

Contents

S. No.	Particulars	Page No.
1	General Information about the KVK	2-5
2	Details of SAC.	6
3	Details of district (2011-12)	7-13
4	Technical achievements.	14-89
5	Impact of KVK activities.	89-90
6	Linkages	91-92
7	Performance of infra-structure in KVK.	92-95
8	Financial performance.	95-97
9.	Constraints	97
10.	Annexure - I-IV	98-107

ANNUAL REPORT 2011-12

1. GENERAL INFORMATION ABOUT THE KVK

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

Address	Telephone		E mail
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, Jammu. Main Campus, Chatha.	0191-2473417 2475035	0191-2473961	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 2012)

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	Pomology	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	Vacant	-	-	-	-	-	-	-
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	Tilak Raj	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 godown		-	-	-	-	-	

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
1.Tractor H.M.T.	2006	422650	-	Working
2.TATA Sumo Victa	2006	500000	78000	Working
3. Hero Honda motorcycle	2011	50000	2500	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

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

Sl. No.	Date	Name and Designation of Participants		Salient Recommendations	Action taken
1.	03-11-11	Dr. K. S. Risam Sh. R. K. Safaya S. Tarvinder singh Mr. S.K. Chatha Dr. K.K. verma Dr. M.I. Magrey Sh. Yog raj Sharma Sh devinder Thakur Mr. Ranjeev sawhney Dr. A. K. Mangota Mr. C.L. Sharma Mr. Anil Gorkha Mr. Manohar lal Smt. Bimla devi Sh. suresh Sharma Smt. Satya parmar Sh. Bodh raj Sh. Mohd. Sharief Smt. Kanta devi Smmt. Hamida Bibi Sh. M.L.Sharma S. sarabjit Singh Sh. Mohd. Shaffi Sh. Chaman lal Dr. Vikas Tandon	D.E.E. SKUAST Jammu Chief agriculture Officer Chief hort. Officer. Udh Chief hort. Officer, Reasi VAS Reasi C.A.H.O., Reasi Dy.Director, employ. Reasi Prasar bharati AEE, irrigation, Reasi C.A.H.O., Reasi SMS, CHO Udhampur SMS, CHO Udhampur DDM, NABARD, Udh Prog. Farmer (women) Prog. Farmer (Big) Prog. Farmer (women) Sarpanch, Prog. Farmer Sarpanch, Prog. Farmer Progressive Farmer Progressive Farmer Sr. Asstt. Sericulture SMS, hort, Reasi Fisheries, Reasi Progressive Farmer Member Secretary <i>*SAC proceedings along with list of participants attached as annexure IV.</i>	▶ DE directed to persue the case of land demarcation with DDC Reasi. ▶ It was suggested to set up a poly house at KVK ▶ Director advised to lay out vegetable demonstrations at areas other than Bhabber. ▶ Director advised to increase the demonstrations on mushrooms and also to set up a mushroom demonstration at KVK. ▶ Director Extension also advised for having honey bee colonies at KVK. ▶ Director advised to make necessary arrangement for OFT and FLD's in advance. ▶ District sericulture officer requested for training programmes on raising of nursery of forest species and also trainings on medicinal plants and sericulture.	▶ A fresh application vide letter no AUJ/PC/KVK/F-36/609-10 dated 24-01-12 has been sent to DDC. ▶ The proposal for a high tech green house has been kept in next EFC. ▶ KVK has laid out demonstrations at Agar, Tikri, Kanjali, mari and Gran villages of Reasi and Udhampur. ▶ KVK Reasi has laid out 70 no's demonstrations on dhangri and also 40 bags demonstrations was laid out at KVK campus. ▶ KVK Reasi has taken advise of line departments and also private growers who have advised that due to excessive heat and lack of flora near our campus it will be difficult to maintain these colonies and will have to be migrated. ▶ KVK had arranged all fertiliser and seed for rabi demonstrations and we also have laid out demonstrations on spices well in time. Varieties from H.P. have also been brought for laying FLD on ginger. ▶ A three day vocational programme on raising of nursery was conducted and regular trainings are being given on medicinal plants.

2. DETAILS OF DISTRICT (2011-12)

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 twenty percent irrigated area 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 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 Reasi. 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 chillies. 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 in some pockets 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

		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 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 (Qtl)	Productivity (Qtl /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 (MT)	Productivity (Qtl /ha)
1	Maize	19800	35640	18.0
2	Wheat	14600	33780	18.0
2	Paddy	2800	6320	22.5
4	Pulses	2050	2050	10.0
5	Oil seed	2100	1470	07.0
6	Vegetables	930	18600	200.0
7	Fodder	750	20625	275.0
8	Jowar/ bajra /barley etc.	600	900	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.

Category	Population	Production	Productivity
Cattle	254955	72.8 (000) MT	
<i>Crossbred</i>			
<i>Indigenous</i>			
Buffalo	143877		
Sheep	58000		
<i>Crossbred</i>			
<i>Indigenous</i>			
Goats	28000		
Pigs			
<i>Crossbred</i>			
<i>Indigenous</i>			
Rabbits			
Poultry			
Hens	163514		
<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 (2011-12)

Sl.No	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Reasi	Reasi	Mari, agar balian, Gran More, Bidda	Wheat/ maize/ oilseed /pulses/ vegetables	1. Low productivity of all crops. 2. Lack of interest in oilseed cultivation. 3. Lack of HYV's of vegetables. 4. Single cropping in some areas.	1. Promotion of single cross maize hybrids. 2. Use of hybrid seeds for vegetable cultivation. 3. Integrated insect / pest and disease management. 4. Promotion of backyard poultry as integration farming component. 5. Seed replacement
2	Reasi	Pouni	Pouni, Malad, Mari, Latier, Dhanwa, Talwara	wheat, maize, vegetables and vegetable nursery, spices, citrus and mango.	1. Use of conventional seeds and planting material. 2. Lack of water management and conservation. 3. Lack of training pruning in fruit crops. 4. High wind areas.	1. Promotion of new high yielding varieties. 2. Promotion of ginger/turmeric etc. 3. Integrated Nutrient management. 4. Promotion of oilseeds. 5. Seed treatment in cereals and vegetables. 6. Promotion of water conservation to enhance productivity.

3	Reasi	Reasi	Dera, Seri, chumbian Mansoo, kanjali, Bhabbar, Pai, kundra Panasa, shapanoo, Tanda	Maize/wheat/poultry /sericulture/vegetables/dhingri	1. Lack of awareness and proper training on latest technologies 2. Promotion of backyard poultry. 3. Lack of knowledge of water conservation.	1. Promotion of self help groups. 2. Increasing water productivity. 3. Promotion of backyard poultry. 4. Introduction of paddy hybrids in the area. 5. Promotion of medicinal plants, sericulture and vegetables.
4	Udhampur	Ramnagar	Ritti, lasal, patta,rown	Maize/pulses/floriculture	1. Lack of new varieties. 2. Rain fed cropping. 3. Use of conventional seeds. 4. Shortage of fodder.	1. Promotion of high yielding new Hybrids/ var. 2. Water conservation and efficient use of irrigation water. 3. promotion of self help groups 4. Promotion of pulses.
5.	Udhampur	Majaltha Tikri	Kishanpur/ manwal/majalta/mand/tikri/sundrani/chari muthal	Maize/wheat/mango /citrus	1. Lower yields and use of old methods of cultivation. 2. Lack of awareness on water harvesting. 3. Poor response to oilseed/pulses.	1. Promotion of water harvesting and conservation. 2. Promotion of new agriculture schemes in the area. 3. Promotion of floriculture. 4. Introduction of new varieties of oilseed in the area.
6	Udhampur	Chenani	Dhramthal, kud, keither, Ghordi	Anardana, peach/apricot/maize/mash	1. Poor yields 2. Old varieties 3. No fertilizer application poor 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.

7.	Reasi	Arnas,	Dharmari/ arnas/salal/ Thuru	Rajmash/maize/fruit crops/mash	1. Low productivity of fruit crops. 2. Single cropping. 3. Poor yield of pulse crops	1. Promotion of training and pruning of fruit crops. 2. Promotion of agricultural schemes in area. 3. Seed treatment in cereals. 4. Promotion of improved varieties of pulse crops in the area.
8	Reasi	Reasi	Pangal/sool/ painthal/kulia/ chak bhakta/ domail/numai /didimorh/ sherwar, Agharjitto, Dheerti	Maize/mash/vegeta bles/floriculture/dhin gri/wheat/Toria/vege tables	1. Low productivity of flowers. 2. Low production of cereals. 3. Lack of hybrid varieties. 4. Lack of awareness of dhangri cultivation 5. Lack of scientific knowledge of hybrid vegetable growing	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 dhangri cultivation in the area.

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	Information on new varieties, checking of anar butterfly, mango malformation, disease and pest management in major fruit crops training and pruning of temperate fruits.
Vegetables	Promotion of hybrids, introduction of new varieties. Disease and pest management. round the year cultivation, nursery raising of vegetable crops.
Animal husbandry	Promotion of dairy farming, problems related to cattle rearing, balanced nutrition.
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.

3. TECHNICAL ACHIEVEMENTS

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

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	8	40	60	Oilseed pulses (24 ha)	22 ha	95	169
				Other than oilseed pulses (15 ha)	14.7 ha	110	169
				Mushrooms	70	70	70
				Marigold (2 ha)	1 ha	10	17
				Vegetable (2 ha)	2 ha	50	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	42	42	840	952	Field days (5)	5	250	264
Rural youth	6	5	90	113	Kisan goshties (2)	2	50	50
Extn. Functionaries	10	5	150	65	Awareness camps (2)	1	100	350
					Kisan mela (2)	2	-	200
					Important days (2)	2	100	300
					campagns	2	100	100

Seed Production (Qtl.)		Planting material (Nos.)	
5		6	
Target	Achievement	Target	Achievement
Wheat	28		
Black gram	2.75		
Lentil	0.35		
Toria	0.40		
Til	0.20		

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	Promotion of high yielding var's in cereals oilseeds and pulses.	Maize	Poor yields in conventional seeds.	-	Integrated nutrient management in maize.	Scientific cultivation of maize	Farmers school.	Field day Farmer school	Seed and fertilizer was given for FLD.
2	-do-	Wheat	Use of seed for more than three years resulting in poor yields.	Performance of late sown wheat varieties in Reasi.	Integrated nutrient management in wheat.	Scientific cultivation of wheat.	Field day	Field day Kisan ghoshthi	Seed and fertilizer
3	-do-	Lentil and chickpea	Non availability of seed.	-	Introduction of lentil (L-4147) and chick pea ().			Field day visits Trainings Diagnostic visits.	Seed of lentil and chick pea and fertilizer with chick pea was supplied.
4	-do-	Toria/ Mustard/ G.sarson	Lower yields Aphid attack	-	Integrated nutrient management of oilseeds.		Field day	Field day Diagnostic visits	Seed and fertilizer were given for FLD.
5	Integrated nutrient and pest management in major crops of the district.	Wheat	Lack of knowledge of nutrient management.	Integrated nutrient management in wheat				diagnostic visits	Trial was laid out with application of Bio Chaar and vermicompost.
6	-do-	Wheat	Poor yields due to lack of weed management	Study on weed management in wheat	-	-	-	Diagnostic visits	Chemicals were given for laying out the trials.

