

Contents

S. No.	Particulars	Page No.
1	General Information about the KVK	2-5
2	Details of SAC	6
3	Details of district (2012-13)	7-13
4	Technical achievements.	14-86
5	Impact of KVK activities.	87-88
6	Linkages	88-89
7	Performance of infra-structure in KVK.	90-93
8	Financial performance.	94-95
9.	Constraints	95
10.	Annexure - I-IV	96-105

PROFORMA FOR ANNUAL REPORT 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
Krishi Vigyan Kendra Vill. Tanda P/o Dera Baba Banda Bahadur Teh. and Distt. Reasi Pin: 182311	Office 01991-287802	FAX 01991-287802	kvkreasi@gmail.com

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

Address	Telephone		E mail
	Office	FAX	
Sher-e-Kashmir University of Agricultural Sciences and Technology of Jammu. Main Campus, Chatha.	0191-2262133 2262134	0191-2262029	vcskuastj@gmail.com

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

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. Vikas Tandon	-	09419155273	tandonvikas@rediffmail.com

1.4. Year of sanction: Nov, 2005

1.5. Staff Position (as on 31st March 2013)

Sl. No.	Sanctioned post	Name of the incumbent	Designation	Discipline	Pay Band & Grade Pay (Rs.)	Present basic (Rs.)	Date of joining	Permanent /Temporary	Category (SC/ST/ OBC/ Others)
1	Programme Coordinator	Dr. Vikas Tandon	Programme Coordinator	Horticulture	37400-67000 (9000)	37400	21.07.08	Temporary	Gen
2	Subject Matter Specialist	Dr. Sheetal Badyal	Subject Matter Specialist	Home science	15600- 39,100 (6000)	25820	18.06.07	Temporary	Gen
3	Subject Matter Specialist	Dr. Banarsi Lal	-do-	Ext. Edu.	15600- 39,100 (6000)	24520	21.06.07	Temporary	Gen
4	Subject Matter Specialist	Mr. Lalit Upadhyay	-do-	Agro-forestry	15600- 39,100 (6000)	24320	06.12.07	Temporary	Gen
5	Subject Matter Specialist	Dr. Mandeep Singh Azad	Do	Animal Husbandry	15600- 39,100 (6000)	24320	04.04.12	Temporary	Gen
6	Subject Matter Specialist	Vacant	-	-	-	-	-	-	-
7	Subject Matter Specialist	Vacant	-	-	-	-	-	-	-
8	Programme Assistant	S. Satbir Singh	Programme Assistant	Env. Sciences	9300-34800 (4200)	14760	04.08.08	Temporary	Gen
9	Farm Manager	Mr. Arvinder Kumar	Farm Manager	Ext. Edu.	9300-34800 (4200)	14760	11.08.08	Temporary	Gen
10	Computer Programmer	Mr. Mohd Qasim	Computer Programmer	Computer Sciences	9300-34800 (4200)	-	12.01.12	Temporary	ST
11	Accountant / Superintendent	Sh. Balraj Khajuria	Head assistant	-	9300-34800 (4200)	19470	-	Temporary	Gen
12	Stenographer	Manhor Lal	Jr. Stenographer	-	5200-20200 (2400)	-	19.01.12	Temporary	SC
13	Driver	Mohd Iqbal	Driver	-	5200-20200 (1900)	7970	-	Temporary	Gen
14	Driver	Manjeet Singh	Driver	-	5200-20200 (1900)	12470	-	Temporary	Gen
15	Supporting staff	Ashok Kumar	Attendant	-	5200-20200 (1300)	7890	-	Temporary	Gen
16	Supporting staff	Sanjay Kumar	Attendant	-	5200-20200(1300)	5920	-	Temporary	Gen

1.6. Total land with KVK (in ha) : 20 ha

S. No.	Item	Area (ha)
1	Under Buildings	0.118
2.	Under Demonstration Units	0.008
3.	Under Crops	5.00
4.	Orchard/Agro-forestry	0.36
5.	Others (specify)	Rest uncultivable. More than 5 ha eroded in floods.

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	Feb,2009	500	62.49	-	-	-
2.	Farmers Hostel	ICAR	Feb,2009	305	43.85	-	-	-
3.	Staff Quarters (6)	ICAR	Feb,2009	400	30.17	-	-	-
4.	Demonstration Units (2)	ICAR	Feb,2008	85 (1)	4.87	-	-	-
5	Fencing	ICAR	-	-	-	-	-	Incomplete / broken
6	Rain Water harvesting system	-	-	-	-	-	-	-
7	Threshing floor		-	-	-	-	-	-
8	Farm go down		-	-	-	-	-	

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
1.Tractor H.M.T.	2006	422650	500 hrs (app)	Working
2.TATA Sumo Victa	2006	500000	83500	Working
3. Hero Honda motorcycle	2011	50000	4250	working

C) Equipments & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
Leveler	2006	7000	Satisfactory
Disc Harrow	2006	23100	Satisfactory
Disc plough	2006	20750	Satisfactory
Cultivator	2006	15600	Satisfactory
Trolley	2006	74000	Satisfactory
HP Computer (1 No)	2007	40000	Satisfactory
UPS 1Kv	2007	8336	Satisfactory
LCD Projector	2007	100387	Satisfactory
Printer (hp Laserjet)	2007	13520	Satisfactory
HP Computer (1 No) (old)	-	-	Not working
HP Computer (01 no) & printer& UPS	2010	42457	Satisfactory
SLR Digital camera (Sony)	2010	24900	Satisfactory
Fax machine (Sharp)	2010	7000	Satisfactory
Xerox Machine	2011	-	Good
HP Computer	2012	410000	Good
Weighing balance (100 kg)	2012	8000	Good

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

Sl. No.	Date	Name and Designation of Participants		Salient Recommendations	Action taken
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	12-05-2012	Dr. K. S. Risam Mr. S. K. Chatha Dr. M.T. Krishan Dr. A. K. Nagotra S. Tajinder Singh S. sarabjit singh Sh. Bodh raj Dr. D. L. Kudyar Sh. Suresh Sharma Mr. Ravindra Sharma Sh. Tilakraj Sharma Mr. C.L. Sharma Sh. Rakesh singh salathia Sh. R.C. gupta Sh. Mukund lal Sh. Ajay Sharma Sh. Yog Raj Sudan Sh. Sucha Singh Smt. Qasim bibi Mrs. Bimla Devi Smt. Sardarum begum	Director Extension, SKUAST Jammu Chief Hort. Officer, Reasi District sheep husbandry officer, Reasi C.A. H.O. Resai Chief Hort. Officer, Udh. SMS(DL) Horticulture, Reasi Asst. Director, Fisheries CAHO Udhampur Dist. Social welfare officer Asst. SCO Dharmari AEO Reasi SMS, CHO Udhampur J&K bank DFO, Reasi Sericulture asst. Irrigation deptt, Dharmari Dist. Director employment Progressive farmer Progressive farmer Progressive Farmer Progressive Farmer	1. Director Extension instructed that the establishment of poly-house at KVK must be undertaken at the priority. 2. Director extension also advised to conduct a survey with department of horticulture for zonalisation of district Reasi for proper selection of planting material for a particular zone. 3. Director instructed that the maize seed for ISOPOM and KVK must be taken from Department of agriculture as a number of good hybrids are available with them and department may supply the seed at lending rate. 4. Director Extension instructed to go for seed production at KVK farm as it is one of the mandates of the KVK. 5. Director Extension also advised to conduct next SAC meeting in Sept-Oct 2012 in order to plan activities for Rabi, 2012. 6. Director Extension instructed That On farm trials have to be laid out at specific locations where certain problems are encountered with specific technologies. 7. Chairman also advised that all extension activities like field days must be held in collaborations with agriculture department.	Polyhouse establishment is under process. Survey will be undertaken in this fruiting season with the department of horticulture. KVK followed the instructions for purchasing the seeds from the deptt. of agri. KVK has produced the seed of wheat, pulses and oilseeds. KVK's scientists strictly followed the instructions for lying out of OFTs. KVK always have contacts with the deptt. Of agri. For conducting the field days.

2. DETAILS OF DISTRICT (2012-13)

The twin districts of Udhampur and Reasi falls in the mid hill zone of the state. Most part both the districts is rain fed with only 7 per cent irrigated area in Reasi and about twenty percent area is irrigated in Udhampur. Major crops of the districts are Maize, Wheat, Paddy, Mustard and Pulses like black gram (mash) and Green gram (moong). The other crops which have been making a significant impact on economy of the farmers are seasonal vegetables, potato, and fodder. There is ample scope for growing mushrooms, apiaries for honey and backyard poultry. Horticulture is another very important part of agriculture in these districts. Citrus and mango are important crops in Reasi and Pouni blocks while stone fruits and walnuts have great scope in higher elevations. The district has immense potential for growing spices namely Onion, garlic, ginger and turmeric in specific pockets. The major crop rotations followed are as follows:

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

S. No	Farming system/enterprise
1	Maize-Wheat
2	Paddy-Wheat
3	Mash-Wheat
4	Maize- Mustard
5	Horticulture crops a: (Vegetables like Tomato, Cole crops, cucurbits, Brinjal and chilies. b. Fruit crops like Mango, Citrus, Guava, Litchi, Peach, plum and apricot. c. Garlic, Ginger and Turmeric are potential spices of some pockets

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

S. No	Agro-climatic Zone	Characteristics
1	Subtropical zone	This includes areas between 380-800m amsl. The lower belt of Reasi where the KVK is located falls in this zone. This area experiences hot summers followed by cold winters and area also experiences autumn frost. The major chunk of precipitation is received during monsoons. The soils are mostly sandy loam and clay loam with normal OM. Most of the area is rain fed with very little irrigation. The annual rainfall of the district is 1000 to 1100 mm. major chunk of it is received from may-September. The mean maximum and minimum temperature ranges between 35- 40 °C and 10-12 °C respectively. Agriculture in this area is diverse and is completely rain fed. The area has low productivity and low input usage.
2	Intermediate Zone	Situated between 800-1500m, amsl, this area experiences definite winters and a hot spell of summer. The major chunk of precipitation is received in July-Aug. Most part of Udhampur and Reasi falls in this zone. The annual rainfall of the district is about 1100 mm. The mean maximum and minimum temperature ranges between 35- 40 °C and 10-12 °C respectively. Agriculture in this area completely rain fed.
3	Temperate zone	It includes few areas falling above 1500m amsl. This area experiences chilling winters and major cropping season is kharif, during which moisture is available for growing crops. These areas also experiences snow in winter thus minimum temperatures falls below zero degrees during these months.

2.3 Soil type/s

S. No	Soil type	Characteristics	Area in ha
1	Sandy loam	Medium O. M. content, Low to medium N and Medium phosphorus and High in K content. Illite is dominate clay mineral. The soils are slightly acidic.	-
2	Clay loam	Medium O. M. content, Low to medium N and Medium phosphorus and High in K content. Illite is dominating clay mineral. The soils are slightly acidic.	-

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

S. No	Crop	Area (ha)	Production (Q)	Productivity (Q /ha)
1	Maize	29000	531000	18.40
2	Wheat	26000	517000	16.20
2	Paddy	10000	230000	23.00
4	Pulses	2320	16200	7.10
5	Millets	12428	-	-
6	Oil seed	2415	15200	4.50
7	Vegetables	3237	536000	166

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

S. No	Crop	Area (ha)	Production (Q)	Productivity (Q /ha)
1	Maize	19800	356400	18.0
2	Wheat	14600	337800	18.0
2	Paddy	2800	63200	22.5
4	Pulses	2050	20500	10.0
5	Oil seed	2100	14700	07.0
6	Vegetables	930	186000	200.0
7	Fodder	750	206250	275.0
8	Jowar/ bajra /barley etc.	600	9000	15.0
9	Floriculture	25	-	-

2.5. Weather data

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)
		Maximum	Minimum	

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

Category	Population	Production	Productivity
Cattle			
<i>Crossbred</i>	79476 (Udh) 110730 (Reasi)		
<i>Indigenous</i>	316099 (Udh) 196842 (Reasi)		
Buffalo	136104 (Udh) 124716 (Reasi)		
Sheep			
<i>Crossbred</i>	175337 (Udh) 210382 (Reasi)		
<i>Indigenous</i>	245268 (Udh) 300474 (Reasi)		
Goats	161432 (Udh) 174774 (Reasi)		
Pigs			
<i>Crossbred</i>			
<i>Indigenous</i>			
Rabbits			
Poultry	Total 117564 (Udh) 89767 (Reasi)		
Hens			
<i>Desi</i>			
<i>Improved</i>			
Ducks			
Turkey and others			

Category	Area	Production	Productivity
Fish			
<i>Marine</i>			
<i>Inland</i>			
Prawn			
Scampi			
Shrimp			

2.6 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 Areas
1	Reasi	Reasi	Agarballian, Mari and Gran more	Wheat, maize, black gram, green gram, Chickpea, paddy and vegetables.	1.Low production 2. Lack of awareness on improved varieties of pulses. 3. Insect-pest and disease attacks.. 4. No information on Weed management in cereals and pulses. 5. Low egg laying in local breeds of poultry.	1. Promotion of improved varieties of pulses. 2. Promotion of high yielding/improved varieties of cereals. 3. Integrated disease and insect-pest management. 4. Weed management in cereals and pulses. 5. Promotion of backyard poultry.
2	Reasi	Pouni	Mari, Malad, Talwara, Mari nala, Dhanwa, , Bharakh,Pouni	Wheat, paddy, maize, vegetables, spices, oilseeds, poultry farming.	1. Lack of knowledge of improved varieties of oilseeds. 2. Use of conventional planting material for the spices. 3. Diseases in turmeric and ginger. 4. Occurrence of Paddy blast. 5. Loose smut and flag smut diseases in wheat crop. 6. Lack of knowledge of scientific cultivation of vegetables. 7. Low egg laying desi poultry breeds.	1. Promotion of high yielding varieties. 2. Promotion of backyard poultry. 3. Replacement of spices varieties. 4. Management of Rhizome rot in spices.

