

PROFORMA FOR ANNUAL REPORT 2020 (Jan-Dec)

1. GENERAL INFORMATION ABOUT THE KVK

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

1.1. Name and address of RVR with phone, fax and e-mail			
Address	Telephone		E mail
	Office	FAX	
KrishiVigyan 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	07889875590	dr.banarsi2000@gmail.com

1.4. Year of sanction: 2005

1.5. Staff Position (as on 31st March 2021)

S. No.	Sanctioned post	Name of the incumbent	Age	Discipline with highest degree obt.	Pay Band & Grade Pay (Rs.)	Date of joining at present post	Permanent /Temporary	Contact Details	Category (SC/ST/OBC/ Others)
1	Programme Coordinator (Incharge)	Dr. Banarsi Lal	43	Ph. D. Agril Extension	15600-39,100 (8000)	21.06.07	Permanent	Mo:7889875590 Email: dr.banarsi2000@gmail.com	Gen
2	Subject Matter Specialist	Mr. Lalit Upadhyay	40	M.Sc. Agroforestry	15600-39,100 (7000)	06.12.07	Permanent	Mo:9419215594 Email:	Gen
3	Subject Matter Specialist	Dr. Mandeep Singh Azad	36	M.V. Sc. (Genetics & Breeding)	15600-39,100 (6000)	04.04.12	Permanent	Mo:9419193178 Email:	Gen
4	Subject Matter Specialist	Dr.Sanjay Koushal	41	Ph.D. Agronomy	15600-39,100 (6000)	25.06.14	Permanent	Mo:9419245190 Email:	Gen
5	Subject Matter Specialist	Dr. Suja Nabi Quereshi	41	Ph.D Fruit Sciences	15600-39,100 (6000)	19.06.15	Permanent	Mo:7006097005 Email:	Gen
6	Subject Matter Specialist	Vacant				-	-	Mo: Email:	-
7	Subject Matter Specialist							Mo: Email:	
8	Programme Assistant							Mo: Email:	

9	Computer Programmer	Mr. Jagdish Kumar	45	M.Sc. IT	9300-34800 (4200)	03.06.13	Permanent	Mo: Email:	SC
10	Farm Manager	Mr. Arvinder Kumar	41	M.Sc. Agril. Extension	9300-34800 (4200)	11.08.08	Permanent	Mo: Email:	Gen
11	Accountant / Superintendent	Vacant						Mo: Email:	
12	Stenographer	Manhor Lal	33	B.Com.	9300-34800 (4200)	19.01.12	Permanent	Mo: Email:	SC
13	Driver	Mohd.Iqbal	46	10th	5200-20200 (2400)	23.7.2010	Permanent	Mo: Email:	Gen
14	Driver	Sanjeet Kumar	28	12th	5200-20200 (1900)	24.9.2018	Permanent	Mo: Email:	Gen
15	Supporting staff	Vacant						Mo: Email:	
16	Supporting staff	Sanjay Kumar	41	10th	5200-20200(1300)	1.06.2010	Permanent	Mo: Email:	Gen

1.6. Total land with KVK (in ha):

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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	-	-	-
	1	ICAR						
	2	ICAR	Feb,2008	85 (1)	4.87	-	-	-
	3	KVK	Jan, 2014		0.50			
	4	KVK	Feb, 2014		0.30			
	5	KVK	Nov. 2013		0.05			
	6	ICAR	-	-	-	-	-	Incomplete / broken
4.	Demonstration Units		-	-	-	-		
	1		-	-	-	-		
	2		-	-	-	-	-	
	3	ICAR	Feb,2009	500	62.49	-	-	-
	4	ICAR	Feb,2009	305	43.85	-	-	-
5	Fencing	ICAR	Feb,2009	400	30.17	-	-	-
6	Rain Water harvesting system	ICAR						
7	Threshing floor	ICAR	Feb,2008	85 (1)	4.87	-	-	-
8	Farm godown	KVK	Jan, 2014		0.50			

