of bamboo, straw or dry grass.

OFT 10:

1.	**Title**	**Management of mustard aphid**
2.	Problem diagnose	Mustard aphid is one of the most dangerous sucking insects of rapeseed and mustard causing more than sixty percent loss. Excess use of insecticides without judging their specificity is a very common practice by the farmers. It has several disadvantages, not only the high cost of pesticides but their residual effects as well as it induces resistance of pest towards pesticides.
3.	Details of technologies selected for **assessment**/ refinement	T_1-Sowing on 15th November,2007 Spraying of Rogor (Dimethoate) Spraying of Metasystox (Oxydimeton methyl) T_2-Fifteen days earlier sowing than farmers' practice Spraying of neem oil Spraying of tobacco leaf extracts Spraying of aktara (Thiamethoxam) Collection & destruction of egg masses/nymph T_3- Sowing on 15th November, 2007 Spraying of Spark (Triazophos + deltamethrin) Spraying of aktara (Thiamethoxam)
4.	Source of Technology	ICAR
5.	Production system and thematic area	Rice based production system Pest management
6.	Performance of the Technology with	The programme in progress

	performance indicators	
7.	Final recommendation for micro level situation	The programme in progress
8.	Constraints identified and feedback for research	-
9.	Process of farmers participation and their reaction	Through training and awareness camp

OFT 11 :

1.	**Title**	**Management of late blight of potato.**
2.	Problem diagnose	It is a devastating disease leading to high protection cost with low yield
3.	Details of technologies selected for **assessment**/ refinement	T_1 : Seed treatment with Mancozeb+Spraying of Mancozeb T_2 : Seed tuber treatment with *Trichoderma viridae*+ soil application and foliar spray of *Trichoderma viridae* T_3 : Seed tuber treatment with Tatamaster (Metalaxyl+Mancozeb) + Spraying of Tatamaster (Metalaxyl+Mancozeb)
4.	Source of Technology	ICAR
5.	Production system and thematic area	Rice based production system Disease management
6.	Performance of the Technology with performance indicators	The programme is in progress
7.	Final recommendation for micro level situation	The programme is in progress
8.	Constraints identified and feedback for research	Botanicals, plant protection chemicals.
9.	Process of farmers participation and their reaction	Through training and awareness camp

3.1. C. Results of On Farm Trials

OFT 1

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials *	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement done	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Rice-lentil-vegetable	Medium upland to lowland	Low system yield in rice-lentil-veg cropping system	Assessment of rice-lentil-vegetable crop sequence through supplementation of bio-based plant nutrient	6	Biofertilization	Yield attributing characters Yield Economics	See table 1	Productivity of rice increased with application of biofertiiser	Biofertilizer application undoubtedly increased yield with minimum cost but it was difficult to get in the market	No	

Technology Assessed	Production per unit (q/ha)	Net Return (Profit) in Rs. / ha	B:C Ratio
13	14	15	16
T1 : Farmers practice (60:60:45 kg NPK/ha)	39.83	16164	2.05
T2 : Recommended dose of fertilizer (80: 40:40 kg NPK/ha)	41.50	16864	2.06
T3 : Seedling treatment with *Azotobacter / Azospirillum* + 75% recommended dose of NPK	44.83	19067	2.19

Table 1 (Data for rice has been obtained and given. Data on other two crops will be given in due course)

Treatment	Plant height (cm)	No. of effective tillers/hill	Panicle length (cm)	Yield (q/ha)	Input cost (Rs./ha)	Gross return (Rs./ha)	B : C ratio
T_1	98	24	21	39.83	15400	31564	2.05
T_2	103	26	23	41.50	15863	32727	2.06
T_3	111	25	24	44.83	15988	35055	2.19
Average	104	25	23	42.05	15750	33115	2.10
LSD at 5%	9.26	NS	NS	2.36	-	-	-

Rice based cropping system prevails in the district of Burdwan among which rice-lentil-vegetable (okra) is a major one. Farmers are under impression that they are not getting desired yield as they would get earlier Application of 75% recommended dose + biofertiliser

significantly improved rice yield over recommended dose and farmers' practice. Plant height was significantly higher in T_3 which was at par with T_2. Farmers benefited more in applying 75% recommended dose along with biofertiliser.

OFT 2

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials *	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement done	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Rice-Mustard-Jute	Medium upland to lowland	Application of fertilizer in an inappropriate and unbalanced manner which results in enhanced production cost.	Soil test crop response based fertilizer application in rice- mustard-Jute crop sequence	5	STCR based fertilization	Yield attributing characters Yield Economics	Table 2	Here farmers benefited quantitatively from less expenses towards fertiliser in case of soil test based application and qualitatively from improved soil health through balanced use of fertilizer.	Requires lees fertilizer without compromising return		

Technology Assessed	*Production per unit (q/ha)	Net Return (Profit) in Rs. / ha	B: C Ratio (net return : cost)
13	**14**	**15**	**16**
T1 : Farmers practice (60:60:45 kg NPK/ha)	40.4	13010	1.85
T2 : Recommended dose of fertilizer (80: 40:40 kg NPK/ha)	43.1	15207	1.93
T3 : Application of NPK for a targeted yield of 60 q/ha	43.6	15437	2.02
T4: Application of NPK for a targeted yield of 65 q/ha	44.2	14462	1.99

Table 2

Treatment	Plant height (cm)	No. of effective tillers/hill	Panicle length (cm)	Yield (q/ha)	Input cost (Rs/ha)	Gross return (Rs/ha)	B:C ratio
T_1	99.8	23.2	18.4	40.4	15263	28273	1.85
T_2	107.6	27.6	21.6	42.0	15255	29393	1.93
T_3	112.8	30.8	24.4	43.6	15075	30512	2.02
T_4	109.6	30.6	24.6	44.2	15570	30932	1.99
Average	107.5	28.1	22.3	42.6	15291	29778	1.95
LSD at 5%	3.52	2.68	NS	1.25	--	--	--

Rice-mustard-jute is a very popular cropping system followed in West Bengal. KVK has attempted to popularize this system in the adopted village Keten. It was seen in other parts of the district that farmers generally complain about enhanced production cost vis-à-vis insufficient return in this cropping system. This can be attributed to application of fertilizer in inappropriate and unbalanced manner which result in enhanced production cost. So the present trial was conducted with a view to standardize application of fertilizers to maintain soil health, cost effectively.

The trial was set with four treatments replicated 5 times. Treatments included farmers' practice, application of N at recommended doses, soil test-based application of N-P-K and farmers' practice for yield targets of 60 q/ha and 65 q/ha for rice.

Results revealed that plant height improved in soil test based applications of fertilizer. Yield was also significantly higher in application of fertilizer on soil test basis, although regarding cost effectiveness application of fertilizer for a targeted yield of 60 q/ha was profitable.

OFT 3

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials *	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement done	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Brinjal	Medium land under irrigated condition	Several insect, pest and disease invasion is one of the prime factors for low productivity in brinjal.	Assessment of IPM and chemical measures against fruit and shoot borer, phomopsis blight and bacterial wilt of brinjal	7	Pest and disease management	Percentage pest and disease infestation. yield **Cost effectiveness**	See the table 3	Use of selected chemicals along with combination of integrated approach acted better than the conventional one in minimizing pest and disease incidence with minimum cost	Proper selection of chemicals and IPM approach reduced their protection cost	Some chemicals have been replaced by new ones in the 2nd phase of OFT	More effective new chemicals are now being available

Technology Assessed	*Production per unit (q/ha)	Net Return (Profit) in Rs. / ha	B:C Ratio
13	**14**	**15**	**16**
T1 : Farmers practice	163.5	84905	1.85
T_2 : Selective chemicals	186.0	98529	1.96
T_3 : IPM approach	205.9	113405	2.21

Table3a

Treatment	Yield (q/ha)	Gross return	Net return	B:C ratio
T1	163.5	130800	84905	1.85
T2	186.0	148800	98529	1.96
T3	205.9	164720	113405	2.21
CD (0.05)	1.856			
CD (0.01)	2.602			
EMS	0.852			

Table 3b

Effect of different treatments on bacterial wilt

Treatment	Survival of plant (%)
T1	88
T2	96
T3	95

Table 3c

Effect of different treatments on phomopsis blight

Treatment	% of disease infestation
T1	34
T2	19
T3	21

Table 3d

Effect of different treatments on fruit and shoot borer

Treatment	% affected fruit
T1	32
T2	27
T3	16

Treatment details:

T_1 - Phorate (10g/plant, after transplanting and again 45 DAT), Cypermethrin and Dithane M-45 (applied very frequently about 7-10 days interval)

T_2 - Soil application of Carbofuran 3G @ 5g/plant
Spray of Quinolphos + Cypermethrin combination.
Seedling treatment with Streptocycline.
Foliar spray of Chlorothalonin.
Foliar spray of Streptocycline

T_3 - Hot water seed treatment.
Seedling treatment with Streptocycline
Periodical removal & destruction of early infected fruit & shoots
Application of neem cake/oil cake.
Installation of sex pheromone traps.
Alternate spray of neem based pesticides.
Need based application of animal origin insecticide i.e., Cartap Hydrochloride.

Excess use of pesticides to control the pests and diseases of brinjal and thereby increasing the cost of production is the day old practice of the vegetable growers. The objective of the OFT was to efficient control of pests and diseases with minimum use of target specific pesticides spending least cost towards plant protection. Among the three treatments IPM approach that combined all the mechanical, chemical and hormonal measures, performed best in controlling fruit and shoot borer(16% fruit affected), phomopsis blight (21% disease infestation) and bacterial wilt(95% survival) that ultimately reflected in terms of higher yield(205.9q/ha) and better return.

OFT 4

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials *	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement done	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Pea	Medium land under irrigated condition	Low yield of garden pea is one of the common problems to the farmers. They don't have any idea about nodule formation or biofertilizer inoculation for increasing the uptake of nitrogen. Another problem associated with pea is the poor seed setting and small size of grain.	**Exploitation of yield potential of garden pea through seed inoculation with *Rhizobium* culture and application of micronutrients**	5	Seed inoculation with biofertilizers and micronutrients application	**Yield** Shelling percentage **Cost effectiveness**	see table4	*Rhizobium* inoculation is essential in pea for better nitrogen uptake of plant and application of micro-nutrient for improvement of the seed setting as well as grain weight	They were convinced about the positive results of biofertilizers and micronutrients in pea.	No	

Technology Assessed	*Production per unit (q/ha)	Net Return (Profit) in Rs. / ha	B:C Ratio
13	**14**	**15**	**16**
T_1 = Farmers practice (40:20:20 NPK per ha)	27.20	15600	1.36
T_2 = Recommended dose of NPK (40:60:40 NPK per ha)	28.70	16700	1.39
T_3 = Seed inoculation with Bio-fertilizer + 75% of recommended dose of nitrogen	34.30	22700	1.95
T_4 = Seed inoculation with Bio-fertilizer + 75% of recommended dose of nitrogen + Foliar spray of micronutrient	40.10	27600	2.20

Table 4

Treatment	Yield (q/ha)	Shelling percentage	Gross return	Net return	B:C ratio
T1	27.20	35.86	27000	15600	1.36
T2	28.70	35.61	28700	16700	1.39
T3	34.30	38.10	34300	22700	1.95
T4	40.10	42.35	40100	27600	2.20
CD (0.05)	0.289	1.725			
CD (0.01)	0.405	2.418			
EMS	0.132	0.791			

Low yield of garden pea is one of the common problems to the farmers. Another problem associated with pea is the poor seed setting and small size of grain. The objective of the OFT was to increase the uptake of nitrogen through seed inoculation with biofertilizer and at the same time better seed development through application of micronutrients. T4 that includes biofertilizer and micronutrients along with NPK, performed best in terms of yield (40.10q/ha), shelling %(42.35) and return followed by T_3.

