# Action Plan 2009-10

# KRISHI VIGYAN KENDRA BURDWAN





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## Annual Action Plan 2009 - 2010

#### Introduction:

A Krishi Vigyan Kendra (KVK) under Central Research Institute for Jute and Allied Fibres (CRIJAF) was sanctioned by Council in 2005 for district Bardhaman in West Bengal. The KVK has been made operational at Central Seed Research Station for Jute and Allied Fibres, Bud Bud in district Barddhaman under CRIJAF in the beginning of 2006. Consequent to initiation of activities by the KVK, village Keten, to start with, was selected for its adoption by the KVK to implement its mandated activities. Subsequently two new villages at Galsi I and Galsi II block were adopted.

#### Description of Agro Climatic Zone and Farming situation of the district :

As per classification made under NARP, West Bengal has been classified under six zones. District Burdwan having diversified features, falls under three zones, namely old alluvial zone, new alluvial zone and red and laterite soil zone. The KVK farm at Bud Bud, however, falls under old alluvial zone.

Burdwan is the only district in the state of West Bengal that is fortunate both in industry and agriculture. On an average about 58 percent of the total population belongs to the agricultural population while the non-agricultural sector accounts for the remaining 42 percent.

The eastern, northern, southern and central areas of the district are extensively cultivated but the soils of the western portion being extreme lateritic type are unfit for cultivation except in the narrow valleys and depressions having rich soil. Rice is the most important crop of the district. Paddy covers maximum of the gross cropped area. Among commercial crops, jute, sugarcane, potato and oilseeds are major crops. Productivity of the major crops grown in the district is indicated below. Major cropping patterns include paddy-wheat-vegetables, paddy – potato – sesame, paddy – vegetable – mustard and jute – paddy – vegetables.

Total land in the district (ha.)	698740
Total cultivable land in the district (ha.)	466630
Irrigated land (ha.)	33890
Rain-fed-land (ha.)	130740
Total no. of block / taluka in the district	31
Total no. of villages	2529
Total population of the district:	6895514 as on 2001
Total population of the farmers of the district	358395

#### **District profile :**

Total no. of farmers in each village (Avg):	141
Large farmers (in terms of land holding)	42
Semi medium farmers (in terms of land	42
holding)	
Medium farmers (in terms of land holding)	28
Small farmers (in terms of land holding)	21
Landless farmers	7
Major crops of the district	Rice, potato, mustard, jute, sesame,
	lentil, chickpea, groundnut, vegetables

#### Animal resources of district :

Animal population in the district:	
(a) Cattle	1655904
i. Cow	671144
ii. Bull & bullock	230828
iii. Young stock	753932
(b) Buffalos	127539
(c) Sheep	140873
(d) Goat	127184
(e) Pig	120904
(f) Others :	
Fowl	3141669
Duck	1835094

(Source: District statistical handbook, 2007, Bureau of Applied Economics & Statistics, Govt. of West Bengal)

#### Major problems identified :

Problem area in	Major problems
(a) Crop production	1) Non-availability of quality seed / planting materials
	2) Low productivity of major crops
	3) Limited water resources for irrigation
	4) High cost involvement for major crops
(b) Soil & Water Management	1) Indiscriminate and inappropriate use of chemical fertilizers
	2) Low input of organic manures and biofertiliser
	3) Improper rainwater harvesting
(c) Animal husbandry	1) Inadequate descriptive/prolific breed of livestock
	2) Inadequate health care of livestock
	3) Poor feed resources
	4) Non- availability of quality fish seed
	5) Poor maintenance of fish ponds
(d) Others	1) Lack of credit facilities
	2) Very restricted livelihood option
	3) Lack of awareness of soil test based fertilizer application
	4) Lack of awareness regarding good agronomic/ husbandry
	practices

#### **Priority thrust areas :**

<b>S. N</b>	Thrust area
1	Integration of good agronomic practices for cultivation of field and vegetable crops for
	vertical agricultural growth
2	Production of quality seeds/planting materials for major agricultural crops like rice,
	jute, mustard, and vegetable and fruit crops
3	Diversification of land use through cultivation of vegetables and other horticultural
	crops
4.	Soil health management like organic farming etc.
5.	Livestock productivity improvement and health care
6.	Efficient utilization of water bodies through composite fish culture and improved
	management practices
7.	Entrepreneurship development for family income generation



# ON FARM TRIALS

#### OFT - 1 :

1.	Title	:	Evaluation of performance of different varieties of jute under rainfed and medium upland situation of Burdwan district
2.	Problem definition	:	Low productivity of jute due to non use of improved varieties
3.	Production System	:	Rainfed rice based production system
4.	Micro-farming Situation	:	Medium upland
5.	Hypothesis	:	Use of improved varieties will augment productivity
6.	Technologies to	:	Farmers' practice: Village level local varieties
	be assessed		Technology - 1 to be assessed: JRO 524
			Technology - 2 to be assessed: JRO 8432
			Technology - 3 to be assessed: JBO 2003 H
			<b>Technology - 4</b> to be assessed: S 19
7.	Source of technology	:	CRIJAF, Barrackpore
8.	Critical inputs	:	Seeds
9.	Unit size	:	0.20 ha
10.	No. of replication	:	4
11.	Unit cost	:	Rs. 100.00
12.	Total cost	:	Rs. 400.00
13.	Monitoring	:	Yield attributing characters
	indicators		• Yield
			Benefit : Cost ratio

# **OFT - 2 (Continuing for 2<sup>nd</sup> year) :**

1.	Title	:	Assessment of performance of Sulphur on productivity of mustard under rainfed and medium to low land situation of Burdwan district
2.	Problem definition	:	Low productivity of mustard due to non use of nutrient mainly Sulphur
3.	Production System	:	Rainfed rice based production system
4.	Micro-farming Situation	:	Medium upland to lowland. Mustard is mostly irrigated with 3 - 4 irrigations.
5.	Hypothesis	:	Application of sulfur can augment yield from 15 – 30 $\%$
6.	Technologies to be assessed	:	Farmers' practice: (60: 60: 45 kg NPK/ha through DAP, urea and MOP)
			<b>Technology - 1</b> to be assessed: 80: 40: 40: 30 kg NPKS/ha through urea, SSP and MOP
			<b>Technology - 2</b> to be assessed: 80: 40: 40: 26 kg NPKS/ha through urea, 20:20:0:13 and MOP
			<b>Technology - 3</b> to be assessed: 80: 40: 40: 20 kg NPKS/ha through urea, 10:26:26 and elemental Sulphur
7.	Source of technology	:	B. C. K. V., Mohanpur
8.	Critical inputs	:	Fertilizers
9.	Unit size	:	0.10 ha
10.	No. of replication	:	7
11.	Unit cost	:	Rs. 900.00
12.	Total cost	:	Rs. 6300.00
13.	Monitoring	:	Yield attributing characters
	indicators		• Yield
			Benefit : Cost ratio

### **CROP PRODUCTION**

#### OFT- 3:

1.	Title	:	Assessment of performance of <i>kharif</i> rice under System of Rice Intensification (SRI) in medium upland situation of Burdwan district
2.	Problem definition	:	It is observed that a gradual decline in productivity of rice
3.	Production System	:	Irrigated rice production system
4.	Micro-farming Situation	:	Medium upland.
5.	Hypothesis	:	Productivity of rice would be better under SRI due to early transplantation and soil aeretion.
6.	Technologies to be	:	Farmers' practice: Conventional rice cultivation
	assessed		<b>Technology - 1 to be assessed:</b> Rice cultivation in alternate wetting and drying with chemical weeding (Pyrazosulfuron ethyl)*
			<b>Technology - 2 to be assessed:</b> Rice cultivation in alternate wetting and drying with mechanical weeding*
7.	Source of technology	:	ANGRAU, Hyderabad
8.	Critical inputs	:	Paddy weeder, herbicide
9.	Unit size	:	0.05 ha
10.	No. of replication	:	7
11.	Unit cost	:	Rs. 4800.00
12.	Total cost	:	Rs. 9600.00
13.	Monitoring	:	Yield attributing characters
	indicators		• Yield
			• Economics