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
1.Tractor H.M.T.	2006	422650	70 hrs (app) (2018-19)	Working
2.TATA Sumo Victa	2006	500000	5435 km (2019-20)	Working
3. Hero Honda motorcycle	2011	50000		Working

C) Equipments including Tractor & 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
LCD Projector	2007	100387	Good
Printer (hpLaserjet)	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
Xerox Machine	2011	-	Good
HP Computer	2012	410000	Good
Weighing balance (100 kg)	2012	8000	Good
Compaq LED monitor	2013	11000	Good
HP colorjet printer	2013	15000	Good
Sony handycam camcorder	2013	19990	Good
Podium	2013	11000	Good
Poly green house structure (1 no)	2015	29582	Good
Laptop (HP & Lenovo)	2017	49900	Good
Laptop (Lenovo)	2018	46000	Good
Laptop(Acer)	2019	49000	Good
Computer(All-in-One) Acer	2019	37848	Good
Portable Project(Viewsonic)	2019	35721	Good

1.8. A). Details SAC meeting* conducted in the year (Jan-Dec) 2020

S. No.	Date	Name and Designation of Participants	No. of absentees	Salient Recommendations	Action taken
1.	21-11-2020	Prof.JP Sharma, Hon'ble Vice Chancellor of SKUAST-J, Chairman	2	Annexure Minutes attached	Annexure
2.		Dr.SK Gupta, Director Extension, SKUAST-J			
3.		Dr.RK Gupta, Director Research, SKUAST-J			
4.		Dr.Deepak Kher, Distt.Planning and Monitoring,SKUAST-J			
5.		Dr.JS Soodan, Prof.& Head,TVCC			
6.		Dr.Rakesh Sharma, Sr.Scientist,SKUAST-J			
7.		Dr.Narinder Panotra, Scientist, SKUAST-J			
8.		S.Iqbal Singh ,			

		Executive Engineer,SKUAST-J			
9.		Dr.Sandeep Sharma, Distt.Horticulture Officer, Reasi			
10.		Sh.Amit Sharma, Distt. Agriculture Officer, Reasi			
11.		Sh.Ravinder Kumar, Distt. Agriculture Officer, Reasi			
12.		Sh.Adarsh Gupta, DDM,NABARD			
13.		Dr.Ajay Sharma, CAHO,Reasi			
14.		Dr.Sanjesh Gupta, AD, Fisheries Deptt., Reasi			
15.		Sh. Ravi Kumar, Branch Manager, J&K Bank, Dera Baba			
16.		Sh.Romesh Khosa, Dy.Project Director,ATMA,Reasi			
17.		S.Jasmeet Singh, AEA, Reasi			
18.		Sh.Arjun Singh Parihar, Asstt.Floriculture Reasi/Udh			
19.		S. Jatinder Pal Singh Sodhi, Progressive Farmer			
20.		Smt. Sunita Devi, Progressive woman farmer			
21.		Dr. Banarsi Lal, I/C, Sr. Scientist & Head			
22.		Dr.Lalit Upadhyay, SMS, Agroforestry			
23.		Dr. Sanjay Koushal, SMS, Agronomy			
24.		Dr. Suja Nabi Qureshi, SMS, Horticulture			
25.		Dr.Arvinde Kumar, Farm Manager			
26.		Dr.Langzung Stanzin, SMS, DAMU			
27.		Smt.Sudesh Kumari, Progressive woman farmer			
28.		Sh.Prem Singh, Progressive farmer			
29.		Sh.Jagdish Kumar, Prog.Asstt.(Comp.)			

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

2. DETAILS OF DISTRICT (2020) (Jan-Dec)

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 0C and 10-12 0C 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 0C and 10-12 0C respectively. Agriculture in this area completely rain fed.
3	Temperate zone	It includes few areas falling above 1500m amsl. This area experiences chilling winters and major cropping season is Kharif, during which moisture is available for growing crops. These areas also experiences snow in winter thus minimum temperatures falls below zero degrees during these months.

