ANNUAL REPORT 2016-17
Krishi Vigyan Kendra ,Reasi

1. GENERAL INFORMATION ABOUT THE KVK

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

Address	Telephone		E mail
	Office	FAX	
Krishi Vigyan Kendra, Reasi Vill. Tanda ,P/o Dera Baba Banda Bahadur Teh. and Distt. Reasi Pin: 182311	01991-287802	01991-287802	kvkreasi@gmail.com

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

Address	Telephone		E mail
	Office	FAX	
Sher-e-Kashmir University of Agricultural Sciences and Technology of Jammu. Main Campus, Chatha.	0191-2262133 2262134	0191-2262028	vcskuastj@gmail.com

1.3. Name of the Programme Coordinator with phone, mobile No & e-mail

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr .Banarsi Lal	01991-287802	9697625519	dr.banarsi2000@gmail.com

1.4. Year of sanction:2005

1.5. Staff Position (as on 31st March 2017)

Sl. No.	Sanctioned post	Name of the incumbent	Age	Discipline with highest degree obt.	Pay Band & Grade Pay (Rs.)	Present basic (Rs.)	Date of joining in KVK	Permanent /Temporary	Category (SC/ST/ OBC/ Others)
1	Programme Coordinator	Dr. Banarsi Lal	40	Ph. D. Agril Extension	15600-39,100 (7000)	31980	21.06.07	Permanent	Gen
2	Subject Matter Specialist	Mr. Lalit Upadhyay	40	M.Sc. Agroforestry	15600-39,100 (6000)	27390	06.12.07	Permanent	Gen
3	Subject Matter Specialist	Dr. Mandeep Singh Azad	33	M.V. Sc. (Genetics & Breeding)	15600-39,100 (5400)	22960	04.04.12	Permanent	Gen
4	Subject Matter Specialist	Dr.Sanjay Koushal	39	Ph.D. Agronomy	15600-39,100 (5400)	21630	25.06.14	Permanent	Gen
5	Subject Matter Specialist	Dr. Suja Nabi Quereshi	40	Ph.D Fruit Sciences	15600-39,100 (5400)	21630	19.06.15	Permanent	Gen
6	Subject Matter Specialist	Vacant				-	-	-	-
7	Programme Assistant	Mrs Shalini Kajuria	41	MSc	9300-34800 (4200)	15470	.2016	Permanent	Gen

8	Computer Programmer	Mr. Jagdish Kumar	43	M.Sc. IT	9300-34800 (4200)	16140	03.06.13	Permanent	SC
9	Farm Manager	Mr. Arvinder Kumar	39	M.Sc. Agril. Extension	9300-34800 (4200)	16140	11.08.08	Permanent	Gen
10	Accountant / Superintendent	Vacant							
11	Stenographer	Manhor Lal	30	B.Com.	5200-20200 (2400)	10770	19.01.12	Permanent	SC
12	Driver	Mohd Iqbal	43	10th	5200-20200 (1900)	10060	23.7.2010	Permanent	Gen
13	Driver	Manjeet Singh	46	8th	5200-20200 (1900)			Permanent	Gen
14	Supporting staff	Vacant					2016	Permanent	
15	Supporting staff	Sanjay Kumar	39	10th	5200-20200(1300)	8600	1.06.2010	Permanent	Gen

1.6. Total land with KVK (in 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	ICAR	Feb,2009	400	30.17	-	-	-
4	Demonstration Units	ICAR						
5	Dairy	ICAR	Feb,2008	85 (1)	4.87	-	-	-
6	Poultry	KVK	Jan, 2014		0.50			
7	Vermicompost	KVK	Feb, 2014		0.30			
8	Mushroom	KVK	Nov. 2013		0.05			
9	Fencing	ICAR	-	-	-	-	-	Incomplete / broken

10	Rain Water harvesting system		-	-	-	-		
11	Threshing floor		-	-	-	-		
12	Farm godown		-	-	-	-	-	

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
1.Tractor H.M.T.	2006	422650	55 hrs (app) (2016-17)	Working
2.TATA Sumo Victa	2006	500000	7570 km (2016-17)	Working
3. Hero Honda motorcycle	2011	50000	684 km(2016-17)	Working

C) Equipments & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
Leveller	2006	7000	Good
Disc Harrow	2006	23100	Good
Disc plough	2006	20750	Good
Cultivator	2006	15600	Good
Trolley	2006	74000	Good
HP Computer (1 No)	2007	40000	Good
UPS 1Kv	2007	8336	Good
LCD Projector	2007	100387	Good
Printer (hp Laserjet)	2007	13520	Good
HP Computer (1 No) (old)	-	-	Unserviceable
HP Computer (01 no) & printer& UPS	2010	42457	Good
SLR Digital camera (Sony)	2010	24900	Good
Fax machine (Sharp)	2010	7000	Good
Xerox Machine	2011	-	Good
HP Computer	2012	410000	Good
Weighing balance (100 kg)	2012	8000	Good
Maharaja Whiteline heaters	2013	9870	Good
Compaq LED monitor	2013	11000	Good
HP colorjet printer	2013	15000	Good
Sony handycam camcorder	2013	19990	Good
HP Scanjet Scanner	2013	4200	Good
Wimax Wi fi internet	2013	1575	Good
Podium	2013	11000	Good
UPS Microtek (2 nos)	2014	3450	Good
Router (D-Link)wi-fi (1 no) 2no USB dongal	2014	5250	Good
Poly green house structure (1 no)	2015	29582	Good

1.8. A). Details SAC meeting* conducted in the year 2016-17

Sl. No.	Date	Name and Designation of Participants	No. of absentees	Salient Recommendations	Action taken
1.	8.03.2017	1. Dr. R.K Arora, Assoc Director Extension, 2. Sh. Ajay Gupta Chief, HDO, Reasi	02	Annexure Minutes added	Annexure

		3. Sh. P.L.Bhat, Chief Agriculture Officer Reasi 4. Sh. Bharat Bhushan, Asstt. Director Fisheries 5.M.A.Malik ,VAS, Reasi 6.Ab.Rashid,Flock Supervisor, Reasi 7.Sh. A.P. Singh, Branch Manager, J&K Bank Dera 8.Avtar Singh, JAEO, Reasi 9.Sh.R.C.Pandoh,AEO,Dangakote 8. Sh. Tilak Raj, Progressive farmer 9. S. Jatinder Pal Singh Sodhi , Progressive Farmer 10. Smt. Neelam Devi, Progressive Farm Women 11. Smt. Sunita Devi, Progressive farmer 12. Sh.Vikrant Sharma,Distt.Flor. Officer, Reasi 13. Dr. Banarsi Lal, PC			
2.					

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

2. DETAILS OF DISTRICT (2016-17)

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

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

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

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

S. No	Agro-climatic Zone	Characteristics
1	Subtropical zone	This includes areas between 380-800m amsl. The lower belt of Reasi where the KVK is located falls in this zone. This area experiences hot summers followed by cold winters and area also experiences autumn frost. The major chunk of

		precipitation is received during monsoons. The soils are mostly sandy loam and clay loam with normal OM. Most of the area is rain fed with very little irrigation. The annual rainfall of the district is 1000 to 1100 mm. major chunk of it is received from may-September. The mean maximum and minimum temperature ranges between 35- 40 ^{0}C and 10-12 ^{0}C respectively. Agriculture in this area is diverse and is completely rain fed. The area has low productivity and low input usage.
2	Intermediate Zone	Situated between 800-1500m, amsl, this area experiences definite winters and a hot spell of summer. The major chunk of precipitation is received in July-Aug. Most part of Udhampur and Reasi falls in this zone. The annual rainfall of the district is about 1100 mm. The mean maximum and minimum temperature ranges between 35- 40 ^{0}C and 10-12 ^{0}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 an d 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

S. No	Crop	Area (ha)	Production (Qtls)	Productivity (Qtls /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

2.5. Weather data

Month	Rainfall (mm)	Temperature ^{0} C		Relative Humidity (%)
		Maximum	Minimum	

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

Category	Population	Production	Productivity
Cattle			
Crossbred	79476 (Udh) 15889 (Reasi)		
Indigenous	316099 (Udh) 126575 (Reasi)		
Buffalo	136104 (Udh) 78780 (Reasi0		
Sheep			
Crossbred	175337 (Udh)		

	210382 (Reasi)		
Indigenous	245268 (Udh) 300474 (Reasi)		
Goats	161432 (Udh) 174774 (Reasi)		
Pigs			
Crossbred			
Indigenous			
Rabbits			
Poultry			
Hens	117564 (Udh) 89767 (Reasi		
Desi			
Improved			
Ducks			
Turkey and others			

Category	**Area**	**Production**	**Productivity**
Fish			
Marine			
Inland			
Prawn			
Scampi			
Shrimp			

2.7 Details of Operational area / Villages (2016-17)

Sl. No.	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Reasi	Reasi	Panasa, Gran More, Seela and Mari	Wheat, maize, Dhingri, black gram, green gram, Chickpea, fruits and vegetables.	1.Low production 2. Lack of awareness on improved varieties of pulses. 3. Insect-pest and disease attacks.. 4. No information on Weed management in cereals and pulses. 5. Low egg laying in local breeds of poultry.	1. Promotion of improved varieties of pulses. 2. Promotion of high yielding/improved varieties of cereals. 3. Integrated disease and insect-pest management. 4. Weed management in cereals and pulses. 5. Promotion of backyard poultry. 6. Management of loose smut and yellow rust of wheat. (7)Introduction of hybrid/improved varieties of vegetables

2	Reasi	Pouni	Later, Bharakh, Malad, Talwara, ,Pouni, Kanha,Khailad, Khairal, , Kansi Patta, Kansi Brahmna	Wheat, maize, vegetables, Dhingri, spices, oilseeds, poultry farming.	1. Lack of knowledge of hybrid varieties of maize. 2. Use of conventional planting material for the spices. 3. Diseases in turmeric and ginger. 4. Occurrence of Paddy blast. 5. Loose smut and yellow rust diseases in wheat crop. 6. Lack of knowledge of scientific cultivation of vegetables. 7. Lack of knowledge of improved varieties of oilseeds and pulses. 8.Lack of knowledge on commercial organic vegetables growing 9.Senile orchards	1. Promotion of hybrid varieties of maize. 2. Promotion of backyard poultry. 3. Replacement of spices varieties. 4. Management of Rhizome rot in spices. 5. Promotion of improved varieties of improved varieties of oilseeds and pulses. 6. Management of loose smut and yellow rust of wheat. 7.Scientific mushroom cultivation 8.Promotion of commercial organic farming 9.Promotion of rejuvenation of orchards
3	Reasi	Reasi	Fadeha,Rajwal,Dera, Tanda, Seri, Chumbian Mansoo, Kanjali, Bhabbar, Kundra , Shafanoo.	Maize/wheat/vegetables/poultry production/ sericulture/ dhingri/floriculture	1. Lack of availability of hybrid/high yielding varieties of creals. 2 .Lack of knowledge of scientific breeding, feeding and management of animals. 3. Lack of diseases and insect-pests management in crops. 4. Lack of awareness for fruit and vegetables processing. 5. Sericulture related seasonal problems. 6.Lack of knowledge of hybrid varieties of marigold. 7.Lack of knowledge of weedicides in cereals. 8.Lack of knowledge of scientific marigold cultivation	1. Promotion of new single cross hybrids of maize and high yielding varieties of wheat. 2. Insect and disease management in cereals. 3. Promotion and formation of SHGs. 4. Fruit and vegetable processing techniques. 5. Promotion of improved sericulture. 6. Promotion of hybrid varieties/improved varieties of marigold. 7. Management of weeds in cereals. 8.Promotion of scientific marigold cultivation

4.	Udhampur	Tikri	Majalta/ Chirai Muthal,Lehnu/Sundrani	Maize/wheat/pulses/oilseeds/Pultry	1. Low yield of cereals due to unscientific cultivation. 2. Lack of awareness on improved varieties of oilseeds and pulses. 3. Lack of awareness on seed treatment in cereals. 4. Lack of awareness on weed management in maize. 5. Lack of knowledge of egg laying varieties of poultry.	1. Promotion of new varieties of cereals in the area. 2. Promotion of improved varieties of oilseeds and pulses. 3. Seed treatment in cereals. 4. Weed management in maize. 5. Promotion of egg laying varieties of poultry.
5	Udhampur	Chenani	Sudhmahadev, Basht, Chenani, Gauri ,Beli	Vegetables Maize/mash	Poor yields Old varieties Poor soil management and indiscriminate plant protection. Lack of knowledge of fruit processing. Lack of single cross new hybrids of maize.	1. Promotion of new hybrids of maize, integrated pest management. 2. introduction of new variety of mash 3. Promotion of olive cultivation. 4. Promotion of fruit processing in the area. 5. Introduction and evaluation of new vegetable hybrids.
6.	Udhampur	Panchari	Panchari,Saddal,Dubi Galli	Poultry/maize/ wheat/dairy	1. Low yield of cereals due to unscientific cultivation. 2. Lack of awareness on improved varieties of oilseeds and pulses. 3. Lack of awareness on seed treatment in cereals. 4. Lack of awareness on weed management in maize. 5. Lack of knowledge of egg laying varieties of poultry.	1. Awareness on new varieties of cereals in the area. 2. Awareness on new varieties of oilseeds and pulses. 3. Seed treatment in cereals. 4. Weed management in maize. 5. Awareness on egg laying varieties of poultry.

7.	Reasi	Katra	Sirah/Pangal/ Kulia/Chamba, chakbhakta/ Moori/ Didimorh/ Agharjitto, Dheerti, Chamarya	Wheat, maize, vegetables, oilseeds,pulses,floriculture, poultry	Low productivity of flowers. Low production of cereals. Lack of availability hybrid/improved varieties' of vegetables Lack of awareness of dhingri/mushroom cultivation Lack of knowledge of scientific cultivation of oilseeds and pulses. Lack of knowledge of high yielding/hybrid varieties of horticultural crops Lack of scientific knowledge diversified agriculture	Awareness on hybrid/improved varieties of marigold in the area. Introduction of single cross maize hybrids. Superior vegetable seeds. Introduction of hybrid varieties of vegetables Promotion of improved varieties of oilseeds and pulses. Promotion of egg laying varieties of poultry. Introduction of new fruit crops varieties. Promotion of scientific diversification in agriculture
8.	Reasi	Thuroo	Dharmari/ Thoru/Narloo/Arnas/Salal/Sajoga/Thuroo	Maize/wheat/veg./poultry/mushroom cultivation/pulses	1. Low productivity of maize crop. 2. Lack of awareness of improved/hybrid varieties of vegetables. 3. Low production of pulses. 4.Lack of awareness of egg laying varieties of poultry 5.Lack of knowledge in scientific cultivation of dhingri/mushroom 6.Lack of technical knowledge of temperate fruits.	1. Introduction of single cross hybrids of maize. 2. Introduction of improved varieties of pulses. 3. Introduction of hybrid var. of vegetables. 4.Introduction of egg laying variety of poultry 5. Scientific cultivation of dhingri. 7.Promotion of scientific cultivation of temperate fruits

9.	Reasi	Mahore	Sungdi/Bandi//Mahore	Maize/veg./poultry/mushroom cultivation/pulses/fruits	1. Low productivity of maize crop. 2. Lack of awareness of improved/hybrid varieties of vegetables. 3. Low production of pulses. 4.Lack of awareness of egg laying varieties of poultry 5.Lack of knowledge in scientific cultivation of dhingri/mushroom 6.Lack of knowledge of training and pruning in temperate fruits.	1. Introduction of single cross hybrids of maize. 2. Introduction of improved varieties of wheat. 3. Introduction of hybrid var. of vegetables. 4.Introduction of egg laying variety of poultry 5. Scientific cultivation of dhingri. 6.Scientific cultivation of fruit plants 7.Introduction of pruning and training of temperate fruits.
10.	Reasi	Arnas	Arnas/Salal	Maize/veg./poultry/mushroom cultivation/pulses/fruits	1. Low productivity of maize crop. 2. Lack of awareness of improved/hybrid varieties of vegetables. 3. Low production of pulses. 4.Lack of awareness of egg laying varieties of poultry 5.Lack of knowledge in scientific cultivation of dhingri/mushroom (6)Lack of knowledge in scientific cultivation of temperate fruit plants	1. Introduction of single cross hybrids of maize. 2. Introduction of improved varieties of wheat. 3. Introduction of hybrid var. of vegetables. 4.Awareness on egg laying variety of poultry 5. Scientific cultivation of dhingri. 6.Scientific cultivation of fruit plants (7) Scientific cultivation of fruit plants.

2.8 Priority/thrust areas

Crop/Enterprise	Thrust area
Cereals-Maize	Introduction of single cross commercial maize hybrids, Integrated Nutrient Management, weed management, common insect / pests management
Wheat	Introduction of new high yielding varieties of wheat, seed treatment, weed management, disease and pest management including termite control and rodents control. Seed production of new varieties.
Fodder	Promotion of new varieties, Increasing area under fodder crops. Round the year fodder production.
Oilseed	Introduction of new improved varieties, Promotion of insect pest management, control of Alternaria blight, Use of balanced nutrition. INM in oilseeds.
Pulses	Promotion of improved varieties, Weed management, insect /pest and disease management.

