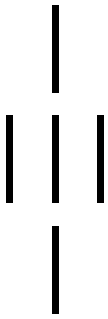
ANNUAL PROGRESS REPORT
2012-13



Krishi Vigyan Kedra, Jorhat
Assam Agricultural University
Teok-785112

PROFORMA FOR ANNUAL REPORT OF KVKS, 2012-13

1. GENERAL INFORMATION ABOUT THE KVK

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

Address	Telephone		E mail
KVK, Jorhat	Office	FAX	**kvkjorhat@ymail.com; kvkjorhat2@gmail.com**

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

Address	Telephone		E mail
	Office	FAX	
Assam Agricultural University, Jorhat			kvkaau@gmail.com

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

Name	Telephone / Contact		
Dr. Rupam Borgohain	Residence	Mobile	Email
		9435352939	**borgohainrupam@yahoo.co.in**

1.4. Year of sanction: 20061.5. Staff Position (As on 31st March, 2013)

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. Rupam Borgohain	Programme Coordinator	Plant Breeding and Genetics	37400 - 67000	62860	24.12.2009	Permanent	OBC

2	Subject Matter Specialist	Ms.Rumjhum Phukan	SMS	Plant Breeding and Genetics	15600 – 39000	24320	10.08.2011		Others
3	Subject Matter Specialist	Mr. Pabitra Saharia	SMS	Fishery Science	15600 – 39000	24320	07.08.2011		Others
4	Subject Matter Specialist	Ms. Mousumi Phukon	SMS	Entomology	15600 – 39000	23610	25.11.2009		OBC
5	Subject Matter Specialist	Dr. Pankaj Deka	SMS	Animal Science	15600 – 39000	22250	02.08.2011		Others
6	Subject Matter Specialist	Ms. Ira Sarma	SMS	Horticulture	15600 – 39000	22250	05.08.2011		Others
7	Subject Matter Specialist	Ms. Bibha Ozah	SMS	Soil Science	15600 – 39000	22250	04.08.2011		Others
8	Programme Assistant	Ms. Binapani Deka	Prog. Assistant	Home Science	8000 - 35000	16300	10.08.2011		Others
9	Computer Programmer	Mr. Shantanu Saikia	Prog. Assistant (Computer)	Computer Science	8000 - 35000	16300	08.11.08		Others
10	Farm Manager	Mr. Manab Bikas Gogoi	Farm Manager	Biotechnology	8000 - 35000	13290	14.10.2011		OBC
11	Accountant / Superintendent	Mr. Dibyajyoti Bharali	Accountant cum Office	NA	8000 -	12900	21.02.2012		Others

			Superintendent		35000				
12	Stenographer	Mr. Biman Jyoti Phukan	Stenographer cum Computer Operator	NA	8000 - 35000	8000	18-2-2012		OBC
13	Driver	Mr. Pankaj Borah	Driver	NA	5200-20200	7400	21.02.2012		OBC

1.6. Total land with KVK (in ha) :

S. No.	Item	Area (ha)
1	Under Buildings	1.20
2.	Under Demonstration Units	1.00 (RKVY)
3.	Under Crops	5.30
4.	Orchard/Agro-forestry	2.13
5.	Others (specify)	2.30

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	30.09.2009	547 .00	42,33,000.00	-	-	-
2.	Farmers Hostel	ICAR	10-2-2012	311.50	17,12,249.00 (Total value 24 lakhs)	-	-	-
3.	Staff Quarters (6)							
	a. PC quarter (1)	ICAR	30.09.09	108.47	8,24,177	-	-	-
	b. SMS quarters (2)	ICAR	06.03.09	76.65 x 2	11,83,565	-	-	-
	c. Farm manager & Pas quarter (2)	ICAR	30.09.09	96.90	7,73,824	-	-	-

	d. Supporting Staff quarters (1)	ICAR	06.05.09	37.80	3,14,300	-	-	-
4.	Demonstration Units (2)							
	1. Cattle shed	RKVY	2010	36.45	2,33,972.00	-	-	-
	2. Vermicompost unit	RKVY	2010	46.80	1,41,774.00	-	-	-
	3. Mushroom Unit	RKVY	2010	27.00	1,99,515.00	-	-	-
	4. Poultry Shed	RKVY	2011	44.40	3,41,368.00	-	-	-
	5. Goattery unit	RKVY	2011	34.20	2,49,305.00	-	-	-
	6. Implement shed	RKVY	2010	170.00	9,40,866.00	-	-	-
	7. Piggery unit	RKVY	2010	41.04	2,80,000.00	-	-	-
	8. Demonstration unit (Display unit)	RKVY	2011	93.50	7,74,700.00	-	-	-
	9. Fertilizer godown	RKVY	2011	22.79	1,63,000.00	-	-	-
	10. Rice- Fish-Vegetable Unit	RKVY	2011	5332 (4 bighas)	2,00,000.00	-	-	-
	11. Fish pond	RKVY	2010	50m x 20m	68,533.00	-	-	-
	12. Deep tube well with distribution line	RKVY	2011	287.60 running m.	4,10,509.00	-	-	-
	13. Green House	ICAR	2011	10m x 8m	5,00,000.00	-	-	-
	14. Automatic Weather Station	RKVY	2011	3m X 3m	45,000.00	-	-	-
	15. Azolla production unit	RKVY	2012	9.9m X 5.5m	2,72,000.00	-	-	-
	16. Compost production Unit	RKVY	2012	9.6m X 5m	2,20,000.00	-	-	-
5	Fencing	ICAR	2012	800RM	15,00,000	-	-	-
		RKVY	2012	980RM	9,00,562.00	-	-	-

C) Equipments & AV aids

Sl. No.	Name of the equipment	Source of Fund	Year of purchase	Cost (Rs.)	Present status
1	Desktop Computer	ICAR	2007	32,000.00	Working
2	UPS	ICAR	2007	6,930.00	Working
3	Ledger Printer	ICAR	2007	7,571.00	Working
4	Xerox (1)	ICAR	2010	1,01,920.00	Working
5	LCD Projector (1)	ICAR	2010	98,000.00	Working
6	Digital Camera (1)	ICAR	2010	19,000.00	Working
7	Computer (2)	ICAR	2010	55,094.00	Working
8	Laser printer (1)	ICAR	2010	5,475.00	Working
9	UPS (2)	ICAR	2010	16,474.00	Working
10	Scanner (1)	ICAR	2010	2,724.00	Working
11	Fax (1)	ICAR	2010	15,190.00	Working
12	Trailer capacity 1.5 tone	RKVY	2008	-	Working
13	Dugged Wheel for 13 HP	RKVY	2008	-	Working
14	Hitch braket with pine set for 13 HP VST Tiller	RKVY	2008	-	Working
15	Five Tyne cultivator for 13 HP VST Sakti power Tiller	RKVY	2008	-	Working
16	Tail wheel float for 13 HP VST power tiller	RKVY	2008	-	Working
17	Wheel Changer for BHP VST Power tiller	RKVY	2008	-	Working
18	Two share MB plough to be fitted with 13 HP VST Sakti power tiller	RKVY	2008	-	Working
19	Handle weight Assembly for 13 HP power tiller	RKVY	2008	-	Working
20	Short rotary for power tiller	RKVY	2008	-	Working
21	Extension lagged wheel for power tiller	RKVY	2008	-	Working
22	Straight blade 18 Nos	RKVY	2008	-	Working
23	Water pump with accessory-suction pipe & head	RKVY	2008	-	Working
24	Legged wheel carrier for power tiller	RKVY	2008	-	Working

25	Motorized knapsack sprayer with 1.2 HP petrol/kerosine engine	RKVY	2008	-	Working
26	Mechanized brush cutter	RKVY	2008	-	Working
27	Model –sparta-37 petrol	RKVY	2008	-	Working
28	driven 2 stroke engine	RKVY	2008	-	Working
29	Multi purpose power	RKVY	2008	-	Working
30	weeder, Model –APW-43	RKVY	2008	-	Working
31	2-stroke engine	RKVY	2008		Working
32	Sealing machine(8”) (1.5 x 3) mm sealing width option.	RKVY	2012	-	Working
33	Earth augar, Model –MTL-51	RKVY	2008	45,967.00	Working
34	Post hole Digger accessories.				
	i. Auger for digger(6”)	RKVY	2011	3,308.00	Working
	ii. Auger for digger(12”)	RKVY	2011	5,513.00	Working
	iii. Auger for digger(18”)	RKVY	2011	9,371.00	Working
	iv. Auger for digger(24”)	RKVY	2011	13,892.00	Working
35	Eight Row self propel rice transplanter	RKVY	2008	-	Working
36	Drag Net (Double knotted 100% nylon machine made)	RKVY	2008	-	Working
37	Fingering catching net(Knotless 100% nylone	RKVY	2008	-	Working
38	Ti -9 tine spring loaded Tiller	RKVY	2008	-	Working
39	Greaves pump set GSP-80B,Engine No-TKG 6748998 pump no-1798	RKVY	2008	-	Working
40	Chaff Cutter (J) No. Blade – 2	RKVY	2008	-	Working
41	T I plogh -2 disc (J)	RKVY	2008	-	Working
42	T I Disc Harrow (12 disc) (J)	RKVY	2008	-	Working
43	Lagged wheel	RKVY	2008	-	Working
44	Tail wheel Float	RKVY	2008	-	Working
45	Wheel changer	RKVY	2008	-	Working
46	Hitch bracket	RKVY	2008		Working
47	Rotavator, 25-35 and 35-50 HP tractor drawn	RKVY	2008	-	Working
48	Puddler	RKVY	2008	-	Working

49	Power paddy weeder	RKVY	2008	-	Working
50	Seed cleaner Model PC-2	RKVY	2008	-	Working
51	Power sprayer	RKVY	2008	-	Working
52	Knapsack mist blower cum duster	RKVY	2008	-	Working
53	Autoclave: Table top	RKVY	2011	8,810.00	Working
54	Autoclave vertical, media make, Model-7440PAD, Size-40x60 cm	RKVY	2011	93,638.00	Working
55	Horizontal Laminar air flow, Make-Rescolar, Model-RH58-7, Size-120 x 60 x 60 cm	RKVY	2011	57,930.00	Working
56	Hot air Oven (600x600x600) mm	RKVY	2011	36,888.00	Working
57	Portable Ph meter with 4 digit LCD display	RKVY	2011	2,270.00	Working
58	B.O.D Incubator(Low temp.) capacity - 171 lt.	RKVY	2011	1,22,131.00	Working
59	Spirit lamp(Brass)	RKVY	2011	280.00	Working
60	Wheel burrow (wheels made of cast iron with solid rubber ring)	RKVY	2011	5,175.00	Working

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

Sl.No.	Date	Name and Designation of Participants	Salient Recommendations	Action taken
1.	22.03.2013	RARS, AAU, Titabar District Agriculture Office District AH & Veterinary Office District Fishery Office District Social Welfare Office ATMA, Jorhat DRDA, Jorhat	1. The Hon'ble Vice Chancellor, Assam Agricultural University advised to formulate action plan for increasing production and productivity of cereals in the district to attain self-sufficiency. 2. Deptt. Agricultural	1.KVK, Jorhat performed various Technology Showcasing and FLD programme to increase the production and productivity of cereals in the district. Under Technology Showcasing programme, KVK, Jorhat sold 40 MT certified seed of Ranjit variety in the last year. This year, under the seed production programme, KVK, Jorhat has produced about 850 MT foundation seed of Ranjit variety covering an area of 170 ha. 2. KVK, Jorhat has also under taken the technology showcasing programme on Pea and Garlic during Rabi 2012-13.

		District Forest Office AIR, Jorhat Sericulture, Jorhat Lead Bank, UBI, Jorhat DIC, Jorhat Dairy Development Office Deptt. of Irrigation, Jorhat Soil Conservation, Jorhat Central Eri & Muga Research & Training Centre, Jorhat Rain forest Research Institute, Jorhat NABARD, Jorhat SIRD, Jorhat Deptt. of Agricultural Engineering, Jorhat	Engineering is interested to construct water harvesting structure in collaboration with KVK, Jorhat. 3. Emphasized on use of mechanical transplantor in paddy field in collaboration with Deptt. of Agriculture. 4. Eri and Muga silk Research and training institute, Lahdoigarh also plan to work with KVK, Jorhat in their different programmes. 5. The house suggested to popularize the technology of Pheromone trap application in farmers field against Brinjal fruit and shoot borer. 6. The Hon'ble Vice Chancellor, Assam Agricultural University advised to take different activities for the benefit of the rural youth. 7. Stressed on the concept of pig village.	3. Under the demonstration programme of "Multiple use of water", bunds were constructed to harvest the runoff water from hilly streams and a model of Integrated Farming System comprising crop-fish-duck component was developed successfully. 4. KVK, Jorhat has recently brought beetal buck and doe from GRS, Burnihut, for production of improved kids in KVK demonstration unit. 5. On the Hon'ble Vice Chancellor's suggestion for the riverine fisheries management, KVK could not directly intervene due limited fund provision of KVK. However, several attempts have been made in homestead pond management/fingerling production so as to increase fish production. 6. KVK, Jorhat has selected Vanaraja, a dual purpose improved variety, developed by PDP, Hyderabad as a need based intervention for tackling the problem with indigenous bird and conducting OFT and FLD in a village where backyard poultry rearing is a common practice. 7. Under TSP programme on "promotion of agriculture centric sustainable livelihood security for tribal farmers of Assam", a total of 2160 numbers of 1 month old Vanaraja birds will be supplied to a cluster of 10 tribal villages of the district to develop backyard poultry farming with improved variety. 8. KVK, Jorhat, have taken OFT on "Productive and reproductive performance of T&D pigs in Jorhat district". 9. KVK, Jorhat has been actively communicating with line departments in the mandatory activities of KVK, Jorhat.

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 – Animal husbandry – Fishery
2.	Agri – Horti – Animal husbandry
3.	Agri – Horti – Fishery
4.	Agri – Horti

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

S. No	Agro-climatic Zone	Characteristics
1.	Upper Brahmaputra Valley Zone	The Upper Brahmaputra Valley Agro-climatic Zone is characterized by the existence of hills, high land, plain land and char areas. Soils of this zone consist of mostly recent immature alluvium in char areas to mature ultisol in the piedmont, high land and hilly areas in the southern part. These soils fall under Entisol order. Annual rainfall varies from 1,200 mm to 2,400 mm. The temperature of the zone varies from a maximum of 37°C to a minimum of 7°C on an average. The zone, however, shows considerable variation in physiography, climate, soil, flood proneness, socioeconomic condition and cropping patters. Based on these parameters, the zone is further classified into eight Agro-Ecological Situations. Out of them six exist in the district and out of them two are related with forest and tea growing areas.