2.3 Soil type/s

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

		Medium phosphorus and High in K content. Illite is dominating clay mineral. The soils are slightly acidic.	
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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	19800	396000	20.00
2	Wheat	14343	322075	22.46
2	Paddy	893	20092	22.50
4	Pulses	2050	15150	7.00
5	Millets	12428	-	-

2.5 Weather data

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

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

Category	Population	Production	Productivity
Cattle			
<i>Crossbred</i>	79476 (Udh) 15889 (Reasi)		
<i>Indigenous</i>	316099 (Udh) 126575 (Reasi)		
Buffalo	136104 (Udh) 78780 (Reasi)		
Sheep			
<i>Crossbred</i>	175337 (Udh) 210382 (Reasi)		
<i>Indigenous</i>	245268 (Udh) 300474 (Reasi)		
Goats	161432 (Udh) 174774 (Reasi)		
Pigs			
<i>Crossbred</i>			
<i>Indigenous</i>			
Rabbits			
Poultry			
Hens	117564 (Udh) 89767 (Reasi)		
<i>Desi</i>			
<i>Improved</i>			
Ducks			
Turkey and others			

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

2.7 Details of Operational area / Villages (2020) (Jan-Dec)

S. No.	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Reasi	Reasi	Dasanu, Aghar Ballian, Panasa, Gran More, Vijay Pur, Seela and Mari	Wheat, maize, Dhingri, black gram, green gram, Chickpea, g. sarson, 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	Kans Brahmna,Kansi Patta,Jambri, Malad,Chaiter, Dadua, Judd, Lehar, Bharakh, Talwara, Pouni, Kanha,Sudheen, Khairal,	Wheat, maize, fruits, vegetables, Dhingri, spices, oilseeds, chick pea,oilseeds, dhingri, poultry farming,beekeeping.	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 10.Lack of knowledge of scientific cultivation of beekeeping	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 (10)Promotion of scientific cultivation of beekeeping
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3	Reasi	Reasi	Shafanoo, Kundra, Dera Baba, Fadeha, Rajwal, Tanda, Seri, Chumbian, Mansoo, Kanjali, Bhabbar,	Maize/wheat/vegetables/poultry production/sericulture/chickpea/Mash/dhingri/floriculture	1. Lack of availability of hybrid/high yielding varieties of cereals. 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	Mand, Chirai Muthal, Lehnu/Sundrani, Tikri	Maize/wheat/pulses/oilseeds/Poultry/Mushroom	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	Dharamthal, Sudhmahadev, Basht, Chenani,	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, Mir, Dubi Galli	Maize/wheat/dairy/fruits	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	Nomain/Serwad/Bhangal/ Gern/Chamba/chakbhakta/ Pomote/Sool/Didimorh/ Agharjitto, Chamarya	Wheat, maize, vegetables, oilseeds,pulses, floriculture, poultry,lemon grass	Low productivity of flowers. Low production of cereals. Lack of availability hybrid/improved varieties' of vegetables Lack of awareness of dhangri/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 Effect of monkeys menace on crops	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 Promotion of lemon grass farming
8.	Reasi	Thuroo	Dhraman/Jashonda/ Maslote/Khad/Padde r/ Dharmari/Sajoga/Thururoo	Maize/wheat/veg./poultry/mushroom cultivation/pulses/dairy/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 dhangri/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 dhangri. 7.Promotion of scientific cultivation of temperate fruits

9.	Reasi	Mahore	Mahore/ Shajroo/Sungdi/Bandi/	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	Paintal	Sirah Kotla,/Paintal/Dheerthi/ Sool and Sirah	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 Lack of knowledge of scientific cultivation of lemon grass	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 Promotion of scientific cultivation of lemon grass

