

ANNUAL REPORT OF KVK PHEK, 2011-12

1. GENERAL INFORMATION ABOUT THE KVK

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

Address	Telephone		E mail
	Office	FAX	
Krishi Vigyan Kendra (NRCM), Village- Porba, P.O-Pfutsero, District - Phek, Nagaland-797107.	03865- 281436	03865- 281436	kvkphek@gmail.com www.kvkphek.nic.in

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

Address	Telephone		E mail
	Office	FAX	
NRC on Mithun, Jharnapani, Medziphema, Nagaland.	03862- 247341	03862- 247341	nrcmithun@mailcity.com www.nrcmithun.res.in

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

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. R.K.Singh	Village- Porba, P.O-Pfutsero, District - Phek, Nagaland- 797107	09436606353	rksingh3@gmail.com

1.4. Year of sanction:

1.5. Staff Position (As on 31st March, 2012)

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. R.K.Singh	Programme Coordinator	Animal Science	37,400-67,000	43250	07.12.08	Permanent	Others
2	Subject Matter Specialist	Mr.Rinku Bharali	SMS	Horticulture	15,600-39,100	18240	17.08.06	Permanent	Others
3	Subject Matter Specialist	T.Esther Longkumer	SMS	Soil Science	15,600-39,100	18240	01.08.06	Permanent	ST
4	Subject Matter Specialist	Hannah K. Asangla	SMS	Agronomy	15,600-39,100	18240	01.08.06	Permanent	ST
5	Subject Matter Specialist	Er. Chitrasen Lairenjam	SMS	Agril Engg.	15,600-39,100	18240	10.08.06	Permanent	OBC
6	Subject Matter Specialist	Dr. Debojyoti Borkotoky	SMS	Animal Science	15,600-39,100	15600	01/11/2010	Permanent	Others

7	Subject Matter Specialist	Mrs. Liza Barua Bharali	SMS	Plant Protection	15,600-39,100	16230	23.11.09	Permanent	Others
8	Programme Assistant	Virginia Thabah	Programme Asst.	Home Science	5,200-20200	10020	31.08.06	Permanent	ST
9	Computer Programmer	Er. Nukusa T. Vadeo	Computer Programmer	Computer Engg.	5,200-20200	10020	01.08.06	Permanent	ST
10	Farm Manager	Keniseto Chucha	Farm Manager	Horticulture	5,200-20,200	8910	10.11.09	Permanent	ST
11	Accountant / Superintendent	Vacant	-	-	-	-	-	-	-
12	Stenographer	R. Imsennaro	Stenographer cum computer operator	-	5,200-20,200	8440	09.04.07	Permanent	ST
13	Driver	Bodan Ch. kachari	Driver cum mechanic	-	5,200-20,200	7540	01.08.06	Permanent	ST
14	Driver	Vacant	-	-	-	-	-	-	-
15	Supporting staff	Shetsonyi	Grade I	-	5,200-20,200	5860	29.03.07	Permanent	ST
16	Supporting staff	Vevo	Grade I	-	5,200-20,200	5860	29.03.07	Permanent	ST

1.6. Total land with KVK (in ha) :

S. No.	Item	Area (ha)
1	Under Buildings	1.0
2.	Under Demonstration Units	0.1
3.	Under Crops	0.2
4.	Orchard/Agro-forestry	1.7
5.	Others (specify)Forest and road	16

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	NA		145.82 lakhs	Oct 2010	539	Cont.
2.	Farmers Hostel	-	-	-	-	-	-	-
3.	Staff Quarters (4)	ICAR	NA		67.68 lakhs	Oct 2010	253	Cont
4.	Demonstration Units (2)	ICAR	NA	-	22.14 lakhs			
5	Fencing	-	-		-	-	-	-

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Bolero	2004	4,37,736.00/-	181666	Running condition but needs to condemned
Power tiller	2004	1,21,868.00/	1600 hr	Good

C) Equipments & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
Computer and accessories	2006	2,30,984.00	Need renovation or replacement, hardware outdated.
Camera	2006	19,390.00	Good
LCD Projector	2010	95,500.00	Good
GPS	2010	14,600.00	Good
Animal Controlling crate (Travice)	2011	57,500.00	Good

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

Sl.No.	Date	Name and Designation of Participants	Salient Recommendations	Action taken
1.	03-08-11	1. Rev.L.Ritse Pfutseromi village 2. Neisale Kapfo 3. Neipelo Kapfo 4. L.Zho (NOAH GRANPA Project Co-ordinator) 5. Medoseto Kiso(NOAH GRANPA Project Co-ordinator) 6. Wepe Kronu (Field Officer) 7. Avi Sakhamo (Farmer) 8. Vilichu Nguzhu (DSCO) 9. N.Kehie (DPO) 10. Dr. Mudozo Sahire D.V.O.Phek 11. Dr.K.K.Baruah (Principal Scientist NRCM). 12. K.Ritse Chairman APMC. 13. Sanyi Dukru (VC,APMC) 14.Kedusayo Puro (Fishery Inspector) 15. Dzuthoru Chotso (Fishery Demonstrator) 16. Ngupetso Farmer) 17. Khazi Lea (President, Phek Distt. Farmer's union) 18. Dr.U.S.Saha(GM, NABARD) 19. Vechulou Kanuo (Exe.Director, CWWS) 20. Rinku Bharali (SMS-Horti) 21. Viginia Thabah (Prog Asstt.-ome S 22. Liza Baruah Bharali (SMS-Plant Protection) 23.T Esther Longkumer (SMS-Soil Sc 24. Keniseto Chucha (Farm Manager) 25. Bodon Ch.Kachari 26. Mezelo Lomi (Chairman Sub-yard APMC) 27. Vevoto (Farmer) 28.Avelu (Farmer) 29. Dr.Debojyoti Borkotoky(SMS_Anir Sc) 30. Dr R K Singh PC,KVK-Phek 31. Surhoveyi (Farmer) 32. Dr.T.Tombi Singh (NRCM)	1. KVK should provide proper technical know how to farmers for proper proper management of Kiwi fruit orchards. 2. KVK should provide proper training on grading and packing of Kiwi and further NABARD is requested to provide support for training and exposure on this aspect. 3. Cabbage is cultivated in this region in quite good quantity but the marketing is a problem and farmers sometimes do not get the remunerative price. GM, NABARD has suggested to take up red cabbage cultivation as it may fetch good price in the market. 4. GM, NABARD has suggested for adoption of SRI in paddy cultivation also asked KVK to organize exposure trip of some progressive farmers to Tuensang for visiting SRI technology adopted by the farmers there. 5. Training on nutrition management of old orchards are very important and KVK should conduct extension activities on this aspect 6. Nutrition management of crops are essential to harvest the potential yield, therefore KVK should formulate strategy for nutrition management of the field crops. 7. DVO Phek suggested regular vaccination of poultry and other animals to achieve sustainability in meat production. 8. President, Phek District Farmers Union explained on potential of	Training and demonstration of Kiwi cultivation has been taken up. Trainings have been conducted and exposure visit of kiwi farmers to Solan, H.P has been organized. On Farm trial on Red cabbage is in progress On farm trial on improved varieties on paddy was taken up. In the next session, SRI will be done. Training on citrus rejuvenation has been imparted to extension officials Demonstration on nutrient management of field crops has been taken up Eight number of vaccination camp programme conducted (4 mithun vaccination & 2 poultry vaccination) Training on TPS

	<p>33. Er.Chitrasen Lairenjam (SMS-Agri Engg) 34. Zhoveyo (VCM) 35. Nukusa. T.Vadeo (Prog asstt.- Computer) 36 R.Imseennaro. Longchar (Jr. Steno) 37. Mutsivolu (Farmer) 38.Zuhuto (Farmer) 39. Vesozolu (Farmer)</p>	<p>9. potato cultivation in there region and requested to organize training on TPS production. Mithun is a unique animal and has potential in this region. KVK should organize a demonstration on cafeteria of the technologies at one site as a model and house request the GM, NABARD for arranging the fund for developing the model. 10. Nagaland is the abode of sixteen major tribes and in Phek itself there are three different tribes. Language sometimes become hindering factor so there is need to develop training media in visual form so the viewer can easily understand the technology. KVK should produce some technical films on different subjects of the farmers interest. 11. Pig breeding programme in the villages should be taken 12. Trainings on large cardamom cultivation to be imparted 13. To form SHGs and Famers club in the district</p>	<p>production will be conducted. 100 sapling of Ficus hookeri planted in Mesulumi village as biofencing DVDs and CDs on crops and livestock rearing has been developed 7 pig breeding units provided Under NICRA and OFT programme Training on large cardamom cultivation will be conducted. Farmers club formation is in progress, so far 10 farmers club have been formed.</p>
2.			

** Attach a copy of SAC proceedings along with list of participants*

2. DETAILS OF DISTRICT

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

S. No	Farming system/enterprise
1.	Jhum
2.	Pani kheti
3.	Zabo system
4.	Agrisilvipastoral system
5.	Alder based cropping system

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

S. No	Agro-climatic Zone	Characteristics
1.	Sub tropical Hill Zone (1000-1500m MSL)	High hills to medium hills with steep slope and undulating topography. Soils are rich in organic matter and ranges from sandy loam to clay loam
2.	Sub Alpine temperate zone (1500-3500m MSL)	High hills with steep terrains and deep gorges. Soils ranges are clay to clay loam
3.	Mild tropical Hill zone (200-800m MSL)	Mid hills to low hills with gentle slopes. Soils ranges from sandy loam to clay

2.3 Soil type/s

S. No	Soil type	Characteristics	Area in ha
1.	Black Soils	Dark grey to black colour with high clay content. Sandy loam to clay in texture.	36468ha
2.	Red Soils	Light textured with porous structure. Clay soil is predominant.	24312 ha
3.	Alluvial Soils	Light grey to dark colour. Sandy loam to clay loam.	18234ha
4.	Sandy Soils	Coarse texture, sandy loam in nature	6078ha