2.3 Soil type/s

S. No	Soil type	Characteristics	Area in ha
1.	Sandy	Contains sand separates 70% or more of the material by weight	15169
2.	Sandy loam	Exhibits property in between sandy and loam and contains more sand separates than loam	89070
3.	Loam	Contains a mixture of sand, silt and clay particles which exhibit light and heavy properties in about equal proportion	12491
4.	Silty clay loam	Contains more silt and clay than loam	23545
5.	Clay	Contains atleast 35% of clay separates and in most cases not less than 40%	12626

Source: Department of Agriculture, Jorhat

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 paddy	6450.00	161300.00	25.00
2.	Winter paddy	83100.00	2492900.00	30.00
3.	Summer paddy	2710.00	56600.00	20.94
4.	Wheat	520.00	600.00	12.00
5.	Black gram	2980.00	17900.00	6.00
6.	Green gram	2070.00	12400.00	6.00
7.	Pea	1050.00	6200.00	5.94
8.	Lentil	520.00	2700.00	5.20
9.	Mustard	9390.00	80000.00	8.50
10.	Sesamum	220.00	1100.00	5.20
11.	Potato	3110.00	298000.00	96.00
12.	Sugarcane	500.00	16700.00	33.75
13.	Ridge gourd	270.00	5000.00	18.20
14.	Pumpkin	610.00	30200.00	50.00
15.	Kharif vegetables	3600.00	310300.00	86.20
16.	Rabi vegetables	6500.00	429900.00	66.16
17.	Garlic	890.00	53400.00	60.00
18.	Ginger	150.00	7800.00	52.00
19.	Arecanut	3090.00	593200.00	192.00
20.	Banana	3400.00	519400.00	153.00
21.	Assam Lemon	920.00	106200.00	115.40

2.5. Weather data

Month	Rainfall (mm)	Temperature (C˚)		Relative Humidity (%)
		Mean Maximum	Mean Minimum	
1012-13				
April	1.8	28.7	19.7	75.0
May	16.4	31.0	22.8	81.0
June	8.8	32.5	25.4	82.0
July	15.4	32.1	25.4	85.0
August	10.8	32.4	25.5	84.0
September	6.2	33.2	25.6	81.0
October	0.9	31.9	22.0	78.0
November	0.6	26.9	14.3	77.0
December	0.6	24.9	11.1	77.0
January	0.5	21.4	10.3	81.8
February	0.3	25.7	12.2	73.0
March	2.5	27.9	16.5	72.0

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

Category	Population	Production	Productivity
Cattle			
Crossbred	13126	57.70 million lit (Milk)	236 lit/ animal/lactation (Average)
Indigenous	474886		
Buffalo	29845	0.80 Million lit (Milk)	180 lt/lactation/period of average 120 days
Sheep			
Crossbred	-	-	-
Indigenous	330	-	-
Goats	170793	0.425 million kg (Meat)	8 kg/goat
Pigs			
Crossbred	85625	0.25 million kg (Pork)	55 kg./pig (Average)
Indigenous	202797		

Rabbits	-	-	-
Poultry			
Hens			
Desi	444062	51.0 million nos	45 nos/ bird/yr (average)
Improved	12275		150 nos/ bird/ yr (average)
Ducks	190000		45 nos/ bird/yr (average)
Turkey and others			

Source: C-DAP Report 2009-10

Category	**Area**	**Production**	**Productivity**
Fish			
Marine			
Inland	43553.49 ha	10468.68 t	0.24 t/ha
Prawn			
Scampi			
Shrimp			

2.7 Details of Operational area / Villages (2012-13)

Sl. No.	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified thrust area
1	Teok	Kaliapani	Boloma Moran Gaon	Vegetables	1. Unawareness about scientific crop production 2. Nematode infestation in cucurbitaceous vegetables 3. Low participation of women in agriculture	1. ICM 2. Processing and value addition 3. Entrepreneurship development 4. Women empowerment 5. IPM

2	Kakojan	Sipahikhola	Fesual - II	Vegetable, Dairy, rice, fishery, duckery	1. Lack of scientific knowledge in crop production especially for vegetables 2. Lack of organized milk market 3. Lack of knowledge about management of group 4. Lack of knowledge and skill on scientific fish rearing	1. ICM and IPM on vegetables 2. Group marketing 3. Integrated livestock production and management 4. Group mobilization 5. Composite fish farming
3	Garmur	Kamalabari, Majuli	Mahkinagaon, Borbarigaon, Bhakat Chapori	Toria, vegetables, sugarcane, rice	1. Lack of HYV of rapeseed 2. Lack of awareness about water management 3. Unorganized market 4. Infestation of white grub in vegetable crops 5. Lack of knowledge about scientific cultivation of kharif pulse and oilseed	1. Introduction of newly released variety 2. Integrated crop management 3. IPM for vegetables 3. Marketing
4	Lahing	Selenghat	Siram Missinggaon	Rice, piggery, poultry	1. Low yield of local rice variety 2. Lack of knowledge about cultivation practices of HYV Sali rice. 3. Problem of water stagnation during planting period 3. Poor growth of pig 4 Incidence of diseases of poultry and pig 5. Lack of knowledge of farm women about livestock management	1. Introduction of HYV of sali rice 2. ICM and IPM 3 Integrated livestock management 4. Integrated poultry management 5. Women empowerment

5	Teok	Sipahikhola	Bailunggaon	Vegetables, rice, tea, poultry, fruits	1. Lack of knowledge on management practices of vegetables 2. Low production of fruits, especially banana 3. Low performance of desi poultry birds	1. ICM and IPM of fruits and vegetables 2. Integrated poultry farming 3. Mobilization of CIG
6	Lahing	Selenghat	Changmaigaon, Adarshagaon	Tea, goatery and poultry	1. Non availability of scented Sali HYV 2. Low production of local scented varieties	1. Introduction of scented HYV of Sali rice
7	Lahing	Selenghat	Haloapathar	Rice, rabi Vegetables, potato	1. Lack of knowledge about scientific cultivation of high value vegetables 2. Non availability of quality seeds and planting material	1. ICM and IPM for high value vegetables 2. Group mobilization 3. Entrepreneurship development
8	Simaluguri	Kaliapani	Dhemajigaon	Rice, Banana, poultry	1. Lack of commercial attitude towards banana cultivation 2. Non availability of quality planting material 3. Low yield of fruit crops 4. High mortality of poultry	1. ICM of fruit crops 2. Production of quality planting material of banana 3. Group mobilization 4. Integrated disease management of poultry
9	Teok	Kaliapani	Kaowimari	Rice, fishery, vegetable, livestock	1. Monocropping 2. Low yield of available rice varieties 3. Lack of scientific knowledge about natural fish farming	1. Group mobilization 2. Wasteland utilization through boro rice cultivation and community fish farming

10	Lahing	Selenghat	Majkuri	Sali rice, vegetable, livestock	1. High incidence of pests and diseases of vegetables 2. Lack of knowledge on judicious application of pesticides 3. Lack of knowledge on scientific cultivation of high value vegetables	1. ICM and IPM of vegetables 2. Production of quality paddy seeds 3. Popularization of high value vegetables
11	Teok	Kaliapani	Narrang pachanigaon	Banana	1. Low productivity, Water scarcity during winter	1. Introduction of integrated crop management
12	Simaluguri	Kaliapani	Kaliapani gohaingaon	Banana	1. Low productivity, Water scarcity during winter	1. Introduction of integrated crop management
13	Simaluguri	Kaliapani	Amtol	Black pepper	1. Lack of quality planting material 2. Low yield	1. Production of quality planting material

14	Bebejia	Titabar	Bor era gaon, Mejenga Grant 1 & 2, Dakhin pat gaon, Silikha Sanatan gaon, Madhapur, Tipumia, Rajabari	Rice	1. Occurrence of severe draught	1. Water management of rice 2. Rain water harvesting
15	Garumara	Dhekergarah	Ganakbari	Vegetables, rice	1. Lack of knowledge on water management practices	1. Water management
16	Meleng	Sipahikhola	Sudamoa gaon	Rice, vegetables	1. Low yield of rice 2. Under-utilization of existing fallow lands	1. Crop intensification 2. ICM and IPM of rice 3. Group mobilization

17	Mariani		Kheremiagaon, Danigaon, Bongaon, Bahonigaon, Newsonowal missingaon	Winter and kharif vegegtable, Potato, rapeseed, black peper, banana, goatery, duckery, pine apple	1. Low productivity of traditionl vaiety. 2. Unawareness of scientific production technology 3. Unscientific horticultural pocket. 4. Under utilization of natural resources.	1. Organic vegetable and fruit production. 2. Entrepreneurship development for rural youths and farm women. 3. Integrated Nutrient Management. 4. Increasing crop productivity through scientific management 5. Introduction of improved bred of pig, and poultry suitable for backyard rearing. 6. Integrated Pest and Disease management in crop and vegetables.

18	Kamala bari	Majuli Development Block	Mahkinagaon, Bhakat chapari, Danigaon, Borbarigaon, Gormur, Kamalabari, Gormur, Aauniati	Sali rice, rapeseed & mustard, rabi vegetables, potato, garlic, apiary piggery, fish production	1. Low crop productivity 2. Unawareness of scientific production technology 3. Pest and disease incidence especially in vegetables 4. Injudicious use of pesticides 5. Traditional low productive pig, duck poultry production. 6. Lack of management of natural depression for fish production	1. Integrated farming systems 2. Entrepreneurship development for rural youths and farm women. 3. Integrated Nutrient Management. 4. Increasing crop productivity through scientific management 5. Integrated livestock production and management 6. Introduction improved bred of pig, duck and poultry suitable for backyard rearing. 7. Integrated Pest and Disease management in crop and vegetables.

19	Fesual	Central Development Block, Chipahikhola	Fesual No-II goan, Fesual No-I gaon, Holongpara Gohaingaon, Karigaon, Jotokia, Hingipulia	Potato, kharif and rabi vegetables, ginger, banana, Assam lemon, fishery, Goatery, dairy Mushroom	1. Mono cropping 2. Unorganised marketing of Milk, Kharif and Winte vegetable 3. Water scarcity during winter season 4. Lack of awareness about child care and nutrition 5. Pest and disease incidence 6. Injudicious use of chemical pesticides	1. Rain water harvesting 2. Increasing crop productivity through scientific management 3. Orgnanised marketing under group approach. 4. Integrated pest and disease management 5. Entrepreneurship development for rural youths 6. Integrated farming systems 7. Women empowerment
20	Ellengmora	Dhekorgora, Development Block	Namdeori gaon, Neul gaon, Laliti, Bahphola, Upper Deori Gaon	Kharif and rabi vegetables, Assam lemon, piggery, fishery, poultry, paddy	1. Mono cropping 2. Lack of Scientific cultivation practices in paddy & vegetables 3. Pest and disease incidence 4. Lack of scientific management practices of piggery 5. Lack of scientific pisciculture	1. Piggery development 2. Fishery development 3. Commercial cultivation of vegetables

3. TECHNICAL ACHIEVEMENTS

3. A. Details of target and achievements of mandatory activities by KVK during 2012-13

Discipline	OFT (Technology Assessment and Refinement)				FLD (Oilseeds, Pulses, Maize, Other Crops/Enterprises)			
	Number of OFTs		Number of Farmers		Number of FLDs		Number of Farmers	
	Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
Plant Breeding	7	7	25	25	3	3	12	12
Horticulture	1	1	2	2	2	2	2	2
Soil Science	2	2	5	5	-	-	-	-
Plant Protection	2	2	6	6	2	2	7	7
Animal Husbandry	4	4	40	40	1	1	5 SHG	5 SHG
Home Science	1	1	3 SHG	3 SHG	1	1	4	4
Fishery	1	1	3	3	3	3	8	8

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	-	-	-	-	-	-	-	-
Rural youth	2	2	100	100	2	2	2	2
Extn. Functionaries	-	-	-	-	-	-	-	-

Seed Production (Qt.)		Planting material (Nos.)	
5		6	
Target	Achievement	Target	Achievement
Sali paddy-variety Ranjit	27.8 q	Cabbage - Green Express	500 seedlngs
KDML	2.1 ql	Cauliflower- NP 2801	500 seedlngs
Mahsuri	7.75 q	Knolkhol - Soldier	500 seedlngs

Blackgram	0.50 q	Tomato - Arjuna, Rocky	3000 seedlngs
Brinjal	200 g	Brinjal - Longai	1000 seedlngs
Tomato	300 g	Banana - Amrit Sagar	200 sucker
Marigold	1kg seed	Pineapple- Kew	1000 sucker
		Garbera - Red-gem	200 nos. sucker
		Ginger - Moran ada	50 kg rhizome
		Turmeric - Megha Turmeric	60 kg rhizome

3.B. Abstract of interventions undertaken

Sl. No	Thrust area	Crop/ Enterprise	Identified problems	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	Integrated Crop Management	Sali paddy	Recurrent flash floods	Performance of paddy variety *Swarna Sub-1* in flash flood situation against *Jalashree* and *Jalkunwari*	-	-	-	Field visit	Rice seed , Fertilizer
2		Sali paddy	Low yield of existing short duration varieties for post flood situation	Assessment of paddy variety *kolong* under post flood situation	-	-	-	Field visit	Rice seed , Fertilizer
3		Sali paddy	Lack of varieties under low input management condition	Assessment of paddy variety *Gandhari/ Srimonta*/*Bharati/Mohan* under low input condition	-	-	-	Field visit	Rice seed , Fertilizer

4		Sali Paddy	Low yield of existing medium duration Sali varieties for double cropped areas	Assessment of Paddy variety *Mulagabhoru* and *TTB 404* for double cropped areas against *Satyaranjan, Basundhara* and *Kanaklata*	-	-	-	Field visit	Rice seed , Fertilizer
5		Black gram	Absence of drought resistant vatieties of Blackgram	Assessment of Black gram variety SBC 40/ PU31	-	-	-	Field visit	Blackgram seed, Fertilizer
6		Toria	Low yield of existing varieties under late sown condition	Assessment of late sown toria variety TS-67 and JT- 90-1	-	-	-	Field visit	Seed , fertilizer
7		Sugarcane	Low yield and sugar content due to cultivation of none descript sugarcane varieties.	-	Demonstration of sugarcane varieties 'kalang'		-	Field Day, Field visit	Sugarcane setts , fertilizer
8		Yellow Sarson	Non adoption of high yielding Yellow Sarson in Jorhat district	-	Large scale production performance and Water management in Yellow Sarson var	-	-	Field visit	Seed , fertilizer
9		French bean	Low yield of existing varieties	-	Performance of French bean variety Pusa Parvaty & Contender	-	-	Field visit	Seeds, fertilizer

10		Banana	Smaller size of fingers towards denavelled end leading to lower bunch weight	Enhanced Bunch yield by treating denavelled end (7.5 g urea + 7.5 g sulphate of potash in 100 ml water + 500 g fresh cowdung)	-	-	-	Expert visit	Sucker, fertilizer,
11		Mandarine orange	Low yield	-	Rejuvenation of Orchard, Crop-Mandarin Orange var. Khasi Mandarin	-	-	Field visit, popular article	
12		Marigold	Ignorance of commercial floriculture	-	Performances of Marigold, variety *Pusa narengi*	-	-	,- popular article	Seed, Ferilizer
13	Integrated Nutrient Management	Sali Paddy	Lack of knowledge of INM in Sali paddy	INM in Rice	-	-	-	Field visit,	Biofertilizer, ferlizer, seed, enriched compost
14	Integrated Nutrient Management	Sali Paddy	Detorioration of Soil quality due to heavy use chemical fertilizer	Effect of Green manuring crops in Rice based cropping system	-	-	-	Field visit	
15	Integrated Nutrient Management	Sali Paddy	Deterioration of Soil quality due to heavy use chemical fertilizer	Azolla cultivation in Rice field to supplement the Nitrogenous fertilizer	-	-	-	Field visit	

16	Integrated Pest Management	Brinjal	Heavy incidence of fruit and shoot Borer	Management of Brinjal Fruit and Shoot Borer	-	IPM in solanaceous vegetablesl	-	Method demonstrationField visit	Seed, Fertilizee, Pheromone trap, Neem based pesticides
17	Storage Pest Management	Blackgram/ Greengram	High Bruchid infestation during staorage	Management of stored grain pest in blackgram/ green gram	-	-	-	Method demonstrationField visit	Plypropylene bag Black pepper powder, Gunny bag
18	Integrated Pest Management	Ahu paddy	Heavy incidence of yellow stem borer, leaf folder	-	IPM in ahu paddy	-	-	Method demonstrationField visit, Radio talk	Pheromone trap, lure, neem based pesticide, banner
19	Beneficial insect	Toria/ Apiary	Low pollination	-	Rearing of Indian bee in Toria Cultivation	-	-	Method demonstrationField visit	Bee colony, beehive, stand, smoker, honey extactor
20	Breed Introduction	T & D pig	Low production potential of indegenous pigs	Reproductive & productive performance of T&D pigs in Jorhat district	-	Scientific management of pigs	-		Piglet, Medicine, Vaccine
21	Breed Introduction	CharaChemballi Duck	Poor production performance of local duck	(Productive performance of Chara-Chemballi duck and its economic impact on women self-help group	-	-	Duck farming as a means of livelihood security of rural farmers		Duckling, Feed, medicine