7	Promotion of spices, floriculture and medicinal plants.	Turmeric	Lack of knowhow Lack of good var's	Impact of planting dates and harvesting dates on yield and quality of turmeric	Introduction of local selection in Reasi	Spice cultivation for higher incomes.	Field day	Field day Diagnostic visits	Seed material was supplied to farmers for OFT and FLD's.
8	-do-	Onion	Lack of weed management	Weed management in onion.	-		-	Diagnostic visits	Chemicals were supplied for OFT
9	-do-	Marigold	Lack of good variety, poor crop management practices.	Integrated nutrient management in marigold.	Introduction of new variety of marigold.	Cultivation of flowers for increasing rural economy.	-	Diagnostic visits. Kisan ghoshthies	s
10	Medicinal plants	Medicinal plants	Lack of knowledge.	-	-	important medicinal plants of reasi. And mportant medicinal tree species	-	Trainings Field visits	
11.	Crop diversification	Mushrooms	Lack of knowhow, and non availability of spawn	-	Introduction of Dhingri in Reasi.	Vocational training on white button mushroom. Farmer trainings on round the year mushroom cultivation.		Field visits.	Spawn of Dhingri alongwith poly bags were supplied for laying out FLD's.
12.	Promotion of vegetable culture.	Vegetables/ potato/ tuber crops.	Lack of new varieties, Poor INM and no check on insect/pest.	-	Introduction of HYV of Okra, bottle guard	Nursery Raising of vegetable crops. Use of micro irrigations in vegetable crops.		Kisan ghoshthies.	Seeds of vegetable crops were distributed to beneficiaries of FLD's

13.	Promotion of fruit crops.	Mango/ citrus/ stone fruits, walnut, apple, pomegranate.	Old varieties, Poor upkeep, Lack of insect pest management.	Control of anar butterfly.	-	Role of micronutrients in fruit culture. Training and pruning of fruit crops Lay out and planting of orchards Propagation techniques in fruit crops.	In service training programmes Kisan melas	Awareness camps Campaigns Kisan ghoshthies.	Inputs for oft were supplied to 10 farmers.
14.	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 ghoshthies.	-

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	10	4	4	1	3		1			23
Seed / Plant production	1	1	3				1			6
Weed Management	1			1						2
Integrated Crop Management										
Integrated Nutrient Management	1			1			1			3
Integrated Farming System										
Mushroom cultivation				1						1
Drudgery reduction										
Farm machineries										
Value addition										
Integrated Pest Management						1				1
Integrated Disease Management	1									1
Resource conservation technology										
Small Scale income generating enterprises										
TOTAL	14	5	7	4	3	1	3			37

* 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	4	4	1							9
Seed / Plant production	1	1	1							3
Weed Management										
Integrated Crop Management										
Integrated Nutrient Management										
Integrated Farming System										
Mushroom cultivation										
Drudgery reduction										
Farm machineries										
Post Harvest Technology										
Integrated Pest Management						1				1
Integrated Disease Management	1									1
Resource conservation technology										
Small Scale income generating enterprises										
TOTAL	6	5	2			1				14

* 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								
Nutrition Management								
Disease of Management								
Value Addition								
Production and Management								
Feed and Fodder								
Small Scale income generating enterprises								
TOTAL								

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

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

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

A. Technology Assessment

Trial 1

- 1) Title : Impact of different dates of planting and date of harvesting on growth and yield of
Turmeric in district Reasi.
- 2) Problem diagnose/defined: Low yield and poor quality due un timely sowing and harvesting.
- 3) Details of technologies selected for assessment
/refinement : T0- (20 April 2011)
T1 (1may 2011)
T2 (20 May 2011) (farmer's practice)
- 4) Source of technology :KVK, Reasi
- 5) Production system
thematic area : Wheat- Turmeric
- 6) Thematic area : Suitable time for planting
- 7) Performance of the Technology with
Performance indicators : Early planting on 20 April have resulted in higher no of rhizomes as well as higher rhizome weight as compared to late planted turmeric. Early planting resulted in yields upto 130q/ha as compared to only 96q/ha in late plantings.
- 8) Final recommendation
For micro level situation : Early planting (20april to 1 may) have resulted in higher yields and quality as compared to late plantings
- 9) Constraints identified and
feedback for research : Moisture availability is bottleneck for early plantings and also good panting material is not available.
- 10) Process of farmer's participation and their reaction : farmers of Mari area have shown encouraging participation for early sowing of crop.



Planting Date:- 20 April 2011



Planting Date: - 20 May 2011

11).Results of On Farm Trials

• **No. of farmers**

Crop/ enterprise	Farming situation	Problem Diagnose d	Title of OFT	No. of trials*	Technology Assessed	Parameter s of assessme nt	Data on the parameter	Results of assessment	Feedbac k from the farmer	Justifi cation for nemenent
1	2	3	4	5	6	7	8	9	10	11
Turmeri c	RF	Low yield and poor quality due not timely sowing and harvest ing	Effect of different dates of planting and date of harvesting on growth and yield of Turmeric in Kandi Belt of District Reasi.	3	T0 (20 april)	Yield, growth parameter s	130q/ha	Early planting on 20 April have resulted in higher no of rhizomes and also yields of rhizomes.	Farmer s have shown interest in this trial.	Late plantings often results in lower yields thus a trial was framed to improve the yields.
					T1 - (1 may)	Do	124q/ha			
					T2- (20 May)	do	96q/ha			

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
12	13	14	15
T0- 20 april	130q/ha	90,000	1:2.16
T1- (1 may)	124q/ha	84000	1:2.06.
T2- 20 th may	96q/ha	75000	1:1.95

Trial 2

1. Title : Management of Annar butterfly in Pomegranate in district Reasi
2. Problem diagnose/defined : Low yield and poor Quality due to insect-pests infestation.
3. Details of technologies selected for assessment/refinement : T0 -(Farmers practice)
T1 – Cypermethrin (1ml/litre)
T2- Imidachlorpid (0.75ml/L)
4. Source of technology : KVK, Reasi
5. Production system thematic area : Pomegranate
6. Thematic area : Management of Anar butterfly
7. Performance of the Technology with performance indicators interval butter fly. : 3 sprays of Imidachlorpid (0.75ml/L) at fortnight resulted in complete checking of anar
8. Final recommendation for Micro level situation (0.75ml/L) 3-4 : farmers may be advised to use imidachlorpid sprays for controlling Anar butterfly.
9. Constraints identified and Feedback for research : Unavailability of Insecticides
10. Process of farmers participation and their reaction : Farmers of Dharmari were satisfied with the control measures applied in Anar.

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	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11
Pomegranate	Rain fed	Low yield due to insect-pests infestation.	Management of Annar butterfly in Pomegranate in district Reasi	5	T0 -(Check) No use of insecticides)	No of infected fruits per plant and yield	90-100 % damaged fruits	Treated trees showed increased yields and lesser incidence of damaged fruits.	Farmers were convinced but have difficulty in spraying pomegranate.	No treatment have been given in these areas thus a trial was formulated to control annar butterfly.
					T1 - (Cypermethrine@1 ml/litre) T2- imidachlorpid	-do-	40 % damaged fruit, (25kg/ tree) 34% damaged fruits (28 kg/tree)			

• **No. of farmers**

Technology Refined	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
12	13	14	15
T0 -(Check) No use of insecticides)	5 kg/tree	350	1:1.85
T1 -(Cypermethrine@1ml/litre)	25 kg/tree	1750	1:2.16
T2 – imidachlorpid (0.75ml/L)	28 kg/tree	2090	1:2.34

Trial 3

1. Title : Integrated Nutrient Management in Marigold.
2. Problem diagnose/defined : low yield due to poor nutrition.
3. Details of technologies selected for assessment/refinement:

T0- Farmers Practice(100 % NPK)

T1- Soil application rhizobium + 75 % NPK

T2- Seedling Treated with rhizobium + 75 %

NPK

4. Source of technology : KVK Reasi
5. Production system thematic area : INM
6. Thematic area : Integrated nutrient Managaement.
7. Performance of the Technology
With performance indicators : Application of biofertilisers gave better yields and quality as compared to standard NPK.
8. Final recommendation for
Micro level situation : Soil application and seedling treatment with Rhizobium resulted in increasing lenth of flowering and improved the flower quality while 100 % NPK resulted in reducing the survival of seedlings
9. Constraints identified and
feedback for research : Unavailability of biofertilisers..
10. Process of farmers participation
and their reaction : farmers themselves approached for reducing the dosage of fertilizer especially urea and with application of biofertiliser they were satisfied with its performance.