Vegetables	Promotion of hybrids, introduction of new varieties. Diseases and pest management. Round the year vegetable cultivation, healthy nursery raising of vegetable crops, kitchen gardening.
Animal husbandry	To increase production potential of livestock by improved breeding, feeding and management practices. Promotion of backyard poultry
Mushroom cultivation	-Promotion of mushroom cultivation, growing of more species for year round cultivation.
Floriculture	Promotion of loose flower cultivation in the district, integrated nutrient management, introduction of new varieties. Disease management in marigold.
Agro-forestry	Fodder trees, Medicinal & Aromatic plants, Environment conservation.
SHGs/Farmers clubs	Formation , management and strengthening of SHGs/farmers clubs.
Fruits	Insect-pest and disease management in fruit plants.
Organic Farming	Promotion of organic farming, preparation of organic inputs

* An example for guidance only

3. TECHNICAL ACHIEVEMENTS

3.A. Details of target and achievements of mandatory activities by KVK during 2016-17

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**
10	11	40	44	241	350	241	350

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	54	54	1120	1194	20	21	400	420
Rural youth	10	6	150	184				
Extn. Functionaries	10	07	150	136				

Seed Production (Qtl.)		**Planting material (Nos.)**	
5		**6**	
Target	**Achievement**	**Target**	**Achievement**
	21.5 qt.		7500

Livestock, poultry strains and fingerlings (No.)		**Bio-products (Kg)**	
7		**8**	
Target	***Achievement***	***Target***	***Achievement***

3.B. Abstract of interventions undertaken

APR 2016-17

S. No	Thrust area	Crop/ Enterprise	Identified Problem	Interventions										
				Title of OFT if any	Title of FLD if any	Number of Training (farmers)	Number of Training (Youths)	Number of Training (extension personnel)	Extension activities (No.)	Supply of seeds (Qtl.)	Supply of planting materials (No.)	Supply of live stock (No.)	Supply of bio products	
													No.	Kg
1.	Weed management in cereals	Maize	Low yield in maize crop due to weed infestation	Weed management in maize	Introduction of hyb. Var. of maize	03	-	-	02	5qt	-	-	-	-
2.	Integrated weed management in pulses	Mash	Low yields due to weed infestation in mash	Integrated weed management in mash	Introduction of improved varieties of mash	2	-	-	02	0.60 qt	-	-	-	-
3.	Management og ginger rot	Ginger	Low yield in ginger due to management of ginger rot	Management of ginger rot		2	-		-1	-	-	-	-	-
4.	Evaluation of wheat varieties	Wheat	Lack of awareness on high yielding varieties in wheat	Varietal evaluative in wheat	Promotion of improved HYV s of wheat	02	-		01	5 qt.	-	-	-	-

5.	Increase in growth and production in Poultry birds	Poultry birds	Low growth due to use of low producing varieties and use of maize mixed ration.	Effect of concentrate mixed feeding with maize and standardized (Pre starter, starter, finisher) feeding on the growth of poultry birds	Use of high producing varieties	02	-	1	2	-	-	1725(birds)	-	-
6.	Parasitic control in sheep and goat	Shep and goat	Poor growth of sheep and goat	Effect and role of leaf meals on growth, production and parasitic control in sheep and goat	Introduction of leaf meal and complete feed block	2	-	-	1	-	-	100 (UMMB)	-	-

3.1 Achievements on technologies assessed and refined

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

Thematic areas	Cereal	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Varietal Evaluation	1									1
Seed / Plant production										
Weed Management			2							2
Integrated Crop Management										
Integrated Nutrient Management										
Integrated Farming										

System										
Mushroom cultivation										
Drudgery reduction										
Farm machineries										
Value addition										
Integrated Pest Management										
Integrated Disease Management	2									2
Resource conservation technology										
Small Scale income generating enterprises										
TOTAL	3		2							5

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

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

Thematic areas	**Cereals**	**Oilseeds**	**Pulses**	**Commercial Crops**	**Vegetables**	**Fruits**	**Flower**	**Plantation crops**	**Tuber Crops**	**TOTAL**
Varietal Evaluation										
Seed / Plant production						2				2
Weed Management										
Integrated Crop Management										
Integrated Nutrient Management										
Integrated Farming System										
Mushroom cultivation										
Drudgery reduction										
Farm machineries										

Post Harvest Technology										
Integrated Pest Management										
Integrated Disease Management										
Resource conservation technology										
Small Scale income generating enterprises										
TOTAL						2				2

***** *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		1						1
Value Addition								
Production and Management								
Feed and Fodder								
Small Scale income generating enterprises								
TOTAL								1

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	1							1
Disease of Management								
Value Addition								
Production and Management								
Feed and Fodder								
Small Scale income generating enterprises								

TOTAL								1

3.2. Achievements on technologies Assessed and Refined

3.2.1. Technologies Assessed under various Crops

Thematic areas	*Crop*	*Name of the technology assessed*	*No. of trials*	*Number of farmers*	*Area in ha (Per trail covering all the Technological Options)*
Integrated Nutrient Management					
Varietal Evaluation	Wheat	Varietal evaluation in wheat	4	4	0.20
Integrated Pest Management					
Integrated Crop Management					
Integrated Disease Management	Ginger	Management of ginger rot	4	4	0.10
	Chilli	Management of chilli wilt	4	4	0.05
Small Scale Income Generation Enterprises					
Weed Management	Maize	Weed Management in maize	4	4	0.2
	Mash	Integrated weed management in mash	4	4	0.2
Resource Conservation Technology					
Farm Machineries					
Integrated Farming System					
Seed / Plant production					
Value addition					
Drudgery Reduction					
Storage Technique					
Mushroom cultivation					
Total			20	20	

3.2.2. Technologies Refined under various Crops

Thematic areas	*Crop*	*Name of the technology assessed*	*No. of trials*	*Number of farmers*	*Area in ha (Per trail covering all the Technological Options)*

Thematic areas	*Crop*	*Name of the technology assessed*	*No. of trials*	*Number of farmers*	*Area in ha (Per trail covering all the Technological Options)*
Integrated Nutrient Management					
Varietal Evaluation					
Integrated Pest Management					
Integrated Crop Management	Mango	Effect of 2,4-D in mango	4	4	0.5
	Brinjal	Effect of spacing on yield of brinjal	4	4	0.5
Integrated Disease Management					
Small Scale Income Generation Enterprises					
Weed Management					
Resource Conservation Technology					
Farm Machineries					
Integrated Farming System					
Seed / Plant production					
Value addition					
Drudgery Reduction					
Storage Technique					
Mushroom cultivation					
Total			**8**	**8**	

3.2.3. Technologies assessed under Livestock and other enterprises

Thematic areas	*Name of the livestock enterprise*	*Name of the technology assessed*	*No. of trials*	*No. of farmers*
Evaluation of breeds				
Nutrition management				
Disease management	Livestock	Early detection of mastitis using California Mastitis Test and	4	4

		composition of different antibiotics		
Value addition				
Production and management				
Feed and fodder				
Small scale income generating enterprises				
Total			4	4

3.2.4. Technologies Refined under Livestock and other enterprises

Thematic areas	***Name of the livestock enterprise***	***Name of the technology assessed***	***No. of trials***	***No. of farmers***
Evaluation of breeds				
Nutrition management	Sheep and goat	Effect and role of leaf meal on the growth ,production and parasitic control in sheep and goat	4	4
Disease management				
Value addition				
Production and management				
Feed and fodder				
Small scale income generating enterprises				
Total			3	5

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

A. Technology Assessment

Trial 1

1) Title : Weed management in maize
2) Problem diagnose/defined : Low productivity due to weed in maize crop
3) Details of technologies selected for assessment /refinement
: T1 Farmer's Practice: Two Hand weeding and hoeing after 20 and 45 DAS
T2 Recommended: Pre-emergence Atrazine 1.5kg / ha
T3 : Laudis 42% SC (tembotrione) 120 g /ha 25 DAS
4) Source of technology : SKUAST-J
5) Production system thematic area : Wheat-maize
6) Thematic area : Weed management
7) Performance of the Technology with performance indicators: T1:20.4q/ha
T2: 22.6 q/ha
T3: 29.6 q/ha
8) Final recommendation for micro level situation : T3 gave the better results and farmers can use it for the eradication of weeds
9) Constraints identified and feedback for research : Lack of knowledge of weedicides and lack of availability of weedicides
10) Process of farmers participation and their reaction : Framers were keenly interested to use the quality weedicides as they were ready to adopt technology

B). 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
Maize	Rainfed	Low productivity due to weed in maize crop	Weed management in maize	4	T1 Farmer's Practice: Two Hand weeding and hoeing after 20 and 45 DAS T2 Recommended: Pre-emergence Atrazine 1.5kg / ha T3 :Laudis 42% SC (tembotrione) 120 g /ha 25 DAS	Yield	T1:20.4q/ha T2: 22.6 q/ha T3: 29.6 q/ha	T3 gave the better results and farmers can use it for the eradication of weeds gave the better results and farmers can use it for the eradication of weeds	Farmers were satisfied with

**** No. of farmers***

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
T1 Farmer's Practice: Two Hand weeding and hoeing after 20 and 45 DAS T2 Recommended: Pre-emergence Atrazine 1.5kg / ha T3 :Laudis 42% SC (tembotrione) 120 g /ha 25 DAS	T1:20.4q/ha T2: 22.6 q/ha T3: 29.6 q/ha	T1-26500 T2-29800 T3-33840	T1-1:2.28 T2-1:2.78 T3-1:3.02

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

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

A. Technology Assessment

Trial 2

1) Title : Integrated weed management in mash
2) Problem diagnose/defined : Low productivity due to weed in pulses
3) Details of technologies selected for assessment /refinement :
   T1 Farmer's Practice One Hand weeding after 30DAS
   T2 Recommended:Pendimethalin@30 EC 1ltr/ha +1 HW 30 DAS
   T3 Imazethapyr100g/ha 15 and 30 DAS (50 g each)
4) Source of technology : SKUAST-J
5) Production system thematic area : Rainfed
6) Thematic area : Integrated weed management
7) Performance of the
   5.45 q/ha
   7.2 q/ha
   8.4 q/ha
8) Performance indicators :
   Final recommendation for Technology with micro level situation : Imazethapyr100g/ha gave the better results as compared to T2 and T3
9) Constraints identified and feedback for research : Lack of knowledge of weedicides and lack of availability of weedicides
10) Process of farmers participation and their reaction : Farmers were satisfied with the results and were ready to use this technology on their fields

B). 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
Mash(Black gram)	Rainfed	Low productivity due to weed in pulses	Integrated weed management in mash	4	T1Farmer's Practice One Hand weeding after 30DAS T2 Recommended:Pendimethalin@30 EC 1ltr/ha +1 HW 30 DAS T3 :Imazethapyr100g/ha 15 and 30 DAS (50 g each)	yield	5.45 q/ha 7.2 q/ha 8.4 q/ha	Imazethapyr100g/ha gave the better results as compared to T2 and T3	Farmers were satisfied with the results and were ready to use this technology on their fields

**** No. of farmers***

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
T1Farmer's Practice One Hand weeding after 30DAS T2 Recommended:Pendimethalin@30 EC 1ltr/ha +1 HW 30 DAS T3 :Imazethapyr100g/ha 15 and 30 DAS (50 g each)	T1-5.45 q/ha T2-7.2 q/ha T3-8.4 q/ha	T1-25500 T2-34500 T3-39700	T1-1:2.21 T2-1:2.72 T3-1:3.12

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

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

Trial 3

1) Title : Early Detection of mastitis using California Mastitis Test and comparison of different antibiotics

2) Problem diagnose/defined : Low growth and milk productivity due to mastitis

3). Details of technologies selected for assessment/refinement:

T1: Enrofloxacin
T2:Gentamycin
T3: intrammamry Cephalosporins

4. Source of technology :
5. Production system thematic area: Poor milk yield due to mastitis
6. Thematic area : Feed and nutrient management in poultry
7. Performance of the Technology with performance indicators : Initial results were satisfactory and the whole year results awaited
8. Final recommendation for micro level situation : In progress
9. Constraints identified and feedback for research : Lack of awareness on use of antibiotic for mastitis control
10. Process of farmers participation and their reaction : Initial results were effective with good monitorial returns

2). 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
Livestock		Low growth and milk production	Early Detection of mastitis using California Mastitis Test and comparison of different antibiotics	5	: T1: Enrofloxacin T2:Gentamycin T3: intrammamry Cephalosporins	Weight gain,growth,disease incidence ,milk yield	In progress	In progress	Initial results were effective	In progress

**** No. of farmers***

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

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

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

Trial 4

A. Technology Assessment

Trial 5

1)	Title	:	Evaluation of different wheat varieties.
2)	Problem diagnose/defined	:	Low yield of wheat due to use of local wheat varieties
3)	Details of technologies selected for assessment /refinement	:	T0-farmer practice T1-JAUW-598 T2-Raj.3765 T3-PBW-175
		:	
4)	Source of Technology	:	SKUAST-J
5)	Production system thematic area	:	Rainfed cereal based system
6)	Thematic area	:	Varietal evaluation
7)	Performance of the Technology with performance indicators	:	Results of PBW-175 were better than the other wheat varieties.
8)	Final recommendation for micro level situation	:	PBW-175 gave better results.
9)	Constraints identified and feedback for research	:	Lack of availability of quality wheat seeds in Reasi distt.
10)	Process of farmers participation and their reaction		Farmers were satisfied after observing the demonstrated fields of OFTs

B). Results of On Farm Trials

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Wheat	Rainfed	Low productivity of local varieties	Evaluation of different wheat varieties	4	T0-farmer practice T1-JAUW-598 T2-Raj.3765 T3-PBW-175	Yield	T0-18.3 T1- 24 q/ha T2- 26.0 q/ha T3- 30.0 q/ha	Results of PBW-175 were better than the other wheat varieties.	Farmers were satisfied after observing the demonstrated fields of OFTs and were eager to adopt the technology

**** No. of farmers***

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
T0-farmer practice T1-JAUW-598 T2-Raj.3765 T3-PBW-175	T0-18.3 T1- 24 q/ha T2- 26.0 q/ha T3- 30.0 q/ha	T0-21215 qt/ha T1-23450qt/ha T2-25100qt/ha T3-27300qt/ha	1:2.10 1:2.23 1:2.78 1:3.12

****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

A. Technology Assessment

1) Title : Management of Ginger Rot.

2) Problem diagnose/defined : Low productivity due to weed in pulses

3) Details of technologies selected for assessment/refinement : T1-Farmers' practice
T2-Recommended practice
(Seed treatment with Mancozeb + bavistin or Ridomil)
T3-Recommended practice + Drenching bavistin or ridomil

4) Source of technology : SKUAST-J

5) Production system thematic area : Rainfed

6) Thematic area : Spices production

7) Performance of the Technology with performance indicators :
T1 - 90 q/ha
T2 - 125 q/ha
T3 - 140 q/a :

8) Final recommendation for micro level situation : T3-Recommended practice + Drenching bavistin or ridomil gave the better results

9) Constraints identified and feedback for research : Lack of availability of quality fungicides

10) Process of farmers participation and their reaction : Farmers were satisfied after observing the results of OFTs.

B). Results of On Farm Trials

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Ginger	Rainfed	Low productivity of ginger due to rhizome rot of ginger	Management of Rhizome rot in Ginger.	3	T1-Farmers' practice T2-Recommended practice (Seed treatment with Mancozeb + bavistin or Ridomil) T3-Recommended practice + Drenching bavistin or ridomil	Yield	T1- 90 q/ha T2- 125 q/ha T3-140 q/a :	T3-Recommended practice + Drenching bavistin or ridomil gave the beter results	Farmers were satisfied after observing the results of OFTs.

**** No. of farmers***

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
T1-Farmers' practice T2-Recommended practice (Seed treatment with Mancozeb + bavistin or Ridomil) T3-Recommended practice + Drenching bavistin or ridomil	T1- 90 q/ha T2- 125 q/ha T3-140 q/a :	3,00,000 3,60,000 4,1,0000	1:2.48 1: 3.01 1: 3.35

Trial 6

A. Technology Assessment

1)	Title	:	Chilli wilt disease management.
2)	Problem diagnose/defined	:	Low yield of chilli due to chilli wilt
3)	Details of technologies selected for assessment /refinement	:	T1-Farmers' practice (without Seed treatment). T2-Recommended practice(Seed treatment with Carbendazim+Thiram 1:1 ratio) . T3- T2 + Drenching with Carbendazim)
4)	Source of Technology:	SKUAST-J	
5)	Production system thematic area	:	Rainfed
6)	Thematic area	:	Spices production
7)	Performance of the Technology with performance indicators	:	Farmers were satisfied after observing the results of T3 i.e.130qt/ha

8) Final recommendation for micro level situation : T3- T2 + Drenching with Carbendazim gives the better results

9)	Constraints identified and feedback for research	:	Lack of knowledge of seed treatment in chilli
10)	Farmer participation and their reaction	:	Farmers were satisfied after observing the results of OFTs.

B). 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
Chilli	Rainfed	Low productivity of chilli due to chilli wilt	Chilli wilt disease management.	3	T1-Farmers' practice (without Seed treatment). T2-Recommended practice(Seed treatment with Carbendazim+Thiram 1:1 ratio) .T3- T2 + Drenching with Carbendazim)	Yield	75.0 q/ha 105. q/ha 150.0 q/ha	T3 gave the better results	Farmers were satisfied after observing the results of OFTs.

**** No. of farmers***

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
T1-Farmers' practice (without Seed treatment). T2-Recommended practice(Seed treatment with Carbendazim+Thiram 1:1 ratio) . T3- T2 + Drenching with Carbendazim)	75.0 q/ha 105. q/ha 150.0 q/ha	3,05,000 3,65,000 4,20,000	1:2.65 1: 3.50 1:3.85

****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 1

A. Technology Refinement

1)	Title	:	Effect of spacing on the yield of brinjal.
2)	Problem diagnose/defined	:	Low productivity due to lack of knowledge of spacing in brinjal crop
3)	Details of technologies selected for assessment /refinement	:	T1 - Farmer practice T2 - 60x45cm T3 - 90x60cm
4)	Source of technology	:	SKUAST-J
5)	Production system thematic area	:	Rainfed
6)	Thematic area	:	ICM
7)	Performance of the Technology with Performance indicators	:	T3 gave the best result (155qtl/ha) as compared to T2(140qtl/ha) and T1(110qtl/ha)
8)	Final recommendation for micro level situation	:	T3 gave the better results as compared to T2 and T3
9)	Constraints identified and feedback for research	:	Lack of knowledge of spacing in brinjal crop
10)	Process of farmers participation and their reaction to use this technology	:	Farmers were satisfied with the results and were on their fields

B). Results of On Farm Trials

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Brinjal	Rainfed	Low productivity due to lack of knowledge of spacing in brinjal crop	Effect of spacing on the yield of brinjal.	4	T1-Farmer practice T2-60x45cm T3-90x60cm	yield	T1-110qtl/ha T2-140qtl/ha T3 -155qtl/ha	T3 gave the best result (155qtl/ha) as compared to T2(140qtl/ha) and T1(110qtl/ha)	Farmers were satisfied with the results and were ready to use this technology on their fields

**** No. of farmers***

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
T1-Farmer practice T2-60x45cm T3-90x60cm	T1-110qtl/ha T2-140qtl/ha T3 -155qtl/ha	T1-24500 T2-33700 T3-39900	1:2.02 1:3.10 1:3.60

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

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

Trial 2

A. Technology Refinement

1) Title : Effect & Role of leaf meals on growth, production and parasitic control in sheep and goat

2) Problem diagnose/defined: Low growth and productivity due to nutrient and mineral deficiency

3) Details of technologies selected for assessment/refinement: T1-Farmer practice
T2-Leaf meal
T3-Complete Feed block

4).	Source of technology	:	SKUAST-Jammu
5)	Production system thematic area	:	Malnourished animals due to nutrient and mineral deficiency in feed and fodders
6).	Thematic area	:	Feed and nutrient management in sheep and goat
7)	Performance of the Technology with performance indicators	:	T2 gave the better result and helped in small control of parasitic load in sheep and goats. Decrease load of Eggs in feaces and overall improvement in health status and weight gain in comparison to other animals
8)	Final recommendation for micro level situation	:	T2 gave the better result and helped in small control of parasitic load in sheep and goats.
9)	Constraints identified and feedback for research and fodders.	:	Lack of awareness on use of balanced ration and quality feed
10)	Process of farmers participation and their reaction	:	Farmers were satisfied with the results and were ready to use this technology on their fields

2). 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
Sheep and goat		Low growth and production	Effect & Role of leaf meals on growth, production and parasitic control in sheep and goat	5	T1-Farmer practice T2-Leaf meal T3-Complete Feed block	Improved overall health status, increase feeding, drinking, increase milk yield,	In progress		Initial results were satisfactory and farmers were ready to adopt technology	

**** No. of farmers***

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

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

***** Give details of the technology assessed or refined a***

nd farmer's practice

Trial 3

A. Technology Refinment

1) Title : Effect of 2, 4-D on fruit drop in mango.