22	Housing	Goatery	Occurance of Respiratory and parasitic diseases in traditional housing system	Improved housing with locally available materials for scientific goat farming	-	Goat farming as a means of livelihood security of rural farmers		Method demonstrationField visit	Materials like bamboo, thatch for construction of housing
23	Feeding Management	Poultry	Early chick mortality due to poor brooding and feeding management in backyard farming system	Use of improved brooding and feeding practices in backyard poultry farming to reduce early chick mortality)	-	-	-	Method demonstration, popular article	Day old chicks, Feed, Medicine, Brooder
24	Breed introduction	Vanaraja	Low production potential of indigenous birds	-	Introduction of improved backyard dual purpose bird in Jorhat district	-	Scientific management of backyard poultry	Method demonstration Field visit	Day old chicks, Feed, Medicine,
25	Energy saving tools	Rabi Vegetables	Non appropriate tools for women leads to fatigue	Uses of Women friendly Hand Fork , circular blade weeder & introduction of improved garden rake in farmers community	-	Uses of women friendly tools	-	Method demonstration	Implements- Hand fork, circular weeder, garden rake

26	Energy saving tools	Tea plucking basket	Traditional plastic bags are uncomfortable and quality of leaves deteriorate due to non aeration	-	Ergonomically Improved Tea Plucking Basket	-	-	Method demonstration Field visit	Tea plucking basket
27	Quality Fish seed production	Fisheries	Non availability of desired quality seed at the right time	Production of quality fish seed	-	-	-	Method demonstration Field visit	Seed, feed, fertilizer
28	Composite fish culture	Fisheries	Lack of Scientific Psciculture	-	Scientific species combination and ratio in composite fish farming	-	-	Method demonstrationField visit	Fingerling, feed
29	Feeding Management	Fisheries	Low production potential due to lack of feed management	-	Use of Sushama a supplementary feed developed by FRC,AAU in composite fish culture			Method demonstration Field visit	Sushama
30	Rice-Fish farming	Fisheries	Non adoption of the existing rice ecosystem for fish culture	-	Integrated Rice-Fish farming		-	Method demonstration Field visit	Advanced fingerling, feed
31	Soil water conservation	Bhoot jolokia , ,	During Oct.-Nov. decreased soil temperature checks plant growth	-	Performance of Bhoot jolokia under plastic mulch	Integrated farming system	-	Method demonstration Field visit, popular article, field day, Bulletin	Bhoot jolokia seedling, fertilizer, pesticide , feed,

32	IFS	Duckery	Wasteland created by runoff water from hills	-	Duckery as a component of IFS	-	-	Method demonstration, field visit , Bulletin	Duckling, feed, medicine,
33	IFS	Fisheries	Wasteland created by runoff water from hills	-	Fishery as a component of IFS	-	-	Method demonstration, field visit , Bulletin	Fingerling, Feed
34	Integrated Crop Management	Boro rice	Low production in the traditional system	-	System of rice intensification	-	-	Method demonstration Field visit, Bulletin, field day	Seed, fertilizer, pesticide
35	Soil and water conservation	Tomato variety Rocky	Frequent watering required	-	Soil water conservation using mulching	-	-	Method demonstration Field visit, Bulletin, field day	Seedlings fertilizer, Plastic mulch
36	Resource Conservation Technologies	Water harvesting structure	Water defecit during the winter months	-	Improvement of rain water harvesting structure	Training cum awarenes s camp on water harvestin g	-	Method demonstration Field visit,	Plastic lining for ponds, bricks
37	Water Management	Brinjal variety Borbeng ena	Low production due to water defecit during the critical stages of crop growth	-	Water management in Brinjal	-	-	Method demonstration Field visit, Bulletin, field day	Seeds, fertilizer POL for irrigation

38	Organic Farming	Turmeric variety Megha Turmeric	Heavy use of chemical fertilizer and pesticide	-	Organic Farming in Turmeric	Organic management of pest and diseases in turmeric	-	Method demonstration Field visit, Bulletin,	Rhizome,Biofertilizer, Biopesticides, neemcake
37	Organic Farming	Pineapple variety Kew	Heavy use of chemical fertilizer and pesticide	-	Organic management of pineapple	Organic cultivation of Pineapple	-	Method demonstration Field visit, Bulletin	Pineapple sucker, Biofertilizer, Biopesticide, neemcake
38	Organic Farming	Black pepper Variety Panniur	Heavy use of chemical fertilizer and pesticide	-	Organic management of Black pepper	Organic management of pest and diseases in Black pepper	-	Method demonstration Field visit, Bulletin	Black pepper cuttings,Biofertilizer, Biopesticide, neemcake

3.1 Achievements on technologies assessed and refined

A.1 Abstract of the number of technologies assessed* in respect of crops/enterprises

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Varietal Evaluation	4	1	1	-	-	-	-	-	-	6
Seed / Plant production	-	-	-	-	-	-	-	-	-	-
Weed Management	-	-	-	-	-	-	-	-	-	-
Integrated Crop Management	-	-	-	-	-	1	-	-	-	1
Integrated Nutrient Management	3	-	-	-	-	-	-	-	-	3
Integrated Farming System	-	-	-	-	-	-	-	-	-	-
Mushroom cultivation	-	-	-	-	-	-	-	-	-	-
Drudgery reduction	-	-	-	-	1	-	-	-	-	1
Farm machineries	-	-	-	-	-	-	-	-	-	-
Value addition	-	-	-	-	-	-	-	-	-	-

Integrated Pest Management	-	-	1	-	1	-	-	-	-	2
Integrated Disease Management	-	-	-	-	-	-	-	-	-	-
Resource conservation technology	-	-	-	-	-	-	-	-	-	-
Small Scale income generating enterprises	-	-	-	-	-	-	-	-	-	-
TOTAL	7	1	2	-	2	1	-	-	-	13

**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 -Nil

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

Thematic areas	Cattle	Poultry/ Duckery	Sheep	Goat	Piggery	Rabbitary	Fisheries	TOTAL
Evaluation of Breeds	-	1	-	-	1		-	2
Nutrition Management	-	-	-	-	-	-	-	-
Disease of Management	-	-	-	-	-	-	-	-
Value Addition	-	-	-	-	-	-	-	-
Production and Management	-	-	-	-	-	-	-	-
Feed and Fodder	-	1	-	-	-	-	-	1
Small Scale income generating enterprises	-	-	-	-	-	-	-	-
Housing	-	-	-	1	-	-	-	1
Fish seed production	-	-	-	-	-	-	1	1
TOTAL	-	2	-	1	1	-	1	5

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	-	-	-	-	-	-	-	-

A.5. Results of On Farm Trials

<table>
<tr><th>Title of OFT</th><th>Problem Diagnosed</th><th>Technology Assessed</th><th>No. of Trials</th><th>Results of Assessment/ Refined (Data on the parameter should be provided)</th><th>Feedback from the farmer</th><th>Feedback to the Researcher</th><th>B.C . Ratio</th></tr>
<tr><td>1.Performance of paddy variety Swarna Sub-1 in flash flood situation against Jalashree and Jalkunwari</td><td>Recurrent flash floods</td><td>Swarna Sub-1</td><td>3</td><td>
<table>
<tr><td rowspan="2">.Parameters assessed</td><td colspan="2">Result</td></tr>
<tr><td>Technology (Swarna Sub-1)</td><td>Check (Jalakuwari)</td></tr>
<tr><td>1. No of flash flood</td><td>2</td><td>2</td></tr>
<tr><td>2. Duration of flood</td><td>7 & 6 days</td><td>7 days, 6 days</td></tr>
<tr><td>3. Crop stand after flood</td><td>90%</td><td>72%</td></tr>
<tr><td>4. Days to maturity</td><td>145 days</td><td>149 days</td></tr>
<tr><td>5. Yield</td><td>4.8 t</td><td>3.7 t/ha</td></tr>
<tr><td>6. Net return (Rs)</td><td>Rs 27000</td><td>Rs 20000</td></tr>
</table>
</td><td>The crop was submerged in two stages at seedling stage and vegetative stage. During the seedling stage (10th to 14th July, 2012, Uttar Dulia, 18th to 25th Sept, Mudoijan) and at vegetative stage (18th to 25th Sept) the crop was submerged for about seven days and 90% of the plants survived</td><td>The tested variety was subjected to two flashes of flood at the early vegetative stage and at panicle initiation stage. The seedling survival rate was quite good(90%) up to 7-15 days. Similarly, the yield level was also good with slender fine grain characteristics. Hence the variety was well accepted by the farmers.</td><td>1.5</td></tr>
<tr><td>2.Assessment of paddy variety kolong under post flood situation</td><td>Low yield of existing short duration varieties for post flood situation</td><td>Paddy variety kolong</td><td>3</td><td colspan="4">The crop was damaged in seedling stage due to heavy flood from 18th Sept to 25th Sept, 2012</td></tr>
</table>

<table>
<tr><td rowspan="8">3.Assessment of paddy variety Gandhari/ Srimonta/Bharati/Mohan under low input condition</td><td rowspan="8">Lack of varieties under low input management condition</td><td rowspan="8">Paddy variety Gandhari/ Srimonta/Bharati/Mohan</td><td rowspan="8">3</td><td>Parameters assessed</td><td>Gandhari</td><td>Srimonta</td><td>Bharati</td><td>Mohan</td><td>Ranjit (Check)</td><td rowspan="8">The 4 low input varieties were tested in 50% of the recommended fertilizer doses and the check variety was Ranjit. It was observed that under low input situation performance of all the varieties including the check was at par.</td><td rowspan="8">However the farmers particularly preferred ‘Srimanta’ and ‘Mohan’ due to their superior grain qualities as compared to the check</td><td rowspan="8"></td></tr>
<tr><td>1. Plant ht(cm)</td><td>138</td><td>144</td><td>123</td><td>115</td><td>110</td></tr>
<tr><td>2. No of tillers</td><td>10</td><td>11</td><td>10</td><td>11</td><td>13</td></tr>
<tr><td>3. Duration(d)</td><td>134</td><td>142</td><td>135</td><td>137</td><td>153</td></tr>
<tr><td>4. Panicle length(cm)</td><td>26</td><td>21</td><td>23</td><td>25</td><td>26</td></tr>
<tr><td>5. Grains/panicle</td><td>178</td><td>263</td><td>184</td><td>223</td><td>305</td></tr>
<tr><td>6. Yield(t/ha)</td><td>3.7</td><td>4.5</td><td>3.95</td><td>4.3</td><td>4.3</td></tr>
<tr><td>7. B:C Ratio</td><td>1.22</td><td>1.38</td><td>1.3</td><td>1.58</td><td>1.58</td></tr>
<tr><td>4.Assessment of Paddy variety Mulagabhoru and TTB 404 for double cropped areas against Satyaranjan, Basundhara and Kanaklata</td><td>Low yield of existing medium duration Sali varieties for double cropped areas</td><td>Paddy variety Mulagabhoru and TTB 404</td><td>3</td><td colspan="10">The crop was damaged in vegetative stage due to heavy flood from 18th Sept to 25th Sept, 2012</td></tr>
<tr><td>5.Assessment of Black gram variety SBC 40/ PU31</td><td>Absence of drought</td><td>Black gram variety SBC 40/ PU31</td><td>3</td><td colspan="10">The crop was damaged in vegetative stage due to heavy flood from 18th Sept to 25th Sept, 2012</td></tr>
</table>

<table>
<tr><td></td><td>resistant varieties of Blackgram</td><td></td><td></td><td colspan="6"></td></tr>
<tr><td>6.Assessment of late sown toria variety TS-67 and JT- 90-1</td><td>Low yield of existing varieties under late sown condition</td><td>toria variety TS- 67 and JT-90-1</td><td>3</td><td colspan="4"><table>
<tr><td>Parameters</td><td colspan="3">Result</td></tr>
<tr><td></td><td>JT-90-1</td><td>TS-67</td><td>TS- 36</td></tr>
<tr><td>1.Date of sowing</td><td>27.11.12</td><td>27.11.12</td><td>27.11.12</td></tr>
<tr><td>2. Pest and diseases infestation</td><td>negligible</td><td>negligible</td><td>negligible</td></tr>
<tr><td>3. Days of maturity</td><td>85-90 d</td><td>85-90 d</td><td>85-90 d</td></tr>
<tr><td>4. Yield</td><td>10.125 q/ha</td><td>8. 25 q/ha</td><td>7.125 q/ha</td></tr>
<tr><td>5. Net return(Rs)</td><td>Rs23477</td><td>Rs16875</td><td>Rs 12938</td></tr>
<tr><td>6. B:C Ratio</td><td>1.95</td><td>1.4</td><td>1.07</td></tr>
</table></td><td>Despite the late sowing, the two the varieties recorded higher yield than the check. The varieties will be suitable for cultivation after normal Sali rice which is harvested from late Oct to early Nov.</td><td>Farmers expressed interest in these two varieties.</td><td>JT-90-1 =1.95

TS-67=1.4

TS-36 =1.07</td></tr>
</table>

<table>
<tr>
<td>7.Enhanced Bunch yield by treating denavelled end (7.5 g urea + 7.5 g sulphate of potash in 100 ml water + 500 g fresh cowdung)</td>
<td>Smaller size of fingers towards denavelled end leading to lower bunch weight</td>
<td>(7.5 g urea + 7.5 g sulphate of potash in 100 ml water + 500 g fresh cowdung)</td>
<td></td>
<td>
<table>
<tr><th>Parameters assessed</th><th>Result</th><th></th></tr>
<tr><th></th><th>Denevelling Techno</th><th>Farmers practice</th></tr>
<tr><td>1. Finger No</td><td>15.0</td><td>14.66</td></tr>
<tr><td>2. Finger length</td><td>14cm</td><td>12.33 cm</td></tr>
<tr><td>3.Finger girth</td><td>13cm</td><td>12.16</td></tr>
<tr><td>4. Hands per bunch</td><td>7.66</td><td>7.00</td></tr>
<tr><td>5. Bunch weight</td><td>20.66 kg</td><td>18.33kg</td></tr>
<tr><td>6. Weight of first hand</td><td>2.46kg</td><td>2.00kg</td></tr>
<tr><td>7. Weight of last hand</td><td>2.3kg</td><td>1.76kg</td></tr>
<tr><td>8. Yield/ha</td><td>35.86 t</td><td>31.80t</td></tr>
<tr><td>9. Net return(Rs.)</td><td>594425.00</td><td>357225.00</td></tr>
<tr><td>9. B:C ratio</td><td>4.84</td><td>3.1</td></tr>
</table>
</td>
<td>The denavelled end chemical treatment was tested in 60 banana plants along with check (without treatment). It was observed that the treatment enhanced finger length, hands/branch, bunch weight, hand weight significantly and these increase in yield components significantly influenced yield per /ha of the crop.
Though the farmers are convinced on the efficacy of the technology, the labour intensive nature of the technology may be the main bottle neck for its spread.</td>
<td>Though the farmers are convinced on the efficacy of the technology, the labour intensive nature of the technology may be the main bottle neck for its spread</td>
<td>Denevelling Techno=4.84

Farmers practice= 3.1</td>
</tr>
</table>

<table>
<tr>
<td>8.Integrated Nutrient Management in Rice</td>
<td>Lack of knowledge of INM in Sali paddy</td>
<td>Azospirillum and PSB @ 4kg of each/ ha , 10kg P_2O_5 as Rock Phosphate and 40 kg K_2O as MOP)</td>
<td>3</td>
<td>
<table>
<tr><th>Parameters assessed</th><th colspan="2">Result</th></tr>
<tr><th></th><th>INM Technology</th><th>Farmers practice</th></tr>
<tr><td>1. Days of maturity</td><td>150 d</td><td>150d</td></tr>
<tr><td>2. Yield (4.5 t/ha)</td><td>4.5 t/ha</td><td>4.2 t/ha</td></tr>
<tr><td>3. Pest and diseases infestation</td><td>negligible</td><td>Negligible</td></tr>
<tr><td>4. Net return(Rs)</td><td>Rs 24580.00</td><td>Rs 21700.00</td></tr>
<tr><td>5. B:C Ratio</td><td>1.44</td><td>1.27</td></tr>
<tr><td colspan="3">6. Soil physico- chemical and biological properties</td></tr>
<tr><td>i. pH</td><td>6.60</td><td>5.08</td></tr>
<tr><td>ii. EC</td><td>0.20 dS/m</td><td>= 0.12 dS/m</td></tr>
<tr><td>iii. Av. N</td><td>315 kg/ha</td><td>295 kg/ha</td></tr>
<tr><td>iv. Av. P_2O_5</td><td>26 kg/ha</td><td>24.20 kg/ha</td></tr>
<tr><td>v. Av. K_2O</td><td>197.92 kg/ha</td><td>104.03 kg/ha</td></tr>
<tr><td>vi. OC</td><td>0.66%,</td><td>0.60%,</td></tr>
<tr><td>vii. Total Microbial Population</td><td>26.6×10^6</td><td>5.12×10^6)</td></tr>
</table>
</td>
<td></td>
<td>INM module using Azospirillum and PSB along with rock phosphate and potash was tested in Sali paddy (Var – Mahusuri). It was observed that the maturity duration, yield and B:C ratio was comparable both in case of the INM module and in farmers practice(without INM practice). However, soil physico-chemical and biological properties was found to be improved under INM practice as evidenced by the properties mentioned above</td>
<td></td>
<td></td>
</tr>
</table>