2.4. Area, Production and Productivity of major crops cultivated in the district (2009-10)

S. No	Crop	Area (ha)	Production (Qtl)	Productivity (Qtl /ha)
1.	Cereals			
A	Jhum Paddy	2.10	37.5	17.85
B	WTRC Paddy	11.90	275.8	23.17
c.	Maize	8.00	142.4	0.178
d.	Small millets	2.40	23.0	9.58
2.	Pulses			
a.	Arhar	0.42	4.0	9.52
b.	Rajma Kholar	0.15	2.1	14.0
c.	Beans	0.26	3.6	13.84
D	Pea	1.00	16.3	16.3
3.	Oilseed			
a.	Groundnut	0.07	0.5	7.14
b.	Soyabean	2.06	28.8	13.98
c.	Rapeseed/Mustard	2.75	27.4	9.96
4.	Fruits			
a.	Pear	10.0	250.0	25.0
b.	Plum	10.0	250.0	25.0
c.	Peach	15.0	400.0	26.7
d.	Orange	300.0	20000.0	66.7
e.	Pomelo	10.0	200.0	20.0
f.	Papaya	25.0	3000.0	120.0
g.	Banana	200.0	50000.0	250.0
h.	Guava	20.0	1000.0	50.0
i.	Pineapple	250.0	35000.0	140.0
j.	Passion fruits	300.0	6000.0	20.0
5.	Vegetables			
a.	Potato	700.0	70000.0	100.0
b.	Sweet potato	10.0	400.0	40.0

c.	Cabbage	500.0	50000.0	100.0
d.	Cauliflower	5.0	150.0	30.0
e.	Brinjal	15.0	1100.0	73.3
f.	Tomato	50.0	3000.0	60.0
g.	Chochow	140.0	13000.0	92.9
h.	Tapioca	0.08	18.6.0	232.5
i.	Colocassia	0.55	52.5.0	95.45
j.	Tree tomato	15.0	1200.0	80.0
6.	Spices			
a.	Ginger	300.0	20000.0	66.7
b.	Garlic	25.0	300.0	12.0
c.	Chillies	300.0	20000.0	66.7
D	Cardamom	0.52	2.5.0	4.8

2.5. Weather data

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)
		Maximum	Minimum	
				85
April 2011	53	21.6	16.6	94.4
May 2011	201	22.6	15.4	96.8
June 2011	346	24.0	17.6	97.8
July 2011	401	23.8	19.0	97.4
Aug 2011	400	25.2	19.8	95.0
Sept 2011	304	25.5	19.0	96.2
Oct 2011	102	23.2	17.0	95.0
Nov 2011	0	19.4	10.6	92.2
Dec 2011	0	19.6	10.6	96.6
Jan 20112	0	19.4	4.8	98.0
Feb 2012	0	20.6	0.8	97.4
Mar 2012	4	17.2	5.6	93.2

2.6. Production and productivity of livestock, Poultry, Fisheries etc. in the district (2007)

Category	Population	Production	Productivity
Cattle			
<i>Crossbred</i>	9,387		3.79
<i>Indigenous</i>	19,870		0.51
Buffalo	3,735		0.786
Sheep	370		
<i>Crossbred</i>			
<i>Indigenous</i>			
Goats	6,520		0.125
Pigs			
<i>Crossbred</i>	1,01,566		
<i>Indigenous</i>			
Rabbits	6,029		
Poultry (Egg-205/day)			
Hens			
<i>Desi</i>	3,71,418		
<i>Improved</i>			
Ducks	Meat-2.7kg/day, Egg-80/day		
<i>Desi</i>	17,837		
Turkey and others			

2.6 Details of Operational area / Villages (2011-12)

No	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Pfutsero	Pfutsero	Porba Mesulumi Kikruma Gidemi Pfutseromi	<p>Paddy</p> <p>Maize</p> <p>Potato</p> <p>Banana</p> <p>Passion fruit</p> <p>Pear, Peach & plum</p>	<p>Poor yield of local variety.</p> <p>Degrading soil fertility</p> <p>Stem borer infestation More time and labour consumption in weeding and thrashing of paddy Poor viability of seeds and loss due to improper storage Soil erosion, loss of fertility and degradation</p> <p>Poor yield and low quality of local variety Improper plant spacing with higher seed rate Drudgery in shelling of maize</p> <p>Low yield</p> <p>Non availability of quality planting material Cut worm, Red ants</p> <p>Cultivation of wild type low quality banana cultivars. Improper training of plants.</p> <p>Improper planting, training and pruning Insect pest and disease infestation. Post harvest losses of fruits and vegetables</p> <p>Heavy weed infestation in the orchards Low yield and quality of pear peach and plum.</p>	<p>Introduction of high yielding varieties of paddy suitable for panikheti. Introduction of biofertilizers e.g. Rhizobium, Azotobacter, Azospirillum, Blue green algae, Azolla for nutrient management Use of suitable plant protection measures Introduction of improved paddy weeders and thrashers.</p> <p>Introduction of improved storage structure for cereals. Proper design of terrace, water harvesting, diversion, developing irrigation and drainage system for proper management of watershed area.</p> <p>Introduction of high yielding/hybride varieties Proper plant geometry and seed rate Use of maize shellers</p> <p>Use of high yielding varieties and adoption of Integrated nutrient management to maintain the fertility status of soil. Introduction of TPS technology Use of suitable plant protection measures</p> <p>Introduction of high quality of banana cultivar such as Grand naine</p> <p>Improved production technology of passion fruit. Use of suitable plant protection measures Development capabilities of rural youth and women in the field of fruits and vegetables processing and value addition.</p>

				<p>Cabbage</p> <p>Ginger</p> <p>Poultry</p> <p>Piggery</p> <p>Mithun</p> <p>Cattle</p> <p>Fishery</p>	<p>Improper nursery raising technique Insect and pest infestation. Mix cultivation resulting in hindrance for intercultural operations.</p> <p>Rotting in field and as well as during storage</p> <p>Low production performance of existing birds No provision of night shelter and unhygienic dwellings Improper feeding High epidemics of RD</p> <p>Low production performance of local breeds Non-availability of piglets in the locality Tendency of the farmers to produce pork on zero to negligible inputs</p> <p>High incidence of disease occurrence like FMD Compensation of mineral deficiency in high hill fodders by providing common salt only Parasitic infestation in young calves Poor milk production of local breed, Thotho</p> <p>Epidemics of FMD Parasitic infestation in young calves</p> <p>Skin disease in local breed Poor production of local fish</p>	<p>Control of weeds Use of high yielding varieties with improved production technology. Proper nursery raising techniques. Use of bio-control agents Developing proper intercropping pattern</p> <p>Soil and Seed treatment Proper storage of finished products</p> <p>Introduction of quality poultry germplasm. Adequate and hygienic shelter/housing Supplementary feeding for better growth and performance Vaccination</p> <p>Introduction of quality pig germplasm. Developing breeding unit of high performing breeds Creating awareness regarding performance and management of better germplasm</p> <p>Vaccination and health coverage measures. Feeding of Compounded mineral mixture instead of common salt only Deworming on regular intervals</p> <p>Breed improvement through selection and cross breeding Vaccination Deworming on regular intervals</p> <p>Liming in fish pond Introduction of quality fish breed</p>
2	Pfutsero	Chizami	Tsupfumi Thetsumi	<p>Paddy</p>	<p>Poor yield of local variety. Degrading soil fertility</p>	<p>Introduction of high yielding varieties of paddy suitable for panikheti. Introduction of biofertilizers e.g. Rhizobium, Azotobacter, Azospirillum, Blue green</p>

				<p>Stem borer infestation More time and labour consumption in weeding and thrashing of paddy Poor viability of seeds and loss due to improper storage Soil erosion, loss of fertility and degradation</p>	<p>algae, Azolla for nutrient management Use of suitable plant protection measures Introduction of improved paddy weeders and thrashers.</p> <p>Introduction of improved storage structure for cereals. Proper design of terrace, water harvesting, diversion, developing irrigation and drainage system for proper management of watershed area.</p>
			Maize	<p>Poor yield and low quality of local variety Improper plant spacing with higher seed rate Drudgery in shelling of maize</p>	<p>Introduction of high yielding/hybride varieties Proper plant geometry and seed rate Use of maize shellers</p>
			Potato	<p>Low yield</p>	
			Banana	<p>Non avialibility of quality planting material Cut worm, Red ants</p>	<p>Use of high yielding varieties and adoption of Integrated nutrient management to maintain the fertility status of soil. Introduction of TPS technology Use of suitable plant protection measures</p>
			Passion fruit	<p>Cultivation of wild type low quality banana cultivars. Improper training of plants.</p>	<p>Introduction of high quality of banana cultivar such as Grand naine</p>
			Pear, Peach & plum	<p>Improper planting, training and pruning Insect pest and disease infestation. Post harvest losses of fruits and vegetables</p>	<p>Improved production technology of passion fruit. Use of suitable plant protection measures Development capabilities of rural youth and women in the field of fruits and vegetables processing and value addition.</p>
			Cabbage	<p>Heavy weed infestation in the orchards Low yield and quality of pear peach and plum.</p>	
			Ginger	<p>Improper nursery raising technique Insect and pest infestation. Mix cultivation resulting in hindrance for intercultural operations.</p>	<p>Control of weeds Use of high yielding varieties with improved production technology. Proper nursery raising techniques. Use of bio-control agents Developing proper intercropping pattern</p>
			Large cardamom	<p>Rotting in field and as well as during storage</p>	<p>Soil and Seed treatment</p>

				<p>Poultry</p> <p>Piggery</p> <p>Cattle</p>	<p>High incidence of disease occurrence resulting in dyeing of plants High energy requirement in drying</p> <p>Low production performance of existing birds No provision of night shelter and unhygienic dwellings Improper feeding</p> <p>High epidemics of RD</p> <p>Low production performance of local breeds Non-availability of piglets in the locality Tendency of the farmers to produce pork on zero to negligible inputs</p> <p>Poor milk production of local breed, Thotho</p> <p>Epidemics of FMD Parasitic infestation in young calves</p>	<p>Proper storage of finished products</p> <p>Use of resistant varieties</p> <p>Proper designing of driers</p> <p>Introduction of quality poultry germplasm. Adequate and hygienic shelter/housing Supplementary feeding for better growth and performance Vaccination</p> <p>Introduction of quality pig germplasm. Developing breeding unit of high performing breeds Creating awareness regarding performance and management of better germplasm</p> <p>Breed improvement through selection and cross breeding Vaccination Deworming on regular intervals</p>
3	Chetheba	Kikruma	K.Basa Thipuzu Thenizu	<p>Paddy</p> <p>Maize</p> <p>Potato</p>	<p>Poor yield of local variety.</p> <p>Degrading soil fertility</p> <p>Stem borer infestation More time and labour consumption in weeding and thrashing of paddy Poor viability of seeds and loss due to improper storage Soil erosion, loss of fertility and degradation</p> <p>Poor yield and low quality of local variety Improper plant spacing with higher seed rate Drudgery in shelling of maize</p>	<p>Introduction of high yielding varieties of paddy suitable for panikheti. Introduction of biofertilizers e.g. Rhizobium, Azotobacter, Azospirillum, Blue green algae, Azolla for nutrient management Use of suitable plant protection measures Introduction of improved paddy weeders and thrashers.</p> <p>Introduction of improved storage structure for cereals. Proper design of terrace, water harvesting, diversion, developing irrigation and drainage system for proper management of watershed area.</p> <p>Introduction of high yielding/hybride varieties</p>

