

ANNUAL REPORT:
October, 2009 to March, 2010
KVK, KOKRAJHAR
(GOSSAIGAON)

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KVK, KOKRAJHAR (GOSSAIGAON)

1. GENERAL INFORMATION ABOUT THE KVK

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

Address	Telephone		E mail
Krishi Vigyan Kendra, Kokrajhar, AAU, Telipara, Gossaigaon – 783 360, District : Kokrajhar, Assam	Office	FAX	kvkkokrajhar@gmail.com
	03669-292704	-	

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

Address	Telephone		E mail
Assam Agricultural University, Jorhat – 785 013, Assam	Office	FAX	kvk.aau@gmail.com
	0376-2340013	0376-2340001	

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

Name	Telephone / Contact		
Dr. Yogendra Prasad	Residence	Mobile	Email
	+9194351-27053	+9194351-27053	-

1.4. Year of sanction: 1985

1.5. Staff Position (as on 31st March,2010)

Sl. No.	Sanctioned post	Name of the incumbent	Designation	Discipline	Pay Scale (Rs.)	Present basic (Rs.)	Date of joining	Permanent /Temporary	Category (SC/ST/ OBC/ Others)
1	Programme Coordinator	Dr. Y. Prasad	Programme Coordinator	Plant Pathology	12000-18300	18720	31.08.01	Permanent	Gen
2	Subject Matter Specialist	Dr. M.N. Ray	Subject Matter Specialist	Veterinary Extension	12000-18300	16620	07.08.96	Permanent	OBC
3	Subject Matter Specialist	Dr. B.C. Deka	Subject Matter Specialist	Nematology	8000-13500	8000	10.11.08	Permanent	Gen
4	Subject Matter Specialist	Mrs. M. Chakravarty	Subject Matter Specialist	Soil Science	8000-13500	8000	07.11.08	Permanent	Gen
5	Subject Matter Specialist	Mrs. S. Brahma	Subject Matter Specialist	Horticulture	8000-13500	8000	07.11.08	Permanent	ST
6	Subject Matter Specialist	Mr. C.R. Deka	Subject Matter Specialist	Agril. Extension	8000-13500	8000	07.11.08	Permanent	Gen
7	Subject Matter Specialist	Mr. M. U. Basumatary	Subject Matter Specialist	Agronomy	8000-13500	8000	29.07.09	Permanent	ST
8	Programme Assistant	Mrs. D. Brahma	Programme Assistant	Plant Breeding & Genetics	5375-10700	5375	17.03.09	Permanent	ST
9	Computer Programmer	Vacant	-	-	-	-	-	-	-
10	Farm Manager	Mr. A. K. Brahma	Farm Manager	Agril. Extension	5375-10700	5375	22.01.09	Permanent	ST
11	Accountant / Superintendent	Mr. S.C. Choudhury	Accountant / Superintendent	-	4120-9725	9400	11.12.06	Permanent	OBC
12	Stenographer	Mr. P.K. Basumatary	Stenographer	-	3580-8750	5900	23.10.87	Permanent	ST
13	Driver	Mr. A.S. Borgoyari	Driver	-	3130-6600	6425	18.02.06	Permanent	ST
14	Driver	Md. A. Ali	Driver	-	3580-8750	6075	18.02.06	Permanen	ST
15	Supporting staff	Mr. R.N. Narzary	Supporting staff	-	2650-5200	4120	01.11.85	Permanen	ST
16	Supporting staff	Mr. D. Basumatary	Supporting staff	-	2650-5200	4120	15.11.85	Permanen	ST

1.6. Total land with KVK (in ha) :

S. No.	Item	Area (ha)
1.	Under Buildings	1.5
2.	Under Demonstration Units	0.5
3.	Under Crops	7.0
4.	Orchard/Agro-forestry	2.0
5.	Others (specify)	-

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	1987-88	157.45	2.00 lakh	-	-	-
2.	Farmers Hostel	ICAR	1987-88	910.10	14.00 lakh	-	-	-
3.	Staff Quarters (6)	ICAR	2003	132.76	5.98 lakh	-	-	-
4.	Demonstration Units (2)	-	-	-	-	-	-	-
5	Fencing	ICAR	1995	0.80km	4.92 lakh	-	-	-
6	Rain Water harvesting system	-	-	-	-	-	-	-
7	Threshing floor	ICAR	2005	225.00	1.31 lakh	-	-	-
8	Farm godown	-	-	-	-	-	-	-
9.	Implement Shed	RKVY	-	-	-	2009	172.00	98% completed
10.	Poultry Unit	RKVY	-	-	-	2009	45.00	-do-
11.	Piggery Unit	RKVY	-	-	-	2009	145.00	-do-
12.	Goatery Unit	RKVY	-	-	-	2010	18.65	60% completed
13.	Vermi-Compost Unit	RKVY	-	-	-	2010	50.00	-do-

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Tractor	2003	Transferred from RARS, Diphu	4350.00 hrs.	Running Condition
Jeep	2006	4.90,503.00/-	45,700 Km	-do-
Power Tiller (2 Nos.)	2009	2,73,022.00/-	100.00 hrs.	-do-

C) Equipments & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
Amplifier	1988	3202.00	Repairable
Black Board	1987	150.00	Damaged
Calculator Machine	1986	252.00	Damaged
Camera	1987	5544.00	Repairable
Desktop Computer	2005	46206.00	Working

Digital Camera	2006	15080.00	Working
Digital Camera (Sony)	2010	19000.00	Working
Duplicating Machine (Manual)	1986	6708.26	Damaged
Duplicating Machine (Automatic)	1995	39050.00	Repairable
Fax Machine (Brother)	2010	15,190.00	Working
Film Rewinder	1988	179.20	Repairable
Flash Gun	1988	570.00	Damaged
Generator	1987	17360.00	Repairable
Horn	1988	358.00	Working
Line Connecting Transformer	1988	616.00	Damaged
Microphone	1988	1891.00	Repairable
Microphone Stand	1988	276.00	Working
Photophone OHP	1988	4256.00	Damaged
Photophone Superlite Sound Projector	1988	12152.00	Repairable
Projection Screen	1988	856.80	Working
Projector Roll (Cinema)	1988	196.00	Damaged
Projector Screen	1988	442.90	Working
Slide Projector	1988	4256.00	Damaged
Television Set	1988	10145.00	Damaged
Xerox Machine (KM – 1635 MFP Printer)	2007	50440.00	Working
Xerox Machine (Kilburn)	2010	101920.00	Working
Digital Inverter (Electra – EEDI 800)	2007	13540.00	Working
LCD Projector	2010	98331.00	Working
UPS (Uniline-800VA FBI UPS)	2010	5964.00	Working
Mechanized Grass Cutter	2009	28000.00	Working
Multi purpose power weeder	2009	42078.00	Working
Power paddy weeder	2009	36254.00	Working
Rice transplanter	2009	188198.00	Working
Earth Auger	2009	56749.00	Working
Water pumps (3 nos.)	2009 & 2010	30,000.00	Working
Seed cleaner	2009	311012.00	Working
Rotavator (2 nos.)	2009	95805.00	Working
Puddler	2009	25896.00	Working
Chaff cutter	2009	15496.00	Working
Voltage stabilizer	2007	3999.00	

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

Sl.No.	Date	Name and Designation of Participants	Salient Recommendations	Action taken
1.	-		-	-

2. DETAILS OF DISTRICT

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

S. No	Farming system/enterprise
1	Agri + Horti + Dairy Cow + Goatery + Poultry + Duckery
2	Agri + Horti + Dairy Cow + Goatery + Piggery + Poultry + Duckery + Pigeon + Fishery
3	Agri + Horti + Dairy Cow + Piggery + Poultry
4	Agri + Horti + Dairy Cow + Buffalo + Piggery + Poultry + Duckery + Pigeon
5	Agri + Horti + Dairy Cow + Goatery + Poultry + Duckery + Fishery

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

S. No	Agro-climatic Zone	Characteristics
1.	Lower Brahmaputra Valley Zone (LBVZ) of Assam	The climate is humid sub-tropical in nature characterised by warm – humid summer cool – dry winter. The monsoon months (June-September) are wet receiving 65-70% of the total rainfall while the winter months (December-February) remain virtually dry. The mean maximum and minimum temperature varies from 33-38°C and 8-10°C respectively.
	Agro ecological situation	
a.	Foot hills old mountain valley	Foot hills of Bhutan in northern part of the district. The soil is loamy to clay, rich in organic matter
b.	Flood free riverine old alluvial plain	Plain areas, sandy to sandy loam soil free from flood
c.	Flood prone riverine alluvial plain	Flood prone areas affected by river Champabati, Gaurang, Saralbhag and Sankosh
d.	Hills and hillocks	Hills and Hillocks areas, red clay soil
e.	Beels	Marshy/Swampy land, water logging low lying areas and covered with water hyacinth

2.3 Soil type/s

S. No	Soil type	Characteristics	Area in ha
1	Alfisols (mountain valley)	Soil is loamy to clay and built up alluvial materials washed down from the hills slope. Medium to heavy textured soil	93658
2	Inceptisols (old alluvium)	Soils are old riverine alluvial type. Sandy loam to loamy soil and free from flood	162962
3	Entisols (recent alluvium)	Soils are recent riverine alluvial plain. Sandy or loamy sand and light textured soil	20758
4	Ultisols (laterised red)	Old alluvial soils are found. The surface soils are generally red to reddish brown and acidic in nature	37824

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

S. No	Crop	Area (ha)	Production (Qtl)	Productivity (Qtl /ha)
1	Autumn Rice	28744	24649	8.71
2	Winter Paddy	54496	69621	12.97
3	Summer Paddy	8110	15955	19.67
4	Maize	1150	598	5.20
5	Wheat	2123	2481	11.68
6	Black Gram	949	545	5.75
7	Green Gram	100	49	4.89
8	Lentil	826	403	4.88
9	Pea	340	180	5.31
10	Rapeseed and Mustard	18051	10229	5.67
11	Niger	995	496	5.00
12	Sesamum	710	421	5.92
13	Linseed	419	207	4.93
14	Jute	4953	57158	20.77

15	Mesta	1211	6621	9.85
16	Banana	1271	20165	158.66
17	Pineapple	311	4652	149.60
18	Papaya	383	5753	150.22
19	Orange	2	18	92.49
20	Assam Lemon	188	1380	77.40
21	Jackfruit	1513	10820	96.93
22	Arecanut	1991	23924 nos	120 no/plant/year
23	Coconut	435	4058550 nos	80 no/plant/year
24	Potato	2721	30139	110.77
25	Colocasia	1514	16654	110.00
26	Tapioca	736	3522	47.85
27	Sweet Potato	361	1373	38.04
28	Kharif Vegetables	2971	45097	151.80
29	Rabi Vegetables	4083	84648	207.31
30	Chilli	718	514	7.16
31	Turmeric	403	315	7.81
32	Ginger	615	4569	74.30
33	Onion	348	974	28.00
34	Black Pepper	44	73	16.50
35	Coriander	369	343	9.20

2.5. Weather data

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)
		Maximum	Minimum	
October, 2009	446.4	31.0		80.15
November	114.0	27.0		75.45
December	0.0	24.1		75.20
January 2010	1.6	20.9		69.25
February	0.0	23.3		66.85
March	0.0	27.8		63.95

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

Category	Population	Production	Productivity
Cattle	353789		
<i>Crossbred</i>	536	15,22,156 ltrs (Milk)	6 ltrs/day/ Animal
<i>Indigenous</i>	353253		750 ml/day/Animal
Buffalo	14983		1.5 ltrs/day/Animal
Sheep	13686		
<i>Crossbred</i>	-	-	-
<i>Indigenous</i>	13686	14,84,350 kgs (Meat)	8 kg/ Animal
Goats	159979		5 kg /animal
Pigs	98970		
<i>Crossbred</i>	32927		60 kg /Animal
<i>Indigenous</i>	66043		30 kg / Animal
Rabbits			
Poultry	322609		
Hens	189999	4,51,800 Nos.	160 Nos./ year/Bird
<i>Desi</i>			
<i>Improved</i>			
Ducks	132610		120 Nos. /year/ Bird
Turkey and others	-	-	-

Category	Area	Production	Productivity
Fish			
<i>Marine</i>			
<i>Inland</i>	3197.87 ha	30315.80 Qt	948.00 kg / ha
Prawn			
Scampi			
Shrimp			