<table>
<tr>
<td>9.Azolla cultivation in Rice field to supplement the Nitrogenous fertilizer</td>
<td>Deterioration of Soil quality due to heavy use chemical fertilizer</td>
<td>Application of fresh Azolla @ 500 kg in the standing water after establishment of the seedlings.
The treatments details:
T1: Azolla +50 % RD of N+ full P+K
T2: Farmers practice</td>
<td>3</td>
<td>
<table>
<tr><th>Parameters assessed</th><th>Green Manuring</th><th>Farmers practice</th></tr>
<tr><td>1. Yield</td><td>5.12 t/ha</td><td>4.60 t/ha</td></tr>
<tr><td>2. Pest and diseases

infestation</td><td>Negligible</td><td>Negligible</td></tr>
<tr><td>3 Net return(Rs)</td><td>Rs 29080.00</td><td>Rs24400.00</td></tr>
<tr><td>4. B:C Ratio</td><td>1.71</td><td>1.44</td></tr>
<tr><td colspan="3">5. Soil physico- chemical and biological properties</td></tr>
<tr><td>i. pH</td><td>5.52</td><td>5.00</td></tr>
<tr><td>ii. EC</td><td>0.04 dS/m</td><td>0.02 dS/m</td></tr>
<tr><td>iii. Av. N</td><td>391 kg/ha</td><td>302 kg/ha</td></tr>
<tr><td>iv. Av. P2O5</td><td>25 kg/ha</td><td>15.8 kg/ha</td></tr>
<tr><td>v. Av. K2O</td><td>240.98 kg/ha,</td><td>163.43 kg/ha</td></tr>
<tr><td>vi. OC</td><td>0.84%</td><td>0.63%,</td></tr>
<tr><td>vii. Total Microbial Population</td><td>24.8 x 106</td><td>6.12 x 106</td></tr>
</table>
</td>
<td>Soil incorporation of 500kg azolla/ha to supplement nitrogen in paddy was tested in var – Ranjit. Paddy yield in azolla incorporated plot was found to be significantly higher than in farmer’s practice. Moreover, azolla incorporation positively influenced the soil physico-chemical and biological properties as was evidenced by elevated values of nitrogen and microbial populations</td>
<td></td>
<td></td>
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</table>

<table>
<tr>
<td>10.Effect of Green manuring crops in Rice based cropping system</td>
<td>Detoriorat ion of Soil quality due to heavy use chemical fertilizer</td>
<td>Dhaincha will be sown before Sali paddy (20-25 kg/ha) followed by incorporation (add organic matter 10-20 t/ha and nitrogen 75-80 kg /ha)
The treatments details:
T1: Green manure + 50 % RD of N+ full P+K
T2: Farmers practice</td>
<td>3</td>
<td></td>
<td>
<table>
<tr><th>Parameters assessed</th><th>Green Manuring</th><th>Farmers practice</th></tr>
<tr><td>1. Yield</td><td>4.6 t/ha</td><td>4.36 t/ha</td></tr>
<tr><td>2. Pest and diseases

infestation</td><td>Rice hispa attack at vegetative stage</td><td>Rice hispa attack at vegetative stage</td></tr>
<tr><td>3 Net return(Rs)</td><td>Rs 24400.00</td><td>Rs22240.00</td></tr>
<tr><td>4. B:C Ratio</td><td>1.44</td><td>1.31</td></tr>
<tr><td colspan="3">5. Soil physico- chemical and biological properties</td></tr>
<tr><td>i. pH</td><td>5.00</td><td>5.06</td></tr>
<tr><td>ii. EC</td><td>0.07 dS/m</td><td>0.05 dS/m</td></tr>
<tr><td>iii. Av. N</td><td>380 kg/ha</td><td>360 kg/ha</td></tr>
<tr><td>iv. Av. P2O5</td><td>28 kg/ha</td><td>20 kg/ha</td></tr>
<tr><td>v. Av. K2O</td><td>163.43 kg/ha</td><td>108.06 kg/ha</td></tr>
<tr><td>vi. OC</td><td>0.81%</td><td>0.78%,</td></tr>
<tr><td>vii. Total Microbial Population</td><td>36.2 x 106</td><td>4.18 x 106</td></tr>
</table>
</td>
<td></td>
<td>Cultivation of Dhaincha as pre-Sali paddy green manuring crop was tested in var – Gitesh. It was observed that the yield was at per both in Dhainch incorporated and non incorporated (farmer’s practice) plots. However, soil physico-chemical and biological properties was found to be improved in Dhaincha incorporated plots as evidenced by the properties mentioned above</td>
<td></td>
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</tr>
</table>

<table>
<tr>
<td>11.Management of Brinjal Fruit and Shoot Borer</td>
<td>Heavy incidence of fruit and shoot Borer</td>
<td>1.Cultural practices
2. Application of pheromone traps @ 10 traps/ha
3. Application of neem cake @ 20 kg/ha
3. Spraying of neem based pesticides @ 10ml/ lit. Of water at 7 days interval starting fron one month after planting</td>
<td>3</td>
<td>
<table>
<tr><th>Parameters assessed</th><th>Result</th><th></th></tr>
<tr><th></th><th>Demonstration</th><th>Farmers practice</th></tr>
<tr><td>1. No of trapped insects/day</td><td>2.53</td><td>-</td></tr>
<tr><td>2. Percent infestation of shoot/5 m2 area</td><td>9%</td><td>81%</td></tr>
<tr><td>3. Percent infestation of fruit/5 m2 area</td><td>20%</td><td>60%</td></tr>
<tr><td>4. Yield</td><td>20 tonne</td><td>15 tonne</td></tr>
<tr><td>5. Farmers reaction</td><td>Very much satisfied</td><td>-</td></tr>
</table>
</td>
<td>The IPM module using pheromone trap and other organic pesticides was tested in brinjal against fruit and shoot borer. Application of pheromone traps and organic pesticide drastically reduced the pest infestation((9% & 20%) as against 81% and 60% in the farmer’s practice.</td>
<td>The farmers are very eager to adopt the technology as the pheromone trap is locally available and cost of 1 dose is only Rs 30 which remains effective for up to 1 month</td>
<td></td>
</tr>
<tr>
<td>12.Management of stored grain pest in blackgram/ green gram</td>
<td>High Bruchid infestation during storage</td>
<td>1.Cleaning and drying of seeds
2. Application of black pepper powder @ 3 gm/kg of seed followed by bagging in poly bags covered by gunny bags</td>
<td>3</td>
<td>1. Date of 1st storage : 13.02.2013
2. Percent infestation at monthly interval
1st = 0%
2nd =0%
3. Secondary infestation if any
= Nil
4. Germination percentage
5. Faemers reaction</td>
<td>In progress till date</td>
<td></td>
<td></td>
</tr>
</table>

				(In progress till date)			
13.Reproductive & productive performance of T&D pigs in Jorhat district	Low production potential of indegenous pigs	T & D pig	4	Body weight: 5th month- 48 Kg Age at sexual maturity Litter size (In progress till date)			
14.Productive performance of Chara-Chemballi duck and its economic impact on women self-help group	Poor production performance of local duck	Chara-Chemballi duck	3	In progress till date			
15.Improved housing with locally available materials for scientific goat farming	Occurrence of Respiratory and parasitic diseases in traditional housing system	Improved housing with locally available materials for scientific goat farming (Raised platform house)	3	In progress till date			
16.Use of improved brooding and feeding practices in backyard poultry farming to reduce early chick mortality)	Early chick mortality due to poor brooding	Nutrition/ Feeding Management	3	In progress till date			

	and feeding management in backyard farming system						
17.Uses of Women friendly Hand Fork , circular blade weeder & introduction of improved garden rake in farmers community	Non appropriate tools for women leads to fatigue	Energy saving tools- Hand Fork , circular blade weeder, garden rake	**3**	**Circular blade weeder** Weeding efficiency: Average time requirement (for weeding $3m^2$ area) i. Circular Weeder : 10 min ii Khurpi(comparision implement): 20 min **Garden rake** Collection of trash: After weeding it became easier for farm women to collect the weeds by using the improved garden rake. Scratch/ stirring of top layer: **Hand Fork**: Harvesting of tuber crops: Average time requirement (for harvesting potato in $3m^2$ area) i. Hand fork : 10 mins ii. By hand: 25 mins	**Circular blade weeder** Women farmers found circular weeder easier & comfortable to perform the weeding activity **Garden rake** Women found it suitable for stirring top layer than traditional tool (spade) **Hand Fork**: They found the hand fork easier and comfortable	The Technology was well accepted by the Women Farmers	

<table>
<tr>
<td>18.Production of quality fish seed</td>
<td>Non availability of desired quality seed at the right time</td>
<td>Pond size - 100- 200 ^{m2}
1.Pond Preparation to eradicate aquatic weeds, predatory and weed fishes
2.Pond manuring
3.Release of fry
4.Feeding
6.Management of water quality and health status</td>
<td>3</td>
<td>
<table>
<tr><th>Parameters assessed</th><th colspan="2">Result</th></tr>
<tr><td></td><td>Demonstration</td><td>Farmers practice</td></tr>
<tr><td>1.Avg Survival(%)</td><td>50%</td><td>20%</td></tr>
<tr><td>2.Length</td><td>10.15 cm(Avg)</td><td>4.5 cm</td></tr>
<tr><td>3.Weight</td><td>25 gm (Avg)</td><td>8.5 gm</td></tr>
<tr><td>4.Net return(Rs)</td><td>7500.00</td><td>3500.00</td></tr>
<tr><td>5. B:C Ratio</td><td>2.7</td><td>1.25</td></tr>
</table>
</td>
<td></td>
<td>Availibility of quality fish seed at right time is a major drawback in in fish production. Hence, the trial was undertaken so that the farmers stock the carried over seeds to enable them to release those seeds next year at right time i.e.March-April. This also appears as a profitable economic venture for the farmers</td>
<td></td>
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</table>

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 2012-13 and recommended for large scale adoption in the district

S. No	Crop/ Enterprise	Technology demonstrated	Horizontal spread of technology		
			No. of villages	No. of farmers	Area in ha
1	Ahu paddy	IPM in ahu paddy	1	1	1 ha
2	Boro Paddy	System of rice intensification	2	5	2 ha
3	French Bean	Performance of French Bean variety *Contender and Pusa Parvati*	2	3	0.52
4	Yellow Sarson	Water management in Yellow Sarson var. Binoy	1	9	2 ha
5	Sugacane	Demonstration of sugarcane varieties 'kolang'	3	3	0.65 ha
6	Marigold	Varietal performance of Marigold *var,Pusa Narangi*	1	1	0.15 ha
7	Orange orchard	Rejuvenation of orange orchard	1	1	60 plants
8	Brinjal	Water management in Brinjal	3	3	0.15 ha
9	Tomato	Soil water conservation in tomato using plastic mulch	2	2	0.15 ha
10	Pine apple	Organic cultivation of Pine apple	1	17	1 ha
11	Black pepper	Organic Cultivation of Black pepper	1	8	1 ha
12	Turmeric	Organic Cultivation of Turmeric	2	10	2 ha
13	Poultry	Introduction of improved backyard dual purpose bird in Jorhat district	5	5 SHGs	50 birds/SHG=250
14	Fisheries	Composite fish culture	1	1	1 ha
15	Fisheries	Use of *Sushama* a supplementary feed developed	3	3	0.40 ha

		by FRC,AAU in composite fish culture			
16	Fisheries	Integrated Rice-Fish farming	3	3	**0.40 ha**
17	Fisheries	Fishery as a component of IFS	2	2	**0.26 ha**
18	Bee keeping	Rearing of Indian bee in Toria Cultivation	1	6	**1 ha**
19	water harvesting structure	Improvement of rain water harvesting structure	2	2	18m x 8m x 1.5m(216m3) 2 nos
20	Energy saving tools and drudgery reduction	Ergonomically Improved Tea Plucking Basket	2	4	2 Tea Gardens
21	Duckery	Performance of Chara Chambali duck	2	20	2 villages (80 ducklings)
22	Bhoot jalakia	Performance of Bhoot jolokia under plastic mulch	4	4	0.52 ha

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

b. Details of FLDs implemented during reporting period (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**	**Farming situation (Rf/ Irrigated, Soil type, altitude, etc)**	**Status of soil (Kg/ha)**		
					Proposed	**Actual**	**SC/ST**	**Others**	**Total**			**N**	**P**	**K**
1	Ahu paddy	Integrated Pest Management	IPM module	2012-13	1ha	1ha	1	-	1	-	Irrigated, Medium low land	-	-	-
2	Boro paddy	System of rice intensification	SRI Method	2012-13	2 ha	2 ha	5	-	5	-	Irrigated, Medium low land	-	-	-
3	French Bean	Varietal Evaluation	Performance of French	2012-13	0.52 ha	0.52 ha	1	2	3	-	Irrigated, high land	-	-	-

			Bean variety *Contender and Pusa Parvati*											
4	Yellow Sarson	Water Management	Water management in Yellow Sarson var. Binoy	2012-13	2 ha	2ha	4	5	9	-	Irrigated, Medium land	-	-	-
5	Sugarcane	Varietal Evaluation	Demonstration of sugarcane varieties 'kolang'	2012-13	0.65 ha	0.65 ha	-	3	3	-	Rainfed upland	-	-	-
6	Marigold	Varietal Evaluation	Varietal performance of Marigold *var,Pusa Narangi*	2012-13	0.15 ha	0.15 ha	-	1	1	-	Irrigated medium land	-	-	-
7	Orange orchard	Rejuvenation	Rejuvenation of orange orchard	2012-13	0.2 ha (60 plants	0.2 ha (60 plants)	1	-	1	-	Rainfed upland	-	-	-
8	Brinjal	*Water Management*	Water management in Brinjal	2012-13	0.15 ha	0.15 ha	-	3	3	-	Irrigated medium land	-	-	-
9	Tomato	Soil water conservation	Soil water conservation in tomato using plastic mulch	2012-13	0.15 ha	0.15 ha	-	2	2	-	Irrigated medium land/upland	-	-	-
10	Pine apple	Organic cultivation	Organic cultivation of Pine apple Var. Kew	2012-13	1 ha	1 ha	5	12	17	-	Rain fed, upland	-	-	-

11	Black pepper	Organic Cultivation	Organic Cultivation of Black pepper Var. Panniur	2012-13	1 ha	1ha	3	5	8	-	Rain fed, upland	-	-	-
12	Turmeric	Organic Cultivation of Turmeric	Organic Cultivation of Turmeric Var. Megha Turmeric	2012-13	2 ha	2 ha	2	8	10	-	Rain fed upland	-	-	-
13	water harvesting structure	water harvesting	Improvement of rain water harvesting structure	2012-13	18m x 8m x 1.5m(216m3) 2 nos	18m x 8m x 1.5m(216m3) 2 nos		2	2	-	Rain fed, lowland	-	-	-
14	Bhoot jalakia	Soil water conservation	Performance of Bhoot jolokia under plastic mulch	2012-13	0.52 ha	0.52 ha	-	4	4	-	Rain fed, upland land	-	-	-

c. Performance of FLD

Sl. No.	**Crop**	**Demo. Yield Qtl/ha**			**Yield of local Check Qtl./ha**	**Data on parameter in relation to technology demonstrated (Yield, Disease incidence, etc. as specified in FLD Programme)**		**Economic Impact**				**Technical Feedback on the Demonstrated Technology**	**Farmers' Reaction on specific Technologies**
								Average Net Return (Profit) (Rs./ha)		**B.C. Ratio**			
								Demo	**Local Check**	**Demo**	**Local Check**		
		H	L	A		Demo	Local						
1	2	7	8	9	10	12	13						