				<p>Low yield</p> <p>Banana Non availability of quality planting material Cut worm, Red ants</p> <p>Passion fruit Cultivation of wild type low quality banana cultivars. Improper training of plants.</p> <p>Mandarin Improper planting, training and pruning Insect pest and disease infestation. Post harvest losses of fruits and vegetables</p> <p>Pear, Peach & plum Improper spacing Insect pest and disease management</p> <p>Ginger Heavy weed infestation in the orchards Low yield and quality of pear peach and plum.</p> <p>Poultry Rotting in field and as well as during storage</p> <p>Piggery Low production performance of existing birds No provision of night shelter and unhygienic dwellings Improper feeding</p> <p>Cattle High epidemics of RD Low production performance of local breeds Non-availability of piglets in the locality Tendency of the farmers to produce pork on zero to negligible inputs Poor milk production of local breed, Thotho Epidemics of FMD Parasitic infestation in young calves</p>	<p>Proper plant geometry and seed rate Use of maize shellers</p> <p>Use of high yielding varieties and adoption of Integrated nutrient management to maintain the fertility status of soil. Introduction of TPS technology Use of suitable plant protection measures</p> <p>Introduction of high quality of banana cultivar such as Grand naine</p> <p>Improved production technology of passion fruit. Use of suitable plant protection measures Development capabilities of rural youth and women in the field of fruits and vegetables processing and value addition. Proper plant geometry Integrated pest and disease management</p> <p>Control of weeds Use of high yielding varieties with improved production technology.</p> <p>Soil and Seed treatment Proper storage of finished products</p> <p>Introduction of quality poultry germplasm. Adequate and hygienic shelter/housing Supplementary feeding for better growth and performance Vaccination</p> <p>Introduction of quality pig germplasm. Developing breeding unit of high performing breeds Creating awareness regarding performance and management of better germplasm</p> <p>Breed improvement through selection and cross breeding</p>
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						Vaccination Deworming on regular intervals
	Phek	Phek Meluri	Lozapuhu Meluri	Paddy	Poor yield of local variety. Degrading soil fertility Stem borer infestation More time and labour consumption in weeding and thrashing of paddy Poor viability of seeds and loss due to improper storage Soil erosion, loss of fertility and degradation	Introduction of high yielding varieties of paddy suitable for panikheti. Introduction of biofertilizers e.g. Rhizobium, Azotobacter, Azospirillum, Blue green algae, Azolla for nutrient management Use of suitable plant protection measures Introduction of improved paddy weeders and thrashers. Introduction of improved storage structure for cereals. Proper design of terrace, water harvesting, diversion, developing irrigation and drainage system for proper management of watershed area.
				Maize	Poor yield and low quality of local variety Improper plant spacing with higher seed rate Drudgery in shelling of maize	Introduction of high yielding/hybride varieties Proper plant geometry and seed rate Use of maize shellers
				Potato	Low yield	Use of high yielding varieties and adoption of Integrated nutrient management to maintain the fertility status of soil. Introduction of TPS technology Use of suitable plant protection measures
				Banana	Non availability of quality planting material Cut worm, Red ants	Introduction of high quality of banana cultivar such as Grand naine
				Passion fruit	Cultivation of wild type low quality banana cultivars. Improper training of plants.	Improved production technology of passion fruit. Use of suitable plant protection measures
				Kiwi	Improper planting, training and pruning Insect pest and disease infestation. Post harvest losses of fruits and vegetables	Development capabilities of rural youth and women in the field of fruits and vegetables processing and value addition. Selection of improved varieties. Improved production technology.
				Mandarin	Poor quality planting material. Lack of knowledge on production technology.	
				Pear, Peach	Improper spacing	

				<p>& plum</p> <p>Ginger</p> <p>Poultry</p> <p>Piggery</p> <p>Cattle</p>	<p>Insect pest and disease management</p> <p>Heavy weed infestation in the orchards Low yield and quality of pear peach and plum.</p> <p>Rotting in field and as well as during storage</p> <p>Low production performance of existing birds No provision of night shelter and unhygienic dwellings Improper feeding</p> <p>High epidemics of RD</p> <p>Low production performance of local breeds Non-availability of piglets in the locality Tendency of the farmers to produce pork on zero to negligible inputs</p> <p>Poor milk production of local breed, Thotho</p> <p>Epidemics of FMD Parasitic infestation in young calves</p>	<p>Proper plant geometry Integrated pest and disease management</p> <p>Control of weeds Use of high yielding varieties with improved production technology.</p> <p>Soil and Seed treatment Proper storage of finished products</p> <p>Introduction of quality poultry germplasm. Adequate and hygienic shelter/housing Supplementary feeding for better growth and performance Vaccination</p> <p>Introduction of quality pig germplasm. Developing breeding unit of high performing breeds Creating awareness regarding performance and management of better germplasm</p> <p>Breed improvement through selection and cross breeding Vaccination Deworming on regular intervals</p>
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3. TECHNICAL ACHIEVEMENTS

3. A. Details of target and achievements of mandatory activities by KVK during 2011-12

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
	Horticulture	2	3	6	8	2	2	15
Plant Protection	2	2	6	6	1	2	20	30
Agronomy	2	2	6	6	2	2	50	30
Soil Science	3	3	12	12	1	2	4	14
Home Science	3	2	12	6	2	2	6	5
Animal Science	2	2	14	12	1	1	5	4
Agricultural Engineering	2	2	6	6	1	1	10	10

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	57	71	1390	1820	148	271	830	1419
Rural youth	18	18	485	467				
Voc.	3	2	60	41				
Sponsd	2	10	180	279				
Extn. Functionaries	6	5	95	62				

Seed Production (Qt.)		Planting material (Nos.)	
5		6	
Target	Achievement	Target	Achievement
		2500	2500

3.B. Abstract of interventions undertaken

S. 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	Introduction of high yielding and quality variety	French bean var. Sel-9	Poor quality of local beans due high fibre content, incidence of anthracnose during kharif	Performance of early sowing of French bean var Sel-9 (Arka komal)		Production technology of French bean	-	Training cum demonstration, Distribution of leaflet/folders	Seeds
2	Introduction of new variety	Knolkhol var. White Vienna	Not introduced	Performance of Knolkhol var. White Vienna under Pfutsero condition		Production technology of knolkhol	-	Training cum demonstration	Seeds
3	Production management	Tomato var.rohini	Not cultivated due to winter	Performance of tomato var. Rohini under polyhouse during rabi season.		Production technology under protection condition	Production technology under protection condition	Training cum demonstration, Distribution of leaflet/folders	Seedlings, Polythene sheet
4	Popularization of protected cultivation technology	Tomato var. rohini	High incidence of late blight disease during rainy season under open condition		Popularization of protected cultivation technology for offseason tomato production	Offseason vegetable production under polyhouse	-	Training cum demonstration, Field day, Distribution of leaflet/folders	Seedlings/Seeds, Polythene, Ropes for staking etc.

5	Introduction of high yielding variety	Carrot var. Early nantes	Not cultivated commercially, low yield due to broadcasting of seeds		Popularization of carrot var. Early Nantes in line sowing	Package of practices for carrot cultivation		Training cum demonstration, Field day, Distribution of leaflet/folders	Seeds
6	Integrated Pest Management	Cabbage	High infestation cabbage butterfly larvae	Effect of <i>Bacillus thuringensis</i> and neem oil against cabbage butterfly larvae		Pest management in cabbage		Training cum demonstration	Seedlings, Bt, Neem oil
7	Integrated Disease Management	Tomato var. Rohini	Severe late blight disease in tomatum resulting in high loss	Late blight management in Tomato through fungicides		Disease management tomato		Training cum demonstration	Seedlings and insecticide
8	Integrated Pest Management	Local Paddy	Severe infestation of stem borer in paddy		Popularization of <i>Trichogramma spp.</i> for stem borer management in paddy	Pest management in rice		Training cum demonstration	Trichocards
9	Varietal evaluation	Paddy	use of conventional seed	introduction on improved varieties on paddy		package and practices on paddy cultivation		Training cum demonstration, distributed folder to farmers	Seeds
10	Varietal evaluation	Rapeseed	use of conventional seed	introduction on improved variety on rapeseed		package and practices on rapeseed		Training cum demonstration, distributed folder to farmers	Seeds

11	popularization of potato	Potato	use of conventional seed		popularization of potato var. Kufri jyoti	package and practices on potato		training was conducted, distributed folder to farmers	Tubers
12	popularization of maize	Maize (HQPM)	use of conventional seed		Popularization of maize. var. HQPM1	production and management on QPM		training was conducted, distributed folder to farmers	Seed
13	popularization of field pea	Field pea	use of conventional seed		popularization of field pea	package and practices on field pea		training was conducted, distributed folder to farmers	Seed
14	Nutrient management	Potato	Low soil fertility status, non-use of biofertilizer and use of non-descript variety		Biofertilizer application on potato.	Production and management technology on potato.	-	Training, method demonstration, distributed folder to farmers and field day	Tubers, biofertilizer
15	Nutrient management	Potato	Low soil fertility status, non-use of biofertilizer and use of non-descript variety		Demonstration on potato cultivation.	Production and management technology on potato		Training, method demonstration, distributed folder to farmers and field day	Tubers, biofertilizer
16	Nutrient management	Maize	Non-use of biofertilizer and use of non-descript	Application of biofertilizer on maize yield		Application of biofertilizer in maize		Training, method demonstration, distributed folder to farmers and field day	Seeds, biofertilizer