3	Reasi	Reasi	Dera, Tanda, Seri, chumbian Mansoo, kanjali, Bhabbar, kundra Pannasa, shafanoo.	Maize/wheat/vegetables /milk and meat production, sericulture/ dhingri	1. Lack of availability of hybrid/improved varieties. 2. Lack of knowledge of scientific breeding, feeding and management of animals. 3. Lack of diseases and insect-pests management in crops. 4. Lack of awareness for fruit and vegetables processing. 5. Sericulture related seasonal problems.	1. Promotion of self help groups. 2. Insect and disease management in cereals. 3. Promotion and formation of SHGs. 4. Fruit and vegetable processing techniques. 5. Promotion of improved sericulture.
4	Udham pur	Ramnagar	Jaganu, Rown	Maize/pulses	1. Lack of new varieties of maize. 2. Use of conventional seeds.	1. Promotion of high yielding new Hybrids/ var. of maize. 2. Weed management in maize crop. 3. Introduction and evaluation of new ginger selection.
5.	Udham pur	Majalta Tikri	Gole/ Majalta/ Mand/ Tikri/ Sundrani/ chiriai Muthal	Maize/wheat/pulses/oilseeds/vegetables	1. Low yield of cereals due to unscientific cultivation. 2. Lack of awareness on improved varieties of oilseeds. 3. Lack of awareness of hybrid/improved var. of vegetables.	1. Promotion of new varieties of cereals in the area. 2. Promotion of improved varieties of oilseeds. 3. Introduction of importance of SHGs in the area. 3. Introduction of hybrid/improved varieties of vegetables.
6	Udham pur	Chenani	Dhramthal, Kud, Basht, Chenani, Gauri kund, Sudmahadev	Vegetables Maize/mash	1. Poor yields 2. Old varieties 3. Poor soil management and indiscriminate plant protection. 4. Lack of knowledge of fruit processing.	1. Promotion of new hybrids of maize, integrated pest management. 2. introduction of new variety of mash 3. Promotion of olive cultivation. 4. Promotion of fruit processing in the area. 5. Introduction and evaluation of new vegetable hybrids.

7.	Reasi	Arnas,	Mahore/Shajru/ Dharmari/ Arnas/Salal/ Thuru	Maize/wheat/fruit crops/mash	1. Low productivity of maize crop. 2. Single cropping. 3. Poor yield of pulse crops 4. Anar butterfly infestation. 5. Lack of knowledge of scientific cultivation temperate fruits.	1. Scientific cultivation of temperate fruits. 2. Introduction of single cross hybrids. 3. Promotion of improved varieties of pulses. 4. Management of insect-pests and diseases in fruit plants.
8	Reasi	Reasi	Pangal/ sool/ painthal/ kulia/ chak bhakta/ Moori/ didimorh/ sherwar, Agharjitto, Dheerti, Chamarya	Maize/mash/vegetables/ floriculture/dhingri/wheat /Toria/vegetables	1. Low productivity of flowers. 2. Low production of cereals. 3. Lack of availability hybrid/improved varieties' of vegetables 4. Lack of awareness of dhingri/mushroom cultivation 5. Lack of knowledge of scientific cultivation of oilseeds.	1. Promotion of marigold in the area. 2. Introduction of single cross maize hybrids. 3. Superior vegetable seeds. 4. Introduction of hybrid varieties of vegetables 5. Promotion of dhingri cultivation in the area. 6. Promotion of improved varieties of oilseeds.
9.	Udham pur	Panchar i	Panchari, Meer,	Maize, mash, chickpea	1. Low productivity of maize crop. 2. Lack of awareness of improved/hybrid varieties of vegetables. 3. Low production of pulses.	1. Introduction of single cross hybrids of maize. 2. Introduction of improved varieties of pulses. 3. Technical guidelines of vegetables.

2.7 Priority/thrust areas

Maize	Introduction of single cross commercial maize hybrids, Integrated Nutrient Management, weed management, common insect / pests.
Wheat	Promotion of seed replacement and introduction of new varieties, seed treatment, weed management, disease and pest management including termite control. Seed production of new varieties.
Paddy	Integrated disease and pest management.
Fodder	Promotion of new varieties, Increasing area under fodder crops. Round the fodder production.
Oilseed	Introduction of new varieties, Promotion of insect pest management. , control of Alternaria blight, Use of balanced nutrition. Seed production at KVK farm.
Pulses	Use of improved varieties, Weed management, insect /pest and disease management.
Fruit crops	Introduction of new varieties, control of anar butterfly, mango malformation, and disease and pest management in major fruit crops training and pruning of temperate fruits, survey of local germplasm.
Vegetables	Promotion of hybrids, introduction of new varieties. Disease and pest management. Round the year cultivation, healthy nursery raising of vegetable crops.
Animal husbandry	To increase production potential of livestock by improved breeding feeding and management practices.
Mushroom cultivation	Promotion of mushroom cultivation, growing of more species for year round cultivation.
Bee Keeping	Promotion of bee keeping, trainings on bee keeping/ management of apiaries.
Spices	Promotion of spices in the district, introduction of new varieties, standardization of planting dates, common diseases in spices, nutrient management.
Floriculture	Promotion of loose flower cultivation in the district, integrated nutrient management, introduction of new varieties.
Water conservation	Promotion of water conservation and increasing water productivity.
Agro-forestry	Fodder trees, Medicinal & Aromatic plants, Environment conservation.

3. TECHNICAL ACHIEVEMENTS

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

OFT (Technology Assessment and Refinement)				FLD (Oilseeds, Pulses, Cotton, Other Crops/Enterprises)			
1				2			
Number of OFTs		Number of Farmers		Number of FLDs		Number of Farmers	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
8	10	24	34	Oilseeds(12 ha)	10.65 ha	53	94
				Pulses (7 ha)	9.70 ha	29	72
				Other than oilseeds and pulses (14 ha)	15 ha	60	110
				Marigold (2 ha)	1.0 ha	20	20
				Vegetables (2ha)	5.7 ha	40	321
				Spices(Turmeric and ginger)(0.2 ha)	0.2 ha	40	61
				Dhingri	200 bags	-	50

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	38	52	760	1201	Field days	6	180	231
Rural youth	6	6	90	128	Kisan Goshthies	2	30	35
Extn. Functionaries	8	4	120	79	Awareness camps	2	40	41
					Important days	2	40	158
					Animal Health Check camps	2	100	120

Seed Production (Qtl.)		Planting material (Nos.)	
5		6	
Target	Achievement	Target	Achievement
Wheat	50		
Blackgram	1.50		
Lentil	1.20		
Toria	0.50		
Sesamum	0.80		
Pigeon pea	0.80		
Turmeric	0.50		
Gram	1.50.		

3.B. Abstract of interventions undertaken

S. No	Thrust area	Crop/ Enterprise	Identified Problem	Interventions					
				Title of OFT if any	Title of FLD if any	Title of Training if any	Title of training for extension personnel if any	Extension activities	Supply of seeds, planting materials etc.
1	Introduction of single cross hybrids, Weed management control of major insect pests in maize crop.	Maize	Low yield in maize crop , use of conventional seed, lack of chemical weed management and no insect /pest control.	-	Introduction of single cross hybrids, introduction of weed management and management of cut worm & its control.	Scientific cultivation of maize	Field day	Field day Trainings , awareness camps and FLDs.	Seed and fertilizer was given for FLD.
2	Seed replacement and promotion of new varieties, seed treatment, disease and weed management	Wheat	Low yields use of local seeds. Unscientific approach towards cultivation. Lack of chemical weed management.	Performance of timely sown wheat varieties in Reasi. Weed management in wheat.	Introduction of improved wheat variety in Reasi and Udhampur.	Scientific cultivation of wheat and seed treatment in wheat.	Field day	Field day Kisan ghoshthi and trainings and FLDs.	Seed of improved varieties.
3.	Management of diseases and introduction of high yielding var.	Paddy	Lack of availability of high yielding varieties. Lack of disease management.	Management of paddy blast.	Introduction of high yielding varieties.	Scientific cultivation of paddy.	-	Trainings and field visits	Seed of improved varieties
4	Promotion of improved varieties of pulses.	Lentil , chickpea black gram and green gram	Non availability of quality seed.	-	Introduction of improved varieties of pulses and integrated weed management.	-	Field day	Field day visits Trainings Diagnostic visits.	Seed of lentil and chick pea .
5	Promotion of improved varieties of oilseed.	Toria/ Mustard/ G.sarson/til	Old varieties. Lower yields due to aphid attack	-	Introduction of high yielding varieties of oilseeds.		Field day	Field day Diagnostic visits and awareness camps.	Seed and fertilizer with Toria were given for FLD.
6	Promotion of spices.	Turmeric and ginger	Rhizome rot and Bacterial wilt diseases and lack of good planting material.	Performance of different strains of ginger in Reasi and Udhampur. Integrated nutrient management in turmeric.	Introduction of new strains of turmeric and ginger in Reasi	Spice cultivation for higher incomes.	Field day	Field day Diagnostic visits	Planting material was supplied to farmers for OFT and FLD's.
7	do	Onion	Lack of weed management	Weed management in onion.	-		-	Diagnostic visits	Chemicals were supplied for OFT

8	Promotion of floriculture	Marigold	Lack of knowledge of scientific cultivation of marigold.	-	Introduction of new variety of marigold.	Cultivation of flowers for increasing rural economy.	Field day	Diagnostic visits. Kisan goshties Celebration of floriculture field day	Seed of improved variety
9	Crop diversification	Mushrooms/dhingri	Lack of knowhow, and non availability of spawn	-	Introduction of Dhingri in Reasi.	Awareness on dhingri/mushroom cultivation.		Field visits.	Spawn of Dhingri along with poly bags were supplied for laying out FLD's.
10.	Promotion of vegetable culture.	Vegetables crops.	Lack of new varieties, Poor INM and no check on insect/pest.	Introduction and evaluation of commercially available hybrids of Tomato, bell pepper, okra, bottle guard etc.	Introduction of HYV of Okra, bottle guard	Nursery Raising of vegetable crops. Use of micro irrigations in vegetable crops.	Entrepreneurial opportunities in vegetables growing.	Kisan goshties and trainings.	Seeds of vegetable crops were distributed to beneficiaries of FLD's
11.	Promotion of fruit crops.	Mango/ citrus/ stone fruits, walnut, apple, pomegranate.	Old varieties, Poor upkeep, Lack of insect pest management.	Survey of existing seedling germplasm in Reasi.	-	Training and pruning of fruit crops Lay out and planting of orchards Nursery raising as an enterprise.	In service training programmes Kisan melas	Awareness camps Campaigns Kisan goshties.	-
12.	Preservation and value addition of commercial crops.	Mango/ citrus, apple, milk, mushrooms, chaat masala etc.	Lack of knowledge of processing Wastage of excess produce	-	-	Post harvest care and management of crops. Processing of fruits and vegetables Milk processing	Trainings for aganwadi workers.	Kisan goshties.	-
13	Introduction of High egg laying poultry varieties	Backyard poultry farming	Use of Local low producing varieties	-	Backyard poultry farming using Van raja poultry birds	Enhancement and popularization of Backyard poultry farming among women and migrant landless farmers		Trainings and FLD Timely disease diagnosis and treatment	Chicks were supplied
15	Parasitic control in small ruminants	Goats and Sheep	No timely de-worming and use non specific anthelmintics	Gastrointestinal Parasitic control	-	Parasitic Control in small ruminants		Timely monitoring and de-worming by specific anthelmintics Trainings	Medicines were given
16	Disease management in Livestock	Livestock	No timely de-worming and vaccination Schedule High Parasitic load		Timely de-worming	Disease management in Large ruminants		Timely worming Trainings De-	Dewormers were supplied