\* Transplanting will be done at 10-12 days old seedling with spacing 25 cm x 25 cm

#### HORTICULTURE

#### OFT - 4 :

1.	Title	:	Evaluation of different varieties of tomato in Burdwan
2.	Problem definition	:	Low yield of tomato is one of the common problems to the farmers due to use of local varieties.
3.	Production System	:	Irrigated vegetable based
4.	Micro-farming Situation	:	Medium to upland. Average rainfall is 1500 mm. The cold season starts from about the middle of November and continues till the end of February. Average temperature in cold season is 20°C.
5.	Hypothesis	:	Cultivation of improved varieties will fetch higher return.
6.	Technologies to	:	Farmers' practice: local variety
	be assessed		Technology - 1 to be assessed: Pusa Ruby
			Technology - 2 to be assessed: Arka Vikas
7.	Source of technology	•	B.C.K.V., Mohanpur
8.	Critical inputs	:	Seedlings of tomato cultivars
9.	Unit size	:	300 sq. m.
10.	No. of replication	:	7
11.	Unit cost	:	Rs. 650.00
12.	Total cost	:	Rs. 4550.00
13.	Monitoring	:	• Yield
	indicators		Benefit: Cost ratio

#### **VETERINARY SCIENCE**

#### **OFT - 5 (Continuing for 2<sup>nd</sup> year) :**

1.	Title	:	Assessment of strategic supplementation for pregnant doe in Burdwan district
2.	Problem definition	:	Mal-nutrition of pregnant doe (Breed- Bengal Goat) leads to production of under -weight kid.
3.	Production System	:	Semi intensive goat based production system
4.	Micro-farming system	:	House hold farming with 4-6 goats, maintained with grazing in day time
5.	Hypothesis	:	Additional feeding during pregnancy will improve the kid weight and reduce kid mortality rate
6.	0	:	Farmers' practice : Grazing and feeding kitchen waste
	assessed		<b>Technology - 1 to be assessed:</b> Feeding of homemade concentrate <sup>*</sup> @ 120 gm/day/goat throughout gestation
			<b>Technolog - 2 to be assessed:</b> Feeding of homemade concentrate* @ 120gm/day/goat from 90 days of gestation to parturition
7.	Source of technology	:	WBUAFS, Kolkata
8.	Critical inputs	:	Home- made feed
9.	Unit size	:	Three (3) pregnant Bengal goats in each treatment
10.	No. of replication	:	7
11.	Unit cost	:	Rs. 600.00
12.	Total cost	:	Rs. 4200.00
13.	Monitoring indicators	:	<ul> <li>Body weight of kids at birth</li> <li>Benefit: Cost ratio</li> </ul>

\* The ration is composed of 1/3 part cereal grain, 1/3 part oil cake, 1/3 part cereal byproducts and mineral mixture with vitamins and salt

#### **VETERINARY SCIENCE**

#### **OFT- 6 (Continuing for 2<sup>nd</sup> year) :**

1.	Title	:	Evaluation of performance of supplemented feeding in lactating deshi cow in Burdwan district
2.	Problem definition	:	Poor milk yield in deshi cow due to imbalanced feed supplementation.
3.	Production System	:	Cattle based under semi intensive system
4.	Micro farming system	:	House hold farming with 2-4 deshi cattle under traditional feeding practices.
5.	Hypothesis	:	Adequate feeding with energy and protein rich ration will enhance milk yield and high return.
6.	Technologies to be assessed	•	<b>Farmers' practice:</b> Feeding of rice polish (1-2 kg), soaked straw (5-6 kg) and grazing
			<b>Technology 1 to be assessed:</b> Farmers' practice + soaked oil cake (0.5 kg) (locally available)
			<b>Technology 2 to be assessed:</b> Farmers' practice + concentrate home made feed * (1kg)
7.	Source of technology	:	IVRI, Izatnagar
8.	Critical inputs	:	Formulated feed and oil cake
9.	Unit size	:	One (1) deshi lactating cow in each treatment
10.	No. of replication	:	7
11.	Unit cost	:	Rs. 1200.00
12.	Total cost	:	Rs. 8400.00
13.	Monitoring	:	Feed Intake
	indicators		Milk Yield
			Lactation period
			Calving interval

\* Home made feed : A ration will be formulated using locally available feed ingredients like broken wheat /maize-30 parts, mustard /Ground nut cake-25 parts, rice husk-40 parts, rice bran- 2 parts, common salt-1part and mineral mixture- 2 parts

#### **FISHERY SCIENCE**

#### **OFT - 7 (Continuing for 2<sup>nd</sup> year) :**

1.	Title	:	Evaluation of formulated feed for increasing fish productivity under perennial pond ecosystem of Burdwan
2.	Problem definition	:	Poor fish productivity in domestic small and medium sized ponds is due to improper feed management
3.	Production System	:	Extensive fish based production system
4.	Micro-farming Situation	:	Medium or small sized domestic water bodies
5.	Hypothesis	:	Application of feed at proper rate in proper doses would increase the productivity of fish
6.	Technologies to be	:	Farmers' practice : Without any application of feed
	assessed		<b>Technology - 1 to be assessed:</b> Formulated feed* @ 1 % of total fish biomass
			<b>Technology - 2 to be assessed:</b> Formulated feed* @ 3 % of total fish biomass
			[Stocking density 7500 nos. fish/ha]
7.	Source of technology	:	CIFA, Bhubaneswar
8.	Critical inputs	:	Formulated feed*
9.	Unit size	:	0.066 ha
10.	No. of replication	:	7
11.	Unit cost	:	Rs. 2140.00
12.	Total cost	:	Rs. 14980.00
13.	Monitoring	:	• Growth rate
	indicators	11	• Yield

\*Formulated feed made by locally available feed ingredients (Mustard Oil Cake: rice bran ::1:1 + vitamin premix)

#### OFT - 8:

1.	Title	:	Effect of various stocking densities of IMC on fish productivity under pond ecosystem of Burdwan
2.	Problem definition	:	Poor fish productivity in domestic small and medium sized ponds is due to improper number of stocked fishes.
3.	Production System	:	Extensive fish based production system
4.	Micro-farming Situation	:	Medium or small sized domestic water bodies
5.	Hypothesis	:	Release of proper number of fishes would increase the productivity of fishponds
6.	Technologies to be	:	Farmers' practice : Stocking density 7500 nos. fish/ha
	assessed		without aeration
			<b>Technology - 1 to be assessed:</b> Stocking density 15000 nos. fish/ha without aeration
			<b>Technology - 2 to be assessed:</b> Stocking density 20000 nos. fish/ha without aeration
7.	Source of technology	:	IIT, Kharagpur
8.	Critical inputs	:	Fish seed
9.	Unit size	:	0.066 ha
10.	No. of replication	:	7
11.	Unit cost	:	Rs. 1800.00
12.	Total cost	:	Rs. 12600.00
13.	Monitoring indicators	:	<ul><li>Growth rate</li><li>Yield</li></ul>