1	Ahu paddy	-	-	-	In progress	-	-	-	-	-	-	In progress	-
2	Boro paddy (SRI)	9	6	7.5	3.6	7.5	3.6	43,000.00	17000.00	1.22	0.89		Accepted the technology
3	French bean												
	Var. Contender	95.2	84.0	89.6	76.5	89.6	76.5	81270	65550.00	3.10	2.49		Accepted the technology
	Var.Pusa Parvati	105.5	81.9	93.75	76.5	93.75	76.5	86250	65550.00	3.28	2.49		
4	Yellow Sarson var. Binoy	15.2	11.4	13.3	7.5	13.3	7.5	33800.00	10500.00	2.65	0.66		Accepted the technology
5	Sugarcane var. Kolong	720	670	695	530	695	530	82750	49750.00	1.47	0.88		Accepted the technology
6	Marigold	62.7	57.3	60	55	60	55	200000.00	180000.0	5 : 1	4.5 : 1		Accepted the technology
7	Rejuvenation of orange orchard	-	-	-	In progress	-	-	-	-	-	-	-	-
8	Brinjal	21.5	18.5	20	14	20	14	160000	110000	4.0	3.66		Accepted the technology
9	Tomato	35.8	24.2	30	17	30	17	255000.0	200000.0	5.66	3.5		Accepted the technology
10	Pine apple	-	-	-	In progress	-	-	-	-	-	-		
11	Black pepper	-	-	-	In progress	-	-	-	-	-	-		
12	Turmeric	30.5	27.5	29	22	29	22	454000	330000	3.6	3.0		Accepted the technology
13	Water harvesting structure	Water use= Household, Water depth= 1m(july) = 0.5m (Dec) = 0.25m(Jan) = 0.00m (march) Farmers pond = dried up mid											Water was retained up to Last January in poly lined structure while farmers

		Jan											check pond dried up in Jan
14	Bhoot jalakia	28	24.5	26.25	15	26.25	15	407125	-	3.45	-	-	Accepted the technology

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

d. Extension and Training activities under FLD

Sl.No.	Activity	No. of activities organised	Date	Number of participants	Remarks
1	Field days	4	10.01.2013 (Adi-Alengi, Majuli)	32	
			22.01.2013 (Balichapori, Majuli)	95	
			22.02.2013 (Alisiga, Meleng)	60	
			16.03.2013 (Rajabari)	30	
2	Farmers Training	-	-	-	
3	Media coverage	-	-	-	
4	Training for extension functionaries	-	-	-	

e. Details of FLD on Enterprises
(i) Farm Implements -

Name of the implement	crop	No. of farmers	Area (ha)	Performance parameters / indicators	* Data on parameter in relation to technology demonstrated		% change in the parameter	Remarks
					Demon.	Local check		
Energy saving tools and drudgery reduction (Tea Plucking	Tea	4	2 tea gardens	Weight of the basket	1200 gm	800 gm		New technology is accepted by the farmers
				Capacity	15 kg	10 kg		
				Shape	Rectangular	Circular		

Basket)								
				Comfort ability	Comfortable due to ergonomic design	Uncomfortable		
				Keeping quality of leaves	Leaves remains fresh & unbroken	Higher compaction of the plucked leaves leading to lesser aeration		
				Farmers reaction	Satisfactory	-		

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

(ii) Livestock Enterprises

Enterprise	**Breed**	**No. of farmers**	**No. of animals, poultry birds etc.**	**Performance parameters / indicators**	*** Data on parameter in relation to technology demonstrated**		**% change in the parameter**	**Remarks**
					Demon.	Local check		
Poultry	Vanaraja	5 SHGs (50 farm women)	50 birds/SHG	Live body weight				Due to better result and return, beneficiaries are showing interest on self propagation of Vanaraja chicks through hatching traditionally with their own local hen and it is helping in horizontal dissemination to other villages
				20th Week	1784 g	768 g	132.68	
				40th Week	2846 g	1450 g	96.27	
				Age at sexual maturity	177 days	188 days	-	
				Egg production (per hen per year)	112	58	93.10	
				Egg Weight	51-59 G	36-41 g	43.90	
				Net Retun (Unit of 10 bird)	4910.00	3190.00	53.91	

				B:C ratio	4.91	3.19	-	
				Egg Price	6/-	6/-	-	
				Chicken price	150/- per KG	200/- per KG	-	
				Mortality	4.5%	4.8%	-	
Duckery	Chara Chambali duck	20 farm women	80 ducklings	Egg production 62 eggs/duck (Till 6 month of laying period) (Sold for hatching purpose @ Rs. 6/- per egg) Sale of 18 nos male duck @Rs. 300/- per duck				Though body weight gain of technology & local check is similar, egg production is significantly higher in technology
Integrated Rice-Fish farming	Rice	3	-	Yield	-	29 q/ha	-	Accepted the technology
	Fish	3	-	Yield	8.6 q/ha	4.50 q/ha	91	-
Fishery as a component of IFS	IMC and Exotic carp	2	650 advanced fingerlings	Yield	28.5 q/ha	15 q/ha	90	Accepted the technology
Composite fish culture	IMC and Exotic carp	2	650 advanced fingerlings	Yield	27 q/ha	15 q/ha	80	Accepted the technology
Fishery	Feed management (Sushama)	2	Feed	-	-	-	-	In progress

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

(iii) Other Enterprises

Enterprise	Variety/ breed/Species/others	No. of farmers	No. of Units	Performance parameters / indicators	Data on parameter in relation to technology demonstrated	% change in the parameter	Remarks

					Demon.	Local check		
Mushroom								
Apiary	Apis cerena in Toria cultivation	6	5 bee colonies (1 ha)	Yield of Toria	12.37 q/ha	7.5 q/ha	64.93	Pollination increased due to bee rearing
				B:C ratio	1.74	0.66		
Sericulture	-	-	-	-	-	-	-	
Vermi compost	-	-	-	-	-	-	-	

3.3.Achievements on Training both On and Off Campus (Including the sponsored, vocational, FLD and trainings under Rainwater Harvesting Unit):

Thematic area	No. of courses			Participants																		
				Others						SC/ST						Total						Grand Total
	On	Off	Total	Male		Female		Total		Male		Female		Total		Male		Female		Total		
				On	Off	On	Off	On	Off	On	Off	On	Off	On	Off	On	Off	On	Off	On	Off	On	Off	
(A) FARMERS & FARM WOMEN																						
I. Crop Production																						
Weed Management																						
Resource Conservation Technologies																						
Cropping Systems																						
Crop Diversification																						
Integrated Farming																						
Water management																						
Seed production	2	2	2	-	28	-	-	-	28	-	20	-	6	-	26	-	48	-	6	-	54	54
Nursery management																						
Integrated Crop Management	1	-	1	32	-	-	-	32	-	-	-	-	-	-	-	32	-	-	-	32	-	32
Fodder production																						
Production of organic inputs																						
II. Horticulture																						
a) Vegetable Crops																						
Production of low volume and high value crops	-	1	1	-	21	-	4	-	25	-	-	-	-	-	-	-	21	-	4	-	25	25
Off-season vegetables																						

Nursery raising																						
Exotic vegetables like Broccoli																						
Export potential vegetables																						
Grading and standardization																						
Protective cultivation (Green Houses, Shade Net etc.)																						
b) Fruits																						
Training and Pruning																						
Layout and Management of Orchards	1	-	1	9		16		25								9	-	16	-	25	-	25
Cultivation of Fruit																						
Management of young plants/orchards																						
Rejuvenation of old orchards																						
Export potential fruits																						
Micro irrigation systems of orchards																						
Plant propagation techniques																						
c) Ornamental Plants																						
Nursery Management																						
Management of potted plants																						
Export potential of ornamental plants																						

Propagation techniques of Ornamental Plants																					
d) Plantation crops																					
Production and Management technology	-	1	1	-	9	-	16	-	25	-	-	-	-	-	-	-	9	-	16	-	25	25
Processing and value addition																					
e) Tuber crops																					
Production and Management technology																					
Processing and value addition																					
f) Spices																					
Production and Management technology																					
Processing and value addition																					
g) Medicinal and Aromatic Plants																					
Nursery management																					
Production and management technology																					
Post harvest technology and value addition																					
III Soil Health and Fertility Management																					
Soil fertility management	-	1	1	-	28	-	4	-	32	-	-	-	-	-	-	-	28	-	4	-	32	32
Soil and Water Conservation																					
Integrated Nutrient	1	-	1	27	-	-	-	27	-	-	-	-	-	-	-	27	-	-	-	27	-	27

Management																						
Production and use of organic inputs																						
Management of Problematic soils																						
Micro nutrient deficiency in crops																						
Nutrient Use Efficiency																						
Soil and Water Testing																						
IV Livestock Production and Management																						
Dairy Management	1	-	1	24	-	-	-	24	-	-	-	-	-	-	-	24	-	-	-	24	-	24
Poultry Management																						
Piggery Management	-	1	1	-	28	-	2	-	30	-	5	-	-	-	5	-	33	-	2		35	35
Rabbit Management																						
Disease Management																						
Feed management																						
Production of quality animal products																						
V Home Science/Women empowerment																						
Household food security by kitchen gardening and nutrition gardening																						
Design and development of low/minimum cost diet																						
Designing and development for high nutrient																						

efficiency diet																						
Minimization of nutrient loss in processing																						
Gender mainstreaming through SHGs	-	1	1	-	-	-	-	-	-	-	-	-	15	-	15	-	-	-	15	-	15	15
Storage loss minimization techniques																						
Value addition																						
Income generation activities for empowerment of rural Women																						
Location specific drudgery reduction technologies	-	1	1	-	-	-	-	-	-	-	15	-	17	-	32	-	15	-	17	-	32	32
Rural Crafts																						
Women and child care																						
VI Agril. Engineering																						
Installation and maintenance of micro irrigation systems																						
Use of Plastics in farming practices																						
Production of small tools and implements																						
Repair and maintenance of farm machinery and implements																						
Small scale																						

processing and value addition																					
Post Harvest Technology																					
VII Plant Protection																					
Integrated Pest Management	-	1	1	-	26	-	-	-	26	-	-	-	-	-	-	-	26	-	-	-	26	26
Integrated Disease Management	-	1	1	-	23	-	2	-	25	-	-	-	-	-	-	-	23	-	2	-	25	25
Bio-control of pests and diseases	-	3	3	-	68	-	3	-	71	-	-	-	-	-	-	-	68	-	3	-	71	71
Production of bio control agents and bio pesticides																					
VIII Fisheries																					
Integrated fish farming																					
Carp breeding and hatchery management																					
Carp fry and fingerling rearing																					
Composite fish culture	-	1	1	-	21	-	-	-	21	-	4	-	-	-	4	-	25	-	-	-	25	25
Hatchery management and culture of freshwater prawn																					
Breeding and culture of ornamental fishes																					
Portable plastic carp hatchery																					
Pen culture of fish and prawn																					
Shrimp farming																					

Edible oyster farming																						
Pearl culture																						
Fish processing and value addition																						
IX Production of Inputs at site																						
Seed Production																						
Planting material production																						
Bio-agents production																						
Bio-pesticides production																						
Bio-fertilizer production																						
Vermi-compost production																						
Organic manures production																						
Production of fry and fingerlings																						
Production of Bee-colonies and wax sheets																						
Small tools and implements																						
Production of livestock feed and fodder																						
Production of Fish feed																						
X Capacity Building and Group Dynamics																						
Leadership development																						
Group dynamics																						

Formation and Management of SHGs																					
Mobilization of social capital																					
Entrepreneurial development of farmers/youths																					
WTO and IPR issues																					
XI Agro-forestry																					
Production technologies																					
Nursery management																					
Integrated Farming Systems																					
TOTAL	4	14	18	92	252	16	35	108	286	-	44	-	38	-	82	92	296	16	69	108	375	481
(B) RURAL YOUTH																					
Mushroom Production	1	-	1	-	-	26	-	26	-	-	-	1	-	1	-	-	-	27	-	27	-	27
Bee-keeping																					
Integrated farming	-	1	1	-	13	-	-	-	13	-	14	-	-	-	14	-	27	-	-	-	27	27
Seed production	-	1	1	-	1	-	-	-	1	-	19	-	-	-	19	-	20	-	-	-	20	20
Production of organic inputs																						
Integrated Farming																						
Planting material production																						
Vermi-culture																						
Sericulture																						
Protected cultivation of	1	-	1	15	-	10	-	25	-	-	-	-	-	-	-	15	-	10	-	25	-	25

vegetable crops																						
Commercial fruit production																						
Repair and maintenance of farm machinery and implements																						
Nursery Management of Horticulture crops																						
Training and pruning of orchards																						
Value addition	1	-	1	-	-	25	-	25	-	-	-	-	-	-	-	-	-	25	-	25	-	25
Production of quality animal products																						
Dairying																						
Sheep and goat rearing	-	1	1	-	23	-	10	-	33	-	-	-	-	-	-	-	23	-	10	-	33	33
Quail farming																						
Piggery																						
Rabbit farming																						
Poultry production	1	-	1	45	-	1	-	46	-	-	-	-	-	-	-	45	-	1	-	46	-	46
Ornamental fisheries																						
Para vets																						
Para extension workers																						
Composite fish culture																						
Freshwater prawn culture																						
Shrimp farming																						
Pearl culture																						
Cold water fisheries																						

Fish harvest and processing technology																						
Fry and fingerling rearing																						
Small scale processing																						
Post Harvest Technology																						
Tailoring and Stitching																						
Rural Crafts	1	-	1	-	-	20	-	20	-	-	-	-	-	-	-	-	-	20	-	20	-	20
Income generating activities	-	1	1	-	-	-	15	-	15	-	-	-	-	-	-	-	-	-	-	15	-	15	15
TOTAL	5	4	9	60	23	82	25	152	62	-	33	1	-	1	33	60	70	83	25	153	95	23 8
(C) EXTENSION PERSONNEL																						
Productivity enhancement in field crops																						
Integrated Pest Management																						
Soil Fertility Management	-	1	1	-	12	-	-	-	12	-	10	-	-	-	10	-	22	-	-	-	22	22
Rejuvenation of old orchards	-	1	1	-	16	-	-	-	16	-	4	-	-	-	4	-	20	-	-	-	20	20
Protected cultivation technology																						
Formation and Management of SHGs																						
Group Dynamics and farmers organization																						
Information																						

networking among farmers																					
Capacity building for ICT application																					
Care and maintenance of farm machinery and implements																					
WTO and IPR issues																					
Management in farm animals	-	1	1	-	13	-	-	-	13	-	12	-	-	-	12	-	25	-	-	-	25	25
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																					
Fish health management	-	1	1	-	10	-	-	-	10	-	15	-	-	-	15	-	25	-	-	-	25	25
TOTAL	-	4	4	-	51	-	-	-	51	-	41	-	-	-	41	-	92	-	-	-	92	92