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	12	4	5	2	5		1			29
Seed / Plant production										
Weed Management	1		-	-	1					2
Integrated Crop Management										
Integrated Nutrient Management				1						1
Integrated Farming System										
Mushroom cultivation				1						1
Drudgery reduction	1									1
Farm machineries										
Value addition										
Integrated Pest Management										
Integrated Disease Management	1			1						2
Resource conservation technology										
Small Scale income generating enterprises										
TOTAL	15	4	5	5	6		1			36

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

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

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Varietal Evaluation	12	4	5							21
Seed / Plant production										
Weed Management	1				1					2
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	13	4	5		1					23

* 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	Sheep	Goat	Piggery	Rabbitary	Fisheries	TOTAL
Evaluation of Breeds		1						1
Nutrition Management								
Disease Management		2						2
Value Addition								
Production and Management		1						1
Feed and Fodder								
Small Scale income generating enterprises		1						1
TOTAL		5						5

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

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

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

A. Technology Assessment

Trial 1

- 1) Title : Performance of different strains of ginger in Reasi.
- 2) Problem diagnose/defined : Low productivity of non-descript and local zinger varieties grown on Rain fed areas.
- 3) Details of technologies selected for assessment /refinement :
 - i. Own seed (Farmers Practice) **
 - ii. J&K selection
 - iii. H.P selection
- 4) Source of technology : SKUAST-J
- 5) Production system thematic area : Rainfed cereal based system
- 6) Thematic area : Varietal evaluation
- 7) Performance of the Technology with Performance indicators : Results showed that H.P. selection was marginally better than the J&K selection and recorded highest yield (6900 kg/ha), B:C Ratio (1:1.90), followed by J&K selection at (6800kg/ha) whereas farmers own seed produced 6000 kg/ha.
- 8) Final recommendation for Micro level situation : Introduction of new varieties from H.P along with superior local strains can increase ginger production in the area.
- 9) Constraints identified and feedback for research : planting material is not available and is required in large quantities.
- 10) Process of farmers Participation and their reaction :The trials were based after thorough consultation with the farmers of prominent ginger growing area. Farmers have shown keen interest in the trial and are now convinced that there old planting material needs to be improved upon.

11). Results of On Farm Trials

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Ginger	Rainfed	Low productivity of local varieties	Varietal evaluation	4	Farmer's own seed	No. of rhizomes/plant, wt. of rhizome/plant, yield	6000kg/ha	HP selection yielded maximum at 6900kg/ha which was at par with JK selection at 6800kg/ha	Farmers were convinced that their own seed has shown degeneration and requires proper selection.
					2. J&K selection	-do-	6800 kg/ha		
					3. H.P. selecti on	-do-	6900kg/ha		

* No. of farmers

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
1. Farmer practice	6000kg/ha	95000	1:1.65
2. J&K Selection	6800kg/ha	127000	1:1.87
4. H.P. Selection	6900kg/ha	131000	1:1.90

**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**

Trial 2

1. Title : Integrated nutrient management in turmeric.

2. Problem diagnose/defined : Low productivity of turmeric in this area.

3. Details of technologies

selected for assessment

/refinement :

I Only FYM (Farmers Practice) **

li Recommended NPK+FYM

iii 75% NPK and 20t/ha vermin compost

4. Source of technology : SKUAST-J

5. Production system

Thematic area : Rainfed cereal based system

6. Thematic area : INM

7. Performance of the

Technology with

performance indicators: Results showed that 75% NPK along with 20t/ha vermin compost resulted in maximum yield of 12,200 kg/ha followed by that in NPK treatment and least in farmer practice (8,400kg/ha). The plant height and no of rhizomes were also higher in these treatments.

8. Final recommendation for

Micro level situation : 75% NPK along with 20t/ha VC resulted in maximum yield of turmeric.

9. Constraints identified and

feedback for research : lack of availability of FYM/ vermin compost and also bio-fertilizers may be tried to improve the quality.

10. Process of farmers

Participation and

their reaction : The trials was based after thorough consultation with the farmers of prominent turmeric growing area. Farmers have shown keen interest in the trial and are now convinced that the application of balanced doses is must to attain higher yields.

Results of On Farm Trials

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Turmeric	Rainfed	Low productivity Low colouration	INM in turmeric.	4	Farmer practice (Only FYM (5t/ha)	Plant height No. of rhizomes/plant, yield	8400kg/ha	75% NPK along with VC@20t/ha resulted in attaining maximum yield as compared to farmer practice.	Farmers were convinced that the application of balanced fertilization increased their yields and also improved colouration in turmeric.
					Recommended NPK (60:30:90) +FYM	-do-	10600kg/ha		
					75% NPK with VC (20t/ha)	-do-	11200kg/ha		

*** No. of farmers**

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
1. Farmer practice (only FYM@5t/ha)	8400kg/ha	132000	1:1.73
2. recommended NPK FYM	10600kg/ha	183000	1:2.19
5. 75% NPK + 20t/ha VC	11200kg/ha	196000	1:2.31

***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**

Trial 3

1. Title : Management of paddy blast
2. Problem diagnose/defined: Low yield due to paddy blast
3. Details of technologies selected for assessment /refinement :
T1- Farmers practice
T2- Seed treatment with carbendazim (2g/kg).
T3- carbendazim (0.2%) Spray
4. Source of technology : SKUAST-J KVK Reasi
5. Production system
Thematic area : Cereal based system
6. Thematic area : Integrated disease management
7. Performance of the Technology with performance indicators : Seed treatment with carbendazim was found more effective as Compared to carbendazim Spray.
8. Final recommendation for micro level situation : Seed treatment with carbendazim was very effective.
9. Constraints identified and
10. feedback for research : Lack of knowledge regarding seed treatment
Process of farmers participation and their reaction : farmers were satisfied after seeing the demonstrated fields.

11). Results of On Farm Trials

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Paddy	Irrigated	Low yield due to paddy blast	Management of paddy blasts	3	1 Farmer practice	Yield (qt/ha)	T1-28qt/ha. T1- 18%		
					2. seed treatment with carbendazim (2 g/kg)	Disease incidence (%)	T2-37qt/ha. T2- 4%		
					3 Spray the crop with carbendazim (0.2%)		T3-35qt/ha. T3- 6%		

*** No. of farmers**

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
Famers practice	T1-28q/ha	36000	1:1.76
2. Seed treatment with carbendazim (2g/kg).	T2-37q/ha	58200	1:2.39
3. Spray the crop with carbendazim (0.2%)	T3-35q/ha	26005	1:2.26

***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**

Trial 4

1. Title : Gastro intestinal parasitic control in goats
2. Problem diagnose/defined : Decreased growth rate due to parasitic infections.
3. Details of technologies
Selected for assessment
/refinement :

T1- Farmers practice.
T2- Banaminth (Morantel citrate).
T3- Zyclose Bolus (Closantal)
4. Source of technology : KVK Reasi
5. Production system
Thematic area :
6. Thematic area : Disease management 7. Performance of the
Technology with
8. Performance indicators : Treatment with both Banaminth and Zyclose
was found effective in Controlling GIT parasite where as
Zyclose bolus was also found effective in Controlling
Liver fluke infection..
9. Final recommendation for
micro level situation : Timely de-worming with effective anthelmintics
can prevent heavy production loss in small ruminants.
10. Constraints identified and
feedback for research : There was no schedule of timely and effective
de-worming in these areas.

Process of farmers
participation and
their reaction : farmers were satisfied with the use of both
The drugs in controlling parasitic infection.

Results of On Farm Trials

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Goat		Gastro intestinal parasitic infection	GIT parasitic control in goats	1	T1 Farmer practice	Egg per gram of faeces Overall health status of animals		Use of both the anthelmintics resulted in controlling GIT parasites moreover use of Zyclose bolus also resulted in controlling liver fluke infection	Farmers were satisfied with use of anthelmintics and were now interested in timely deworming of their animals
					T2. Benaminth (Morantel citrate)	Do	@4-6 ml/ 20 kg body wt.		
					T3 Zyclose (Closentel)	Do	@10-12 mg/ kg body wt.		

*** No. of farmers**

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
1 Farmer practice	Rs. 2000	Rs. 500	1:1.25
2 Banaminth	Rs. 2050	Rs. 1740	1:1.82
3 Zyclose Bolus	Rs. 2100	Rs. 1650	1:1.78

***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**

Trial 5

1. Title : Productivity estimation of ginger under bamboo based agro- forestry system.
2. Problem diagnose/defined : Non utilization of the area under Bamboo canopy.
3. Details of technologies selected for assessment/refinement:
 1. Local practices of Ginger cultivation (Open Field)
 2. Ginger cultivation under Bamboo clumps
4. Source of technology : GBPUAT Pantnagar
5. Production system thematic area: Bamboo based Agro-forestry system
6. Thematic area : Integrated Farming System
7. Performance of the Technology with performance indicators : Under Bamboo clumps ginger production was recorded higher.
8. Final recommendation for micro level situation : Ginger crop can be taken under shade of tree canopy.
9. Constraints identified and feedback for research : Hesitation in adopting new technology.
10. Process of farmers participation and their reaction : Farmers showed keen interest in the trial. They were satisfied with the results as they can utilize the waste land where they were unable to grow any crop.

11. Results of On Farm Trials

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology refined	Parameters	Data on the parameter	Results of refinement	Feedback from the farmer	Justifi- cation for refinement
1	2	3	4	5	6	7	8	9	10	11
Ginger	IFS	Non utilization of the area under Bamboo canopy.	Productivity estimation of ginger under bamboo based agro- forestry system.	2	T1- Farmers Practice(Open field)	Yield	60 00	Yield under bamboo was higher in comparison to open field	They were satisfied with the results as they can utilize the waste land under Bamboo.	Due to tree canopy, farmers were not able to utilize the land. By the trial they can take the ginger crop under the Canopy
					T2- Under Bamboo canopy		8600			

* No. of farmers

Technology Refined	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
12	13	14	15
T1- Farmers Practice(Open field)	6000	88000	1:1.95
T2- Under Bamboo canopy	8600	166000	1:2.80

*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

Trial 7

1. Title : Performance of normal sown varieties of wheat in mid hills of J&K
2. Problem diagnose/defined : Low yield of wheat crop due to lack of availability of high yielding varieties of wheat.
3. Details of technologies
4. selected for assessment /refinement :
 - T1- Famers practice
 - T2- PBW-175
 - T3- PBW-527
 - T4- PBW-621
 - T5- HS-490
5. Source of technology : SKUAST-J KVK Reasi
6. Production system thematic area : Cereal based system
7. Thematic area : Integrated crop management
8. Performance of the Technology with Performance indicators : Result awaited
9. Final recommendation for Micro level situation : Awaited
- Constraints identified and feedback for research : Lack of availability of high yielding varieties of wheat.
10. Process of farmers participation and their reaction : farmers were satisfied after seeing the demonstrated fields.

11). Results of On Farm Trials

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Wheat	Rainfed	Low yield of wheat crop due to lack of availability of high yielding varieties of wheat.	Performance of normal sown varieties of wheat in mid hills of J&K	16	1 Farmer practice	Yield (qt/ha)	Awaited	Awaited	So far farmers are satisfied with the demonstrated plots.
					2. PBW-175				
					3 PBW-527				
					4. PBW-621				
					5. HS-490				

*** No. of farmers**

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
1.Famers practice	Awaited	Awaited	Awaited
2. PBW-175	Awaited	Awaited	Awaited
3. PBW-527	Awaited	Awaited	Awaited
4. PBW-621	Awaited	Awaited	Awaited
5. HS-490	Awaited	Awaited	Awaited

***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**

Trial 8

1. Title : Weed management in wheat.
2. Problem diagnose/defined : Low productivity in wheat yield due to weeds.
- 3 .Details of technologies
selected for assessment
/refinement :
- T1- Famers practice
T2- Atlantis@400g/ha
T3- Leader@400g/ha
T4- Sulphosulphorne@400g/ha
4. Source of technology : SKUAST-J KVK Reasi
5. Production system
thematic area : Cereal based system
6. Thematic area : Integrated weed management
7. Performance of the
Technology with
performance indicators : Result awaited
- 8 .Final recommendation for
micro level situation : Awaited
9. Constraints identified and
feedback for research : Lack of availability of good quality weedicides.
10. Process of farmers
participation and
their reaction : farmers were satisfied after seeing the demonstrated fields.