1) Problem diagnose/defined: Low mango production due to heavy fruit drop
2) Details of technologies selected for assessment /refinement :
   T0-Control
   T1-10ppm
   T2-20ppm
   T3-30ppm
3) Production system thematic area : Rainfed
4) Thematic area : Fruit Production
5) Performance of the Technology with performance indicators : T3 gave the best result with 14% increase in yield

   Final recommendation for micro level situation : T3-30 ppm ppm gives the best results and farmers can use it at their farms to reduce the mango fruit drop.
   Constraints identified and feedback for research : Lack of availability of quality growth regulators in Reasi distt.
6) Process of farmers participation and their reaction : Farmers were satisfied after observing the demonstrated fields of OFTs.

B). Results of On Farm Trials

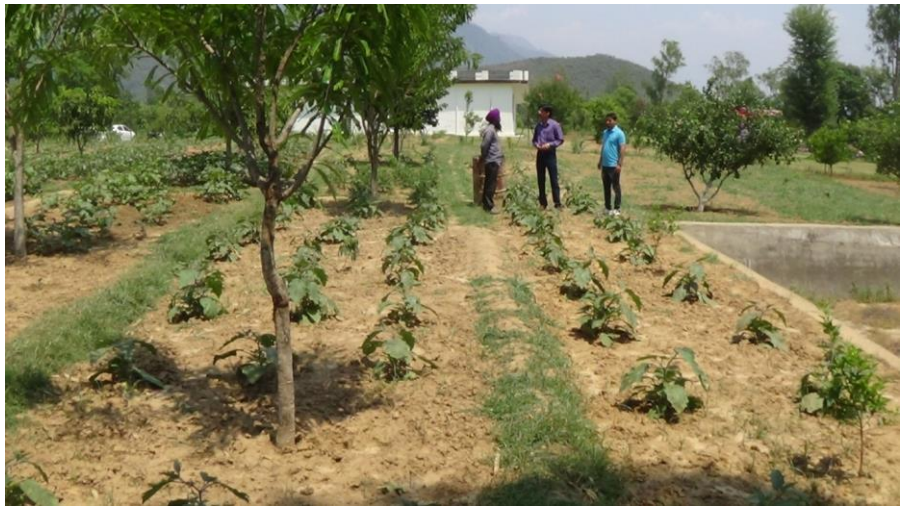
Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Mango	Rainfed	Low productivity of mango due to fruit drop	Effect of 2, 4-D on fruit drop in mango.	4	T0-Control T1-10ppm T2-20ppm T3-30ppm	Fruit drop and Yield	T0-8.37% T1-9.11% T2-12.01% T3-14.00%	T3 gave the best results as it reduces 14 % of fruit drop	Initial Fruit set results were effective

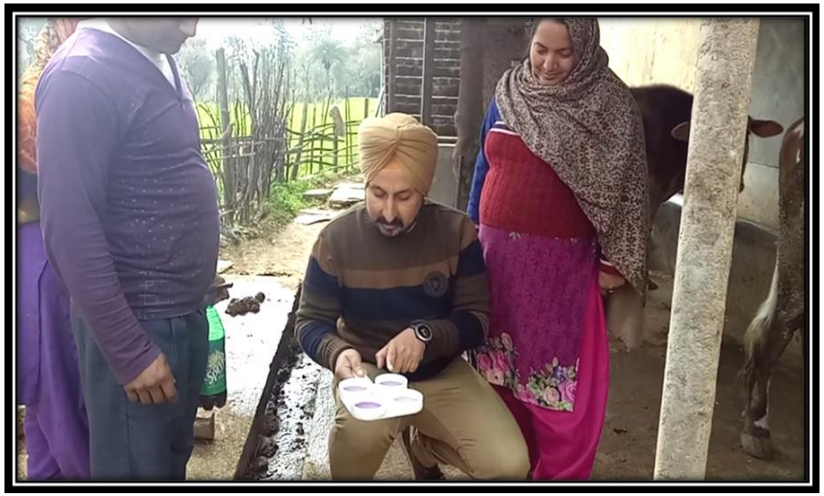
**** No. of farmers***

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
T0-Control T1-10ppm T2-20ppm T3-30ppm	T0-3.2 tones/ha T2-4.3 tones/ha T3-4.6 tones/ha T3-4.9 tones/ha	T0-63000/ha T1-71000/ha T2-79500/ha T3-82300/ha	1:2.26 1:2.89 1:3.14

****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***





PART 4 - FRONTLINE DEMONSTRATIONS

4. A. Summary of FLDs implemented during 2016-17

Sl. No.	*Category*	*Farming Situation*	*Season and Year*	*Crop*	*Variety/ breed*	*Hybrid*	*Thematic area*	*Technology Demonstrated*	*Area (ha)*		*No. of farmers/ demonstration*			*Reasons for shortfall in achievement*
									Proposed	*Actual*	*SC/ST*	*Others*	*Total*	
1	Oilseeds	Rainfed	Kharif 2016											
		Rainfed	Rbi 2016	Gobi Sarson	RSPN-25	-	Improved varieties	Improved variety	6	6	20	27	47	
2	Pulses	Rainfed	Kharif 2016	Black Gram	PU-31	-	Improved varieties of Pulses	Improved var. of black gram	4	4	12	39	51	
		Rainfed	Kharif 2016	Green Gram	SML-668	-	Improved varieties of Pulses	Improved var. of green gram	2	2	8	10	18	
		Rainfed	Rabi 2016	Chickpea	GNG-1581	-	Improved varieties of pulses	Improved var. of chickpea	6	6	17	64	81	
		Rainfed	Kharif 2016	Maize	**PG – 2320, PG-2475**	Hybrid	Hybrid var.	Hybrid var	5	5	16	28	44	
3	Cereals	Rainfed	Rabi 2016	wheat	PBW-175	-	High yielding varieties of wheat	Improved varieties	5	5	6	36	42	
4	Vegetables	Rainfed	2016-17	Okra, bottle gourd, bitter gourd	Paravani Kranti, King of Market, Pride of India, Purple Vienna,		Hybrid var. of vegetables	Hybrid var	2.0	2.0	21	24	45	

Sl. No.	*Category*	*Farming Situation*	*Season and Year*	*Crop*	*Variety/ breed*	*Hybrid*	*Thematic area*	*Technology Demonstrated*	*Area (ha)*		*No. of farmers/ demonstration*			*Reasons for shortfall in achievement*
									Proposed	*Actual*	*SC/ST*	*Others*	*Total*	
					Purple Top,Varsha Uphaar etc. etc									
5	Millets													
6	Fodder	Rainfed	Rabi 2016-17	Oats	Kent	Improved variety	Improved varieties	Improved varieties	2	4	5	29	34	
		Rainfed	Kharif 2016-17	Sorghum	SSG-1	Hyb.	Improved varieties	Improved varieties	2	2	2	21	23	
7	Flowers	Rainfed	Kharif 2016-17	Marigold	Pusa Narangi and Pusa Basanti		Improved varieties	Improved varieties	2	2	12	22	34	
8	Fruit	Rainfed	2016-17											
	Spices and condiments													
9	Commercial													
10	Medicinal and aromatic													
`11	Mushroom													
	Dhingri	Rainfed	2016-17	Dhingri	Pleoratus sp.		Scientific mushroom cultivation	Pleoratus sp.	-	32 bags	3	5	8	

Sl. No.	*Category*	*Farming Situation*	*Season and Year*	*Crop*	*Variety/ breed*	*Hybrid*	*Thematic area*	*Technology Demonstrated*	*Area (ha)*		*No. of farmers/ demonstration*			*Reasons for shortfall in achievement*
									Proposed	*Actual*	*SC/ST*	*Others*	*Total*	
12	Fodder													
13	Dairy													
14	Poultry		2016-17	Back yard Poultry birds	Kadaknath		Backyard Poultry framing	Kadaknath birds	2000	1725			159	Poultry birds
15	Piggery													
16	Sheep and goat													
17	Button mushroom													
18	Vermicompost													
19	IFS													
20	Apiculture													
21	Implements													
22	Others (specify)													

Soil fertility status of FLDs during 2016-2017

Sl. No.	*Category*	*Farming Situation*	*Season and Year*	*Crop*	*Variety/ breed*	*Hybrid*	*Thematic area*	*Technology Demonstrated*	*Status of soil (Kg/Acre)*			*Previous crop grown*
									N	*P*	*K*	
1.	Oilseeds											
2.	Pulses											
3.	Cereals											
4.	Millets											
5.	Vegetables											
6.	Flowers											
7.	Fruit											
8.	Spices and condiments											
9.	Commercial											
10.	Medicinal and aromatic											
11.	Fodder											
12.	Plantation											
13.	Dairy											
14.	Poultry											
15.	Piggery											
16.	Sheep and goat											
17.	Button mushroom											
18.	Vermicompost											
19.	Apiculture											
20.	Implements											
21.	Others (specify)											

B. Results of Frontline Demonstrations

4.B.1. Crops

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.

** BCR= GROSS RETURN/GROSS COST ; H – Highest Yield, L – Lowest Yield A – Average Yield

Crop	*Name of the technology demonstrated*	*Variety*	*Hybrid*	*Farming situation*	*No. of Demo.*	*Area (ha)*	*Yield (q/ha)*				*% Increase*	**Economics of demonstration (Rs./ha)*				**Economics of check (Rs./ha)*			
							Demo			*Check*		*Gross Cost*	*Gross Return*	*Net Return*	*** BCR*	*Gross Cost*	*Gross Return*	*Net Return*	*** BCR*
							H	L	A										
Oilseeds	Improved varieties																		
	Improved varieties	RSPN-25	-	Rainfed	47	6	8.6	5.8	6.8	4.7	44.68	11600	44300	32700	1:3.81	10900	29010	18110	1:2.66
Pulses	Improved var. of Black Gram	PU-31	-	Rainfed	51	4	6.8	5.7	6.7	4.4	52.00	12200	42500	30300	01:3.5	11800	32200	20400	01:2.7
	Improved var. of Chickpea	GNG-1581	-	Rainfed	81	6	10.5	5.7	8.2	5.3	54.71	9320	41700	32380	01:04.5	8730	29300	20570	01:03.3
	Improved var. of Greengram	SML-668	-	Rainfed	18	2	5.9	3.4	4.5	3.1	45.16	6900	17900	11000	1:2.59	5280	25100	16250	1.2.92
Cereals	Scientific maize cultivation	**PG – 2320, PG-2475**	Hybrid	Rainfed	43	5	36	20	26	14	**57.14**	12500	37,100	24600	1:2.96	9980	21200	11220	1:2.12
	High yielding variety wheat	PBW-175		Rainfed	40	5	38	19	28.30	17.4	62.64	12080	34900	22820	1:2..88	8500	19400	10900	1:2.28
Millets																			
Vegetables	High Yielding/Hyb. Varieties of vegetables	ParavaniKranti, King of Market, Pride of India, Purple Vienna, Purple Top ,Varsha Uphaar etc	Hyb.	Rainfed	45	2													

Mushroom																			
Dhingri	Improved var. of Dhingri	Pleoratus	-	Rainfed	8	32 bags	-	-				-	-	-		-	-	-	-
Flowers	Improved varieties of marigold	Pusa Narangi and Pusa Basanti	-	Rainfed	35	2	140	90	121	80	51	23753	140350	116597	1:4.9	18636	55560		
Fodder	High Yielding varieties	SSG	-	Rainfed		2	460	350	410	315	43.8	34500	61500	27000	1:1.78	30500	47250		
	High Yielding varieties	Kent	-	Rainfed	2	4	360	265	325	240	54	34000	48750	15000	1:1.44	30000	36000		
Fruit																			
Spices and condiments																			
Commercial																			
Medicinal and aromatic																			
Fodder	Improved varieties	Kent	-	Rain fed	20	2	500	420	465	350	30.000	15000	46500	31500	1:2.1	14000	35000	21000	1:1.5
	Improved varieties	SSG	-	Rain fed	20	2	300	230	262	220	20.04	10000	26500	16500	1:1.65	8800	19000	10200	1:1.30

Data on additional parameters other than yield (viz., reduction of percentage in weed/pest/ diseases etc.)

Data on other parameters in relation to technology demonstrated					
Crop	***Technology to be demonstrated***	***Variety/ Hybrid***	***Parameter with unit***	***Demo***	***Check***

4.B.2. Livestock and related enterprises

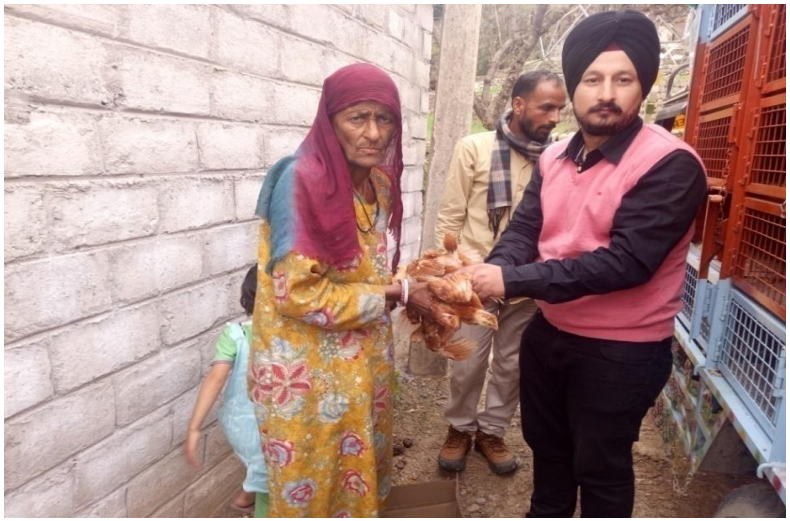
Type of livestock	*Name of the technology demonstrated*	*Breed*	*No. of Demo*	*No. of Units*	*Yield (q/ha)*				*% Increase*	**Economics of demonstration Rs./unit)*				**Economics of check (Rs./unit)*			
					Demo			*Check if any*		*Gross Cost*	*Gross Return*	*Net Return*	*** BCR*	*Gross Cost*	*Gross Return*	*Net Return*	*** BCR*
					H	L	A										
Dairy																	
Poultry	Backyard Poultry	Kadaknath	159	1725 birds	180	150	165	80	72.5	40	1165	1115	27.8	40	560	520	13.0
Rabbitry																	
Pigerry																	

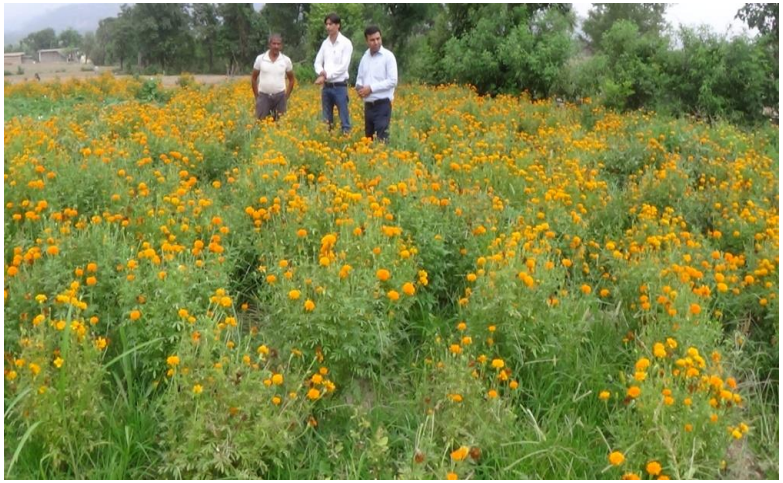
Sheep and goat																	
Duckery																	
Others (pl.specify)																	

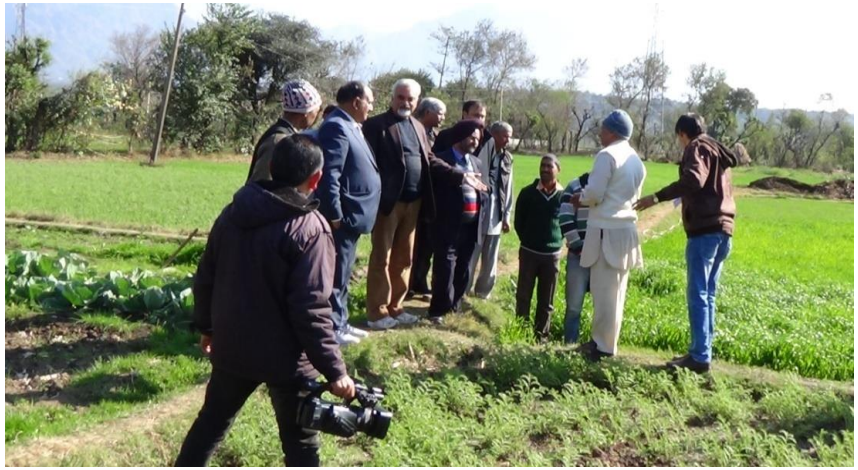
* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.

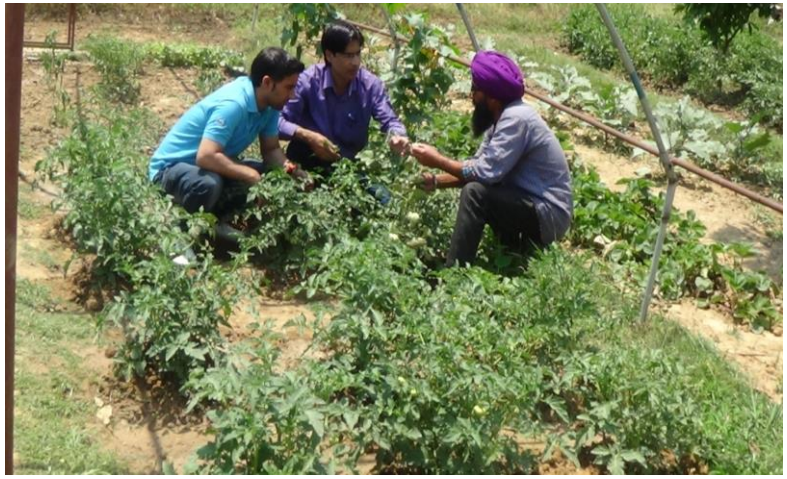
** BCR= GROSS RETURN/GROSS COST

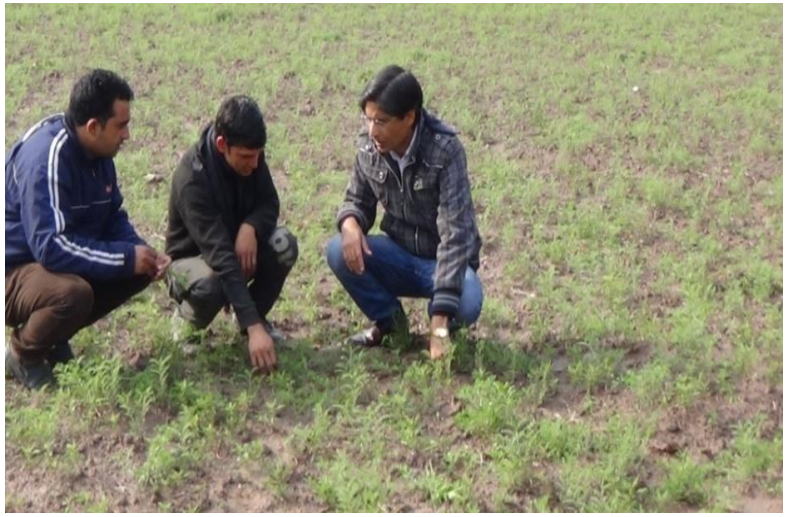
Data on additional parameters other than yield (viz., reduction of percentage diseases, increase in conceiving rate, inter-calving period etc.)