17	Nutrient management	Naga local bean	Non-use of biofertilizer	Rhizobium seed treatment on bean		Biofertilizer treatment on French bean		Training, method demonstration, distributed folder to farmers	Seeds, biofertilizer
18	Nutrient management	Vermicompost	Non-use of vermicompost and low soil fertility status.	Low cost vermicomposting		Management of problematic soil		Training, method demonstration, distributed folder to farmers	Earthworms, plastic sheets.
19	Design and development of Low /minimum cost diet	Diet	Poor Nutrition	Design and development of Low cost diet for hard working farm women in agriculture	-	Design and development of low cost diet	-	Training cum Demonstration on low cost diet. Distribution of folders	Local ingredients
20	Processing	Guava	Not available of process products of Guava	Processing of local Guava for jam and jelly preparation	-	Processing of fruits	-	Training cum demonstration on processing of Guava Fruits, distribution of leaflets	Ingredients
21	Drudgery reduction	Winnower	High energy consumption by traditional Methods	Hand operated mechanical winnower	-	Use of mechanical winnower for drudgery reduction	-	Training cum demonstration distribution of leaflets/folder	Winnower
22	Nursery	Paddy var megha rice 2	More space requirement in traditional type of nursery	-	Mat nursery for raising rice seedlings	Mat nursery for plantation of paddy	-	Demonstration on Mat Nursery, distribution of leaflets/folder	seeds, wooden frame polythene sheet and compost

23	Household food security by nutritional garden	Vegetables, var early nantes, shalini and local beans	Poor nutrition and poor backyard vegetable s cultivation	-	Scientific technology in nutritional garden	Kitchen garden	-	Training cum demonstration distribution of leaflets/folder	Seeds
24	Poultry production	Poultry	Low egg production , Non availability of layer type birds	Performance Of gramapriya birds					Gramapriya Birds
25	Pig production	Piggery	Low meat production	Performance of ghungroo pigs					Ghungroo pigs
26	Water conservation and weed control	Cauliflower	Severe drought during winter, Cut worm and ant infestation	Performance of Cauliflower under mulch during winter				Folder on mulching for vegetable	Black polysheet 40 micron
27	Water conservation and weed control	Rabi vegetable	Severe drought during winter, Cut worm and ant infestation	Use of Drip and mulch on Rabi vegetable during winter		Installation and working of Drip irrigation system		Folder on drip irrigation.	Black polysheet 40 micron Drip set and Direron.
28	Drudgery reduction and mechanization	Water	Lifting of water is labourous in hill area		Introduction of Treadle pump for lifting of water	Training and demonstration on installation and working of Treadle Pump (Water lifting device)			IDE Treadle pump

11). Results of On Farm Trials

Title of OFT	Problem Diagnosed	Technology Assessed	No. of Trials	Results of Assessment/ Refined (Data on the parameter should be provided)	Feedback from the farmer	Feedback to the Researcher	B.C . Ratio
Performance of early sowing of French bean var Sel-9 (Arka komal)	Poor quality and yield of local beans due high fibre content, incidence of anthracnose disease during kharif	Early sowing of French bean var. Sel-9 (Arka komal)	3	Av.Plant height-36.06cm Av.Plant spread-34.33cm No of branches/plant-4.33 No of pods/plant-23.80 Av. Yield-7.13t/ha	Farmers are interested to cultivate French bean var. Sel9 as it is soft and tender even at maturity compared to local beans.	To conduct trial on evaluation of anthracnose resistant varieties of french bean under pfutsero condition.	2.66
				Local check: Av.Plant height-23.0cm Av.Plant spread-28.60cm No of branches/plant-3.40 No of pods/plant-19.80 Yield- 5.0t/ha			1.60
Performance of tomato var. Rohini under polyhouse during rabi season.	Not cultivated due to winter	Tomato var.rohini under polyhouse	2	Av. plant height-38.72cm Av.Plant spread-37.92cm No of branches/plant-8.55 No of flower/cluster-4.50 No of fruits/plant-7.3 Av. Fruit weight-31.02gm/fruit Yield-5.0t/ha	As the growth and yield of tomato was poor during winter even under polyhouse, farmers are not interested to grow crop during winter due to low temperature and drought.	To conduct trial on evaluation of varieties of tomato suitable under pfutsero condition during winter.	0.51
Performance of Knolkhol var. White Vienna under Pfutsero condition	Not introduced	Knolkhol var. White vienna	3	Av. plant height-27.82cm Av.Plant spread-33.23cm No of leaves/plant-10.8 Av. Knob diameter-7.18cm Av. Knob weight-224.12gm Yield-12.0t/ha	Farmers are satisfied with the performance of knolkhol var.white Vienna in terms of yield, but as they are not	-	1.53

					habituated with consumption of knolkhol they are not interested to grow.		
Effect of <i>Bacillus thuringensis</i> and neem oil against cabbage butter fly larvae	High infestation cabbage butterfly larvae	<i>Bacillus thuringensis</i> and neem oil	3	<u>Bt treated plot:</u> Av.Larva count/plant at harvesting -1.3 Infestation -30% Yield-33.51t/ha	Farmers are interested to apply Bt and neem oil as it is organic pesticides and reduces pest population	-	3.01
				<u>Neem oil plot:</u> Av.Larva count/plant at harvesting -1.8 Infestation -40% Yield-24.39 t/ha			2.17
				<u>Control plot:</u> Av.Larva count/plant at harvesting -13.4 Infestation -90% Yield-16.30 t/ha			1.49
Late blight management in Tomato by using fungicides.	Occurrence of late blight disease in tomato under polyhouse during rainy season	Fungicides: 1.Carbendazim @2gm/ltr water 2.Mancozeb @2gm/ltr water 3. Carbendazim + Mancozeb @2gm/ltr water	3	<u>Carbendazim:</u> Infestation-20% No of fruits/plant-26.20 Yield-22.85t/ha	Farmers were interested to see tomato under polyhouse with less infestation diseases compared to open condition		3.31
				<u>Mancozeb:</u> Infestation-25% No of fruits/plant-23.80 Yield-20.0t/ha			2.91
				<u>Carbendazim + Mancozeb:</u> Infestation-10% No of fruits/plant-27.70 Yield-28.57t/ha			4.15

Application of biofertilizer on maize yield	Non-use of biofertilizer and use of non- descript	- Biofertilizer -Variety-All rounder	1	1) plant height (cm) – 81.99 2) No. of leaves – 9.86 3) No. of cob/plant – 2.66 4) Cob girth (cm) – 15.99 5) Cob wt. (cm) – 207.26 6) Grain yield (kg/ha) -2778.3	Farmers are satisfied with the yield performance and are encourage to apply biofertilizer		1.11
Rhizobium seed treatment on bean	Non-use of biofertilizer	- Rhizobium biofertilizer -Naga local variety	1	1) Plant height (cm) – 125.34 2) No. of leaves – 75.73 3)No. of branches/plant – 9.46 4) No.of pods/plant – 11.46 5) Yield (kg/ha) – 962.64	Though the yield was low, farmers are interested to cultivate provided the seeds are available in time with improved technology.	As the yield was low, so inoculation of of phosphotika along with rhizobium biofertilizer will be conducted	1.08
Low cost vermicomposting	Non-use of vermicompost and low soil fertility status.	Earthworm spp. <i>Eisenia foetida</i>	1	Yield:45kg/unit(1mx0.5mx0.45m) Nutrient Content: N-1.6% P-1.2% K-1.9%	Farmers are encourage to take up this enterprise as it fetches high price in the market		1.28

Low cost diet for hard working farm women in agriculture	Poor Nutrition	Preparation of diet with local recipe. local maize Nagacha and Rajmah Curry	3	Supplementation of diet for 2 months, Anthropometric measurement and Body Mass Index (Before) Height-150cm, 155cm, 149.3cm Weight- 41kg, 52.5kg, 49kg BMI – 18.22, 21.85, 21.98 Average BMI = 20.5 Anthropometric measurement and Body Mass Index (After) Height-150cm, 155cm, 149.3cm Wtweight- 42kg, 54kg, 50kg BMI – 18.67, 22.48, 22.43 Average BMI = 21.19 3.36% increases in BMI of farm women	Farm women like the diet and it also increases the nutritional status of the family.	-	-
Processing of local guava for Jam and jelly preparation	Not available of process products of Guava	Preparation of local guava for jam and jelly	3	Organoleptical test for shelf life of guava products. Score of 1 to 6 Jam Taste – 5.5 Flavor –5.5 Sweetness –5.5 Colour –5 Texture –5 Jelly Taste – 5.5 Flavor –5 Sweetness –5.2 Colour –5.2 Texture –5 Jam and jelly can best be store for 12 months in good condition	Farmers find it interested in preparation of guava products for income generation	-	0.48
Drudgery reduction	High energy consumption by traditional methods	Efficiency of Winnowing and Winning capacity.	3	under progress	-	-	under progress

Performance Of gramapriya birds	Low egg production, Non availability of layer type birds	Growth, egg weight, egg production	8	Body wt gain 6 week 190.68±6.79 12 week 1009.75±51.87 18 week 1665.36±97.91 24 week 2097.07±118.64 Egg weight 30 week :42.73±1.72 35week:42.46±1.36 40 week: 45.18±1.4 45 week:51.83±0.65 Egg quality at 45 week: Shape index: 70.33±1 Albumin index:1.45±0.15 Hough value index:53.07±4.54 Egg production till 45 week 30 week: 24..45±1.78 35 week: 45.27±1.45 40 week: 61.15±1.84 45 week:78.67±2.34 Survivability rate: 84%	Highly satisfied	Well adopted to local feeding and managerial system, egg production better than local and lower mortality and disease condition	2.65
Performance of ghungroo pigs	Low meat production	Growth	4	Body wt. gain 2 months: 8.01±1.23 4 months:31.2 kg ±2.5 6 months:52.33±4.65 87.5% survivability rate	Highly satisfied	Adoptable to the local condition of feeding and management.	3.30
Performance of Cauliflower under mulch during winter	Severe drought during winter, Cut worm and ant infestation	Poly mulch and soil treatment to control cut worm using (Derision)	2	Yield 17000 kg/ha Mean air temp =18.5 °C Soil temp at 7.5 cm soil depth =24 °C Farmer practice. Yield 9000 kg /ha Soil temp at 7.5 cm soil depth = 21.4 °C	Production is satisfactory. Weed control are satisfactory to the farmer	Soil treatment gives an efficient control on cut worm. Increase in temp approximately 2-4 °C was found in soil under mulching	Farmers practice 1.2 Farmers practice 0.8