OFT 5

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials *	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement done	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Cattle	House hold farming with 2-4 cattle	Dairy raiser often complains about infertility, prolong calving interval and low milk yield in deshi cow	Mineral content-based feed supplementation in cow	10	Region specific mineral mixture	• Levels of minerals in locally available feedstuff • Calving interval • Milk yield	see table 5	The mineral status of feedstuffs indicated that daily diet of lactating cow were deficient in P, Zn, Cu, Mn. So, to overcome the deficiency and production losses an area specific mineral mixture, composed of sulphate salt of minerals, was formulated and supplemented. Higher milk yield has been noticed with increased in fat % in supplemented group	Most of beneficiaries expressed that milk yield and taste of milk had improved with daily supplementation of area specific mineral mixture after 10 days of first supplementation in ration.	No	

Technology Assessed	*Production per unit (Avg. milk yield in Kg/ day/cow)	Net Return (Profit) in Rs./ unit (one cow/day)	BC Ratio
13	**14**	**15**	**16**
T_1 = Farmers' practice (only common salt -50g/d/h)	1.775	5.5	1.44
T_2 = Formulated mineral mixture with chloride salt (25g/d/h)	2.184	9	1.66
T_3 = Formulated mineral mixture with chloride + sulphate salt (25g/d/h)	2.507	11.5	1.85

Table 5:

Treatment	Milk yield (kg/day/cow	Fat %
T_1	1.775[a]	3.48[a]
T_2	2.184[b]	4.45[b]
T_3	2.507[c]	5.08[c]
Significance level (p)	<0.001	<0.001

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Treatment details including farmers' practice

Farmers' practice: Grazing and paddy straw with common salt (50 gm/day/head)
Mineral mixture:
T2 - main ingredients are Dicalcium phosphate, chloride salt of sodium and calcium, cupric oxide, cobalt carbonate, manganese carbonateand zinc oxide.
T3- main ingredients are Dicalcium phosphate, chloride salt of sodium, cupric sulphate, cobalt sulphate, manganese sulphate, potassium iodide and zinc sulphate. Concentration (in %) Ca-25, P-11, Zn-0.80, Cu-0.16, Co-0.026, I-0.006

Mineral contents (copper, zinc, manganese, and iron) of the feeds & forages were estimated by Atomic Absorption Spectrophotometer. Phoshphorus content was estimated colorimetrically. The program was formulated to develop a region specific mineral mixture for deshi cow by analyzing mineral status in locally available feed stuffs with the objective of improvement of productivity and reproduction efficiency. The trial was conducted in deshi cow (2nd lactation) under tradition feeding practices (3kg straw, 1 kg rice husk, 100 g oil cake and 20 g salt daily plus grazing) producing 1.8 to 1.9 kg milk/ day on an average having 3.2- 4.2 5 fat. The parameter on milk yield and fat % were analyzed but record keeping on calving interval is continuing as calving interval in deshi cow is 20-22 months.

Daily mineral supplementation (25 g/day) in deshi lactating cow significantly improved milk yield (0.5 kg/ day/ cow)

OFT-6

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials *	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement done	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Duck	House hold farming with a flock of 5-6 ducks.	Farmers are encountering problem of providing adequate feed to the ducks during summer and winter as most of aquatic bodies become dry resulting in small and thin shelled egg production.	Evaluation of formulated duck feed using locally available feed ingredients	8	Balanced ration	• Egg production • Egg wt • Shell thickness	see table 6	Target of improved egg production in Khaki Campbell duck has been achieved by formulation of duck ration using locally available feed ingredients	Farmers are happy with the number and size of egg production	No	

Technology Assessed	*Production per unit No of egg/ duck/ annum	Net Return (Profit) in Rs. / duck/annum	B:C Ratio (Gross return : cost)
13	**14**	**15**	**16**
T_1 = Farmers' practice	91	117	2.06
T_2 = Economic feeding (50gm/d/layer + 2-4 hrs foraging)	179	315	2.43
T_3 = Formulated feed with vitamins (100gm/d/layer)	202	168	1.38

Table 6:

Treatment	Egg no (duck/ annum)	Wt of egg (g)	Shell Thickness (mm)
T_1	91^a	61.14^a	0.32^a
T_2	179^b	66.14^b	0.33^b
T_3	202^c	70.18^c	0.35^b
Significance level (p)	>0.001	>0.001	>0.001

Feed was formulated by using locally available feed ingredients **(Broken wheat-52, wheat bran-7, rice bran-5, rice polish -7, soybean 18, fish meal-4, linseed cake-2, DCP-1.5, shell grid- 3.5 part in 100 kg of feed)** other nutrient were methionine-250 g, cholin chloride 100g, salt- 200g, daily mix- 25 g, Briplex 25g, uafsminP-25g, Toxin binder 100g)

Practice of providing 50 g of formulated feed and 4-6 hrs foraging was significantly better in term of profitability under farmer's condition. It also helped to develop immunity as they received green grass and leaves through foraging. Such feeding practice also improved external quality of eggs (weight and size).

OFT 7

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials *	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement done	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Fish	Medium or small sized domestic water bodies	The primary productivity of ponds is low in comparison to carrying capacity. This may be attributed to improper nutrient management and water quality management.	Standardization of manuring for enhancement of fish yield	7	Locally available Organic fertilizers like cowdung etc.	Length weight data Growth rate Yield performance	see table 7	Application of organic manure like cowdung is very much necessary for better growth rate of fish and sustainable higher production from small and semimedium domestic ponds.	Farmers are made aware of chemical analysis of water and impact of fertilizers on fish pond	No	

Technology Assessed	*Production per unit (t/ha)	Net Return (Profit) in Rs./ ha	B:C Ratio
13	**14**	**15**	**16**
T_1= Farmers' practice (Stocking density 7500 nos fish/ha) with indiscriminate use of cowdung	1.31	6320	1.41
T_2 = Stocking density 7500 nos fish/ha + cowdung (5 t/ha)	1.34	9376	1.50
T_3 = Stocking density 7500 nos fish/ha + cowdung (10 t/ha)	1.41	11876	1.55

Trial was conducted on standardization of different doses of cowdung application for increasing productivity freshwater ponds by culturing IMC.
T_1= Farmers' practice (Stocking density 7500 nos fish/ha) with indiscriminate use of cowdung , here farmers applied cowdung when cowdung available as they are not aware about the usefulness of cowdung application.

T_2= Stocking density 7500 nos fish/ha + cowdung (5 t/ha), with very lower use of cowdung, cowdung was applied @ 5 t/ha/yr in each replication.
T3 = Stocking density 7500 nos fish/ha + cowdung (10 t/ha) with proper dose of cowdung, cowdung was applied @ 10 t/ha/yr in each replication.

Table 7a: Effect of different treatments on length , weight of fish, plankton productivity and total fish productivity.

Treatment	Length of Fish (mm)	Weight of Fish (gm)	Plankton Density (no of units /litre of water)	Productivity of pond (t/ha)	Gross Return	Net Return	BCR
T_1	38.97	311.29	41247.00	1.31	21584	6320	1.41
T2	44.32	316.25	45022.14	1.34	27945	9376	1.50
T3	48.01	330.41	47753.86	1.41	33594	11876	1.55
CD(0.05)	101.3006	19.2427	1394.5207	0.1300			
CD(0.01)	142.0217	26.9780	1955.0948	0.1823			
SEd	46.4930	8.8317	640.0310	0.0597			

Table 7b: Correlations of different characteristic of water with plankton density and total productivity.

Characters					
	BOD	hardness	dissolved oxygen	plankton density (no of units per litre)	Total productivity (tonne/ha)
Available Phosphorous	0.307	0.093	0.171	0.033	-0.055
BOD		0.041	0.436	-0.297	-0.455
Hardness			0.225	-.699(**)	-0.419
Dissolved oxygen				-0.114	-0.241
Plankton Density					0.402

Farmers apply raw cowdung as organic manures irrespective of the requirement of the pond. Recommended doses are determined by the estimated values of important water properties like available phosphorous, hardness, etc . It was proposed to conduct an **on farm trial** to evaluate and demonstrate the importance of cowdung at desired dose for fish rearing with following objectives.

Objectives:

- To study the relative efficiency of manures used in maintaining a sufficiency of fish food in carp ponds. plankton density of pond water, growth rate and yield performance.

The trial was set with 3 treatments, each replicated 7 times. The observations were recorded after stocking the fish fingerling at 30 days interval. Results obtained indicated that by optimizing cowdung application, which was previously inadequate, increased the productivity from 1.1 t/ha to 1.6t/ha. In other words, there was an increase of 45% due to this cowdung application. The OFT revealed that organic manure (cowdung) gave the best result when applied @ 10 t/ha in terms of yield/ha. Considering the plankton density and cost of treatment, cowdung application @ 10 t/ha appeared to be more efficient among all treatments.

OFT 8

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials *	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement done	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Kitchen garden	Semi intensive, adjacent to the household	In India per capita availability is around 135 gm against the minimum requirement of about 300 gm for a balance diet. It is now well conceived that by simply adding greens and other vegetables to the available food grains, the diet of the average Indians can substantially be upgraded and there is a scope for using the unutilized land adjacent to the household.	**Supplementation of diversified vegetables to farm families through kitchen garden**	7	Crop diversification and Nutrient management	Total yield (component wise) Incorporation of vegetables in daily diet Surplus production Monetary savings	See table 8	Results revealed that kithen	Realized the benefits of diversified vegetable production with manuring	No	

Technology Assessed	*Production per unit (t/ha)	Net Return (Profit) in Rs./ ha	B:C Ratio

13	14	15	16
T_1 – Farmers' practice (only cucurbits)			
T_2 – Diversified vegetables (cucurbits ,brinjal, chilli, tomato, okra, bean) without manuring			
T_3 – Diversified vegetables (cucurbits, brinjal, chilli, tomato, okra, bean) + Manuring			

Table 8a

Treatments	**Incorporation of vegetables in daily diet (g)**			**Surplus yield (Kg/unit)**			**Monetary savings (Rs/unit)**		
	Cucurbits	**Other veg**	**Total**	**Cucurbits**	**Other veg**	**Total**	**Cucurbits**	**Other veg**	**Total**
T1	38	-	38	11	-	11	538	-	538
T2	26	10.8	36.8	-	.75	.75	271	306	577
T3	29	14.2	43.2	8	11	19	400	526.75	926.75

Table 8b

Yield (kg/unit)

Treatments	**Cucurbits**				**Other vegetables**					
	Bottle gourd	Bitter gourd	Ridge gourd	**Total**	Brinjal	Okra	Tomato	Dolichos bean	Chilli	**Total**
T_1	21	16	16.5	53.5	**-**	**-**	**-**	**-**	**-**	**-**
T_2	13	7.5	8.25	28.75	5	4.5	6	4	1.5	21
T_3	17	11.75	12	40.75	9.25	9	11	7	1.75	38

It is now well conceived that by simply adding greens and other vegetables to the available food grains, the diet of the average Indians can substantially be upgraded and there is a scope for using the unutilized land adjacent to the household. In this OFT the treatments that include diversified vegetables with manuring performed best in terms of Incorporation of vegetables in daily diet (43.2), monetary savings (926.75 Rs/unit) and Yield (kg/unit).