Data on other parameters in relation to technology demonstrated		
Parameter with unit	***Demo***	***Check if any***

4. B.3. Fisheries

Type of Breed	*Name of the technology demonstrated*	*Breed*	*No. of Demo*	*Units/ Area (m^2)*	*Yield (q/ha)*				*% Increase*	**Economics of demonstration Rs./unit) or (Rs./m2)*				**Economics of check Rs./unit) or (Rs./m2)*			
					Demo			*Check if any*		*Gross Cost*	*Gross Return*	*Net Return*	*** BCR*	*Gross Cost*	*Gross Return*	*Net Return*	*** BCR*
					H	L	A										
Common carps																	
Others (pl.specify)																	

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST
H-High L-Low, A-Average

Data on additional parameters other than yield (viz., reduction of percentage diseases, effective use of land etc.)

Data on other parameters in relation to technology demonstrated		
Parameter with unit	***Demo***	***Check if any***

4.B.4. Other enterprises

Enterprise	*Name of the technology demonstrated*	*Variety/ species*	*No. of Demo*	*Units/ Area {m^2}*	*Yield (q/ha)*				*% Increase*	**Economics of demonstration (Rs./unit) or (Rs./m2)*				**Economics of check (Rs./unit) or (Rs./m2)*			
					Demo			*Check if any*		*Gross Cost*	*Gross Return*	*Net Return*	*** BCR*	*Gross Cost*	*Gross Return*	*Net Return*	*** BCR*
					H	L	A										
Button mushroom																	
Vermicompost																	
Apiculture																	
Others (pl.specify)																	

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST
H-High L-Low, A-Average

Data on additional parameters other than yield (viz., additional income realized, employment generation, quantum of farm resources recycled etc.)

Data on other parameters in relation to technology demonstrated		
Parameter with unit	***Demo***	***Local***

4.B.5. Extension and Training activities under FLD

Sl.No.	***Activity***	***No. of activities organised***	***Number of participants***	***Remarks***
1	Field days	6	167	
2	Farmers Training	54	1194	
3	Media coverage	60		
4	Training for extension functionaries	7	126	
5	Others (Please specify)			

5. 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
(A) Farmers & Farm Women										
I Crop Production										
Weed Management										
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming										

Water management										
Seed production										
Nursery management										
Integrated Crop Management										
Fodder production										
Production of organic inputs										
II Horticulture										
a) Vegetable Crops										
Production of low volume and high value crops										
Off-season vegetables										
Nursery raising	1	7	0	7	10	4	14	17	4	21
Exotic vegetables like Broccoli										
Export potential vegetables										
Grading and standardization										
Protective cultivation (Green Houses, Shade Net etc.)										
b) Fruits										
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit										
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										

Plant propagation techniques										
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
d) Plantation crops										
Production and Management technology										
Processing and value addition										
e) Tuber crops										
Production and Management technology										
Processing and value addition										
f) Spices										
Production and Management technology										
Processing and value addition										
g) Medicinal and Aromatic Plants										
Nursery management	1	17	0	17	5	0	5	22	0	22
Production and management technology										
Post harvest technology and value addition										
III Soil Health and Fertility Management										
Soil fertility management										

Soil and Water Conservation										
Integrated Nutrient Management										
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient Use Efficiency										
Soil and Water Testing										
IV Livestock Production and Management										
Dairy Management										
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										
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing										
Gender mainstreaming										

through SHGs										
Storage loss minimization techniques										
Value addition										
Income generation activities for empowerment of rural Women										
Location specific drudgery reduction technologies										
Rural Crafts										
Women and child care										
VI Agril. Engineering										
Installation and maintenance of micro irrigation systems										
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology										
VII Plant Protection										
Integrated Pest Management										
Integrated Disease Management										
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										

VIII Fisheries										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
IX Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production	1	7	0	7	5	0	5	12	0	12
Organic manures production										
Production of fry and fingerlings										

Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
X Capacity Building and Group Dynamics										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital	1	76	2	78	9	0	9	85	2	87
Entrepreneurial development of farmers/youths	1	17	0	17	5	0	5	22	0	22
WTO and IPR issues										
XI Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
TOTAL	5	114	2	196	34	4	38	175	6	164
(B) RURAL YOUTH										
Mushroom Production										
Bee-keeping										
Integrated farming	1	10	4	14	3	0	3	13	4	17
Seed production										
Production of organic inputs										
Integrated Farming										
Planting material production										

Vermi-culture										
Sericulture										
Protected cultivation of vegetable crops	1	14	6	20	9	14	23	23	20	43
Commercial fruit production	1	23	0	23	5	0	5	28	0	28
Repair and maintenance of farm machinery and implements										
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Value addition										
Production of quality animal products										
Dairying										
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production	1	0	0	0	19	5	24	19	5	24
Ornamental fisheries										
Para vets										
Para extension workers										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Small scale processing										
Post Harvest Technology										

Tailoring and Stitching										
Rural Crafts										
TOTAL	4	47	10	57	36	19	55	83	29	112
(C) Extension Personnel										
Productivity enhancement in field crops										
Integrated Pest Management										
Integrated Nutrient management										
Rejuvenation of old orchards	1	12	0	12	0	0	0	12	0	12
Protected cultivation technology										
Formation and Management of SHGs										
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Care and maintenance of farm machinery and implements										
WTO and IPR issues										
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Women and Child care										
Low cost and nutrient efficient diet designing										

Production and use of organic inputs	2	45	0	45	0	0	0	45	0	45
Gender mainstreaming through SHGs										
TOTAL	3	57	0	57	0	0	0	57	0	57

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	3	43	9	52	33	0	33	76	9	85
Resource Conservation Technologies	2	28	0	28	19	2	21	47	2	49
Cropping Systems										
Crop Diversification	1	28	0	28	0	0	0	28	0	28
Integrated Farming	1	15	4	19	2	9	11	17	13	30
Water management										
Seed production										
Nursery management										
Integrated Crop Management	1	21	0	21	2	0	2	23	0	23
Fodder production										
Production of organic inputs	1	10	13	23	0	0	0	10	13	23
II Horticulture										
a) Vegetable Crops										
Production of low volume and high value crops	1	6	12	18	0	0	0	6	12	18
Off-season vegetables	1	19	5	24	0	0	0	19	5	24
Nursery raising										
Exotic vegetables like Broccoli										

Export potential vegetables										
Grading and standardization										
Protective cultivation (Green Houses, Shade Net etc.)										
b) Fruits										
Training and Pruning										
Layout and Management of Orchards	1	0	0	0	3	16	19	3	16	19
Cultivation of Fruit	1	15	0	15	5	0	5	20	0	20
Management of young plants/orchards	1	0	0	0	10	8	18	10	8	18
Rejuvenation of old orchards	1	0	0	0	5	11	16	5	11	16
Export potential fruits										
Micro irrigation systems of orchards	1	0	0	0	0	7	7	0	7	7
Plant propagation techniques	1	22	0	22	4	0	4	26	0	26
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
d) Plantation crops										
Production and Management technology										
Processing and value addition	1	15	11	26	2	0	2	17	11	28
e) Tuber crops										

Production and Management technology										
Processing and value addition										
f) Spices										
Production and Management technology										
Processing and value addition										
g) Medicinal and Aromatic Plants										
Nursery management	1	17	0	17	5	0	5	22	0	22
Production and management technology	1	13	1	14	6	3	9	19	4	33
Post harvest technology and value addition										
III Soil Health and Fertility Management										
Soil fertility management	1	2	0	2	7	3	10	10	0	10
Soil and Water Conservation										
Integrated Nutrient Management										
Production and use of organic inputs	1	0	0	0	5	11	16	5	11	16
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient Use Efficiency										
Soil and Water Testing	4	61	11	77	9	3	12	70	14	84
IV Livestock Production and Management										
Dairy Management	1	0	0	0	10	5	15	15	0	15
Poultry Management	3	0	0	0	42	32	74	42	32	74

Piggery Management										
Rabbit Management										
Disease Management	1	32	0	32	4	0	4	36	0	36
Feed management	1	13	0	13	3	0	3	16	0	16
Production of quality animal products	2	10	01	11	26	05	31	36	6	42
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening										
Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing										
Gender mainstreaming through SHGs										
Storage loss minimization techniques										
Value addition										
Income generation activities for empowerment of rural Women										
Location specific drudgery reduction technologies										
Rural Crafts										
Women and child care										
VI Agril. Engineering										
Installation and maintenance of micro irrigation systems										

Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology										
VII Plant Protection										
Integrated Pest Management										
Integrated Disease Management										
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
VIII Fisheries										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										

Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
IX Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production	1	14	0	14	0	0	0	14	0	14
Organic manures production	1	0	0	0	6	11	17	6	11	17
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
X Capacity Building and Group Dynamics										
Leadership development										
Group dynamics	1	9	0	9	5	0	5	14	0	14
Formation and Management of SHGs	3	25	33	58	0	0	0	25	33	58
Mobilization of social capital	2	4	0	5	28	10	38	32	10	42
Entrepreneurial	4	81	20	101	1	08	9	82	28	110

development of farmers/youths										
WTO and IPR issues	1	0	0	0	16	0	16	16	0	16
XI Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
TOTAL	49	535	108	563	263	134	397	771	242	1030
(B) RURAL YOUTH										
Mushroom Production										
Bee-keeping										
Integrated farming										
Seed production										
Production of organic inputs	1	35	0	35	14	1	15	49	1	50
Integrated Farming										
Planting material production										
Vermi-culture										
Sericulture										
Protected cultivation of vegetable crops										
Commercial fruit production										
Repair and maintenance of farm machinery and implements										
Nursery Management of Horticulture crops	1	16	0	16	6	0	6	22	0	22
Training and pruning of orchards										
Value addition										
Production of quality animal products										

Dairying										
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Para vets										
Para extension workers										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
TOTAL	2	51	0	51	20	1	21	71	1	72
(C) Extension Personnel										
Productivity enhancement in field crops										
Integrated Pest Management										
Integrated Nutrient management										
Rejuvenation of old orchards	1	25	0	25	0	0	0	25	0	25
Protected cultivation technology										
Formation and										

Management of SHGs										
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Care and maintenance of farm machinery and implements										
WTO and IPR issues										
Management in farm animals										
Livestock feed and fodder production	2	19	0	19	0	0	0	19	0	19
Household food security										
Women and Child care										
Low cost and nutrient efficient diet designing										
Production and use of organic inputs										
Gender mainstreaming through SHGs	1	25	0	25	0	0	0	25	0	25
TOTAL	4	69	0	69	0	0	0	69	0	69

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	3	43	9	52	33	0	33	76	9	85
Resource Conservation Technologies	2	28	0	28	19	2	21	47	2	49

Cropping Systems										
Crop Diversification	1	28	0	28	0	0	0	28	0	28
Integrated Farming	1	15	4	19	2	9	11	11	13	30
Water management										
Seed production										
Nursery management										
Integrated Crop Management	1	21	0	21	2	0	2	23	0	23
Fodder production										
Production of organic inputs										
II Horticulture										
a) Vegetable Crops										
Production of low volume and high value crops	1	6	12	18	0	0	0	6	12	18
Off-season vegetables	1	19	5	24	0	0	0	19	5	24
Nursery raising	1	7	0	7	10	4	14	17	4	21
Exotic vegetables like Broccoli										
Export potential vegetables										
Grading and standardization										
Protective cultivation (Green Houses, Shade Net etc.)										
b) Fruits										
Training and Pruning										
Layout and Management of Orchards	1	0	0	0	3	16	19	3	16	19
Cultivation of Fruit	1	15	0	15	5	0	5	20	0	20
Management of young plants/orchards	1	0	0	0	10	8	18	10	8	18
Rejuvenation of old orchards	1	0	0	0	5	11	16	5	11	16

Export potential fruits										
Micro irrigation systems of orchards	1	0	0	0	0	7	7	0	7	7
Plant propagation techniques	1	22	0	22	4	0	4	26	0	26
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
d) Plantation crops										
Production and Management technology										
Processing and value addition	1	15	11	26	2	0	2	17	11	28
e) Tuber crops										
Production and Management technology										
Processing and value addition										
f) Spices										
Production and Management technology										
Processing and value addition										
g) Medicinal and Aromatic Plants										
Nursery management	1	17	0	17	5	0	5	22	0	22
Production and management technology	1	13	1	14	6	3	9	19	4	33
Post harvest technology and value addition										

III Soil Health and Fertility Management										
Soil fertility management	1	2	0	2	7	3	10	10	0	10
Soil and Water Conservation										
Integrated Nutrient Management										
Production and use of organic inputs	1	0	0	0	5	11	16	5	11	16
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient Use Efficiency										
Soil and Water Testing	4	61	11	77	9	3	12	70	14	84
IV Livestock Production and Management										
Dairy Management	1	0	0	0	10	5	15	15	0	15
Poultry Management	3	0	0	0	42	32	74	42	32	74
Piggery Management										
Rabbit Management										
Disease Management	1	32	0	32	4	0	4	36	0	36
Feed management	1	13	0	13	3	0	3	16	0	16
Production of quality animal products	2	10	01	11	26	5	31	36	6	42
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening										
Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet										

Minimization of nutrient loss in processing										
Gender mainstreaming through SHGs										
Storage loss minimization techniques										
Value addition										
Income generation activities for empowerment of rural Women										
Location specific drudgery reduction technologies										
Rural Crafts										
Women and child care										
VI Agril. Engineering										
Installation and maintenance of micro irrigation systems										
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology										
VII Plant Protection										
Integrated Pest Management										
Integrated Disease Management										
Bio-control of pests and diseases										

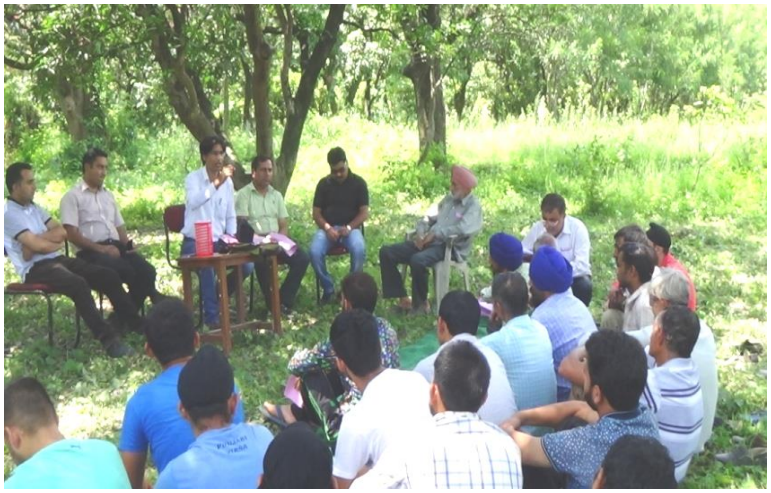
Production of bio control agents and bio pesticides										
VIII Fisheries										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
IX Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production	1	14	0	14	0	0	0	14	0	14
Organic manures production	1	0	0	0	6	11	17	6	11	17

Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
X Capacity Building and Group Dynamics										
Leadership development										
Group dynamics	1	9	0	9	5	0	5	14	0	14
Formation and Management of SHGs	3	25	33	58	0	0	0	25	33	58
Mobilization of social capital	2	4	0	5	28	10	38	32	10	42
Entrepreneurial development of farmers/youths	4	81	20	101	1	8	9	82	28	110
WTO and IPR issues	1	0	0	0	16	0	16	16	0	16
XI Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
TOTAL	54	649	110	759	297	138	435	946	248	1194
(B) RURAL YOUTH										
Mushroom Production										
Bee-keeping										
Integrated farming	1	10	4	14	3	0	3	13	4	17
Seed production										
Production of organic inputs	1	35	0	35	14	1	15	49	1	50
Integrated Farming										

Planting material production										
Vermi-culture										
Sericulture										
Protected cultivation of vegetable crops	1	14	6	20	9	14	23	23	20	43
Commercial fruit production	1	23	0	23	5	0	5	28	0	28
Repair and maintenance of farm machinery and implements										
Nursery Management of Horticulture crops	1	16	0	16	6	0	6	22	0	22
Training and pruning of orchards										
Value addition										
Production of quality animal products										
Dairying										
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production	1	0	0	0	19	5	24	19	5	24
Ornamental fisheries										
Para vets										
Para extension workers										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										

Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
TOTAL	6	98	10	108	56	20	76	154	30	184
(C) Extension Personnel										
Productivity enhancement in field crops										
Integrated Pest Management										
Integrated Nutrient management										
Rejuvenation of old orchards	2	37	0	37	0	0	0	37	0	37
Protected cultivation technology										
Formation and Management of SHGs										
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Care and maintenance of farm machinery and implements										
WTO and IPR issues										
Management in farm animals										
Livestock feed and fodder production	2	19	0	19	0	0	0	19	0	19
Household food security										
Women and Child care										

Low cost and nutrient efficient diet designing										
Production and use of organic inputs	2	45	0	45	0	0	0	45	0	45
Gender mainstreaming through SHGs	1	25	0	25	0	0	0	25	0	25
TOTAL	7	126	0	126	0	0	0	126	0	126