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

Sl. No	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 participants		
								Male	Female	Total	Male	Female	Total	Male	Female	Total
1	25-06-2012	F&FW	Quality seed production in Rice	Plant Breeding and Genetics	Seed Production	1	Off	28	-	28	-	-	28	28	-	28
2	08-08-2012	F&FW	Quality seed production in Rice	Plant Breeding and Genetics	Seed Production	1	Off	-	-		20	6	26	20	6	26
3	14-09-2012 to 15-09-2012	F&FW	Productivity enhancement of Pulse crops	Plant Breeding and Genetics	Integrated Crop Management	2	on	32	-	32	-	-	-	32	-	32
4	11.09.12	F&FW	Planning, layout and management practices of orchard	Horticulture	Layout and management of Orchard	1	on	9	16	25	-	-	-	9	16	25
5	03.01.13	F&FW	Production techniques of high value vegetables	Horticulture	Production of low volume high value crops	1	Off	21	4	25	-	-	-	21	4	25
6	06.02.13	F&FW	Scientific cultivation of plantation crops	Horticulture	Production and management technology of plantation crops	1	Off	9	16	25	-	-	-	9	16	25
7	21.07.12	F&FW	Scientific management of	Animal Husband	Dairy Management	1	on	24	-	24	-	1	1	24	1	25

			dairy Cow	ry												
8	4.11.12	F&FW	Scientific management of Pigs	Animal Husbandry	Piggery Management	1	Off	28	2	30	5	-	5	33	2	35
9	16.10.12	F&FW	Scientific Method of Pisciculture	Fishery	Composite Fish farming	1	Off	21	-	21	4	-	4	25	-	25
10	16.10.12	F&FW	Uses of women friendly tools	Home Science	Location specific drudgery reduction technology	1	Off	-	-	-	15	17	32	15	17	32
11	06.03.13	F&FW	Management of SHG for entrepreneurship development	Home Science	Gender mainstreaming through SHGs	1	Off	-	-	-	-	15	15	-	15	15
12	22.08.12	F&FW	Integrated Pest Management in Sali rice	Entomology	IPM	1	off	26	-	26	-	-	-	26	-	26
13	12.09.12	F&FW	Biocontrol of pests and diseases in black pepper and betelvine	Entomology	Biocontrol of pests and diseases	1	off	25	-	25	-	-	-	25	-	25
14	11.10.12	F&FW	Application of biocontrol agents in crop field	Entomology	Biocontrol of pests and diseases	1	off	23	3	26	-	-	-	26	-	26
15	15.10.12	F&FW	Management of fungal, bacterial and viral diseases in chilli	Entomology	Disease Management	1	off	23	2	25	-	-	-	25	-	25
16	12.10.12	F&FW	Biocontrol of pests and diseases in turmeric	Entomology	Biocontrol of pests and diseases	1	off	20	-	20	7	-	7	27	-	27
17	13.09.	F&FW	Integrated	Soil	INM	1	on	27	-	27	-	-	-	27	-	27

	13		Nutrient Management in Sali Rice	Science												
18	18.09.12	F&FW	Green Manuring crops in Soil Fertility Management	Soil Science	Soil Fertility management	1	off	28	4	32	-	-	-			32
19	17-08-2012	Rural Youth	Quality seed production in Rice	Plant Breeding and Genetics	Seed Production	1	off	1	-	1	19	-	19	20	-	20
20	10.9.12	Rural Youth	Protected cultivation of capsicum and cucumber	Horticulture	Protective cultivation	1	on	15	10	25	-	-	-	15	10	25
21	06.11.12	Rural Youth	Commercial Broiler Farming.	Animal Husbandry	Poultry Management	2	on	45	-	45	1	-	1	46	-	46
22	18.02.12	Rural Youth	Goat farming as a livelihood security for unemployed youth.	Animal Husbandry	Goatery Management	1	off	23	10	33	-	-	-	23	10	33
23	7.03.13	Rural Youth	Integrated Fish Farming	Fishery	IFS	1	off	13	-	13	14	-	14	27	-	27
24	12.09.12	Rural Youth	Preparation of squash and pickle from locally available fruits and vegetable	Home Science	Value addition	1	on	-	25	25	-	-	-	-	25	25
25	3.11.12	Rural Youth	Tie and die by using natural dyes	Home Science	Rural Crafts	1	on	-	20	20	-	-	-	-	20	20
26	7.11.13&	Rural Youth	Candle making for entrepreneurship	Home Science	Income generating	2	off	-	15	15	-	-	-	-	15	15

	8.11.12		development		activities											
27	4th-6th Feb,2013	Rural Youth	Mushroom cultivation for self employment	Plant protection	Mushroom production	3days	on	-	26	26	-	1	1	-	27	27
28	23.03.13	Extension personel	Commercial cultivation of Assam lemon	Horticulture	Cultivation of fruit crops	1 days	off	16	-	16	4	-	4	20	-	20
29	19.03.13	Extension personel	Duck farming as a livelihood security for rural farmers and farm women	Animal Husbandry	Poultrymanagement	1 days	off	13	-	13	12	-	12	25	-	25
30	13.03.13	Extension personel	Recent advances in fish nutrition	Fishery	Fish health management	1	off	10	-	10	15	-	15	25	-	25
31	30.03.13	Extension personel	Home stead method of Azolla cultivation	Soil Science	Soil fertility management	1	off	12	-	12	10	-	10	22	-	22

(D) Vocational training programmes for Rural Youth

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	
Weaving on Jacqurd Loom		Vocational Training on Upliftment of Weaving Skills on Jacquard Loom	Income generating activities	15days	1	14	15	Jacquard Loom	10 operating looms	7	8

Cutting and tailoring	03.10.2012 to 18.10.2012	Cutting and tailoring	Income generating activities	15days	-	19	19	Sewing Machine	3 nos	-	-

*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		
	25.07.2012 to 27.07.2012	Transfer of appropriate technology of agriculture and allied sector.	Interdisciplinary	Income generating activities	3days	RY	1	48	25	73	9	18	27	57	43	100	SIRD, Jorhat	Not transferred to KVK account

	28.07.2012	Economics of Three tier pig-poultry-fish farming	IFS	Income generating activities	1day	RY	1	13	15	28	4	15	19	17	30	47	SIRD, Jorhat	
	30.07.2012	Scientific pisciculture for self employment	Fishery	Income generating activities	1day	RY	1	4	31	35	-	-	-	4	31	35	SIRD, Jorhat	
	31.07.2012	Prospects of pisciculture a means of rural economy upliftment	Fishery	Income generating activities	1day	RY	1	-	14	14	-	-	-	-	14	14	SIRD, Jorhat	
	10.08.2012	Food processing and Value Addition	Home Science	Income generating activities	1day	RY	1	-	81	81	-	15	15	-	96	96	IICPT, Regional Office, Guwahati	
	27.09.2012	Training cum awareness programme on improved production technology of Rabi vegetables	Horticulture	Production and management technology	1day	RY	1	72	-	72	-	-	-	72	-	72	Association of Senior Citizen, Na-Kachari	

	03.10.2012 to 18.10.2012	Cutting and tailoring	Home Science	Income generating activities	15 days	RY	1	-	15	15	-	4	4	-	19	19	DRDA, Jorhat	
	17.12.2012	Scientific cultivation of potato, Rajmah and pea	Horticulture	Production and management technology	1day		1	23	8	31	-	-	-	23	8	31	ATMA, Jorhat	
	22.12.2012	Scientific Pig Farming and Vermicomposting Technology	Animal husbandry & Soil Science	Income generating activities	1day	RY	1	-	-	-	3	13	16	3	13	16	NBSS &LUP	
	27.12.2012	Protection of Plant Varieties and Farmers' Right	Plant Breeding and Genetics	WTO & IPR issues	1day	RY	1	63	5	68	1	-	1	64	5	69	Department of Plant Breeding and Genetics, AAU, Jorhat-785013	
	7.01.2013 to 8.01.2013	Compost and Vermicompost Production Technology	Soil Science	Income generating activities	1day	RY	1	45	39	84	5	6	11	50	45	95	Department of Soil Science, AAU, Jorhat-785013	

	08.01.2013	Fruit preservation	Home Science	Income generating activities	1day	RY	1	-	19	19	-	-	-	-	19	19	NABARD	
	25.01.2013	Preparation of squash	Home Science	Income generating activities	1day	RY	1	-	25	25	-	-	-	-	25	25	NABARD	
	26.02.2013-27.02.2013	Transfer of appropriate technology of agriculture and allied sector	interdisciplinary		1day	RY	1	10	15	25	-	-	-	10	15	25	NGO, NEADS, Jorhat	
	Total							**278**	**292**	**570**	**22**	**71**	**93**	**300**	**363**	**663**		

3.4. Extension Activities (including activities of FLD programmes) (Please mention specific Extension Activity conducted by the KVK such as Field Day, Kisan Mela, Exhibition, Diagnostic Visit, etc)

Sl. No.	Nature of Extension Activity	Purpose/ topic and Date	No. of activities	Participants											
				Farmers (Others) (I)			SC/ST (Farmers) (II)			Extension Officials (III)			Grand Total (I+II+III)		
				Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1.	Diagnostic visits	Diagnostic	187	156	10	166	38	3	41				194	13	207
2.	Advisory Services	-	450	315	73	388	92	20	112	-	-	-	-	93	500
3.	Animal Health Camp	-	3	53	14	67	23	4	27	-	-	-	-	18	94
	Plant health camp	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4.	Training/	-	-	-	-	-	-	-	-	-	-	-	-	-	-

	practical manual														
5.	Celebration of important days	World Women's Day (8 h March, 2013)	1	-	77	77	-	23	23	-	-	-	-	100	100
	Exhibition	-	2	47	114	161	15	24	39	-	-	-	62	138	200
6.	Exposure visits	Exposure visit to Experimental Farm, AAU, Jorhat	1	27	24	51	10	9	19	-	-	-	37	33	70
7.	Farm Science Club Conveners meet	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8.	Farmers Seminar/ workshop		-	-	-	-	-	-	-	-	-	-	-	-	-
9.	Farmers Visit to KVK		-	324	90	414	280	6	286	-	-	-	604	96	700
10.	Field Day		4	111	22	133	70	34	104	-	-	-	*181*	56	237
11.	Group meetings/ Discussion		3	37	15	52	23	-	23	-	-	-	52	23	75
12.	Awareness Camp		6	260	27	287	22	13	35	-	-	-	287	35	322
13.	Kisan Gosthi		-	-	-	-	-	-	-	-	-	-			
14.	Kisan Mela		-	-	-	-	-	-	-	-	-	-			
15.	Mahila Mandal Conveners' meetings		-	-	-	-	-	-	-	-	-	-			
16.	Method Demonstrations		36	565	124	689	12	19	31	-	-	-	689	31	720
17.	Scientists visit		87	454	144	598	67	19	86	-	-	-	598	86	684

	to farmers field														
18.	Self Help Group Conveners meetings		-	-	-	-	-	-	-	-	-	-	-	-	-
19.	Soil health/ testing Campaigns		-	-		-	-	-	-	-	-	-	-	-	-
20.	Film show		-	-		-	-	-	-	-	-	-	-		-
21.	Any other (Pl. specify)														
	Total		**780**												**3912**
Others															
22	News paper coverage		12	-	-	-	-	-	-	-	-	-		-	-
23	Radio talk		15												
24	TV Talk		2												

* Example for guidance only

3.5 Production and supply of Technological products during 2012-13

SEED MATERIALS

Major group/class	Crop	Variety	Quantity	Value (Rs.)	Provided to No. of Farmers/Other Agencies
CEREALS	**Paddy**	Ranjit (FD) KDML (TLS) Mashuri (FD	27.80q 2.10q 7.75q	108420.00 5250.00 30225.00	Provided to five numbers of farmers and used in KVK,farm
Pulses	Blackgram	KU-301	10q	4250.00	Provided to two numbers of farmers and used in KVK,farm
Vegetables	Tomato Brinjal	24 var. Longai	300g 200g	400.00 400.00	Provided to two numbers of farmers and used in KVK,farm

Flowers	Marigold	Pusa Narangi	1000g	2500.00	Provided to two numbers of farmers and used in KVK,farm
OTHERS (Specify)					

SUMMARY

Sl. No.	Major group/class	Quantity (qtl.)	Value (Rs.)	Provided to No. of Farmers/Other Agencies
1	CEREALS	27.80q 2.10q 7.75q	108420.00 5250.00 30225.00	Provided to five numbers of farmers and used in KVK,farm
2	OILSEEDS	-		
3	PULSES	10q	4250.00	Provided to two numbers of farmers and used in KVK,farm
	TOTAL	**47.65q**	1,48,145.00	
4	VEGETABLES	300g 200g	400.00 400.00	Provided to two numbers of farmers and used in KVK,farm
5	FLOWER CROPS	1000g	2500.00	Provided to two numbers of farmers and used in KVK,farm
TOTAL		**1500g**	**3300.00**	

PLANTING MATERIALS

Major group/class	Crop	Variety	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
FRUITS	Banana	Amritsagar	200 nos suckers	1000.00	Used in Farm
	Pineapple	Kew	200 nos suckers	600.00	Used in Farm
SPICES	Ginger	Moran Ada	50kg Rhizomes	1000.00	Used in Farm
	Turmeric	Megha Turmeric	60kg Rhizomes	1200.00	1 farmer and Used in Farm
VEGETABLES	Cabbage	Green Express	500 nos seedlings	300.00	Used in Farm
	Cauliflower	Snowball	500 nos seedlings	300.00	Used in Farm
	Knolkhol	Soilder	500 nos seedlings	300.00	Used in Farm
	Tomato	24 var.	3000 nos seedlings	1800.00	Used in Farm
	Brinjal	Longai	1000 nos seedlings	600.00	Used in Farm
ORNAMENTAL CROPS	Gerbera	Red Gem	1000 nos suckers	5000.00	Used in Farm

SUMMARY

Sl. No.	Major group/class	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
1	FRUITS	400	1600.00	Used in Farm
2	VEGETABLES	5500	3300.00	Used in Farm
3	SPICES	110kg	2200.00	1 farmer and Used in Farm
4	FOREST SPECIES			
5	ORNAMENTAL CROPS	1000	5000.00	Used in Farm
6	PLANTATION CROPS	-	-	-
7	OTHERS			

	TOTAL	**6900**	**12,100.00**	

BIO PRODUCTS

Major group/class	Product Name	Species	Quantity		Value (Rs.)	Provided to No. of Farmers
			No	(kg)		
BIOFERTILIZERS						
1	Vermocompost	Eisemia foetida		816	8160.000	Used in KVK Farm
2	Azolla	-		100 (F. wt.)	1000.00	Used in KVK Farm
BIO PESTICIDES						
1	Trichoderma based bio-pesticide	Trichoderma viride		1500	75000.00	50 numbers of farmers and used in KVK farm

SUMMARY

Sl. No.	Product Name	Species	Quantity		Value (Rs.)	Provided to No. of Farmers
			Nos	(kg)		
1	BIO FERTILIZERS	Eisemia foetida Azolla	-	816 100 (F. wt.)	8160.000 1000.00	Used in KVK Farm
2	BIO PESTICIDE	Trichoderma viride	-	1500	75000.00	50 numbers of farmers and used in KVK farm
	TOTAL			1944	79440.00	

LIVESTOCK

Sl. No.	Type	Breed	Quantity		Value (Rs.)	Provided to No. of Farmers
			(Nos)	Kgs		
1	Cattle	HF cross		952 lit Milk	26,516.00	

2	GOAT	Beetle/ Local	2 nos. Kid		1400.00	
3	POULTRY		-			
	Broiler	Cobb 400	-	723.8 Kg	73180.00	
	Vanaraja	Vanaraja	-	8.8 Kg	1320.00	
	One month old Vanaraja Chicks	Vanaraja	-	One month old	2400.00	
	Duck Egg (Hatching Egg)	Chara-Chemballi	140 Egg	-	700.00	
4	Pig	T &D, Hampshire & Ghungroo	-	73	7,370.00	
5	FISHERIES	IMC/ Exotic Carp (480 nos)	-	100Kg	10000.00	
		Indian Major Carps and Exotic Carps	-	63 kg	6300.00	
Others (Specify)	Mushroom	Var. Oyster	-	4kg	200.00	

SUMMARY

Sl. No.	**Type**	**Breed**	**Quantity**		**Value (Rs.)**	**Provided to No. of Farmers**
			Nos	**Kgs**		
1	CATTLE	HF cross		952 lit Milk	26,516.00	
2	GOAT	Beetle/ Local	2 nos. Kid	-	1400.00	
3	POULTRY					
i	Broiler	Cobb 400	-	723.8 Kg	73180.00	
ii	Vanaraja (1st batch)	Vanaraja	-	8.8 Kg	1320.00	
iii	Vanaraja (2nd batch)	One month old Vanaraja Chicks	-	One month old	2400.00	

iv	Duck (Hatching Egg)	Chara-Chemballi	140 Egg	-	700.00	
4	Pig	T &D, Hampshire & Ghungroo	-	73	7,370.00	
	FISHERIES	IMC/ Exotic Carp (480 nos)	-	100Kg	10000.00	
		Indian Major Carps and Exotic Carps	-	63 kg	6300.00	
5	OTHERS(Mushroom)	Var. Oyster		4kg	200.00	
	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			
	Production and characterization of monoclonal antibodies against a local isolate of classical swine fever virus	Sarma Dilip K, Kashyap Namrata, Deka Pankaj, Medhi Prabhat & Roychoudhury Parimal	-
	Economic empowerment of rural women through backyard poultry farming in Assam	Deka P., Sarma M., Nath PJ and Phukan M.	-
	A study on backyard system of rearing Vanaraja and Indigenous chicken in Jorhat and Nagaon districts of Assam	Deka P., Sarma M., Nath PJ, Borgohain R, Mahanta JD, Phukan M. and Deka B.	-
	Clinical and microbiological investigation and management of diseases in goat farm at Majuli	P. Deka, N. Deka, N.N.Barman and R. Borgohain	-
	Soil enzyme and Microbial Biomass Carbon under Rice- Toria Sequenced by Nutrient Management	Nath, D.J., Ozah, B., Baruah, R., Barooah, R.C., Borah, D.K. and Gupta, M.	