3.2 Achievements of Frontline Demonstrations

a. Follow-up for results of FLDs implemented during previous years

List of technologies demonstrated during previous year and popularized during 2006-07 (October to September) and recommended for large scale adoption in the district

S. No	Thematic Area*	Technology demonstrated	Details of popularization methods suggested to the Extension system	Horizontal spread of technology		
				No. of villages	No. of farmers	Area in ha
1	Crop diversification	Improved jute production technology	Training and demonstration	1	10	2
2	Agronomic practice	Improved production technology for paddy	Awareness camp	-	-	-
		Improved production technology for mustard	Awareness camp	2	25	10
		Improved production technology for lentil	Awareness camp	2	20	2
		Improved production technology for sesame	Awareness camp	2	10	3

b. Details of FLDs implemented during 2007-08 (Information is to be furnished in the following **three tables** for **each category** i.e. **cereals, horticultural crops, oilseeds, pulses, cotton and commercial crops**.)

Sl. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/demonstration				Reasons for shortfall in achievement
					Proposed	Actual	SC	ST	Others	Total	
1	Jute	Crop diversification	Improved production technology	Pre kharif 2008	Land is being prepared						
2.	Mustard*	Improved agronomic practice	Package demonstration	Rabi 2006	5 ha	5 ha	10		19	29	
3.	Lentil*	Improved agronomic practice	Package demonstration	Rabi 2006	1 ha	1 ha			7	7	

* Results of the FLDs are awaited

Details of farming situation

Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
				N	P	K					
Jute	Pre kharif 2008	Irrigated	Sandy loam	Will be undertaken in March 2008							
Mustard	Rabi 2006	Irrigated	Keten: Sandy loam Jagulipara: Clay loam	--	--	--	Paddy	Keten: 24.11.2007 Jagulipara: 7.11.2007	Keten: Yet to be harvested Jagulipara: 28.2.2008		
Lentil	Rabi 2006	Irrigated	Sandy loam	--	--	--	Paddy	30.12.2007	Yet to be harvested		

Performance of FLD

Sl.No.	Crop	Technology Demonstrated	Variety	No. of Farmers	Area (ha.)	Demo. Yield q/ha			Yield of local Check Qtl./ha	Increase in yield (%)	Data on parameter in relation to technology demonstrated (q/ha)	
						H	L	A			Demo	Local
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Jute	Package demonstration	JRO 524E	To be conducted								
2	Mustard	Package demonstration	B - 9	Keten: 15 Jagulipara :14	Keten: 15 Jagulipara :14	Crop has been harvested in Jagulipara but not yet in Keten. Data to be fully compiled later on.						
3	Lentil	Package demonstration	B – 256	7	1 ha							

NB: Attach few good action photographs with title at the back with pencil

Economic Impact (continuation of previous table)

Average Cost of cultivation (Rs./ha)		Average Gross Return (Rs./ha)		Average Net Return (Profit) (Rs./ha)		Benefit-Cost Ratio (Gross Return / Gross Cost)
Demonstration	Local Check	Demonstration	Local Check	Demonstration	Local Check	
14	15	16	17	18	19	20
--	--	--	--	--	--	--
--	--	--	--	--	--	--

Analytical Review of component demonstrations (details of each component for rainfed / irrigated situations to be given separately for each season)

Crop	Season	Component	Farming situation	Average yield (q/ha)	Local check (q/ha)	Percentage increase in productivity over local check
		1. Seed/Variety				
		2. Bio-fertilizer				
		3. Fertilizer management				
		4. Plant Protection				
		5. Combination of components (Please specify)				
Jute	Pre kharif 2008	Package demonstration (seed, fertilizer and plant protection chemical)	Irrigated	Has been undertaken		
Mustard	Rabi 2007	Package demonstration (seed, fertilizer and plant protection chemical)	Irrigated	Crop has not been fully harvested		
Lentil	Rabi 2007	Package demonstration (seed, fertilizer and plant protection chemical)	Irrigated			

Technical Feedback on the demonstrated technologies

S. No	Crop	Feed Back
1	Jute	Yet to receive feed back
3.	Mustard	Yet to receive feed back
4.	Lentil	Yet to receive feed back

Farmers' reactions on specific technologies

S. No	Crop	Feed Back
1	Jute	--
3.	Mustard	--
4.	Lentil	--

Extension and Training activities under FLD

Sl.No.	Activity	No. of activities organised	Date	Number of participants	Remarks
1	Field days	--	--	--	--
2	Farmers Training	3	14.11.07, 17.12.07, 14.03.08	76	
3	Media coverage				
4	Training for extension functionaries				

c. Details of FLD on Enterprises

(i) Farm Implements

Name of the implement	crop	No. of farmers	Area (ha)	Performance parameters / indicators	* Data on parameter in relation to technology demonstrated		% change in the parameter	Remarks
					Demon.	Local check		

**** Field efficiency, labour saving etc.***

(ii) Livestock Enterprises

Enterprise	Breed	No. of farmers	No. of animals, poultry birds etc.	Performance parameters / indicators	* Data on parameter in relation to technology demonstrated		% change in the parameter	Remarks
					Demon.	Local check		

**** Milk production, meat production, egg production, reduction in disease incidence etc.***

(iii) Other Enterprises

Enterprise	Variety/ breed/Species/ others	No. of farmers	No. of Units	Performance parameters / indicators	Data on parameter in relation to technology demonstrated		% change in the parameter	Remarks
					Demon.	Local check		
Mushroom								
Apiary								
Sericulture								
Vermi compost								
Other (Fishery)								

3.3 Achievements on Training (Including the sponsored and FLD training programmes):

A) ON Campus

Thematic Area	No. of Courses	No. of Participants						
		Others			SC/ST			Grand Total
		Male	Female	Total	Male	Female	Total	
(A) Farmers & Farm Women								
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	1	30	0	30	0	0	0	30
Production of organic inputs	1	18	0	18	8	0	8	26
II Horticulture								
a) Vegetable Crops								
Production of low volume and high value crops								
Off-season vegetables								
Nursery raising	1	12	0	12	11	0	11	23
Exotic vegetables like Broccoli								
Export potential vegetables								
Grading and standardization								
Protective cultivation (Green Houses, Shade Net etc.)								
b) Fruits								
Training and Pruning								
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								
c) Ornamental Plants								
Nursery Management								
Management of potted plants								
Export potential of ornamental plants								
Propagation techniques of Ornamental Plants								
d) Plantation crops								
Production and Management technology								
Processing and value addition								
e) Tuber crops								
Production and Management technology								
Processing and value addition								
f) Spices								

Production and Management technology								
Processing and value addition								
g) Medicinal and Aromatic Plants								
Nursery management								
Production and management technology								
Post harvest technology and value addition								
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								
IV Livestock Production and Management								
Dairy Management								
Poultry Management								
Piggery Management								
Rabbit Management								
Disease Management								
Feed management								
Production of quality animal products								
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								
Value addition								
Income generation activities for empowerment of rural Women								
Location specific drudgery reduction technologies								
Rural Crafts								
Women and child care								
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								
VII Plant Protection								
Integrated Pest Management								

Integrated Disease Management								
Bio-control of pests and diseases	1	8	0	8	22	0	22	30
Production of bio control agents and bio pesticides								
VIII Fisheries								
Integrated fish farming								
Carp breeding and hatchery management								
Carp fry and fingerling rearing								
Composite fish culture								
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								
IX Production of Inputs at site								
Seed Production								
Planting material production								
Bio-agents production								
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								
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								
XI Agro-forestry								
Production technologies								
Nursery management								
Integrated Farming Systems								
XII Others (Pl. Specify)								
TOTAL	**4**	**68**	**0**	**68**	**41**	**0**	**41**	**109**
(B) RURAL YOUTH								
Mushroom Production	2	168	6	174	117	5	122	296
Bee-keeping								
Integrated farming								
Seed production								
Production of organic inputs	1	12	0	12	18	0	18	30
Integrated Farming								
Planting material production								
Vermi-culture								
Sericulture								

Protected cultivation of vegetable crops								
Commercial fruit production								
Repair and maintenance of farm machinery and implements								
Nursery Management of Horticulture crops	2	17	0	17	43	0	43	60
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								
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	**5**	**197**	**6**	**203**	**178**	**5**	**183**	**386**
(C) Extension Personnel								
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								
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	1	23	0	23	7	0	7	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	1	28	0	28	2	0	2	30
Gender mainstreaming through SHGs								

Any other (soil health)	1	28	0	28	2	0	2	30
TOTAL	**3**	**79**	**0**	**79**	**11**	**0**	**11**	**90**

B) OFF Campus

Thematic Area	No. of Courses	No. of Participants						
		Others			SC/ST			Grand Total
		Male	Female	Total	Male	Female	Total	
(A) Farmers & Farm Women								
I Crop Production								
Weed Management								
Resource Conservation Technologies								
Cropping Systems								
Crop Diversification								
Integrated Farming								
Water management								
Seed production								
Nursery management								
Integrated Crop Management	4	105	3	108	12	0	12	120
Fodder production	1	8	0	8	2	0	2	10
Production of organic inputs								
II Horticulture								
a) Vegetable Crops								
Production of low volume and high value crops								
Off-season vegetables	1	0	0	0	23	0	23	23
Nursery raising	1	12	0	12	11	0	11	23
Exotic vegetables like Broccoli								
Export potential vegetables								
Grading and standardization								
Protective cultivation (Green Houses, Shade Net etc.)								
Others (cultivation of summer veg.)	1	47	0	47	15	0	15	54
b) Fruits								
Training and Pruning								
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								
c) Ornamental Plants								
Nursery Management								
Management of potted plants								
Export potential of ornamental plants								
Propagation techniques of Ornamental Plants								
d) Plantation crops								
Production and Management technology								
Processing and value addition								
e) Tuber crops								
Production and Management technology	2	66	0	66	24	0	24	90
Processing and value addition								

f) Spices								
Production and Management technology								
Processing and value addition								
g) Medicinal and Aromatic Plants								
Nursery management								
Production and management technology								
Post harvest technology and value addition								
III Soil Health and Fertility Management								
Soil fertility management	1	27	0	27	1	0	1	28
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								
IV Livestock Production and Management								
Dairy Management	2	59	14	73	5	4	9	82
Poultry Management	2	9	3	12	8	3	11	23
Piggery Management								
Rabbit Management								
Disease Management	5	68	32	100	79	10	89	189
Feed management								
Production of quality animal products								
V Home Science/Women empowerment								
Household food security by kitchen gardening and nutrition gardening	1	0	46	46	0	4	4	50
Design and development of low/minimum cost diet								
Designing and development for high nutrient efficiency diet								
Minimization of nutrient loss in processing	1	0	11	11	0	0	0	11
Gender mainstreaming through SHGs								
Storage loss minimization techniques	1	0	31	31	0	9	9	40
Value addition	8	19	172	191	4	62	66	257
Income generation activities for empowerment of rural Women								
Location specific drudgery reduction technologies								
Rural Crafts								
Women and child care								
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								