Soil application Biofertilizer +NPK



Seedling treated with Biofertilizer +NPK

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
Marigold	Rainfed	low yield due to poor nutrition.	Integrated Nutrient Managemen t in Marigold.	4	T0- Farmers Practice 100% NPK	Yield and economic return.	5.5 q/ha	Application of 75% NPK alongwith Biofertiliser gave highest yield as compared to others also the flowering period was prolonged.	Farmers were convinced with application of biofertilisers alongwith NPK.
					T1- Soil application of azotobactor + K'solublising bacteria + 75% NPK		5.75q/ha		
					T2- Soil application of azotobactor + K'solublising bacteria + 50% NPK		4.5q/ha		

*** No. of farmers**

Technology Refined	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
12	13	14	15
T0 -(Check) 100% NPK	5.5q/ha	110000/ha	1:350
T1 -(soil application of bio fertiliser +75% NPK)	5.75q/ha	120000/ha	1:3.75
T1 -(soil application of bio fertiliser +50% NPK)	4.5q/ha	95000/ha	1:3.25

Trial 4

- 6) Title : Performance of late sown wheat varieties in Reasi
- 7) Problem diagnose/defined : Low Performance of Local varieties
- 8) Details of technologies selected for assessment /refinement :
- T0- Farmers Practice
T1- PBW 373
T2- Raj 3765
T3- Raj 3077
T4- VL 892
- 9) Source of technology : SKUAST Jammu
- 10) Production system thematic area : Rainfed cereal based system
- 6) Thematic area : Varietal evaluation
- 7) Performance of the Technology with performance indicators : Late sown varieties perform better as compared to normal sown varieties if sown late.
- 8) Final recommendation for micro level situation : Raj 3077 was found to be the best late sown variety with average yields of 21q/ha followed by raj 3765 with 20q/ha, VL 892 with 18.5q/ha and least in PBW-373 (17q/ha).
- 9) Constraints identified and feedback for research delayed sown causes : Un availability of high yielding varieties of wheat and declined in yield
- 10) Process of farmers participation and their reaction : The farmers appreciated the demonstrated late sown varieties of wheat and they were satisfied with the performance of late wheat varieties.

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 performance of local varieties	Varietal evaluation of late sown wheat	3	i. Farmer practice ii.PBW 373 iii.Raj 3765 iv.Raj 3077 v. VL892	Yield	T1- 14q/ha T2- 17q/ha T3- 20q/ha T4- 21q/ha T5- 18.5q/ha	Raj 3077 with average yields of 21q/ha was found to be the best late sown variety in the district.	The farmers appreciated the demonstrated late sown varieties of wheat and they were satisfied with the performance of wheat

* No. of farmers

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
1. Farmer Practice	14	9650	1:2.04
2.PBW 373	17	13700	1:2.38
3. Raj 3765	20	17500	1:2.81
4. Raj 3077	21	18900	1:2.93
5. VL892	18.5	15400	1:2.65

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

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

Trial 5

- 1)Title : Management of yellow rust in wheat
- 2)Problem diagnose/defined : Reduction in wheat grain yield and wheat straw due to yellow rust in wheat
- 3)Details of technologies selected for assessment /refinement :
- i. 2 sprays of Propiconazole (0.1%)
 - ii. 2 Sprays of tebuconazole (0.2%)
 - iii. 2 Sprays of hexaconazoles (0.2%)
- 4)Source of technology : SKUAST Jammu KVK Reasi
- 5)Production system thematic area : Rainfed cereal based system
- 6)Thematic area : Integrated disease management
- 7)Performance of the Technology with performance indicators : 2 sprays of tebuconazole was found more effective as compared to hexaconazole and propiconazole.
- 8)Final recommendation for micro level situation : Application of Tebuconazole (2 sprays) was found effective in controlling in yellow rust of wheat.
- 9)Constraints identified and feedback for research : Lack of awareness of fungicides and there unavailability.
- 10)Process of farmers participation and their reaction : Farmers showed the keen interest after seeing the demonstrated fields and they asked KVK for the fungicides

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 and wheat straw due to yellow rust in wheat	Management of yellow rust in wheat	5	i. Farmer Practice propiconazole (0.1%) ii. 2 Sprays of tebuconazole (0.2%) iii.2 Sprays of Hexaconazole (0.2%)	Yield	Yield T1- 18q/ha T2-20q/ha T3-18.5q/ha Disease incidence T1- 25 T2-8.5 T3-2.5	It was found that spray of Tebuconazole was found more effective as compared to other two chemicals tried..	Farmers showed the keen interest after seeing the demonstrated fields and they asked KVK for the fungicides

* No. of farmers

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
1. Farmer Practice propiconazole (0.1%)	18q/ha	16375	1:2.23
2. 2 Sprays of Tebuconazole (0.1%)	20q/ha	18575	1.:2.50
3. 2 Sprays of Hexaconazole (0.1%)	18.5q/ha	16875	1:2.28

*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 6

- 1) Title : Performance of different varieties of fodder crops under round the year fodder production
- 2) Problem diagnose/defined : lack of green fodder in lean period
- 3) Details of technologies selected for assessment/refinement : Introduction and Testing of different fodder varieties under round the year fodder production.
- 4) Source of technology : KVK Reasi
- 5) Production system thematic area : Production technology
- 6) Thematic area : Integrated crop management
- 7) Performance of the Technology with performance indicators : in different season, different crop improved varieties shown a very high growth in comparison to local varieties.
- 8) Final recommendation for micro level situation : Tree plantations on the farm bunds can provide a large amount of green fodder for the animals in the lean period, with cultivation of high yielding varieties Oats , Barseem and sorghum in Rabi & Kharif season respectively.
- 9) Constraints identified and feedback for research : Lack of awareness about improved fodder varieties & use of wheat straw and locally available grasses for feeding of cattle's.
- 10) Process of farmers participation and their reaction : Farmers showed keen interest in the demonstrations and shown interest in plantation of trees under agro forestry system on their farms.



Fig: Sorghum, Grewia tree and Oats on field.

11). Results of On Farm Trials

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Para meters of assess ment	Data on the parameter	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
fodder	Rain fed	lack of fodder in lean period	Performan ce of different varieties of fodder crops under round the year fodder production	2	T0-Local varieties of Sorghum, Barseem, and Oats T1- Sorghum SSG114 Barseem Vardaan Oats Kent	Yield Q/ha	Sorghum 310 00/ha Barseem 50000/h a Oats 52000/h a <i>Grewia optiva</i> 46kg/tre e	In different seasons the HYV of fodder crops showed better performance in comparison to local check in which farmers used wheat straw and local grasses.	Farmers showed interest in the demonstration and shown interest in plantation of trees under agro forestry system on their farms.

* No. of farmers

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
T1- Sorghum (SSG114)	31000	22200	1:2.52
Barseem (Vardaan)	50000	40800	1:4.43
Oats (Kent)	52000	44000	1:5.5
T0- Sorghum Local	16875	9875	1:2.41
Barseem Local	30000	23000	1:4.28
Oats Local	26250	19050	1:3.64

Trial 7

- 1) Title : Effect of different doses of nutrients on the growth of *Bauhinia variegata*
- 2) Problem diagnose/defined : Slow growth of *Bauhinia variegata* on border plantation.
- 3) Details of technologies selected for assessment
/refinement : Effect of different organic & chemical fertilizers on the growth of *B. variegata*.
- 4) Source of technology : KVK Reasi
- 5) Production system
thematic area : Integrated farming system
- 6)Thematic area : fodder based agro-forestry system
- 7) Performance of the Technology with
performance indicators: Different organic & chemical fertilizers are being tested on the growth of *B. variegata*
- 8) Final recommendation for
micro level situation : Trees of *B. variegata* can be planted on the farm boundary to fulfill the fodder needs of cattle.
- 9) Constraints identified and
feedback for research : Heavy lopping, less plantation & Slow growth of *Bauhinia variegata*.
- 10) Process of farmers
participation and
their reaction : Farmers showed keen interest in the trial for their need of fodder.

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
fodder	Rainfed	Slow growth of Bauhinia variegata on border plantation.	Effect of different doses of nutrients on the growth of <i>Bauhinia variegata</i>	1	T1- control T2- Organic manure T3- NPK	Survival & growth (Height & Diameter)	Survival percent 60%	After one year 60% plants are surviving. Height and diameter will be recorded to get the growth in a year.	Farmers showed keen interest in the trial for their need of fodder.

* No. of farmers

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:

T0-Farmer Practice (manual)
T1- Atlantis (400g/ha)
T2- Metribuzin(250g/ha)
T3- Sulphosulphrone (33g/ha)

4. Source of technology : SKUAST-Jammu KVK Reasi
5. Production system thematic area : Rainfed Cereal based system
6. Thematic area : Integrated Weed management

7. Performance of the Technology

with performance indicators: The application of pre emergence weedicides within 40 days after sowing resulted in reducing the weed population drastically. Application of Atlantis @ 400g/ha gave maximum control of weeds and increased the yields of wheat.

8. Final recommendation
for micro level situation

:Application of Atlantis (400g/ha) resulted in maximum weed control followed by Sulphosulphuron (33g/ha) and Metribuzine (250g/ha) respectively can be recommended for controlling the weeds in the wheat fields.

9. Constraints identified and feedback for research : Unavailability of the high quality weedicides

10. Process of farmers participation
and their reaction :

The farmers were satisfied with the result of weedicides

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	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11
Wheat	Rainfed	low productivity in wheat crop due to weed competition.	Weed management in wheat	3	T1- farmer practice T2- Atlantis (400g/ha) T3- Metribuzine (250g/ha) T4- Sulphosulphrone (33g/ha)	Weed count Yield	Weed count T1- 89 (No/m ²) T2- 7 (No/m ²) T3- 25 (No/m ²) T4- 11 (No/m ²) Yield T1- 14q/ha T2- 20q/ha T3 -17q/ha T4- 19q/ha	Atlantis showed the best control of weeds and increased the grain yields as compared to others	The farmer appreciated the demonstrated technologies on integrated weed management practices in wheat	Weed management is not followed in the Reasi and its promotion is required for better yields.