11). Results of On Farm Trials

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Wheat	Rainfed	Low productivity in wheat yield due to weeds..	Weed management in wheat.	8	1 Farmer practice	Yield (qt/ha)	Awaited	Awaited	So far farmers are satisfied with the demonstrated plots.
					2. Atlantis@400g/ha				
					3 Leader@400g/ha				
					5. Sulphosulphorne @400g/ha				

*** No. of farmers**

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
1.Famers practice	Awaited	Awaited	Awaited
2. Atlantis@400g/ha	Awaited	Awaited	Awaited
3. Leader@400g/ha	Awaited	Awaited	Awaited
4. Sulphosulphorne @400g/ha	Awaited	Awaited	Awaited

***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**

Trial 9

1. Title : Weed management in Onion
2. Problem diagnose/defined : lack of manpower and low yields
3. Details of technologies selected for assessment /refinement :
 - T1- Famers practice (two hand weeding)
 - T2- Pre planting treatment, stomp @2.5l/ha
 - T3- pre emergence Basaline @1.0l/ha
 - T4- post emergence Terga super@1.0l/ha
4. Source of technology : SKUAST-J KVK Reasi
5. Production system thematic area : Cereal based system
6. Thematic area : Integrated weed management
7. Performance of the Technology with performance indicators : the application of pre emergence weedicide before transplanting have resulted in maximum control of weeds
8. Final recommendation for micro level situation : Application of stomp (2.5l/ha) resulted in maximum weed control followed by Basaline (1.0L/ha) and can be recommended for controlling weeds in onions
9. Constraints identified and feedback for research : Lack of availability of good quality weedicides.
10. Process of farmers participation and their reaction : farmers were satisfied after seeing the demonstrated fields.

11). Results of On Farm Trials

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Onion	Rainfed	Lower yields due to weeds	Weed management in onion	2	Farmer practice	Weed count	T1-110 no/m ²	Preplant application of stomp was best treatment for controlling of weeds in Onion followed by Basaline.	The farmers appreciated the trial and are demanding weedicide which will save on labour.
					Pre-plant treatment	yield	T2- 25 no/m ²		
					pre emergence treatment		T3-42 no/m ²		
					Post emergence aapplication		T4- 95m ²		

*** No. of farmers**

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
1.Famers practice	Awaited	Awaited	Awaited
2. pre plant application (stomp 2.5l/ha)	Awaited	Awaited	Awaited
3. Pre emergence application (Basalin @1.0 L/ha)	Awaited	Awaited	Awaited
4. Post emergence application (terga super@ 1/L/ha)	Awaited	Awaited	Awaited

***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**

Trial 10

1. Title : Survey and selection of elite seedling mango trees in mid hills of J&K.

2. Problem diagnose/defined : Existence of large no of seedling mango trees.

3. Details of technologies

Selected for assessment

/refinement : Survey of mango trees in adjoining areas to locate some good germplasm

4. Source of technology : SKUAST-J KVK Reasi

5. Production system

thematic area : Cereal based system

6. Thematic area : Horticulture

7. Performance of the

Technology with

performance indicators : Result awaited

7. Final recommendation for

Micro level situation : Awaited

8. Constraints identified and

feedback for research : long distances and difficult terrain

9. Process of farmers

Participation and

their reaction

:farmers have shown full cooperation in collecting the samples and so far 11 elite trees have been marked.

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	Thematic Area*	Technology demonstrated	Details of popularization methods suggested to the Extension system	Horizontal spread of technology		
					No. of villages	No. of farmers	Area in ha
1.	Maize	ICM	New single cross hybrids, Disease and pest management technologies	Awareness-cum-Trainings, FLDs, field days, diagnostic field visits, Kisan Goshthies.	8	42	5.0ha
2.	Paddy	ICM	Improved varieties of paddy.	Awareness-cum-Trainings, FLDs, field days, diagnostic field visits.	4	15	3.0
3.	Black gram	ICM	Improved variety of mash.	-do-	7	50	5.0
4.	Green gram	ICM	Improved variety of moong.	-do-	2	12	1.0
5.	Til	ICM	Improved variety of til	-do-	6	31	2.15
6.	Vegetables	ICM	Hybrid/Improved varieties of vegetables.	-do-	6	321	5.7
7.	Spices	ICM	Improved varieties of turmeric and ginger.	-do-	14	66	0.2
8.	Wheat	ICM	High yielding varieties of wheat and weed management.	-do-	7	40	6.0
9.	Chickpea	ICM	Improved variety of chickpea	-do-	5	25	2.70
10.	Lentil	ICM	Improved variety of lentil	-do-	1	10	1
11.	Oats	ICM	Improved variety of oats	-do-	4	13	1.0
12.	Oilseeds(Rabi)	ICM	Improved variety of oilseeds and pest management.	-do-	6	44	5.5
13.	Backyard poultry	Poultry production	Vanraja chicks.	-do-	4	83	1000 birds
14	Dewormer	Disease mgt.	Panacur Bolus	Awareness & FLD	1	21	33

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

- b. Details of FLDs implemented during 2012-13 (Information is to be furnished in the following **three tables** for **each category** i.e. **cereals, horticultural crops, oilseeds, pulses, cotton and commercial crops.**)

Sl. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
					Proposed	Actual	SC/ST	Others	Total	
1.	Maize	Integrated crop management	Hybrid Varieties	Kharif 2012	5.0	5.0	20	21	42	-
2.	Paddy	Integrated crop management	Hybrid Varieties	Kharif 2012	2.0	3.0	6	9	15	-
3.	Black gram	Integrated crop management	Improved varieties	Kharif 2012	5.0	5.0	20	30	50	-
4.	Green gram	Integrated crop management	Improved varieties	Kharif 2012	2.0	1.0	2	10	12	-
5.	Marigold	Integrated crop management	Improved varieties	Kharif 2012	2.00	1.00	12	8	20	-
6.	Til	Integrated crop management	Improved varieties	Kharif 2012	2.00	2.15	21	10	31	-
7.	Turmeric	Integrated crop management	Improved varieties	Kharif 2012	0.1	0.1	13	20	33	-
8.	Ginger	Integrated crop management	Improved varieties	Kharif 2012	0.1	0.1	10	23	33	-
9.	Wheat	Integrated crop management	Improved varieties	Rabi 2012	5.00	6	12	28	40	-

		nt								
10.	Oats	Integrated crop management	Improved varieties	Rabi 2012	2.00	1.00	5	8	13	-
11.	Chickpea	Integrated crop management	Improved varieties	Rabi 2012	2.5	2.70	3	22	25	-
12.	Lentil	Integrated crop management	Improved varieties	Rabi 2012	-	1	0	10	10	-
13.	Dhingri	Integrated crop management	Improved varieties	Rabi 2012	-	-	13	37	50	-
14.	Toria	Integrated crop management	Improved varieties	Rabi 2012	6	5.5	11	33	44	-
15.	Mustard	Integrated crop management	Improved varieties	Rabi 2012	2	0.8	2	4	6	-
16.	Gobi Sarson	Integrated crop management	Improved varieties	Rabi 2012	2	2.2	1	12	13	-
17.	Vegetables	Integrated crop management	Improved varieties	Kharif 2012	2	2	70	80	150	-
18.	Poultry	Backyard poultry farming	Vanraja chicks.	Kharif 2012	-	1000 birds	28	55	83	-
19.	De-wormer	Disease mgt.	Panacur Bolus	October 12			-	21	21	

Details of farming situation

Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
				N	P	K					
Maize	Kharif	RF	Sandy loam	M	L	L	Wheat	June	Oct	-	-
Black gram	-do-	RF	Sandy loam	M	L	L	Wheat	July	Nov	-	-
Green Gram	-do-	RF	Sandy loam	M	L	L	Wheat	July	Nov	-	-
Paddy	-do-	RF	Clay loam	M	L	L	Wheat	July	Nov	-	-
Sesamum	-do-	RF	Clay Loam	M	L	L	chickpea/wheat	June	Oct	-	-
Ginger	-do-	RF	Sandy loam	M	L	L	Vegetables	May	Nov	-	-
Turmeric	-do-	RF	Sandy loam	M	L	L	vegetables	May	Nov	-	-
Wheat	Rabi	RF	Sandy loam	M	L	L	Maize	Nov	-	-	-
Toria	Rabi	RF	Sandy loam	M	L	L	Maize	Oct	Dec	-	-
Mustard/g. sarson	Rabi	RF	Sandy loam	M	L	L	Maize	Nov	Apr	-	-
Chickpea	Rabi	RF	Sandy loam	M	L	L	Maize	Nov	Apr		
Oats	Rabi	RF	Sandy loam	M	L	L	Maize	Nov	Jan-Apr	-	-
Lentil	Rabi	RF	Sandy Loam	L	L	L	Maize	Nov	Apr		

Performance of FLD

Sl.No.	Crop	Technology Demonstrated	Variety	No. of Farmers	Area (ha.)	Demo. Yield Qtl/ha			Yield of local Check Qtl./ha	Increase in yield (%)	Data on parameter in relation to technology demonstrated	
						H	L	A			Demo	Local
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Maize	New single cross hybrid varieties.	Plant gene	3	0.15	30	20	25	15	66.66	Yield	Yield
			Kh-517	10	1.25	28	18	23	15	53.33	Yield	Yield
			Double Deklab	8	1.00	27	17	22	15	46.66	Yield	Yield
			Bio-seed	10	1.30	25	15	20	15	33.33	Yield	Yield
			KH-612	11	1.30	22	16	18	15	20.00	Yield	Yield
2	Blackgram	Improved variety of black gram	Uttra	50	5.0	7.20	4.20	5.70	3.60	58.33	Yield	Yield
3	Green Gram	Improved variety of green gram	SML-668	12	1.00	6	3.8	4.90	3.0	63.33	Yield	Yield
4	Paddy	High yielding varieties of paddy	B-370	4	0.95	30.00	26.00	28.00	20.00	40.00	Yield	Yield
			Pusa-1121	5	0.90	30.00	25.00	27.50	18.00	52.00	Yield	Yield
			Jaya	2	0.25	35.00	25.00	30.00	23.00	30.43	Yield	Yield
			K-343	4	0.60	26.00	22.00	24.00	16.00	50.00	Yield	Yield
5	Til	Improved var.of til	Pb-1	31	2.15	6.1	5	5.5	3.2	71.87	Yield	Yield
6	Sorgham	HYV of Sorgham	SSG-114	24	2.0	300	250	275	225	22.22	Yield	Yield
7	Ginger	Improved var.of ginger	HP sel.	33	0.1	85	55	70	55	27.27	Yield	Yield
8	Turmeric	Improved var.of turmeric	Sugandha	33	0.1	165	105	135	110	22.72	Yield	Yield
9	Toria	Improved var.of toria	RSPT-1	44	5.5	8.1	5.7	6.9	5.0	38.00	Yield	Yield
10	Wheat	Evaluation of timely sown wheat varieties.	PBW-175	40	6.0	Cont...					Yield	Yield
11	Chickpea	Promotion of improved var.of chickpea	GNG-469	25	2.7	-do-					Yield	Yield
12	Lentil	Improved var.lentil	L-4147	10	1.0	-do-					Yield	Yield
13	Mustard	Scientific cultivation of mustard.	RSPR-01	6	0.8	-do-					Yield	Yield

14	Gobisarson	Scientific cultivation of mustard.	DGS-1	13	2.2	-do-					Yield	Yield
15	Oats	Improved var. of oats.	Kent	13	1.0	550	470	510	350	45.71	Yield	Yield
16	Vegetables	Hybrid varieties/improved varieties of vegetables.	PK,,P.Komal,,PN			Cont.					Yield	Yield
17	Dhingri	Scientific cultivation of dhingri.	Pleurotus Caju	50	200 bags	Cont.					Yield	Yield
18.	Poultry farming	High egg laying var.	Vanraja	83	1000birds	Cont.					Egg production	Egg production
19.	De-wormer	Health & disease mgt.	Panacur Bolus	21	33 Bolus	-	-	-	-	-	Improved Health & Normal Estrous	Poor Health
20	Marigold	Promotion of Floriculture	Pusa Narangi	20	1.0							

Economic Impact (continuation of previous table)

Average Cost of cultivation (Rs./ha)		Average Gross Return (Rs./ha)		Average Net Return (Profit) (Rs./ha)		Benefit-Cost Ratio (Gross Return / Gross Cost)
Demonstration	Local Check	Demonstration	Local Check	Demonstration	Local Check	
14	15	16	17	18	19	20
9800	9000	31500	20000	21700	11000	1:3.21
9600	9000	29000	20000	19400	11000	1:3.02
9800	9000	31300	20000	21500	11000	1:3.19
9500	9000	28900	20000	19400	11000	1:3.04
9500	9000	28700	20000	19200	11000	1:3.02
12900	10800	36200	21200	23300	11000	1:1.28
13100	11200	27100	20000	14000	8800	1:2.06
18650	13800	68000	33200	49350	19400	1:3.64
18300	13800	66800	33200	48500	19400	1:3.65
15400	11600	55000	17600	39600	6000	1:3.57
16200	12300	57000	17100	40800	4800	1:3.51
15900	15650	42900	26700	27000	11250	1:2.69
9000	8000	30000	25000	21000	17000	1:3.33
92000	52000	210000	165000	118000	113000	1:2.28
92000	52000	405000	350000	313000	298000	1:4.40
9000	7500	24800	19200	15800	11700	1:2.75
Cont...						
Cont...						
Cont...						
Cont...						
Cont...						
9200	7400	25500	17500	16300	10100	1:2.77

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

Crop	Season	Component	Farming situation	Average yield (q/ha)	Local check (q/ha)	Percentage increase in productivity over local check
		1. Seed/Variety				
		2. Bio-fertilizer				
		3. Fertilizer management				
		4. Plant Protection				
		5. Combination of components (Please specify)				

Technical Feedback on the demonstrated technologies

S. No	Feed Back
1.	Maize variety Plant gene better than other demonstrated varieties.
2.	Uttara variety of mash performed exceptionally well in Reasi and Udampur.
3.	Wheat HS-490 and PBW-527 are in much better condition in the fields than other varieties.
4.	Paddy B-370 performed better in the field.
5.	Ginger variety from H.P. gave better results than local variety of ginger.
6.	Toria variety RSPT-01 mustard variety RSPR-1 gave excellent results.
7.	Vanraja has successfully adopted in these conditions.
8.	De-worming decreased the incidence of anoestrus, repeat breeding and improves health.