#### HOME SCIENCE

#### OFT - 9:

1.	Title	:	Evaluation of improved sickles for harvesting of paddy to minimize drudgery of farm women	
2.	Problem definition	:	Low efficiency of farm women during harvesting paddy due to more drudgery	
3.	Production System	:	Rainfed rice based production system	
4.	Micro farming system	:	Medium upland to lowland.	
5.	Hypothesis	:	Improved sickles can reduce the drudgery of farm women while harvesting paddy	
6.	Technologies to be assessed	:	<b>Farmers' practice :</b> Traditional sickle <b>Technology - 1 to be assessed:</b> Modified traditional sickle <b>Technology - 2 to be assessed:</b> Naveen sickle	
<ol> <li>7.</li> <li>8.</li> <li>9.</li> <li>10.</li> <li>11.</li> <li>12.</li> <li>13.</li> </ol>	Source of technology Critical inputs Unit size No. of replication Unit cost Total cost Monitoring indicators	:::::::::::::::::::::::::::::::::::::::	CIAE, Bhopal Different types of sickles 10 farm women for one treatment 7 Rs 800 Rs 5600.00 • Working heart rate (beats/min) • Increase heart rate over rest (beats/min) • Increase in heart beats/m <sup>2</sup> of area harvested • Out put (m <sup>2</sup> /hr)	

#### **INTEGRATED FARMING SYSTEM**

### OFT - 10 (Continuing for 2<sup>nd</sup> year) :

1.	Title	:	Evaluation of performance of crop – fish – livestock integrated
			farming on improving aquatic niche based production system
2.	Problem definition	:	Inefficient performance of available perennial pond based
			production system is due to non efficient utilization of natural
			resources
3.	Production System	:	Fish based production system
4.	Micro-farming Situation	:	Fish cultivation in medium or small sized tanks without utilizing
			the bund area
5.	Hypothesis	:	Better resource utilization and generation of income from several
			commodities/ enterprises
6.	Technologies to be	:	Farmers' practice: Fish farming
	assessed		Technology - 1 to be assessed: Vegetable + fish + poultry *
			farming
			farming <b>Technology – 2 to be assessed:</b> Vegetable + fish + duck** farming
7.	Source of technology	:	C C
7. 8.	Source of technology Critical inputs		<b>Technology – 2 to be assessed:</b> Vegetable + fish + duck** farming
	0.		<b>Technology – 2 to be assessed:</b> Vegetable + fish + duck** farming BAU, Ranchi
8.	Critical inputs	:	<b>Technology – 2 to be assessed:</b> Vegetable + fish + duck** farming BAU, Ranchi Vegetable Seed, fish fingerlings, ducklings and chicks
8. 9.	Critical inputs Unit size	:	<b>Technology - 2 to be assessed:</b> Vegetable + fish + duck** farming BAU, Ranchi Vegetable Seed, fish fingerlings, ducklings and chicks 0.05 ha 7
8. 9. 10.	Critical inputs Unit size No. of replication	::	<b>Technology - 2 to be assessed:</b> Vegetable + fish + duck** farming BAU, Ranchi Vegetable Seed, fish fingerlings, ducklings and chicks 0.05 ha 7
8. 9. 10. 11.	Critical inputs Unit size No. of replication Unit cost	::	<ul> <li>Technology - 2 to be assessed: Vegetable + fish + duck** farming</li> <li>BAU, Ranchi</li> <li>Vegetable Seed, fish fingerlings, ducklings and chicks</li> <li>0.05 ha</li> <li>7</li> <li>Rs. 3000.00</li> <li>Rs. 21000.00</li> <li>Economics</li> </ul>
<ol> <li>8.</li> <li>9.</li> <li>10.</li> <li>11.</li> <li>12.</li> </ol>	Critical inputs Unit size No. of replication Unit cost Total cost	::	Technology - 2 to be assessed: Vegetable + fish + duck** farming BAU, Ranchi Vegetable Seed, fish fingerlings, ducklings and chicks 0.05 ha 7 Rs. 3000.00 Rs. 21000.00 • Economics • Yield
<ol> <li>8.</li> <li>9.</li> <li>10.</li> <li>11.</li> <li>12.</li> <li>13.</li> </ol>	Critical inputs Unit size No. of replication Unit cost Total cost	:::::::::::::::::::::::::::::::::::::::	Technology - 2 to be assessed: Vegetable + fish + duck** farming BAU, Ranchi Vegetable Seed, fish fingerlings, ducklings and chicks 0.05 ha 7 Rs. 3000.00 Rs. 21000.00 • Economics • Yield • Post harvest return

# <u>Summary</u>

S.N.	Discipline /thematic area	OFT No.	Unit size	Cost (Rs.)		
1	Crop Production	OFT-1	0.20	400.00		
2	Crop production	OFT-2	0.10 ha	6300.00		
3	Crop production	OFT-3	0.05 ha	9600.00		
4	Horticulture	OFT-4	0.03 ha	4550.00		
5	Veterinary Science	OFT-5	3 goats	4200.00		
6	Veterinary Science	OFT-6	1 cow	8400.00		
7	Fishery Science	OFT-7	0.066 ha	14980.00		
8	Fishery Science	OFT-8	0.066 ha	12600.00		
9	Home Science	OFT-9	10 farm women	5600.00		
10	Integrated farming	OFT-10	0.05 ha	21000.00		
	Total					

# FRONT LINE DEMONSTRATION

#### I. Front Line Demonstration on Oilseeds and Pulses

#### FLD - 1 (Oilseeds) :

1. Crop	:	Mustard
2. Thematic area	:	Improved production practice
3. Technology to be demonstrated	:	Package demonstration
4. Season	:	Rabi 2009
5. Previous crop	:	Kharif paddy
6. Farming situation		
a. Rainfed/ Irrigated	:	Irrigated
b. Land situation	:	Medium upland
c. Soil type	:	Sandy-loam
7. Area (ha)	:	6
8. Variety	:	Newly released varieties
9. Sowing time	:	OctNov., 2009
10. Name of villages where to be implemented	:	Jagulipara and Garamba-Bhasapur, Burdwan
11. No. of demonstration	:	40
12. Demonstration cost	:	Rs. 27000.00
a. Components (items) b. ICAR share c. Farmers' share	:	Seed, fertilizer and plant protection chemicals Seed, fertilizer and plant protection chemicals Labour, land preparation, irrigation
13. Cost of extension activities	:	Rs. 3000.00
14. Total cost of demonstration (ICAR share)	:	Rs. 30000.00

#### FLD - 2 (Oilseeds) :

1.Crop	:	Sesame
2. Thematic area	:	Crop diversification
3. Technology to be demonstrated	:	Package demonstration
4. Season	:	Pre-kharif 2010
5. Previous crop	:	Mustard, potato
6. Farming situation		
a. Rainfed/ Irrigated	:	Irrigated
b. Land situation	:	Medium to up land
c. Soil type	:	Sandy-loam
7. Area (ha)	:	4
8. Variety	:	Newly released varieties
9. Sowing time	:	March, 2010
10. Name of villages where to be implemented	:	Garamba-Bhasapur, Burdwan
11. No. of demonstration	:	25
12. Demonstration cost	:	Rs. 18000
a. Components (items)	:	Seed, fertilizer and plant protection chemicals
b. ICAR share	:	Seed, fertilizer and plant protection chemicals
c. Farmers' share		Labour, land preparation, irrigation
13. Cost of extension activities	:	Rs.2000.00
14. Total cost of demonstration (ICAR share)	:	Rs. 20000.00