* No. of farmers

Technology Refined	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
12	13	14	15
T1 - farmer practice	14q/ha	9600	1:2.07
T2 - Atlantis (400g/ha)	20q/ha	17300	1:2.78
T3 -Metribuzine (250g/ha)	17q/ha	13800	1:2.42
T4 Sulphosulphrone (33g/ha)	19q/ha	15800	1:2.62

Trial 9

1. Title : Weed management in Onion.
2. Problem diagnose/defined : High labour cost and Low productivity in Onion yield due to weeds.
3. Details of technologies selected for assessment/refinement:
 - T0-Farmer Practice (Manual)
 - T1- stomp (2.5l\ha) (Pre- plant application)
 - T2- Basaline (1.0L/ha) (Pre- emergence application)
 - T3- Terga super (1.0L/ha) (Post emergent application)
4. Source of technology : SKUAST-Jammu KVK Reasi
5. Production system thematic area : maize- onion – vegetables.
6. Thematic area : Integrated Weed management
7. Performance of the Technology
 - with performance indicators: The application of pre emergence weedicides before transplanting have resulted in reducing the weed population drastically. Application of Stomp @ 2.5L/ha gave maximum control of weeds .
- 8.Final recommendation
 - for micro level situation : Application of Stomp (2.5L/ha) resulted in maximum weed control followed by baseline (1.0L/ha) and Least effective was post emergent weedicide respectively can be recommended for controlling the weeds in the wheat fields.
- 11.Constraints identified and feedback for research : Unavailability of the high quality weedicides
- 12.Process of farmers participation and their reaction : The farmers were satisfied with the result of weedicides

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
Onion	Rainfed	Labour intensive operation and low yields due to weeds.	Weed management in Onion	3	T1- farmer practice (manual) T2- Pre plant application of stomp(2.5L/ha) T3-Pre- emergence applicationof basaline (1.0L/ha) T4- post emergence application (1.0/ha)	i. Weed count ii- yield	T1- 110 (No/m ²) T2- 15 (No/m ²) T3- 47 (No/m ²) T4- 85 (No/m ²) Yield awaited	Pre plant application with stomp has given the best weed control. as compared to pre emergence with very less control by post emergence application	The farmer appreciated the demonstrated technologies on integrated weed management practices in onion	Weed management is not followed in the Reasi and its promotion is required for better yields.

*** No. of farmers**

Technology Refined	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
12	13	14	15
T1 - farmer practice (manual)	R.A	RA	
T2 – pre plant application (2.5L/ha)			
T3 -Pre emergence (1.0L/ha)			
T4 post emergence (1.0L/ha)			

Trial 10

1. Title : Integrated nutrient management in wheat
2. Problem diagnose/defined : Poor soil health due to continuous cropping years after years.
3. Details of technologies selected for assessment/refinement:
 - T0-Farmer Practice (full NPK)
 - T1- 75% NPK + Vermicompost
 - T2- 75% NPK + Bio Chaar
4. Source of technology : SKUAST-Jammu
5. Production system thematic area : rainfed cereal based system.
6. Thematic area : Integrated nutrient management management
7. Performance of the Technology
 - with performance indicators: The application of vermicompost and Bio Chaar will improve soil health and its effect on yield will be studied.
8. Final recommendation for micro level situation : results awaited
13. Constraints identified and Unavailability of the organic manures in sufficient quantities.
 - feedback for research :
14. Process of farmers participation and their reaction : Results awaited

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
Wheat	Rainfed	Poor soil health	Integrated nutrient management in wheat.	1	T1- full NPK (farmer Practice	i. crop stand ii- yield	R.A.	Application of vermicompost and biochaar had little affect on crop stand the results are awaited.	Results are awaited	Due to continous cropping soil health is deteriorating and efforts are to be made for its restoration.
					T2- 75% NPK with vermicompost					
					T3- 75% NPK with Bio Chaar.					

*** No. of farmers**

Technology Refined	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
12	13	14	15
T1 - farmer practice (100% NPK)	R.A	RA	
T2 – 75% NPK + vermicompost (6t/ha)			
T3 -75% NPK with Bio Chaar. (6t/ha)			

3.2 Achievements of Frontline Demonstrations

a. Follow-up for results of FLDs implemented during previous years

List of technologies demonstrated during previous year and popularized during 2011-12 and recommended for large scale adoption in the district

S. No	Crop/ Enterprise	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	Improved technologies and cultural practices	Awareness camps Kisaan ghoshthies Field visits Trainings	3	12	2
2	Til	ICM	Improved technologies and cultural practices	-do-	5	20	2.0
3.	Black Gram	ICM	Improved varieties	-do-		7	39
4.	Vegetables	ICM	Improved varieties / hybrids	-do-	5	50	1.5
5.	Wheat	ICM	New variety	-do-	5	40	5.0
6.	Chick pea	ICM	New variety Pest control	-do-	6	15	3.0
7	Fodder	ICM	New variety	-do-	5	25	4.0
8.	Oilseed (Rabi)	ICM	Improved technologies and cultural practices	-do-	10	50	10.0
9.	Backyard poultry	ICM	Diversification	-do-	2	20	200
				-do-			

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

- b. Details of FLDs implemented during 2011-12 (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 2011	5.0	5.0	18	21	39	-
2.	Sorghum	Integrated crop management	Hybrid Varieties	Kharif 2011	2.0	2.0	13	11	24	-
3.	Black gram	Integrated crop management	Improved varieties	Kharif 2011	5.0	5.0	17	20	37	-
4.	Green gram	Integrated crop management	Improved varieties	Kharif 2011	2.0	2.0	9	15	24	-
5.	Marigold	Integrated crop management	Improved varieties	Kharif 2011	1.00	1.00	4	13	17	-
6.	Til	Integrated crop management	Improved varieties	Kharif 2011	5.00	5.00	9	11	20	-
7.	Turmeric	Integrated crop management	Improved varieties	Rabi 2011	0.2	0.2	17	20	37	-
8.	Wheat	Integrated crop management	Improved varieties	Rabi 2011	5	5	22	29	51	-
9.	Oats	Integrated crop management	Improved varieties	Rabi 2011	1.5	1.5	14	6	20	-
10.	Chickpea	Integrated crop management	Improved varieties	Rabi 2011	2.5	2.5	15	18	33	-

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	Scientific cultivation of hybrid maize	Plant gene	10	1.5	26	16	21	14	50	Yield	Yield
			bio seed	11	1.5	25	15	20	14	42.85	Yield	Yield
			Polo	10	1	25	16	20.5	14	46.42	Yield	Yield
			KH-612	8	1	23	14	18.5	14	32.14	Yield	Yield
2	Sorghum	Promotion of hybrid varieties of sorghum	SSG-114	24	2.0	320	240	280	225	38.48	Yield	Yield
3	Black gram	Improved varieties of black gram	Uttara	37	5.0	6.8	3.8	5.3	3.5	51.14	Yield	Yield
4	Green gram	Improved varieties of green gram	SML-668	24	2.0	5.2	3.2	4.2	3.0	40.00	Yield	Yield
5	Marigold	Promotion of Improved varieties	Pusa Narangi	17	1.0	6.0	4.5	5.25	-	-	Yield	Yield
6	Til	Improved varieties and balanced use of fertilizers	Pb til 1	20	5.0	6.2	5.0	5.6	3.2	43.75	Yield	Yield
7	Turmeric	Scientific cultivation of turmeric	Local	37	0.2	110	80	95	75	26.66	Yield	Yield

8	Wheat	Varietal evaluation of wheat	PBW175, ,	24	2.0	22	16	19	12	58.33	Yield	Yield
			PBW-550	15	1.50	20	15	17.5	12	45.83	Yield	Yield
			Raj.3765	10	1	20	16	18	12	50.00	Yield	Yield
			RAJ.3077	2	0.50	21	16	18.5	12	54.16	Yield	Yield
9	Oats	Promotion of Improved varieties	Kent	20	1.5	540	350	445	350	21.42	Yield	Yield
10	Chickpea	Improved varieties & control of podborer	GPF-2	33	2.5	6.5	4.2	5.35	4.20	27.38	Yield	Yield
11	Lentil	Improved varieties	L-4147	13	.65	5.5	3.2	4.3	2.5	72.0	Yield	Yield
12	Dhingri	Scientific cultivation of dhingri	Pleurotus Caju	70	-	-	-	-	-	-	Yield	Yield
13	Toria	Scientific cultivation of Toria	RSPT01	12	4	7.7	5.3	6.50	4.80	35.41	Yield	Yield
14	Mustard	Scientific cultivation of Mustard	RSPR-1	26	4	7.5	6	6.75	5.00	35.00	Yield	Yield
15	Gobisarson	Scientific cultivation of Gobisarson	DGS-1	33	2	7.6	6.2	6.9	5.25	31.42	Yield	Yield
16.	Okra	Improved varieties	Syali special Varsha upahaar	43	2	70	52	61	44	38.63	Yield	yield

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

Economic Impact (continuation of previous table)

Average Cost of cultivation (Rs./ha)		Average Gross Return (Rs./ha)		Average Net Return (Profit) (Rs./ha)		Benefit-Cost Ratio (Gross Return / Gross Cost)
Demonstration	Local Check	Demonstration	Local Check	Demonstration	Local Check	
14	15	16	17	18	19	20
9500	8800	26000	18000	6900	9200	1:2.73
9200	8800	24100	18000	14900	9200	1:2.61
9500	8800	25000	18000	15500	9200	1:2.63
9200	8800	22100	18000	12900	9200	1:2.40
8800	8000	28000	22500	19200	14500	1:3.18
12300	10600	35100	21000	22800	10400	1:2.85
12500	10900	26500	19500	14000	8600	1:2.12
50000	-	200000	-	150000	-	1:4.00
13700	11800	31600	17900	17900	6100	1:2.30
120000	100000	260000	200000	140000	100000	1:2.16
9700	8900	36100	18200	26400	9300	1:3.72
9700	8900	33900	18200	24200	9300	1:3.49
9700	8900	34200	18200	24500	9300	1:3.52
9700	8900	24900	18200	25200	9300	1:3.59
9200	7400	33375	26250	24175	18850	1:3.62
8250	7400	33000	25000	24750	17600	1:4.00
12500	10500	33000	20000	20500	9500	1:2.64
-	-	-	-	-	-	-
8000	7200	22900	18100	14900	10900	1:2.86
8100	7200	23400	18700	15300	11500	1:2.88
8215	7810	24000	21000	15785	13190	1:2.92
20000	15000	60000	40000	40000	25000	1: 3.00