Farmers' reactions on specific technologies

S. No	Feed Back
1	Farmers showed keen interest in single cross maize hybrids.
2	Farmers were satisfied after seeing the performance of HS-490,PBW-527 and PBW-175.
3.	Farmers were satisfied after seeing the results of OFT on weed control in wheat .They were interested in using these chemicals in their fields.
4.	Farmers gave good feedback after seeing the results of Ultra variety of mash and SML-668 variety of moong.
5.	After seeing the results of B-370 and Pusa-1121 the farmers were satisfied.
6.	Migrant's women farmers were taking interest in rearing vanraja and had build small wooden cages for their birds.
7.	Scheduled de-worming resulted in overall improvement in health status of animal.

Extension and Training activities under FLD

Sl.No.	Activity	No. of activities organised	Date	Number of participants	Remarks
1	Field days	6	5-4-2012,11-4-2012,20-9-12,25-9-12,26-9-12,8-11-12	231	
2	Farmers Training	52		1281	
3	Media coverage	46			
4	Training for extension functionaries	4		79	

[illegible]

Bengalgram										
Redgram										
Others (Chick pea)										
Total										
Vegetable crops										
Bottle gourd										
Capsicum										
Cucumber										
Tomato										
Brinjal										
Okra										
Onion										
Potato										
Field bean										
Others (pl.specify)										
Total										
Commercial crops										
Cotton										
Coconut										
Others (pl.specify)										
Total										
Fodder crops										
Napier (Fodder)										
Maize (Fodder)										
Sorghum (Fodder)										
Others (pl.specify)										
Total										

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone. ** BCR= GROSS RETURN/GROSS COST

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		
Multi crop thrasher	Wheat	5	1	Drudgery reduction				The new thrasher resulted in reducing labour involved in thrashing of wheat and farmers could thrash one quintal grain in 10 minutes.

*** 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		
Backyard poultry farming	Vanraja	83	1000	Increase egg production	5 – 6 eggs per week/bird	2-3 eggs/ week	In progress	A small but steady income generation.

*** 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	Pleorotus spp.	50	200 bags	-				
Apiary								
Sericulture								
Vermi compost								

[illegible]

[illegible]

[illegible]

Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
IX Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
X Capacity Building and Group Dynamics										
Leadership development	1	15	0	15	3	1	4	18	1	19

[illegible]

animal products										
Dairying										
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Para vets										
Para extension workers										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Small scale processing	2	0	42	42	0	5	5	0	47	47
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
TOTAL	2	0	42	42	0	5	5	0	47	47
(C) Extension Personnel										
Productivity enhancement in field crops										
Integrated Pest Management										
Integrated Nutrient management										
Rejuvenation of old orchards	1	21	0	21	0	0	0	21	0	21
Protected cultivation technology										
Formation and Management of SHGs										
Group Dynamics and farmers organization										
Information networking	1	23	0	23	0	0	0	23	0	23

among farmers										
Capacity building for ICT application										
Care and maintenance of farm machinery and implements										
WTO and IPR issues										
Management in farm animals	1	19	0	19	0	0	0	19	0	19
Livestock feed and fodder production	1	16	0	16	0	0	0	16	0	16
Household food security										
Women and Child care										
Low cost and nutrient efficient diet designing										
Production and use of organic inputs										
Gender mainstreaming through SHGs										
TOTAL	4	79	0	79	0	0	0	79	0	79

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	1	15	0	15	3	1	4	18	1	19
Group dynamics	4	83	5	88	7	1	8	90	6	96
Formation and Management of SHGs	2	36	9	45	4	12	16	40	13	53
Mobilization of social capital	2	15	1	16	6	0	6	21	1	22
Entrepreneurial development of farmers/youths	4	47	2	49	44	10	54	91	12	103

WTO and IPR issues	1	6	0	6	13	1	14	19	1	20
XI Agro-forestry										
Production technologies	6	68	5	73	32	3	35	100	8	108
Nursery management	1	6	0	6	9	0	9	15	0	15
Integrated Farming Systems	2	20	13	33	2	0	2	22	13	35
TOTAL	52	636	184	820	299	90	389	935	266	1201
(B) RURAL YOUTH										
Mushroom Production										
Bee-keeping										
Integrated farming										
Seed production										
Production of organic inputs										
Integrated arming										
Planting material production	1	3	0	3	6	0	6	9	0	9
Vermi-culture										
Sericulture										
Protected cultivation of vegetable crops										
Commercial fruit production										
Repair and maintenance of farm machinery and implements										
Nursery Management of Horticulture crops	1	10	0	10	6	0	6	16	0	16
Training and pruning of orchards	1	12	0	12	7	0	7	19	0	19
Value addition										
Production of quality animal products	1	15	0	15	22	1	23	37	1	38
Dairying										
Sheep goat rearing										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Small scale processing	2	0	42	42	0	5	5	0	47	47
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
TOTAL	6	39	42	81	41	6	47	80	48	128

(C) Extension Personnel										
Productivity enhancement in field crops										
Integrated Pest Management										
Integrated Nutrient management										
Rejuvenation of old orchards	1	21	0	21	0	0	0	21	0	21
Protected cultivation technology										
Formation and Management of SHGs										
Group Dynamics and farmers organization										
Information networking among farmers	1	23	0	23	0	0	0	23	0	23
Capacity building for ICT application										
Care and maintenance of farm machinery and implements										
WTO and IPR issues										
Management in farm animals	1	19	0	19	0	0	0	19	0	19
Livestock feed and fodder production	1	16	0	16	0	0	0	16	0	16
Household food security										
Women and Child care										
Low cost and nutrient efficient diet designing										
Production and use of organic inputs										
Gender mainstreaming through SHGs										
TOTAL	4	79	0	79	0	0	0	79	0	79

(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	
Fruit processing	25-27/07/12	Processing and preservation of Mango.	To promote home scale processing	3	0	31	31	-	-	-	-
Agroforestry	29-31/7/12	Quality planting material and nursery establishment of agroforestry Trees.	Promotion of medicinal plants and agroforestry trees.	3	9	0	9	-	-	-	-
Horticulture	3-5/9/12	Nursery management in horticulture crops	Production of quality planting material.	3	16	0	16	Nursery	2	2	-
Animal science	5-7/9/12	Milk and milk byproducts	Small scale processing	3	37	1	38	Home scale	4	10	-
Horticulture	9-11/1/13	Training programme on advances in horticulture	Latest knowhow in horticulture	3	18	0	18	-	-	-	-
Vegetable processing	15-17/1/13	Preservation of fruits and vegetables	Home scale processing	3	0	16	16	Home scale	-	-	-

*training title should specify the major technology /skill transferred

(E) Sponsored Training Programmes

Sl.No	Date	Title	Discipline	Thematic area	Duration (days)	Client (PF/RY/EF)	No. of courses	No. of Participants									Sponsoring Agency	Amount of fund received (Rs.)
								Others			SC/ST			Total				
								Male	Female	Total	Male	Female	Total	Male	Female	Total		
1	2/2/13	Scope of cultivation of marigold and gladiolus in Reasi.	Floriculture	Ornamental plants	1	PF	4	28	4	32	22	-	22	50	4	54	Dept. of floriculture	-
2	13-03-13	Charcha mandal	Agriculture	Crop production	1	PF	4	28	3	31	20	7	27	48	10	58	Dept. of agriculture	5000/-
3	28-2-13	Seed production in wheat and maize	Agronomy	Seed production	1	PF	5	40	-	40	22	10	32	62	10	72	SKUAST-J	7000/-
4	11-03-13	Micro-irrigation in mid hills of J&K	Floriculture	Micro irrigation	1	PF	7	-	71	71	-	50	50	-	121	121	Deptt of floriculture	25,000
5	25-03-13	-do-	-do-	-do-	1	PF	5	15	12	27	20	9	29	35	21	56	-do-	25000
6	22-3-13	Recent advances in animal husbandry.	Animal husbandry	Animal science	1	PF	6	10	-	10	65	-	65	75	-	75	Dept. of animal science	7500/-
7	23-3-13	Entrepreneurship development	Agriculture	Entrepreneurship development	1	RY	10	35	24	59	21	20	41	56	44	100	NYK	-
Total	-	-	-	-	7		41	156	114	270	170	96	266	326	210	536	-	69,500

DETAILS OF TECHNOLOGY WEEK CELEBRATIONS during 2012-13

No. of Technology week celebrated	Types of Activities	No. of Activities	Number of Participants	Related crop/livestock technology
	Gosthies			
	Lectures organised			
	Exhibition			
	Film show			
	Fair			
	Farm Visit			
	Diagnostic Practicals			
	Distribution of Literature (No.)			
	Distribution of Seed (q)			
	Distribution of Planting materials (No.)			
	Bio Product distribution (Kg)			
	Bio Fertilizers (q)			
	Distribution of fingerlings			
	Distribution of Livestock specimen (No.)			
	Total number of farmers visited the technology week			

3.5 Production and supply of Technological products

SEED MATERIALS

Major group/class	Crop	Variety	Quantity (qtl.)	Value (Rs.)	Provided to No. of Farmers
CEREALS					
	Wheat	PBW-175	50	1,12,500	1125
OILSEEDS					
	Toria	RSPT-01	0.5	2600	
			-		
	Til	Pb.Til1	0.8	4800	
PULSES	Mash	Uttra	1.5	6500	
	Chickpea	GNG-469	1.6	5500	
	Lentil	L-4147	1.0	5200	
	Arhar	UP120	1.0	5200	
VEGETABLES					
FLOWER CROPS					
OTHERS (Specify)					

SUMMARY

Sl. No.	Major group/class	Quantity (qtl.)	Value (Rs.)	Provided to No. of Farmers
1	CEREALS	50	1,12,500	1125
2	OILSEEDS	1.3	7400	
3	PULSES	5.1	22400	
4	VEGETABLES			
5	FLOWER CROPS			
6	OTHERS			
TOTAL		56.4	142300	

PLANTING MATERIALS

Major group/class	Crop	Variety	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
FRUITS					
SPICES	Turmeric	Local	1 qts	4000	
VEGETABLES					
FOREST SPECIES					
ORNAMENTAL CROPS					
PLANTATION CROPS					
Others (specify)					

*An example for guidance only

SUMMARY

Sl. No.	Major group/class	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
1	FRUITS			
2	VEGETABLES			
3	SPICES	1 q	4000	
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						
BIO PESTICIDES						
1						
2						
3						

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	Impact of vocational training programmes imparted by KVK.	Banarsi Lal and Vikas Tandon	
	Media preferences of dairy farmers of hilly areas.	Banarsi Lal and Vikas Tandon	
	Association between attitude of respondents towards farm T.V.programmes and selected independent variables in Jammu and Kashmir, India.	Banarsi Lal	
	Communication behaviour of televiewing farmers.	Banarsi Lal and Dipak De	
	Modeling of communication behavior and transfer of technology through institutional innovations.	Banarsi Lal , Dipak De and Gautam Goswami	
	Communication behaviour of dairy farmers in hilly areas.	Banarsi Lal and Vikas Tandon	
	Attitude of farmers towards different farm TV programmes.	Banarsi Lal	
	A study on media preferences of televiewing farmers.	Banarsi Lal and Dipak De	
	ITK practices used by the farmers of hilly areas.	Banarsi Lal and Vikas Tandon	
	Association between selected independent variables and communication behaviour of farmers towards farm education programmes of	Banarsi Lal and Dipak De	

	television.		
Total			
Technical reports			
Popular articles	Electronic media for rural development	Banarsi Lal and Vikas Tandon	Daily news papers
	Television in changing society	Do	
	Parthenium management-A Challenge	Do	
	ATMA-An Innovative Idea for Rural Development Role of ICTs in agriculture	Do	
	Declining Sex Ratio Role of cooperatives for rural development	Do	
	Self Help Groups-An Innovative Idea for Rural Development	Do	
	Need of Organic Farming for Sustainable Agriculture	Do	
	Need to Meet the Agricultural Challenges	Do	
	Animal Cloning- taking the work of God into our own hands	Do	
	Food crisis knocking our doors	Do	
	Animal welfare as an economic venture in the era of climate challenge	Do	
	Buffalo milk beats cow milk	Do	
	Malnutrition biggest concern for developing India	Do	
	Women Awakening in India-Need of the Hour	Do	
	Need of Organic Farming for Sustainable Agriculture	Do	
	Agricultural Extension for Rural Prosperity	Do	
	Women Awakening in India-	Do	

	Need of the Hour Diversification in Agriculture	Do	
	Contract Farming for Rural Prosperity	Do	
	Floriculture-An Innovative Industry for Rural Development	Do	
	Need of Environmental Education	Do	
	Floriculture-An Innovative Industry for Rural Development	Do	
	Promotion of Rural Tourism	Dr.Banarsi Lal and Dr.Vikas Tandon	
	Land Resources Management- Land Husbandry	Do	
	Horticulture Production for Rural Prosperity	Do	
	Feminization of agriculture	DO	
	Sustainable life stock farming	Dr. Mandeep Singh Azad and Dr. Vikas Tandon	
	India needs white revolution again	Dr. Mandeep Singh Azad and Dr. Vikas Tandon	
	Live stock culprit of green house gases	Do	
Leaflets/folders			
Total			
Grand TOTAL			

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

(C) Details of Electronic Media Produced

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

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

Case-1

Introduction: Chamera a small village in Agar jitto Reasi is a good example of large scale adoption of Merigold cultivation in the district. The village is irrigated as small khul passes through the village which enables life saving irrigation to the crops. The soil is fertile and is suited for cultivation of high value crops. However, Maize, wheat and Paddy are main crops but farmers also grow ginger/ turmeric and marigold in their fields.