2.6 Details of Operational area / Villages

Sl.No.	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Gossaigaon	Gossaigaon	Matiajuri, Rangapara, Padmabil, Joyma, Kusumbil, Bhumka, Chakma, Bashbari, Babubil, Thuribari, Bhawraguri, Natunpara, Guwabari, Sagunhara, Choto Binnyakhata, Gambaribil, Kamalsing	Boro Rice and early Ahu, Lentil, Pea, Linseed, Rapeseed, Vegetables, Potato, Flowers	i. Low productivity of Oilseeds and Pulses due to non-adoption of recommended varieties ii. Production problem in Potato	i. Popularisation of HYV of Summer and Boro rice ii. Introduction of high yielding Pulse and Oilseed varieties iii. Commercial potato and fruit production
		Hatidhura	Jacobpur, Fwilaguri, Majadabri, Kamandanga, Haripur, Tamahat, Simaltapu, Grahampur, Srirampur, Palashkandi	Rice, Maize, Rapeseed, Niger, Wheat, Vegetables, Goatery	i. Poor yield in Oilseeds and Pulses ii. Pest and Disease problem iii. Low productivity due to rearing of local breed of goat iv. Sandy and light textured soil	i. Popularisation of improved varieties of Oilseed and Pulse ii. Integrated Pest and Disease management iii. Improvement of productivity of Goatery iv. Soil health and fertility management

		Kachugaon	Ballamguri, Malaguri, Bhadiaguri, Ballimari, Jaymaguri, Dawaguri, Goladangi, Bajugaon, Jaraguri, Maktaigaon, Bhomrabail, Saraibil, Mothambail, Nasrabail, Borobadha, Burichattam, Haoriapet, Hashraobari, Hatigarh, Garufella, Sapkata, Gakulkata, Polashguri, Kachugaon	Rice, Maize, Vegetables, Rapeseed, Lentil, Pea, Buckwheat, Niger Beekeeping	i. Pre and Post Production problem in Vegetables ii. Poor fertility status of soil iii. Lack of scientific knowledge and skills about rearing of honey bee	i. Low volume – high value Vegetables ii. Soil health and fertility management iii. Commercial fruit production and processing iv. Popularisation of Beekeeping
2	Kokrajhar	Titaguri	Debargaon, Narabari, Gendrabail, Kunthaibari, Titaguri, Kumguri, Sukanjhara, Chandrapara, Simborgaon, Uttar Patgaon, Amguri, Jharbari, Ghoramari, Bhumki, Dakhin Karigaon, Dawkibari, Kakrighola, Nayekgaon, Bandarmari, Harighola, Harigaon, Bamungaon, Diplaibil, Salakati, Bandarchara, Chautaki	Piggery, Poultry, Aquaculture, Sericulture, Agro-forestry, Winter vegetables,	i. Low production of meat and egg ii. Fish seed formulation, feeding technology and pond management iii. Poor quality and low yield of worm due to traditional rearing method iv. Dearth of scientific knowledge regarding agro-forestry plantation	i. Rearing of Pig and Poultry ii. Integrated Fish farming iii. Rearing of Eri, Muga and Silk worm iv. Agro-forestry plantation technology v. Spice production and value addition

		Dotma	Angthihara, Simlaguri, Batabari, Dotma, Barshijhora, Umanagar, Baldiapathan, Fakiragram, Saktiashram, Chithilaghob, Athiabari, Ghoshkata, Sikargaon, Laudanga, Dangarkuti, Bhalukmari, Puthimari, Lakhnabari, Ramfalbil, Serfanguri	Dairy, Mushroom, Piggery, Fruit preservation, Tailoring and Stitching	i. Low productivity and management problem in Dairy and Piggery ii. Lack of scientific knowledge about mushroom production iii. Storage problem of fruit iv. Lack of technical knowledge and skills regarding tailoring, stitching and knitting	i. Improvement of productivity of Dairy ii. Rearing of Pig iii. Production techniques of Mushroom iv. Processing of fruit v. Tailoring, Knitting and Embroidery techniques for women
3	Parbatjhora	Rupsi	Kajigaon, Manglajhora, Tipkai, Molandubi, Kurshakati	Ahu, Boro rice, Rapeseed, Potato, Summer vegetables	i. Low yield of Rice due to growing of local varieties ii. Production and management problem of vegetables and spices iii. Pest and Disease problem	i. Popularisation of HYV of Summer, Sali and Boro rice ii. Low volume – high value Vegetables iii. Spice production and value addition iv. Integrated Pest and Disease management

2.7 Priority/thrust areas

Crop/Enterprise	Thrust area
Rice*	Popularisation of HYV of Summer, Boro rice
Tomato and Capsicum	Low volume – high value vegetables
Poultry and Piggery	Rearing of Pig and Poultry
Fishery	Integrated Fish Farming
Oilseeds	Popularisation of improved varieties of Oilseed (Torla)
Soil management	Soil health and fertility management
Cereals and vegetables	Integrated Pest and Disease Management
Pulse	Introduction of high yielding Pulse (Pea and Lentil) varieties
Mushroom	Production techniques of Mushroom
Banana, Pineapple and Mandarin	Commercial fruit production and value addition
Diary and Goatery	Improvement of productivity of Dairy and Goatery
Agro-forestry	Agro-forestry plantation Technology
Sericulture	Rearing of Eri, Muga and Silk worm
Handloom and handy crafts	Tailoring, Knitting and Embroidery techniques for Women
Apiculture	Popularisation of Beekeeping
Spices	Spice production and value addition

3. TECHNICAL ACHIEVEMENTS**3. A. Details of target and achievements of mandatory activities by KVK during October, 2009- March, 2010**

OFT (Technology Assessment and Refinement)				FLD (Oilseeds, Pulses, Cotton, Other Crops/Enterprises)			
1				2			
Number of OFTs		Number of Farmers		Number of FLDs		Number of Farmers	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
5	4	25	35	6	6	21	60

Training (including sponsored, vocational and other trainings carried under Rainwater Harvesting Unit)					Extension Activities			
3					4			
Number of Courses			Number of Participants		Number of activities		Number of participants	
Clientele	Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
Farmers	30	30	750	829	225	216	2300	2016
Rural youth	1	1	25	32				
Extn. Functionaries	2	2	50	52				

Seed Production (Qtl.)			Planting material (Nos.)		
5			6		
Crop	Target	Achievement	Crop	Target	Achievement (nos)
Buckwheat (Local)	14.0 q	15.75 q	Cauliflower (Snowball)	500	500
Rapeseed (TS-36)	2.0 q	3.25 q	Knoll-khol (White Viena)	1000	1000
Niger (NG-1)	2.0 q	3.30 q	Cabbage (Drum Head)	500	500
-	-	-	Tomato (Avinash)	250	250
-	-	-	Chrysanthemum (Snowball)	200	200
-	-	-	Gerbera (Red Monarch)	150	150
-	-	-	Marigold (Harmony)	250	250
-	-	-	Tuberose (Calcutta Single)	150	150

3.B. 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	Popularisation of HYV of Summer, Sali and Boro rice	Rice	Poor yield due to use of traditional variety	Performance of newly developed Boro rice variety	Short duration HYV of Ahu rice	Scientific production technology for rice	–	Field visit, Field day	Seeds of HYV of rice (Ranjit)
2	Vegetable production techniques	Vegetables	i. Low production ii. Pest and disease problem	Varietal performance of brinjal and turmeric		Scientific cultivation of brinjal, turmeric and TPS	–	Radio talk, Popular article	Planting materials of vegetables
3	Rearing of Pig and Poultry	Piggery, Poultry	Poor management and disease problem viz. swine fever, bird flu	–	–	Scientific pig and poultry farming	–	Group meeting, Extension literature	–
4	Integrated Fish Farming	Aqua-farming	Fish seed formulation, feeding technology and pond management	–	–	Composite fish culture	–	Field visit, Advisory services	–
5	Popularisation of improved varieties of Oilseeds	Rapeseed, Sesamum Linseed	Low yield and pest and disease	Integrated nutrient management of Jute and residual effect on Toria	HYV of Rapeseed, Sesamum, Linseed	Integrated crop management for oilseed	–	Extension literature, Field visit	Seeds of Rapeseed (TS 36), Sesamum (AST – 1)
6	Integrated Nutrient Management	Biofertiliser, Vermi-compost	i. Poor fertility status of soil ii. Micro nutrient deficiency iii. Sandy and light textured soil	–	–	Improved vermi-technology for compost production	–	Field Visit, Extension literature	
7	Integrated Pest and Disease management techniques of major crops	Rice, Pulse, Oilseeds, Vegetables,	High infestation of pest and diseases in different crops	i. Biological control of wilt disease in Brinjal	–	IPDM of rice, vegetables, pulse and oilseed	–	Diagnostic visit, Extension literature	
8	Introduction of HYV of Pulse crops	Blackgram, Pea, Lentil	Low yield due to non-adoption of HYV & appropriate technology	i. Varietal evaluation of blackgram under delayed sowing	HYV of blackgram, lentil	Improved production technology of pulse crops	–	Field visit , Extension literature	
				ii. Varietal evaluation of greengram under normal sowing					

	rice pest									
Integrated Disease Management				Biological control of wilt disease in Brinjal						
Resource conservation technology										
Small Scale income generating enterprises										
TOTAL										

* Any new technology, which may offer solution to a location specific problem but not tested earlier in a given micro situation.

A.2. Abstract of the number of technologies **refined*** in respect of crops/enterprises

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										
Integrated Disease Management										
Resource conservation technology										
Small Scale income generating enterprises										
TOTAL										

* Technology that is refined in collaboration with ICAR/SAU Scientists for improving its effectiveness.

A.3. Abstract of the number of technologies **assessed** in respect of livestock / enterprises: Nil

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

A.4. Abstract on the number of technologies **refined** in respect of livestock / enterprises: Nil

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

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

A. Technology Assessment

Trial 1

- 1) Title : Potash management in blackgram (variety- PU-31)
- 2) Problem diagnose/defined : Low yield due to potash deficiency in soil
- 3) Details of technologies selected for assessment /refinement : Assessment
- 4) Source of technology :Regional Agricultural Research Station, AAU, Shillongoni , Nagaon
- 5) Production system thematic area : Pulse based Production system
- 6) Thematic area : Nutrient management
- 7) Performance of the Technology with performance indicators : Mean yield= 11.2 q/ha, % increase in yield=28.78%, B:C ratio= 2.73
- 8) Final recommendation for : micro level situation : Application of potash @ 15 kg/ha was found to be suitable for increasing yield
- 9) Constraints identified and feedback for research : Not found
- 10) Process of farmers participation and their reaction : Farmers showed positive reaction towards application of potash in blackgram for getting higher yield.

11). Results of On Farm Trials

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
1	2	3	4	5	6	7	8	9	10
Blackgram	Rain fed – low land	: Low yield due to potash deficiency in soil	Potash management in blackgram (variety- PU-31)	10	i) Application of potash @ 15 kg/ha	Yield	Mean yield= 11.2 q/ha	Increase in yield over farmers practice=28.78%, B:C ratio= 2.73	Farmers expressed satisfaction and accepted the technology
					ii) Farmers practice	Yield	Mean yield=87 q/ha		

* No. of farmers

Technology Assessed	*Production per unit	Net Return (Profit) in Rs./ ha	B:C Ratio
Farmers' practice	870 kg/ha	18,270.00	2.14
Application of potash @ 15 kg/ha	1120 kg/ha	29,869.00	2.73

*Field crops – kg/ha, * for horticultural crops – kg/t/ha, * milk and meat – litres or kg/animal, * for mushroom and vermi compost kg/unit area.