Use of Drip and mulch on Rabi vegetable during winter (tomato)	Severe drought during winter,	Drip irrigation system, poly mulching for water conservation and efficient used of available water	3	<p>Yield parameter</p> <p>35000 kg/ha</p> <p>Drip efficiency Operating head 2.5 m 1st emitter of 1st lateral pipe = 1.7 lit /hrs 20th emitter of 4th lateral =0.9 lit /hrs</p> <p>Farmers practice 19000 kg / ha</p>	Cost of drip system . complex system	Drip irrigation is a complex system and cost investment is high. Its advantage due to topography is that we can use gravity drip from higher elevation through small pond or any other water storage/harvesting structure.	0.27 First year (for it involve fixed investment for procurement of drip system (2.4 from 2 nd year and later , after deducting cost of drip system, with assumption that other variable cost is same) 1.9
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****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 2011-12 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	Tomato	Var. Rohini under polyhouse	2	5	0.028
2	Garden pea	Var. Arkel	6	40	2.00
3	Mushroom	Var. Oyster	2	40	100 units
4	Paddy	<i>Trichogramma japonicum</i> sp against rice stem borer	2	20	7.0
5	Apiary	Popularization of improved honey bee boxes	1	10	10units
6	ground nut (JI 24)	variety,line sowing,spacing, timely earthing up and weeding	3	16	0.25
7	soybean (JS 335)	variety,line sowing,spacing, and earthing up	1	10	0.10
8	field pea (Aparna)	variety,line sowing,spacing, and earthing up	5	50	3
9	field pea (Rachna)	variety,line sowing,spacing, and earthing up	5	50	2.8
10	Potato	Use of biofertilizer, Variety	4	12	1.25
11	Poultry	Vaccination of poultry against RD and fowl pox	3	182	-
12	Mithun	FMD vaccination	4	140	-

* **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.**)

Horticultural 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, Soiltype, altitude, etc)	Status of soil (Kg/ha)		
					Proposed	Actual	SC/ST	Others	Total			N	P	K
1	Tomato	Protected cultivation technology	Var. Rohini under Polyhouse	Kharif, 2011	0.02	0.016	6		6	-	Irrigated			
2	Carrot	Crop	Var. Early	Kharif,	0.05	0.046	3		3	-	Rainfed			

		production	Nantes in line sowing	2011										
3	Paddy	Integrated pest management	<i>Trichogramma japonicum</i>	Kharif 2011	2.0	4.0	20		20		Rainfed			
4	potato	Crop production	variety Kufri megha, line sowing, spacing, timely earthing up	kharif / 2011	0.25	0.25	15		15		Rainfed			
5	QPM	Crop production	variety HQPM1, line sowing, spacing, timely earthing up	kharif / 2011	5	5	80		80		Rainfed			
6	field pea	Crop production	variety Aparna, line sowing, spacing, timely earthing up	rabi / 2011	1	1	25		25		Rainfed			
7	Potato	Nutrient management	Variety: Kufri megha, biofertilizer, line sowing, weeding and earthing up	Rabi 2011	0.25	0.25	4	-	4	-	Rainfed	156.80	5.93	175.35
8	Potato	Nutrient management	Variety: Kufri jyoti and kufri girdhari, biofertilizer, line sowing, weeding and earthing up	Rabi 2011	-	1	10		10	-	Rainfed	172.00	11.30	155.00

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			
		H	L	A				Demo	Local Check	Dem o	Local Check		
1	2	7	8	9	10	12	13						
1	Tomato	200.0	111.11	155.55	32.0	Av. plant height-108.5cm Av.Plant spread-74.81cm No of primary branches/plant -4.46 No of secondary branches/plant -20.66 No of flower cluster/plant-8.46 No of fruits/plant-27.33 Yield-15.5t/ha Late blight disease under polyhouse	Av. plant height-89.50cm Av.Plant spread-68.36cm No of primary branches/plant -4.40 No of secondary branches/plant -10.60 No of flower cluster/plant-5.40 No of fruits/plant-8.00 Yield-3.2 t/ha Severe late blight disease in open resulting in 60-70%loss in yield.	5,75000.00	-20,000	2.35	0.88	Tomato can be grown commercially under polyhouse during offseason (Kharif) in Pftusero condition whereas in open 70 %loss occurs due to severe late blight disease.	Farmers are very much interested to grow tomato and other vegetables under polyhouse. This technology has been adopted by many villages. In Rihuba village around 15 polyhouses has been constructed by farmers with their own expenses and are growing various crops.
2	Carrot	70.00	50.00	60.00	50	Av. plant height-62.88cm Av.Plant	Av. plant height-44.14cm Av.Plant	1,07600.00	52,500.00	2.05	1.53	Carrot var.Early Nantes yield is more when seeds mixed	Farmers took keen interest in carrot cultivation

						spread- 15.42cm Av. root length- 16.97cm Av.root diameter- 2.46cm Av. Root weight- 49.71gm Av.Yield- 6.0t/ha	spread- 14.64cm Av. root length- 12.40cm Av.root diameter- 2.00cm Av. Root weight- 32.38gm Av.Yield- 5.0t/ha					with sand are sown in line and with all the recommended practice compared to local practice of broadcasting only seeds	throughout the demonstration. Seeing the yield of crop under recommended practice, farmers are interested to cultivated Carrot var. early nantes in large scale.
3	Paddy	32.00	27.50	29.75	26.60	No of hill/m2- 51.6 No of effective tiller/hill-7.23 No. of white earhead/hill- 0.66 Yield-2.97t/ha	No of hill/m2- 53.3 No of effective tiller/hill-5.3 No. of white earhead/hill- 1.40 Yield-2.90t/ha	21620.00	12000.00	1.73	1.43		
4	Potato	18.79	17.23	17.85	17.03	Plant height (cm) – 30. no. of leaves – 23.8 no. of branches – 14.5 no. of flower – 10.9 no. of tuber – 10.3 weight of tuber - 2376 yield (kg/ha) – 21634.45	plant height (cm) – 30.6no. of leaves – 24.2no. of branches – 15no. of flower – 10.8no. of tuber - 9weight of tuber - 2010yield (kg/ha) – 20518.07	28073.2	19560	2.4	2.3	potato var kufri megha yield is more with all the recommended practice compared to local cultivar.	Farmers took keen interest in potato cultivation .Seeing the yield of crop under recommended practice, farmers are interested to cultivate potato var kufri megha in large scale.

5	QPM	14.03	13.95	13.98	12.08	Plant height (cm) – 129 No. of leaves – 16.1 Cob length (cm) – 14.5 cob girth (cm) – 13.4 Cob wt. (cm) - 205 Cob yield (kg/ha) - 1399	plant height (cm) – 220.5 no. of leaves – 12 cob length (cm) – 23.5 cob girth (cm) – 17.8 cob wt. (cm) - 204 cob yield (kg/ha) - 1208	17880	7740	2.7	1.5	HQPM1 variety performed well than local cultivar.as the seeds were sown in line and timely earthing and weeding was done there was no loss due to lodging as the variety is a short stature plant.	Farmers are interested to grow HQPM 1 provided the seeds are available in time.
6	field pea	18.51	14.23	16.40	13.45	plant ht. (cm) – 34.1 no. of leaves – 14.8 pod/plant – 18.5 yield (Kg/ha) - 1726	plant ht. (cm) – 52.5 no. of leaves – 30 pod/plant – 18 yield (Kg/ha) – 1345	18420	10800	2.1	1.6	Field pea var. Aparna is a short stature variety it does not require staking and its yield is also higher than the local cultivar.	Farmers are highly satisfied with the yield and are ready to cultivate in a large scale.
7	Potato	247.20	240.00	245.12	234.88	Plant height (cm) – 33.75 No. of leaves – 25.86 No. of branches – 16.26 No. of flower – 12.6 No. of tuber – 12.66 Weight of tuber – 2024.14 Yield (kg/ha) – 24410.56	Plant height (cm) – 30.6 No. of leaves – 19.8 No. of branches – 16 No. of flower – 12.2 No. of tuber - 12 Weight of tuber - 2010 Yield (kg/ha) – 23488.00	366511.2	350560	4.01	3.94	Kufri megha variety can be grown in this region along with the use of biofertilizer as it increased the yield.	Farmers are interested to grow potato var Kufri megha and use biofertilizer as the yield was good compared to the local variety.

8	Potato	I) 210.0 II) 253.0	I) 198.0 II) 240.0	I) 200.0 II) 248.7 5	I) 195.00 II) 232.00	<u>I) Kufri jyoti</u> <u>Variety</u> Plant height (cm) – 56.02 no. of leaves – 241.97 No. of branches – 4.88 no. of flower – 9.05 No. of tuber – 11.31 Weight of tuber – 730.42 Yield (kg/ha) – 20000.00 <u>II) Kufri</u> <u>girdhari</u> <u>Variety</u> Plant height(cm)- 63.26 No.shoots/pla nt-6.6 No.leaves/plan t-288.2 No.tubers/plan t-12.6 Weight of tuber(g)- 1098.00	<u>I) Kufri jyoti</u> <u>Variety</u> Plant height (cm) – 54.96 No. of leaves – 227.8 No. of branches – 4.2 No. of flower – 9.0 No. of tuber – 10.4 Weight of tuber – 651.2 Yield (kg/ha) – 19500.00 <u>II)Kufri girdhari</u> <u>Variety</u> Plant height(cm)- 57.94 No.shoots/plan t-5.4 No.leaves/plan t-249.4 No.tubers/plan t-11.8 Weight of tuber(g)- 1074.80					Kufri jyoti and Kufri girdhari variety can be grown in this region along with the use of biofertilizer as it increased the yield.	Farmers are interested to grow potato both var Kufri jyoti and Kufri girdhari but they prefer Kufri girdhari to Kufri jyoti as the yield was higher and size of tuber was also bigger. Also use of biofertilizer as the yield of both was good compared to the local variety.
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NB: Attach few good action photographs with title at the back with pencil

Extension and Training activities under FLD

SI.No.	Activity	No. of activities organised	Date	Number of participants	Remarks		
1	Field days	2	14/9/2011 21/9/2011	42	Farmers of Thetsumi village visited polyhouse with tomato Farmers of porba village visited the area under carrot cultivation.		
		2	12/7/11	10	Farmers of Mesulumi village visited potato cultivation area		
			03/10/11	14	Farmers of Kikruma village visited HQPM cultivated area		
		2	11-07-11	22	Farmers of Mesulumi village visited potato field.		
			27-07-11	18	Farmers of Tsupfume and Lekromi village potato cultivation area.		
2	Farmers Training	6	4/4/11 16/11/11 5/6/11 18/6/11 21/7/11 29/7/11	139	Sponsored (IARI) training was conducted in Nov.2011 Trainings on IPM in paddy		
		2	9/4/11 5/11/11	26 43	Training on production and management on HQPM Training on package and practice on field pea		
			11/11/11	19	Training on package and practice on field pea		
		2	31-01-11 26-02-11	30 15	Training on production technology on potato crop. Training on production technology on potato crop(under NABARD)		
		1	17-3-10	27	Training on nutritional garden,		
		2	6-6-11	2	Demonstration on Mat nursery		
		3	Media coverage	3	20/7/11	-	Biological control of rice stem borer.
		4	Training for extension functionaries	-	-	-	-

c. Details of FLD on Enterprises

(i) Farm Implements

Name of the implement	Crop	No. of farmers	Area (ha)	Performance parameters / indicators	* Data on parameter in relation to technology demonstrated		% change in the parameter	Remarks
					Demon.	Local check		
Treadle pump	Water	10	10 units	Labour requirement	Pumping height 50 feet vertical To pump 1000 liter 19.3 min required	To fetch 1000 liter 193.4 min required		IDE treadle is usable for hilly region for domestic as well as irrigation on a elevated area. Its performance for low height water lifting is very satisfactory.
				Pumping capacity (discharge rate)	0.86 litre per sec	0.08 litre per sec		
				Field capacity	24768 litre per mandays	2332 litre per mandays		