VII Plant Protection								
Integrated Pest Management	4	116	0	116	54	0	54	170
Integrated Disease Management	4	97	0	97	53	0	53	150
Bio-control of pests and diseases	1	12	0	12	18	0	18	30
Production of bio control agents and bio pesticides								
VIII Fisheries								
Integrated fish farming								
Carp breeding and hatchery management	2	36	0	36	9	0	9	45
Carp fry and fingerling rearing								
Composite fish culture	4	19	0	19	71	0	71	90
Hatchery management and culture of freshwater prawn	1	19	0	19	6	0	6	25
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								
Other, if any (Airbreathing fish culture)	1	20	0	20	10	0	10	30
IX Production of Inputs at site								
Seed Production								
Planting material production								
Bio-agents production								
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								
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	1	40	0	40	10	0	10	50
XI Agro-forestry								
Production technologies								
Nursery management								
Integrated Farming Systems								
XII Others (Pl. Specify)								
TOTAL	49	789	301	1080	415	92	507	1587
(B) RURAL YOUTH								
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								
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								
Freshwater prawn culture								
Shrimp farming								
Pearl culture								
Cold water fisheries								
Fish harvest and processing technology								
Fry and fingerling rearing	2	22	0	22	22	0	22	44
Small scale processing								
Post Harvest Technology								
Tailoring and Stitching								
Rural Crafts								
TOTAL	2	22	0	22	22	0	22	44
(C) Extension Personnel								
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								
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								
Any other (Pl. Specify)								
TOTAL								

C) Consolidated table (ON and OFF Campus)

Thematic Area	No. of Courses	No. of Participants						
		Others			SC/ST			Grand Total
		Male	Female	Total	Male	Female	Total	
(A) Farmers & Farm Women								
I Crop Production								
Weed Management								
Resource Conservation Technologies								
Cropping Systems								
Crop Diversification								
Integrated Farming								
Water management								
Seed production								
Nursery management								
Integrated Crop Management	4	105	3	108	12	0	12	120
Fodder production	2	38	0	38	2	0	2	40
Production of organic inputs	1	18	0	18	8	0	8	26
II Horticulture								
a) Vegetable Crops								
Production of low volume and high value crops								
Off-season vegetables	1	0	0	0	23	0	23	23
Nursery raising	2	24	0	24	22	0	22	46
Exotic vegetables like Broccoli								
Export potential vegetables								
Grading and standardization								
Protective cultivation (Green Houses, Shade Net etc.)								
Other (Summer Veg.)	1	47	0	47	15	0	15	62
b) Fruits								
Training and Pruning								
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								
c) Ornamental Plants								
Nursery Management								
Management of potted plants								
Export potential of ornamental plants								
Propagation techniques of Ornamental Plants								
d) Plantation crops								
Production and Management technology								

Processing and value addition								
e) Tuber crops								
Production and Management technology	2	66	0	66	24	0	24	90
Processing and value addition								
f) Spices								
Production and Management technology								
Processing and value addition								
g) Medicinal and Aromatic Plants								
Nursery management								
Production and management technology								
Post harvest technology and value addition								
III Soil Health and Fertility Management								
Soil fertility management	1	27	0	27	1	0	1	28
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								
IV Livestock Production and Management								
Dairy Management	2	59	14	73	5	4	9	82
Poultry Management	2	9	3	12	8	3	11	23
Piggery Management								
Rabbit Management								
Disease Management	5	68	32	100	79	10	89	189
Feed management								
Production of quality animal products								
V Home Science/Women empowerment								
Household food security by kitchen gardening and nutrition gardening	1	0	46	46	0	4	4	50
Design and development of low/minimum cost diet								
Designing and development for high nutrient efficiency diet								
Minimization of nutrient loss in processing	1	0	11	11	0	0	0	11
Gender mainstreaming through SHGs								
Storage loss minimization techniques	1	0	31	31	0	9	9	40
Value addition	8	19	172	191	4	62	66	257
Income generation activities for empowerment of rural Women								
Location specific drudgery reduction technologies								
Rural Crafts								
Women and child care								
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								
VII Plant Protection								
Integrated Pest Management	4	116	0	116	54	0	54	170
Integrated Disease Management	4	97	0	97	53	0	53	150
Bio-control of pests and diseases	2	20	0	20	40	0	40	60
Production of bio control agents and bio pesticides								
VIII Fisheries								
Integrated fish farming								
Carp breeding and hatchery management	2	36	0	36	9	0	9	45
Carp fry and fingerling rearing								
Composite fish culture	4	19	0	19	71	0	71	90
Hatchery management and culture of freshwater prawn	1	19	0	19	6	0	6	25
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								
Other (Airbreathing fish)	1	20	0	20	10	0	10	30
IX Production of Inputs at site								
Seed Production								
Planting material production								
Bio-agents production								
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								
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	1	40	0	40	10	0	10	50
XI Agro-forestry								
Production technologies								
Nursery management								
Integrated Farming Systems								
XII Others (Pl. Specify)								
TOTAL	53	847	301	1148	456	92	548	1696
(B) RURAL YOUTH								

Mushroom Production	2	168	6	174	117	5	122	296
Bee-keeping								
Integrated farming								
Seed production								
Production of organic inputs	1	12	0	12	18	0	18	30
Integrated Farming								
Planting material production								
Vermi-culture								
Sericulture								
Protected cultivation of vegetable crops								
Commercial fruit production								
Repair and maintenance of farm machinery and implements								
Nursery Management of Horticulture crops	2	17	0	17	43	0	43	60
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								
Freshwater prawn culture								
Shrimp farming								
Pearl culture								
Cold water fisheries								
Fish harvest and processing technology								
Fry and fingerling rearing	2	22	0	22	22	0	22	44
Small scale processing								
Post Harvest Technology								
Tailoring and Stitching								
Rural Crafts								
TOTAL	7	219	6	225	200	5	205	430
(C) Extension Personnel								
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								
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	1	23	0	23	7	0	7	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	1	28	0	28	2	0	2	30
Gender mainstreaming through SHGs								
Any other (soil health)	1	28	0	28	2	0	2	30
TOTAL	**3**	**79**	**0**	**79**	**11**	**0**	**11**	**90**

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

Date	Clientele	Title of the training programme	Duration in days	Venue (Off / On Campus)	Number of participants			Number of SC/ST		
					Male	Female	Total	Male	Female	Total
04.04.07	Farmers & farm women	Improved cultivation techniques of jute and jute-based cropping systems	1	Off	8	0	8	0	0	0
02.07.07	〃	Post harvest operations in jute	1	Off	25	0	25	10	0	10
05.05.07	〃	STCR based fertilizer application for paddy	1	Off	20	0	20	8	0	8
04.04.07	〃	Hand on training on utilization of biofertiliser in kharif rice	1	Off	10	0	10	1	0	1
31.05.07	〃	Soil sampling for testing	1	Off	20	0	20	10	0	10
21.08.07	〃	Disease and pest management of rice	1	Off	13	0	13	0	0	0
30.08.07	〃	Soil test based fertilizer application	1	Off	28	0	28	1	0	1
22.08.07	〃	Pest management of paddy	1	Off	28	0	28	5	0	5
22.09.07	〃	Disease management of paddy	1	On	35	0	35	14	0	14
22.09.07	〃	Insect management of paddy	1	On	21	0	21	19	0	19
15.07.07	〃	Seed bed preparation for vegetables	1	Off	20	0	20	5	0	5
06.04.07	〃	Seed production techniques of Summer vegetable crops	1	Off	25	0	25	10	0	10
05.06.07	〃	Nursery management in vegetable crops	1	Off	20	0	20	7	0	7
04.04.07	〃	Production of TARO	1	Off	12	0	12	2	0	2
05.09.07	〃	Cultivation of early season cauliflower	1	Off	23	0	23	23	0	23
28.09.07	〃	Management of physiological disorder pests and diseases of cauliflower	1	Off	25	0	25	3	0	3
05.04.07	〃	Cultivation techniques of elephant foot yam	1	Off	12	0	12	2	0	2
22.08.07	〃	Nursery management	1	On	23	0	23	11	0	11
24.08.07	〃	Bio pesticide preparation and its application	1	On	30	0	30	18	0	18
17.04.07	〃	Care of day old duckling	1	Off	8	2	10	8	2	10
07.06.07	〃	Management of growing duckling	1	Off	9	4	13	0	1	1
09.08.07	〃	Techniques of cattle shed cleaning	1	Off	3	17	20	1	4	5
21.08.07	〃	Cattle shed disinfection procedure	1	Off	4	16	20	0	4	4

21.09.07	〃	Procedure of medication in animal	2	Off	43	0	43	19	0	19
02.07.07	〃	Seed treatment of maize with bio-fertilizer	1	Off	10	0	10	2	0	2
27.10.07	-	Procedure of medication in birds	1	Off	7	23	30	5	3	8
26.11.07-27.11.07	〃	Care of new born calf	2	Off	61	1	62	4	0	4
17.12.07 – 21.12.07	〃	Quail production techniques	5	On	60	0	60	55	0	55
28.01.08 – 29.01.08	〃	Duck/Hen shed disinfection to control Bird Flu	2	Off	63	3	66	55	3	58
18.03.08	〃	Method of stool sample collection from animal	1	Off	30	0	30	0	0	0
25.03.08 – 26.03.08	〃	Cultivation of maize as fodder	2	On	30	0	30	0	0	0
31.05.07	〃	Rearing pond management	1	Off	10	0	10	10	0	10
08.05.07	〃	Nursery pond management	1	Off	10	0	10	10	0	10
25.08.07	〃	Disease management of composite fish	1	Off	20	0	20	4	0	4
25.08.07	〃	Induced breeding of IMC	1	Off	20	0	20	6	0	6
21.09.07	〃	Air breathing fish culture	1	Off	30	0	30	16	0	16
28.09.07	〃	Fish seed transportation	1	Off	19	0	19	3	0	3
20.10.07		Nutrient management for growout culture of carps	1	Off	20	0	20	6	0	6
14.03.08		Importance of liming in fish ponds	1	Off	25	0	25	8	0	8
15.03.08		Polyculture of IMC & fresh water prawn	1	Off	25	0	25	6	0	6
26.02.08		Importance of liming in fish ponds under composite fish culture (Sponsored)	1	Off	25	0	25	1	0	1
03.04.07	〃	Conservation of nutrients during cooking of food	1	Off	0	12	12	0	0	0
02.07.07	〃	Management of kitchen garden	1	Off	5	9	14	2	2	4
14.05.07	〃	Preparation of mango pickle	1	Off	7	13	20	0	6	6
12.04.07	〃	Preparation of mixed vegetable pickle	1	Off	0	16	16	0	6	6
07.06.07	〃	Preparation of mango squash	1	Off	0	6	6	0	6	6
21.08.07	〃	Management of kitchen garden	1	Off	0	27	27	0	0	0
25.08.07	〃	Management of nutritional garden	1	Off	0	23	23	0	4	4
21.09.07	〃	Effective storage of grain, fruits and vegetables	1	Off	0	20	20	0	5	5
28.09.07	〃	Effective storage of grain, fruits and vegetables	1	Off	0	20	20	0	4	4
01.11.07	-	Cake preparation	2	Off	0	60	60	0	13	13
27.11.07	-	Preparation of tomato sauce	1	Off	0	30	30	0	7	7