** Give details of the technology assessed or refined and farmer's practice

A. Technology Assessment**Trial 2**

- | | |
|--|--|
| 1) Title : | Varietal evaluation of brinjal varieties |
| 2) Problem diagnose/defined : | Low yield due to non availability of high –yielding varieties tolerant to bacterial wilt |
| 3) Details of technologies selected for assessment /refinement : | i) Local variety
ii) High yielding variety- RCMBL-2 & RCMBL-3 |
| 4) Source of technology : | Division of Horticulture, ICAR Research Complex for NEH Region, Umiam |
| 5) Production system thematic area : | Vegetable based production system |
| 6) Thematic area : | Varietal evaluation |
| 7) Performance of the Technology with performance indicators : | Fruit Yield |
| 8) Final recommendation for micro level situation : | |
| 9) Constraints identified and feedback for research : | On-Going |
| 10) Process of farmers participation and their reaction : | On-Going |

11. Results of On Farm Trials

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
1	2	3	4	5	6	7	8	9	10
Brinjal	Rain fed – medium land	Low yield due to non availability of high – yielding varieties tolerant to bacterial wilt	Varietal evaluation of brinjal varieties	5	1. Farmer's practices	Yield	-	-	On- going
					2. RCMBL- 2 & RCMBL-3	Yield	-		

*** No. of farmers**

Technology Assessed	*Production per unit	Net Return (Profit) in Rs./ ha	B:C Ratio
11	12	13	14
1. Farmer's practices	-	-	-
2. High yielding variety- RCMBL-2 & RCMBL-3	-	-	-

***Field crops – kg/ha, * for horticultural crops –= kg/t/ha, * milk and meat – litres or kg/animal, * for mushroom and vermi compost kg/unit area. ** Give details of the technology assessed or refined and farmer's practice**

A. Technology Assessment**Trial 3**

- 1) Title : Varietal evaluation of turmeric varieties
- 2) Problem diagnose/defined : Low yield of local varieties due to non-availability of high yielding varieties, tolerant to rhizome rot with high curcumin content
- 3) Details of technologies selected for assessment
/refinement : i) Local variety
ii) High yielding variety (Megha Turmeric-1)
- 4) Source of technology : Division of Horticulture, ICAR Research Complex for NEH Region, Umiam
- 5) Production system thematic area : Spice based production system
- 6) Thematic area : Varietal evaluation
- 7) Performance of the Technology with performance indicators : i) Yield of Rhizome and ii) Percentage of Rhizome rot
- 8) Final recommendation for micro level situation : On- Going
- 9) Constraints identified and feedback for research : On- Going
- 10) Process of farmers participation and their reaction : On-Going

11). Results of On Farm Trials

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
1	2	3	4	5	6	7	8	9	10
Turmeric	Rain fed – upland	Low yield of local varieties due to non- availability of high yielding varieties, tolerant to rhizome rot with high curcumin content	Varietal evaluation of turmeric varieties	9	1. High-yielding variety	i) Yield of Rhizome ii) Percentage of Rhizome rot	-	-	On-Going
					2. Local variety	i) Yield of Rhizome ii) Percentage of Rhizome rot	-		

* No. of farmers

Technology Assessed	*Production per unit	Net Return (Profit) in Rs./ ha	B:C Ratio
11	12	13	14
1. Local variety	-	-	-
2 High-yielding variety Megha Turmeric-1	-	-	-

*Field crops – kg/ha, * for horticultural crops -= kg/t/ha, * milk and meat – litres or kg/animal, * for mushroom and vermi compost kg/unit area. ** Give details of the technology assessed or refined and farmer's practice

A. Technology Assessment

Trial 4

- 1) Title : Pitcher drip irrigation in banana, var. Malbhog
- 2) Problem diagnose/defined : Low yield banana (Malbhog) due to moisture stress during winter season from November to March
- 3) Details of technologies selected for assessment /refinement : i) Farmers Practice
ii) Pitcher drip irrigation with straw mulching
- 4) Source of technology : AICRP on Water Management, AAU, Jorhat-13
- 5) Production system thematic area : Fruit production system
- 6) Thematic area : Water Management
- 7) Performance of the Technology with performance indicators : i) Yield in farmers practice= 25.7 t/ha
ii) Yield in pitcher drip irrigation = 36.29 t/ha
- 8) Final recommendation for micro level situation : Pitcher drip irrigation is a low cost technology accepted by the farmers for irrigating banana plants during the dry spell from November to March
- 9) Constraints identified and feedback for research : Not found
- 10) Process of farmers participation and their reaction : Awareness and field visit. Farmers were highly satisfied with the low cost technology. -

11). Results of On Farm Trials

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
1	2	3	4	5	6	7	8	9	10
Banana (Malbhog)	Rain fed – upland	Low yield due to moisture stress during winter season	Pitcher drip irrigation in banana (Var. Malbhog)	10	1. Farmers practice	i) Moisture content in soil ii) Number of hands/bunch iii) Number of fingers/bunch iv) Yield	i) 12.7% ii) 7 hands/bunch iii) 12.33 fingers/hand iv) 25.7t/ha	Increase in yield over farmers practice= 41%	Farmers were highly satisfied with the low cost technology of irrigating banana plants during moisture stress period from November to March when irrigation is a major problem.
					2 Pitcher drip irrigation with straw mulching	i) Moisture content in soil ii) Number of hands/bunch iii) Number of fingers/bunch iv) Yield	i) 31% ii) 9 hands/bunch iii) 18 fingers/hand iv) 36.29t/ha		

* No. of farmers

Technology Assessed	*Production per unit	Net Return (Profit) in Rs./ ha	B : C Ratio
11	12	13	14
1. Farmers practice	25.7t/ha	2,81,988.00	3.12
2 Pitcher drip irrigation with straw mulching	36.29t/ha	5,56,551.00	2.65

*Field crops – kg/ha, * for horticultural crops – kg/t/ha, * milk and meat – litres or kg/animal, * for mushroom and vermi compost kg/unit area. ** Give details of the technology assessed or refined and farmer's practice

B. Technology Refinement: Nil

11). Results of On Farm Trials

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology refined	Parameters	Data on the parameter	Results of refinement	Feedback from the farmer	Justifi cation for refinement
1	2	3	4	5	6	7	8	9	10	11

*** No. of farmers**

Technology Refined	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
12	13	14	15

***Field crops – kg/ha, * for horticultural crops -= kg/t/ha, * milk and meat – litres or kg/animal, * for mushroom and vermi compost kg/unit area.**

**** Give details of the technology assessed or refined and farmer's practice**

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 2008-09 and recommended for large scale adoption in the district

S. No	Crop/Enterprise	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	Potato (TPS)	Tuber-let production	Performance of TPS, Var-HPS/13	Training on TPS, Block demonstration, Field visit, field day, programme	9	10	0.3
2.	Rapeseed	Rabi Oilseed production	Performance of TS-36	Training on rapeseed, Block demonstration, Field visit, field day, programme	8	13	4.0
3.	Lentil	Rabi pulse production	Performance of var. K-75	Training on lentil, Block demonstration, Field visit, field day, programme	5	17	4.0
4.	Tomato	Biological control	Application of Biofor PF against wilt disease	Training on tomato, Block demonstration, Field visit, field day, programme	4	8	0.13
5.	Boro rice	Water management	Application of 5 cm irrigation water 3 days after disappearance of ponded water	Training on tomato, Block demonstration, Field visit, field day, programme	10	25	3.25
6.	Boro rice	Varietal evaluation	Performance of Boro rice variety- Kanaklata	Training on tomato, Block demonstration, Field visit, field day, programme	6	15	1.95

* Thematic areas as given in Table 3.1 (A1 and A2)

b. Details of FLDs implemented during 2009-10 (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.	Potato (TPS)	Tuber-let production	Performance of TPS, Var-HPS/13	Rabi, 2009-10	0.3	0.26	5	5	10	Nil
2.	Rapeseed	Rabi Oilseed production	Performance of TS-36	Rabi, 2009	4.0	4.0	9	4	13	Nil
3.	Lentil	Rabi pulse production	Performance of var. K-75	Rabi, 2009	4.0	4.0	13	4	17	Nil

4.	Tomato	Biological control	Application of Biozin PTB against Wilt disease	Rabi, 2009	0.1	0.1	-	10	10	Nil
5.	Boro rice	Water management	Application of 5 cm irrigation water 3 days after disappearance of ponded water	Summer 2009-10	1.0	1.0	1	-	1.0	Nil

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					
Potato (TPS)	Rabi	RF	Sandy loam	M	L	L	Vegetables	06.11.09	26.03.2010	20.14 mm	6 days
Rapeseed	Rabi	RF	Sandy loam	M	L	L	Paddy	12.09.2009	10.02.2010	150 mm	10 days
Lentil	Rabi	RF	Sandy loam	M	L	L	Paddy	13.11.2009	20.02.2010	200 mm	12 days
Tomato	Rabi	RF	Sandy loam	M	L	L	Paddy	25.09.09	10.03.10	200 mm	12 days
Boro rice	Summer	Irrigated	Sandy loam	M	L	L	Paddy	10.12.09	20.05.10	160 mm	10 days

Performance of FLD

Sl.No.	Crop	Technology Demonstrated	Variety	No. of Farmers	Area (ha.)	Demo. Yield Qtl/ha			Yield of local Check Qtl./ha	Increase in yield (%)	Data on parameter in relation to technology demonstrated	
						H	L	A			Demo	Local
1	2	3	4	5	6	7	8	9	10	11	12	13
1.	Potato (TPS)	Performance of TPS, Var-92PT27	92PT27	10	0.26	300	200	250.0	150.0	66.7	250.0	150.0
2.	Rapeseed	Performance of TS-36	TS-36	13	4.0	12	8.0	10.0	6.0	40.0	10.0	6.0
3.	Lentil	Performance of var. K-75	K-75	17	4.0	12.0	6.4	9.2	5.5	40.20	9.2	5.5
4.	Tomato	Application of Biozin PTB	Avinash – 2	10	0.13	800	700	750	350	53.3	750	350
5.	Boro rice	Application of 5 cm irrigation water 3 days after disappearance of ponded water	Joymati	1	1	63.45	-	63.45	47.0	35.0	63.45	47.0

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
30,500.00	61,825.12	1,40,000.00	1,20,000.00	1,09,500.00	58,174.88	4.59 (demo) and 1.94
13,299.00	9,802.00	18,000.00	12,000.00	8198.00	2198.00	1.35 (demo) and 1.22 (check)
16,254.00	11,800.00	50,600.00	27,500.00	34,346.00	15,700.00	3.1(demo.) and 2.3 (Check)
81,570.00	45,000.00	5,25,000.00	2,45,000.00	4,43,430.00	2,05,000.00	6.4 (Demo) and 5.4 (Check)
18,500.00	15,000.00	57,105.00	42,300.00	38,605.00	27,300.00	3.08 (demo) and 2.82 (Check)

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
Potato (TPS)	Rabi	Variety- 92PT27	Rainfed	250	150	66.7
Rapeseed	Rabi	Variety -TS-36	Rainfed	10.0	6.5	40.0
Lentil	Rabi	Variety -K-75	Rainfed	9.2	5.5	40.20
Tomato	Rabi	Variety -Avinash – 2	Rainfed	750	350	114.2
Boro rice	Summer	Variety- Joymati	Irrigated	63.45	47.0	35.0

Technical Feedback on the demonstrated technologies

S. No	Feed Back
1.Potato (TPS)	Non-availability of TPS
2. Rapeseed	Adjustment of sowing time after harvest of Sali rice and management of water
3. Lentil	Non availability of suitable varieties
4. Tomato	Irrigation management is important
5. Boro rice	Water management is important especially 3 days after disappearance of ponded water.

Farmers' reactions on specific technologies

S. No.	Feed Back
1	Satisfactory performance of TPS selected for demonstration
2	Satisfied with the performance of HYV of Rapeseed (TS-38)
3	Satisfied with good performance of HYV of Lentil (K-75)
4	Biofor PF is not easily available
5	Satisfied with the technology of water management in boro rice

Extension and Training activities under FLD

Sl.No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	TPS	Field visit – 6, Field day -1	26.03.10 (Field Day)	52	
2	Field visit, Field day	Field visit – 4 Field day -1	10.2.10 (Field Day)	27	
3	Field visit, Field day	Field visit – 6, Field day -1	12.02.10 (Field day)	26	
4	Field visit, Field day	Field visit – 6, Field day -1	24.01.10 (Field day)	30	
5	Field visit, Field day	Field visit – 6, Field day -1	15.05.10 (Field day)	50	

c. Details of FLD on Enterprises

(i) Farm Implements: Nil

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.