	Potentiality of Diverse Organic inputs with low chemical fertilizer on Microbial Biomass Carbon, Soil enzymes and crop yield in paddy soil	Nath, D.J., Baruah, R., Ozah, B., Gogoi, D., Barooah, R.C. and Borah, D.K.	
Total	**6**		
Abstract of papers	Comparative studies on backyard poultry farming in Karbi Anglog and Jorhat districts of Assam	Deka P., Sarma M., Mahanta JD, Sapcota D. and Borgohain R.	
	Scope of Strengthening Eco Tourism in Bordoipam Beelmukh bird Sanctuary (Proposed) are a through Angling	Chetia Borah Bibha, Saharia Pabitra, Deka Binapani, Gogoi Rinku, Mahanta Prasanta, Bhuyan Sonmaina	
	Enclosure method of fish farming in flood affected areas of Sonitpur Didtrict	Saharia P. K, Choudha ry J.K, Borgohain R, Deka B.	
	Prospects of Candle Making as a Means of Women Entrepreneurship Development for Self Employment	Deka Binapani, Phukan Rumjhum, Saharia Pabitra, Deka Pankaj	
	Exploration of Banana Fiber as Low Cost Eco- friendly Waste Management	Deka Binapani, Deka Pankaj, Borgohain Rupam	
	Prospects of Herbal Gardens as New Vistas of Medical Tourism in North East India	Deka Binapani, Saharia Pabitra, Borgohain Rupam, Sarma Ira, Ozah Bibha	
Technical reports	Monthly Progress Report (12)	KVK Scientists	
	Monthly Client Citizen Report (12)	KVK Scientists	
	Bimonthly Progress Report (6)	KVK Scientists	
	Quarterly Progress Report (4)	KVK Scientists	
	Quarterly Monitoriable Progress Report (4)	KVK Scientists	
	Annual Action Plan	KVK Scientists	
	Annual Progress Report	KVK Scientists	
Popular articles	Unnata padhatire phulkobir kheti,Dainik	Ira Sarma	-
	Seuij grihat agatia capsicumor kheti	Ira Sarma	-
	Labhjanak broccoli kheti	Ira Sarma	-
	Ranga laor kheti,	Ira Sarma	-
	Tarmujar Kheti	Ira Sarma	-
	Labhjanak Ada kheti	Ira Sarma	-

	Udyan sayat plastic mulchor bybahar	Rumjhum Phukan	-
	Upabhoktar adhikar	Binapani Deka	-
	Upabhoktar adhikar divasat amar karania	Binapani Deka	-
	Joibik padhatire Bhoot Jalakiar khetit kit patango niantron	Mousumi Phukan	-
	Trichoderma abidh bhekurnasok	Mousumi Phukan	-
	Bharalot kit patanga niantron	Mousumi Phukan	-
	Masor Paripurak Khadya	Pabitra Saharia	-
	Min Palanat Masor aahar aru paripusti	Pabitra Saharia	-
	Management of post flood affected fish pond	Pabitra Saharia	-
	Fish as a health food	Pabitra Saharia	-
	Human nutrition and role played by fish and fisheries product	Pabitra Saharia	-
	Fish disease and control	Pabitra Saharia	-
Leaflets/folders	Krishirata mahilar babe Saririk kasta laghabor ahila, Bulletin No. 1/2012-13	Binapani Deka, Dr. Utpala Goswami,Dr. Rupam Borgohain, Rumjhum, Phukan ,Ira Sarma, Bibha Ozah, Mousumi Phukan Dr. Pankaj Deka, Pabitra Saharia, Manab Bikash Gogoi, Didyajyoti Bharali	50
	Bayan Silpat Jekard Salar Bhumica , Bulletin No.2/2012-13	Binapani Deka, Dr. Rupam Borgohain, Rumjhum Phukan,Mousumi Phukan,Ira Sarma, Bibha Ozah, Dr. Pankaj Deka, Pabitra Saharia, Manab Bikash Gogoi, Dibyajyoti Bharali	50

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

(C) Details of Electronic Media Produced

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

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

Empowerment of Rural Women through backyard Poultry by using Vanaraja breed

Women's issues are development issues and bypassing them in development programmes means leaving almost half of human resources outside development intervention. Women belonging to poor families in rural areas suffer from double deprivation. They are poor because they belong to poor families. They are also poor because they are women members of those families. The common characteristics of rural women are poverty, virtual lack of assets, a constant battle with insecurity, unemloyment and under employment, low wages and low returns for their labour. Women have some strong qualities desirable and relevant to entreprenureship development such as their ability to manage details, dedication to the work they take up, tolerance and kindness towards people etc. In our society, the mother is the complete manager, as she plans budgets, executes and shows results in the day to day life. Therefore, to raise the status of rural women it is important to empower them by increasing income level. In this context, the backyard poultry farming with improved variety may be the potent tool for upliftment of the rural women in Assam.

Rural poultry production is being recognized as important component of socio economic improvement of the poorest of the poor. Besides income generation backyard poultry provides nutrition supplementation in the form of valuable animal protein at relatively low cost and empower rural women.

Background and Problem

Socially we are having male dominating family system; obviously all income from agril produce is in hands of male farmer. It is observed that there is always shortage of money in the hands of rural farm women. There are some enterprises existing in the present situation which gives some assured income viz. Backyard poultry, small unit of goat keeping etc. in the hands of rural women. However, poor farm women have maintained indigenous low productive stock with traditional management.

We are aware that the taste of indigenous poultry were better accepted, it has more demand too. But when we think about commercial point of view, problem of poor weight gain and egg production is the major problem observed by KVK.

KVKs intervention

Krishi Vigyan Kendra, Jorhat has planned to introduce a new improved variety suitable for backyard poultry to replace existing low productive indigenous bird in the Kaliapani development block of Jorhat district. KVK, Jorhat has selected Vanaraja, a dual purpose improved variety, developed by PDP, Hyderabad as a need based intervention for tackling the problem with indigenous bird and planned to conduct On Farm Trial and Front Line Demonstration in a village where backyard poultry rearing is a common practice. Further, KVK**,** Jorhat introduced the technology of improved feeding and brooding practices of backyard poultry to reduce early chick mortality to few women in the same and nearby villages for development of mother unit of improved variety for backyard poultry. During FLD programme, KVK scientists regularly monitor the performance of the chicks supplied at the door steps besides providing health care and technical support. Vaccination against Ranikhet and Infectious bursal disease were done regularly.

Productivity

In backyard it is observed that both live weight and egg production of Vanaraja bird is significantly increased over the indigenous bird.

Result at farmers' field

Mean (± SE) body weight (g) gain of Vanaraja and indigenous chicken at different ages

Age in weeks	Vanaraja		Indigenous	
	Male	Female	Male	Female
Day old	34.36 ± 0.82[a]	31.36 ± 0.62[b]	27.85 ± 1.009[c]	24.25 ± 0.77[d]
8	925.22 ± 47.32 [a]	861.96 ±44.66 [b]	358.48 ±30.24[c]	301.96 ± 17.36[d]
16	1218.26 ±55.56 [a]	1162.61 ± 38.57 [b]	486.74± 27.07[c]	454.13 ± 31.17 [d]
20	1561.96 ±34.17 [a]	1443.70 ± 46.76 [b]	694.35 ± 13.84[c]	639.57 ± 23.00[d]
24	1991.96 ±70.70 [a]	1489.57 ± 65.17 [b]	908.48±17.80[c]	848.70 ± 29.47[d]

Means with different superscripts within a row differ significantly (P<0.05).

Performance traits of Vanaraja and indigenous chicken

Trait	Vanaraja	Indigenous
Age at first egg (in days)	178.13 ± 0.79a	191.25 ± 1.46b
Egg Production/Year/Hen	145.75 ± 1.44 a	54.62 ± 1.13b
Egg Weight 40 Weeks (g)	51.08 ± 0.36[a]	36.12 ± 0.62[b]

Egg Weight 72 Weeks(g)	59.06 ± 0.42^{a}	41.07 ± 0.48^{b}

Means with different superscripts within a row differ significantly (P<0.05)

Acceptance of the TechnologyAdoption by the beneficiaries: Beneficiaries are interested to produce chicks from eggs of Vanaraja by hatching traditionally with their own local hen. Also, two numbers of mother unit for Vanaraja bird was developed by KVK, Jorhat as regular source of the Vanaraja grower bird for the area.

i) **Adoption by non beneficiaries:** Due to good result and return from Vanaraja, the farm women supplied chicks and eggs of Vanaraja to their relatives. Some farm families purchased eggs from beneficiaries at the rate of Rs. 6/- and hatched with their own local hen.

Suitability

i) Supplementary nutrition: Eggs of Vanaraja bird produced by the villagers were used as supplementary animal protein source by the villagers. Thus, nutrition level of school children and pregnant women might be increased.

ii) Low input: In backyard, birds were let loose during the day time by the farmers and offered on an average 35 g of feed per bird in terms of crushed maize, boiled rice, broken rice and kitchen waste etc. and the rest of their requirement was met by scavenging themselves in the form of insects, worms, seeds of grasses, tender leaves of grasses etc. The unproductive family members, old persons, children can easily manage and supervise the managerial practices of backyard poultry in a very short time.

Social impact

With the help of backyard poultry with Vanaraj, returns were increased and all these amounts are in the hands of farm women. So, she became a money holder member of a family and ultimately she is one of the major members of the family having the role in decision making of a family.

Marketing

Commercial poultry are available in urban area and cost of commercial poultry produce are more in rural areas due to transportation and unavailability, while backyard poultry produce are available in village condition. Therefore, backyard poultry produce are the easily available animal protein source for rural areas. Further, the meat and eggs of Vanaraja were preferred by the local consumers and found very demandable in the market owing to its similarity of the typical appearance of the indigenous bird. There was record of selling @ Rs.5 to 6/-per egg and Rs.150/--175/- per Kg live weight of Vanaraja bird by the farmer locally with equal market demand and good realization. So, village itself and daily and weekly bazzar (Hut) in nearby area are the market for chicken and eggs of backyard poultry farming.

Cost benefit ratio

Generally, the backyard poultry units having an average of 15 birds per family, produced in and around 1800 eggs which costs about Rs. 9000/- and 25 Kg of meat which costs around Rs. 3000/-. The total gross income is around Rs. 12,000/-, while input and other cost is around as Rs. 2500/- only. Therefore, the cost benefit ratio of unit is 1: 4.91

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

1. On demonstration, the broodiness of hybrid poultry "Vanaraja" was not observed. Further, it is not possible to incubate hatching eggs under local broody hen round the year. Therefore, to incubate eggs of hybrid poultry in rural areas, an electric cum kerosene based wooden device has been designed and developed by KVK Jorhat in collaboration with a farmer where temperature can be maintained manually. The farmers can easily build the device at home with locally available material. This device can be used in the household level to incubate non broody brids like Vanaraja. In the men time the device is gaining popularity among the farmers.

2. Non availability of quality fish seed is a major bottle neck in fish farming particularly in upper assam. Due to non availability of right seed at right time the farmer can not take the full period growth advantage of fish farming (March to October). To do so, a programme on production of carried over seed was undertaken so that farmers rear the previous years fish seed (Carried over) when temperature become congenial for fish farming. Some of the farmers can also take this method of fish seed production as a business venture in the locality.

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.	Duckery	Use of *Bhatghila* [*Oroxylum indicum* (L) Vent.] bark extract. The rural people use the bark, make paste and provided to the local ducks when observe symptom of lameness. The symptom of lameness resembles parosis condition of duck. They believe that bhatghila bark can control this problem of duck. This believe if standardized can be converted to technology for controlling duck's deficient in magnesium and iron. This is the first reporting ITK on duck by bhatghila bark.	Treatment for lameness problem (suspected parosis) in duck
2.	Rice	Leaves of 'Bihlongini' (*Polygonum hydropiper*) or 'Bihdhekia' (*Sphaerostiphnos unitus*) are incorporated into the soil of the growing crop	Management of rice stem borer
3.	Rice	'Posotia' leaves are dried, grinded and dusted in the rice field	Management of rice hispa
4.	Rice	Chopped *Kola kachu* (*Colocasia esculanta* Black) and fresh cowdung are distributed in water in the field	Management of case worm problem of rice
5.	Rice	Keeping the stubbles of *Boro* rice undisturbed avoiding ploughing and grazing by the cattle for 1 - 1½ months. The practices is usually practised in traditional varieties grown in low lying (beel) areas	This practice allows the development of ratoon of *boro* rice which provides an additional income to the farmers with zero investment
6.	Rice	Grains for seed purpose are stored in 'koloh or earthen pitcher with a lid made of earth	The stored grain pests cannot enter the structure, thereby savings the seeds. The earthen pot also saves the grains from outside

			moisture
7.	Banana	Spraying solution of "Samsolokha"/*germani bon* (*Chromolena odorata*) leaves along with detergent soap in banana plant	To control banana weevil
8.	Banana	The juice of *gundhowa bon*, (*Ageratum conizoides*) is sprayed on banana plant	To get rid of leaf and fruit scarring beetle of banana

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

- Identification of courses for farmers/farm women: PRA, Group discussion
- Rural Youth: Rural empowerment, PRA, group discussion, stakeholder analysis
- In-service personnel: On recommendation by DAO

3.11 Field activities

i. Number of villages adopted : 03
ii. No. of farm families selected : 200
iii. No. of survey/PRA conducted :03

3.12. Activities of Soil and Water Testing Laboratory

Status of establishment of Lab : Lab not yet established
1. Year of establishment :
2. List of equipments purchased with amount :

Sl. No	Name of the Equipment	Qty.	Cost
1			
2			
3			
Total			

3. Details of samples analyzed so far :

Details	No. of Samples	No. of Farmers	No. of Villages	Amount realized
Soil Samples				
Water Samples				
Plant Samples				
Petiole Samples				
Total				

4.0 IMPACT

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

Sl. No.	Name of specific technology/skill transferred	No. of participants	% of adoption	Change in income (Rs.)	
				Before (Rs./Unit)	After (Rs./Unit)
1	Sali paddy var. Ranjit	344	100	12750.00 (As grain)	83410.00 (As seed)
2	Sugarcane Var. Kalang	5	100	52500.00	77100.00
3	Blackgram (KU-301)	8	100	13080.00	26380.00
4	Toria TS- 38 TS- 46	154	100	20750.00	25235.00
5	Dual purpose chicken Vanaraja	1	100	2900.00 per unit of 10 birds	5150.00 per unit of 10 birds
6	French bean Var. Pusa parboti, contendar	10	100	75000.00	1,10000.00
7	Boro paddy (SRI)	9	100	17000.00	43,000.00
8	Marigold	1	100	180000.00	200000.00
9	Water management in Brinjal	3	100	110000.00	160000.00
10	Water management in Tomato	3	100	200000.00	255000.00
11	Management of Brinjal Fruit and Shoot Borer	3	100	15 tonne (Yield)	20 tonne
12	Organic management in Turmeric, var. Megha turmeric	10	100	330000.00	454000.00

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

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

Activity	**Methodology used for analysis**	**Impact**
Demonstration on Sali paddy (var. Ranjit, Mahsuri, Bahadur, Aghoni Bora, Keteki Joha)	Observation and Group Discussion	▪ After observing the excellent performance of Sali paddy, the farmers become interested to go for large scale cultivation of that varieties in the forthcoming season ▪ Farmers accepted the technology and nearby farmers adopted
Demonstration on Sugarcane var. kolang	Observation and Group Discussion	▪ Farmers of Majuli showed interest towards the technology after visualizing the difference in yield and economic benefit. ▪ Farmers accepted the technology and nearby farmers adopted
Demonstration on Blackgram (KU-301)	Observation and Group Discussion	▪ Farmers accepted the technology and nearby farmers adopted ▪ Farmers are convinced about prospect of cultivating Blackgram
Demonstration on toria var. TS- 38 TS- 46	Group discussion	▪ Farmers of Majuli showed interest towards the technology after getting benefited economically through cultivation of toria ▪ Farmers exhibited keen interest towards the toria var. TS 38, TS 46
Demonstration on Organic Farming	Group discussion and personal contact	▪ Farmers become aware about the new technology about the cultivation of French bean under organic farming ▪ Farmers showed interest towards the new technology after getting benefited economically through cultivation of toria ▪ More farmers become aware about public health importance of organic farming
OFT Dual purpose chicken Vanaraja	Observation and personal contact	▪ Concept of rearing of Dual purpose chicken Vanaraja has been adopted by many farmers ▪ One farmer Mr. Himantabiswa Gogoi, Bonai have started with 200 Vanaraja chicks. One batch of 100 chicks is in laying stage.