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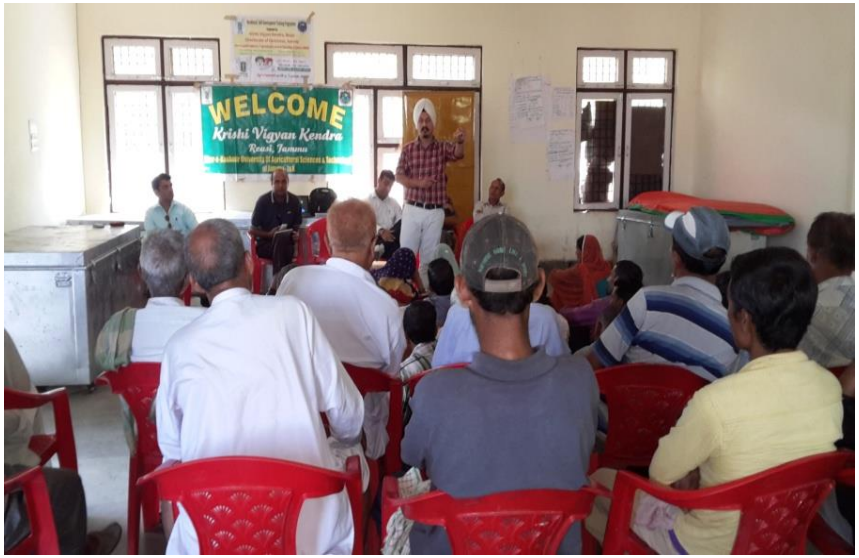
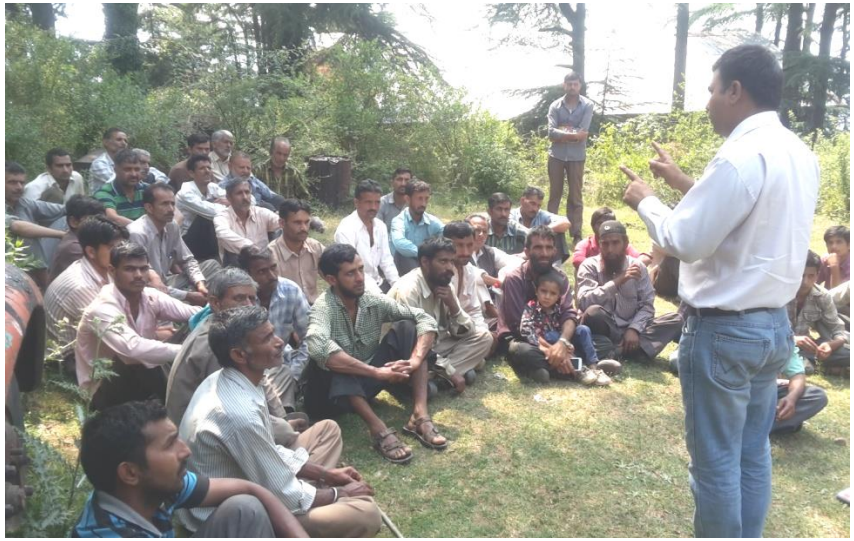
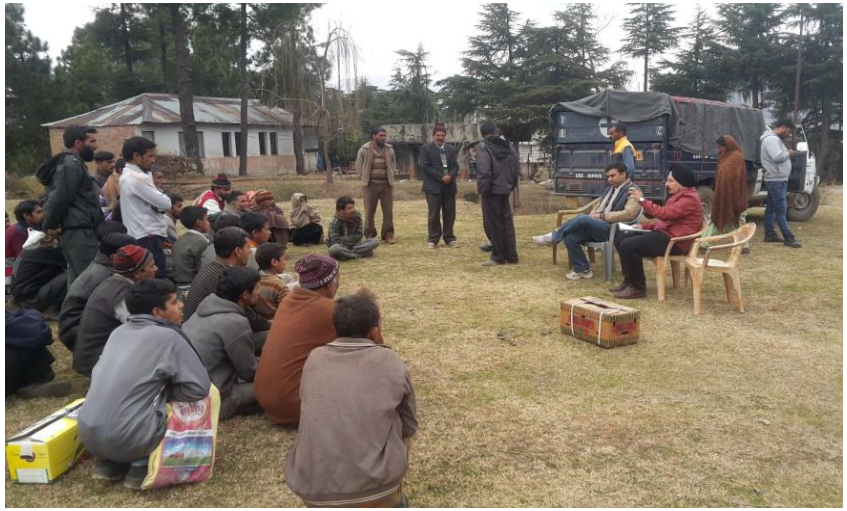

WELCOME
Krishi Vigyan Kendra
Reasi, Jammu





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

Date	Clientele	Title of the training programme	Discipline	Thematic area	Duration in days	Venue (Off / On Campus)	Number of other participants			Number of SC/ST			Total number of participants		
							Male	Female	Total	Male	Female	Total	Male	Female	Total
20.04.2016	Farmers	Planting of quality planting material and its aftercare	Horticulture	Propagation techniques	1day	Off campus	7	0	7	10	4	14	17	4	21
25.4.2016	Farmers	Disease management in large ruminants	A.H.	Disease management in Livestock.	1	Off Campus	19	0	19	0	0	0	19	0	19
26.4.2016	Farmers	Training programme on various agricultural schemes and programmes.	Extension Education	Agril/ Schemes/ Programmes	1	Off Campus	1	0	1	12	10	22	13	10	23
20.5.2016	Farm	Disease	A.H.	Disease	1	Off	13	0	13	4	0	4	17	0	17

	ers	management in large ruminants		management in Livestock.		campus									
26.5.2016	Farmers	Harvesting of mango and its precautions.	Hort.	Fruit Production	1	Off campus	15	0	15	5	0	5	20	0	20
27.5.2016	Farmers	INM in Kharif crops	Agronomy	INM	1day	Off Campus	21	0	21	2	0	2	21	2	23
31.5.2016	Farmers	Agricultural information sources for rural development	Extension Education	ITC	1day	Off Campus	0	0	0	16	0	16	16	0	16
2.6.2016	Farmers	Formation and management of SHGs	Extension Education	Formation and management of SHGs	1day	Off campus	10	0	10	0	0	0	10	0	10
2.6.2016	Farmers	Organic farming for sustainable agriculture	Extension Education	Organic farming	1day	Off campus	0	0	0	5	11	16	5	11	16
8.6.2016	Farmers	INM in Kharif crops	Agronomy	INM	1day	Off Campus	22	0	22	13	0	13	35	0	35
9.6.2016	Farmers	Sheep and goat management	AH	Disease management in sheep and goat Layout of orchards	1day	Off Campus	10	1	11	13	2	15	23	3	26
13.6.2016	Farmers	Layout of orchards	Hort.		1day	Off Campus	0	0	0	3	16	19	3	16	19
4.7.2016	Farmers	Formation and management of SHGs	Extension Education	Formation and management of SHGs	1day	Off campus	0	17	17	0	0	0	0	17	17

15.7.2016	Farmers	Integrated weed management in Kharif crops	Agronomy	Weed Management	1day	Off campus	6	0	6	20	0	20	26	0	26
26.7.2016	Farmers	Propagation of planting material and its techniques	Hort.	Propagation techniuques	1day	Off Campus	22	0	22	4	0	4	26	0	26
29.7.2016	Farmers	Balanced feeding through UMMB and fodder management	AH	Nutrition management	1day	Off Campus	13	0	13	0	3	3	16	0	16
2.8.2016	Farmers	Entrepreneurship development in agriculture	Extension Education	Entrepreneurship development in agriculture	1day	Off Campus	13	0	13	1	0	1	14	0	14
4.8.2016	Farmers	Commercial organic farming for rural development	Extension Education	Entrepreneurship development in agriculture	1day	Off campus	0	0	0	6	11	17	6	11	17
20.8.2016	Farmers	Soil sampling technique and its management	Agronomy	Soil Health Management	1day	Off campus	16	0	16	32	0	32	48	0	48
1.9.2016	Farmers	Physiological disorders in mango and their management	Hort.	Scientific fruit production	1day	Off campus	0	0	0	5	11	16	5	11	16

7.9.2016	Farmers	Entrepreneurship development in organic vegetables	Extension Education	Entrepreneurship development in agriculture	1day	Off Campus	12	4	16	0	0	0	12	4	16
23.9.2016	Farmers	Conservation agricultural based management in maize /wheat	Agro.	Conservation agriculture	1day	Off Campus	17	0	17	2	0	2	19	0	19
30.9.2016	Farmers	Dairy meant and milking	A.H.	Dairy Management	1day	Off campus	0	0	0	10	5	15	0	15	15
26.10.2016	Farmers	Zero and min. tillage as resource conservation	Agronomy	Conservation agriculture	1day	Off campus	11	0	11	17	2	19	28	2	30
31.100.2016	Farmers	Postharvest management in horticulture produce	Hort.	Postharvest management in horticulture	1day	Off Campus	15	11	26	2	0	2	17	11	28
2.11.2016	Farmers	Disease management in poultry	AH	Disease management in poultry	1day	Off Campus	14	4	18	0	0	0	14	4	18
2.11.2016	Farmers	Streghthening and management of SHGs	Ext. Edu	Formation and management of SHGs	1day	Off campus	1	15	16	0	0	0	1	15	16
4.11.2016	Farmers	Cultivation of cole crops nad its	Hort.	Vegetables production	1day	Off campus	6	12	18	0	0	0	6	12	18

		aftercare													
8.11.2016	Farmers	Training programme on commercial organic farming	Ext. Edu	Organic farming	1day	Off Campus	14	0	14	0	0	0	14	0	14
9.11.2016	Farmers	IWM in weed management in Rabi crops	Agronomy	IWM in weed management	1day	Off Campus	15	9	24	0	0	0	15	9	24
11.11.2016	Farmers	Soil sampling techniques	Agronomy	Soil Testing	1day	Off Campus	15	10	25	0	0	0	15	10	25
15.11.2016	Farmers	Entrepreneurship development in vegetable growing	Ext. Edu.	Entrepreneurial development of farmers	1day	Off campus	19	5	24	0	0	0	19	5	24
22.11.2016	Farmers	Training programme on commercila scientific agriculture	Ext. Edu.	Entrepreneurial development of farmers	1day	Off Campus	11	5	16	0	0	0	11	5	16
24.11.2016	Farmers	Training programme on walnut cultivation	Hort.	Scientific fruit production	1day	Off Campus	0	0	0	10	8	18	10	8	18
20.12..2016	Farmers	Training programme on commercila scientific agriculture	Ext. Edu.	Entrepreneurial development of farmers	1day	Off Campus	45	10	55	0	8	8	45	18	63
28.12..2016	Farm	INM on	Agronom	INM	1day	Off	15	4	19	2	9	11	17	13	30

	ers	Rabi crops	y			campus									
30.12..2016	Farmers	Integrated poultry farming and sustainable means	AH	Backyard poultry farming	1day	Off Campus	0	0	0	22	0	22	22	0	22
4.1..2017	Farmers	Poultry farming as an enterprise	AH	Poultry farming as an enterprise	1day	Off Campus	0	0	0	8	28	36	8	28	36
12.1..2017	Farmers	Entrepreneurship development in medicinal and aromatic plants	Ext.Edu.	Entrepreneurship development in agrii.	1day	Off Campus	13	1	14	6	3	9	19	4	23
19.1..2017	Farmers	Fertility management in large ruminanats	AH	Fertility management in LS	1day	Off campus	0	0	0	13	3	16	13	3	16
31.1..2017	Farmers	Organic farming and its advantages	Agronomy	Organic farming and its advantages	1day	Off campus	10	13	23	0	0	0	10	13	23
8.2.2017	Farmers	Role of KVK in rural development	Ext. Edu.	Social capital mobilization	1day	Off campus	4	0	4	16	0	16	20	0	20
20.2.2017	Farmers	Training programme on entrepreneurship development in	Ext. Edu.	Entrepreneurship development in agricultuure	1day	On campus	17	0	17	5	0	5	22	0	22

		horticulture													
22.2.2017	Farmers	Diversification in agriculture in hilly areas	Agronomy	Diversified agriculture	1day	On campus	28	0	28	0	0	0	28	0	28
28.2.2017	Farmers	Scientific cultivation of marigold	Agroforestry	Forestry for hill areas	1day	On campus	17	0	17	5	0	5	22	0	22
8.3.2017	Farmers	Backyard poultry farming as an enterprise	AH	Backyard poultry farming as an enterprise	1day	On campus	8	1	9	0	3	3	8	4	12
20.3.2017	Farmers	Soil sampling techniques	Agronomy	Soil Testing	1day	Off campus	16	0	16	6	0	6	22	0	22
24.3.2017	Farmers	Backyard poultry farming as an enterprise	Horticulture	Backyard poultry farming as an enterprise	1day	Off campus	0	0	0	12	4	16	12	4	16
27.9.2017	Extension Personnel	Urban Agriculture: Need of the Hour	Extension Edu.	Urban agriculture	1day	On campus	11	0	11	0	0	0	11	0	11
28.9.2017	Extension Personnel	Sustainability of low chilly varieties of fruit crops in Reasi district	Fruit science	Scientific fruit production	1day	On campus	12	0	12	0	0	0	12	0	12
29.9.2017	Extension Personnel	Role of organic farming for the upliftment of	Agronomy	Organic farming	1day	On campus	34	0	34	0	0	0	34	0	34

		the unprivilleged agri. In hilly areas													
7-2-2017	Extension Personnel	Feeding management in LS	AH	Feeding Management in LS	1day	Off campus	10	0	10	0	0	0	10	0	10
13-2-2017	Extension Personnel	Infertlity management and breed improvement in LS	LS	Infertlity management	1day	Off campus	9	0	9	0	0	0	9	0	9
18-3-2017	Extension Personnel	Gender mainstreaming in extension	Ext. Edu.	Gender mainstreaming	1day	Off campus	25	0	25	0	0	0	25	0	25
19-3-2017	Extension Personnel	Challenges in fruit production under Reasi conditions	Hort.	Fruit prod.	1day	Off campus	25	0	25	0	0	0	25	0	25

(D) Vocational training programmes for Rural Youth

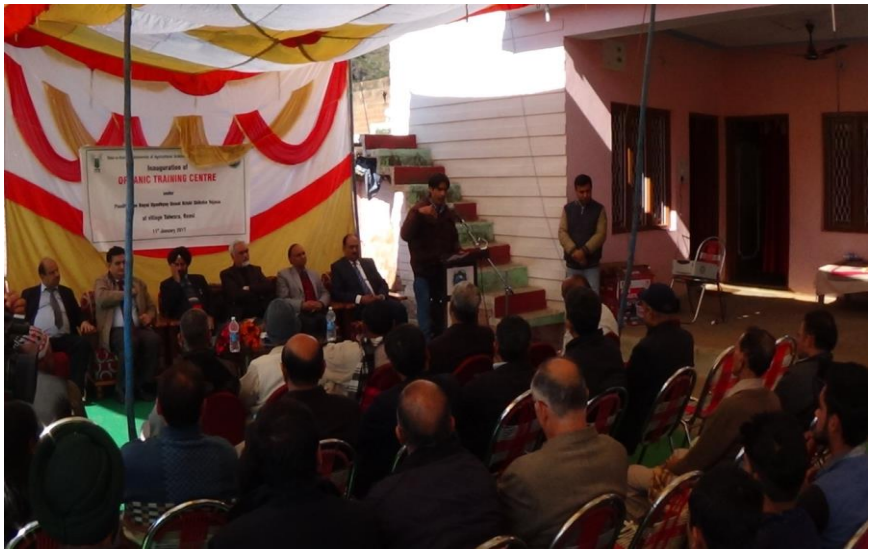
Crop / Enterprise	**Date**	**Training title***	**Identified Thrust Area**	**Duration (days)**	**No. of Participants**			**Self employed after training**			**Number of persons employed else where**
					Male	**Female**	**Total**	**Type of units**	**Number of units**	**Number of persons employed**	

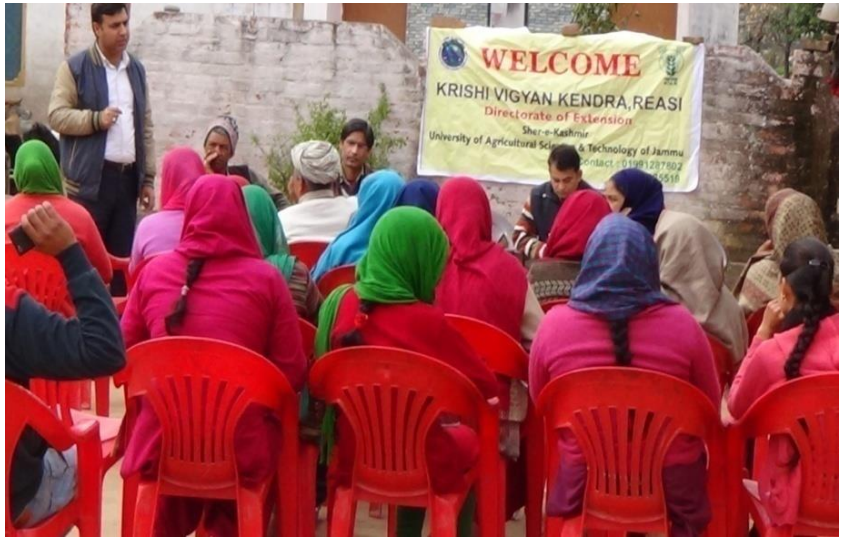
Floriculture	26-6-2016 to 23-6-2016	Floriculture as an enterprise	Commercial floriculture	04 days	13	4	17		3	3	
Vegetables	29-8-2016 to 1-9-2016	Entrepreneurship development in vegetables growing	Entrepreneurship development in vegetables growing	04 days	23	20	43		8	10	
Fruits Crops	2-3-12-2016	Training programme on advance hort.	Scientific fruits production	02 days	21	0	21		6	10	
Fruits Crops	6-9-2017	Nursery raising techniques for horticultural plants	Nursery raising techniques for horticultural plants	04 days	22	0	22		2	5	
Poultry farming	13-12-2016 to 16-12-2016	Poultry farming as an entreprise	Entrepreneurship development in Poultry farming	04 days	19	5	24		12	12	
Vermicomposting as an entreprise	17-1-2017 to 20-1-2017	Vermicomposting as an enterprise for small farmers	Vermicomposting as an entreprise	04 days	49	1	50		5	5	
Organic farming	19 to 22/1/2016	Training on Organic farming for rural development	Commercial organic farming	04 day	31	17	48		12	22	2

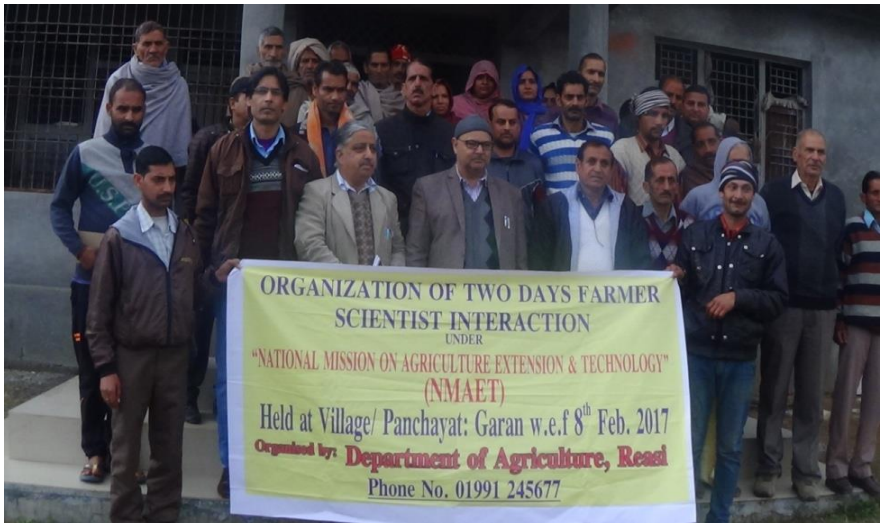
*training title should specify the major technology /skill transferred

(E) Sponsored Training Programmes

Sl.No	Date	Title	Discipline	Thematic area	Duration (days)	Client (PF/RY/EF)	No. of courses	No. of Participants									Sponsoring Agency	Amount of fund received (Rs.)
								Others			SC/ST			Total				
								Male	Female	Total	Male	Female	Total	Male	Female	Total		
1	30-1-2017 to 3-2-2017	Training programme on Organic Farming	Ext.Edu.	Organic Farming	6	Farmers	5	12	17	29	1	0	30	13	17	30	ICAR,New Delhi & SKUAST-J	1 lac
2.	13-18-2-2017	Training programme on Organic Farming	Ext.Edu.	Organic Farming	6	Farmers	5	20	8	28	2	0	2	22	8	30	ICAR,New Delhi & SKUAST-J	1 lac
3.	6-10-3-2017	Training programme on Organic Farming	Ext.Edu.	Organic Farming	5	Farmers	5	17	3	20	8	2	10	25	5	30	ICAR,New Delhi & SKUAST-J	1 lac
4.	20-24-3-2017	Training programme on Organic Farming	Ext.Edu.	Organic Farming	5	Farmers	5	11	4	15	9	6	15	20	10	30	ICAR,New Delhi & SKUAST-J	1 lac
5.	25-29-3-2017	Training programme on Organic Farming	Ext.Edu.	Organic Farming	5	Farmers	5	4	8	12	10	8	18	14	16	30	ICAR,New Delhi & SKUAST-J	1 lac
6.	March,2017	Training programme on Organic Horticulture	Hort.	Organic Hort.	2	Farmers	5	25	0	25	10	0	10	35	8	35	Deptt. of Hort.,Udhampur	
7.	March,2017	Training programme on Organic Horticulture	Hort.	Organic Hort.	2	Farmers	5	27	0	27	13	0	13	40	8	40	Deptt. of Hort.Samba	
8	March,2017	Commercial floriculture	Floriculture	floriculture	1	Farmers	3	25	0	25	15	0	15	40	0	40	Deptt of floriculture	