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

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								

A) ON Campus

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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										
PRA-family approach for rural situation analysis										
Post harvest handling and value addition of horticultural crops	1	22	-	22	5	-	5	27	-	27
TOTAL	1	22	-	22	5	-	5	27	-	27

B) OFF Campus

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II Horticulture										
a) Vegetable Crops										
Production of low volume and high value crops	1	26	-	26	-	-	-	26	-	26
Off-season vegetables										
Nursery raising	1	5	22	27	-	-	-	5	22	27
Exotic vegetables like Broccoli										
Export potential vegetables										
Grading and standardization										
Protective cultivation (Green Houses, Shade Net etc.)										
Improved production technology vegetables										
b) Fruits										
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit	1	20	3	23	2	-	2	22	3	25
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 (Potato and Tapioca)	1	9	7	16	9	-	9	25	-	25
Processing and value addition										
f) Spices										
Production and Management	1	26	-	26	-	-	-	26	-	26

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Low cost techniques for pest management										
TOTAL	1	32	0	32	0	0	0	32	0	32
© 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										
Mushroom production										
PRA methods and Agro-eco system analysis	1	18	-	18	7	-	7	25	-	25
TOTAL	1	18	-	18	7	-	7	25	-	25

C) Consolidated table (ON and OFF Campus)

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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 (Potato and Tapioca)	1	9	7	16	9	-	9	25	-	25
Processing and value addition										
f) Spices										
Production and Management technology (ginger & turmeric)	1	26	-	26	-	-	-	26	-	26
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	3	69	-	69	4	-	4	73	-	73
Soil and Water Conservation										
Integrated Nutrient Management (Okra and Cowpea)	2	59	-	59	-	-	-	59	-	59
Production and use of organic inputs										
Management of Problematic soils	1	7	-	7	17	6	23	24	6	30
Micro nutrient deficiency in crops										
Nutrient Use Efficiency										
Soil and Water Testing										
IV Livestock Production and Management										
Dairy Management	1	25	-	25	-	-	-	25	-	25

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Household food security										
Women and Child care										
Low cost and nutrient efficient diet designing										
Production and use of organic inputs										
Gender mainstreaming through SHGs										
Mushroom production										
PRA methods and agro-eco system analysis.	1	18	-	18	7	-	7	25	-	25
Post harvest handling and value addition of horticultural crops	1	22	-	22	5	-	5	27	-	27
TOTAL	2	40	-	40	12	-	12	52	-	52

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

Date	Clientele	Title of the training programme	Discipline	Thematic area	Duration in days	Venue (Off / On Campus)	Number of other participants			Number of SC/ST			Total number of participangs		
							Male	Female	Total	Male	Female	Total	Male	Female	Total
			Horticulture												
27.10.09	PF/RW/RW	Improved production technology of potato	Do	Tuber crop production	1 day	Mainaguri M.E. School	9	6	16	9	-	9	25	-	25
28.10.09	PF/RW/RW	Nursery raising techniques of transplanted vegetable crops and scientific laying out of kitchen garden	Do	Nursery raising	1 day	Simaltapu No. 1 L.P. School	5	22	27	-	-	-	5	22	27
18.11.09	PF/RW	Scientific cultivation of tomato, brinjal and chilli	Do	Production of low volume high value crops	1 day	Simaltapu	26	-	26	-	-	-	26	-	26
18.01.10 & 19.01.10	PF/RW	Post harvest handling and value addition of horticultural crops	Do	Post harvest technology	2 days	KVK Training Hall	22	-	22	5	-	5	27	-	27
09.03.10	PF/RW	Scientific production technology of ginger and turmeric	Do	Spices production technology	1 day	L.P. School, Bhomrabil No.2	26	-	26	-	-	-	26	-	26
22.03.10	PF/RW/RW	Scientific cultivation technology of banana	Do	Fruit production	1 day	Gokulkhata No.2	20	3	23	2	-	2	22	3	25
			Soil Health and Fertility Management												
26.10.09	PF/RW	Integrated nutrient management in cole crops	Do	Integrated nutrient management	1 day	Chatamari	28	-	28	-	-	-	28	-	28

17.11.09	PF/RV	Soil fertility management for cultivation of boro rice	Do	Soil fertility management	1 day	Simaltapu	25	-	25	-	-	-	25	-	25
23.01.10	PF/RV/RW	Management of acid soil for crop production	Do	Management of problematic soil	1 day	Molandubi L.P. School	7	-	7	17	6	23	24	6	30
05.03.10	PF/RV	Integrated nutrient management in okra and cowpea	Do	Integrated nutrient management	1 day	Pratapkhata L.P. School	31	-	31	-	-	-	31	-	31
15.03.10	PF/RV	Soil fertility management for cultivation of ahu rice	Do	Soil fertility management	1 day	Bherbheri	20	-	20	5	-	5	25	-	25
24.03.10	PF/RV	Nutrient management in coconut and arecanut	Do	Integrated nutrient management	1 day	Hatidura	24	-	24	2	-	2	26	-	26
			Agril. Extension												
22.10.09	RW	Income generation activities for empowerment of rural women	Do	Women empowerment	1 day	L.P.School, Simultapu, Block-2	-	22	22	-	3	3	-	25	25
19.11.09	PF/RV	Development of village level para-extension worker	Do	Leadership development	1 day	L.P.School, Pakirtal	26	-	26	-	1	1	26	1	27
20.01.10	PF/RV	Leadership principles, importance and methodology for identification of local leader	Do	Do	1 day	Kotpara village, Shithila	26	-	26	-	1	1	26	1	27
10.03.10	PF	Mobilization of social capital in village	Do	Mobilization of social capital	1 day	1 No. Jaima	-	12	12	10	3	13	22	3	25
18.03.10	PF	Formation and management of SHG	Do	Formation and management of SHG	1 day	Gurufella	15	3	18	5	3	8	20	6	26
19.03.10 to 20.03.10	EF	PRA methods and Agro-eco system analysis	Do	Capacity building	2 day	Gurufella Dev. Block	18	-	18	7	-	7	25	-	25

30.10.09	PF/RV/RW	Integrated disease management for Potato & Tomato	Plant Pathology	IDM	1 day	L. P. School, Guabari	-	-	-	2	24	26	2	24	26
11.03.10	PF/RV	Integrated Disease Management for Cucumber, Ridge gourd and Bitter gourd	- do -	IDM	1 day	L. P. School, Khajurbari	26	-	26	-	-	-	26	-	26
12.03.10	PF	Integrated Disease Management for Jute and Mesta	- do -	IDM	1 day	Community hall, Bherbheri	27	-	27	-	-	-	27	-	27
			Entomology												
25.10.09	PF/RV	Integrated insect pest and disease management of for oil seed crops	- do -	IPM	1 day	L. P. School, Hansabil	25	-	25	2	-	2	27	-	27
17.03.10	PF/RV	Integrated insect pest and nematode management in Ahu rice (Anticipated).	- do -	IPM	1 day	Serfanguri area	8	-	8	15	2	17	23	2	25
			Apiculture												
23.11.09 to 24.11.09	PF/RV	Beekeeping for improvement of crop productivity		Beekeeping techniques	2 days	L. P. School, Ghanargaon	32	-	32	-	-	-	32	-	32
			Animal Husbandry												
23.10.09	PF	Common diseases of livestock and cattle	Do	Disease management	1 day	KVK, Gossaigaon (On)	13	7	20	6	-	6	19	7	26
16.11.09	PF	Common diseases of Poultry	Do	Do	1 day	Dotma	-	-	-	-	25	25	-	25	25
22.01.10	PF	Scientific Goat farming	Do	Sheep & Goat	1 day	Takarkata	8	17	25	-	-	-	8	17	25
06.03.10	PF	Scientific broiler farming	Do	Poultry farm management	1 day	Balagaon	15	10	25	-	-	-	15	10	25
13.03.10 to 14.03.10	PF	Scientific dairy farm management	Do	Livestock production and management	2 days	KVK, Gossaigaon (On)	25	-	25	-	-	-	25	-	25

			Agronomy												
24.10.09	PF	Scientific production technology of Rabi oilseeds and pulse crops	Do	Crop diversification	1 day	Titaguri	8	-	8	22	3	25	30	3	33
21.11.09 to 23.11.09	PF/Ry	Integrated farming system	Do	Integrated farming	2 day	KVK, Gossaigaon (On)	24	-	24	8	-	8	32	-	32
21.01.10	PF	Scientific production technology of Boro rice	Do	Integrated crop management	1 day	Garokhuta L.P. School	31	-	31	-	-	-	31	-	31
4.03.10	Ry	Weed management in Ahu Rice	Do	Weed management	1 day	Kashibari L.P. School	-	-	-	25	5	30	25	5	30
23.03.10	PF/Ry	Rice fish integrated farming system	Do	Integrated farming	1 day	Dolegaon L.P School	-	-	-	25	-	-	25	-	25

(D) Vocational training programmes for Rural Youth: Nil

Crop / Enterprise	Date	Training title*	Identified Thrust Area	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	

*training title should specify the major technology /skill transferred

(E) Sponsored Training Programmes

Sl.No	Date	Title	Discipline	Thematic area	Duration (days)	Client (PF/RY/EF)	No. of courses	No. of Participants									Sponsoring Agency	Amount of fund received (Rs.)
								Others			SC/ST			Total				
									Male	Female	Total	Male	Female	Total	Male	Female	Total	
1	14.12.09	Scientific cultivation of Oyster Mushroom	Mushroom	Mushroom production	2 days	RY-20 RW-8	1	12	4	16	8	4	12	20	8	28	Bodoland Mushroom Development Foundation, Mahendrapur, Bhawraguri	-
2	3.01.10	Integrated disease management of late blight of Potato	Plant protection	Integrated disease management	1	RY-23 RW-4	1	20	3	23	3	1	4	23	4	27	Luthern World Service, Kachugao n Branch	-
3	21.12.09	Scientific cultivation of Boro rice	Crop production	Rice production	1	RY-24	1	5	-	5	14	5	19	19	5	24	Sub-Divisional Office, Dept of agriculture, Parbatjhora	-
4	14.11.09	Orientatiob n on vermicomposting	Soil Science	Production of input at site	1	RY-10 PF-25	1	12	-	12	20	3	23	32	3	35	Luthern World Service (I), Gossaigaon	
Total							4	49	7	68	45	13	58	94	20	114		

3.4. Extension Activities (including activities of FLD programmes)

[illegible]

19.	TV talks														
20.	Popular articles		7												
21.	Extension Literature		10												
22.	Advisory Services		130	35	15	50	60	31	91	-	-	-	95	46	141
23.	Scientific visit to farmers field		20	25	8	33	15	15	30	-	-	-	58	23	81
24.	Farmers visit to KVK		-	100	25	125	50	40	90	-	-	-	225	65	290
25.	Diagnostic visits		7	10	-	10	15	10	25	-	-	-	25	10	35
26.	Exposure visits		2	40	-	40	30	4	34	-	-	-	70	4	74
27.	Ex-trainees Sammelan														
28.	Soil health Camp														
29.	Animal Health Camp														
30.	Agri mobile clinic														
31.	Soil test campaigns	27.03.10	1	44	-	44	21	-	21	1	-	1	66	-	66
32.	Farm Science Club Conveners meet														
33.	Self Help Group Conveners meetings		5	20	10	30	25	5	30	-	-	-	50	15	65
34.	Mahila Mandals Conveners meetings														
35.	Celebration of important days (specify)	26 th January, 2010	1	12	8	20	10	2	12	-	-	-	22	10	32
36.	Farmers-Scientists interaction														
	Grand Total		215	933	234	1167	509	189	698	48	5	53	1558	428	1986

* Example for guidance only

3.5 Production and supply of Technological products

SEED MATERIALS

Major group/class	Crop	Variety	Quantity (qtl.)	Value (Rs.)	Provided to No. of Farmers
CEREALS	Buckwheat	Local	15.75	25,200.00	35
OILSEEDS	Rapeseed	TS-36	3.25	12,675.00	42
	Niger	NG-1	3.30	16,500.00	40
PULSES					
VEGETABLES					
FLOWER CROPS					
OTHERS (Specify)					

*An example for guidance only

SUMMARY

Sl. No.	Major group/class	Quantity (qtl.)	Value (Rs.)	Provided to No. of Farmers
1	CEREALS	15.75	25,200.00	35
2	OILSEEDS	6.55	29,175.00	82
3	PULSES			
4	VEGETABLES			
5	FLOWER CROPS			
6	OTHERS			
TOTAL		22.3	54,375.00	117

PLANTING MATERIALS

Major group/class	Crop	Variety	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
FRUITS					
SPICES					
VEGETABLES					
	Cauliflower	Snowball	500	250.00	7
	Knoll-khol	White Viena	1000	500.00	20
	Cabbage	Drum Head	500	250.00	5
	Tomato	Avinash	250	125.00	5
FOREST SPECIES					
ORNAMENTAL CROPS					
	Chrysanthemum	Snowball	200	400.00	20
	Gerbera	Red Monarch	150	300.00	15
	Marigold	Harmony	250	500.00	25
	Tuberose	Calcutta Single	150	300.00	10
PLANTATION CROPS					
Others (specify)					

*An example for guidance only

SUMMARY

Sl. No.	Major group/class	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
1	FRUITS			
2	VEGETABLES	2250	1125.00	37
3	SPICES			
4	FOREST SPECIES			
5	ORNAMENTAL CROPS	750	1500.00	70
6	PLANTATION CROPS			
7	OTHERS			
	TOTAL	3000	2625.00	107