KVK intervention: KVK Reasi started its activities in the village from the year 2009. KVK started imparting trainings on cultivation of Marigold to the people of the area who were till then growing flowers on limited scale and only local varieties were cultivated. KVK introduced Pusa Narangi and Pusa Basanti from IARI, New Delhi and planted in farmers fields at village Chamera.

Farmers shared a good Rapport with KVK and thus regular trainings were imparted to them in order to prepare them for marigold cultivation on commercial scale. Farmers of the area were convinced with the new cultivars and adopted our package and practices. This resulted in increase in their productivity and also improved quality of their produce.

Outcome: A farm family could easily earn anything between 6000 to 10,000 per kanal from the Diwali season crop. The new cultivar resulted in better yield, quality and market acceptability. There is now increased demand for these varieties. KVK's efforts have also resulted in cultivation of crop in summer season as well as prior to these farmers were taking only Diwali season crop.

Impact- The socio-economic status of families has improved and there are growers who are making up to 1.0 Lac per season. More than twenty families are now growing marigold in this village and now it is a famous area among the Buyers to buy marigold.

Case-2

Introduction

Sirla is a model village in hilly district Reasi of Jammu and Kashmir. The village soil is fertile with good texture. There is no source of irrigation and so rain fed farming is done in the village. The farmers of the village are very hard working. Despite their hard work they were not getting the satisfactorily results of their main crop wheat.

KVK Intervention

In 2008 Krishi Vigyan Kendra conducted few farmers training programmes and then looking at the prospects base line survey of the village was also conducted. The farmers of the village developed good rapport with the KVK scientists. it was assessed by the scientists that wheat yield in the area was low and the main reason was that the farmers were using their old seed and no new variety was introduced.

In 2009, Krishi Vigyan Kendra, Reasi laid Front Line Demonstration on wheat crop (var.PBW-527) at five selected farmers' fields of the above mentioned village. The seed was specially brought from PAU, Ludhiana and the seed and fertilizers were given to the selected farmers for laying out the demonstrations. These demonstrations were laid in presence of the scientists. The technical guidelines for scientific wheat production were suggested to the farmers. Constant monitoring of the FLDs was done by the KVK scientists. The required weedicides, fungicides and rodenticides were applied in the fields.

Output

The demonstrations were excellent and wheat was a bumper crop with more than 22 qt yield/ha as compared to 10q/ha which used to harvest. The whole village farmers were gathered to exhibit the success of this new variety and all were satisfied after seeing the results of FLDs.

Impact

The farmers took keen interest to sow the same variety in next year. In next year many farmers purchased the seed from those five farmers to whom initially FLDs were given. Now almost whole village farmers are sowing the variety PBW-527. The farmers are mitigating their wheat seed demand themselves. They have learnt all the technical guidelines in wheat seed production. Now they disseminate the technical guidance to the farmers of nearby villages and also sell their seed to nearby villages..

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

KVK always involve the Panches, Sarpanches, local leaders and other influential public representatives in dissemination of agricultural information to the farmers. The help of mobile communication and are also taken to transfer the technologies to the farmers even in distant areas. KVK uses all available forums to publicize the activities of the KVK.

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.	Vegetables	1. Use of ash to control red pumpkin beetle in cucurbits	Red pumpkin beetle management
2.	Vegetables	2. Use of ash to supply nutrients in cucurbits and vegetable crops to increase the yield	Nutrients supply in vegetables
3	Maize	3. Control of weeds in maize crop by ploughing in between the plants of maize crop.	Weed management
4	Vegetable	4. Sorghum and cucurbits are sown together to control the Insects, pests in vegetables	Insect pest management
5.	Cereals	5. Leaves of trees are used to increase the fertility in maize and wheat crop	Fertility management in cereals crop
6	Cereals	6. Leaves of Neem plant , Bana(Vitus nigundu) and Eucalyptus sp. plant are used to store the wheat grains to protect from stored grain pests	Management of store grain pests in store grain pests.
7	Field crops	7. Use of kerosene oil to protect the field crops from termite Attack	Termite control
8.	Wheat	8. Protection of wheat crop from rabbits attack by using the white cloths and polythene sheets on sticks	Protection of wheat crop from rabbits.
9.	Maize	9. Mixed cultivation of maize and cowpea to protect the Maize crop from boars	Protection of maize crop from boars.
10.	Vegetables	10. Staking of cucurbits, peas and tomato to increase the yield and also to get the good quality of crop	Staking to increase the yield and also to get the quality crop.
11.	Maize	11. Use of cow urine mix with the cow dung to control the Insect-pests in maize crop	Insect-pests management in maize crop.
12.	Animal Husbandry	12. Use of saunf, gur and mustard oil after boiling it and then filtering it to control bloating in animals	
13.	Do	13. Bleeding from certain parts of animals to control the bloating in animals	

14.	Do	14.Mixture of cotton and ghee to control the diarrhea In animals	Bloat control in animals.
15	Do	15. Use of Methi and gur mixture to control the diarrhea in animals in winters	Bloat control in animals
16.	Do	16.Gur and saunf mixture to control the diarrhea in animals in winters	Diarrhea control in animals
17.	Do	17. Use of mixture of mustard oil and lassi to control the Diarrhea in summers	Diarrhea control in animals
18.	Do	18.Hooka (tobacco) water is used to save the animal is bitten By snake or any other poisonous organism	Protection from snake biting.
19.	Do	19.Use of kerosene oil to control the ticks and mites in animals	Ticks and mites control.
20.	Do	20.Use of Dhaman plant to increase the yield of milk in animals	To increase the milk yield.
21.	Do	21.Use of mixture of salt, mustard oil and turmeric to control The foot and mouth disease	FMD management.
22	Do	22.Black ink and ghee or oil to protect the animals from Wounds infection	Infection management
23.	Fruits	23.Use of wheat straw for ripening of mango	Mango ripening.
24.	AH	24.Use of protein rich concentrate (mixture of wheat brawn, cotton cakes, mustard cakes, salt and chickpea bran) to increase the milk yield in animals	To increase the milk yield and also maintain the animal health.

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

- Identification of courses for farmers/farm women

Baseline surveys helps in identification of training needs.

Suggestions from various district heads are also incorporated in or programmes from time to time.

Suggestions from panchayat members and local representatives are also kept in mind. Ex trainees and farmers are also consulted before formulating the KVK programmes.

- Rural Youth-Rural youth's vocational courses are made according to the interest of youth. on the basis of availability of locally available resources and

- In service personnel-The courses are decided on the basis of suggestions of various allied departments Chiefs and SMSs. Abreast courses are designed for in service personnel.

3.11 Field activities

- Number of villages adopted- 3
- No. of farm families selected 50
- No. of survey/PRA conducted-8

3.12. Activities of Soil and Water Testing Laboratory

Status of establishment of Lab : Not available

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)
Hybrid maize seeds	80	80		
Promotion of improved varieties of pulses	60	25		
Introduction of improved varieties of oilseeds	85	30		
Use of improved/hybrid varieties of vegetables.	100	30		
Use of seed treatment in wheat crop	80	70		
Use of weedicides in maize crop.	60	50		
Control of insect-pests and disease management in vegetables.	80	20		
Promotion of dhingri	50	20		

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

1. Hybrid maize adoption

KVK Reasi is laying out the demonstrations of single cross maize hybrids from the last five years. Every year more than 10 hectares of hybrid maize is laid out at the farmers fields. These are followed by the trainings imparted to the farmers and awareness camps and field days organized to promote hybrid maize culture in the district. Data collection and regular monitoring of crop has resulted in establishing of the facts that these hybrids have the potential to change the maize culture in hilly districts of J&K. people of the district were very less aware of the yield potentials of the hybrid maize and less than 10 percent farmers were sowing the hybrid maize. But now with the strenuous efforts of the KVK more than eighty per cent of the farmers are sowing these single cross hybrids. The farmer is so impressed with the hybrids that they are ready to pay the high prices for single cross hybrids maize seeds.

The yellow seeded maize hybrids have found special preference from the poultry industry in the district. The buyers are satisfied with the grain size and offer good price to growers at their farm itself. People have preference to white maize for their own consumptions and white hybrids are also gaining popularity. KVK's efforts were synergized by the activities of the state department of Agriculture. Seeing the need the government also offered subsidy on these seeds. This year more than 1200 qts of maize single cross hybrid seeds were lifted from the government stores in district Reasi alone and similar was the position in district Udhampur as well. The productivity which used to hover around 10-12q/ha is now raised to 18-20q/ha and in some demonstrations we have harvested up to 45q/ha of maize grain.

Cultivation of these new hybrids has also increased the fodder availability in the district. These hybrids are tall and sturdy and along with higher yield also offer higher biomass and thus solve the fodder problems in these hilly districts. We may say that Hybrid maize culture is the single technology that has spread very quickly to far furlong areas of the districts.

2. Development of floriculture in the district:

Another case of large scale adoption is cultivation of marigold in the district Reasi especially in Katra area. KVK Reasi actively took up promotion of Floriculture since 2009. Through continuous trainings and awareness camps people of the area were motivated to cultivate marigold on commercial scale. Since the area is famous for holy shrine of vaishno Devi there is immense demand of flowers which are often imported from other states. Thus efforts were made to encourage farmers to this enterprise. A village Chamera in Reasi was particularly chosen for laying out demonstrations and also for creating awareness about benefits of flower cultivation. Improved seeds of new varieties were brought from IARI, New Delhi and were distributed among growers who were till then growing local marigold breeds. Farmers were convinced about the yield potential and the quality of the bloom.

An average farmer gets around Rs 6to8 thousand from one kanal flower cultivation and this income increases to about 10,000 per kanal in diwali season. No other enterprise is giving this return to farmers of this area. Many families are now cultivating marigold and they earn anything between 50,000 to 75,000 within three months during the festival season. KVK is also introducing new cultivars so that the season of cultivation may further be increased. Presently there is 25ha area under marigold cultivation in the district.

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

The impact analysis is done by the extension specialist using PRA and other survey techniques. The adoption level is estimated by interviewing the farmers and looking at the general aspects such purchase of seed and chemicals etc. by the farmers.

5.0 LINKAGES

5.1 Functional linkage with different organizations

Name of organization	Nature of linkage
1. Department of Agriculture	Laying out of FLDs/field days/ awareness camps/ kisan melas/ ATMA/ RKVY etc.
2.Department of Horticulture	Joint diagnostic survey/ caimpagns/ kisan mela /ATMA/RKVY
3. Department of animal husbandry.	Participation in meeting / vetrinary camps/ backyard poultry
4. Department of fisheries.	participation in meeting / technology week / ATMA/ RKVY
5. NABARD	Participation in meeting / farmers clubs
6. District cooperative societies.	Participation in meeting / supply of inputs.
7. Department of Forests	Participation in meeting / Sac members /
8. Marketing development board	Participation in meeting
9. SKUAST-Jammu.	All guidance / planting materials/ seed
10. lead banks	SAC member
11.Rural self employment training institute	Trainings to the farmers.
12. Deptt. of floriculture	Training to the farmers/ camps

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.)
ATMA	Feb-mar 13	Department of agriculture	-
HTMM1	Jan 2013	Dept. of horticulture, Reasi	22,500
Floriculture	Feb, 2013	Deptt. of floriculture, Jammu	-
Mega seed production	Feb, 2013	Chatha-Jammu.	7000
National Mission on micro irrigation	Mar, 2013	Dept. of floriculture	50,000
ATMA	Mar, 2013	Department of animal husbandry	7500
Nehru Yuva Kendra	Mar, 2013	NYK Udhampur	-

5.3 Details of linkage with ATMA

a) Is ATMA implemented in your district Yes/No

S. No.	Programme	Nature of linkage	Remarks
1	ATMA	Members of BTT's. Training to farmers laying out of OFTs , exposure visits of H.P. farmers.	KVK has been allotted Rs 100000 for laying out the On farm Trials in Reasi and Udhampur
2	RKVY	Training programmes organized by line departments.	Providing all technical support to the line departments.