WELCOME
KRISHI VIGYAN KENDRA, REASI
Directorate of Extension
Sher-e-Kashmir
University of Agricultural Sciences & Technology of Jammu


ORGANIZATION OF TWO DAYS FARMER SCIENTIST INTERACTION
UNDER
"NATIONAL MISSION ON AGRICULTURE EXTENSION & TECHNOLOGY"
(NMAET)
Held at Village/ Panchayat: Garan w.e.f 8th Feb. 2017
Organized by: Department of Agriculture, Reasi
Phone No. 01991 245677

6. Extension Activities (including activities of FLD programmes)

Sl. No.	Nature of Extension Activity	Purpose/ topic and Date	No. of activities	Participants											
				Farmers (Others) (I)			SC/ST (Farmers) (II)			Extension Officials (III)			Grand Total (I+II+III)		
				Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1.	Field Day	**Field Day on wheat on23/4/2016 and 26/4/2016**	**2**	**26**	**5**	**31**	**10**	**2**	**12**	**0**	**0**	**0**	**36**	**7**	**43**
2.	Field Day	**Field Day on oat on27/4/2016**	**1**	**27**	**0**	**27**	**14**	**0**	**14**	**0**	**0**	**0**	**41**	**0**	**41**
3.	Field day	**Field Day on maize on3/10/2016**	**1**	**21**	**0**	**21**	**4**	**0**	**4**	**0**	**0**	**0**	**25**	**8**	**25**
4	Field day	**Field Day on sorghum on31/8/2016**	**1**	**19**	**3**	**22**	**12**	**1**	**13**	**0**	**0**	**0**	**31**	**4**	**35**
5	Field day	**Field Day on blackgram on28/10/2016**	**1**	**0**	**0**	**0**	**0**	**22**	**22**	**0**	**0**	**0**	**0**	**22**	**22**
	Total		6	93	8	101	40	25	65	0	0	0	133	41	166
4.	Kisan Mela(organised)	**15/4/2016**	**1**												**550**
5.	Kisan Mela(attended)														**2550**
	Total														**3100**
6.	Kisan Gosthi		3												334
7.	Exhibition		9												3770
8.	Film Show		8												256
9.	Method Demonstrations														
10.	Farmers														

	Seminar														
11.	Workshop		1												
12.	Group meetings		3												30
13.	Lectures delivered as resource persons		22												350
14.	Newspaper coverage		55												
15.	Radio talks														
16.	TV talks		3												
17.	Popular articles		60												40
18.	Extension Literature		12												3500
19.	Advisory Services		10												
20.	Scientific visit to farmers field														70
21.	Farmers visit to KVK														1050
22.	Diagnostic visits														70
23.	Exposure visits		2												100
24.	Ex-trainees Sammelan														
25.	Soil health Camp														
26.	Animal Health Camp		1												35
27.	Agri mobile clinic														
28.	Soil test campaigns														
29.	Farm Science Club Conveners														

	meet														
30.	Self Help Group Conveners meetings	5													55
31.	Mahila Mandals Conveners meetings														
32.	Celebration of important days (specify)	Parthenium Days days ,soil day,Swachh Bharat Abhiyan,Jai Kisan Jai Vigyan Week etc.													440
	Grand Total														

* Example for guidance only

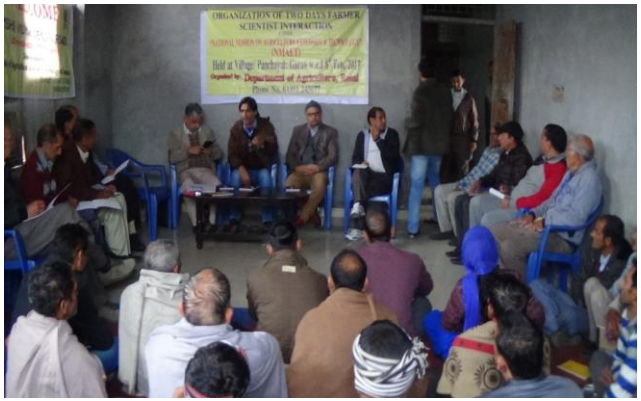
6. B. Kisan Mobile Advisory Services

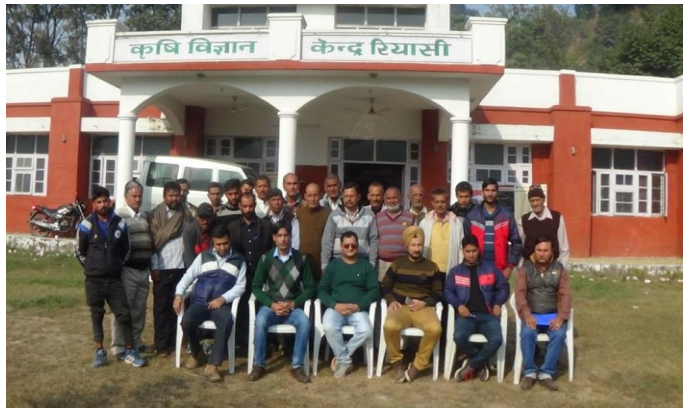
Kisan Mobile Advisory									
Name of the KVK	**No. of farmers Covered**	**No. of Messages (Text)**	**Type of messages**						
			Crop	**Livestock**	**Weather**	**Marketing**	**Awareness**	**Other enterprise**	**Any other**

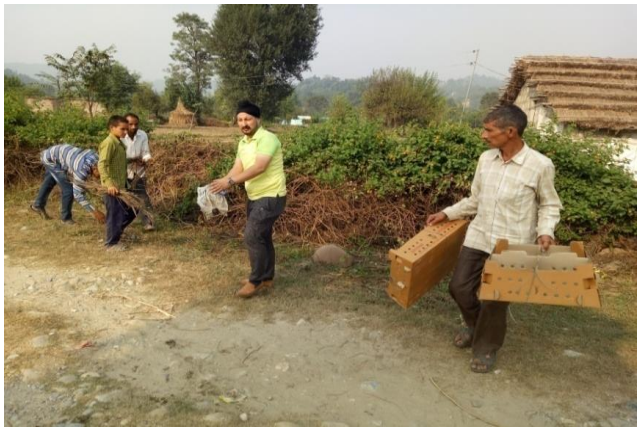
6.C. DETAILS OF TECHNOLOGY WEEK CELEBRATIONS during 2016-17

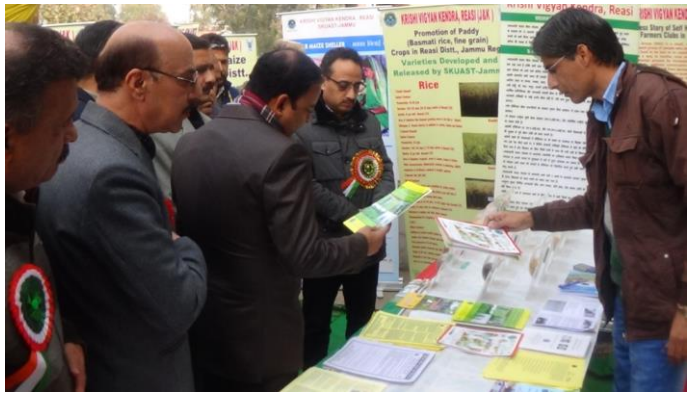
No. of Technology week celebrated	**Types of Activities**	**No. of Activities**	**Number of Participants**	**Related crop/livestock technology**
	Gosthies			
	Lectures organised			
	Exhibition			
	Film show			
	Fair			
	Farm Visit			
	Diagnostic Practical’s			

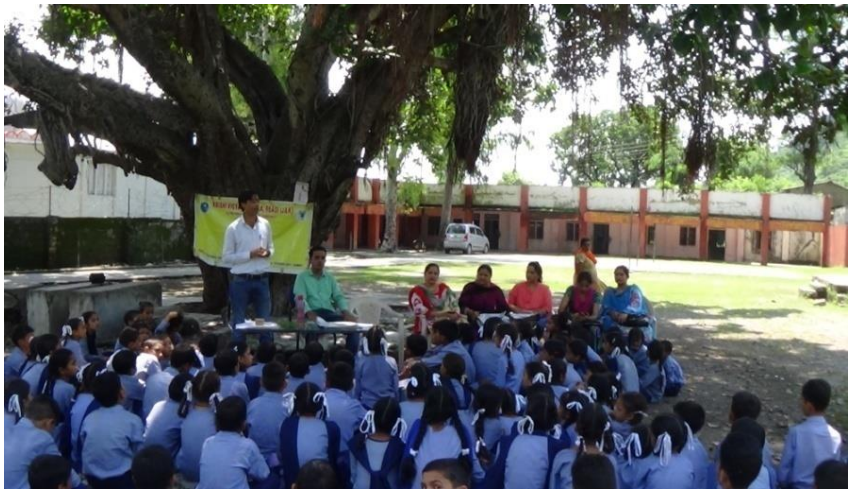
	Distribution of Literature (No.)			
	Distribution of Seed (q)			
	Distribution of Planting materials (No.)			
	Bio Product distribution (Kg)			
	Bio Fertilizers (q)			
	Distribution of fingerlings			
	Distribution of Livestock specimen (No.)			
	Total number of farmers visited the technology week			

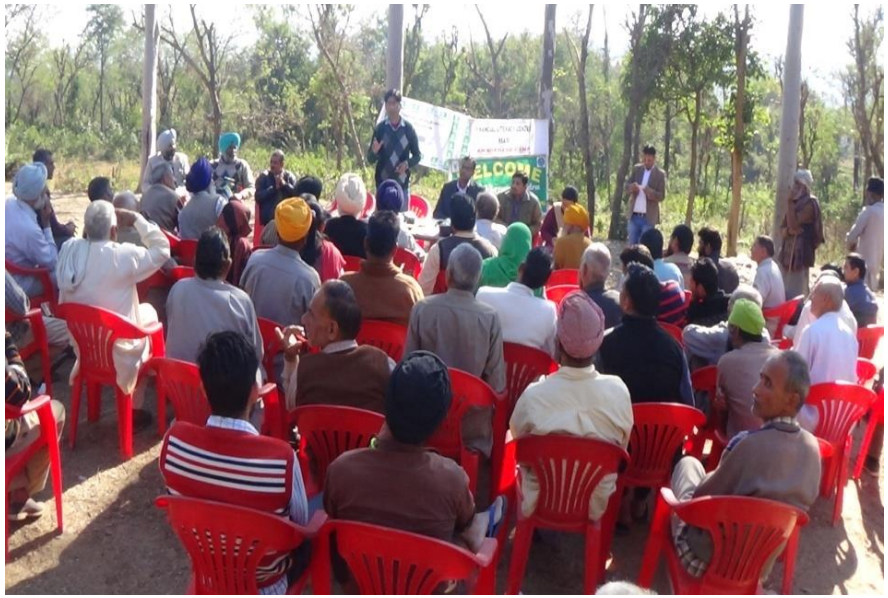


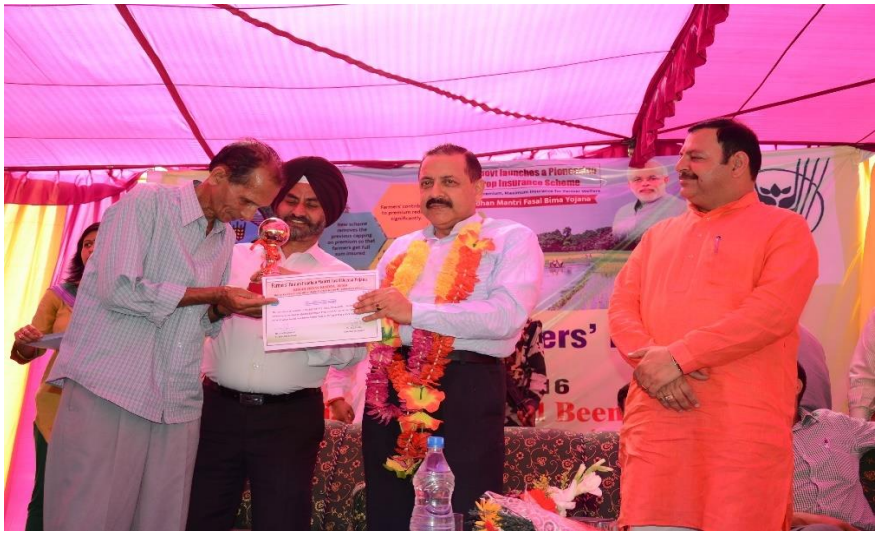


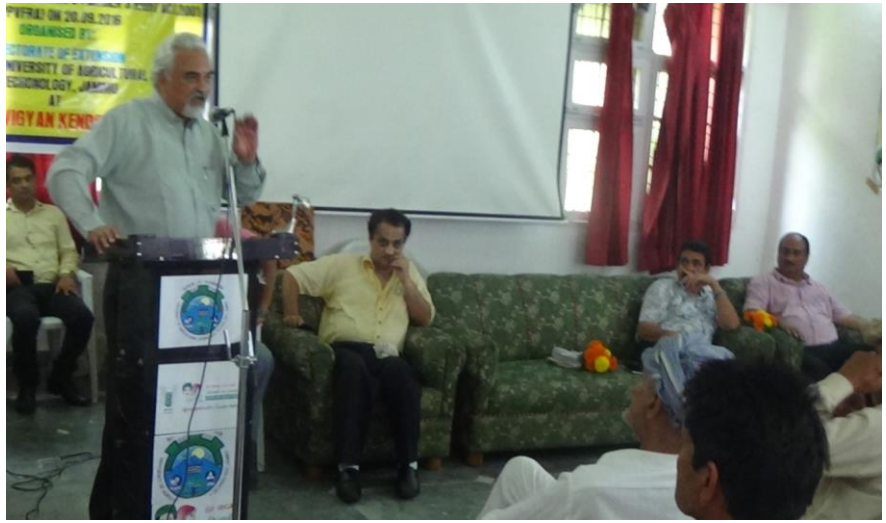


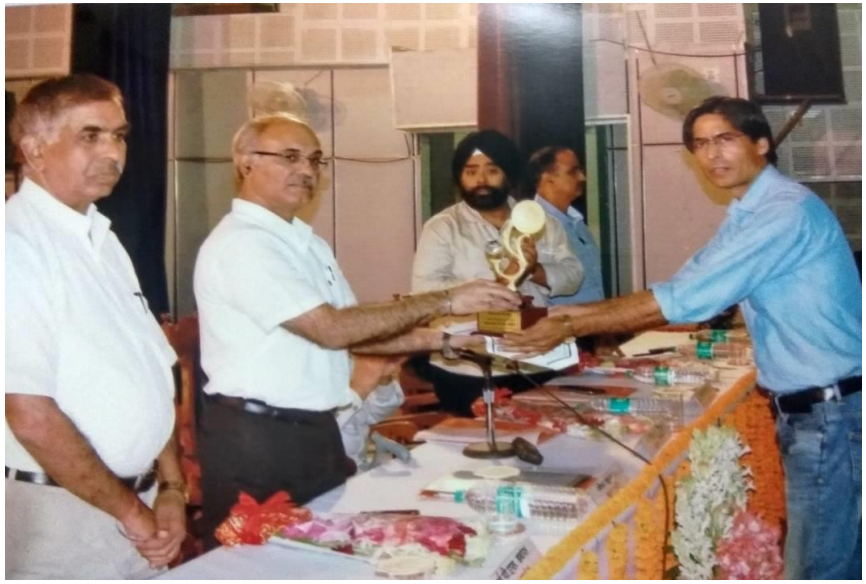












7. Production and supply of Technological products

A) SEED MATERIALS

Major group/class	Crop	Variety	Quantity (qtl.)	Value (Rs.)	Provided to No. of Farmers
CEREALS					
	Wheat	PBW-509	17qt	30600	-
	Maize	Plant Gene	20qt.	23100	
OILSEEDS					
	Mustard	RSPR-01	0.39	3900	
PULSES					
	Blackgram	Shekher-3	0.1qt		
	Chickpea	GNG-1581	1.50 qt.		
VEGETABLES					
FLOWER CROPS					
	Marigold	Pusa Narangi	2,50 Kg		
OTHERS (Specify)					

*An example for guidance only

B) PLANTING MATERIALS

Major group/class	Crop	Variety	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
FRUITS					
SPICES					
VEGETABLES					
	Tomato, brinjal, chilli etc.	**Hyb. tomato**	**10,000**	**-**	**150**

FOREST SPECIES					
ORNAMENTAL CROPS					
	Marigold	**Pusa Narangi**	**5000**	**-**	**100**
PLANTATION CROPS					
Others (specify)					

*An example for guidance only

C) BIO PRODUCTS

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

D) LIVESTOCK

Sl. No.	Type	Breed	Quantity		Value (Rs.)	Provided to No. of Farmers
			(Nos	Kgs		
Cattle						
Feed Blocks	**UMMB**		**500**	**3 kg/brick**		
SHEEP AND GOAT						
POULTRY						
FISHERIES						
Others (Specify)						

*** An example for guidance only**

PART 8 – PUBLICATION, SUCCESS STORY, SWTL, TECHNOLOGY WEEK AND DROUGHT MITIGATION

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

(A) KVK News Letter – (Name, Date of start, periodicity, number of copies distributed, etc.)