* *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		
Anthelmintic medication to reduce ecto-endo parasitic infestation	Goat	4	150	Faecal egg count, coat condition, growth	4	1	58.83 % reduction of Gastrointestinal parasites, 83.33% reduction of mange infestation and 84.73% reduction of tick infestation. Better coat condition and 2.32 % growth	Eimeria spp., Haemonchus spp. Trichostrongylus Moneizia benedeni egg were found prior treatment. Threatment regime was albendazole 5 mg/kg bdwt at 0 21 and 180 days and Tactic 12.5% solution 1ml/ltr on 0 and 180 th day

* *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	Improved ISI A type bee boxes	10	10	Yield	9.8kg/Unit	7.86kg/Unit	19.60	As the region is colder therefore sealing of openings in improved boxes is difficult compared to local method.
Sericulture								
Vermi compost								
Mat nursery	Var, megha rice2	2	5 wooden frame	Germination percentage No of days Av Plant height No of leaves No of days Av Plant height No of leaves	84.62 5 days 1.5cm 1 leaf 14days 18.5cm 2 leaves	70.2 5 days .8cm 1leaf 14 days 5.4cm 2 leaves	20.54%	Paddy seeds sown in mat nursery increases the germination and growth of seedlings as compared to conventional method of nursery.
Nutritional garden	Var, early nantes, shalini and local beans	3	0.0238ha	Vegetables supplement No of days Body mass index (BMI)	100 gm/day/person 30 days BMI(Before) Average 22.7 BMI(After) Average 23.2	-	2.2%	Supplementation of vegetables cultivated at backyard of the house was less as Production of vegetables was low due to heavy rain. There was little increase in BMI of farm women

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																		Grand Total	
	On	Off	Total	Others						SC/ST						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		
(A) FARMERS & FARM WOMEN																							
I. Crop Production																							
Weed Management		1	1									11		1		12		11		1		12	12
Resource Conservation Technologies		1	1									23		10		33		23		10		33	33
Cropping Systems																							
Crop Diversification		1	1									17		15		32		17		15		32	32
Integrated Farming																							
Water management																							
Seed production		1	1									9		17		26		9		17		26	26
Nursery management		1	1									12		14		26		12		14		26	26
Integrated nutrient management		2	2									35		34		69		35		34		69	69
Integrated Crop Management																							
Fodder production		1	1									18		9		27		18		9		27	27
Productivity enhancement of crops		5	5									70		58		128		70		58		128	128
II. Horticulture																							
a) Vegetable Crops																							
Production of low volume and high value crops		3	3									25		28		53		25		28		53	53
Off-season vegetables		1	1									29		4		33		29		4		33	33
Nursery raising																							
Exotic vegetables		1	1									0		16		16		0		16		16	16

(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	
Livestock production	5/9/11 to 8/9/11	Poultry production and management	Meat and egg production	4	0	10	10	15	10	10	
Livestock production	22/3/12 to 24/3/12	Commercial rabbit production	Meat production	3	0	31	31	0	0	0	

*training title should specify the major technology /skill transferred

(E) Sponsored Training Programmes

Sl.No	Date	Title	Discipline	Thematic area	Duration (days)	Client (PF/R/RY/EF)	No. of courses	No. of Participants									Sponsoring Agency	Amount of fund received (Rs.)
								Others			SC/ST			Total				
								Male	Female	Total	Male	Female	Total	Male	Female	Total		
1.	8/11/11	Production technology of kiwi fruit	Horticulture	Production of export potential fruits	1	PF	1				22	5	27	22	5	27	ATMA, Phek	
2.	16/11/11	Cultivation practices of radish and carrot	Horticulture	Production of low volume high value crops	1	PF	1				25	2	27	25	2	27	IARI, New Delhi	
3.	17/11/11	Cultivation practices of pea tomato	Horticulture	Production of export potential vegetables	1	PF	1				29	2	31	29	2	31	IARI, New Delhi	
4.	24/11/11	Improved fruit production technologies	Horticulture	Cultivation of fruits	1	PF	1				32	6	38	32	6	38	CWWS (NGO), Pfutsero	
5.	18/10/11	Cultivation practices and propagation techniques in plum	Horticulture	Plant propagation techniques	1	RY	1				2	14	16	2	14	16	ATMA, Phek	

6.	25/11/11	Seed production technology	Agronomy	seed production	1	PF	1				9	17	26	9	17	26	State agri dept	
7.	9/2/12	technology adoption in agriculture and allied sector	Agronomy		1		1				17	8	25	17	8	25	ATMA, Phek	
8.	25-10-12	Vermicompost production	Soil Science	Soil health and fertility management	1	PF	1				0	15	15	0	15	15	NABARD. and Chakesang women welfare society under Tribal Development Fund project	
9.	03-11-11	Role of biofertilizer and its application in different crops	Soil Science	Soil health and fertility management	1	PF	1				33	11	44	33	11	44	State Agriculture Deptt	
10	25-11-11	Production of organic inputs	Soil Science	Soil health and fertility management	1	PF	1				9	21	30	9	21	30	State Agriculture Deptt	

		Cauliflower, Cabbage, IPM in cabbage, cauliflower and tomato													
7.	Exposure visits	<p>1. Porba farmers to Meghalaya/ 04-04-11 to -07-04-11</p> <p>2. SHG farmers of Phek district to Meghalaya and Khanapara, Assam/ 27-04-11 to 30-04-11.</p> <p>3. Phek farmers to LRD, Bamboo Resource Centre and ICAR-RC, Jharnapani. 20-10-11 and 21-10-11.</p> <p>4. Kiwi farmers of Phek to Solan, H.P./ 11-03-12 to 21-03-12.</p> <p>5. Thipuzu farmers to RMC, NRCP, C.Vsc, Assam and GRS, Meghalaya/12-03-12 to 15-03-12.</p>	5				70	34	104				70	34	104
8.	Folder/Leaflet	<p>1. Mushroom cultivation: A profitable enterprise</p> <p>2. Kiwi: A potential fruit for northeast</p> <p>3. Insect Pest Management in Paddy</p> <p>4. Insect Pest Management in cabbage</p> <p>5. Foot and mouth disease in Livestock</p>	4												
9.	Lectures delivered as resource person	<p>1. ,Production technology of kiwi fruit /8/8/11.</p> <p>2. Cultivation practices and propagation techniques in plum-</p>	9				166	96	262				166	96	262

		18/10/11 3. Vermicompost production 25/10/11. 4. Preservation of fruits 29/10/2011. 5. Role of biofertilizer and its application in different crops 03/11/11. 6. Cultivation practices of radish and carrot- 16/11/11 7. Cultivation practices of pea tomato- 17/11/11 8. Improved fruit production technologies- 24/11/11 9. Production of organic inputs 25/11/11													
10.	PRA		1												
11.	Scientist visit to farmers field		64					64							64
12.	Farmers visit to KVK		83				63	20	83				63	20	83
13.	Farmers scientist interaction	Farmers scientist interaction, ATMA Phek and 22-02-12	1				47	2	49	4	1	5	51	3	54
14.	Workshop	Workshop on climate resilient agriculture	1						746						746
15.	Diagnostic visits		75				63	12	75				63	12	75
	Grand Total		271	0	0	0	426	178	1414	4	1	5	430	179	1419

* Example for guidance only

3.5 Production and supply of Technological products

SEED MATERIALS

Major group/class	Crop	Variety	Quantity (qt)	Value (Rs.)	Provided to No. of Farmers/Other Agencies
CEREALS					
OILSEEDS					
PULSES					
VEGETABLES	Cabbage seed	Rareball	20gm	300.00	3
	Knolkhol	White vienna	250gm	250.00	3
	Carrot	Early nantes	250gm	570.00	3
	French bean	Sel-9	2.0kg	280.00	3
FLOWER CROPS					
OTHERS (Specify)					

SUMMARY

SI. No.	Major group/class	Quantity (qtl.)	Value (Rs.)	Provided to No. of Farmers/Other Agencies
1	CEREALS			
2	OILSEEDS			
3	PULSES			
4	VEGETABLES	2.7kg,	1400.00	12
5	FLOWER CROPS			
6	OTHERS			
	TOTAL			

PLANTING MATERIALS

Major group/class	Crop	Variety	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
FRUITS					
SPICES					
VEGETABLES	Tomato	Rohini	1500nos seedlings	750.00	6
FOREST SPECIES					
ORNAMENTAL CROPS					
PLANTATION CROPS					
Others (specify)					

SUMMARY

Sl. No.	Major group/class	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
1	FRUITS			
2	VEGETABLES	1500	750.00	6
3	SPICES			
4	FOREST SPECIES			
5	ORNAMENTAL CROPS			
6	PLANTATION CROPS			
7	OTHERS			
	TOTAL			

BIO PRODUCTS

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

SUMMARY

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

LIVESTOCK

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

SUMMARY

Sl. No.	Type	Breed	Quantity		Value (Rs.)	Provided to No. of Farmers
			Nos	Kgs		
1	CATTLE					
2	SHEEP & GOAT					
3	POULTRY					
4	FISHERIES					
5	OTHERS					
	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	Managerial evaluation of rabbit farming in Phek district of Nagaland	P.R Dutta, D.Borkotoky, R.K Singh, J.Chamuah	
	Incidence of gastrointestinal helminthes parasites in free ranging mithun (<i>Bos frontalis</i>) from Phek district of Nagaland	J.K. Chamuah*, V. Singh, P. R. Dutta, K. Khate, A. Mech , C. Rajkhowa and D. Borkotoky	
Total			
Technical reports	Knowledge Management of Subject Matter Specialist of KVKs for mithun farming technologies	R.K Singh, Vidya Singh, C.Rajkhowa	
	Diseases of Mithun: overview and perspective In Stratagies for propogation and augmenting productivity of mithun in North eastern hill region Pg no 57-64	Vidya Singh, jayanta Chamuah, and Debojyoti Borkotoky	
Popular articles	1. Polyhouse vegetable production, 2. Biological control of rice stem borer	Rinku Bharali Liza Barua Bharali	
Leaflets/folders	1. Mushroom cultivation: A profitable enterprise	Rinku Bharali	