#### FLD - 3 (Pulses) :

1. Crop	:	Lentil
2. Thematic area	:	Crop diversification
3. Technology to be demonstrated	:	Package demonstration
4. Season	:	Rabi 2009
5. Previous crop	:	Kharif paddy
6. Farming situation		
a. Rainfed/ Irrigated	:	Irrigated
b. Land situation	:	Medium to up land
c. Soil type	:	Sandy-loam
7. Area (ha)	:	2
8. Variety	:	HYV and newly released
9. Sowing time	:	November, 2009
10. Name of villages where to be implemented	:	Garamba-Bhasapur, Burdwan
11. No. of demonstration	:	20
12. Demonstration cost	:	Rs. 9000.00
a. Components (items)	:	Seed, fertilizer and plant protection chemicals
b. ICAR share	:	Seed, fertilizer and plant protection chemicals
c. Farmers' share		Labour, land preparation, irrigation
13. Cost of extension activities	:	Rs.1000.00
14. Total cost of demonstration (ICAR share)	:	Rs. 10000.00

#### II. Front Line Demonstration on Other than Oilseeds and Pulses

#### FLD - 4:

1. Crop	:	Jute
2. Thematic area	:	Crop diversification
3. Technology to be demonstrated	:	Improved cultivation practice
4. Season	:	Pre kharif 2010
5. Previous crop	:	Mustard, potato
6. Farming situation		
a. Rainfed/ Irrigated	:	Irrigated
b. Land situation	:	Medium to upland
c. Soil type	:	Sandy-loam
7. Area (ha)	:	2
8. Variety	:	Newly released varieties
9. Sowing time	:	March, 2010
10. Name of villages where to be implemented	:	Garamba-Bhasapur, Burdwan
11. No. of demonstration	:	10
12. Demonstration cost	:	Rs.9000.00
a. Components (items)	:	Seed, fertilizer, weedicides and plant protection chemicals
b. ICAR share	:	Seed, Weedicides and Plant protection chemicals
c. Farmers' share		Fertilizer, labour, land preparation, irrigation
13. Cost of extension activities	:	Rs. 1000.00
14. Total cost of demonstration (ICAR share)	:	Rs. 10,000.00

#### FLD - 5:

1.Crop	:	Brinjal
2. Thematic area	:	Insect management
3. Technology to be demonstrated	:	Management of fruit and shoot borer in brinjal
4. Season	:	Kharif
5. Previous crop	:	Bitter gourd
6. Farming situation		
a. Rainfed/ Irrigated	:	Both
b. Land situation	:	Upland
c. Soil type	:	Sandy-loam to clay-loam
7. Area (ha)	:	0.5 ha
8. Variety	:	Local
9. Sowing time	:	May, 2009
10.Name of villages where to be implemented	:	Garamba- Bhasapur, Burdwan
11. No. of demonstration	:	10
12. Demonstration cost	:	Rs. 6000.00
a. Components (items)	:	Seed, fertilizer and pheromone traps & Lures
b. ICAR share	:	Pheromone traps & Lures
c. Farmers' share		Seed, fertilizer
13. Cost of extension activities	:	Rs. 500.00
14. Total cost of demonstration (ICAR share)	:	Rs. 6500.00

#### FLD - 6:

1.Crop	. Paddy
2. Thematic area	: Insect management
3. Technology to be demonstrated	: Management of stem borer in Kharif paddy
4. Season	: Kharif
5. Previous crop	: Sesame
6. Farming situation	
a. Rainfed/ Irrigated	: Both
b. Land situation	: Medium land
c. Soil type	: Sandy-loam to clay-loam
7. Area (ha)	: 0.5 ha
8. Variety	: MTU-7029
9. Sowing time	: June, 2009
10.Name of villages where to be implemented	: Jagulipara, Burdwan
11. No. of demonstration	: 5
12. Demonstration cost	: Rs. 5000
a. Components (items)	: Seed, fertilizer, Plant Protection chemicals
b. ICAR share	: Plant Protection chemicals
c. Farmers' share	Seed, fertilizer
13. Cost of extension activities	: Rs. 600.00
14. Total cost of demonstration (ICAR share)	: Rs. 5600.00

#### FLD - 7:

1.Crop	:	Potato
2. Thematic area	:	Disease management
3. Technology to be demonstrated	:	Integrated approach for late blight management
4. Season	:	Rabi
5. Previous crop	:	Cucurbits
6. Farming situation	:	
a. Rainfed/ Irrigated	:	Irrigated
b. Land situation	:	Medium to upland
c. Soil type	:	Sandy-loam
7. Area (ha)	:	1
8. Variety	:	Kufri Pokhraj
9. Sowing time	:	Oct. – Nov, 2009
10.Name of villages where to be implemented	:	Garamba-Bhasapur, Burdwan
11. No. of demonstration	:	15
12. Demonstration cost	:	Rs.4600.00
a. Components (items)	:	Seed, fertilizer, plant protection chemicals
b. ICAR share	:	Plant protection chemicals
c. Farmers' share		Seed, fertilizer
13. Cost of extension activities	:	Rs. 2000.00
14. Total cost of demonstration (ICAR share)	:	Rs. 6600.00

#### FLD - 8:

1. Crop	:	Rice bean ( fodder)
2. Thematic area	:	Improved agronomic practices
3. Technology to be demonstrated	:	Package demonstration
4. Season	:	Kharif
5. Previous crop	:	Sesame/ Nil
6. Farming situation	:	
a. Rainfed/ Irrigated	:	Rain fed
b. Land situation	:	medium to upland land
c. Soil type	:	Sandy-loam to clay-loam
7. Area (ha)	:	0.2
8. Variety	:	Rice bean (Bidhan- 1)
9. Sowing time	:	June- July, 2009
10.Name of villages where to be implemented	:	Jagulipara, Burdwan
11. No. of demonstration	:	5
12. Demonstration cost	:	Rs. 2000.00
a. Components (items)	:	Seed, bio-fertilizer, chemical fertilizer
b. ICAR share	:	Seed, Bio-fertilizer, chemical fertilizer
c. Farmers' share		Manure
13. Cost of extension activities	:	Rs. 400.00
14. Total cost of demonstration (ICAR share)	•	Rs. 2400.00

#### FLD - 9:

1. Enterprise	:	Cattle
2. Thematic area	:	Nutrition management
3. Technology to be demonstrated	:	Supplementation of region specific mineral mixture for cow
4. Season	:	Year round (2009)
5. System of rearing	:	Semi-intensive
6. Sp./Variety	:	Deshi cow
7.Name of village to be implemented	:	Jagulipara, Burdwan
8. No. of demonstration	:	10
9. Unit size of demonstration	:	1 cow/ demonstration
10. Demonstration cost	:	Rs. 5000.00
a. Components (items)	:	Mineral mixture , feed
b. ICAR share	:	Mineral mixture
c. Farmers' share	:	Feed
11. Cost of extension activities (field day, field broad)	:	Rs. 800.00
12. Total cost of demonstration (ICAR share)	:	Rs. 5800.00

#### FLD - 10:

1. Enterprise	:	Goat (Bengal Goat)
2. Thematic area	:	Disease management
3. Technology to be demonstrated	:	Vaccination against Peste des Petits Ruminants (PPR)
4. Season	:	Summer (2009)
5. System of rearing	:	Semi-intensive
6. Sp./Variety	:	Live attenuated PPR vaccine
7. Name of village to be implemented	:	Bhasapur, Burdwan
8. No. of demonstration	:	50 families
9. Unit size of demonstration	:	400 animals
10. Demonstration cost	:	Rs.800.00
a. Components (items)	:	PPR vaccines , syringe
b. ICAR share	:	PPR vaccine , syringe
c. Farmers' share	:	-
11. Cost of extension activities (field day etc)	:	Rs.200.00
12. Total cost of demonstration (ICAR share)	:	Rs. 1000.00