		▪ Consumers of local market well accepted brown shelled eggs and meat of Vanaraja poultry. ▪ Vanaraja poultry farming may be the source of livelihood and food security for rural youth and farm women in Jorhat District.
Advisory services on disease management of Bhut Jalakia	Observation and personal contact	▪ Many farmers of local area were benefited from the advisory services and have adopted the recommended management practices

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

Impact analysis was not done because it has to be carried out by a 3rd party.

5.0 LINKAGES

5.1.1 Functional linkage with different organizations

Name of organization	Nature of linkage
1. Department of Agriculture, Govt. of Assam	In planning and organizing training programme, demonstrations, field days, farmers-Scientist interaction, District ATMA diagnostic survey, CDAP preparation, resource person in training progeammes
2. Department of Animal Husbandry and veterinary, Govt. of Assam	In planning and implementing training programme and also organizing rural camp for vaccination of farm animals
3. Agricultural Technology Management Agency (ATMA), Jorhat	Conducting collaborative demonstration, training and expert visit.
3. District Rural Development Agency, Jorhat	Conducting collaborative training programmes and resource persons for DRDA training
4. Dairy Development, Jorhat, Assam	In planning and organizing training programme
5. NABARD, Jorhat	Conducting exposure visit, training and acting as resource person in training programmes
6. North East Affected Area Development Society (NGO)	In planning and organizing training programme

8. All India Radio, Jorhat	For coverage of rural programme and broadcasting of Radio-talk on Agriculture
9. SIRD, Jorhat	For conducting training, Celebrating important days
10. RRTC, Umran, Meghalaya	Conducting exposure visit
11. Central Potato Research Station, Upper Shillong	Conducting exposure visit
12. ICAR Research Complex for NE Hill Region, Umiam, Barapani	Source of technology and conducting exposure visit
13. NRC on Pig, Rani, Kamrup	Source of technology, Source of quality piglets
15. R & D, TATA Tea, Teok, Jorhat	Exchange of resource person, information sharing, exposure visit
16. Central Silk Board, Lahdoigarh	Knowledge sharing, source of information
17. DRDA, Jorhat	Conducting vocational training, Resource person and participant selection
18. Doordarshan, Dibrugarh	For coverage of KVK activities programme and broadcasting of discussion on Agriculture
19. IICPT, Regional Office, Guwahati	Awareness programme
20. Association of Senior Citizen, Na- Kachari	Training
21. NBSS &LUP	Training, awareness programme
22. Department of Plant Breeding and Genetics, AAU	Training
23. Department of Soil Science , AAU, Jorhat- 785013	Training

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.)
Technology Showcasing	2010-11	RKVY	29,25,740.00
Rural Knowledge Centre	December, 2009	NABARD, Jorhat	1,50,000.00
RAWEP	August,2012	Govt. of India, ICAR	-
High Tech Fruit Orchard cum nursery	Feb,2012	NHB	75,00,000.00
FPARP Phase II	Nov,2011	Ministry of Water Resources, GOI	6,37,500.00
Technology Showcasing ie., three tier pig- poultry- fish under RKVY	09/08/2012	RKVY	400000.00
Agriculture centric sustainable livelihood improvement programme for the tribal farmers of Assam	March,2013	ICAR	77,00000.00

5.3 Details of linkage with ATMA

a) Is ATMA implemented in your district : Yes

S. No.	Programme	Nature of linkage proposed
1	Governing Body, ATMA, Jorhat	Member
2	Training	As Resource persons
3	Demonstration on Toria at Majuli	Site and farmers selection

4	Farmers – Scientists Interaction	As Resource persons
5	Field Day	Collaborative programme
6	Diagnostic field visit	As specialists

5.4 Give details of programmes implemented under National Horticultural Mission: Nil

S. No.	Programme	Nature of linkage	Constraints if any

5.5 Nature of linkage with National Fisheries Development Board : Nil

S. No.	Programme	Nature of linkage	Remarks

6.PERFORMANCE OF INFRASTRUCTURE IN KVK

6.1 Performance of demonstration units (other than instructional farm)

Sl. No	Name of the animal / bird / aquatics	Details of production			Amount (Rs.)		Remarks
		Breed	Type of Produce	Qty.	Cost of inputs	Gross income	
1	Cattle	HF cross	Milk	952 lit	-	26,516.00	-
2	Goat	Beetle/ Local	Quality kid	2 nos. Kid	-	1400.00	-
3	Broiler	Cobb 400	meat	723.8 Kg	55765.00	73180.00	-
4	Vanaraja	Vanaraja	meat	8.8 Kg	-	1320.00	-
5	One month old Vanaraja	Vanaraja	Quality hybrid chicks	One month old	-	2400.00	-

	Chicks						
6	Duck Egg (Hatching Egg)	Chara-Chemballi	Egg	140 Egg	-	700.00	-
7	Pig	T &D, Hampshire & Ghungroo	Piglet		29000.00	7,370.00	10 numbers of Hampshire and T&D pigs are now in Grower stage
8	Fish	IMC/ Exotic Carp (480 nos)	Fish	100Kg	2400.00	10000.00	-
9	Rice cum fish	Indian Major Carps and Exotic Carps	Fish	63 kg	1250.00	6300.00	-
10	Mushroom	Var. Oyster	-	4kg	50.00	200.00	-

6.2 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	4th-6th, June,2012	10-14th,Nov, 2012	2.3	Ranjit (FD) KDML (TLS) Mashuri (FD	Foundation seeds	27.80q 2.10q 7.75q	50000.00	108420.00 5250.00 30225.00	B:C 1.87
								total143895.00	
Pulses	12th august,2012	25th Nov,2012	0.26	KU-301	Seeds	10 q	2000.00	4250.00	B:C1.12
Pigeonpea	-	-	-	-	-	-	-	-	-
Oilseeds	-	-	-	-	-	-	-	-	-
Fibers	-	-	-	-	-	-	-	-	-
Spices & Plantation crops									

Ginger	20th April,2012	22th ,	0.01	Moran Ada	Rhizome	50kg	300.00	1000.00	Used in KVK farm
Turmeric	25th April,2012	Oct,2012 30th,oct, 2012	0.13	Megha Turmeric-1	Rhizome	60kg	300.00	1200.00	Used in KVK farm
Floriculture Marigold Gerbera	12th Sep2012 10-12th May,2012	20th Dec,2012 -	0.01 0.02	Pusa Narangi Red Gem	Seeds Suckers	1000g 1000nos	500.00 900.00	2500.00 5000.00	Used in KVK farm
Fruits									
Banana	15-20th March,2011		0.13	Amritsagar	Suckers	200nos	-	1000.00	Used in KVK farm
Vegetables Brinjal	10th Oct,2012	-	0.01			200 g	-	400.00	Used in KVK farm
Tomato	10th Oct,2012	-	0.01	24 different varieties		300g		400.00	Used in KVK farm
Cabbage	10th Sept,2012	-	Total area 3sqm	Green Express	Seedlings	500 nos	-	300.00	Used in KVK farm
Cauliflower	10th Sept,2012	-		Pusa Snowball	Seedlings	500 nos		300.00	Used in KVK farm

Knolkhol	10th Sept,2012	-		Soilder	Seedlings	500 nos		300.00	Used in KVK farm
Tomato	10th Oct,2012	-		24 var Longai	Seedlings	3000 nos		1800.00	Used in KVK farm
Brinjal	10th Oct,2012	-		Longai,	Seedlings	1000 nos		600.00	Used in KVK farm
Products									
Pineapple	10-15th April,20	Aug-Sept,201	0.13	Kew	Fruits	157kg	500.00	1575.00	2.15
Cabbage	10th Sept,2012	Nov,2012 on wards	0.01	Green Express	Head	70.1kg	200.00	650.00	2.25
Cauliflower	10th Sept,2012	Nov,2012 on wards	0.01	Pusa Snowball	Curd	8.2kg	200.00	82	-
Tomato	10th Oct,2012	Dec,2012 onwards	0.01	26 var.	Fruits	123 kg	200.00	615.00	2.07
Brinjal	10th Oct,2012	Dec,2012 onwards	0.01	Longai	Fruits	30kg	50.00	140.00	1.8
Bhoot jalakia	20th Feb,2012	July,2012onwards	0.04	-	Fruits	122kg	4000.00	19255.00	3.81
Off season spinach	10th Aug,20	Sept,2012onwards	0.02	All Green	Leaves	56.75 kg	500.00	2270.00	3.54

	12								
Okra	12th March,2012	May,2012 onwards	0.01	Arka Anamika	Fruits	42kg	150.00	420.00	1.8

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

Sl. No.	Name of the Product	Qty **(qt)**	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	
1	Trichoderma based bio-pesticide	15	150000.00	75000.00 (@ Rs. 50/ kg)	Distributed to the farmers and used in KVK Farm
2	Vermocompost	8.16	1000.00	8160.00,(@ Rs. 10/ kg)	Used in KVK Farm
3	Azolla	1 (F. wt.)	500.00	1000.00,(@ Rs. 10/ kg)	Used in KVK Farm

6.4 Performance of instructional farm (livestock and fisheries production)

Sl. No	Name of the animal / bird / aquatics	Details of production			Amount (Rs.)		Remarks
		Breed	Type of Produce	Qty.	Cost of inputs	Gross income	
1	Cattle	HF cross	Milk	952 lit	-	26,516.00	-
2	Goat	Beetle/ Local	Quality kid	2 nos. Kid	-	1400.00	-
3	Broiler	Cobb 400	meat	723.8 Kg	55765.00	73180.00	-
4	Vanaraja	Vanaraja	meat	8.8 Kg	-	1320.00	-
5	One month old Vanaraja Chicks	Vanaraja	Quality hybrid chicks	One month old	-	2400.00	-
6	Duck Egg (Hatching Egg)	Chara-Chemballi	Egg	140 Egg	-	700.00	-
7	Pig	T &D, Hampshire & Ghungroo	Piglet		29000.00	7,370.00	10 numbers of Hampshire and T&D pigs are now in Grower stage

8	Fish	IMC/ Exotic Carp (480 nos)	Fish	100Kg	2400.00	10000.00	-
9	Rice cum fish	Indian Major Carps and Exotic Carps	Fish	63 kg	1250.00	6300.00	-
10	Mushroom	Var. Oyster	-	4kg	50.00	200.00	-

6.5 Rainwater Harvesting

Training programmes conducted by using Rainwater Harvesting Demonstration Unit : No rain water harvest structure established

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

6.6 Utilization of hostel facilities (Month Wise): Not used as the water connection is not done yet

Accommodation available (No. of beds) :

Months	Title of the training course/Purpose of stay	Duration of Training	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
Total					
Grand total					

(Duration of the training course X No. of trainees)=Trainee days

7. FINANCIAL PERFORMANCE

7.1Details of KVK Bank accounts

Bank account	Name of the bank	Location	Account Number
With Host Institute	SBI, AAU, Branch	Assam Agricultural University, Jorhat	10253825316
With KVK	SBI, Teok	Teok	30240073924

7.2 Utilization of funds under FLD on Maize *(Rs. In Lakhs): No FLDs under maize*

Item	Released by ICAR/ZPD		Expenditure		Unspent balance as on 31st March, 2013
	2009-10	2010–11	2011-12	2012-13	
Inputs					
Extension activities					
TA/DA/POL etc.					
TOTAL					

7.3 Utilization of KVK funds during the year 2012 -13

S. No.	Particulars	Sanctioned (in Lakh)	Released (in Lakh)	Expenditure (in Lakh)	Remark
A. Recurring Contingencies					
1	**Pay & Allowances**	44 lakhs	7016209.00	7016209.00	
2	**Traveling allowances**	2 lakhs	60000.00	177230.00	
3	**Contingencies**				
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)				
B	POL, repair of vehicles, tractor and equipments				
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)				

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)				
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)				
G	Training of extension functionaries				
H	Maintenance of buildings				
I	Establishment of Soil, Plant & Water Testing Laboratory				
J	Library				
TOTAL (A)		**8.00 lakhs**	**756134.00**	**841575.00**	Additional expenditure amount to Rs. 42182.00. This excess amount was due to i. Rs. 43259.00 was used by DoEE, AAU, Jorhat ii. Electricity bill was increased iii. Labour payment increased iv. The excess amount to Rs. 42182.00 will be adjusted from the budget of 2013-14 financial year as per the decision taken by the DEE, AAU, Jorhat
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					
GRAND TOTAL (A+B+C)		**8.00 lakhs**	**756134.00**	**841575.00**	

7.4 Status of revolving fund (Rs. in lakhs) for last three years

Year	Opening balance as on 1st April	Income during the year	Expenditure during the year	Net balance in hand as on 1st April of each year
April 2010 to March 2011	**1,02,937.00**	**12,512.00**	**14,042.00**	**1,01,407.00**
April 2011 to March 2012	**1,01,407.00**	**2,37,341.00**	**1,24,463.00**	**2,31,285.00**
April 2012 to March 2013	**2,31,285.00**	**1,60,499.00**	**27,653.00**	**3,64,131.00**

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

12. TECHNOLOGY SHOWCASING : SEED PRODUCTION

Period/Season	Crop	Area (ha)	No. of farmers	Yield			Name of the line departments involved
				Highest	Lowest	Average	
2012-13 (Kharif)	Sali Paddy (var. Ranjit) Foundation seed	62	162			6.00 t/ ha	State Agriculture Department
		27	38				
		21	25				
		27	17				
		33	72				
2012-13 (Rabi)	Toria (var. TS-36)	50	110			12.37 qt/ha	State Agriculture Department
2012-13 (Rabi)	Pea (var. Azad pea 1)	20	88				State Agriculture Department
	var. Vikash	12	23				State Agriculture Department
2012-13 (Rabi)	Garlic (var. Local)	6.13	54				State Agriculture Department

Fishery Technology Showcasing Programme

Technology Showcasing ie., three tier pig- poultry- fish under RKVY :

Technology showcasing programme on three tier pig-poultry and fish farming under RKVY is being implemented at six different location of Jorhat district. The objectives of the programme is to aware the farmers and popularize the three tier integrated pig-poultry-fish farming. Four such model has been completed till date and 60% work has been completed for remaining two three tier integrating model.

TSP Project: Promotion of Agriculture Centric Sustainable Livelihood Security for Tribal Farmers of Assam

Under TSP programme on "Promotion of Agriculture Centric Sustainable Livelihood Security for Tribal Farmers of Assam", 5 village cluster has been selected at Elengmora, Jorhat. Till date, 5 pig breeding unit comprising 2 male and 10 female pigs in each has been developed to produce quality piglets for the development of pig farming in the district. Also, 45 pig fattening unit has been developed in the same tribal villages to meet the demand of pork and empower tribal farming community in the district. A total of 50 beneficiaries have also been selected for backyard poultry farming with hybrid variety "Vanaraja" in the same village cluster. Further, about 300 farmers have been selected for fruit crops (Assam Lemon and Pine apple), vegetables and paddy cultivation.

8.1 Constraints :

a) Administrative

- Inadequate periodic HRD programmes for KVK staff

b) Technical

- Lack of diagnostic laboratory
- Weak internet connectivity
- Lack of AES wise technology

c) Financial

- Late and under allocation of funds.
- Fund allotment(Recurring contingency) among the KVKs should justifiable be based on the work load and history of fund utilization