28.12.07	-	Clean milk production	1	Off	14	16	30	4	5	9
18.03.08& 24.03.08	-	Preparation of guava jam and jelly	2	Off	0	50	50	0	10	10
19.03.08	-	Preparation of meat pickle	1	Off	0	20	20	0	5	5
27.07.07-02.08.07	″	Preparation of diversified jute handicrafts	7	Off	7	203	210	0	14	14
14.11.07	″	Improved cultivation practices of mustard	1	Off	30	0	30	2	0	2
26.11.07 – 28.11.07	″	Disease and pest management of mustard	3	Off	98	0	98	24	0	24
27.11.07	″	Improved production technology of wheat	1	Off	30	0	30	4	0	4
17.12.07 – 18.12.07	″	Improved production technology of lentil	2	Off	56	4	60	5	1	6
25.01.08 & 18.03.08	″	Procedure of application of pesticides	2	Off	60	0	60	18	0	18
27.10.07	″	Seed tuber treatment of potato	1	Off	30	0	30	9	0	9
29.11.07 &30.11.07	″	Production problems of potato and their management	2	Off	60	0	60	15	0	15
24.01.08	″	Pest management of potato	1	Off	30	0	30	11	0	11
28.01.08& 29.01.08	″	Cultivation of cucurbits	2	Off	54	0	54	7	0	7
20.03.2008	-	WTA and its impact on Indian Agriculture	1	ON	25	0	25	7	0	7
22.03.2008	″	WTA and its impact on Indian Agriculture	1	Off	25	0	25	7	0	7
27.09.07 28.09.07	Rural Youth	Techniques of different type of mushrooms cultivation	2	Off	48	0	48	10	0	10
27.10.2007&05.11.07	Rural Youth	Nursery management of gladiolus	2	ON	60	0	60	43	0	43
24.08.07	Rural Youth	Bio pesticide preparation and its application	1	ON	30	0	30	18	0	18
25.09.07	Rural Youth	Cultivation of different type of mushrooms	1	On	34	0	34	22	0	22
26.09.07	Rural	Cultivation of Oyster mushroom	1	On	34	0	34	22	0	22

	Youth									
29.02.08	Extension Personnel	Restoration of soil health	1	on	28	0	28	2	0	2
29.02.08	Extension Personnel	Bio-pesticides – its impact and utilization in horticultural crops	1	on	28	0	28	2	0	2
26.03.08	Extension Personnel	Vaccination schedule for ruminant	1	on	23	0	23	7	0	7

(D) Vocational training programmes for Rural Youth

Crop / Enterprise	Identified Thrust Area	Training title*	Duration (days)	No. of Participants			Self employed after training			Number of persons employed else where
				Male	Female	Total	Type of units	Number of units	Number of persons employed	
Jute handicraft	Using raw jute for production of diversified product	Preparation of diversified jute handicrafts	7	7	203	210	SHG	2	20	
Kantha stich	Design, stitching and preparation of diversified dress material	Preparation of Kantha stitch	7	-	210	210	SHG	2	20	
Quail	Housing , feeding and product processing,	Quail production techniques	5	60	0	60	Newly introduced farming yet to be adopted			

*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
					PF/RY/EF		Male		Female		Total			
							Others	SC/ST	Others	SC/ST	Others	SC/ST	Total	
1	1a	1b	Feb, 08	1	PF	1	22	8	-	-	22	8	30	NABARD
2	2a	2b	Feb, 08	1	PF	1	18	8	-	-	18	8	26	NABARD
3	3a	3b	Feb, 08	1	PF	1	18	7	-	-	18	7	25	
Total														

1a Biopesticides its impact and utilization in horticultural crops
1b Conversion of chemicals to bio product is urgent need for environment friendly sustainable crop production
2a Preparation of vermicompost
2b Organic farming
3a Importance of liming in fish ponds under composite fish culture (Sponsored)
3b Water quality management

3.4. 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										
Kisan Mela										
Kisan Ghosthi	1	167	38	205	26	0	26	193	38	231
Exhibition										
Film Show	3	70	20	90				70	20	90
Method Demonstrations **(seed drill)**	1	18	0	18				18	0	18
Farmers Seminar										
Workshop										
Group meetings										
Lectures delivered as resource persons	2	235	25	260				235	25	260
Newspaper coverage	20									
Radio talks										
TV talks	1	230	35	265				230	35	260
Popular articles										
Extension Literature	22	586	154	740				586	154	740
Advisory Services	225	210	15	225				210	15	225
Scientific visit to farmers field	54	900	442	1342				900	442	1342
Farmers visit to KVK	30	620	70	690				620	70	690
Diagnostic visits										
Exposure visits	1	22	8	30	8	1	9	30	9	39
Ex-trainees Sammelan										
Soil health Camp										
Animal Health Camp	12	420	40	460 families				420	40	460families
Agri mobile clinic										
Soil test campaigns										
Farm Science Club Conveners meet	14	220	20	240				220	20	240
Self Help Group Conveners meetings										
Mahila Mandals Conveners meetings	2		25	25					25	25
Celebration of important days (specify)	(2) 15th August and 26th January									
Any Other (Specify)										
Total										

3.5 Production and supply of Technological products

A.SEED MATERIALS PRODUCED AT KVK FARM (TL seed)

Sl. No.	Crop	Variety	Quantity (q)	Value (Rs.)	Provided to No. of Farmers
CEREALS	Rice	MTU 7029 CR 1010	70 q	Selling in progress as TL seed	-
OILSEEDS	Mustard	B-9	1.5 q	Selling in progress as TL seed	-
PULSES					
VEGETABLES	Okra	Arka Anamika	0.07	1056	15 (TL seed)
FLOWER CROPS	Gladiolus	Different varieties	600 corms and 5 kg cormels	-	-
OTHERS (Specify)	Hybrid Napier	Pusa Giant	364 kg	364.00	10

SUMMARY

Sl. No.	Crop	Quantity (qtl.)	Value (Rs.)	Provided to No. of Farmers
1	CEREALS (Rice)	70 q	Selling in progress as TL seed	-
2	OILSEEDS (Mustard)	1.5 q	Selling in progress as TL seed	-
3	PULSES			
4	VEGETABLES (Okra)	0.07	1056	15 **(TL seed)**
5	FLOWER CROPS (Gladiolus)	600 corms and 5 kg cormels	-	-
6	OTHERS			
TOTAL				

B. SEED MATERIALS PRODUCED THROUGH VILLAGE SEED PRODUCTION PROGRAMME

Sl. No.	Crop	Variety	Quantity (qtl.)	Value (Rs.)	Provided to No. of Farmers
CEREALS	--	--	--	--	--
OILSEEDS	--	--	--	--	--
PULSES	--	--	--	--	--
VEGETABLES	--	--	--	--	--
FLOWER CROPS	--	--	--	--	--
OTHERS (Specify)	--	--	--	--	--

PLANTING MATERIALS

Sl. No.	Crop	Variety	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
FRUITS	--	--	--	--	--
SPICES	--	--	--	--	--
VEGETABLES	--	--	--	--	--
FOREST SPECIES	--	--	--	--	--
ORNAMENTAL CROPS	--	--	--	--	--
PLANTATION CROPS	--	--	--	--	--
Others (specify) 1					

SUMMARY

Sl. No.	Crop	Quantity	Value (Rs.)	Provided to

		(Nos.)		No. of Farmers
1	FRUITS	--	--	--
2	VEGETABLES	--	--	--
3	SPICES	--	--	--
4	FOREST SPECIES	--	--	--
5	ORNAMENTAL CROPS	--	--	--
6	PLANTATION CROPS	--	--	--
7	OTHERS			
	TOTAL			

BIO PRODUCTS

Sl. No.	Product Name	Species	Quantity		Value (Rs.)	Provided to No. of Farmers
			No	(kg)		
	--	--	--	--	--	--
BIOAGENTS	--	--	--	--	--	--
BIOFERTILIZERS	--	--	--	--	--	--
BIO PESTICIDES	--	--	--	--	--	--

SUMMARY

Sl. No.	Product Name	Species	Quantity		Value (Rs.)	Provided to No. of Farmers
			No	(kg)		
1	BIOAGENTS	--	--	--	--	--
2	BIO FERTILIZERS	--	--	--	--	--
3	BIO PESTICIDE	--	--	--	--	--
	TOTAL	--	--	--	--	--

LIVESTOCK

Sl. No.	Type	Breed	Quantity		Value (Rs.)	Provided to No. of Farmers
			(Nos	Kgs		
Cattle	--	--	--	--	--	--
SHEEP AND GOAT	--	--	--	--	--	--
POULTRY	Duck feed	KC		253	3036	10
FISHERIES	IMC Fry	Rohu, catla mrigal	257000	127	8995	25
	IMC Fingerling	Rohu, catla mrigal	-	285	13500	10
Others (Specify)	--	--	--	--	--	--

SUMMARY						
Sl. No.	**Type**	**Breed**	**Quantity**		**Value (Rs.)**	**Provided to No. of Farmers**
			Nos	**Kgs**		
1	CATTLE	--	--	--	--	--
2	SHEEP & GOAT	--	--	--	--	--
3	POULTRY	KC feed		253	3036	10
4	FISHERIES	Rohu, catla mrigal		412	22495	35
5	OTHERS	--	--	--	25531	45
	TOTAL				16123.00	

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

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

(B) Literature developed/published

Item	Title	Authors name	Number
Research papers	See Annexure I		
Technical reports			
News letters			
Technical bulletins			
Popular articles			
Extension literature	1. Improved mechano -microbial retting of jute 2. Oyster mushroom cultivation 3. Backyard poultry rearing 4. Medication of Animal 5. Soil test based fertilizer application 6. Khaki Campbell rearing 7. Care of new born calf 8. Clean milk production 9. Cultivation of maize as fodder 10. System of Rice Intensification 11. Seed treatment techniques of paddy 12. Identification of pest and diseases of cole crops and their control 13. Biopesticide preparation and its application 14. Scientific mushroom cultivation 15. Induced breeding of IMC 16. Habitat disinfection of birds 17. Scientific fish culture in grow out ponds 18. Disease of IMC, treatment and prophylactic measures 19. Cattle shed disinfection 20. Culture of air breathing fish (Magur) 21. Importance of liming in freshwater fish cultre 22. Quail rearing techniques	D. Ghorai S. Garai C. Jana C. Jana D. Ghorai C. Jana C. Jana S. Sethy C. Jana D. Ghorai D. Ghorai S. Sarkar S. Sarkar S. Garai G. Ziauddin C. Jana G. Ziauddin G. Ziauddin C. Jana G. Ziauddin G. Ziauddin C. Jana	
Others (Pl. specify)			
TOTAL			

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

(C) Details of Electronic Media Produced

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

(D) Details of personnel development

Title of training/ winter school	Venue and date	Scientists attended
SREP preparation through village survey, data compilation- interpretation and documentation	State Agricultural management Extension Training Institute, Narendrapur on 06.08.07-11.08.07	Dr. Subrata Sarkar
Training and workshop for SMS in Horticulture, Agromony and Plant Protection for South Bengal KVKs	BCKC, Kalyani from 05.11.07 and 06.11.07	Dr. Subrata Sarkar, Mr. Dipankar Ghorai and Mr. Sandipan Garai
Sustainable livestock and Poultry Production Through KVKs	West Bengal University of Animal and Fishery Sciences, Mohanpur from 06.02.08 to 10.02.08	Dr. Chandrakanta Jana
Animal nutrition for better productivity and Health	Indian Veterinary Research Institute, Izatnagar from 13.02.08 to 04.03.08	Dr. Chandrakanta Jana
Community based Management of Fisheries	State Institute of Panchayats & Rural Development, Kalyani, from 12.12.07 to 17.12.07	Mr. Golam Ziauddin
Social science research tools in the inland fisheries development	Central Inland Fisheries Institute , Barrackpore, from 7.01.08 to 27.01.08	Mr. Golam Ziauddin
Entrepreneurship development for sustainable livelihood of Agricultural practitioners	MPUAT, Udaipur, from 23.01.08 to 12.02.08	Mr. Manoj Kumar

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

KVK Burdwan has been operational since one and half year only and it started fully functioning after joining of Programme Coordinator in April, 2007. Time is not adequate enough to have significant success stories and impacts for the KVK. Still KVK has put some bold and sincere steps forward to achieve success in imminent future, couple of which are worthy of mentioning.