BIO PRODUCTS: NIL

Major group/class	Product Name	Species	Quantity		Value (Rs.)	Provided to No. of Farmers
			No	(kg)		
BIOAGENTS						
BIOFERTILIZERS						
1						
2						
3						
4						
BIO PESTICIDES						
1						
2						
3						
4						

SUMMARY

Sl. No.	Product Name	Species	Quantity		Value (Rs.)	Provided to No. of Farmers
			Nos	(kg)		
1						
2						
3						
	TOTAL					

LIVESTOCK: Nil

Sl. No.	Type	Breed	Quantity		Value (Rs.)	Provided to No. of Farmers
			(Nos)	Kgs		
Cattle						
SHEEP AND GOAT						
POULTRY						
FISHERIES						

Others (Specify)						

* An example for guidance only

SUMMARY

Sl. No.	Type	Breed	Quantity		Value (Rs.)	Provided to No. of Farmers
			Nos	Kgs		
1						
2						
3						
4						
5						
	TOTAL					

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 of copies
Research papers	-	-	-
Total			
Technical reports			
Popular articles	Contact Farming –Advantages and disadvantages for the farmers (in Assamese) published in the “Namanir Asom” dated 27 th Nov, 2009.	C.R. Deka and S. Brahma	1
	Mycorrhiza in plant nutrition (in Assamese) published in Mithinga (The nature) and Annual Multilingual Mouth Peace of Kokrajhar District National Children Science Congress published in connection with its District Congress held at Srirampur on 5 th Oct, 2009.	Dr. U. J. Sarmah & Mrs. M. Chakravorty	1
	Integrated nutrient management in plants (in Assamese) published in Dainik Agradoot, 3 rd March, 2010.	Dr. U. J. Sarmah & Mrs. M. Chakravorty	1
	Nursery raising techniques of winter season vegetables and their management (in Assamese) published in Dainik Agradoot on 4 th Nov, 2009.	Mrs. S. Brahma	1
Leaflets/folders/Bulletin Bulletin	Cultivation practices of edible Bamboo Species. (in Assamese) Bulletin No:05/2010	C.R.Deka, Y. Prasad, S. Brahma, M. Chakravarty & M.U. basumatary	200
	Role of KVK in agricultural development through establishment of farmers. (in Assamese) Bulletin	C.R.Deka, Y. Prasad, S. Brahma, M. Chakravarty & M.U. basumatary	500

	No:06/2010		
	Green manuring for soil fertility management (in Assamese) Bulletin No: 03/2010	M.Chakravarty, S. Brahma, C.R.Deka & M.U. Basumatary	200
	Commercial cultivation of Okra (in Assamese) Bulletin No: 01/2010	S. Brahma, Y. Prasad, M. Chakravorty & C.R. Deka	200
	Improved cultivation practices of Banana (in Assamese) Bulletin No: 02/2010	S. Brahma, Y. Prasad, M. Chakravorty & C.R. Deka	200
	Soil fertility management of Sali Rice (in Assamese) Bulletin No. 04/2010	M.Chakravarty, S. Brahma, C.R.Deka & M.U. Basumatary	200
	Nursery raising techniques of cold crops. Bulletin No. 07/2010	S. Brahma, Y. Prasad, M. Chakravorty & C.R. Deka	200
	Layout and management of model kitchen garden (in Assamese) Bulletin No. 08/2010	S. Brahma, Y. Prasad, M. Chakravorty & C.R. Deka	200
Leaflet	Importance of soil testing (in Assamese) Leaflet no. 01/2010	M.Chakravarty	500
	Method of soil collection from crop fields for soil testing (in Assamese) Leaflet no. 02/2010	M.Chakravarty	500
	Nursery raising techniques and management of coconut and arecanut seedlings (in Assamese) Leaflet no. 04/2010	S Brahma	200
	Integrated nutrient management in coconut and arecanut (in Assamese) Leaflet no. 03/2010	S Brahma	200
Total	16		
Grand Total	16		

* an example for guidance only

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: Nil

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

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

AN ILLITERATE OLD FARMER BECOMES A ROLE MODEL

Sri Sankar Lal Boro, S/o Late Satish Boro of village North Kashibari under Kokrajhar Block in the District of Kokrajhar is now 73 years old. He didn't see even the door of Primary School. Instead he used to visit his father's farming land from his very childhood. He started to learn ploughing at the age of 13-14 years. Mr. Boro inherited 2.67 ha of land and at that time the agricultural production from his quantum of land was quite plenty. But after few years things started changing and his agricultural production started gradually deteriorating. About 40 years ago he came in contact with one agricultural officer late Bineswar Brahma, who advised him to use inputs like fertilizer, high yielding varieties for higher production. Thus he could enhance his agricultural production to some extent. But total adoption of scientific methods of cultivation was far from his reach.

Quite a few years back he incidentally participated in one training programme organized and conducted by KVK, Gossaigaon. That was the beginning and since then he didn't have to look back. In the training programme, which he attended for the first time he was greatly motivated by the concerned resource persons of the training programme. Later he invited the scientists of KVK, Gossaigaon to his house and showed his farming land and sought suggestions from them for enhancing his agricultural production.

The scientists took stock of his resources and constraints and suggested him to undergo more training on different disciplines like agronomy, horticulture, soil science, plant protection etc. Thus he gathered vast scientific knowledge from such training programme. Moreover, for improving his skill several OFT's and FLD's were conducted in the fields of Mr. Boro under the direct supervision of the scientists. All these helped Mr. Boro adopt total scientific methods in his farm lands. With the proper application of his gained knowledge and improved skill he could enhance his agricultural production to a great extent.

At present he possesses 7.33 ha of land out of which he inherited 2.67 ha of land as paternal property and purchased another 4.67 ha from the income generated by him from improved agriculture. At present he is cultivating rice in 4.0 ha of land at his own and leased out another 2.67 ha to share croppers. Almost 0.67 ha of land consists of his homestead. Different improved varieties of rice like Ranjit, Mahsuri and some of the traditional varieties of rice like Borni, Phulpakhri and Bhog are being cultivated by Mr. Boro. Moreover, he is cultivating rubber plants in about 0.40 ha of land in his homestead and is earning Rs. 50,000.00 per year in initial stage. He also possesses forest trees like teak, titachop, sisho etc. in about .04 ha of land. He is also growing horticultural crops like potato, cauliflower, cabbage, tomato, brinjal etc. In his farm, Mr. Boro produces 320 Qt of rice, 150 Qt of potato, 50 Qt of cabbage, 20 Qt of cauliflower, 45 Qt of tomato, 30 Qt of brinjal and 5 Qt of rubber annually.

From his income he purchased a pumping set, a power tiller and a paddy weeder. At present his annual income is Rs. 5,00,000.00 from different enterprises. Such incomes helped Mr. Boro bring up his children whom he could impart higher education. Both of his two sons are employed as Engineers in higher position. His only daughter graduated from Kokrajhar College and got married.

Observing the above mentioned achievements of Mr. Boro, District Agriculture Officer awarded district level first prize, which consisted of Rs. 30,000.00 in cash on Independence Day, the 15th August, 2009.

Now Mr. Boro is a successful farmer and a role model for the farmers not only of Kokrajhar district but of entire BTC. He could prove that lack of formal education is not a barrier for adopting scientific methods in order to become a successful and progressive farmer. Mr. Boro is a living and glaring example of this fact.

AN UNEMPLOYED ENGINEER BECOMES AN IDEAL DAIRY FARMER

Mr. Madhusudan Ray, Son of Late. Jonardan Krishna Ray of village Tengapara under Kokrajhar Dev. Block in kokrajhar District was a brilliant student right from his childhood and graduated himself in Mechanical engineering in 1991 with first class. Like any other Engineering Graduate, it was but natural for him to dream of a colorful future for himself. He started attempting to manage a lucrative job. Time was passing and his search for a job was going on. But fate betrayed him and his attempt to manage a job became futile every time. At this time he came in contact with two other Engineers, one Sri. Dipti Brahma, B.E. (Mechanical) and another Sri Chakradhar Narzary, B.E. (Electrical) who fell in similar condition. All these three engineers including Mr. Ray formed a group and applied for the training programme under Chief Minister's Swaniyojan Programme. They were selected for the above mentioned training programme and underwent a six months course of training in Chepham Milk Speciality in Derabashi, New Chandigarh. In this institute about seven lakh litres of milk were collected daily from the surrounding villages for processing. This training programme motivated them to open a milk processing plant near Kokrajhar Town. But survey conducted by them revealed that it was almost impossible to collect the necessary raw materials i.e. milk for the proposed milk processing plant.

Under such circumstances they came to KVK, Gossaigaon to take advice from the Veterinary scientist who suggested them to start a dairy farm instead of a milk processing plant. Accordingly a project for the proposed dairy farm was prepared for them with which they applied for a loan from District Industrial Centre (DIC) in Kokrajhar Town. The DIC sent them to NEDFi where they were told that project forwarded by DIC could not be considered by it. If any loan has to be sanctioned the concerned applicants should undergo management training under NEDFi. Accordingly all the three members of the group underwent management training from IIE, Guwahati for one month and another training course of fifteen days duration from MANAGE, Hyderabad.

Coming back from there, they applied for a loan of Rs. 10,00,000/- (ten lakhs) and were granted only Rs.2,55,000/- (two lakhs fifty five thousands). With this meager amount, they started a dairy farm in the year 2003 in Kokrajhar Town. In accordance with the advice of the KVK, scientists, they purchased five local Cows. In the second batch they purchased six Cows of Holstein Frizian and Jersey Breed. Although it was a joint venture in the beginning, the two engineers, Mr. Dipti Brahma and Mr. Chakradhar Narzary could get employment and left the group. The entire burden fell on Mr. Ray. It was the hard time for him to manage the farm alone. Many a time the KVK scientists visited his farm and continue to provide necessary advice. For urgent problems local VAS was helping him. For long three years he could gain not even a single penny from the farm. But on fourth year things started improving. His production started increasing because the heifers produced by the initially purchased mothers started giving milk.

At present in the farm of Mr. Ray, there are twenty six numbers of milch Cows. Total number of animals in the farm including calves is sixty. The average daily production of milk in the farm is two hundred fifty litres. Mr. Ray employed six labourers for running the farm. His net profit in the farm is about one lakh per month. Thus Mr. Ray, an unemployed Engineer becomes an ideal dairy farmer. The interested dairy farmers and entrepreneurs now frequently visit his farm and take advice from him.

3.8 Give details of innovative methodology/technology developed and used for Transfer of Technology during the year: Nil

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.	Rice	Top portion of rice seedlings are cut and buried or fed to cattle before transplanting	To check the multiplication of stem borer
2.	Rice	Pulp of Pummelo is used in rice field	To control rice Gandhi Bug as the pulp may act as an attractant
3.	Bean	Extract yielded from overnight soaking of tobacco leaves in water is used	To control insect-pests

4.	Onion	Soaking of Onion seeds in water of "Hookah"	For quick germination
5.	Brinjal	Ash of fire wood is used in Brinjal cultivation	To control fruit and shoot borer
6.	Rice and Jute	Placing of branches of tree in rice and jute field	To control of rice stem borer and jute semi-looper. The branches facilitate predatory birds to sit and destroy the pests.
7.	Rice	Lighting of earthen lamp in rice field during Sep-Oct.	To trap insects and pests
8.	Bottle gourd and Arecanut	Piercing in cucurbits and areca nut plants	To increase fruit setting percentage
9.	Cattle	Juice of turmeric mixed with molasses and fed to cattle in empty stomach.	To expels worms. The mixture act as anthelmintic
10.	Goat	Mixture of black salt and 100 ml juice of garlic and ginger is used against tympany	To treat the Goat suffering from tympany
11.	Dairy	10 gm of Asafoetida (hing) is mixed with feed and fed to milch cow.	To increase milk production
12.	Cattle and Goat	Juice of Basak leaves when fed along with honey.	To control coughing. The juice act as cough syrup.

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

- Identification of courses for farmers/farm women

PRA techniques, SAC meeting, ZREAC meeting, Farmers visit to KVK, Bimonthly Zonal Workshop, Interaction with extension functionaries, Discussion with district and primary Pathar Parichalana Samiti (PPS), All Bodoland Farmers Association (DuBAA), etc.

- Rural Youth

PRA techniques, SAC meeting, ZREAC meeting, Farmers visit to KVK, Bimonthly Zonal Workshop, Discussion with district and primary Pathar Parichalana Samiti (PPS), All Bodoland Farmers Association (DuBAA), Extension Functionaries, Youth organizations, NGOs, SHGs etc

- In-service personnel

Bimonthly Zonal Workshop, SAC meeting, ZREAC meeting, Interaction with extension functionaries, PRA techniques, Interaction with youth organizations, NGOs, SHGs etc.