#### FLD - 11 :

1. Enterprise	:	Fish
2. Thematic area	:	Species diversification in pond aquaculture
3. Technology to be demonstrated	:	Improved culture practice of pangus
4. Season	:	Year round (2009)
5. System of rearing	:	Modified extensive
6. Sp./Variety	:	Pungasius pungasius
7. Name of village to be implemented	:	Jagulipara, Burdwan
8. No. of demonstration	:	10 ponds
9. Unit size of demonstration	:	0.2 ha / demonstration
10. Demonstration cost	:	Rs. 12000.00
a. Components (items)	:	Seed, feed
b. ICAR share	:	Seed
c. Farmers' share	:	Feed
11. Cost of extension activities (field day, etc.)	:	Rs. 1500.00
12. Total cost of demonstration (ICAR share)	:	Rs. 13,500.00

### **Summary**

Sl. No.	Crop &Var.*	Season	Farming Situation	Area (ha.)	Demonstration cost (Rs.)
1.	Mustard	Rabi	Irrigated	6.0	30,000.00
2.	Lentil	Rabi	Irrigated	2.0	10,000.00
3.	Sesame	Rabi/ summer	Irrigated	4.0	20,000.00
	Total	•		12.0	60,000.00

#### I. FLD on Oilseeds and Pulses

#### II. FLD on Other than Oilseeds and Pulses

S. N.	Crop / Enterprise	Subject	Season	Area	Variety	Demonstration cost (Rs.)
1.	Jute	Improved management practices	Pre kharif	2 ha.	Recently released varieties	10,000.00
2.	Brinjal	Disease management	Kharif	0.5 ha	Local	6,500.00
3.	Paddy	Insect management	Kharif	0.5 ha	MTU-7029	5,600.00
4.	Potato	Disease management	Rabi	1 ha	Kufri Pokhraj	4,600.00
5.	Fodder (Rice bean)	Improved management practices	Kharif	0.2 ha	Rice bean (Bidhan-1)	2,400.00
6.	Cow	Mineral mixture	Year round	10 animals	Region specific for deshi cow	5,800.00
7.	Goat	Disease management through Vaccination	Summer	400 goats	PPR (vaccine)	1,000.00
8.	Fish	Species diversification in pond aquaculture	Kharif	10 ponds	Pungasius pungasius	13,500.00
					Total	49,400.00

# TRAINING PROGRAMMES TO BE CONDUCTED DURING 2009-10

#### I. <u>Crop Production</u>

#### a) For practicing farmers and farm women

Month	Title of training	Objective	Duration	Venue	Course	Targ	et no	<b>o. of</b> ]	parti	cipa	nts	
					facilitator	SC		ST		Oth	ner	Total
						Μ	F	Μ	F	Μ	F	
April, 09	Improved production technology of Jute	To make farmers aware about the improved production practices	1 day	Off-campus	Mr. D. Ghorai (SMS, Ag.)	10	-	-	-	20	-	30
May, 09	Rice cultivation through SRI	To make farmers aware about the system	2 days	On and off campus	Mr. D. Ghorai (SMS, Ag.)	20	-	-	-	40	-	60
June, 09	Need for soil testing and soil test based fertilizer application	To make farmers understand need of soil test based fertilizer application in order to get optimum yield with balanced fertilization	1 day	Off-campus	Mr. D. Ghorai (SMS, Ag.)	10	-	-	-	20	-	30
June, 09	Seed treatment and nursery management of <i>kharif</i> paddy	Hand-on training for seed treatment against fungal disease and proper nursery management for growing healthy seed crops	2 days	Off-campus	Mr. D. Ghorai (SMS, Ag.)	20	-	10	-	30	-	60
June 09	Rice cultivation through SRI	To make farmers aware about the system	1 days	Off campus	Mr. D. Ghorai (SMS, Ag.)	10	-	-	-	20	-	30
July, 09	Use of fibre extractor in extraction of fibre	To reduce drudgery in retting	1 day	Off-campus	Mr. D. Ghorai (SMS, Ag.)	10	-	-	-	20	-	30
July, 09	Weed control of paddy	To make farmers aware about weed control technologies of paddy	1 day	Off-campus	Mr. D. Ghorai (SMS, Ag.)	10	-	5	-	15	-	30

Aug, 09	Integrated nutrient management for enhancement of paddy productivity and better soil health	To make farmers aware about the boons of integrated management in augmenting productivity and maintaining soil health	1 day	Off-campus	Mr. D. Ghorai (SMS, Ag.)	10	-	5	-	15	-	30
Sep, 09	Paddy seed production technology	To produce quality seed for themselves	1 day	Off-campus	Mr. D. Ghorai (SMS, Ag.)	10	-	5	-	15	-	30
Oct, 09	NADEP compost production	To produce organic manure using own agricultural wastes	1 day	Off-campus	Mr. D. Ghorai (SMS, Ag.)	15	-	-	-	15	-	30
Dec, 09	Improved fertilizer management in mustard	To acquaint farmers with improved cultivation and production technology	2 days	Off-campus	Mr. D. Ghorai (SMS, Ag.)	20	-	10	-	30	-	60
Dec, 09	Improved production technology of lentil	To acquaint farmers with improved cultivation and production technology	1 day	Off-campus	Mr. D. Ghorai (SMS, Ag.)	15	-	-	-	15	-	30
Jan, 2010	Improved production technology of sesame	To teach about seed treatment, fertilizer management, pest and disease diagnoses and preventions to get enhanced yield and proper grain quality	2 days	Off-campus	Mr. D. Ghorai (SMS, Ag.)	10	-	10	-	40	-	60

#### b) For rural youths

Month	Course Title	Course object	Duration (day)		Course	No of participants						Grand
					facilitator	SC		ST		Γ Oth		Total
0.00						Μ	W	Μ	W	Μ	W	
Sep, 09	5	To develop small scale entrepreneurship	1	Off- campus	Mr. D. Ghorai (SMS,	10	-	5	-	15	-	30
	production technology	entrepreneuromp		cumpus	Ag.)							
January, 2010	production at farmers	1	1	On campus	D. Ghorai SMS (Agr.)	3	-	7	-	10	-	20
	level	marketing prospects										

#### c) For Extension Functionaries

Month	Course Title	Course object	Duration	Venue	Course	No	of p	artic	ipan	ts		Grand
			(day)		facilitator	SC		ST		Oth	ners	Total
						Μ	W	Μ	W	Μ	W	
June 09	Rice cultivation through SRI	To make extension personnel abreast with the technology	1 day	On campus	Mr. D. Ghorai (SMS, Ag.)	10	-	-	-	20	-	30
November 09	Improved fertilizer management in oilseeds and pulses to augment productivity	fertilizer for better crop	1	On campus	D. Ghorai SMS (Agr.)	10				15		25
January, 2010	Vermicompost production and its utilization for better soil health	towards the soil	1	On campus	D. Ghorai SMS (Agr.)	10				15		25