KETEN, the adopted village by KVK, is one village with fairly diverse agro-ecology from medium upland to lowland and soil type from sandy to sandy loam to clay loam. Not surprising the village has a moderately diverse crop span from cereals to oilseeds and pulses to vegetables with a tinge of floriculture as well. KVK explored the possibilities of further diversification by introducing new crops like jute in pre kharif season when much of the medium upland with sandy to sandy loam soil remains fallow. Since jute was an alien crop for the farmers of the village, they were first motivated towards it's cultivation through mass awareness camps, group meetings, farmers' tour to Central Research Institute for Jute and Allied Fibres and training. Farmers were then selected for frontline demonstration. Barring few cases most of the farmers generated good earnings in the range of Rs. 1500 to Rs. 2000

per bigha by selling of jute fibre, price of which is relatively high as compared to the conventional jute growing areas like Nadia and Murshidabad.

Besides farmers were shown the way of utilizing the jute fibre in another possible way – this time through entrepreneurship development for rural women. Selected farm women and school dropout girls were thoroughly trained in a 7 day workshop by KVK for preparation of jute handicrafts from fibre. After completion of the training 2 Mahila Mandals were formed and two members of the groups namely Namita Lohar and Tanushree Majhi mastered the skills so well that they started preparing crafts like jute bags, pen stands and other ornamental items themselves. The crafts were marketed in the gramin melas, women fairs and they earned incomes of Rs. 1400 and Rs. 1800 respectively till date, thereby ensuring grater livelihood security for their families.

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

Nil so far

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
1	**Goat and Cattle**	Paste of leaves of **kalmeg** is made in water which is drenched orally.	Deworming for cattle and goat
2	**Cattle**	Leaves and twigs (20g) of **neem** are boiled in water (1 liter) till the colour of leaves turn greyish. The decoction, after cooling, is applied externally on the affected area	To control Foot and mouth disease in cattle
3	**Goat and Cattle**	Paste of branch of **lonka suti** (2 for adult cow and 1 for goat) in semi-solid form is fed to the affected animals for 2 days	For treatment of diarrhoea of cattle and goat
4	**Goat and Cattle**	Black pepper is mixed with **ghee** and fed to the affected animals.	For treatment of fever (HS) for cattle and goat
5	**Goat and Cattle**	Paste of **harjora** is applied on the affected area which is fixed by using bamboo stick	Setting of fractured bone of small and large animals
6	**Buffalo**	Paste of **raw turmeric and mustard cake** is applied on the affected area with rice glue on back	Swelling and pain in hump of buffalo
7	**Paddy/ wheat**	Dried neem leaves are placed in different layers of grain during storage	To check pest attack in paddy/ wheat during storage

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

- Identification of courses for farmers/farm women :

Through multidisciplinary PRA method and Group discussion

- Rural Youth
  Through multidisciplinary PRA method and Group discussion
- In-service personnel: Training and discussion using A/V aids

3.11 Field activities

i. Number of villages adopted – 3 so far ***(Two during the year)***
ii. No. of farm families selected- 1227 ***(1023 during the year)***
iii. No. of survey/PRA conducted- 3 ***(Two PRAs during the year)***

3.12. Activities of Soil and Water Testing Laboratory

Status of establishment of Lab :

1. Year of establishment : 2007- 2008
2. List of equipments purchased with amount :

Name of the equipment	Qty	Cost (Rs.)
Photo copier with stabilizer	one	49499.00
Flame photometer	One	29813.00
Spectrophotometer	One	46283.00
Shaker	One	20756.00
Hot air oven	One	5344.00
Hot plate	One	14000.00
Glass distillation unit	One	28000.00
Conductivity bridge	One	10000.00
pH meter	One	8500.00
Refrigerator	One	12350.00
Electronic balance	one	12375.00

(Note: Purchase of other instruments are under process)

3. Details of samples analyzed so far :

Details	No. of Samples	No. of Farmers	No. of Villages	Amount realized
Soil Samples	75	75	2	-
Water Samples	20	20	2	-
Total	95	95	4	-

4.0 IMPACT

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

Name of specific technology/skill transferred	No. of participants	% of adoption	Change in income (Rs.)	
			Before (Rs./Unit)	After (Rs./Unit)
Preparation of jute handicrafts	30	85	-	1600
Introduction of cultivation of jute in new areas	40	75	-	15000/ha
Cultivation of Oyster mushroom in new areas	40	50	-	
Preparation of kantha stitch	30	80	-	2500/month
Introduction of Khaki Campbell duck	25	80	-	300/month

4.2. Cases of large scale adoption

(Please furnish detailed information for each case)

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

5.0 LINKAGES

5.1 Functional linkage with different organizations

Name of organization	Nature of linkage
Animal Resource Development Department, Govt. of W.B.,	• Ducklings supply • Vaccination camp against FMD, PPR, Rani khet disease • Health camp against infertility
ATMA	• Governing body and management committee memeber • Collaborative programmes
National Seed Corporation, State Seed Corporation,	Foundation and certified paddy and potato seed supply
Department of Fisheries, Govt. of W.B	• Fish fingerlings supply • Training on fish culture, management • Awareness camp on subsidized loan scheme, fisherman identity card
Bidhan Chandra Krishi Viswavidyalaya, Mohanpur	• Time to time planning execution • Planting material collection • Bio fertilizers collection
West Bengal University of Animal and Fishery Science	Feed and milk sample analysis
State Department of Agriculture, Burdwan	Time to time planning execution
Regional Station for Forage Production Demonstration, Kalyani	Training and fodder seed collection
State Agricultural Management Extension Training Institute, Narendrapur	Training on SREP preparation
NABARD, CBI, SBI & RRBs ,Burdwan Region	Credit facility for farmers
NGOs like Men at Work, Ujjiban, SSSNS Burdwan	Farmers' tour , Training etc

NB The nature of linkage should be indicated in terms of joint diagnostic survey, joint implementation, participation in meeting, contribution received for infrastructural development, conducting training programmes and demonstration or any other

5.2 List of special programmes undertaken by the KVK, which have been financed by State Govt./Other Agencies

Name of the scheme	Date/ Month of initiation	Funding agency	Amount (Rs.)
Front line demonstration on jute	Mar, 2008	ATMA	-
Training and demonstration	Mar, 2008	ATMA	-

5.3 Details of linkage with ATMA

a) Is ATMA implemented in your district Yes (2007)

S. No.	Programme	Nature of linkage	Remarks
1	Governing body Meeting	Decision making on SREP and annual work plan as GB member	-
2	Management committee meeting	Approval for SREP, PRA and Accounts etc. as MC member	-
3	Master training on SREP preparation	Training attended at SAMETI	-
4	PRA	Collaborative programmes in SREP preperation	-

5.4 Give details of programmes implemented under National Horticultural Mission

S. No.	Programme	Nature of linkage	Constraints if any
			Burdwan district is not covered under NHM

Nature of linkage with National Fisheries Development Board

S. No.	Programme	Nature of linkage	Remarks
1.	Training and Demonstration on Composite Fish culture	Funded by NFDB	Rs. 82,250/- Released by NFDB for conducting programme

6. PERFORMANCE OF INFRASTRUCTURE IN KVK

6.1 Performance of demonstration units (other than instructional farm)

Sl. No.	Demo Unit	Year of estt.	Area	Details of production			Amount (Rs.)		Remarks
				Variety	Produce	Qty.	Cost of inputs	Gross income	

6.2 Performance of instructional farm (Crops) including seed production

Name Of the crop	Date of sowing/ transplanting	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty.	Cost of inputs	Gross income	
Cereals (paddy)	20.8.2007	15.12.2007	2 ha	MTU 7029 CR 1010	Seed	70 q	Selling in progress as TL seed		
Pulses									
Oilseeds (Mustard)	15.11.2008	1.3.2008	0.2 ha	B-9	Seed	1.5 q	Selling in progress as TL seed		
Fibers									
Spices & Plantation crops									
Turmeric	25.04.07	21.01.08	0.06	BH-4	Rhizome	80 kg	3000	-	Selling in progress
Floriculture (gladiolus)	15.10.07	18.02.08	0.01	Different	Corms and corm lets	600 corms and 5 kg corm lets	3000	-	Selling in progress
Fruits									
Vegetables (Okra)	02.3.07	28.5.07	0.02	Arka Anamika	Seed	6 kg	756	1056	(TL)
Others (specify)									
Fodder (hybrid Napier)	17.06.06	Every 45 days	400sq m	Pusa Giant	Cuttings	364kg	1604	364	Selling in progress

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

Sl. No.	Name of the Product	Qty	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	

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	
	Fish fingerling	IMC	Fry and Fingerling	5q	12000	22495	

6.5 Utilization of hostel facilities

Accommodation available (No. of beds) –Hostel construction is in the verge of completion

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
October 2006	--	--	--
November 2006	--	--	--
December 2006	--	--	--
January 2007	--	--	--
February 2007	--	--	--
March 2007	--	--	--
April 2007	--	--	--
May 2007	--	--	--
June 2007	--	--	--
July 2007	--	--	--
August 2007	--	--	--
September 2007	--	--	--

(for whole of the year)

7. FINANCIAL PERFORMANCE

7.1 Details of KVK Bank accounts

Bank account	Name of the bank	Location	Account Number
With Host Institute	State Bank of India Railway Station Branch, Barrackpore	Barrackpore	10391779335
With KVK	State Bank of India Panagarh	Panagarh	01000050263

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

Item	Released by ICAR		Expenditure		Unspent balance as on 1st April 2008
	Kharif 2007	Rabi 2007-08	Kharif 2007	Rabi 2007-08	
Inputs	4900	17500	-	17500	Rs. 10700.00
Extension activities	1050	3750	-	-	
TA/DA/POL etc.	700	2500	-	2200	
TOTAL	6650	23750	-	19700	

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

Item	Released by ICAR		Expenditure		Unspent balance as on 1st April 2008
	Kharif 2006	Rabi 2006 -07	Kharif 2006	Rabi 2006-07	
Inputs	-	3500	-	3000	Rs. 1250.00
Extension activities	-	750	-	-	
TA/DA/POL etc.	-	500	-	500	
TOTAL	-	4750	-	3500	

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

Item	Released by ICAR		Expenditure		Unspent balance as on 1st April 2007
	Kharif 2006	Rabi 2006 -07	Kharif 2006	Rabi 2006-07	

Inputs					
Extension activities					
TA/DA/POL etc.					
TOTAL					

7.5 Utilization of KVK funds during the year 2007 -08 till date

7.5 A. Utilization of KVK funds during the year 2007 -08

S. No.	Particulars	Sanctioned (Rs. In Lakh)	Released (Released in Lakh)	Expenditure (Rs. In Lakh)
A. Recurring Contingencies				
1	**Pay & Allowances**	26.00	26.00	26.00
2	**Traveling allowances**	1.50	1.50	1.39
3	**Contingencies** (A+B+C+D+E+F+G+H+I+J)	6.00	6.00	6.01
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	3.05	3.05	3.21
B	POL, repair of vehicles, tractor and equipments			
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	1.95	1.95	1.92
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)			
E	Training of extension functionaries			
F	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	0.30	0.30	0.23
G	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	0.70	0.70	0.65
H	Maintenance of buildings			
I	Establishment of Soil, Plant & Water Testing Laboratory			
J	Library			
TOTAL (A)		**33.50**	**33.50**	**33.50**
B. Non-Recurring Contingencies				
1	**Works**	20.91	20.91	15.00
2	**Equipments including SWTL & Furniture**	--	--	--
3	**Vehicle** (Four wheeler/Two wheeler, please specify)	--	--	--
4	**Library** (Purchase of assets like books & journals)	--	--	--
TOTAL (B)		**20.91**	**20.91**	**15.00**
GRAND TOTAL (A+B)		**54.41**	**54.41**	**48.40**