3.11 Field activities

- Number of villages adopted: 2
- No. of farm families selected: 45
- No. of survey/PRA conducted: 2

3.12. Activities of Soil and Water Testing Laboratory

Status of establishment of Lab :

- Year of establishment : 2009
- List of equipments purchased with amount :

Sl. No	Name of the Equipment	Qty.	Cost
1	Spectrophotometer	1 No	23,488.00
2	Flame photometer	1 No	22,490.00
3	PH Meter	1 No	7,384.00
4	Conductivity Bridge	1 No	8,673.00
5	Physical Balance (5 Kg capacity)	1 No	4,500.00
6	Physical Balance (2.5 Kg capacity)	1 No	3,000.00
7	Chemical Balance	1 No	32,500.00
8	Shaker	1 No	16,500.00
9	Rotary Shaker	1 No	19,800.00
10	Refrigerator	1 No	14,062.00
11	Hot Plate	1 No	3,000.00
12	Oven	1 No	18,960.00

13	Grinder	1 No	15,750.00
14	Double Water Distillation Apparatus	1 No	27,800.00
15	Water Distillation Still	1 No	9,970.00
16	Electronic Automatic KEL PLUS Digestion System	1 No	80,497.00
17	Electronic KEL PLUS Automatic Distillation System	1 No	1,50,110.00
Total			

3. Details of samples analyzed so far :

Details	No. of Samples	No. of Farmers	No. of Villages	Amount realized (Rs.)
Soil Samples	40	36	19	900.00
Water Samples	-	-	-	-
Plant Samples				
Petiole Samples				
Total	40	36	19	900.00

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)
Summer vegetables cultivation techniques	170	72	28000/ha	53000/ha
Cole crops production technology	91	66	34000/ha	46000/ha
Nursery techniques	88	52	74000/ha	114000/ha
Mushroom production technology	235	45	-	18000/Season
Fertiliser application in Boro rice	87	71	8000/ha	10000/ha
Improved variety of Rapeseed	90	60	8000/ha	16000/ha
Improved cultivation of Potato	90	80	19000/ha	25000/ha
Improved method of Banana plantation	87	76	10000/ha	140000/ha
Broiler farming	85	70	2500/month	4500/month
Composite Fish farming	56	30	35000/ha	75000/ha
HYV in Sali rice (Ranjit)	400	90	20000/ha	30000/ha
Control of shoot and fruit borer in Brinjal	60	30	6000/ha	9000/ha
Control of fruit scaring beetle in Banana	52	60	50000/ha	65000/ha
Techniques for preparation of Vermi compost	56	35	-	35000/year
Rearing of Pig	80	65	4500/pig	6500/pig

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

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

1	Adoption of HYV of Boro Rice – Joymati, Kanaklata	Area increased – 55 %
2	Adoption of HYV of Rapeseed – TS – 36 & TS – 38	Increase in area – 43 %
3	Commercial cultivation of Banana variety – Malbhog	Increase in area – 45 %
4	Adoption of control measures for late blight of Potato	Adoption – 86 %
5	Adoption of Broiler farming	Adoption – 20 %
6	Adoption of Piggery farming	Adoption – 45 %
7	Adoption of cultivation of Oyster mushroom	Adoption – 39 %

8	Adoption of Fish farming	Adoption – 33 %
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4.3 Details of impact analysis of KVK activities carried out during the reporting period

Sl. No.	Name of the specific technology/skill transferred	No. of participant	% of adoption	Changes in income (Rs.)	
				Before	After
1	HYV in Boro rice (Joymati & Kanaklata)	28	55	Rs. 22500/ha	Rs. 37000/ha
3	Production technology of Milky mushroom	60	40	-	Rs. 15000/Sesaon
4	Improved variety of Rapeseed (TS 36 & TS 38)	60	65	Rs. 7000/ha	Rs. 15000/ha
5	Improved method of Banana production	55	45	Rs. 75000/ha	Rs. 160000/ha
6	Integrated Fish farming	35	60	Rs. 50000/ha	Rs. 80000/ha
7	Management of fruit scaring beetle in Banana	26	50	Rs. 40000/ha	Rs. 80000/ha
8	Vermi-compost production techniques	55	30	-	Rs. 35000/Year
9	Rearing of Pig	55	50	Rs. 2000/Pig	Rs. 6000/Pig
10	Nursery management of Horticultural crops	30	45	Rs. 50000/ha	Rs. 135000/ha

5.0 LINKAGES

Functional linkage with different organizations

Name of organization	Nature of linkage
1. Department of Agriculture, GOA in Gossaigaon sub-division and Kokrajhar districts	Zonal workshop, Survey & PRA, Trainings, Seminar, Technology Mission, NWDPPRA, ARIASP and DLTF programmes
2. Department of Veterinary and line departments	Exchange of resource persons for various trainings, SAC and other meetings
3. Civil administration, B.D.O.'s and Banks	Participation in development programmes, formation of SHGs, NGOs etc
3. NGOs : Pathar Parichalana Samiti (PPS), All Bodoland Farmers Association (DuBAA), North East Development Society (NEDS), Sunjarang Allied Agriculture & Horticulture Marketing and Processing Cooperative society Ltd., Anjali Sukhati, Discovery club, Everest Sports club	Collaboration in survey, PRA, rganization of training programmes, conducting demonstrations, field visit and inspection
5. Research Stations, Agricultural University	ZREAC meeting, conducting trials and demonstrations, Diagnostic visit, invitation of Resource person, production and supply of seeds and planting materials 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 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.)

5.3 Details of linkage with ATMA

a) Is ATMA implemented in your district: Yes

S. No.	Programme	Nature of linkage	Remarks
1	Identification of problems and constraints faced by different socio-economic groups and farmers	Collaboration in Field survey, PRA, Group meeting	
2	Strategy for research and extension programme	Cooperation in preparation of integrated SREP	

5.4 Give details of programmes implemented under National Horticultural Mission

S. No.	Programme	Nature of linkage	Constraints if any
1.	Identification and selection of thrust crops under Technology Mission on Horticulture	Collaboration in land survey, field visit, plenary meeting	
2.	Implementation of different programmes for area expansion and development of Horticulture	Technical guidance, field visit and survey	
3.	Institutional training programmes for upgradation of knowledge and skills of beneficiaries selected under the mission	Designing of training course, Delivery of lecture as Resource Person	

5.5 Nature of linkage with National Fisheries Development Board

S. No.	Programme	Nature of linkage	Remarks
1	Training programmes for upgradation of knowledge and skills	Deputation of KVK Scientists	
2	Proposal for training programme for integrated development of fishery in Kokrajhar district	Designing of training course, Organising and conducting training programmes	

6. PERFORMANCE OF INFRASTRUCTURE IN KVK

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

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

Performance of instructional farm (Crops) including seed production

Name Of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty.	Cost of inputs	Gross income	
Cereals									
Rice									
Ahu rice									
Sali rice									
Buck Wheat	20.10.09 to 27.10.09	19.02.10 to 24.02.10	3.5	Local	Grain	15.75	4,275.00	25,200.00	
Maize									
Pulses									
Pigeonpea									
Oilseeds									
Rapeseed	15.10.09	16.01.10 & 17.01.10	0.5	TS-36	Seed	3.25	1,500.00	12,675.00	
Sesamum									
Niger	12.10.09	15.02.10 & 16.02.10	0.5	NG-1	seed	3.30	935.00	16,500.00	

Fibers									
Spices & Plantation crops									
Floriculture									
Fruits									
Vegetables									
Others (specify)									

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

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) : Nil

Sl. No	Name of the animal / bird / aquatics	Details of production			Amount (Rs.)		Remarks
		Breed	Type of Produce	Qty.	Cost of inputs	Gross income	

6.5 Rainwater Harvesting

Training programmes conducted by using Rainwater Harvesting Demonstration Unit: Nil

Date	Title of the training course	Client (PF/RV/EF)	No. of Courses	No. of Participants including SC/ST			No. of SC/STParticipants		
				Male	Female	Total	Male	Female	Total

Utilization of hostel facilities

Accommodation available (No. of beds) : 60

Months	Title of the training course/Purpose of stay	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
October 2009		Nil	Nil	
Total		Nil	Nil	
November 2009		Nil	Nil	
Total		Nil	Nil	
December 2009		Nil	Nil	
Total		Nil	Nil	
January 2010		Nil	Nil	
Total		Nil	Nil	
February 2010		Nil	Nil	

Total		Nil	Nil	The farmer's hostel needs major renovation and repairing. The furniture's and furnishings had also been damaged which need replacement
March 2010		Nil	Nil	
Total		Nil	Nil	
Total		Nil	Nil	
Grand total		Nil	Nil	

5 X 25= 125 (Duration of the training course X No. of trainees)

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	AAU, Jorhat	10253825316
With KVK	State Bank of India	Gossaigaon	11378641024 11378660228

7.2 Utilization of funds under FLD on Oilseed

Item	Released by ICAR		Expenditure		Unspent balance as on 31 st March, 2010
	Kharif 2009	Rabi 2009-10	Kharif 2009	Rabi 2009-10	
Inputs	10,687.50	14250	10686	12661	1591
Extension activities	1425.00	1900	1420	1900	5
TA/DA/POL etc.	2137.50	2850	1871	2783	333
TOTAL	14,250.00	19,000	13,977	17,344	1929

N.B. Spent from unspent balance

7.3 Utilization of funds under FLD on Pulses

Item	Released by ICAR		Expenditure		Unspent balance as on 31 st March, 2010
	Kharif 2009	Rabi 2009-10	Kharif 2009	Rabi 2009-10	
Inputs	14,250.00	14250	14224	14250	26
Extension activities	1900.00	1900	1880	1890	30
TA/DA/POL etc.	2850.00	2850	2714	2745	241
TOTAL	19,000.00	19,000	18,818	18,885	297

N.B. Spent from unspent balance

7.4 Utilization of funds under FPARP on Boro rice during the year 2009-10

Item	Released by ICAR		Expenditure		Unspent balance as on 31 st March' 2010
	Kharif 2009-10		Kharif 2000-10		
Operational Cost	9800.00		9667.00		133.00
Equipment	6000.00		3860.00		2140.00
Field day	6900.00		6778.00		122.00
Field day signboard	1000.00		1000.00		-
Report including photography	1000.00		1000.00		-
TA/DA/POL etc.	4000.00		3845.00		155.00
TOTAL	28,700.00		26,150.00		2550.00

7.5 Utilization of funds under FPARP on Toria

Item	Released by ICAR		Expenditure		Unspent balance as on 31 st March, 2009
	Kharif 2009-10		Kharif 2009-10		
Recurring contingency					
Extension activities					
TA/DA/POL etc.					
TOTAL					

7.6 Utilization of funds under RKVY Training

Item	Dept. of Agriculture, Govt. of Assam	Expenditure	Unspent balance as on 1 st April 2009
TOTAL			

7.7 Status of revolving fund (Rs.) for the three years

Year	Opening balance as on 1 st April	Income during the year	Expenditure during the year	Net balance in hand as on 1 st April of each year
April 2007 to March 2008	97,402.56	1,28,766.34	1,30,029.56	96,139.34
April 2008 to March 2009	96,139.34	1,29,163.00	1,37,407.34	87,895.00
April 2009 to March 2010	87,895.00	1,75,035.00	1,34,222.00	1,28,708.00

7.8 Utilization of KVK funds during the year 2009 -10 (Up to March, 2010).

S. No.	Particulars	Sanctioned (lakh)	Released (Rs.)	Expenditure (Rs.)
A. Recurring Contingencies				
1	Pay & Allowances	34.00	40,85,518.00	40,85,518.00
2	Traveling allowances	1.00	1,00,000.00	99,900.00
3	Contingencies			
		6.00		
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)		2,13,693.00	2,13,693.00
B	POL, repair of vehicles, tractor and equipments		62,053.00	62,053.00
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)		1,27,217.00	1,27,217.00
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)			
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)		79,384.00	79,384.00
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)		11,676.00	11,676.00
G	Training of extension functionaries		69,832.00	69,832.00
H	Maintenance of buildings		-	-
I	Establishment of Soil, Plant & Water Testing Laboratory		-	-
J	Library (News Paper)		-	-
TOTAL (A)		41.00	47,49,373.00	47,49,273.00
B. Non-Recurring Contingencies				
1	Works			
2	Equipments including SWTL & Furniture			
3	Vehicle (Four wheeler/Two wheeler, please specify)			
4	Library (Purchase of assets like books & journals)			
TOTAL (B)				
C. REVOLVING FUND		0.50	1,34,222.00	1,34,222.00
GRAND TOTAL (A+B+C)		41.50	48,83,595.00	48,83,495.00

8.0 Please include information which has not been reflected above (write in detail).**8.1 Constraints**

a. Administrative
1. Long distance from the head quarter (600 km) with poor transport and communication facility
2. On-campus vocational training could not be taken due to non-renovation of the hostel and lack of furniture and furnishings
b. Financial
1. Provision of funds for Traveling Allowance for trainees
2. Fund allocation under recurring contingency is insufficient in view of continuous price escalation.
4. Non-availability of funds in time for FLD hampers technology dissemination process and reduces KVK's impact
5. Procedures for release of fund should be more simplified
6. Budget should be provided timely so that fund can be utilized properly
7. More fund for infrastructure development
8. More fund for TA/DA for the Scientists and Staffs
c. Technical
1. Lowest speed of the existing internet facility.
2. Lack of STW and Godown hinders the farm activities of KVK
3. Deplorable office furnitures and inadequate space for sitting arrangement leads to poor working environment and low zeal of scientists
4. Lack of cupboard and shelves for systematic arrangement of the materials in the soil testing laboratory of the KVK.