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
Maize (Plant gene, Bioseed, polo, KH 612)	Kharif 2011	Seed/Variety/ Fertilizer management	Rain fed	21, 20, 20.5, 18.5	14.0	50, 42.85, 46.42, 32.14
Sorghum	-do-		Rain fed	280	225	38.48
Black gram	-do-		Rain fed	5.30	3.50	51.14
Green gram	-do-		Rain fed	4.20	3.0	40.0
Marigold	-do-		Rain fed	5.25	-	-
Til	-do-		Rain fed	5.60	3.20	42.75
Turmeric	-do-		Rain fed	95	75	26.6
Wheat (PBW-175, PBW550, Raj 3765, Raj 3077)	Rabi 2011		Rain fed	19, 17.5, 18, 18.50	12	58.33, 45.83, 50.00, 54.16
Oats	-do-		Rain fed	445	350	21.42
Chickpea	-do-		Rain fed	5.35	4.20	27.38
Lentil	-do-		Rain fed	4.30	2.50	72.00
Dhingri	-do-		Rain fed			
Toria	-do-		Rain fed	6.50	4.80	35.41
Mustard	-do-		Rain fed	6.75	5.00	35.00
Gobisarson	-do-		Rain fed	6.90	5.25	31.42
Okra	-do-		Rain fed	61	44	38.63

Technical Feedback on the demonstrated technologies

S. No	Feed Back
1	Maize variety Plant gene performed better than all other hybrids in current year.
2	PB-til 1 performed exceptionally well in Reasi with yields upto 6.20q/ha.
3	PBW-175 performed much better and was resistant to yellow rust as compared to other varieties especially PBW 550 which was affected by rust.
4.	Toria RSPT-1 showed excellent results and compensated farmers for late sowing of wheat

Farmers' reactions on specific technologies

S. No	Feed Back
1	Farmers were enthusiastic about new maize hybrids in the districts and were willing to pay for these

Mustard										
Safflower										
Sesame										
Sunflower										
Groundnut										
Soybean										
Others (pl.specify)										
Total										
Pulses										
Greengram										
Blackgram										
Bengalgram										
Redgram										
Others (pl.specify)										
Total										
Vegetable crops										
Bottle gourd										
Capsicum										
Cucumber										
Tomato										
Brinjal										
Okra	Varsha Upahhar Sayali special	43	2.0	61.0	44.0	38.63	20000	60000	40000	1:3.00
Onion										
Potato										
Field bean										
Others (pl.specify)										
Total		43	2.0	61.0	44.0	38.63				1:3.00
Commercial crops										
Cotton										
Coconut										
Others (pl.specify)										
Total										
Fodder crops										
Napier (Fodder)										
Maize (Fodder)										
Sorghum (Fodder)	SSG- 114	24	2.0	280	225	38.48	8800	28000	19200	1:3.18
Others (pl.specify)										
Total		24	2.0							

(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		

(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		

(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	Pleurotus spp.	70	-	Yield	2.0 kg/bag	-	-	Farmers got good results from the demonstrations
Apiary								
Sericulture								
Vermi compost								

3.3 Achievements on Training (Including the sponsored, vocational, FLD and trainings under Rainwater Harvesting Unit) :**A) ON Campus**

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

rearing										
Small scale processing	1	0	16	16	0	22	22	0	38	38
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
TOTAL	5	34	22	56	21	36	57	69	44	113
(C) Extension Personnel										
Productivity enhancement in field crops	1	10	0	10	0	0	0	10	0	10
Integrated Pest Management										
Integrated Nutrient management	1	9	0	9	0	0	0	9	0	9
Rejuvenation of old orchards										
Protected cultivation technology										
Formation and Management of SHGs										
Group Dynamics and farmers organization	1	10	0	10	0	0	0	10	0	10
Information networking among farmers										
Capacity building for ICT application										
Care and maintenance of farm machinery and implements										
WTO and IPR issues										
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Women and Child care										
Low cost and nutrient efficient diet designing										
Production and use of organic inputs										
Gender mainstreaming through SHGs										
TOTAL	3	29	0	29	0	0	0	29	0	29

B) OFF Campus

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
(A) Farmers & Farm Women										
I Crop Production										
Weed Management										
Resource Conservation Technologies										
Cropping Systems	1	16	0	16	0	0	0	16	0	16
Crop Diversification										
Integrated Farming										
Water management										
Seed production										
Nursery management										
Integrated Crop Management	1	10	12	22	14	14	28	24	26	50
Fodder production										
Production of organic inputs										
II Horticulture										
a) Vegetable Crops										
Production of low volume and high value crops	1	13	2	15	4	8	12	17	10	27
Off-season vegetables										
Nursery raising	1	16	0	16	0	0	0	16	0	16
Exotic vegetables like Broccoli										
Export potential vegetables										
Grading and standardization										
Protective cultivation (Green Houses, Shade Net etc.)										
b) Fruits										
Training and Pruning	1	8	4	12	8	5	13	16	9	25
Layout and Management of	1	7	0	7	14	0	14	21	0	21

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Management										
Soil fertility management										
Soil and Water Conservation										
Integrated Nutrient Management	2	31	3	34	30	0	30	61	3	64
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient Use Efficiency										
Soil and Water Testing	1	10	0	10	8	0	8	18	0	18
IV Livestock Production and Management										
Dairy Management										
Poultry Management										
Piggery Management										
Rabbit Management										
Disease Management										
Feed management										
Production of quality animal products										
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening										
Design and development of low/minimum cost diet	1	0	0	0	0	22	22	0	22	22
Designing and development for high nutrient efficiency diet	1	2	17	19	0	4	4	2	21	23
Minimization of nutrient loss in	2	0	22	22	0	23	23	0	45	45

[illegible]

[illegible]

[illegible]

[illegible]

maintenance of farm machinery and implements										
WTO and IPR issues										
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Women and Child care										
Low cost and nutrient efficient diet designing										
Production and use of organic inputs										
Gender mainstreaming through SHGs										
TOTAL	2	36	0	36	0	0	0	36	0	36

C) Consolidated table (ON and OFF Campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
(A) Farmers & Farm Women										
I Crop Production										
Weed Management										
Resource Conservation Technologies										
Cropping Systems	1	16	0	16	0	0	0	16	0	16
Crop Diversification										
Integrated Farming										
Water management										
Seed production										
Nursery management										
Integrated Crop Management	1	10	12	22	14	14	28	24	26	50
Fodder production	1	4	0	4	6	5	11	10	5	15
Production of organic inputs										
II Horticulture										
a) Vegetable Crops										
Production of low volume and high value crops	2	21	2	23	10	8	18	31	10	41
Off-season vegetables										
Nursery raising	1	16	0	16	0	0	0	16	0	16
Exotic vegetables like Broccoli										
Export potential vegetables										
Grading and standardization										
Protective cultivation (Green Houses, Shade Net etc.)										
b) Fruits										
Training and Pruning	1	8	4	12	8	5	13	16	9	25

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III Soil Health and Fertility Management										
Soil fertility management										
Soil and Water Conservation										
Integrated Nutrient Management	2	31	3	34	30	0	30	61	3	64
Production and use of organic inputs	1	13	0	13	11	0	11	24	0	24
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient Use Efficiency										
Soil and Water Testing	1	10	0	10	8	0	8	18	0	18
IV Livestock Production and Management										
Dairy Management										
Poultry Management										
Piggery Management										
Rabbit Management										
Disease Management										
Feed management										
Production of quality animal products										
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening										
Design and development of low/minimum cost diet	1	0	0	0	0	22	22	0	22	22
Designing and development for high nutrient efficiency diet	1	2	17	19	0	4	4	2	21	23

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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	1	0	16	16	0	22	22	0	38	38
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
TOTAL	5	34	22	56	21	36	57	69	44	113
(C) Extension Personnel										
Productivity enhancement in field crops	1	10	0	10	0	0	0	10	0	10
Integrated Pest Management										
Integrated Nutrient management	2	24	0	24	0	0	0	24	0	24
Rejuvenation of old orchards										
Protected cultivation technology										
Formation and Management of SHGs										
Group Dynamics and farmers organization	1	10	0	10	0	0	0	10	0	10
Information networking among farmers										
Capacity building for ICT	1	21	0	21	0	0	0	21	0	21

application										
Care and maintenance of farm machinery and implements										
WTO and IPR issues										
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Women and Child care										
Low cost and nutrient efficient diet designing										
Production and use of organic inputs										
Gender mainstreaming through SHGs										
TOTAL	5	65	0	65	0	0	0	65	0	65

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

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
06.05.2011	Farmer	Cultivation of Jowar as fodder crop	Agro forestry	Fodder producti on	1	On Campus	4	0	4	6	5	11	10	5	15
24.05.2011	Farmer	Layout and planting of new orchard aftercare of young plants	Horticulture	Layout and manage ment of orchids	1	Off campus	7	0	7	14	0	14	21	0	21

Details given at annexure I

(D) Vocational training programmes for Rural Youth

Crop / Enterprise	Date	Training title*	Identified Thrust Area	Duratio n (days)	No. of Participants			Self employed after training			Number of persons employed else where
					Male	Femal e	Total	Type of units	Number of units	Number of persons employed	
Post harvest technology	23 to 25- 01- 2012	Fruit preservation.	Post harvest and value addition	3	0	38	38	-	-	-	
Mushroom cultivation	33,31 & 01- 01-2012	Mushroom cultivation:	Crop diversification	3	14	6	20				
Agroforestry	25-06-11 to 27-06-11	Propagation techniques of forest tree species	Nursery management	3	15	0	15				
Hoticulture	27-06-11 to 29-06-11	Raising of fruit plant nursery for self employment	Nursery management	3	19	0	19				
Horticulture	13-03-12 to 16-03-12	Commercial Horticulture: basic principles	Commercial horticulture	5	21	0	21				