7.5 Status of revolving fund (Rs. in lakhs) for the 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
April 2004 to March 2005	-	-	-	-
April 2005 to March 2006	1.00	-	-	-
April 2006 to March 2007	1.00	Rs. 18974/-	Rs. 19309/-	Rs. 99665/-
April 2007 to March 2008	0.99665	Rs. 83106/-	Rs. 63681/-	Rs. 1,19,090/-

8.0 Please include information which has not been reflected above (write in detail).

8.1 Constraints- Nil

(a) Administrative- Nil
(b) Financial- Nil
(c) Technical- Nil

SUMMARY TABLES

1 Details of Technology assessment and refinement

Table 1A: Abstract on the number of technologies assessed in respect of crops

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Varietal Evaluation										
Seed / Plant production										
Weed Management										
Integrated Crop Management										
Integrated Nutrient Management	3									3
Integrated Farming System	1									1
Mushroom cultivation										
Drudgery reduction										
Farm machineries										
Value addition	1									1
Integrated Pest Management	1									1
Integrated Disease Management	1									1
Resource conservation technology										
Small Scale income generating enterprises										
TOTAL	7									7

Table 1 B; Abstract on the number of technologies refined in respect of crops

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Varietal Evaluation										
Seed / Plant production										
Weed Management										
Integrated Crop Management										
Integrated Nutrient Management										

Integrated Farming System										
Mushroom cultivation										
Drudgery reduction										
Farm machineries										
Post Harvest Technology										
Integrated Pest Management	1									1
Integrated Disease Management										
Resource conservation technology										
Small Scale income generating enterprises										
TOTAL	1									1

Table 1 C: Abstract on the number of technologies assessed in respect of livestock enterprises

Thematic areas	Cattle	Poultry	Piggery	Rabbitary	Fisheries	TOTAL
Evaluation of Breeds						
Nutrition Management	1				1	2
Disease of Management						
Value Addition						
Production and Management						
Feed and Fodder		1				1
Small Scale income generating enterprises						
TOTAL	1	1			1	3

Table 1 D: Abstract on the number of technologies refined in respect of livestock enterprises

Thematic areas	Cattle	Poultry	Piggery	Rabbitary	Fisheries	TOTAL
Evaluation of Breeds						
Nutrition Management						
Disease of Management						
Value Addition						
Production and Management						
Feed and Fodder						
Small Scale income generating enterprises						
TOTAL						

Table – 1 E Details of technology refined

Crop / Enterprise	Technology Assessed	No. replications	Technology refined	Result justifying the refinement
Brinjal	**IPM**	**7**	**Application of newly released pesticides by replacing the old ones**	**Result awaited. Crop is standing**

2. Details of Frontline Demonstrations

Table – 2 A Front Line Demonstrations on Oilseed Crops

Crop	Technology Demonstrated	No. of Farmers	Area (ha.)	Demo. Yield	Local Check	Increase in yield (%)	Data on parameter in relation to technology demonstrated		Average Net Return (Profit) (Rs./ha)	Benefit-Cost Ratio (Gross Return / Gross Cost)
							Demo	Local		
Mustard	Package demonstration	29	5	Yet to receive data						

Table – 2 B Front Line Demonstrations on Pulse Crops

Crop	Technology Demonstrated	No. of Farmers	Area (ha.)	Demo. Yield	Local Check	Increase in yield (%)	Data on parameter in relation to technology demonstrated		Average Net Return (Profit) (Rs./ha)	Benefit-Cost Ratio (Gross Return / Gross Cost)
							Demo	Local		
Lentil	Package demonstration	7	1	Yet to receive data						

Table – 2 C Front Line Demonstrations on Other Crops

Crop	Technology Demonstrated	No. of Farmers	Area (ha.)	Demo. Yield (q/ha)	Local Check	Increase in yield (%)	Data on parameter in relation to technology demonstrated		Average Net Return (Profit) (Rs./ha)	Benefit-Cost Ratio (Gross Return / Gross Cost)
							Demo	Local		
Jute	Package demonstration	Will be initiated in March, 2008								

Table – 2 D Front Line Demonstrations on Other enterprises

Enterprise	Variety/ breed/Species/others	No. of farmers	No. of Units	Size of Unit	Parameter indicators	Data on parameter in relation to technology demonstrated		% change in the parameter	Remarks
						Demon.	Local check		
Duck feed	Grower ration	10	10	4	Body weight, age of maturity	Results awaited			

3. Details of training programmes conducted:

Table – 3 A Area-wise distribution of On + Off Campus Training Courses for Farmers and Farm Women (regular + sponsored)

	No. of Participants										
Thematic Area	No. of Courses	Others			SC			ST			Grand Total
		M	F	T							
Crop Production											
Weed Management											
Resource Conservation Technologies											
Cropping Systems											
Crop Diversification											
Integrated Farming											
Micro Irrigation/Irrigation											
Seed production											
Nursery management											
Integrated Crop Management	4	105	3	108	12	0	12	0	0	0	120
Fodder production	2	38	0	38	2	0	2	0	0	0	40
Soil and Water Conservation											
Integrated Nutrient Management											
Production of organic inputs	1	18	0	18	8	0	8	0	0	0	26
Other											
Horticulture											
a) Vegetable Crops											
Production of low value and high volume crop											
Off-season vegetables	1	0	0	0	23	0	23	0	0	0	23
Nursery raising	2	24	0	24	22	0	22	0	0	0	46
Exotic vegetables											
Export potential vegetables											
Grading and standardization											
Protective cultivation											
Other (summer veg)	1	47	0	47	15	0	15	0	0	0	62
b) Fruits											
Training and Pruning											
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											
c) Ornamental Plants											
Nursery Management											

Management of potted plants											
Export potential of ornamental plants											
Propagation techniques of Ornamental Plants											
d) Plantation crops											
Production and Management technology											
Processing and value addition											
e) Tuber crops											
Production and Management technology	2	66	0	66	24	0	24	0	0	0	90
Processing and value addition											
f) Spices											
Production and Management technology											
Processing and value addition											
g) Medicinal and Aromatic Plants											
Nursery management											
Production and management technology											
Post harvest technology and value addition											
Soil Health and Fertility Management											
Soil fertility management	1	27	0	27	1	0	1	0	0	0	28
Integrated water management											
Integrated nutrient management											
Production and use of organic inputs											
Management of Problematic soils											
Micro nutrient deficiency in crops											
Nutrient use efficiency											
Balanced use of fertilizers											
Soil and water testing											
Livestock Production and Management											
Dairy Management	2	59	14	73	5	4	9	0	0	0	82
Poultry Management	2	9	3	12	8	3	11	0	0	0	23
Piggery Management											
Rabbit Management											
Animal Disease Management	5	68	32	100	79	10	89	0	0	0	189
Feed and Fodder technology											
Production of quality animal products											
Home Science/Women empowerment											
Household food security by kitchen gardening and nutrition gardening	1	0	46	46	0	4	4	0	0	0	50

Design and development of low/minimum cost diet											
Designing and development for high nutrient efficiency diet											
Minimization of nutrient loss in processing	1	0	11	11	0	0	0	0	0	0	11
Processing and cooking											
Gender mainstreaming through SHGs											
Storage loss minimization techniques	1	0	31	31	0	9	9	0	0	0	40
Value addition	8	19	172	191	4	62	66	0	0	0	257
Women empowerment											
Location specific drudgery reduction											
Rural Crafts											
Women and child care											
Agril. Engineering											
Farm machinery and its maintenance											
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											
Plant Protection											
Integrated Pest Management	4	116	0	116	54	0	54	0	0	0	170
Integrated Disease Management	4	97	0	97	53	0	53	0	0	0	150
Bio-control of pests and diseases	2	20	0	20	40	0	40	0	0	0	60
Production of bio control agents and bio pesticides											
Fisheries											
Integrated fish farming											
Carp breeding and hatchery management											
Carp fry and fingerling rearing											
Composite fish culture											
Hatchery management and culture of freshwater prawn	1	19	0	19	6	0	6	0	0	0	25
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											
Other (Airbreathing fish)	1	20	0	20	10	0	10	0	0	0	30
Production of Inputs at site											
Seed Production											
Planting material production											
Bio-agents production											
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											
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	1	40	0	40	10	0	10	0	0	0	50
Agro-forestry											
Production technologies											
Nursery management											
Integrated Farming Systems											
Others (Pl. specify)											
TOTAL	53	847	301	1148	456	92	548	0	0	0	1696

Table – 3 B Area-wise distribution of On + Off Campus Training Courses for Rural Youth (regular + sponsored + vocational)

Thematic Area	**No. of Courses**	**No. of Participants**									
		Others									Grand Total
		Male	Female	Total	SC			ST			
					M	F	T	M	F	T	
Mushroom Production	2	168	6	174	117	5	112	0	0	0	296
Bee-keeping											
Integrated farming											
Seed production											
Production of organic inputs	1	12	0	12	18	0	18	0	0	0	30
Integrated Farming											
Planting material production											
Vermi-culture											
Sericulture											
Protected cultivation of vegetable crops											
Commercial fruit production											
Repair and maintenance of farm machinery and implements											
Nursery Management of Horticulture crops	2	17	0	17	43	0	43	0	0	0	60
Training and pruning of orchards											
Value addition											
Production of quality animal products											
Dairying											
Sheep and goat rearing											
Quail farming	5	5	0	5	55	0	55	0	0	0	60
Piggery											
Rabbit farming											
Poultry production											
Ornamental fisheries											
Composite fish culture											
Freshwater prawn culture											
Shrimp farming											
Pearl culture											
Cold water fisheries											
Fish harvest and processing technology											
Fry and fingerling rearing	2	22	0	22	22	0	22	0	0	0	44
Small scale processing											
Post Harvest Technology											
Tailoring and Stitching	7	0	182	182	0	20	20	0	8	8	210
Rural Crafts	7	7	189	196	0	14	14	0	0	0	210
Others, if any											
TOTAL	26	231	377	608	255	39	294	0	8	8	910

Table – 3 C Area-wise distribution of On + Off Campus Training Courses for In-service Extension Personnel (regular + sponsored)

Thematic Area	No. of Courses	No. of Participants									Grand Total
		Others			SC			ST			
		Male	Female	Total	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											
Information networking among farmers											
Capacity building for ICT application											
Care and maintenance of farm machinery and implements											
Management in farm animals	1	23	0	23	6	0	6	1	0	1	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	1	28	0	28	0	0	0	2	0	2	30
Gender mainstreaming through SHGs											
Any other (soil health)	1	28	0	28	0	0	0	2	0	2	30
Total	3	79	0	79	0	0	0	11	0	11	90

Table – 4 Numbers of Extension Activities and Beneficiaries

Nature of Extension Activity	No. of activities	Farmers			Extension Officials			Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Field Day	1	120	15	135				120	15	135
Kisan Mela										
Kisan Ghosthi										
Exhibition										
Film Show	3	70	20	90				70	20	90
Method Demonstrations	1	18	0	18				18	0	18
Farmers Seminar										
Workshop										
Group meetings										
Lectures delivered	2	235	25	260				235	25	260
Newspaper coverage	15									
Radio coverage										
TV coverage										
Radio Programmes										