Annexures

District Profile - I**Include the details of**

1. General census : - 2001.
2. Agricultural and allied census: - Agril. Census 2001 and Livestock Census 2008.
3. Agro-climatic zones: - Lower Brahmaputra Valley Zone (LBVZ) of Assam.
4. Agro-ecosystems: -

No.	Agro-ecological situation	Characteristics
1	Foot hills old mountain valley	Foot hills of Bhutan in northern part of the district. The soil is loamy to clay, rich in organic matter
2	Flood free riverine old alluvial plain	Plain areas, sandy to sandy loam soil free from flood
3	Flood prone riverine alluvial plain	Flood prone areas affected by river Champabati, Gaurang, Saralbhag and Sankosh
4	Hills and hillocks	Hills and Hillocks areas, red clay soil
5	Beels	Marshy/Swampy land, water logging low lying areas and covered with water hyacinth

5. Major and micro-farming systems: -

No.	Farming system identified
1	Agri + Horti + Dairy Cow + Goatery + Poultry + Duckery
2	Agri + Horti + Dairy Cow + Goatery + Piggery + Poultry + Duckery + Pigeon + Fishery
3	Agri + Horti + Dairy Cow + Piggery + Poultry
4	Agri + Horti + Dairy Cow + Buffalo + Piggery + Poultry + Duckery + Pigeon
5	Agri + Horti + Dairy Cow + Goatery + Poultry + Duckery + Fishery

6. Major production systems like rice based (rice-rice, rice-green gram, etc.), cotton based, etc.: -

No.	Cropping system in upland situation
1	Rice (DS) – Blackgram – Potato.
2	Rice (DS) – Sesamum – Rabi vegetables.
3	Rice (DS) – Kharif vegetables – Rabi vegetables.
4	Vegetables – Rabi vegetables.
No.	Cropping sequence in medium/medium low land situation
1	Rice (DS) – Rice (T) – Potato/Toria.
2	Jute – Rice (T) – Potato.
3	Jute – Rice (T) – Wheat.
4	Jute – Rice (T) – Toria/ Niger/ Linseed/ Lentil.
5	Jute – Rice (T) – Potato/ Rabi vegetables.
No.	Cropping sequence in flood affected area
1	Summer Rice – Rice (Late Winter rice)
2	Summer Rice – Potato/ Rapeseed/ Lentil/ Vegetables.
No.	Cropping sequence in perennial crop
1	Arecanut + Ginger + Turmeric

2	Arecanut + Betelvine + Pineapple + Ginger
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7. Major agriculture and allied enterprises: -

Sl. No.	Enterprises
1.	Rice Production
2.	Maize Production
3.	Wheat Production
4.	Buckwheat Production
5.	Black gram production
6.	Green gram Production
7.	Lentil Production
8.	Oil seed Production
9.	Fibre crop Production
10.	Commercial fruit crop Production
11.	Vegetables Production
12.	Spices crop Production
13.	Pig Farming
14.	Diary Farming
15.	Poultry Farming
16.	Duck Farming
17.	Composite Fish Farming
18.	Sericulture
19.	Handloom and Handycrafts

Agro-ecosystem Analysis of the focus/target area - II

Include

1. Names of villages, focus area, target area etc.

Villages under foot hills old mountain valley: Mothambil, Nasraibil, Jambaguri, Chengmari, Takampur, Jharbari, Ouguri, Raimana and Ranighat

Focus area: Rice, Maize, Vegetables, Pineapple, Sesamum, Buckwheat, Niger, Bee-keeping, Diary, Piggery, Poultry, Agro-forestry and Sericulture.

Target area: Rice, Maize, Vegetables, Pineapple, Sesamum, Buckwheat, Niger, Piggery, Sericulture and Agro-forestry

2. Survey methods used (survey by questionnaire, PRA, RRA, etc.)

Survey was performed by using PRA and RRA.

3. Various techniques used and brief documentation of process involved in applying the techniques used like release transect, resource map, etc.

Techniques used in PRA methods are transect walk, village mapping, seasonality calendar and historical trend analysis etc.

4. Analysis and conclusions

After completion of the survey we analysed the rural situation on agriculture and allied activities and finally identified that crop enterprises like Rice, Maize, Vegetables, Banana, Pineapple, Sesamum, Buckwheat, Niger and allied enterprises like Piggery, Diary, Sericulture and Agro-forestry are found very important.

5. List of location specific problems and brief description of frequency and extent/intensity/severity of each problem

Crop/Enterprise	Problems diagnosis	Brief description of frequency and extent/intensity/severity
Rice and Maize	Low yield due to growing of traditional variety	The problem is very severe due to traditional mind setup among the farmers
Vegetables	Low yield due to moisture stress	The problem is frequent during winter season
Pineapple	Low yield due to non availability of HYV	The problem is severe due to lack of planting material
Banana	Low yield due to Panama wilt	The problem is severe due entire district is affected by this disease
Sesamum and Niger	Low yield due to non-adoption of HYV	The problem is severe due to lack of knowledge about yield potentiality of HYV
Piggery and Diary	Low production of meat and milk due to non-adoption exotic breed	The problem is severe due to non-availability of exotic breed.
Sericulture	Low production of cocoon due to traditional methods of rearing and non-availability of DFLs.	The problem is severe due to lack of knowledge about scientific rearing of silk worm and inadequate supply of DFLs from Govt. Seed farm.

6. Matrix ranking of problems

Sl.No.	Problems
1.	Low yield rice and maize due to growing of traditional variety
2.	Low production of pig meat due to non-adoption exotic breed
3.	Low yield of vegetables due to moisture stress
4.	Low production of silk worm cocoon due to traditional methods of rearing and non-availability of Disease free layings (DFLs).
5.	Low yield of Pineapple due to non availability of HYV
6.	Low yield of Banana due to severe occurrence of Panama wilt
7.	Low yield oil seeds due to non-adoption of HYV

7. List of location specific thrust areas

Crop/Enterprise	Thrust area
Rice*	Popularisation of HYV of direct seeded rice
Vegetables	Low volume – high value vegetables
Piggery	Rearing of exotic Pig
Oilseeds (Sesamum and Niger)	Popularisation of improved varieties of Oilseed (Sesamum and Niger)
Piggery and Diary	Improvement of productivity of Piggery and Diary
Agro-forestry	Agro-forestry plantation Technology
Sericulture	Rearing of Eri, Muga and Silk worm
Apiculture	Popularisation of Beekeeping

8. List of location specific technology needs for OFT and FLD

Crop/Enterprise	Technology
Rice*	HYV of direct seeded rice
Vegetables	HYV of vegetable crops and fertility management
Oilseeds (Sesamum and Niger)	HYV of Oilseed (Sesamum and Niger) and irrigation management
Piggery and Diary	Rearing of exotic breed and supply of nutritive feed
Agro-forestry	Scientific plantation of forest crops
Sericulture	Pre and post rearing management and Chawki rearing of Muga
Apiculture	Scientific Bee-keeping practices (Use of modern bee boxes, honey Extractor etc.)

9. Matrix ranking of technologies

Sl. No.	Technology
1.	HYV of direct seeded rice
2.	Rearing of exotic Pig in scientific way
3.	HYV of vegetable crops and fertility management
4.	Pre and post rearing management and Chawki rearing of Muga
5.	HYV of Oilseed (Sesamum and Niger) and irrigation management
6.	Scientific plantation of forest crops/trees
7.	Scientific Bee-keeping practices (Use of modern bee boxes, honey Extractor etc.)

10. List of location specific training needs

Sl. No.	Training needs
1.	Scientific production technology for Rabi Oilseed and Pulse crops
2.	Improved Vermi-technology for compost production
3.	Integrated nutrient management
4.	Integrated pest management
5.	Scientific Diary, Piggery and Poultry farming
6.	Scientific cultivation of vegetables
7.	Scientific cultivation of fruit crops
8.	Integrated Pest and Disease management
9.	Scientific cultivation of Oyster mushroom

10.	Scientific production technology for Sali, Ahu and Boro rice
11.	Integrated Fish Farming
12.	Scientific rearing of Eri, Muga and Mulberry
13.	Scientific Bee-keeping
14.	Scientific plantation techniques for forest crops/trees
15.	Capacity building of farmers, rural youth and rural women

Technology Inventory and Activity Chart - III

Include

- Names of research institutes, research stations, regional centres of NARS (SAU and ICAR) and other public and private bodies having relevance to location specific technology needs

Sl.No.	Research Institute/Regional Centre
1.	RARS, AAU, Titabor
2.	RARS, AAU, Shillongini, Nagaon
3.	Sugarcane Research Station, AAU, Buralikson, Dergaon
4.	RARS, AAU, Diphu
5.	Department of livestock production and management, College of Veterinary Science, Khanapara, Guwahati
6.	Goat Research station, Directorate of Research (Vety), AAU, Byrnihat

2. Inventory of latest technology available *

Sl no	Technology	Crop/Enterprise	Year of release	Source of Technology	Reference/Citation
A. Crop improvement					
1	Gopinath, Kanaklata, TTB500-1, TTB501-5	Ahu rice(Direct seeded early ahu)	2009 Under pipeline	RARS, Titabar, AAU	-
2	TTB103-20,TTB103-21	Transplanted Ahu rice	Under pipeline	RARS, Titabar, AAU	-
3	Bishnuprasad, Jaymati, Jyotiprasad, Kanaklata, Chandrama, NBR2, NBR3	Boro rice	2005	RARS, Titabar, AAU	-
4	Gitesh, Prafulla,Jalashree, Jalkunwari, Gandhari, Srimanta, Mohan,Bharti, Mitrasali, Dharendra	Sali rice in flash water situation	2009	RARS, Titabar, AAU	-
5	Dinanath and Swarnabh	Boro rice	2009	RARS, Titabar, AAU	-
6	Tarun	Jute	2009	RARS, AAU, Shilongoni, Nagaon	-
7	SGI (Pratap)andSG21-5	Greengram	2009	RARS, AAU, Shilongoni, Nagaon	-
8	KU301 and USJD113	Blackgram	2009	RARS, AAU, Shilongoni, Nagaon	-
9	HUR-301and HUR-203	Rajmah	2009	RARS, AAU, Shilongoni, Nagaon	-
10	DBW-14 and HUW468	Wheat	2009		-
11	TS-46(Lakshmi)	Toria	2009		-
12	Dhansiri, Kolong, Nambar, Kapilipar	Sugarcane	2006	Sugarcane Research station, Buralikson, AAU, Dergaon	-
13	Doiyang	Sugarcane	2009	Sugarcane Research station, Buralikson, AAU, Dergaon	-
14	Keteki joha, Bakul joha	Scented rice Under pipeline	2007	RARS, Titabar, AAU	-
15	Bhogali Aghoni	Premier rice varieties	1997 2005	RARS, Titabar, AAU	-
B. Crop and Soil Management					
16	Package of practices of	Rice	2001	AAU, Jorhat	-