(B) Literature developed/published

Item	***Title***	***Authors name***	***Number of copies***
Research papers	1. Constraints identified in rearing of the live stock in hilly areas. Research in Environment and life science.pp.561-562(May, 2016 issue) 2. Impact of vocational training programmes on income of the rural youths. Journal of Communication studies. pp 69-72. **3.** Impact of plant protection activities on production and productivity of crops in Jammu Region (J&K), India. Vegetos- An International Journal of Plant Research.pp.2-4	Dr.Banarsi Lal ,Dr.Vikas Tandon and Dr.Shahid Ahmed Dr.Banarsi Lal ,Dr.Vikas Tandon and Dr.Shahid Ahmed Dr.Shahid Ahmed, Dr.B.Lal,Dr.Sinah and Dr.JP Sharma	
Technical reports			
Technical bulletins		12	
Popular articles			
	(1)Commercialization of agriculture in J&K (Daily Excelsior) (2)Preservation of heritage and monuments (Daily Excelsior) (3)Role of farmers fairs for rural development.	Dr.Banarsi Lal and Dr.Pawan Sharma do Dr.Banarsi Lal	

Item	*Title*	*Authors name*	*Number of copies*
	(State Times) (4)Technology transfer for rural development. (State Times) (5)Krishi Vigyan Kendras for Rural Development. (State Times). (6)TV –An Effective Medium of Mass Communication (State Times). (7)Social Media for Rural Development.(State Times) (8)Urban Pollution Management Excelsior,2015) (9) KVKs for Rural Development(Early Times Times) (10)SHGs for Rural Development(Early Times) (11)Women Empowerment for Poverty Eradication(Daily Excelsior) (12)Suicide among the farmers (State Times) (13)Potential of floriculture in J&K.(State Times)	Dr.Banarsi Lal Dr.Banarsi Lal Dr.Banarsi Lal, Dr.Banarsi Lal, Dr.Banarsi Lal Do Do Do Do	
Training Manual			
Extension literature			
Folders /leaflets	Folders and leaflets (1)KVKs for Rural Prosperity (2)Microenterpreneurship development in agriculture. (3)Entrepreneurship development in organic farming.	Dr.Banarsi Lal Dr.Banarsi Lal Dr.Banarsi Lal	100 100 100

Item	*Title*	*Authors name*	*Number of copies*
TOTAL			

(C) Details of Electronic Media Produced

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

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

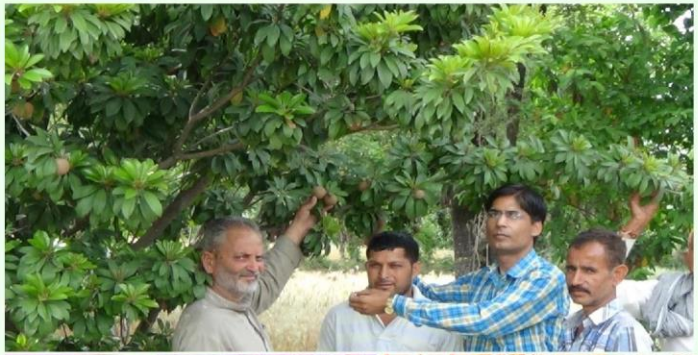
The success stories/case studies with good action photographs (with captions) should be on the following topics

a) ***Effective popularization on a larger scale of any one FLD technology and its role in transformation of district agriculture with respect to that particular crop or enterprise***
b) ***Performance of the end results of any one technology assessed, its refinement if any and its impact in district agriculture with respect to that crop or enterprise***
c) ***Effect of production and supply of seeds and planting material / animal breed / or bio-product and its impact on district agriculture with respect to that crop/ enterprise/ bio-product***

The general format for preparing the above success stories/case studies are furnished below

SUCCESS STORY

Dr.Jatinder Singh in the farmers fair organised by Krishi Vigyan Kendra (KVK), Reasi. He was also appreciated by the Vice Chancellor of SKUAST-Jammu Dr.P.K.Sharma for his efforts for diversified agriculture in the PPV&FRA programme organised by KVK,Reasi. Sh.Shail Singh another farmer from this village was awarded in the farmers fair organised by SKUAST-J in 2015-16 for promoting the spota (Chicku) farming in Reasi district. Efforts of the Krishi Vigyan Kendra (KVK), Reasi scientists and progressive farmers of Sirah village have given new shape to the diversification in agriculture and the quantity and quality of agricultural production have been increased. By observing the results of scientific diversified agriculture in Sirah village the other farmers of the `adjoining villages arealso attracted towards scientific diversification in agriculture. With the increase in the income of the farmers their respect and reconisation have also been increased in the society. They have build their Pucca houses and their children education status is improving year after year. They exhibit their organic farm produce in different farmers' fairs organised by SKUAST-J& allied departments and recognised by the different organisations. Their efforts for diversified farming were highly appreciated by Hon'ble ex-DG, ICAR, Dr.S. Ayappan, Hon'ble Union Minister Dr. Jatinder Singh, Hon'ble Governor of J&K Sh. N.N.Vora, Hon'ble Vice Chancellor of SKUAST-J Dr.P.K.Sharma and Hon'ble J&K Min. Sh. Ajay Nanda during the farmers' fairs and other extension activities conducted by SKUAST-J. KVK, Reasi is making strenuous efforts for the farmers' welfare through scientific diversified agriculture in the hilly district Reasi of Jammu and Kashmir.



The writers are :

- Dr. Banarsi Lal, I/C, Sr. Scientist–cum-Head, Krishi Vigyan Kendra, Reasi -182301
- Dr.R.K.Arora, Associate Director Extension & In-charge of KVKs of SKUAST-J
- Dr.Shahid Ahamad, Deputy Director Research, Directorate of Research, SKUAST-J
- Sh. Jagdish Kumar, Programme Assistant (Computer), Krishi Vigyan Kendra, Reasi, (SKUAST-J)

Agri-search with a human touch

Published by :
Krishi Vigyan Kendra, Reasi

SUCCESS STORY

DIVERSIFIED AGRICULTURE IN SIRAH VILLAGE OF REASI DISTRICT
(Adopted by KVK, Reasi)

Krishi Vigyan Kendra, Reasi
DIRECTORATE OF EXTENSION
Sher-e-Kashmir University of Agricultural Sciences & Technology of Jammu

1. Situation Analysis/Problem Statement

Agriculture is the major occupation of the people in Jammu & Kashmir where more than 75 per cent of the population is directly associated with agriculture. Thus, agricultural development harbingers the overall growth and development of the State. Jammu and Kashmir is a mountainous state in which about 30 per cent of the area is under cultivation. Agriculture is the mainstay of the people as it provides employment to about 75 per cent of the workforce.

There is dire need to increase the income and employment in agriculture and allied sectors for the farmers of the hilly state.There is possibility to increase the production and productivity of the crops and to enable the farmers to diversify their crop production by adopting the modern technologies in agriculture and establishing the infrastructure for the farm production of hilly areas of J&K.There is need to promote the diversification in agriculture and move towards high value crops like vegetables, aromatic and medicinal plants, saffron, mushroom, beekeeping, silkworms, pulses etc.It is matter of grave concern that the interest of younger generation in the state is dwindling towards agriculture.

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 (about 94%) 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 percentage of modern agricultural technologies is low resulting in the low socio-economic status of the farmers. There are various insect-pests and disease problems in the district. Boars and monkeys too damage the crops to a large extent in this particular district.

Sirah village is about 13 km away from world famous religious place Katra in Reasi district of Jammu and Kashmir. This village is situated near the Shri Mata Vaishno Devi (SMVD) University and Super Speciality Narayani hospital. There are around 150 families in the village. The major occupation of the people is agriculture but there is no source of irrigation and the village is totally rainfed. The village is having vermicompost units, tractors, reaper-cum-binder, disc harrows, ferti-seed drills, rotaveter etc. There are many progressive farmers in the village Sirah. The village is having around 100 hectares of land. Initially the villagers were growing maize, wheat and few local varieties of vegetables as their forefathers were doing. They were using the traditional technologies in their fields and monkeys and boars were the great threats in their fields. All the agricultural produce was consumed by their families with very little surplus to sell. Their farming system was deteriorating and they were unable to mitigate the basic needs of their families.

2. Plan,Implementation and Support of KVK

Before the KVK interventions the farmers of Sirah village were doing the unscientific agriculture on a small scale. They were endouvering for scientific diversified agriculture to increase their income. They were using the local resources and were growing of maize, wheat, fruits, vegetables, marigold etc. with the traditional methods. Initially they got mediocre results and also got some failures especially in fruits and vegetables. They were lacking the scientific knowledge of diversified agriculture. Then they came in contact with the KVK, Reasi scientists. KVK scientists started regularly visiting their farms and a benchmark study was conducted in the village. The farmers were guided and motivated to use new agricultural technologies at their farms so as to increase their crops production. They were motivated for diversified agriculture in a scientific way. KVK Reasi organised the trainings / awareness programmes / kisan ghosties / field days/exposure visits/farmers fairs etc. on diversified agriculture in Sirah village of Reasi distt. KVK, Reasi scientists laid Front Line Demonstrations (FLDs) and On Farm Trials (OFTs) in the village. The technical guidelines on different crops were provided to the farmers. The farmers were fascinated by observing the results of FLDs and OFTs and they showed keen interest in the adoption of the technologies. The technical literature on diversified agriculture was provided to the farmers of the village. The KVK work was synergised by the Department of Agriculture and other allied departments. Scientific cultivation of cereals, pulses, oil seeds, fruits, organic vegetable, poultry etc. changed their life. KVK, Reasi has also introduced the new varieties of aromatic and medicinal plants and have promoted lemon grass farming and phalsa farming in around 100 Kanals of land of the village in collaboration with the Indian Institute of Integrative Medicines (IIM)- Jammu and Central Institute of Medicinal and Aromatic Plants (CIMAP) - Lucknow to overcome the problem of monkeys menace in the area.

3. Output

Before KVK interventions farmers of Sirah village were using their traditional technologies for diversified agriculture and they were lacking the technical skills and knowledge on diversified agriculture. There was heavy infestation of diseases and insects-pests and farmers were earning only Rs. 81, 000/ha as their crops productivity was low but with the new scientific technologies of diversified agriculture their crops productivity increased and they raised their annual income up to Rs. 2, 67,000/ha in 2014-15to Rs. 3, 56,000/ha in 2015-16. By growing the different crops, the farmers are fetching more prices.

Before KVK intervention:

S. No.	Enterprise taken	Operational Expenses(Rs./ha)	Total Output(Rs./ha)	Net Profit(Rs./ha)
1.	Traditional methods of diversified agriculture	80,000	1,61,000	81,000

After KVK intervention:

S. No.	Year	Enterprise taken	Operational Expenses(Rs./ha)	Total Output(Rs./ha)	Net Profit(Rs./ha)
1.	2014-15	Scientific methods of diversified agriculture	1,23,000	3,90,000	2,67,000
2.	2015-16	Scientific methods of diversified agriculture	1,27,000	4,83,000	3,56,000

4. Outcome

By observing the successful results of different crops in Sirah village, the other farmers of the adjoining villages such as Sool, Dheerti, Bhakta, Painthal etc. are also showing keen interest for diversified agriculture. With the introduction of scientific technologies of different crops the farmers are able to generate extra income and employment. With the introduction of vermicompost units the farmers are able to fulfil the need of the required soil nutrients in the organic vegetables growing. With the generation of extra income the farmers developed confidence to mitigate their basic problems. A self- reliance and entrepreneurial spirit has been developed among the farmers. Their new attitude towards scientific diversified agriculture has been developed. Sirah farmers' success in diversification in agriculture is inspiring the other farmers of the area in shifting the villagers towards diversification in agriculture in a scientific way for better economic returns. The other farmers of the area take opinion from them about the scientific agricultural practices used in diversified agriculture. With the scientific diversified agriculture the socio-economic status of the farmers have been improved.

5. Impact

KVK in the form of farmer's trainings, vocational trainings, front line demonstrations, farmers-scientists interaction, farmers' exposure visit, field days, Kisan Ghosties, campaigns, dissemination of production technologies through radio, TV, extension literature etc. have led to increase in agricultural diversification in the village . Gradually many farmers of the area are becoming interested in scientific diversification in agriculture. They have developed a good rapport with the KVK scientists and always participate in the agricultural extension activities conducted by the Krishi Vigyan Kendra, Reasi. Year- by- year they started to generate more income and employment. Lot of farmers including Sh. Tilak Raj, a progressive farmer in the village was highly impressed with the technical guidelines given by the KVK scientists and presently he is having one reaper-cum-binder, rotaveter, disc harrow, ferti- seed drill, maize sheller, two thrashers, two tractors etc. He possesses 160 mango plants, 80 guava plants,6 litchi plants, 60 banana plants, 35 citrus plants,10 papaya plants, 15 aonla plants, 7 pear plants and 164 agro forestry trees. He is also having one gobar gas plants and one vermicompost unit which were established by the Department of Agriculture. There are many other farmers in the village who have become agri-enterpreneurs like Sh. Tilak Raj. They used to sale wheat, maize, fruits, pulses, oilseeds, organic vegetables, marigold, poultry etc. produced. Now the village farmers have developed confidence in themselves and they are having lot of credibility on KVK scientists. The village farmers have become an example of success and motivating factor for other farmers in adjoining areas. KVK scientists too motivated other farmers also for the diversification in agriculture as it can change their socio-economic status.Farmers were facilitated to develop the marketing channels to sale their farm produce in local markets, Katra and even in Jammu. Katra has an immense potential for the marketing of their farm produce especially fruits and vegetables.

Sh.Tilak Raj, a progressive farmer of this village was felicitated by the Governor of J&K State Sh. N.N. Vohra in a farmer fair organised by the Sher-e-Kashmir University of Agricultural Sciences and Technology, Jammu (SKUAST-J) as a progressive diversified farmer in 2013-14.In 2016-17 he was again honoured by Hon'ble Union Minister

Recognition

Sh.Gulzar Ahmed has gained recognition by winning many exhibition awards in many farmers' fairs held at district and state level in Reasi district. He has exhibited some outstanding materials in different exhibitions conducted by the Sher-e-Kashmir University of Agricultural Sciences & Technology of Jammu and also state department of agriculture. In 2016 his efforts on Integrated Farming System (IFS) were appreciated by Dr.S. Ayappan, the then by Director General of Indian Council of Agricultural Research (ICAR), New Delhi at KVK, Reasi. He was also awarded as a progressive farmer in the farmer fair organised by SKUAST-Jammu in 2016. He has emerged as a progressive farmer of his area.

Sh. Gulzar Ahmed receiving the award in the farmer fair organised by SKUAST-J at Chatha, Jammu

Sh. Gulzar Ahmed at his Barseem field

हर कदम, हर डगर
किसानों का हमसफर
भारतीय कृषि अनुसंधान परिषद
Agrisearch with a human touch

Published by :
Krishi Vigyan Kendra, Reasi
Directorate of Extension
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Success Story of a Tribal Farmer

Inspired by :
Dr. P.K.Sharma, Vice Chancellor
Guided by :
Dr. R.K.Arora, Assoc. Director Extension

Prepared and Compiled by:
Dr. Banarsi Lal, I/C Sr. Scientist & Head
Sh. Jagdish Kumar, Computer Programmer

Krishi Vigyan Kendra, Reasi
DIRECTORATE OF EXTENSION
Sher-e-Kashmir University of Agricultural Sciences & Technology of Jammu

Integrated Farming System in Hilly Areas for the Prosperity of Tribal Farmers

Sh. Gulzar Ahmed is a progressive farmer of village Tanda which is about 30 km away from Katra in Reasi district of Jammu and Kashmir. He is educated up to 8th class. His family comprises his wife, two sons and one daughter. He is having 4 acres of land. Before KVK interventions he was growing maize, wheat and few local varieties of vegetables. All this agricultural produce was almost consumed by the family with very small surplus. Thus, he was unable to mitigate the basic needs of his family with the traditional farming.

Krishi Vigyan Kendra Intervention

A base line survey of village Tanda was done by the KVK team of scientists and it was observed that majority of varieties of different cops including vegetables were traditional which the forefathers of the farmers were using from many years ago. There were no proper scientific agricultural technologies utilized by the farmers of this village and crops production was very low. The Krishi Vigyan Kendra, Reasi scientists along with the allied departments introduced the improved and hybrid seeds of maize, wheat, pulses, oilseeds and vegetables in the village so that the farmers can be encouraged for the commercial farming. Scientific guidelines on dairy farming, backyard poultry farming, sericulture and horticulture were also provided to the farmers. It was intensively done to improve the crops production so that the farmers can earn their livelihood and improve their socio-economic status and can also mitigate their own nutritional problems. The Krishi Vigyan Kendra Scientists were constantly assessing and refining the technologies suitable for the farmers of that particular area.

Ex-DG, ICAR, Dr. S.Ayappan appreciating Sh.Gulzar Ahmed for his efforts for Integrated Farming System at KVK, Reasi

20 interested farmers (including Sh. Gulzar Ahmed) were identified and hybrid /improved crops seeds were provided by the KVK scientists with technical guidelines. The horticultural plants were also provided by the department of horticulture and technical guidelines on advance horticulture were given by the KVK experts. They were also guided how to save their different crops from insect-pests and diseases. They were also guided for the scientific dairy farming and backyard poultry by the KVK experts. They were constantly motivated how they can raise their socio-economic status by the Integrated Farming System.

Horticultural Plants at Sh. Gulzar Ahmed field

Sh. Gulzar Ahmed at his vegetables field

INCOME DIFFERENCE BETWEEN THE TRADITIONAL METHOD OF FARMING AND INTEGRATED FARMING SYSTEM PROVIDED BY THE KVK

Component	Area	Intervention	Gross cost	Gross return	Net profits	B:C Ratio
Traditional Method of Farming	4 acres	Use of local varieties, unscientific methods for farming	17380	37100	19720	1:2.13
Integrated Farming System	4 acres	Use of hybrid seeds. Scientific Production technology	43200	157000	113800	1:3.63

Sh. Gulzar Ahmed was having very fertile 4 acres of land which was suitable for the different crops. His methods for different crops production, dairy farming, backyard poultry farming and sericulture production were traditional. Before KVK interventions he was using the traditional technologies at his farm. The result was that the crops yield was very poor. As is evident from the above table that by using the local varieties he was able to earn only Rs. 19720 annually from 32 Kanals of land. But when he followed the scientific guidelines from KVK scientists for the integrated farming system and he used the improved /hybrid varieties of different crops, scientific dairy farming, scientific backyard poultry farming, scientific horticultural crops production and sericulture production he was able to earn Rs. 113800 annually from the same piece of land. Now Sh. Gulzar Ahmed was confident as his income has increased and he was feeling more secure by establishing an Integrated Farming System under the guidance of KVK. He has established a dug well at his farm by which he irrigates his farm land. Now Sh. Gulzar Ahmed is inspiring the other farmers of his area and they are following the same technologies as used by Sh.Gulzar Ahmed.

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

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

Maize hybrids:

1. **Hybrid maize adoption**

KVK Reasi is laying out the demonstrations of maize hybrids from the last seven years in both the districts Udhampur and Reasi. Every year more than 5 hectares of hybrid maize is laid out at the farmers' fields as FLDs. These are followed by the trainings imparted to the farmers and awareness camps and field days organized to promote hybrid maize culture in the district. Data collection and regular monitoring of crop has resulted in establishing of the facts that these hybrids have the potential to change the maize culture in hilly districts of J&K. people of the district were very less aware of the yield potentials of the hybrid maize and less than 10 percent farmers were sowing the hybrid maize. But now with the strenuous efforts of the KVK more than eighty per cent of the farmers are sowing these hybrids. The farmer is so impressed with the hybrids that they are ready to pay the high prices for single cross hybrids maize seeds. The yellow seeded maize hybrids have found special have found special preference from the poultry industry in the district. The buyers are satisfied with the grain size and offer good price to growers at their farm itself. People have preference to white maize for their own consumptions and white hybrids are also gaining popularity. KVK's efforts were synergized by the activities of the state department of Agriculture. Seeing the need the government also offered subsidy on these seeds. This year huge quantity of maize hybrid seeds were lifted from the government stores in district Reasi alone and similar was the position in district Udhampur as well. The productivity which used to hover around 10-12q/ha is now raised to 20-25 q/ha and in some demonstrations we have harvested up to 40q/ha of maize grain. Cultivation of these new hybrids has also increased the fodder availability in the district. These hybrids are tall and sturdy and along with higher yield also offer higher biomass and thus solve the fodder problems in these hilly districts. We may say that hybrid maize culture is the single technology that has spread very quickly to far furlong areas of the districts.