5.4 Give details of programmes implemented under National Horticultural Mission

S. No.	Programme	Nature of linkage	Constraints if any
1	Exposure visits of farmers to KVK.	-do-	
2.	One week training programme on commercial horticulture	Residential training to 19 farmers from Mahore and Dharmari , sponsored by department of horticulture, Reasi.	

5.5 Nature of linkage with National Fisheries Development Board

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.	Demo Unit	Year of estt.	Area	Details of production			Amount (Rs.)		Remarks
				Variety	Produce	Qty.	Cost of inputs	Gross income	

6.2 Performance of instructional farm (Crops) including seed production

Name Of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty.	Cost of inputs	Gross income	
Cereals									
Wheat	18-22 Nov 2011	25 Apr 12	3	PBW-175	Seeds	50	40000	90000	
Maize	May	Sep	2	Shiva Pioneer	Grain	31	20000	31000	
Pulses									
Mash	20.07.2012	Oct 12	0.7	Uttra	Seed	1.5	5000	9000	
Grams	04.11.2011	May	0.5	GNG 469	Seed	1.6	4500	8250	
Lentil	22.11.2011	Apr12	0.25	L4147	Seeds	1	2000	5200	
Arhar	May	Feb	0.25	UPAS120	Seed	1	4000	6000	
Oilseeds									
Toria	Oct	Dec	0.25	RSPT1	Seed	0.5	1500	2200	
Til	June	Oct	0.5	PbTil1	Seed	0.8	3000	4500	
Fibers									
Spices & Plantation crops									
Turmeric	June10	Mar12	0.01	Local	Rhizome	1	-	-	
Floriculture									
Fruits									
Vegetables									
Others (specify)									

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

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

6.4 Performance of instructional farm (livestock and fisheries production)

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

6.5 Rainwater Harvesting

Training programmes conducted using Rainwater Harvesting Demonstration Unit

Date	Title of the training course	Client (PF/R/Y/E F)	No. of Courses	No. of Participants including SC/ST			No. of SC/ST Participants		
				Male	Female	Total	Male	Female	Total

Demonstrations conducted using Rainwater Harvesting Demonstration Unit

Date	Title of the Demonstration	Client (PF/R/Y/E F)	No. of Demos.	No. of Participants including SC/ST			No. of SC/ST Participants		
				Male	Female	Total	Male	Female	Total

Seed produced using Rainwater Harvesting Demonstration Unit

Name of the crop	Quantity of seed produced (q)

Plant materials produced using Rainwater Harvesting Demonstration Unit

Name of the crop	Number of plant materials produced

Other activities organized using Rainwater Harvesting Demonstration Unit

Activity	No. of visitors
Visit of farmers	
Visit of officials	

Utilization of hostel facilities

Accommodation available (No. of beds): 20

Months	Title of the training course/Purpose of stay	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
April 2012				
Total				
May 2012				
Total				
June 2012				
Total				
July 2012	Quality planting material and nursery establishment of agroforestry trees	9	2	
Total		9	2	
August 2012				
Total				
	Milk and milk by products	38	3	
Total		54	6	
October 2012				
Total				
November 2012				
Total				
December 2012				
Total				
January 2013	Training on horticulture	19	5	
Total		19	5	
February 2013	Training programme on marigold and gladiolus	54	1	
	Seed production technology for wheat and maize	72	1	
Total		126	2	
March 2013	Charcha mandal	58	1	
	Awareness programme on microirrigation	56	1	
	Training prog on advances in animal sciences	75	1	
Total		189	3	
Grand total		397	18	

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

7. FINANCIAL PERFORMANCE

7.1 Details of KVK Bank accounts

Bank account	Name of the bank	Location	Account Number
With Host Institute	J&K Bank	Chatha	SB 003
With KVK	J&K Bank	Reasi	SB 18557 (revolving fund) & SB 20341(PC's account)

7.2 Utilization of KVK funds during the year 2012-13 (up to March 2013)

S. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	Pay & Allowances	59.17	59.17	59.11
2	Traveling allowances	0.70	0.70	0.67
3	Contingencies			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	2.00	2.00	2.00
B	POL, repair of vehicles, tractor and equipments			
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	3.00	3.00	2.99
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)				
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)		64.87	64.87	64.77

7.3 Status of revolving fund (Rs. in lakhs) for the last four years

Year	Opening balance as on 1 st April	Income during the year	Expenditure during the year	Net balance in hand as on 1 st April of each year
April 2009 to March 2010	-	136675.47		136675.47
April 2010 to March 2011	136675.47	230384	64977	302082.47
April 2011 to March 2012	302082.47	151837	32558	421361.47
April 2012 to March 2013	421361.47	82761	72813	431309.47

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

8.1 Constraints

(a) Administrative-

Vacant positions of SMS's.

(b) Financial-

No provision for impressed money with Programme coordinator.

(c) Technical-

- Lack of exposure to other successful KVK's of region and country.
- Lack of access to latest seed and planting material for FLD's.
- Inability to incorporate private sectors hybrids/inputs for KVK programmes.
- Regular trainings of staff of KVK and more involvement of SAU and ICAR institutes in KVK activities.
- Collaboration in research projects and provisions for scientists in KVK to guide post graduate students.

**ANNEXURES
(I-IV)**

Annexure I: LIST OF TRAINING PROGRAMMES 2012-13.

Date	Clientel e	Title of the training programme	Discipline	Themati c area	Durati on in days	Venue (Off / On Campu s)	No. of other Participants			No. of SC ST Participants			Total no. of participants		
							M	F	Total	M	F	Total	M	F	Tota l
20.04.12	Farmer	Importance of spices in mid hills of J&K	Horticulture	ICM	1	Off Campus	3	-	3	16	-	16	19	-	19
01.05.12	Farmer	Medicinal &Aromatic plants for better health	Agroforestry	ICM	1	Off Campus	12	-	12	7	1	8	19	1	20
16.05.12	Farmer	Animal Health and management for increasing milk production	Animal science	ICM	1	Off Campus	13	-	13	3	-	3	16	-	16
17.05.12	Farmer	Entrepreneurial opportunities in agriculture.	Ext. edu.	ICM	1	Off Campus	3	-	3	16	-16	19	-	19	19
30.05.12	Farmer	Scope of agriculture information sources in rural development	Ext. edu	ICM	1	Off Campus	31	4	35	1	-	1	32	4	36
07.06.2012	Farmer	Scope of agriculture information sources in rural development	Ext. Edu.	ICM	1	Off Campus	28	0	28	-	-	-	28	0	28
08.06.12	Farmer	Common practices in sericulture	sericulture	ICM	1	Off Campus	34	-	34	33	3	36	67	3	70
21.06.12	Farmer	Agro forestry for better land use	agroforesry	ICM	1	Off Campus	12	-	12	3	-	3	15	-	15
22.06.12	Farmer	Formation and management of self help groups	Ext. edu.	ICM	1	Off Campus	-	9	9	-	12	12	-	21	21
22.06.2012	FM	Preparation and promotion of nutrient rich diets of infants.	Home Science	Child care	1	Off Campus	0	9	9	0	12	12	0	21	21
25.06.2012	Farmer	Important fodder trees for agro-forestry	Agro- forestry	ICM	1	Off Campus	9	0	9	8	0	8	17	0	17
29.06.12	Farmer	Disease management	Animal	LPM	1	Off	10	-	10	4	1	5	14	1	15

		in large ruminants	science			Campus									
10.07.12	Farmer	Intercropping practices for maximizing productions.	Agroforestry	ICM	1	Off Campus	13	0	13	6	0	6	19	0	19
11.07.12	Farmer	Popularization and enhancement of backyard poultry farming as a women enterprise.	Animal science	LPM	1	Off Campus	0	0	0	18	9	27	18	9	27
17.07.12	Farmer	Nutritive instant food from cereals and pulses for infants and young children.	Home science	Child Care	1	Off Campus	0	13	13	11	2	13	0	17	17
19.07.12	Farmer	Organic farming practices in horticulture.	Horticulture	ICM	1	Off Campus	15	1	16	11	2	13	26	3	29
07.08.12	Farmer	Management of various poultry diseases outbreak.	Animal science	LPM	1	Off Campus	0	6	6	0	4	4	0	10	10
07.08.12	Farmer	Renewable energy resources for protection of forests.	Agroforestry	ICM	1	Off Campus	16	-	16	-	-	-	16	-	16
01.08.12	Farmer	Popularization and enhancement of backyard poultry as an entrepreneur.	Animal science	LPM	1	Off Campus	3	9	12	1	5	6	4	14	18
08.08.12	Farmer	Bamboo cultivation for income generation and soil conservation.	Agroforestry	ICM	1	Off Campus	4	13	17	2	-	2	6	13	19
08.08.12	Farmer	Infertility management in large ruminants.	Animal sciences	LPM	1	Off Campus	4	6	10	4	2	6	8	8	16
06.09.12	Farmer	Entrepreneurial opportunities in agriculture.	Ext. edu.	ICM	1	Off Campus	27	2	29	6	7	13	33	9	42
11.09.12	Farmer	Maize production technology.	Agronomy	ICM	1	Off Campus	14	-	14	-	-	-	14	-	14
03.10.12	Farmer	Scientific cultivation of vegetables.	horticulture	ICM	1	Off Campus	6	-	6	14	-	14	20	-	20
11.10.12	Farmer	Scientific cultivation of wheat.	agronomy	ICM	1	Off Campus	14	0	14	2	-	2	16	-	16

11.10.12	Farmer	Scientific cultivation of winter vegetables	horticulture	ICM	1	Off Campus	13	-	13	3	-	3	16	-	16
02.11.12	Farmer	Infertility management and improving conception rate	Animal science	LPM	1	Off Campus	18	-	18	3	-	3	21	-	21
19.11.12	Farmer	Scope of agricultural information sources in Rural Development	Ext. edu.	ICM	1	Off Campus	9	1	10	6	-	6	15	1	16
27.11.12	Farmer	Role of FLDs in Rural Development	Ext. edu.	ICM	1	On Campus	15	-	15	0	1	1	15	1	16
30.11.12	Farmer	Nitrogen fixation trees for soil improvement	agroforestry	ICM	1	Off Campus	8	3	11	2	-	2	10	3	13
03.12.12	Farmer	Entrepreneurial opportunities in agriculture	Ext. edu.	ICM	1	Off Campus	13	-	13	3	-	3	16	-	16
04.12.12	Farmer	Popularization and enhancement of backyard poultry farming as women enterprise.	Animal science	LPM	1	Off Campus	7	12	19	-	-	-	7	12	19
04.12.12	Farmer	Agroforestry practices for better land use.	agroforestry	ICM	1	Off Campus	6	-	6	9	-	9	15	-	15
06.12.12	Farmer	Formation and management of SHGs.	Ext. edu.	ICM	1	Off Campus	36	-	36	4	-	4	40	-	40
20.12.12	Farmer	Management of various poultry diseases outbreak.	Animal science	LPM	1	Off Campus	13	4	17	4	3	7	17	7	24
21.12.12	Farmer	Improving conception rate in livestock.	Animal science	LPM	1	Off Campus	18	19	37	1	-	1	19	19	38
28.12.12	Farmer	Disease management in large ruminants.	Animal science	LPM	1	Off Campus	-	34	34	-	9	9	-	43	43
04.01.13	Farmer	Processing and preservation of fruit and vegetable.	Home science	HS	1	Off Campus	16	26	42	4	-	4	20	26	46
22.01.13	Farmer	Training and pruning of fruit plants.	Horticulture	ICM	1	Off Campus	7	-	7	16	-	16	23	-	23
22.01.13	Farmer	Propagation techniques of fruit plants.	Horticulture	ICM	1	Off Campus	6	-	6	30	-	30	36	-	36

23.01.13	Farmer	Formation and management of SHG.	Ext. edu.	ICM	1	Off Campus	-	11	11	-	4	4	-	15	15
30.01.13	Farmer	Renewable energy resources for protection of the forests.	Agroforestry	ICM	1	Off Campus	15	-	15	13	-	13	28	-	28
13.02.13	Farmer	Organic farming practices in horticulture.	Horticulture	ICM	1	Off Campus	18	-	18	10	-	10	28	-	28
15.02.13	Farmer	Training programme on agricultural information resources for the Rural development	Ext. edu.	ICM	1	Off Campus	6	-	6	13	1	14	19	1	20
20.02.13	Farmer	Scientific cultivation of vegetables.	Horticulture	ICM	1	Off Campus	17	-	17	4	-	4	21	-	21
20.02.13	Farmer	Renewable energy resources for protection of forests.	Agroforestry	ICM	1	Off Campus	10	-	10	6	-	6	16	-	16
28.02.2013	Farmer	Training and management of small ruminants	Animal husbandry	LPM	1	On campus	15	0	15	14	0	14	29	0	29
06.03.13	Farmer	Scientific cultivation of marigold.	Horticulture	ICM	1	Off Campus	8	6	14	4	2	6	12	8	20
13.03.13	Farmer	Training programme on standing rabi season crops.	Ext. Edu	ICM	1	Off Campus	30	3	33	19	6	25	49	9	58
19.03.13	Farmer	Entrepreneurial opportunities in vegetable growing.	Horticulture	ICM	1	Off Campus	4	-	4	10	3	13	14	3	17

Annexure II

District Profile - I

1. General census

District udhampur extending over an area of 4550 sq. Kms comprises of 645 villages which includes both udhampur and Reasi as a new district Reasi has been carved out of the combined district, for development purpose. The district has a population of 7.43509 lakhs as per 2001 census. The district has recorded population growth rate of 27.73% during the decade 1991-2001. population is mostly rural and only 15.68% of it resides in the towns. The combined district had 5 tehsils out of which 3 falls in udhampur and rest two falls in Reasi. The tehsils are namely Udhampur, ramnagar,chenani, Reasi and gool gulabgarh.