	hybrid rice (var PA 6444, DRRH1 and KRH2) in Boro season				
17	Seedling raising of boro rice inside polytunnel during cold period (end of Dec to mid of January)	Rice	2001	AAU, Jorhat	-
18	Weed management (Pre-emergence application of pretilachlor 0.75kg a.i./ha or butachlor 1kg a.i./ha followed by rotary paddy weeder at 40 days after transplanting in boro rice	Boro rice	2006	AAU, Jorhat	-
19	Weed management (Pre-emergence application 3-5days after planting of Metolachlor 1kg /ha followed by use of grubber at 40 DAP or garden hoeing at 20 and 40 DAP.	Tomato	2006	AAU, Jorhat	-
20	Weed management (Pre-emergence application of 3-5 DAP of Metolachlor 1kg/ha followed by the use of grubber at 40 DAP or garden hoeig at 20 and 40 DAP.	Brinjal	2006	AAU, Jorhat	-
21	Weed management Soil solarization with trans Parent polythene sheet (5 μ and 15 μ)	Okra Tomato cropping sequence	2005	AAU, Jorhat	-
22	Weed management Isoproturon 1kg a.i./ha + Metasufuon 4kg /ha or Sulfosulfuron 25g/ha	Wheat	2009	AAU, Jorhat	-
23	Seed Treatment Seed priming by soaking seeds over night before sowing for fast emergence and more uniform crop establishment	Wheat	2009	AAU, Jorhat	-
24	Staggered planting of rice cv. Gitesh	Rice	Under pipeline	AAU, Jorhat	-
25	Potassium management 15 kg K ₂ O /ha as basal in summer and kharif green gram recommended for CBVZ	Kharif greengram	2009	AAU, Jorhat	-
26	Potassium management 15 kg K ₂ O /ha as basal recommended for CBVZ	Summer and Kharif blackgram	2009	AAU, Jorhat	-
27	Potassium management 15 kg K ₂ O /ha as basal recommended for CBVZ	Lentil	2009	AAU, Jorhat	-
28	Green Harvest @25g/10lit. of water at 30 days after sowing	Toria	2009	AAU, Jorhat	-
29	Application of Borax@ 7.5 kg/ha as basal along with recommended doses of NPK for CBVZ	Toria	2009	AAU, Jorhat	-
30	Seed soaking in water for 24 hrs and then incubate in FYM + soil mixture (1:1) for 2-3 days and pre-germinated	Potato	2009	AAU, Jorhat	-

	seeds to be sown in nursery bed				
31	Seed treatment with Azotobacter@ 50g + PSB @ 50g and 15:12.5:25 kgNPK/ha application	Olitorius Jute (var. NOJ-14)	Under pipeline	RARS, AAU Shillongini, Nagaon	-
32	Rice based cropping system for irrigated medium land (winter rice-autumn rice-toria-rajmah)	Rice (Basundhara and Gopinath) Toria (TS-38) Rajmah (Udai)	2003	AICRP on Cropping System, AAU, Jorhat	-
33	Pulse based cropping sequence for rainfed upland (greengram-toria-lady's finger)	Greengram (Pratap) Toria (TS-38) Ladys Finger (Prabhani Kranti)	2007	AICRP on Cropping System, AAU, Jorhat	-
34	Practice for seed potato storage in On-Farm stores	Potato	2009	AAU, Jorhat	-
35	Seed rate of rainfed late sown toria after Sali paddy (rice-toria sequence) is 13kg/ha i.e.,33% higher than recommended rate of 10 kg/ha	Rice and Toria	2009	AAU, Jorhat	-
36	Ricebean for fodder should be sown in the month of March-April	Ricebean	2009	AAU, Jorhat	-
37	50% recommended dose of fertilizer + vermicompost @ 2.5t/ha+FYM @ 2.5t/ha to be applied	Oat and Hybrid Napier	2009	AAU, Jorhat	-
38	75% of recommended dose of NPK through chemical fertilizer and 25% N through water hyacinth compost in jute and 50% of recommended dose of fertilizer in toria (Jute-Toria ropping sequence)	Jute and Toria	2009	AAU, Jorhat	-
39	Liming @1/10 th of LR of soil in furrows integrated with FYM@ 2t/ha together with 50% recommended dose of NPK to be applied in the soils having pH <5.5 under rainfed/irrigated upland and medium land as a fertilizer for various pulses, oilseeds and vegetable crops	Pulse, Oilseeds and vegetables	2009	Deptt. Of Soil Sc., AAU, Jorhat	-
40	Incorporation of 45 days old Dhaincha (<i>Sesbenia aculeata</i>) substitute against 50% of recommended NPK in lowland kharif rice	Kharif rice	2009		-
41	Pitcher drip irrigation in banana	Banana	Under pipeline	AICRP on Water management, AAU, Jorhat	-
42	Drip irrigation in Assam Lemon	Assam Lemon	Under pipeline	AICRP on Water management, AAU, Jorhat	-
43	High density cultivation in banana	Banana (Malbhog/Bor Jahaji)	2004	AICRP on Tropical Fruits, Deptt. Of Hort. AAU, Jorhat	-
44	Mulching in pineapple with 50 micron black plastic film	Pineapple (Kew)	Under pipeline	Deptt. Of Hort. AAU, Jorhat	-
45	Potato cultivation using TPS	Potato	2005	AICRP on Potato, Deptt. Of Agronomy.	-

				AAU, Jorhat	
C. Plant Protection					
46	Management of bacterial wilt through seed treatment with bio-for @ 1g/10g seed, Root treatment @1kg in 2 litre of water for 1000 seedlings and soil application @ 10g mixed with 100g dried cowdung/plant	Brinjal and Tomato	Under pipeline	Deptt. Of Plant Pathology, AAU, Jorhat	-
47	Rice hispa management using Mycoinsecticides	Rice	2004	Deptt. Of Plant Pathology, AAU, Jorhat	-
48	Rhizome-rot management using biofor PF	Ginger	2004	Deptt. Of Plant Pathology, AAU, Jorhat	-
49	Use of pheromone traps @ 8 traps/ha for YSB	Rice	2009	AAU, Jorhat	-
50	Release of Trichogramma species @ 50, 000/ha (6 release)	Rice	2009	AAU, Jorhat	-
51	Application of Beauveria bassiana impregnated RHSDRB medium @ 3 kg/ha in 600 lits. of water (10^7 spores per annum)	Rice	2009	AAU, Jorhat	-
52	Mix blackpepper seed powder @3g/ks of dried pulse seed to control <i>Callosobruchus y bagsspp.</i> during storage and store in polybags with outer covering of gun	Pulse	2009	AAU, Jorhat	-
D. Animal Science					
53	Rearing of upgraded pig and goat	Pig and Goat	2005	AAU, Jorhat	-

3. Activity Chart

Crop/Animal/Enterprise	Problem	Cause	Solution	Activity	Reference of Technology
1. Olitorious Jute	Low yield	1. Poor fertility status of soil 2. Severe root rot disease incidence	Application of fertilizer @ 15: 12.5: 25 kg N.P.K per ha + Azotobacter @ 50 kg and PSB @ 50 gm per kg seed as seed treatment	1. Training and awareness programme. 2. OFT on integrated nutrient management	Sl. No. 13 of Technology Inventory
2. Ginger	Low yield	1. Severe Rhizome rot disease	Biological control through Rhizome treatment with Biofor @ 1 kg/ 10 kg of Rhizome + SOM treatment with Biofor and dry cow dung @ 100 kg Biofor /ha	1. Training and awareness 2. OFT on biological control of Rhizome rot through Biofor treatment of Rhizome and soil	Sl. No. 33 of Technology Inventory
3. Tapioca	Low yield and poor quality of traditional variety	1. Non-availability of short duration HYV	Short duration variety Sri Bijaya	1. Training, awareness and leaflets 2. OFT on varietal performance of Tapioca variety	Sl. No. 30 of Technology Inventory
4. Boro rice	Low yield	1. Infestation of stem borer and leaf folder	Biological control with T.Spp @ 50000/ ha	1. Training, awareness and leaflets 2. OFT on biological control of stem borer and leaf folder	Sl. No. 31 of Technology Inventory
5. Banana (Malbhog)	Low yield	1. Moisture stress during winter season from Nov-Feb	Pitcher drip irrigation through straw mulching	1. Training, awareness and leaflets 2. OFT on pitcher drip irrigation with rice straw mulching	Sl. No. 18 of Technology Inventory
6. Brinjal	Low yield	1. Severe incidence of wilt disease	Biological control through seed treatment with Biogen PTB @ 1 gm/ 10 gm of seed, root dip treatment @ 1 kg/ 1000 seedlings + soil application @ 15 gm/ ha (1:10 ratio with dry cow dung)	1. Training, awareness and leaflets 2. OFT on biological control of wilt disease in Brinjal	Sl. No. 32 of Technology Inventory
7. Ahu rice	Low yield of traditional variety	1. Non-availability of HYV	Dikhow	1. Training, field visit and field day 2. FLD on varietal evaluation of HYV of Ahu rice	Sl. No. of Technology Inventory
8. Rapeseed	Low yield	1. Non-availability of HYV	TS-36	1. Training, field visit and field day 2. FLD on varietal evaluation of HYV of Rapeseed.	-
9. Linseed	Low yield	1. Non-availability of HYV	T-397	1. Training, field visit and field day 2. FLD on varietal	-

				evaluation of HYV of Linseed	
10. Lentil	Low yield	1. Non-availability of HYV	B-77	1. Training, field visit and field day 2. FLD on varietal evaluation of HYV of Lentil	-
11. Rapeseed (TS-36) FPARP	Low yield	1. Moisture stress during Oct- March	One irrigation at 6 cm depth during flowering	1. Training, field visit and field day 2. FLD on irrigation management in Rapeseed	-
12. Boro rice (Jaymati) FPARP	Less economic due to frequent irrigation	1. Frequent irrigation by farmers	Application of 5 cm irrigation 3 days after disappearance of ponding water	1. Training, field visit and field day 2. FLD on irrigation management in Boro rice	-
13. Boro rice (Kanaklata)	Low yield	1. Non-availability of HYV	Kanaklata	1. Training, field visit and field day 2. FLD on varietal evaluation of HYV of Boro rice	-

1. Details of each of the technology under Assessment, Refinement and demonstration

Include

a. 1. Detailed account on varieties /breed characters for each of the variety/breed selected for OFT

Sl. No.	Crop	Varietal characteristics
1.	Jute, Var: JRO-524	<ol style="list-style-type: none"> 1. Parentage – JRO-632 x Sudan grass 2. Stem and foliage colour – full green 3. Seed coat colour- Blackish grey 4. Fruit- Doesn't shatter on maturity and drying 5. Takes 180-200 days for 50% flowering 6. Require 260-280 days for seed to seed maturity 7. Suitable for sowing in medium and high land 8. Average fibre yield 36 Qt/ ha
2.	Banana, Var: Malbhog	<ol style="list-style-type: none"> 1. Plant medium tall in stature 2. Bunch weight 15-18 kg with 6-7 hands / bunch 3. Fruit bold, stout, turning golden yellow on ripening, sour-sweet blended taste with pleasant flavor 4. Requiring 13-15 months for harvest
3.	Brinjal, Var: Pusa purple long	<ol style="list-style-type: none"> 1. Fruit shape –long (25-30 cm), smooth and tender 2. Colour- purple, glossy 3. Plant type –semi erect and dwarf 4. Maturity -100-110 days 5. Average yield -35 tones/ha
		1.

a. 2. Detailed account on varietal/breed characters for each of the variety/breed selected for FLD

Sl. No.	Crop	Varietal characteristics
1.	Rapeseed, Var: TS-36	<ol style="list-style-type: none"> 5. Plant height- Medium tall 6. Seed medium ball and yellow in colour 7. Oil content 45% 8. Seed yield 1200-1800 kg/ha
2.	Linseed, Var:	1. Resistant to rust and wilt

	T-397	2. Seed medium size and brown in colour 3. Oil content 43% 4. Seed to seed maturity 145 days 5. Yield under irrigated condition 13 qt/ha 6. Yield under rain fed condition 6 qt/ha
3.	Ahu rice, Var: Dikhow	2. Suitable for post flood cultivation 3. Duration-90-95 days 4. Average yield-4.8-5.6 qt / bigha
4.	Lentil, Var: B-77	1. Susceptible to wilt 2. Parentage- Jorhat local selection 3. Seeds small with dark spot 4. Maturity-120-125 days 5. Average yield -14-15 qt/ha
5.	Boro rice, Var: Kanaklata and Jaymati	1. Plant type semi dwarf, medium tall 2. Duration -165-175 days 3. Grain- medium slender

- b. Details of technologies that may include formulation, quantity, time, methods of application of nutrients, pesticides, fungicides etc., for technologies selected under FLD and OFTs: Nil
- c. Details of location/area specificity of recommended technology viz., for each of the variety/breed/technology selected for FLD and OFT: -