2. Organic Vegetables Growing: KVK has developed certain pockets for organic vegetables where the farmers are producing the organic vegetables and fetching more prices. .KVK scientists imparted specific trainings on organic vegetables growing. They were trained for the preparation of organic inputs such as Panchgavaya, Jeevamrit, Beejamrit, Cow Urine, Neem oil, Vermicompost etc. Now the farmers are growing commercial vegetables and selling in local market and also in Jammu. An organic training centre established at Talwara village is also co-ordinated by the KVK where the farmers from every nook and corners are coming for the training purpose on organic farming.

3. Development of floriculture in the district:

Another case of large scale adoption is cultivation of marigold in the district Reasi especially in Katra area. KVK Reasi actively took up promotion of floriculture since 2009. Through continuous awareness and trainings camps people of the area were motivated to cultivate marigold on commercial scale. Since the area is famous for holy shrine of Vaishno Devi there is immense demand of flowers which are often imported from other states. Thus efforts were made to encourage farmers to this enterprise. A village Chamyara in Reasi was particularly chosen for laying out demonstrations and

also for creating awareness about benefits of flower cultivation. Improved seeds of new varieties were brought from IARI, New Delhi and were distributed among growers who were till then growing local marigold breeds. Farmers were convinced about the yield potential and the quality of the bloom.An average farmer gets around Rs 8to10 thousand from one Kanal flower cultivation and this income increases to about 10,000 per kanal in diwali season. No other enterprise is giving this return to farmers of this area. Many families are now cultivating marigold and they earn anything between 50,000 to 75,000 within three months during the festival season. KVK is also introducing new cultivars so that the season of cultivation may further be increased.

Seed treatment in Wheat: The farmers of hilly district Reasi were unaware about the seed treatment in wheat . .KVK Scientist conducted campaign, awareness, Trainings, diagnostic field visit etc for seed treatment in wheat as the district is infested with the loose smut of wheat and other seed borne diseases. Though demonstration, it was shown the excellent result of seed treatment fungicides viz. vitavax @ 0.2% per kg seed. Now many farmers have adopted this technology.

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

11.0 LINKAGES

11.1 Functional linkage with different organizations

Name of organization	Nature of linkage
1.Department of Agriculture	Trainings/FLDs/OFTs/Kissan Melas /ATMA/ RKVY etc.
2.Department of Horticulture	Trainings/FLDs/OFTs/ Kissan Melas/ ATMA/RKVY etc.
3.Department of Animal Husbandry	Vet. Camps/backyard poultry
4.Department of Fisheries	Participation in meetings/technology week/ATMA/RKVY etc.
5.Department of forests	Participation in SAC meetings/supply of planting material
6.NABARD	Formation of farmers clubs/SAC meeting
7.District cooperative societies	Participation in meetings/Supply of inputs
8.SKUAST-Jammu	Collaborative programmes/supply of important inputs etc.
9.Marketing development board	Participation in meetings
10.Lead banks	Participation in meetings
11.Rural sef-employment training institute	Trainings to the farmers
12.Department of floriculture	Camps/supply of planting materials

NB The nature of linkage should be indicated in terms of joint diagnostic survey, joint implementation, participation in meeting, contribution received for infrastructural development, conducting training programmes and demonstration or any other

11.2 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.)

11.3 Details of linkage with ATMA

a) Is ATMA implemented in your district Yes

S. No.	Programme	Nature of linkage	Remarks
1.	Kisan Mela	Deptt. of agriculture	KVK experts gave the technical advice to the farmers
2.	**FFS**	Deptt. of agriculture	**Provided technical guidelines to the farmers**
3.	**Farmers-Scientist Interaction**	Deptt. of agriculture	**Interacted with the farmers on scientific agriculture in the district**

Coordination activities between KVK and ATMA during 2016-17

S. No.	*Programme*	*Particulars*	*No. of programmes attended by KVK staff*	*No. of programmes Organized by KVK*	*Other remarks (if any)*
01	**Meetings**	3	3		
02	**Research projects**				
03	**Training programmes**	5	5		
04	**Demonstrations**	2	2		
05	**Extension Programmes**				
	Kisan Mela	1	1		
	Technology Week				
	Exposure visit	2	2		
	Exhibition	1	1		

S. No.	*Programme*	*Particulars*	*No. of programmes attended by KVK staff*	*No. of programmes Organized by KVK*	*Other remarks (if any)*
	Soil health camps				
	Animal Health Campaigns				
	FFS	2	2		
06	**Publications**				
	Video Films	2			
	Books				
	Extension Literature	300			
	Pamphlets	100			
	Others News coverage	5			
07	**Other Activities**				

11.4 Give details of programmes implemented under National Horticultural Mission

S. No.	**Programme**	**Nature of linkage**	**Constraints if any**
1.	Awareness/training programmes on organic horticulture	Provided technical guidelines on organic horticulture	

11.5 Nature of linkage with National Fisheries Development Board

S. No.	**Programme**	**Nature of linkage**	**Remarks**
1	SAC	Participated as a member of SAC	-

11.6. Details of linkage with RKVY

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Remarks
1	Awareness programmes	Provided technical guidelines			

12. PERFORMANCE OF INFRASTRUCTURE IN KVK

12.1 Performance of demonstration units (other than instructional farm)

Sl. No.	Demo Unit	Year of Estt.	Area	Details of production			Amount (Rs.)		Remarks
				Variety	Produce	Qty.	Cost of inputs	Gross income	
1.	Vermicompost unit	2015				15 qt.			
2.	Dhingri unit	2016				40 bags			
3	Poultry	2014				1000 chicks			

12.2 Performance of instructional farm (Crops) including seed production

Name Of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty.	Cost of inputs	Gross income	
Cereals									
Wheat	Nov.26	April,25	2ha	PBW-509	Seed and straw	25qt	30400	42000	
Maize	June 10	Sept.28	2ha	Plant Gene	Grain and straw	18qt.	12,000	23100	
Pulses									
Black gram	June 17	Oct.8	0.6 ha	Shekhar-3	Seed	0.39	2000	3900	-
Chickpea	Nov.10	April 16	0.6 ha	GNG-1581	Seed	1.50 qt.			
Oilseeds									
Mustard	Nov.28	April,17	0.5	RSPN-25	Grain	1qt.			

			ha						
Fibers									
Sorghum	June,6	June 6	0.5 ha	SSG-1	Fodder	-	3500	9000	
Spices & Plantation crops									
Floriculture									
Fruits									
Vegetables	June 8	Sept.10	0.1 ha	Varsha Uphaar	Vegetables	92 Kg	3000	9200	
Others (specify)									

12.3 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	

12.4 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	

12.5 Utilization of hostel facilities:

Accommodation available (No. of beds) = 20

Months	***No. of trainees stayed***	***Trainee days (days stayed)***	***Reason for short fall (if any)***

April 2016			
May 2016			
June 2016			
July 2016			
August 2016			
September 2016			
October 2016			
November 2016			
December 2016			
January 2017			
February 2017			
March 2017	40	2days	KVK is located in the far-flung area of the district.

12.6. Database management

S. No	*Database target*	*Database created by the KVK*

12.7 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	

13. FINANCIAL PERFORMANCE

13.1 Details of KVK Bank accounts

Bank account	Name of the bank	Location	Account Number
With Host Institute	J&K Bank	Chatha	SB 003
With KVK	J&K Bank	Reasi	0029040500018557 IFSC- JAKA0REASSI
	J&K Bank	Dera baba	0707040500000036 JAKA0DERABAB

13.2 Utilization of KVK funds during the year 2016-17 (up to March 2017)(in lakhs)

S. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	**Pay & Allowances**	106	101	95
2	**Traveling allowances**	1.31	1.23	1.30
3	**Contingencies**			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	4.50	3.48	4.49
B	POL, repair of vehicles, tractor and equipments			
C	Meals/refreshment for trainees	16.50	11.50	14.17
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**	**8.50**	**8.41**	**8.50**
2	**Equipments including SWTL & Furniture**			
3	**Vehicle** (Four wheeler/Two wheeler, please specify)			
4	**Library** (Purchase of assets like books & journals)	0.1	0.1	0.08
TOTAL (B)				
C. REVOLVING FUND		7.68		
GRAND TOTAL (A+B+C)				

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

Year	Opening balance as on 1st April	Income during the year	Expenditure during the year	Net balance in hand as on 1st April of each year
April 2013 to March 2014	**4,68156.00**	**2,07781.00**	**27,559,00**	**6,48378.00**
April 2014 to March 2015	**6,48378.00**	**1,93250.00**	**323413 + (1 lac paid to ICAR)=423413.00**	**4,16,092.00**
April 2015 to March 2016	**4,16,092.00**	**213855.00**	**50799.00**	**6,22,829.00**
April 2016 to March 2017	**6,22,829.00**	**130256.00**	**5880.00**	**768531.00**

14. Details of HRD activities attended by KVK staff during 2016-17

Name of the staff	*Designation*	*Title of the training programme*	*Institute where attended*	*Date*
Dr .Banarsi Lal	I/CSr.Scientist-cum-Head	2 days training programme and one day KVK, workshop at SKUAST-J	SKUAST -Jammu	Mar 29-31,2017
		Himachal Krishi Vishabvidhyala, Palampur	12-14 Dec.,2016	Workshop
		PAU,Ludhiana	23-24 Jan.2017	Workshop

Dr.MSAzad	Animal Science	2 days training programme and one day KVK, workshop at SKUAST-J	SKUAST -Jammu	Mar 29-31,2017
Dr.SajayKoushal	Agronomy	2 days training programme on agril.schemes March,2016 and kvk workshop	SKUAST -Jammu	Mar 28-30,2016

15. Please include any other important and relevant information which has not been reflected above (write in detail).

Annexures

District Profile - I

Include the details of

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 19991-2001. 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 goolgulabgarh.

2. Agricultural and allied census
3. 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 kand holding is marginal to small while there are only 133 large land holdings.
4. 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.

5. Agro-climatic zones

Sl. No	***Agro-climatic Zone***	***Characteristics***

1	Subtropical zone	This includes areas between 380-800m, amsl. The lower belt of Reasi where the KVK is located falls in this zone. This area experiences hot summers followed by cold winters and area also experiences autumn frost. The major chunk of precipitation is received during monsoons. The soils are mostly sandy loam and clay loam with normal OM. Most of the area is rain fed with very little irrigation. The annual rainfall of the district is 1000 to 1100 mm. major chunk of it is received from may-September. The mean maximum and minimum temperature ranges between 35- 40 ^{0}C and 10-12 ^{0}C respectively.Agriculture in this area is diverse and is completely rain fed. The area has low productivity and low input usage.
2	Intermediate Zone	Situated between 800-1500m, amsl, this area experiences definite winters and a hot spell of summer. The major chunk of precipitation is received in July-Aug. Most part of Udhampur and Reasi falls in this zone. The annual rainfall of the district is about 1100 mm. The mean maximum and minimum temperature ranges between 35- 40 ^{0}C and 10-12 ^{0}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.

6. Agro-ecosystems
7. The major crop rotations followed are as follows:
8. 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

9. Major and micro-farming systems
ude 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

Major production systems like rice based (rice-rice, rice-green gram, etc.), cotton based, etc. includes wheat based and maize based farming systems. However, in very few pockets rice based system is also followed.

10. Major agriculture and allied enterprises 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.-Talwara, Bharakh, Gran More, Tanda, Sirah, Bhakta, Kansi Patta
2. Survey methods used (survey by questionnaire, PRA, RRA, etc.)-PRA, base line survey
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

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
2. a. Sher e Kashmir University of agricultural sciences and technology of Jammu.
3.
4. b. Regional research laboratory Jammu.
5.
6. c. Central institute of temperate horticulture, (CITH) Srinagar.
7.
8. d. Pulses research station samba.
9.
10. e. regional research station and KVK gurdaspur.
11.
12. f. CSK, HPKVV, Palampur.
13.
14. g. PAU, Ludhiana.

15. Inventory of latest technology available *

Sl. No	Technology	Crop/enterprise	Year of release or recommendation of technology	Source of technology	Reference/citation	
1	Seed treatment in various crops	Cereals/pulses/ vegetables	-	SKUAST-J		
2	Introduction of high yielding varieties in different crops	Wheat, Paddy, pulses, oilseed		SKUAST-J, PAU, CSKHPKVV		
3	Introduction of hybrids in maize	Maize	-	PAU		
4	Introduction of	Cucurbits,	-	-		

	high yielding vegetable varieties.	okra, tomato, capsicum, brinjal etc.				
5	Management of rhizome rot in Ginger.	Ginger	-	-		
6	Introduction of new varieties of ginger.	Ginger				
7	Promotion of round the year mushroom cultivation.	Mushroom	-	SKUAST-J, NRC mushroom		
8	Promotion of backyard poultry in Reasi	Poultry		SKUAST-J		
9	Fodder management for round the year availability.	Fodder spp.	-	SKUAST-J		
10.	Introduction of high yielder marigold in the district.	Merigold		IARI, New Delhi		

PS * an example for guidance only

16. Activity Chart

Crop/Animal/ Enterprise	Problem	Cause	Solution	Activity	Reference of Technology
Cotton	Low productivity of cotton under rainfed medium black soils of Northern Amaravati	1) Imbalance fertilizer application 2) Pest and disease occurance 3) Flower and fruit drop due to micro-nutrient deficiency	1. Application of recommend dose of Nutrients 2. Integrated Pest control 3. Micro-nutrient i.e boron application to control flower and fruit drop	1. Single component FLD to demonstrate effect of recommended dose of nutrients 2. Training and FLD programme on integrated pest management of cotton pest 3. OFT on management boron deficiency to control flower and fruit drop	1. Sl. No. 6 of Technology Inventory 2. Sl. No. 45 of technology Inventory 3. Sl. No. 99 of Technology inventory
Soybean					
Mulberry					
Jersy Cow					

4. 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

1. 1.8. A). Details SAC meeting* conducted in the year 2016-17

Proceeding of VIIIth SAC meeting held at K.V.K.,Reasi on 8.3.2017

The IXth scientific advisory committee (SAC) meeting of Krishi Vigyan Kendra, Reasi was held in the meeting hall of KVK, Reasi on 18-3-2017 under chairmanship of Dr. R.K.Arora, Associate Director Extension, SKUAST-Jammu. District heads and Officers from various line departments of Agriculture, Horticulture, Animal husbandry, Forestry, Soil conservation, Social forestry, Social welfare, Lead bank, Fisheries, Small scale industries etc. and progressive farmers attended the meeting (List of participants enclosed).

Dr.Banarsi Lal, I/C,Sr.Scientist cum Head, K.V.K.,Reasi and the member secretary welcomed the chairman and worthy members of scientific advisory committee and appraised the house about the importance of this meeting and asked for their valuable suggestions in reforming the action plan for the year 2016-17.

Agenda 1. Confirmation of the Proceedings

The proceedings of VIIIth scientific advisory committee (SAC) of KVK, Reasi held on 18-1-2016 at KVK, Reasi have already been circulated to all the SAC members. Since no comments were received from the members , The proceedings were unanimously confirmed by the house.

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

Dr.Banarsi Lal,I/C Sr.Scientist cum Head, K.V.K., Reasi presented the action taken report on the issues raised in the VIIIth SAC meeting. He appraised the house about the various activities undertaken by the KVK in two districts of Reasi and Udhampur. During this period, KVK imparted trainings of district Reasi and Udhampur in various disciplines of agriculture. He also presented the achievements in vocational training programmes of KVK Reasi, other activities undertaken by the KVK including diagnostic visits and on spot guidance to the farmers by visiting their fields and many farmers visited the KVK during the year in order to have solution of their problems. 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 awareness programmes and field days celebrated by the line departments. Sr. Scientist & Head also presented the action plan of KVK for the year 2017-18. After the presentation, Director Extension invited the suggestions/queries from the house and following suggestions were made:

2. ADE said for translation of books/broachers/pamphlets in to local language and prepare bulletin in Urdu for the tribal farmers (Action KVK, Reasi)
3. ADE suggested to prepare impact analysis of clusters and advised to prepare impact analysis of the technologies already disseminated among the farmers' communities. (Action KVK, Reasi)
4. ADE guided to write the course content of the training programme with topic and concerned scientist. (Action KVK, Reasi)
5. ADE suggested preparing the training programme related to watershed management. (Action KVK, Reasi)
6. ADE suggested to conduct training programme on home science especially on Papad making. (Action KVK, Reasi)
7. ADE recommended for Flex/ poster installation on FLD's and OFT's in the concerned village and farmer's field with full details of the scientific interventions. (Action KVK, Reasi)
8. ADE said to arrange Audio/video CD's of Ms. Krishana Yadav successful entrepreneur and assured to help in bringing the CD's. (Action KVK, Reasi)
9. ADE said to bring the successful entrepreneur in the KVK to encourage the budding entrepreneurs. (Action KVK, Reasi)
10. ADE said to upload the activities of KVK on KVK portal with quality photographs and also upload the photographs with practical field training at organic village on Pandit Deen Dayal Upadhaya website. (Action KVK, Reasi)
11. CAO, Reasi advised to replace the Wheat var.PBW 175 with HD2967 and HD 3043. (Action KVK, Reasi)
12. ADE said to procure the Dogri dubbed videos (30 DVD's) from KVK- Jammu showing different agriculture technologies. (Action KVK, Reasi)
13. ADE instructed to send the report of PPVFRA. (Action KVK, Reasi)
14. CAHO suggested establishing animal unit with two cows in the KVK. (Action KVK, Reasi)

15. ADE said to celebrate October 15 as National Women Day every year in the KVK and make assure that only women should participate in the National Women Day. (Action KVK, Reasi)
16. ADE suggested to get books on establishment of Vermicompost unit (Kenchua Khad) from DEE office SKUAST-J and distributed among the progressive farmers. (Action KVK, Reasi)
17. ADE suggested to introduce composite variety of maize in the district especially released varieties of SKUAST-J. (Action KVK, Reasi)
18. ADE suggested introducing the aromatic and medicinal plants in the district especially in the areas affected by monkeys.(Action KVK, Reasi)
19. ADE suggested to make groups of Haldi (Turmeric) growers in the districts with technology consultation of Successful entrepreneur Dunda Singh of Kathua (Action KVK, Reasi)

20. List of participants of 9th SAC meeting held on 8-3-2017

Sl. No.	Date	Name and Designation of Participants
1.	8.03.2017	1. Dr. R.K Arora, Assoc Director Extension, 2. Sh. Ajay Gupta Chief, HDO, Reasi 3. Sh. P.L.Bhat, Chief Agriculture Officer Reasi 4. Sh. Bharat Bhushan, Asstt. Director Fisheries 5.M.A.Malik ,VAS, Reasi 6.Ab.Rashid,Flock Supervisor, Reasi 7.Sh. A.P. Singh, Branch Manager, J&K Bank Dera 8.Avtar Singh, JAEO, Reasi 9.Sh.R.C.Pandoh,AEO,Dangakote 8. Sh. Tilak Raj, Progressive farmer 9. S. Jatinder Pal Singh Sodhi , Progressive Farmer 10. Smt. Neelam Devi, Progressive Farm Women 11. Smt. Sunita Devi, Progressive farmer 12. Sh.Vikrant Sharma,Distt.Flor. Officer, Reasi 13. Dr. Banarsi Lal, PC