# II. <u>Horticulture</u>

## a) For practicing farmers and farm women

Month	Title of training	Objective	Duration	Venue	Course	T	Target no. of participants						
					Facilitato	r S	С		ST		Other		Total
						Ν	[	F	Μ	F	Μ	F	
April, 09	Preparation of organic pesticides and its application	To provide knowledge of indigenous organic- pesticides, procedure of preparation and efficacy	5	Off- campus	Dr. Sarkar SMS (Hort.)	5. 10	)	-	-	-	20	-	30
May, 09	Use of mulch in horticultural crops	To acquaint farmers about the procedure of mulching using different locally available materials to conserve moisture and management of weeds	5	Off campus		5. 10	)	-	-	-	20	-	30
July, 09	Impact and utilization of biofertilizers	To learn the farmers about the specific biofertilizers for selective crops, its application and efficacy	1 day	Off campus	Dr. S Sarkar SMS (Hort.)	5. 10	)	-	-	-	20	-	30
Aug, 09	Nursery management in vegetable crops	Farmers are to learn the proper method of seed bed preparation, their management and protection of seedlings from pest and diseases	1 day	Off campus	Dr. S Sarkar SMS (Hort.)	5. 8		2	-	-	10	5	25
Sep, 09	Improved cultivation of tissue culture banana	To learn the farmers about	5	Off campus	Dr. Sarkar SMS (Hort.)	5. 8		2	-	-	10	5	25
Oct, 09	Improved production	To acquaint farmers with improved cultivation and	1 day	Off campus	Dr. Sarkar	5. 10	)	-	-	-	20	-	30

	technology of	proc	luction technology of			SMS									
	tomato	tom	0,			(Hort.)									
Nov, 09	Improved	То	acquaint farmers with	1 day	Off	Dr.	S.	10	-	-	-	-	20	-	30
	production	imp	roved cultivation and	-	campus	Sarkar									
	technology of	proc	luction technology of		-	SMS									
	potato	pota	ito			(Hort.)									
Dec, 09	Identification of	Prov	vide knowledge to the	1day	Off	Dr.	S.	10	-	-	-	-	20	-	30
	major diseases of	farm	ners, so that they can		campus	Sarkar									
	potato	able	to identify the			SMS									
		com	mon diseases and their			(Hort.)									
		spec	rific control												
Feb,10	Improved		acquaint farmers about	1days	Off	Dr.	S.	10	-	-	-	-	15	-	25
	production		improved techniques of		campus	Sarkar									
	technology of okra	culti	ivation of okra			SMS									
						(Hort.)									
March,	Management of		identify the pest and	1 day	Off	Dr.	S.	10	-	-	-	-	15	-	25
10	major pest and		ases and their specific		campus	Sarkar									
	diseases of	cont	rol			SMS									
	Cucurbits					(Hort.)									
-	r rural youths				-										
Month	Course Title		Course object	Duratio	Venue	Course				of p		cipar			Grand
				n (day)		facilita	ator		SC		ST			ners	Total
				-					Μ	W	Μ	W	Μ	W	
October,	Seed produc		Phase 1: Preparation o		On	Dr. S. S			3	-	-	-	7	-	10
09	techniques of m	najor	beds and nursery	7	campus	SMS (I	Hort.	.)							
	vegetable crops		raising						-						
Dec, 09	Seed produc		Phase 2 :Management o		On	Dr. S. S			3	-	-	-	7	-	10
	techniques of m	najor	crops ,field inspection	1	campus	SMS (I	lort.	.)							
	vegetable crops	-	and rouging						-						
Feb,10	Seed produc		Phase 3: Post harves	t   1	On	Dr. S. S			3	-	-	-	7	-	10
	techniques of m	najor	operations and storage		campus	SMS (I	Hort.	.)							
	vegetable crops														

#### c) For Extension Functionaries

Month	Course Title	Course object	Duration	Venue	Course	No of p		artic	ipan		Grand					
			(day)		facilitator	SC	SC ST		SC		SC			Others		Total
						Μ	W	Μ	W	Μ	W					
August 2009	Preparation of	To provide knowledge of	1	on	Dr. Subrata	10				15		25				
	organic pesticides	indigenous organic-		campus	Sarkar,											
	and its	pesticides, procedure of			SMS											
	application	preparation and efficacy			(Hort)											

# III. Veterinary Science

#### a) For practicing farmers and farm women

Month	Course Title	Course object	Duration	Venue	Course	No	of p	artic	ipan	ts		Grand
			(day)		facilitator	SC		ST		Oth	ners	Total
						Μ	W	Μ	W	Μ	W	
April, 09	Techniques of	Farmers will be able to	1	Off	Dr. C. Jana,	5	5	-	-	20	0	30
	paneer preparation	make value added		campus	SMS (A.H.&							
		milk products		_	V.S)							
May, 09	Feeding practices	Owner can adopt	1	Off	Dr. C. Jana,	-	10	-	-	8	12	30
-	of Doe	better feeding of		campus	SMS (A.H.&							
		practices.		_	V.S)							
May, 09	Cultivation	Farmer will develop	3	on	Dr. C. Jana,	15	-	-	-	30	-	45
-	techniques of	knowledge and skill			SMS (A.H.&							
	maize as fodder :	regarding fodder and			V.S)							
	impact in animal	feed resource										
	nutrition	improvement										
June, 09	Care of new born	To check mortality and	1	Off	Dr. C. Jana,	10	20	-	-	-	-	30
	kids	ensuring good health		campus	SMS (A.H.&							
				-	V.S)							
June,09	Preservation of egg	Farmers can save the	1	On	Dr. C. Jana,		10	-	-	5	15	30
5		post harvest loss of		campus	SMS (A.H.&							
		table eggs.			V.S)							

July, 09	Care of new born	Farmer will develop	1	Off	Dr. C. Jana,	10	5	-	-	10	5	30
	calf	knowledge and skill regarding care of new born calf		campus	SMS (A.H.& V.S)							
August, 09	Animal shed disinfection at rainy season	Farmer will develop knowledge and skill regarding cattle health	2	Off campus	Dr. C. Jana, SMS (A.H.& V.S)	10	10	-	-	20	20	60
Sept, 09	Cultivation techniques of rice bean	Farmer will develop knowledge and skill regarding fodder and feed resource improvement	2	On campus	Dr. C. Jana, SMS (A.H.& V.S)	5	5	-	-	5	5	20
October,09	Feeding techniques of mineral mixture for dairy cow	To make a common practice among farmers for better milk yield	1	Off campus	Dr. C. Jana, SMS (A.H.& V.S)	10	10	-	-	5	5	30
November, 09	Vaccination schedules for duck	To support farmer's knowledge about better preventive care	1	Off campus	Dr. C. Jana, SMS (A.H.& V.S)	5	10	-	-	10	5	30
December, 09	Home made cattle feed preparation	To support farmer's knowledge regarding feeding practice of cattle	1	Off campus	Dr. C. Jana, SMS (A.H.& V.S)	10	5	-	-	10	5	30
January, 10	Care of doe during pregnancy	To check mortality and ensuring good health	1	Off campus	Dr. C. Jana, SMS (A.H.& V.S)	5	10	-	-	10	5	30
March, 10	Preventive measure against PPR	To cover good health and to control infective diseases	1	Off campus	Dr. C. Jana, SMS (A.H.& V.S)	10	4	-	-	11	5	30

#### b) For rural youths

Month	Course Title	Course object	Duratio	Venue	Course	No	of p	artic	ipan	ts		Grand
			n (day)		facilitator	SC		ST		Oth	ners	Total
						Μ	W	Μ	W	Μ	W	
October,	Khaki Campbell	Rural youths will develop	3	On	Dr. C.	10	10	-	-	10	-	30
09	duck rearing	knowledge and skill		campus	Jana,							
		regarding package practice			SMS (A.H.							
		of Khaki Campbell duck			& V.S.)							
		production										

#### c) For Extension Functionaries

Month	Course Title	Course object	Duration	Venue	Course	No	of p	artic	ipan	ts		Grand
			(day)		facilitator	SC		ST		Oth	ners	Total
						Μ	W	Μ	W	Μ	W	
Sept.	New generation	Extension personnel will	2	On	Dr. C. Jana,	10				30		40
2009	vaccines and	develop knowledge and		campus	SMS							
	immunization	skill regarding new vaccines			(A.H.&							
	schedule for	and immunization			V.S)							
	animals	programme										