	2. Kiwi: A potential fruit for northeast 3. Insect Pest Management in Paddy 4. Insect Pest Management in cabbage 5. Foot and Mouth Disease in livestock	Rinku Bharali Liza Barua Bharali Liza Barua Bharali Debojyoti Borkotoky	
Total	8 nos		
GrandTOTAL			

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)

Control of Endemic Newcastle Disease Through Active Participation of Rural Youths: A Success Story

Poultry is the most common livestock in a Naga village. It is readily harvestable livestock preferred by majority of the population and at the same time it is also an important component to meet the daily requirement of protein of animal origin. Due to free-ranging and unconfined type of management of poultry, problems of disease outbreaks and parasitic infestation are very common. Among the diseases, Newcastle disease (Ranikhet Disease) has been reported to be one of the major constraints to rural poultry farming as both epidemic and endemic forms of this disease are prevalent in village conditions. Newcastle disease being a highly contagious viral disease is a major threat. The affected birds may show the symptoms like fluffing of its feathers, severe respiratory distress and gasping, swelling of the head and neck, greenish diarrhoea, lethargy, torticollis (twisting of neck) convulsions and paralysis of wings and legs. The mortality rate varies, often reaching 70 percent to 100 percent. Vaccination is an effective way to prevention and control this devastating poultry disease. However, lack of awareness among the villagers about the disease and its preventive measures is the primary reason for frequent outbreak and economic loss. The vaccines are not commonly available in rural markets. The inadequate supply of electricity adds to trouble as the vaccine demands maintenance of cold chain for its optimum efficacy. The vaccines vial are marketed in multiple doses of 100, 500 and 1000 doses. Hence, it becomes difficult to arrange vaccines for small number of birds raised in rural families. Skill veterinary personnels or paravets can play a pivotal role to effectively control this disease. Considering the constraints Krishi Vigyan Kendra, Phek organizes regular awareness cum training programmes on prevention and control of Ranikhet disease in poultry. The Kendra has also arranged mass vaccination cum health camps as method demonstration. Mass Vaccination Campaign conducted by the KVK staff has built a great confidence among the rural population and particularly the youths are adopting vaccination through their own collective actions.

In the year 2011 to 2012, four mass vaccination camp against Ranikhet and Pox disease was conducted and 3118 poultry birds were vaccinated in three village of Pfutsero block. No incidence of Ranikhet disease was reported in the adopted village Pfutseromi after the mass vaccination programme covering the entire village conducted on June 2011. Booster vaccination was done on 7th March 2012. Hand on training on handling and administering of the vaccines were given to village elders and youths namely Mr. L. Ritse, Mr. K. Mero, Mr. R.

Kapfo. These trained people volunteered to conduct the vaccinations in different Khels of Pfutseromi village. Ranikhet was endemic to the village and the villagers suffered great economic loss before the intervention. The intervention has saved the farmers from economic loss. Considering the poultry population of the village as about 1600 birds and 70 percent mortality, the intervention could save about 1120 birds and in turn Rs. 1.12 lakh. This concerted approach with people's participation has helped in controlling this disease in the Pfutseromi village. The youths are now acting as facilitator for arranging vaccine and feeds for poultry in Pfutseromi and nearby villages.



Fig: Immunizing R2B Vaccine in adult birds



Fig: Hand on training to rural youth

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

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

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

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

- Identification of courses for farmers/farm women
- Rural Youth
- Inservice personnel

3.11 Field activities

- i. Number of villages adopted:
- ii. No. of farm families selected:
- iii. No. of survey/PRA conducted:1

3.12. Activities of Soil and Water Testing Laboratory

Status of establishment of Lab :

- 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).

Name of specific technology/skill transferred	No. of participants	% of adoption	Change in income (Rs.)	
			Before (Rs./Unit)	After (Rs./Unit)

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)

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

5.0 LINKAGES

5.1 Functional linkage with different organizations

Name of organization	Nature of linkage
1. ATMA, Phek	Technology transfer
2. NABARD, Dimapur	Financial assistance
3. Chakhesang Women Welfare Society, Pfutsero (NGO)	Technology transfer
4. NOAH-GRANDPA(NGO)	Technology transfer
5. Centre For Integral Development, Pfutsero(NGO)	Technology transfer
6. ASSOCHAM	Technology transfer

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.)
Irrigation with rain water harvesting structure, treadle pump and microirrigation system	August 2009	NABARD	5,67,500.00
NICRA	2011	CRIDA, ICAR	30,35,000

6.5 Rainwater Harvesting

Training programmes conducted by using Rainwater Harvesting Demonstration Unit

Date	Title of the training course	Client (PF/RV/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):

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)
Grand total					

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

7. FINANCIAL PERFORMANCE

7.1 Details of KVK Bank accounts

Bank account	Name of the bank	Location	Account Number
With Host Institute	State Bank of India	Medziphema	11667721762
With KVK			

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

Item	Released by ICAR/ZPD		Expenditure		Unspent balance as on 31 st March, 2012
	2009-10	2010-11	2009-10	2010-11	
Inputs		28200		26000	NIL
Extension activities				2200	
TA/DA/POL etc.					
TOTAL		28200		28200	

7.3 Utilization of KVK funds during the year 2011 -12

S. No.	Particulars	Sanctioned (in Lakh)	Released (in Lakh)	Expenditure (in Lakh)
A. Recurring Contingencies				
1	Pay & Allowances	7,235,000.00	7,235,000.00	7,196,734.00
2	Traveling allowances	150,000.00	150,000.00	149,565.00
3	Contingencies	700,000.00	700,000.00	698,717.00
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)		8,085,000.00	8,085,000.00	8,045,016.00
B. Non-Recurring Contingencies				
1	Works	3,464,000.00	3,464,000.00	3,451,000.00
2	Equipments including SWTL & Furniture	0.00	0.00	0.00
3	Vehicle (Four wheeler/Two wheeler, please specify)	0.00	0.00	0.00
4	Library (Purchase of assets like books & journals)	10,000.00	10,000.00	10,000.00
TOTAL (B)		3,474,000.00	3,474,000.00	3,461,000.00
C. REVOLVING FUND		-	-	-
GRAND TOTAL (A+B+C)		11,559,000.00	11,559,000.00	11,506,016.00

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 2009 to March 2010	109730	Nil	5000	104730
April 2010 to March 2011	104730	55440	10180	149990
April 2011 to March 2012	149990	12467	8050	154407

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

8.1 Constraints

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

Details of the Training Programmes

Date	Clientel e	Title of the training programme	Discipline	Thematic area	Durati on in days	Venue (Off / On Campus)	Number of other participants			Number of SC/ST			Total number of participants		
							Male	Fema le	Total	Mal e	Fema le	Total	Mal e	Fem ale	To tal
2/4/11	PF	Production technology on French bean	Horticulture	Production of low volume high value crops	1	Off campus				0	10	10	0	10	10
4/4/11	PF	Package of practices of carrot production	Horticulture	Production of low volume high value crops	1	Off campus				0	16	16	0	16	16
4/4/11	PF	Production technology on knolkhol	Horticulture	Production of exotic vegetables	1	Off campus				0	16	16	0	16	16
15/7/11	PF	Cultivation technology on khasi mandarin	Horticulture	Cultivation of fruits	1	Off campus				19	7	26	19	7	26
27/8/11	PF	Layout and management of orchard	Horticulture	Layout and management of orchard	1	Off campus				17	8	25	17	8	25
8/11/11	PF	Production technology of kiwi fruit	Horticulture	Production of export potential fruits	1	Off campus				22	5	27	22	5	27
16/11/11	PF	Cultivation of radish and carrot	Horticulture	Production of low volume high value crops	1	Off campus				25	2	27	25	2	27
17/11/11	PF	Cultivation of pea and tomato	Horticulture	Production of export potential vegetables	1	Off campus				29	2	31	29	2	31
24/11/11	PF	Improved fruit production technologies	Horticulture	Cultivation of fruits	1	Off campus				32	6	38	32	6	38
28/11/11	PF	Offseason	Horticulture	Offseason	1	Off				29	4	33	29	4	33

		vegetable production under polyhouse		vegetable production		campus									
10/2/12	PF	Production technology on kiwi fruit	Horticulture	Production of export potential fruits	1	Off campus				30	4	34	30	4	34
18/6/11	RY	Offseason tomato production under polyhouse	Horticulture	Offseason vegetable production	1	Off campus				7	3	10	7	3	10
5/10/11	RY	Production technology on Apple	Horticulture	Production of export potential fruits	1	Off campus				16	8	24	16	8	24
18/10/11	RY	Cultivation practices and propagation techniques in plum	Horticulture	Plant propagation techniques	1	Off campus				2	14	16	2	14	16
5/3/12	RY	Production technology on king chilly under polyhouse	Horticulture	Protected cultivation technology	1	Off campus				15	0	15	15	0	15
27/3/12	RY	Nursery management in cabbage	Horticulture	Nursery management of vegetables	1	Off campus				14	1	15	14	1	15
4/11/11	EF	Production technology on mandarin and rejuvenation of old orchards	Horticulture	Rejuvenation of old orchards	1	Off campus				11	1	12	11	1	12
30/4/11	PF	IPM in Cabbage	Plant protection	Integrated pest management	1	Off campus				6	9	15	6	9	15
5/6/11	PF	IPM in Paddy	Plant protection	Integrated pest management	1	Off campus				18	12	30	18	12	30
18/7/11	PF	IPM in Khasi mandarin	Plant protection	Integrated pest management	1	Off campus				15	7	22	15	7	22