(E) Sponsored Training Programmes

S.No	Date	Title	Discipline	Thematic area	Dur ation (da ys)	Clie nt (PF/ RY/ EF)	N o. of c o ur ses	No. of Participants									Spon rin g Agen cy	Amount of fund received (Rs.)
								Others			SC/ST			Total				
								M	F	Tot al	M	F	Tot al		F	Tot al		
1.	31-05-2011	Scaling up of water productivity for enhancing livelihood	Watershed	Water conserv ation	5	PF	5	25	05	30	22	03	25	47	08	55	WM RC Chat ha	-
2.	09-06-11	Scaling up of water productivity for enhancing livelihood	Watershed	-do-	2	PF	2	20	10	30	10	10	20	30	20	50	-do-	
3.	17-12-11	Scaling up of water productivity for enhancing livelihood	watershed	-do-	2	PF	2	25	7	32	15	5	20	40	12	52	-do-	
4.	10-02-12	Scaling up of water productivity for enhancing livelihood	Watershed	-do-	1	PF	2	20	6	26	13	12	25	33	18	51	-do-	
5	2.08.2011`	Cultivation of wild rose for oil purpose	Floriculture	Rose oil	1	PF	3	20	8	28	10	0	10	30	8	38	Floricultur e	
6	24-09-11	Kissan coference	Horticulture	Commer cial horticult ure	1	PF/ EF	1	80	40	12 0	60	20	80	140	60	200	Deptt . of hortic Udh.	
7.	22-02-12	Use of micro irrigation in horticulture.	Horticulture	Water manage ment	2	PF	4	25	3	28	25	4	29	50	7	57	SKU AST-K	
8.	13-03-12 to 16-03-12	Commercial horticulture	-do-	Commer cial horticult ure	5	PF	1 0	22	0	22	0	0	0	22	0	22	Dept of hortic ultur e	10,000
Total					19	-	2 9	237	79	31 8	15 5	54	209	392	133	525		

3.4. Extension Activities (including activities of FLD programmes)

[illegible]

[illegible]

DETAILS OF TECHNOLOGY WEEK CELEBRATIONS during 2011-12 (March-2011)

No. of Technology week celebrated	Types of Activities	No. of Activities	Number of Participants	Related crop/livestock technology
1	Gosthies	2	40	Crop husbandry/ horticulture
	Lectures organised	2	40	-do-
	Exhibition	1	200	-do-
	Film show	2	100	Mushrooms/ vermicompost
	Fair	1	200	-
	Farm Visit	6	200	Crps/ horticulture
	Diagnostic Practicals	-	-	-
	Distribution of Literature (No.)	100	-	-
	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		200	

3.5 Production and supply of Technological products SEED MATERIALS

Major group/class	Crop	Variety	Quantity (qtl.)	Value (Rs.)	Provided to No. of Farmers
OILSEEDS	Til	Punjab til-1	0.25	2500	100
	Toria	RSPT-1	0.40	1200	49
PULSES	Mash	Uttara	2.0	12000	50 farmers of Reasi and to 2 other districts
	Lentil	L-4147	1.70	10200	For FLD
	Arhar		1.0	10000	20 farmers
Cereals	Wheat	PBW-175	5.0	11000	FLD
		PBW 527	5.0	11000	FLD
PULSES			18q	15000	grain
VEGETABLES					
FLOWER CROPS					
OTHERS (Specify)					

SUMMARY

Sl. No.	Major group/class		Quantity (qtl.)	Value (Rs.)	Provided to No. of Farmers
1	CEREALS	-	-	-	
2	OILSEEDS	0.65	0.65	3700	149
3	PULSES		4.70	32000	Pulse FLD in 4 districts.
4	Cereals		28.00	29000	FLd and sold to farmers.

PLANTING MATERIALS

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

SUMMARY

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

BIO PRODUCTS

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

SUMMARY

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

LIVESTOCK

Sl. No.	Type	Breed	Quantity		Value (Rs.)	Provided to No. of Farmers
			(Nos)	Kgs		
Cattle	Buffalo*	Murrah*				
	Buffalo*					
SHEEP AND GOAT	Goat*	Osmanabadi*				
POULTRY	Hen*	Whiteleghorn*				
	Hen*	Giriraja*				
	Quails*					
FISHERIES						
Others (Specify)						

3.6. Literature Developed/Published (with full title, author & reference)

(A) KVK News Letter ((Date of start, Periodicity, number of copies distributed etc.) - nil

(B) Literature developed/published

Item	Title	Authors name	Number of copies
Research papers	Study to access thawarenees of farmers about Farm T.V. programmes	Banarsi lal	-
	Impact of vocational trainings imparted by KVK.	Banarsi lal, vikas Tandon	Accepted
	A study on media preferences of dairy farmers of hilly areas.	Banarsi lal, vikas Tandon , r. P. sahu	Accepted
Total	3		
Technical reports	Monthy and quarterly reports	Banarsi lal, lalit Upadhyay and vikas Tandon	
	ISOPM reports	-do-	
Popular articles	Electronic media in agricultural development	Dr. Banarsi lal , Dr. vikas Tandon	Local daily paper
Leaflets/folders	Self help groups: innovations for income and employment	Banarsi lal, vikas tandon et. al.	
	Parthenium management :A chalange	-do-	
	Agriculture technology Management agency: an Innovative idea of technology dissemination	Banarsi lal, Vikas Tandon	
	Bamboo: asourc of income and employment	Banarsi lal, Vikas Tandon	
Total	4		
GrandTOTAL	26		

(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)

Mushroom Cultivation : A Commercial Venture for the Farmers of Hilly Areas

Reasi is the hilly district of Jammu and Kashmir. Most of the farmers of this district are small and marginal and crops are mostly cultivated under rain fed conditions. Major crops grown in this area are maize, wheat, paddy, mash and potato. Farmers of this district are having very limited resources and mostly they adopt the traditional system of agriculture. The yield of all the crops is low as compared to the national and state average yields. The adoption of modern technologies is very less resulting low production and low socio-economic status of the farmers. There are severe insect-pests and disease problems and also the boars and monkeys menace add up the problem of this particular district.

Sh. Romesh Kumar is a progressive farmer of village Gharn (Aghar Jitto) which is 10 km away from famous religious place Katra in Reasi district of Jammu and Kashmir. His family comprises his wife and two children. He is having 5 acres of land. He was growing maize, wheat and few local varieties of vegetables. He was using the traditional technologies in his fields and monkeys and boars were the great problems in his fields. All the agricultural produce was consumed by his family with very little surplus to sell. His farming system was collapsing and he was unable to mitigate the basic needs of his family.



Sh. Romesh Kumar in his mushroom unit

Sh. Romesh Kumar Effort and KVK interventions

In 2007-08 he initiated the mushroom cultivation. He used local resources and started a small unit for mushroom growing. He was using the poultry manure from his own poultry farm. Initially, he got mediocre results and also faced some failures. He was lacking the scientific knowledge of mushroom cultivation. Then for scientific cultivation he approached the KVK scientists. KVK scientists started constantly visiting his farm and they scientifically guided him and motivated him to grow it round the year. He made 500 sq. feet of shed and now he grows 400 trays. He has also developed a marketing channel to sell his produce. Mushroom cultivation has changed his life. There is a great demand of mushroom in Jammu region. This year, he has earned Rs.2.50 lakhs by selling about 25qt of white button mushrooms. He has

also started growing dhingri and raised some 400 polybags. The crop was satisfactory and till date he has earned Rs.15,000 from dhingri cultivation. Now he was feeling more confident as his income increased. He has become the motivating factor for other farmers in his area. KVK scientists motivated other farmers also to cultivate mushroom as it can change their socio-economic status.

KVK in the form of farmers trainings, vocational trainings, front line demonstrations, farmer-scientists interaction, farmers exposure visit, dissemination of production technologies through radio, TV, literature has led to increase in mushroom and dhingri cultivation. Slowly but surely many more farmers of the area are becoming interested in this viable and sealable agro-enterprise.



Sh. Romesh Kumar in his dhingri unit

Honours to Sh. Romesh Kumar

Sh. Romesh Kumar success in mushroom cultivation is inspiring the other farmers of his area in shifting the villagers to mushroom and dhingri cultivation for better economic returns. Sh. Romesh Kumar has received the award from Agriculture Minister of State Sh. Gulam Hasan Mir as mushroom entrepreneur in a farmer fair organised by department of agriculture. He was felicitated by the Governor of State Sh. N.N. Vohra in a farmer fair organised by the Sher-e-Kashmir University of Agricultural Sciences and Technology, Jammu as a mushroom entrepreneur. He is having good rapport with the KVK scientists and always participates in the training programmes and farmers fairs conducted by the Krishi Vigyan Kendra.

Summary

Efforts of the Krishi Vigyan Kendra scientists and Sh. Romesh Kumar have given new shape to the mushroom growing venture. The quantity and quality of mushroom has increased by their efforts. Their efforts are attracting the other farmers of this area also towards mushroom cultivation.

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

KVK Reasi is a distantly located KVK and its location often causes hindrance in people approaching the KVK. Still we are trying our level best to reach to farthest of people. KVK makes best use of panchayati raj system and personnel contacts to spread our schedules of programmes

. The village sarpanch and lambardars and chowkidars are used for giving message for training programmes to the villagers. KVK reasi is also encouraging young school children attracting them to farming. A large numbers of Field days, awareness camps and ghoshthies are held to popularize new technologies. KVK lays out Front line demonstrations at prominent places to generate interest of farmers in new seed. KVK takes part in all line department programmes to have maximum reach towards the farmers.

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.	Cocoon production.	Local Khaddis are utilized for silk preparation. Instead of single crop now growers are taking two crops in a year.	Low cost technology
2.	Bamboo and its products.	Tokris/ furniture items and toys are prepared from bamboo.	Low cost technology
3.	Kas cultivation.	Formation of ropes and tying materials.	Low cost technology
4.	Tikki masala preparation	Local groups especially women make this spice masala which is used in chaats and tiki shops at tourist places.	Low cost technology.

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

- Identification of courses for farmers/farm women consultations in SAC with various line departments, public meetings and any requests received from farmer representatives/ groups.
- Rural Youth -- special interest of Rural Youths the trainings are kept in accordance to suitability of area and interest of this young group. The economical returns are also kept in mind before formulating any course.

- Inservice personnel as per suggestions in SAC meeting as well as calendar received from Chief Agriculture/ horticulture officer.