2. Agricultural and allied census

Agriculture is the main source of livelihood in the district as in the rest of the state. The agriculture however, is not very developed and hence productivity of major crops is below the national average. The net area sown in both the districts is 116323 hectares, with 10513 hectare of fallow land. Out of the net sown area 11596 hectare is under food crops and 494 hectare is under fruits and vegetables, 3066 hectares is under oilseeds and 842 hectares is under fodder crops. Most of the land holding is marginal to small while there are only 133 large land holdings.

The area signifies only low input usage i.e. fertiliser usage is low, new high yielding seeds are lesser taken, plant protection is followed only in specific pockets etc. Thus the yield of major crops is less. The district Udhampur and Reasi falls in the mid hill zone. Most part of the district is rain fed and major crops grown here are Maize, Wheat, Paddy, Mustard and Pulses like black gram (mash) and Green gram (moong). The crops of irrigated area are paddy, *barseem*, and Seasonal vegetables besides horticulture. There is ample scope for growing mushrooms, apiaries for honey and backyard poultry.

3. Agro-climatic zones :

Subtropical zone	This includes areas between 380-800m amsl. The lower belt of reasi where the KVK is located falls in this zone. This area experiences hot summers followed by cold winters and area also experiences autumn frost. The major chunk of precipitation is received during monsoons. The soils are mostly sandy loam and clay loam in some pockets with normal OM. Most of the area is rainfed with very little irrigation. The annual rainfall of the district is about 1100 mm. The mean maximum and minimum temperature ranges between 35- 40 °C and 10-12 °C respectively. Agriculture in this area is diverse and is completely rain fed. The area has low productivity and low input usage.
Intermediate Zone	Situated between 800-1500m, amsl, this area experiences definite winters and a hot spell of summer. The major chunk of precipitation is received in summer months. Most part of udhampur and Reasi falls in this zone. The annual rainfall of the district is about 1100 mm. The mean maximum and minimum temperature ranges between 35- 40 °C and 10-12 °C respectively. Agriculture in this area is completely rain fed.
Temperate zone	It includes few areas falling above 1500m amsl. This area experiences chilling winters and major cropping season is kharif, during which moisture is available for growing crops. These areas also experience snow in winter thus minimum temperatures fall below zero degrees during these months.

Agro-ecosystems - The major crop rotations followed are as follows:

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

S. No	Farming system/enterprise
1	Maize-Wheat
2	Rice-Wheat
3	Mash-Wheat
4	Maize- Mustard
5	Horticulture crops a: (vegetables like Tomato, Cole crops, cucurbits, Brinjal and chillies. b. Fruit crops like Mango, Citrus, Guava, Litchi, Peach, plum and apricot. c. Garlic, Ginger and Turmeric are potential crops of some pockets

- 4.
5. Major and micro-farming systems include backyard poultry, and fishery in some pockets of the district. Some enterprises like seasonal floriculture, dairy farming, sericulture and vegetable cultivation has been adopted as
6. Major production systems includes wheat based and maize based farming systems. However, in very few pockets rice based system is also followed.
7. Major agriculture and allied enterprises in district Udhampur and Reasi people have adopted vegetable cultivation as an enterprise, in some areas olive cultivation is being practised commercially. In certain pockets seasonal flowers (marigold) is being cultivated for religious purposes. Pickles, Tiki masala and chutney preparation has also been taken up as enterprise in the district.

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

Include

1. Names of villages, focus area, target area etc.
2. Survey methods used (survey by questionnaire, PRA, RRA, etc.)
3. Various techniques used and brief documentation of process involved in applying the techniques used like release transect, resource map, etc.
4. Analysis and conclusions
5. List of location specific problems and brief description of frequency and extent/ intensity/severity of each problem
6. Matrix ranking of problems
7. List of location specific thrust areas
8. List of location specific technology needs for OFT and FLD
9. Matrix ranking of technologies
10. List of location specific training needs

Annexure III

Technology Inventory and Activity Chart - III

Include

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

a. Sher e Kashmir University of agricultural sciences and technology of Jammu.

b. Regional research laboratory Jammu.

c. Central institute of temperate horticulture, (CITH) Srinagar.

d. Pulses research station samba.

e. regional research station and KVK gurdaspur.

f. CSK, HPKV, Palampur.

g. PAU, Ludhiana.

2. Inventory of latest technology available

Sl. No	Technology	Crop/enterprise	Year of release or recommendation of technology	Source of technology	Reference/citation
1	Seed treatment in various crops	Cereals/pulses/vegetables	-	SKUAST-J	
2	Introduction of high yielding varieties in different crops	Wheat, Paddy, pulses, oilseed		SKUAST-J, PAU, CSKHPKV	
3	Introduction of hybrids in maize	Maize	-	PAU	
4	Introduction of high yielding vegetable varieties.	Cucurbits, okra, tomato, capsicum, brinjal etc.	-	-	
5	Management of rhizome rot in Ginger.	Ginger	-	-	-
6	Introduction of new varieties of ginger.	Ginger			
7	Promotion of round the year mushroom cultivation.	Mushroom	-	SKUAST-J, NRC mushroom	
8	Promotion of backyard poultry in Reasi	Poultry		SKUAST-J	
9	Fodder management for round the year availability.	Fodder spp.	-	SKUAST-j	
10.	Introduction of	Merigold		IARI, New	

	high yielder marigold in the district.			Delhi	
--	--	--	--	-------	--

3.

4.

5.

6.

7.

8. **Activity Chart**

Crop/Animal/ Enterprise	Problem	Cause	Solution	Activity	Reference of Technology
				1.	1.

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

Include

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

Annexure IV

Proceedings of the 5th scientific advisory committee meeting of KVK Reasi held on 12-05-2012.

The 5th scientific advisory committee (SAC) meeting of Krishi Vigyan Kendra, Reasi was held in the meeting hall of District Development Commissioner, Reasi on 12-05-2012. Dr. K. S. Risam, Director Extension, SKUAST-J chaired the meeting and District heads and Officers from various line departments of Agriculture, Horticulture, Animal husbandry, Forests, Soil conservation, Social forestry, Social welfare, lead bank, fisheries, small scale industries etc. and progressive farmers attended the meeting (List of participants enclosed).

Dr. Vikas Tandon Programme Coordinator, KVK, Reasi and the member secretary welcomed the chairman and worthy members of scientific advisory committee and presented a detailed account of agriculture scenario of the state in general and district Reasi and Udhampur in particular. He appraised the house about the importance of this meeting and asked for their valuable suggestions in formulating the action plan for the year 2012-13.

Agenda 1. Confirmation of the Proceedings

The proceedings of fourth scientific advisory committee (SAC) of KVK, Reasi held on 03-11-2011 at DDC office complex Reasi were circulated to all the SAC members vide letter no: AUJ/PC/KVK/Udh/11-12/F-4/647-71 dated 03-02-2012. The proceedings were unanimously confirmed by the house.

Agenda 2. & 3. Action Taken Report and Presentation of Annual Progress Report.

Programme Coordinator, KVK, Reasi presented the action taken report on the issues raised in the fourth SAC meeting. He also presented the annual progress report of Krishi Vigyan Kendra for the year 2011-12 (April 2011 to March, 2012).

He appraised the house about the various activities undertaken by the KVK in two districts of Reasi and Udhampur. During this period, KVK imparted 42 trainings to the farmers of district Reasi and Udhampur, in various disciplines of agriculture, wherein a total of 942 farmers were trained in latest technologies available in the field of agriculture. Member secretary in his report also presented the achievements in vocational training programmes of KVK Reasi and apprised that a total of five such programmes were organised for rural youths and 113 participants attended these courses.

KVK organized five in-service training programmes to refresh the knowledge of extension officers and 65 extension officers participated in these programmes. Krishi Vigyan Kendra, Reasi/Udhampur also laid down nine on farm trials and the results were presented in the presentation. Programme coordinator also presented the details of front line demonstrations organised by the KVK during 2011-12. He reported that more than 22 ha of demonstrations on oilseed and pulses and 15 ha demonstrations in cereals and fodder crops. Apart from this KVK Reasi laid demonstrations on marigold, dhingri mushroom and vegetables.

Other activities undertaken by the KVK include diagnostic visits and provided on spot guidance to the farmers by visiting their fields and many farmers visited the KVK during the year in order to have solution of their problem. KVK also took part in the monthly Training and visit programme of the university where it interacted with the field functionaries of the line departments regarding monthly operations to be undertaken in the fields. The KVK also associated in various other awareness programmes and field days etc. celebrated by the line departments.

After the presentation, Director, Extension Education invited the suggestions/queries from the house and following suggestions were made:

8. Director Extension instructed that the establishment of poly-house at KVK must be undertaken at the priority.
(Action: KVK, Reasi)
9. Director extension also advised to conduct a survey with department of horticulture for zonalisation of district Reasi for proper selection of planting material for a particular zone.
(Action: KVK, Reasi)
10. Director instructed that the maize seed for ISOPOM and KVK must be taken from Department of agriculture as a number of good hybrids are available with them and department may supply the seed at lending cost.
(Action: KVK, Reasi)
11. Director Extension instructed to go for seed production at KVK farm as it is one of the mandates of the KVK.
(Action: KVK, Reasi)

12. Director Extension also advised to conduct next SAC meeting in Sept-Oct 2012 in order to plan activities for Rabi, 2012. **(Action: KVK, Reasi)**
13. Director Extension instructed That On farm trials have to be laid out at specific locations where certain problems are encountered with specific technologies. **(Action: KVK, Reasi)**
14. Chairman also advised that all extension activities like field days must be held in collaborations with agriculture department. **(Action: KVK, Reasi)**

AGENDA: 3 Presentation of proposed action plan

After these discussions Dr. Vikas Tandon Programme Co-ordinator presented the proposed action plan for the year 2011-12. Following suggestions were made by the participants.

15. Director Extension also instructed to include agro forestry activities in Udhampur as well as it is suitable area for forestry and medicinal plants. **(Action: KVK, Reasi)**
16. Director also urged to cover all blocks in Reasi, however if need is felt number of trainings may be decreased. **(Action: KVK, Reasi)**
17. Director advised to increase Number of kisan Ghoshthies and awareness camps. **(Action: KVK, Reasi)**
18. Divisional Forest officer, Reasi asked to develop a plan for medicinal plants for Reasi and Director also advised to organise four five trainings/ camps on medicinal plants. **(Action: KVK, Reasi)**
19. Director Extension also instructed to organise animal health / clinical camps with the veterinary department. **(Action: KVK, Reasi)**
20. Director Extension Education instructed the KVK to conduct sponsored training programmes. **(Action: KVK, Reasi)**
21. Director Extension advised that training programme on A. I. May be taken up at the FoVsc, R.S.pura as such training cannot be properly imparted at KVK level. **(Action: KVK, Reasi)**
22. Director Extension also instructed to include training on enhancement of milk production in dairy cattle for extension officers of animal husbandry department. **(Action: KVK, Reasi)**
23. It was also proposed to lay out demonstrations on Backyard poultry and to increase the number of birds to 2000 from 200. **(Action: KVK, Reasi)**
24. Director Extension Education advised to start procuring inputs as seeds etc. for Kharif season to avoid any delays. **(Action: KVK, Reasi)**