21/7/11	PF	IPM in Paddy	Plant protection	Integrated pest management	1	Off campus				20	0	20	20	0	20
29/7/11	PF	IPM in Paddy	Plant protection	Integrated pest management	1	Off campus				19	12	31	19	12	31
28/8/11	PF	IPM in Apple	Plant protection	Integrated pest management	1	Off campus				11	9	20	11	9	20
25/11/11	PF	IPM in vegetables	Plant protection	Integrated pest management	1	Off campus				9	16	25	9	16	25
25/2/12	PF	Integrated pest management	Plant protection	Integrated pest management	1	Off campus				29	4	33	29	4	33
18/6/11	RY	IPM in Paddy	Plant protection	Integrated pest management	1	Off campus				14	1	15	14	1	15
23/9/11	RY	Bee keeping	Plant protection	Bee keeping	1	Off campus				20	1	21	20	1	21
8/10/11	RY	Bee enemies and their management	Plant protection	Bee keeping	1	Off campus				19	1	20	19	1	20
4/11/11	RY	IPM in vegetables	Plant protection	Integrated pest management	1	Off campus				10	0	10	10	0	10
9/4/11	PF	Production and management technology on QPM	Agronomy	Productivity enhancement in field crops	1	Off campus				8	18	26	8	18	26
10/6/11	PF	Package and practices on paddy	Agronomy	Productivity enhancement in field crops	1	Off campus				13	3	16	13	3	16
23/7/11	PF	Integrated crop management	Agronomy	Integrated crop management	1	Off campus				25	4	29	25	4	29
25/7/11	PF	Integrated weed management	Agronomy	Weed management	1	Off campus				11	1	12	11	1	12
9/4/11	PF	Production and management technology on QPM	Agronomy	Productivity enhancement in field crops	1	Off campus				8	18	26	8	18	26
10/6/11	PF	Package and practices on	Agronomy	Productivity enhancement in	1	Off campus				13	3	16	13	3	16

		paddy		field crops											
23/7/11	PF	Integrated crop management	Agronomy	Integrated crop management	1	Off campus				25	4	29	25	4	29
25/7/11	PF	Integrated weed management	Agronomy	Weed management	1	Off campus				11	1	12	11	1	12
1/9/11	EF	Productivity enhancement in field crops	Agronomy	Productivity enhancement in field crops	1	Off campus				13	1	14	13	1	14
9/9/11	PF	Nutrient management in paddy	Agronomy	Integrated crop management	1	Off campus				10	30	40	10	30	40
27/9/11	PF	Resource management through agronomic measures	Agronomy	Resource Conservation Technologies	1	Off campus				23	10	33	23	10	33
29/10/11	RY	Seed production on pulse crops	Agronomy	Seed production	1	Off campus				8	15	23	8	15	23
5/11/11	PF	Package and practice on field pea	Agronomy	Productivity enhancement in field crops	1	Off campus				33	10	43	33	10	43
11/11/11	PF	Package and practice on field pea	Agronomy	Productivity enhancement in field crops	1	On campus				0	19	19	0	19	19
21/11/11	PF	Package and practice on rapeseed	Agronomy	Productivity enhancement in field crops	1	Off campus				16	8	24	16	8	24
25/11/11	PF	Seed production technology	Agronomy	Seed production	1	Off campus				9	17	26	9	17	26
17/12/11	RY	Integrated farming system	Agronomy	Integrated farming system	1	Off campus				21	9	30	21	9	30
6/3/12	PF	Crop diversification	Agronomy	Crop diversification	1	Off campus				17	15	32	17	15	32
15/3/12	PF	Intensive fodder production system	Agronomy	Fodder production	1	Off campus				18	9	27	18	9	27

26/3/12	PF	Nursery raising in paddy	Agronomy	Nursery management	1	Off campus				12	14	26	12	14	26
12-04-11	PF	Application of biofertilizer in maize	Soil Science	Soil fertility management	1	Off campus				12	13	25	12	13	25
13-05-11	PF	Biofertilizer treatment on French bean	Soil Science	Production and use organic inputs	1	Off campus				11	0	11	11	0	11
27-06-11	PF	Soil and water conservation	Soil Science	Soil and water conservation	1	Off campus				0	16	16	0	16	16
08-07-11	PF	Management of problematic soil	Soil Science	Management of problematic soil	1	Off campus				26	6	32	26	6	32
25-07-11	RY	Vermiculture	Soil Science	Vermiculture	1	Off campus				25	5	30	25	5	30
06-09-11	EF	Production and use organic inputs	Soil Science	Soil health and fertility management	1	Off campus				13	1	14	13	1	14
07-09-11	PF	Other organic manure production	Soil Science	Production of inputs at site	1	Off campus				12	37	49	12	37	49
25-10-11	PF	Vermicompost production	Soil Science	Vermicompost production	1	Off campus				0	11	11	0	11	11
09-11-11	PF	Micronutrient deficiency in crops	Soil Science	Micronutrient deficiency in crops	1	Off campus				33	11	44	33	11	44
12-11-11	PF	Vermicompost production	Soil Science	Vermicompost production	1	Off campus				16	8	24	16	8	24
17-11-11	RY	Production of organic inputs	Soil Science	Production of organic inputs	1	On campus				0	20	20	0	20	20
25-11-11	RY	Production of organic inputs	Soil Science	Production of organic inputs	1	Off campus				9	21	30	9	21	30
05-12-11	PF	Vermicomposting production	Soil Science	Vermicomposting	1	Off campus				35	9	39	35	9	39
20-02-12	PF	Vermicompost production	Soil Science	Vermicompost production	1	Off campus				15	5	20	15	5	20

07-03-12	PF	Soilfertility management	Soil Science	Soil fertility management	1	Off campus				2	25	27	2	25	27
10-03-12	PF	Composting method	Soil Science	Soil fertility management	1	Off campus				17	14	31	17	14	31
12-03-12	RY	Production of organic inputs	Soil Science	Production of organic inputs	1	Off campus				19	7	26	19	7	26
19-03-12	PF	Management of problematic soil	Soil Science	Management of problematic soil	1	Off campus				10	15	25	10	15	25
24-03-12	PF	Vermicomposting and its application to crops	Soil Science	Vermicompost production	1	Off campus				18	14	32	18	14	32
30-03-12	PF	Soil fertility management	Soil Science	Soil fertility management	1	Off campus				10	11	21	10	11	21
22/6/2011	PF	Household food security by nutrition gardening	Home Science	Household food security by nutrition gardening	1	Off campus				-	13	13	-	13	13
28/9/2011	PF	Minimization of nutrient loss in processing	Home Science	Minimization of nutrient loss in processing	1	Off campus				20	8	28	20	8	28
29/9/2011	PF	Preparation of meat pickle	Home Science	Value Addition	1	Off campus				-	25	25	-	25	25
30/9/2011	PF	Design and development of low cost diet	Home Science	Design and development of low / minimum cost diet	1	Off campus				-	14	14	-	14	14
29/10/2011	PF	Preservation of fruits	Home Science	Value Addition	1	Off campus				14	20	34	14	20	34
7/3/2012	RY	Processing of fruits and vegetables	Home Science	Processing	1	Off campus				2	26	28	2	26	28
8/3/2012	RY	Processing	Home Science	Processing	1	Off campus				-	22	22	-	22	22
31/3/2012	RY	Rural Craft	Home Science	Rural Craft	1	Off campus				4	21	25	4	21	25

18/06/11	PF	Climate change and animal health	Animal Sc	Animal production	1	Off campus				14	1	15	14	1	15
09/07/11	PF	Poultry disease and their management	Animal Sc	Disease management	1	Off campus				0	25	25	0	25	25
25/07/11	RY	Scientific pig rearing and management	Animal Sc	Animal production	1	Off campus				26	4	30	26	4	30
30/08/11	PF	Scientific pig rearing and management	Animal Sc	Animal production	1	Off campus				16	4	20	16	4	20
12/09/11	PF	FMD in mithun, prevention and control	Animal Sc	Disease management	1	On campus				20	0	20	20	0	20
26/09/11	PF	FMD in mithun, prevention and control	Animal Sc	Disease management	1	Off campus				25	5	30	25	5	30
23/11/11	PF	Vanaraja and gramapruya for backyard rabbit farming	Animal Sc	Animal production	1	Off campus				29	3	32	29	3	32
24/11/11	PF	Scientific pig production and management	Animal Sc	Animal production	1	Off campus				26	3	39	26	3	39
26/11/11	RY	Prevention and control of poultry diseases	Animal Sc	Animal production	1	Off campus				18	8	26	18	8	26
14/12/11	PF	Vanaraja and gramapruya for backyard rabbit farming	Animal Sc	Animal production	1	Off campus				20	2	22	20	2	22
20/12/11	RY	Commercial rabbit farming	Animal Sc	Animal production	1	Off campus				11	15	26	11	15	26
26/01/12	PF	Breeding	Animal Sc	Animal breeding	1	Off				17	7	24	17	7	24

		management of pigs				camps									
27/01/12	PF	Prevention and Control of Ranikhet disease in poultry	Animal sc	Disease management	1	Off campus				15	10	25	15	10	25
26/05/11	PF	Improved farm implement for hill Agriculture	Agricultural Engineering	Resource conservation	1	Off campus				20	0	20	20	0	20
24/05/11	EF	Seepage control in Farm pond with LDPE poly lining	Agricultural Engineering	Resource conservation	1	Off campus				12	0	12	12	0	12
06/07/11	PF	Training and demonstration on installation and working of Treadle Pump (Water lifting device)	Agricultural Engineering	Drudgery reduction	1	Off campus									
18/08/11	PF	Seepage control in Farm pond with LDPE poly lining	Agricultural Engineering	Resource conservation	1	Off campus				15	0	15	15	0	15
30/09/11	PF	Improve farm implement and machineries	Agricultural Engineering	Drudgery reduction	1	Off campus				14	0	14	14	0	14
30/01/11	PF	Seepage control in Farm pond with LDPE poly lining	Agricultural Engineering	Resource conservation	1	Off campus				11	1	12	11	1	12
28/02/12	PF	Training and demonstration on installation and working of Treadle Pump	Agricultural Engineering	Drudgery reduction	1	Off campus				5	10	15	5	10	15

		(Water lifting device)													
29/02/12	PF	Improved farm implement and tools for hill Agriculture	Agricultural Engineering	Drudgery reduction	1	Off campus				2	10	12	2	10	12
03/03/12	RY	Improved farm implement and tools for hill Agriculture	Agricultural Engineering	Drudgery reduction	1	Off campus				10	5	15	10	5	15
14/03/12	PF	Mat type seedling preparation and working of manual paddy tranplanter	Agricultural Engineering	Drudgery reduction	1	Off campus				22	04	26	22	04	26
14/03/12	PF	Installation and working of Drip irrigation system	Agricultural Engineering	Resource conseravtion	1	Off campus				22	04	26	22	04	26