3.11 Field activities

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

3.12. Activities of Soil and Water Testing Laboratory

Status of establishment of Lab : Not established

- 1. Year of establishment :
- 2. List of equipments purchased with amount :

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

3. Details of samples analyzed so far :

Details	No. of Samples	No. of Farmers	No. of Villages	Amount realized
Soil Samples	100	100	25	-
Water Samples				
Plant Samples				
Petiole Samples				
Total	100	100	25	

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)
1. Use of hybrid seeds in maize.	50	40	-	-
2. Promotion of mustard and Gobi sarson in the district.	50	10	-	-
3. Promotion of fodder crops in the district.	50	30	-	-
4. Use of weedicide in maize crop.	100	25	-	-
5. Use of weedicide in wheat.	50	30	-	-
6. Control of mustard aphid.	50	25	-	-
7. Management of cutworm and termite in cereals.	50	25	-	-
8. Management of yellow rust in wheat.	100	20	-	-
9. Use of chemicals in vegetables.	100	20	-	-
10. Cultivation of mushrooms in Reasi.	150	5	-	-

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

1. ADOPTION OF SINGLE CROSS MAIZE HYBRIDS:

KVK Reasi since last three years is laying out front line demonstrations in big way to promote the hybrid maize in the district. We have laid out more than 50 ha in demonstrations since 2008. People of the area had no information of hybrid maize and were growing the old local varieties which were yielding even less than half in most of the cases. KVK imparted regular trainings to the farmers and took their demonstrations in far furlong areas and peoples were made to believe that their production is bound to increase by adopting cultural practices with hybrid maize. People of the area were also made aware through various campaigns about the potential of hybrid maize. Now the people of the area themselves ask for the hybrid maize even if they are made to pay Rs 50 for one kg of hybrid seed. The grain also fetches good price as it is in high demand with the poultry farm people. Thus the farmers are no more hesitant to grow yellow hybrids for which they used to show the reluctance.

Farmers were earlier reluctant to use this costly input which was required every year and also the preference is towards white maize. KVK Reasi also introduced high quality protein maize which is nutritionally important for people of hilly area. This year alone more than 500 quintals of maize hybrid seed was lifted from department of agriculture, Reasi and figures are no less in district Udhampur as well. Thus we can say that hybrid maize is now the culture of these maize growing districts.

2, Development of floriculture.

Since the year 2008, KVK Reasi has been keenly working towards the development of floriculture in the district. Our active efforts are now showing results and farmers of the district are cultivating marigold in their fields which finds ready acceptability in the local markets due to many holy shrines in the district as well as in Jammu. This district is surely getting ahead to become the leader in floriculture. KVK along with the department of floriculture is working in developing this enterprise. KVK is formulating farmers group for the development of marigold cultivation in Katra as well as in Shiv khori. We have laid out OFT's on marigold and also laid out front line demonstrations on farmers field so as to encourage them into this enterprise. Marigold cultivation alongside maize as mixed crop is catching farmer's fancy. After harvesting maize the farmer can very easily sell their merigolds which were planted in between the maize plants. Average yield of marigold (pure crop) gives about Rs 1, 00,000 per ha and especially those farmers who have approach to some irrigation are slowly but surely moving into this enterprise. KVK is also looking to extend the season of cultivation so as to get more than one crop. There is ample demand of flowers and our farmers are already earning Rs 50,000 to 60,000 per season from marigold. Efforts of KVK Reasi as well as line department has resulted in increasing the area under marigold to 25 ha in 2011-12.

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

5.0 LINKAGES

5.1 Functional linkage with different organizations

Name of organization	Nature of linkage
1. Department of Agriculture	Joint diagnostic survey, field days/ awareness camps/ kisan melas/ ATMA/ RKVY etc.
2. Department of Horticulture	Joint diagnostic survey/ campaigns/ kisan mela /ATMA/RKVY
3. Department of animal husbandry.	Participation in meeting / sadbhavna camps/ backyard poultry
4. Department of fisheries.	participation in meeting / technology week /
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.

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 camp		Department of agriculture	-
HTMM1	March 2012	Dept. of horticulture, Udhampur	15000
Floriculture		Deptt. of floriculture, Jammu	-
Plasticulture scheme Leh	Jan-2012	RHRSS, Leh	-
Scaling up of water productivity for improved livelihood.	May-dec,2012	WMRC Chatha	-
Division of agro forestry		Agroforestry Chatha	-
Division of pomology		Chatha	-

5.3 Details of linkage with ATMA

a) Is ATMA implemented in your district **Yes**

S. No.	Programme	Nature of linkage	Remarks
1	ATMA	Training to farmers and extension officers.	KVK has been allotted Rs 50,000 for laying out the On farm Trials. KVK laid out five offt in the districts.
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 22 farmers from Udhampur , sponsored by department of horticulture, Udhampur.	

5.5 Nature of linkage with National Fisheries Development Board nil

S. No.	Programme	Nature of linkage	Remarks

6. PERFORMANCE OF INFRASTRUCTURE IN KVK

6.1 Performance of demonstration units (other than instructional farm)

[illegible]

6.2 Performance of instructional farm (Crops) including seed production

[illegible]

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/Ry/EF)	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/Ry/EF)	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	

6.5 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 2011				
Total				
May 2011				
Total				
June 2011				
Total				
July 2011				
Total				
August 2011				
Total				
September 2011				
Total				
October 2011				
Total				
November 2011				
Total				
December 2011				
Total				
January 2012				
Total				
February 2012				
Total				
March 2012	Training on horticulture	22	110	
Total		22	110	
Grand total		22	110	

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	
With KVK	J&K bank	Reasi	18557

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

Item	Released by ICAR		Expenditure		Unspent balance as on 1 st April 2012
	Kharif 2011	Rabi 2011-12	Kharif 2011	Rabi 2011-12	
Inputs					
Extension activities					
TA/DA/POL etc.					
TOTAL					

7.3 Utilization of funds under FLD on Pulses (Rs. In Lakhs)

Item	Released by ICAR		Expenditure		Unspent balance as on 1 st April 2012
	Kharif 2011	Rabi 2011-12	Kharif 2011	Rabi 2011-12	
Inputs					
Extension activities					
TA/DA/POL etc.					
TOTAL					

7.4 Utilization of funds under FLD on Cotton (Rs. In Lakhs)

Item	Released by ICAR		Expenditure		Unspent balance as on 1 st April 2012
	Kharif 2011	Rabi 2011-12	Kharif 2011	Rabi 2011-12	
Inputs					
Extension activities					
TA/DA/POL etc.					
TOTAL					

7.5 Utilization of KVK funds during the year 2011-12 (up to March 2012)

S. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	Pay & Allowances	44.55	44.55	44.54
2	Traveling allowances	0.60	0.60	0.59
3	Contingencies			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	1.64	1.64	1.61
B	POL, repair of vehicles, tractor and equipments			
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	2.46	2.46	2.40
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)	0.10	0.10	0.10
TOTAL (B)				
C. REVOLVING FUND				
GRAND TOTAL (A+B+C)		49.35	49.35	49.24

7.5 Status of revolving fund (Rs. in lakhs) for the three years

Year	Opening balance as on 1 st April	Income during the year	Expenditure during the year	Net balance in hand as on 1 st April of each year
April 2008 to March 2009				
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

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

8.1 Constraints

(a) Administrative: The vacant posts of subject matter specialists must be filled on priority. KVK staff should also be engaged in research activities of the University for their skill up gradation as well as knowledge improvement.

(b) Financial: There should be provision for impressed money with the KVK for smooth operations as KVK activities are time bound and have to be carried out well in time.

(c) Technical: There should be regular trainings for KVK staff as well and KVK scientists should have close liaison with the faculty scientists. KVK should be free to purchase the inputs / technologies available in the private sector.

ANNEXURES (I-IV)

Annexure I: LIST OF TRAINING PROGRAMMES 2011-12.

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
06.05.2011	Farmer	Cultivation of Jowar as fodder crop	Agro forestry	Fodder producti on	1	On Campus	4	0	4	6	5	11	10	5	15
24.05.2011	Farmer	Layout and planting of new orchard aftercare of young plants	Horticulture	Layout and manage ment of orchids	1	Off campus	7	0	7	14	0	14	21	0	21
31.05.2011	Farmer	Formation and management of SHG	Ext. Education	Formati on and manage ment of SHG	1	Off campus	16	1	17	16	2	18	32	3	35
01.06.2011	Farmer	Role of micronutrients in fruit culture	Hort.		1	Off campus	24	3	27	21	0	21	45	3	48
02.06.2011	Farmer	Scientific Cultivation of Turmeric & ginger	Hort.		1	Off campus	12	4	21	4	1	5	16	5	21
03.06.2011	Farmer	Role of front line demo. In rural development	Ext. Edu.	Leaders hip develop ment	1	On campus	6	1	7	10	1	11	16	2	18
06.06.2011	F.W	Post harvest care and management of crops	H.S		1	Off campus	0	0	0	13	5	18	13	5	18
8.6.2011	Farmer	Integrated nutrient management in horticulture crops	Hort.		1	Off campus	7	0	7	9	0	9	16	0	16
10.6.2011	Farmer	Role of medicinal and aromatic plants	Hort.		1	Off campus	21	3	24	13	2	15	34	5	39
13.06.2011	Farmer	Natural resource management for sustainable dev.	Agro.		1	Off Campus	10	2	12	3	0	3	13	2	15
14.06.2011	F.W	Planting and prep. Of nutritionally rich diet	H.S		1	Off campus	0	0	0	0	22	22	0	22	22

		for infants and preschoolers													
12.07.2011	Farmer	Soil testing techniques & importance	S.S		1	Off campus	10	0	10	8	0	8	18	0	18
18.07.2011	M & F.M	Viable income generating units for rural farm women & adol. School dropouts & org. of SHGS & their consolidation.	H.S		1	On campus	1	12	13	0	0	0	1	12	13
02.08.2011	Farmer	Cut flower production for improving Hort. Rural economy			1	On Campus	19	0	19	17	0	17	36	0	36
08.08.2011	Farmer	Awareness programme on maize crop	Ext. Edu.	Integrated crop management	1	Off Campus	10	12	22	14	14	28	24	26	50
08.09.2011	Farmer	FLDS on rural dev.	Ext. Edu.	Leadership development	1	On Campus	8	0	8	5	0	5	13	0	13
14.09.2011	Farmer	Use of organic manures & fertilizers	S.S		1	Off Campus	14	0	14	10	0	10	24	0	24
22.09.2011	Farmer	Video show for the farmers on vermicomposting	S.S		1	On Campus	13	0	13	11	0	11	24	0	24
27.09.2011	Farmer	Cut flower production for improving the rural economy	Hort.		1	Off Campus	17	2	19	3	0	3	22	0	22
13.10.2011	Farmer	Production tec. On maize	Agronomy		1	Off Campus	16	0	16	0	0	0	16	0	16
13.10.2011	Farmer	Imp. Fodder crops of Kandi areas	Agroforestry		1	Off Campus	15	0	15	4	0	4	19	0	19
21.10.2011	Farmer	Nursery raising tech. in veg. crops	Hort.		1	Off Campus	16	0	16	0	0	0	16	0	16
22.10.2011	Farmer	Imp. Medicinal tree sp.	Agroforestry		1	Off Campus	11	2	13	3	0	3	14	2	16
23.10.2011	Farmer	Training Prog. On various agril. Schemes & prog. For rural upliftment	Ext. Edu.	Mobilization of social capital	1	On Campus	7	0	7	9	0	9	16	0	16