TV Programmes	1	230	35	265				230	35	260
Publications										
Popular articles										
Extension Literature	18	533	135	668				533	135	668
Advisory Services	176	166	10	176				166	10	176
Scientific visit to farmers field	37	359	29	388				359	29	388
Farmers visit to KVK	20	256	15	271				256	15	271
Diagnostic visits										
Field visits										
Exposure visits	1	20	5	25				20	5	25
Ex-trainees Sammelan										
Agriculture Camps										
Clinic day										
Soil health Camp										
Animal Health Camp	11	400	35	435 families				400	35	435 families
Agri mobile clinic										
Soil test campaigns										
Farm Science Club Conveners meet	Every month									
Self Help Group Conveners meetings										
Mahila Mandals Conveners meetings	2		25	25					25	25
Celebration of important days (specify)	15th August & 26th Jan									
Any Other (Specify)										
Total		**2407**	**349**	**2756**				**2407**	**349**	**2756**

Table – 5 A Productions of Seeds (TL seed)

Sl. No.	Crop	Variety	Quantity (q)	Value (Rs.)	Provided to No. of Farmers
CEREALS	Rice	MTU 7029 CR 1010	70 q	Selling in progress as TL seed	-
OILSEEDS	Mustard	B-9	1.5 q	Selling in progress as TL seed	-
PULSES					
VEGETABLES	Okra	Arka Anamika	0.07	1056	15 (TL seed)
FLOWER CROPS	Gladiolus	Different varieties	600 corms and 5 kg corm lets	-	-
OTHERS (Specify)	Hybrid Napier	Pusa Giant	364 kg	364.00	10

SUMMARY

Sl. No.	Crop	Quantity (q)	Value (Rs.)	Provided to No. of Farmers
CEREALS	Rice	70 q	Selling in progress as TL seed	-
OILSEEDS	Mustard	1.5 q	Selling in progress as TL seed	-
PULSES				
VEGETABLES	Okra	0.07	1056	15 (TL seed)
FLOWER CROPS	Gladiolus	600 corms and 5 kg cormels	-	-
OTHERS (Specify)	Hybrid Napier	364 kg	364.00	10

Table – 5 B Production of planting/seedling materials of Fruits/Vegetables/Forest Species

Sl. No.	Crop	Variety	Quantity (Nos.)	Value (in Rs.)	Provided to No. of Farmers
I. FRUITS					
Total					
II. VEGETABLES					
1	**Okra**	Arka Anamika	0.07	1056.00	15 ***(TL seed)***
Total				**1056.00**	**15**
III. SPICES					
Total	Turmeric	BH 4	80kg rhizome	Selling is in progress	
IV. FOREST SPECIES					
Total					
V. ORNAMENTAL CROPS					
1	**Gladiolus**	Different	600 corms and 5kg corm lets	Selling is in progress	
Total				**--**	
VI. PLANTATION CROPS					
Total					
VII. OTHERS					
1	Hybrid Napier	Pusa Giant	364 kg	364.00	10
Total				364.00	

SUMMARY

Sl. No.	Crop	Quantity (Nos.)	Value (in Rs.)	Provided to No. of Farmers
I	**FRUITS**			
II	**VEGETABLES (Okra)**	0.07	1056.00	15 ***(TL seed)***
III	**SPICES (Turmeric)**	80kg rhizome	Selling is in progress	-
IV	**FOREST SPECIES**			
V	**ORNAMENTAL CROPS (Gladiolus)**	600 corms and 5kg corm lets	Selling is in progress	-
VI	**PLANTATION CROPS**			
VII	**OTHERS**	**364 kg**	**364.00**	**10**
TOTAL			**1420.00**	**25**

Table –5 C Production of bio products

Sl. No.	Product	Species	Quantity	Value	Provided

	Name		No	(kg)	(Rs.)	to No. of Farmers
	--	--	--	--	--	--
I. BIOAGENTS	--	--	--	--	--	--
II. BIOFERTILIZERS	--	--	--	--	--	--
III. BIO PESTICIDES	--	--	--	--	--	--

SUMMARY

Sl. No.	Product Name	Species	Quantity		Value (Rs.)	Provided to No. of Farmers
			No	(kg)		
I	BIOAGENTS	--	--	--	--	--
II	BIO FERTILIZERS	--	--	--	--	--
III	BIO PESTICIDE	--	--	--	--	--
	TOTAL	--	--	--	--	--

Table 5 Livestock materials

Sl. No.	Type	Breed	Quantity		Value (Rs.)	Provided to No. of Farmers
			(Nos	Kgs		
I. Cattle						
II. SHEEP AND GOAT						
III. POULTRY	Duck feed	KC	-	253	3036	10
IV. FISHERIES	IMC fry fingerling	Rohu, catla mrigal	-	412	22495	35
V. Others (Specify)						

SUMMARY

Sl. No.	Type	Breed	Quantity		Value (Rs.)	Provided to No. of Farmers
			Nos	Kgs		
I	CATTLE					
II	SHEEP & GOAT					
III	POULTRY	KC feed		253	3036	10
IV	FISHERIES	Rohu, scatla mrigal		412	22495	35
V	OTHERS					
	TOTAL				25531	45

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Publications

News papers covered

Title	Date	News paper/Reporter
Farmer Scientist interaction programme	26.05.2007	ICAR Reporter (April- June 07)
Krishi vigyan kendrer paramarsha krishakder (KVK advice to farmers)	23.07.2007	Anandabazar Patrika (24.07.07)
CRIJAF seminar mein krishi vikash ebong rojgar paar charcha (Discussion on Agricultural development & employment)	23.07.2007	Dainik Jagaran (24.07.07)
Krishi vigyan kendrer haat dhore unnayaner swapna dekhche keten (Progress of Keten through KVK)	02.08.2007	Anandabazar Patrika (03.08.07)
Hasta kala ka Prasikhhan dene mahilaye hogi swanirbhar (Women will be self dependent)	27.07.2007 to 02.08.2007	Dainik Jagaran (03.08.07)
Pashuo ke rog ke prati jagrook karne ko le swasthya shibir (Animal health camp for awareness of animal diseases)	03.08.2007	Dainik Jagaran (04.08.07)
Samasya akhon sambhabar lockgate niyei, kanksar grame jalamagna krishi jami (Agriculture land of Kanksa village inundated)	13.08.2007	Anandabazar Patrika (14.08.07)
Krishi sambandhit prasikhhan ka ayojan (Agriculture related training programme)	21.08.2007	Dainik Jagaran (22.08.07)
Gharelu bagan se milta hai santulit aahar (Balanced diet through kitchen gardening)	21.08.2007	Dainik Jagaran (22.08.07)
Jaibik kitnashak banana ke liye prasikhhan shibir (Training on Bio-pesticides)	24.08.2007	Rajasthan Patrika (25.08.07)
Shibir mein jaibo kitnashak ke bare mein di gayi jankari (Training on Bio-pesticides)	24.08.2007	Dainik Jagaran (25.08.07)
Matsya palan ebong khadya bagicha prasikhhan mein mili jankari (Training on Fish rearing and Kitchen garden)	25.08.2007	Dainik Jagaran (26.08.07)
Pashu chikitsya shibir aaj (Animal health camp at Jagulipara)	16.09.2007	Dainik Jagaran (16.09.07)
Jagulipara me chikitsya shibir ka ayojan (Animal health camp at Jagulipara)	16.09.2007	Dainik Jagaran (19.09. 07)
Rogpoka damane shibir (Training on Disease – insect management)	22.09.2007	Sambad (24.09.07)
Mushroom chasher prasikhhan shibir (Training on Mushroom cultivation)	27.09.2007	Sambad (28.09.07)
Kisano ko di gayi mushroom paidabar ki jankari (Training on Mushroom cultivation)	27.09.2007	Dainik Jagaran (28.09.07)
Prasikhhan: moneyi order sabit hogi mushroom ki kheti (Training on Mushroom will be money order)	27.10.2007	Dainik Jagaran (28.10. 07)
Kisan Gosthi at CRIJAF-KVK	20.11.2007	ICAR Reporter (October-December 2007)
Rin ki samay par wapsi jaruri (Timely repayment of loan is essential)	20.11.2007	Dainik Jagaran (21.11.07)
KVK ne kiya panch prashikhshan shibir ka ayojan kiya (KVK has organized five training programmes)	06.12.2007	Dainik Jagaran (07.12.07)
Prasikhhan shibir ka ayojan (Organization of training programme)	11.12.2007	Dainik Jagaran (12.12.07)
Kantha stitch prasikhhan (Training on kantha stitch)	13.02.2008-19.02.2008	Anandabazar Patrika 20.02.08

Research Publications of the KVK Scientists

1. B.K.Bandyopadhyay, D.Burman, **D.Ghorai**, A. Majumder. The effect of Azolla and blue green algae on yield of rice and subsequent crops on coastal saline soil. 142-145. J. Ind.Soc.Coastal.Ag.Res. 24(1), 2006.
2. P. K. Katiha, Suman Dutta, Sumanta Dey and **Ziauddin, G.**, Carp polyculture for fish production in Kalahandi district of Orissa: Economics and constraints. (2007). kalahandi. J. *Inland Fish. Soc. of India.* 39(1) : 40 – 44.
3. **Ziauddin,** G. Chandravaal Dutta and A. Goswami,. (2007). Article on prospects of Ornamental fish culture and export in india, *Fishing Chimes* 23 (4): 44 – 46
4. G. R. Najar, Farida Akhtar, **F. H. Rahman** and I. U. Sheikh (2007). Micronutrient status of Karewa Apple Orchards Soils of Kashmir. *Environment and Ecology.25(4): 794 - 797*
5. Rakshanda Zargar, G. R. Najar, F. Akhtar and **F. H. Rahman** (2007). Micronutrients Status of Paddy Growing Soils of Srinagar District of Jammu and Kashmir. *Environment and Ecology* (In press).
6. S. Mandal and **F. H. Rahman** (2007) Preparation of Phosphocompost from the Mushroom bed waste – water hyacianth mixture along with phosphate rock and pyrite and its effect on yield and P uptake by soybean. *Proceedings of the 73rd Annual Convention of the Indian Society of Soil Science*, BAU, Ranchi, Nov. 02 – 05, 2007.

Symposium /seminar/ workshop attended by the KVK Scientist

1. S. K. Jha, V. B. Sambhu, **D. Ghorai, Manoj kumar**, Sujeet k. Jha (2008). Evaluation of high yielding jute varities at farmers field under front line demonstration (FLD). International symposium on jute and allied fibers production, utilization and marketing. During 09-12 January 2008.
2. S. K. Jha, V. B. Sambhu, **Manoj kumar, D. Ghorai,** Sujeet k. Jha (2008). Basket of options for farmers engaged in jute based multiple cropping system. International symposium on jute and allied fibers production, utilization and marketing. During 09-12 January 2008
3. M. N. Saha, A. K. Jana, **D. Ghorai** and A.Majumder (2008). Changes in productivity, soil quality and sustainability under long term fertilization with jute-rice-wheat cropping system-A Barrackpore Experience. Poster presented at 72 nd annual convention of ISSS held at BAU, Ranchi 2-5 nov, 2007 **(Won best poster award)**.
4. S. Chattopadhyay, G. Ziauddin and S. N. Dutta (2007) Present Status of Fisheries in Barddhaman District of West Bengal *National Seminar on* ***Ecosystem Health and Fish for Tomorrow*** from 14 – 16 December, 2007 at CIFRI, Barrackpore.
5. **F. H. Rahman** and S. Mandal (2007) Preparation of Phosphocompost from the Mushroom bed waste – water hyacianth mixture along with phosphate rock and pyrite and its effect on yield and P uptake by soybean 72nd Annual Convention of the Indian Society of Soil Science, Birsa Agricultural University, Ranchi, Nov. 02 – 05, 2007.
6. **S. Sethy and F. H. Rahman** (2008) Technology transfer of jute diversified products to the grass root level. *International Symposium on Jute and Allied Fibres production, utilization and marketing*, Kolkata, Jan. 09 – 12, 2008.