# IV. Fishery Science

## a) For practicing farmers and Farm Women

Month	Course Title	Course object	Duration	Venue	Course	No	of p	artic	ipan	ts		Grand
			(day)		facilitator	SC		ST		Oth	ners	Total
						Μ	W	Μ	W	Μ	W	
April, 09	Preparation and	To learn preparation	1	Off	G. Ziauddin,	6	5			19		30
	management of	and management of		campus	SMS							
	nursery pond	nursery ponds			(Fishery)							
May, 09	Aquatic weeds	To learn the impact of	1	Off	G. Ziauddin,	7	5			18		30
	and algal	aquatic weeds and algal		campus	SMS							
	blooms in fish	bloom on production of			(Fishery)							
	ponds, their	fish and utilization of										

	control and utilization	weeds for increasing fish production								
June ,09	Rearing pond preparation and management.	To learn pond preparation and management practices of rearing ponds	1	Off campus	G. Ziauddin, SMS (Fishery)	5	3	17	5	30
July, 09	Induced breeding of Indian major carp	To learn about different aspects of induced breeding in Hapa and Bundh breeding	1	On campus	G. Ziauddin, SMS (Fishery)	6	6	14	4	30
July, 09	Schedule of fertilization and liming in fish culture ponds.	To learn the process and schedule of application of fertilizer and lime simultaneously	1	On campus	G. Ziauddin, SMS (Fishery)	6	6	14	4	30
August , 09	Disease management and prophylactic measures in composite fish culture ponds	To learn the symptoms of common diseases of fresh water fishes and their prevention	1	Off campus	G. Ziauddin, SMS (Fishery)	5	3	17	5	30
September, 09	Effects of liming in fish ponds	To aware the farmers about the good effects of applying lime and bad effects of not applying lime in ponds	1	Off campus	G. Ziauddin, SMS (Fishery)	6	6	14	4	30
October, 09	Monoculture of freshwater Prawn	To made learn the farmers about the monoculture of prawn in freshwater culture ponds	1	Off campus	G. Ziauddin, SMS (Fishery)	6	6	14	4	30

November,	Integrated	To made learn the	1	Off	G. Ziauddin,	6	6	14	4	30
09	duck-cum-fish	farmers about the		campus	SMS					
	farming in back	integrated duck cum			(Fishery)					
	yard pond	fish farming in culture								
		ponds								
December,	Culture of some	To made learn the	1	Off	G. Ziauddin,	6	6	14	4	30
09	freshwater	farmers about the		campus	SMS					
	ornamental	freshwater ornamental			(Fishery)					
	fishes	fishes in earthen								
		pits/small ponds								
January ,	Polyculture of	To learn the	1	Off	G. Ziauddin,	9	3	15	3	30
10	Indian major	management practices		campus	SMS					
	carp and fresh	of mixed farming of		_	(Fishery)					
	water prawn	Indian Major carps and								
	-	Freshwater Prawn								

### b) For rural youth

Month	Course Title	Course object	Duratio	Venue	Course	No	of p	artic	ipan	ts		Grand
			n (day)		facilitator	SC		ST		Oth	ners	Total
						Μ	W	Μ	W	Μ	W	
October, 09	Air breathing	Rural youth will be able to	1	Off	G.	8	4			14	4	30
	fish culture	adopt different management		campus	Ziauddin,							
		practices in air breathing fish			SMS							
		culture			(Fishery)							

#### c) For Extension Functionaries

Month	Course Title	Course object	Duration	Venue	Course	No	of p	artic	ipan	ts		Grand
			(day)		facilitator	SC		ST		Oth	ners	Total
						Μ	W	Μ	W	Μ	W	
November 2009	Inland aquaculture	Extension personnel will develop knowledge of inland aquaculture and the remedies	1	on campus	G. Ziauddin, SMS (Fishery)	10				20		30

# V. <u>Home Science</u> a) For practicing farmers and Farm women

Month	Course Title	Course object	Duration	Venue	Course	No	of pa	rtici	pant	5		Grand
			(day)		facilita	SC		ST	-	Oth	ers	Total
					tor	Μ	W	Μ	W	Μ	W	
April 09	Design and development of low cost nutritious diet	about the design and	1	Off campus	S.Sethy SMS (Home Sc)	-	10	-	5	-	10	25
May 09	Minimization of nutrients loss during processing food products.	Farm women will be able to adopt different nutrient	1	Off campus	S.Sethy SMS (Home Sc)	-	7	-	3	-	10	20
June 09	Preparation of mango squash.	Farm women will be able to adopt preparation method, preservative use and storage practices of the squash.	1	On campus	S.Sethy SMS (Home Sc)		5		5		10	20
August 09	Balance diet and RDA of foods for	To impart knowledge regarding balance diet and Required Dietary	1	Off campus	S.Sethy SMS		7		3		10	20

	expectant and nursing mothers	Allowances (RDA) of foods for expectant and nursing mothers thereby helping in planning of meals with regard to economy and quality			(Home Sc)				
Septem ber 09	Management of nutrition garden.	Farm women will be able to adopt different practices related to the lay out, intercultural operation, manuring and irrigation of nutrition garden.	1	Off campus	S.Sethy SMS (Home Sc)	12	3	10	25
October 09	Storage loss minimization of fruits and vegetables.	To avoid wastage, reduce pest attack and to provide the knowledge about different storage methods of, fruits and vegetables.	1	Off campus	S.Sethy SMS (Home Sc)	10	5	10	25
Novem ber 09	Motivation and formation of women SHGs	Empowerment of farm women though Self Help Groups	1	Off campus	S.Sethy SMS (Home Sc)	10	3	12	25
Februar y 10	Preparation of tomato sauce.	To reduce the wastage and to utilize the tomato for product development in peak season and providing the knowledge about tomato sauce preparation.	1	On campus	S.Sethy SMS (Home Sc)	8	2	15	25
March 10	Preparation of mixed vegetable pickle	To provide knowledge about the use of preservatives, preparation methods & storage. To empower farm	1	Off campus	S.Sethy SMS (Home	10		20	30

women with adequate		Sc)				
knowledge of preparation						
method, use of preservative						
& end point testing.						

### b) For rural youth (Special Skill Programme)

Month	Course Title	Course object	Durati	Venue	Course No of pa		articipants				Grand	
			on		facilitator	SC	SC ST		Others		Total	
			(day)			Μ	W	Μ	W	Μ	W	
July 09	Preparation of	Empowering farm women with	7	On	S. Sethy,		70		35		70	175
	kantha stitch	knowledge and skill of		campus	SMS							
		preparing kantha stitch.		_	(Home Sc)							
Jan 10	jute handicrafts	Empowering farm women with	7	Off	S. Sethy,		56		14		105	175
	preparation for	knowledge and skill of		campus	SMS							
	Self employment	preparing jute handicrafts.			(Home Sc)							

#### c) For Extension Functionaries

Month	Course Title	Course object	Duration	Venue	Course	No of participants						Grand
			(day)		facilitator	SC		ST		Oth	ners	Total
						Μ	W	Μ	W	Μ	W	
December	Feeding of	Extension personnel will	1	On	S. Sethy,	10				15		25
2009	infant (after 5	develop knowledge		campus	SMS (Home							
	months) with	regarding weaning food		_	Sc)							
	weaning food.											