31.10.2011	F.W	Training prog. On processing of milk	H.S		1	Off Campus	0	0	0	0	18	18	0	18	18
11.11.2011	F.W	Self help group formation and management	Ext. Edu	Formation and management of SHG	1	Off Campus	12	1	13	0	3	3	1	15	16
14.12.2011	F.W	Prevention and processing of H.S fruits & vegetables			1	Off Campus	0	22	22	0	5	5	0	27	27
15.12.2011	F.W	Formation and management of SHGS	Ext. Edu.	Formation and management of SHG	1	Off Campus	0	23	23	0	3	3	0	26	26
22.12.2011	Farmer	Agroforestry techniques for maximizing prod.	Agroforestry		1	Off Campus	12	0	12	9	1	10	21	1	22
23.12.2011	W. Farmer	Planning and prep. Of iron rich H.S diet	H.S		1	Off Campus	2	17	19	0	4	4	2	21	23
5.12.2011	Farmer	Minor forest products for livelihood gen.	Agroforestry		1	Off Campus	18	0	18	7	0	7	25	0	25
05.01.2012	Farmer	Training and pruning of fruit crops	Hort.		1	Off Campus	8	4	12	8	5	13	16	9	25
03.02.2012	M&F	Entrepreneurial opportunities in organic farming	Ext. Edu.	Entrepreneurial development of farmers	1	Off Campus	4	0	4	12	2	14	16	2	18
15.02.2012	Farmer	Role of information and comm.. tech. in rural development	Ext. Edu.		1	Off Campus	15	0	15	3	0	3	18	0	18
17.02.2012	Farmer	Imp. Fodder tree of kandi areas	Agroforestry		1	Off Campus	21	0	21	14	0	14	35	0	35
22.02.2012	Farmer	Micro irrigation in hort. Crops	Hort.		1	Off Campus	27	1	28	2	0	2	29	1	30
23.02.2012	Farmer	Micro irrigation in hort. Crops	Hort.		1	On Campus	8	2	10	9	4	13	17	6	23
06.03.2012	Farmer	Training prog. On mushroom growing	Plant protection		1	Off Campus	13	2	15	4	8	12	17	10	27
09.03.2012	Farmer	Entrepreneurial	Ext. Edu.	Entrepre	1	Off	2	21	23	2	8	10	4	29	33

		opportunities in agri.		neurial develop ment of farmers		Campus									
17.03.2012	F	Renewable energy resources for protection of forests	Agroforestr y		1	Off Campus	5	0	5	10	0	10	15	0	15
18.03.2012	F	Awareness prog. On veg. crop	Ext. Edu.	Entrepre neurial develop ment of farmers	1	On Campus	8	0	8	6	0	6	14	0	14
27.03.2012	F	Entrepreneurial opportunities in veg. growing	Ext. Edu	Entrepre neurial develop ment of farmers	1	Off Campus	5	0	5	12	0	12	17	0	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 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, HPKVV, 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

3.

4. 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 4th scientific advisory committee meeting of KVK Reasi held on 03-11-2010.

The 4th scientific advisory committee (SAC) meeting of Krishi Vigyan Kendra, Udhampur (Reasi) was held in the conference hall of District Development commissioner, Reasi on 03-11-2011 at 11.00 A.M. Dr. K. S. Risam, Director Extension Education, SKUAST-J chaired the meeting. Members of the advisory committee including District Officers from various line departments of Agriculture, Horticulture, Forest, Soil conservation, Social forestry, Animal husbandry, Social welfare etc. and progressive farmers attended the meeting (List of participants enclosed).

Dr. Vikas Tandon Programme Coordinator, KVK, Reasi welcomed the chairman and the worthy members of scientific advisory committee to the 4th SAC meeting of the Kendra. Programme coordinator appraised the house that during the last three years this KVK has become fully functional KVK of Jammu division. He requested the members to provide their valuable suggestions for the current Rabi season for improving the production and productivity of the district. He also requested the Line departments to utilise the facilities developed at KVK by sending their field functionaries and progressive farmers to this KVK.

Agenda 1. Confirmation of the Proceedings

The proceedings of second Scientific Advisory Committee meeting were circulated to the worthy members vide letter no AUJ/PC/KVK/Udh/10-11/F-21/420-35 Dated 31-10-2011. The proceedings were unanimously confirmed by the house.

Agenda 2. Action Taken Report

&

Agenda 3. Presentation of Annual Progress Report

Programme Coordinator, KVK, Reasi presented the report about action taken on the issues raised in the previous SAC meeting held on 06-12-2010. He also presented the annual progress report of Krishi Vigyan Kendra for the year 2010-11 (up to October, 2011).

He appraised the house about the various activities undertaken by the KVK in two districts of Udhampur and Reasi. During this period, KVK imparted 40 trainings to the farmers of district Udhampur and Reasi in various disciplines of agriculture, wherein a total of 840 farmers including those from SC/ST communities as well as farm women were trained in latest technologies available in the field of agriculture. He also informed about organizing four vocational training programmes on different aspects by the KVK. That included horticulture, Mushroom cultivation and agroforestry.

KVK organized five in-service training programmes to refresh the knowledge of extension officers. Krishi Vigyan Kendra, Reasi/Udhampur. Programme coordinator also appraised the house about the on farm trials completed and being implemented during the current season.

During Rabi 2010 and kharif 2011, Krishi Vigyan Kendra laid out front line demonstrations on wheat, Sarson, chickpea, maize, fodder crops and more prominently on spices, vegetables and backyard poultry.

KVK is regularly conducting diagnostic visits and provided on spot guidance to the farmers by visiting their fields. Many farmers visited the KVK during the year in order to have suggestions on agricultural issues and for attaining solution of their farm related 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. This year Krishi Vigyan Kendra participated in all block level ATMA fairs and increased their reach to all the four blocks of Reasi. KVK also organised exposure visits for the farmers to Jammu and SKUAST-J.

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

1. Director Extension Education instructed that KVK should lay out its demonstrations in other villages known for vegetable cultivation and not only at Bhabber. **(Action: KVK, Reasi)**
2. Director Extension Education also suggested that no. of mushroom units in the district should increase and KVK should put in all efforts to increase mushroom cultivation in the district. **(Action: KVK, Reasi)**
3. Director Extension Education also instructed that KVK should also encourage beekeeping and should have 3-4 colonies at our KVK farm. CAO Reasi assured of providing beehives to the KVK in April. **(Action: KVK, Reasi)**

4. Programme coordinator requested the Director for providing experts in Agronomy, Plant protection and animal science. DEE suggested that KVK's will either get Soil scientist or agronomist.
(Action: DEE, SKUAST-J)
5. Director Extension Education instructed to lay out FLD/OFT with improved Ginger variety this year as new variety could not be arranged during the current season and advised PC to be prepared for next season.
(Action: KVK, Reasi)
6. District Sericulture Officer suggested carrying out the training programme on medicinal plants and sericulture and nursery raising techniques.
(Action:KVK,Reasi/CAO/ CHO)
7. Chief Horticulture officer, Reasi suggested identifying suitable varieties for the district and trying to lay out FLD on some fruit crops.
(Action: KVK, Reasi)
8. SMS horticulture suggested that bud wood can be collected and in situ grafting of some plants can be undertaken for quick results.
(Action: KVK, Reasi)
9. Director Extension Education also instructed to lay out few demonstrations/ OFT's on temperate horticulture this year
(Action: KVK, Reasi)
10. DEE also advised to provide demonstrations on mushroom growers for spreading of this venture.
(Action: KVK, Reasi)
11. Director Extension Education instructed to conduct training programme on horticulture at Goldhi (Udhampur).
(Action: KVK, Reasi)
12. Chief Horticulture officer Reasi suggested conducting short term courses on horticulture at district level. CHO Udhampur also suggested that training programmes of KVK and Department could be held jointly at KVK and expenses could be paid to the KVK..
(Action: KVK, Reasi)
13. Progressive farm women requested to provide specialised trainings to their women group. (bag stitching etc.)
(Action: KVK, Reasi)
14. Director Extension Education instructed the KVK to go for seed production at their farm.
(Action: KVK, Reasi)
15. Director Extension Education advised to conduct in service training programmes at KVK itself and CAO agreed to send their functionaries to the KVK.
(Action:KVK,Reasi)
16. Director Extension Education instructed for videography and action photographs for the programmes conducted by KVK.
(Action:KVK,Reasi)
17. DEE also announced that resource persons can be sent from Jammu for conducting specialised programmes for which experts are not available at KVK and also experts from Line departments can be utilised for such programmes.
(Action: KVK, / CAO/ CHO, Reasi)
18. Director Extension Education advised to give trainings to self help groups at Malad and for forming farmer clubs at Reasi.
(Action: KVK, Reasi)
19. Chief agriculture officer suggested that soil samples can be analysed for major nutrients at their lab.
(Action: KVK, CAO Reasi)
20. CAO also suggested that winter maize can be successful in some areas and DEE advised the district coordinators to seek CAO's help for winter maize demonstrations.
(Action : KVK, Reasi)
21. Director also advised to involve sarpanches and public representatives in KVK's programmes.
(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 (Rabi). Director Extension Education suggested that since the programme is already approved KVK should go ahead with it. He however suggested to lay demonstrations on Baby corn and fix training programmes and resource persons whenever needed will be provided by the directorate.