# VI. Agril. Extension

a) For practicing farmers, Farm Women, rural youths and extension functionaries

Month	Course Title	Course object	Duration	Venue	Course	No	of p	artic	ipan	ts		Grand
			(day)		facilitator	SC		ST		Oth	ners	Total
						Μ	W	Μ	W	Μ	W	
April, 09	Leadership development	To develop leadership among farmers to popularize and adoption of new technology to the farmers in a efficient way	2	Off campus	Dr. Manoj Kumar, SMS (Ag. Extn.)	5	2			10	3	20
June,09	Mobilization of social capital	To make better utilization of social resources for sustainable agriculture	2	Off campus		5	2			10	3	20
August, 09	Water management through micro irrigation	To make aware the farmers about efficient use of water	2	On campus	Dr. Manoj Kumar, SMS (Ag. Extn.)	7	3			25	5	40
Nov, 09	WTO and IPR issue	To create awareness about the changing scenario in the context of world trade agreements.	2	Off campus	Dr. Manoj Kumar, SMS (Ag. Extn.)	7	3			25	5	40
Jan , 10	Group dynamics and farmers' organization	To study the group behavior of farmers for easy promotion and adoption of improved technology	2	Off campus	Dr. Manoj Kumar, SMS (Ag. Extn.)	5	2			10	3	20

#### b) For rural youth

Month	Course Title	Course object	Duratio	Venue	Course	No of participants			Grand			
			n (day)		facilitator	SC		ST	ST		ners	Total
						Μ	W	Μ	W	Μ	W	
May,09	ICT application in	To sensitize the farmers	7	On	Dr. M.	35		14		91		140
-	agriculture	about the increasing role of		campus	Kumar							
		ICT at farmer's field.										
July, 09	Operation,	To develop the skill of	7	On	Dr. Manoj	35		14		91		140
	maintenance and	operation, maintaining and		campus	Kumar,							
	repairing of power	repairing of power tiller,			SMS (Ag.							
	tiller, pumpset	pumpset and other			Extn.) and							
	and other	agricultural implements as			other							
	agricultural	a potential vocational			experts							
	implements	enterprise.										

### c) For Extension Functionaries

Month	Course Title	Course object	Durati	Venue	Course	No	of p	artic	ipan	ts		Grand
			on		facilitator	SC		ST		Oth	ners	Total
			(day)			Μ	W	Μ	W	Μ	W	
Aug, 09	Formation and management of self help groups	1 0	1	On campus	Dr. Manoj Kumar, SMS (Ag. Extn.)	7	3			25	5	40
Feb, 10	Role of information networking among farmers	To develop strong network among farmers for speedy transfer of technology	1	On campus	Dr. Manoj Kumar, SMS (Ag. Extn.)	7		3		10		20
Feb, 10	Gender main streaming through SHG	To eliminate the gender discrimination between farmers and farm women	1	On campus	Dr. Manoj Kumar, SMS (Ag. Extn.)	7		3		10		20

# VII. <u>Plant Protection</u> a) For practicing farmers and Farm Women

Month	Course Title	Course object	Durati	Venue	Course	Noo	of p	artic	ipants			Gran
			on		facilitat	SC		ST		Other	rs	d
			(day)		or	Μ	W	Μ	W	Μ	W	Total
July, 09	Management of fruit & shoot borer of brinjal	The training would help the farmers about proper management of this insect through IPM measures	2	Off campus	S. Garai and S.S. Kundu, (Prog.	20	-	-	-	40	-	60
July, 09	Integrated Pest Management (IPM) in rice	The training would help the farmers to develop the concept of IPM in rice crop.	2	Off - campus and On- campus	Asstt). S. Garai and S.S. Kundu, (Prog. Asstt).	20	-	-	-	40	-	60
October, 09	Pest Management through Bio- pesticides	The training would help the farmers to get detail conception about these eco-friendly pesticides.	2	Off – campus and On- campus	S. Garai (Prog. Asstt).	20	-	-		40	-	60
December, 09	Pest Management in Potato	The training would help the farmers to learn the proper management for insect & disease attack.	2	Off- Campus	S. Garai and S.S. Kundu, (Prog. Asstt).	15	-	-	-	45	-	60
December, 09	Pest Management in Mustard	The training would help the farmers to get detail conception different types of insect & disease attack and their proper management.	2	Off – campus and On- campus	S. Garai and S.S. Kundu, (Prog. Asstt).	20				40		60

Month	Course	Course object	Durati	Venue	Course No of		f pa	rticip	ants			Grand
	Title		on		facilitato	SC		ST		Other	S	Total
			(day)		r	Μ	W	Μ	W	Μ	W	
Decemb	Improved	Mushroom is very potent	2	Off	S. Garai	10	-	10	-	40	-	60
er, 09	Production	as a profitable enterprise		Campu	(Prog							
	Technology	for rural youths, school		s	Asstt)							
	of Oyster	dropouts and farm										
	Mushroom	women. With this										
	Cultivation	rationale KVK wish to										
		popularize mushroom										
		production technology										
		among the villagers.										

b) For rural youth (Special Skill Programme on Mushroom Cultivation)

# **Extension Fuctionaries**

# <u>Summary</u>

S. N.	Discipline	No. of trainin gs		icing Far ming Wo		R	Rural Yout	h	Exten	sion Functi	onaries	
			SC /ST	Others	Total	SC/ ST	Others	Total	SC/ ST	Others	Total	Grand Total
1	Crop production	22	215	295	510	25	25	50	30	50	80	640
2	Horticulture	14	100	180	280	9	21	30	10	15	25	335
3	Veterinary Science	22	199	226	425	20	10	30	10	30	40	495
4	Fishery Science	13	123	207	330	12	18	30	10	20	30	390
5	Home Science	24	108	107	215	175	175	350	10	15	25	590
6	Extension (Ag.)	27	41	99	140	98	182	280	30	50	80	500
7	Plant protection	12	95	205	300	20	40	60	-	-	-	360
	Total	134	881	1319	2200	359	471	830	100	180	280	3310

S.N.	Enterprises	Variety	Season	Area (ha)
1	Seed production of rice	MTU 7029, IR 36	Kharif	5.0
2	Seed production of mustard	B – 9,WBBN 1/2	Rabi	1.0
3	Seed production of cucurbits (bottle gourd, pumpkin etc.)	Different varieties	Pre- kharif	0.13
4	Seed production of tomato	Pusa Ruby	Rabi	0.07
5	Seed corm production of gladiolus	Different varieties	Rabi	0.02
6	Maintenance of progeny orchard	Different fruit crops	Through out the year	0.4
7	Rice bean seed production as fodder	Bidhan-1	Rabi	0.05
8	Kid production	Bengal breed	Year- round	10
9	IMC Fish seed production	Catla, Rohu and Mrigal	Monsoon	3.0 q
10	Fingerling production of Exotic carps	Silver carp	Monsoon	0.5 q

## **ACTIVITIES IN KVK FARM / DEMONSTRATION UNITS**

S.N.	Activities	Nos.	Month	Cost involved (Rs.)
1.	Field day	2	Kharif & Rabi	10,000.00
2.	Kisan Mela	1	Rabi	1,00,000.00
3.	Kisan Gosthi	1	Kharif	10,000.00
4.	Krishi Vigyan Mandal	1	May, 09	5,000.00
5.	Radio/T.V. show	1	Oct, 09	10,000.00
6.	Film show	4	Aug, Nov, 2009	10,000.00
7.	Farmers' Study Tour	1	March, 10	10,000.00
8.	Ex-trainees' sammelan	1	Sept. 09	10,000.00
			Total	1, 75, 000.00

#### **OTHER EXTENSION ACTIVITIES**

## PROPOSED EXPENDITURE FOR DIFFERENT ACTIVITIES OF KVK (2009 - 2010)

S. N.	Activities	Proposed expenditure (Rs.)
1.	Contingencies <i>i.e.</i> Stationery, repair of vehicle, POL, telephone other office charges	4,00,000.00
2.	Training Programmes etc.	3,00,000.00
3.	On Farm Trials	87,630.00
4.	FLD on oilseeds and pulses	60,000.00
5	FLD other than oilseeds and pulses	49,400.00
6.	Extension activities and publication	1,75,000.00
	Total	10, 72, 030.00

(Dr. F. H. Rahman) Programme Coordinator