11.	Reasi	Arnas	Arnas/Salal/Bidda/Jyotipuram/Thanpal	Maize/veg./poultry/mushroom cultivation/pulses/fruits/beekeeping	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 (7) Lack of knowledge of scientific cultivation of beekeeping	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. (8) Promotion of scientific cultivation of beekeeping.
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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 and diseases 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
Lemon grass	Promotion of scientific cultivation of lemon grass

* An example for guidance only

3. TECHNICAL ACHIEVEMENTS

3.A. Details of target and achievements of mandatory activities by KVK during 2020 (Jan-Dec)

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
9	11	45	55	183.75	437	183	437

3.A.1 FLDs Conducted under CFLDs on Oilseed

FLD (Oilseeds)			
Number of FLDs		Number of Farmers	
Targets	Achievement	Targets	Achievement
18.5 ha	95	18.5 ha	95

3.A.2 FLDs Conducted under CFLDs on Pulses

FLD (Pulses)			
Number of FLDs		Number of Farmers	
Targets	Achievement	Targets	Achievement
13.10	111	13.10	111

Training (including sponsored, vocational and other trainings carried under Rainwater Harvesting Unit)					Extension Activities			
3					4			
Number of Courses			Number of Participants		Number of activities		Number of participants	
Clientele	Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
Farmers	57	59	1140	1064		276		5780
Rural youth	9	8	135	180				
Extn. Functionaries	9	6	135	77				
Skill Development	2	2	40	40				

Seed Production (Qtl.)					Planting material (Nos.)			
5					6			
Target		Achievement			Target		Achievement	
		33.7 qt.					15000 seedlings of veg. and marigold	

Livestock, poultry strains and fingerlings (No.)					Bio-products (Kg)			
7					8			
Target		Achievement			Target		Achievement	
							4000	

3.B. Abstract of interventions undertaken

S. No	Thrust area	Crop/Enterprise	Identified Problem	Interventions										
				Title of OFT if any	Title of FLD if any	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 livestock (No.)	Supply of bio products	
													No.	Kg

3.1 Achievements on technologies assessed and refined

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

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Tuber Crops	TOTAL
Varietal Evaluation	1								1
Seed / Plant production									
Weed Management	2		1						3
Integrated Crop Management						2			2
Integrated Nutrient Management				1					1
Integrated Farming System									
Mushroom cultivation									
Drudgery reduction									
Farm machineries									
Value addition									
Integrated Pest Management					2				2
Integrated Disease Management									
Resource conservation technology									
Small Scale income generating enterprises									
TOTAL	3		1	1	2	2			9

* 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	Tuber Crops	TOTAL
Varietal Evaluation									
Seed / Plant production									
Weed Management									
Integrated Crop Management					1				1
Integrated Nutrient Management									
Integrated Farming System									
Mushroom cultivation									
Drudgery reduction									
Farm machineries									
Post Harvest Technology									
Integrated Pest Management									
Integrated Disease Management	1								1
Resource conservation technology									
Small Scale income generating enterprises									
TOTAL	1				1				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								
Value Addition								
Production and Management								
Feed and Fodder								
Small Scale income								

generating enterprises								
TOTAL								

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

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

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 performance of wheat in rain fed areas of Reasi	5	5	0.4
Integrated Pest Management	Maize	Organic management of stem borer in maize crop	5	5	0.4
	Cauliflower	Organic management of insect-pests in cauliflower	5	5	0.2
Integrated Crop Management					
Integrated Disease Management	Mango	Management of anthracnose in mango	5	5	0.5
Small Scale Income Generation Enterprises					
Weed Management	Maize	Weed management in Maize	5	5	0.4
	Blackgram	Weed management in Black gram	5	5	0.4
	Wheat	Weed management in Wheat	5	5	0.4
Resource Conservation Technology					
Farm Machineries					
Integrated Farming System	Litchi	Management of fruit cracking in Litchi var. Dehradun by NAA	5	5	0.5
		Cultivation of brinjal under agroforestry	5	5	0.2

<i>Thematic areas</i>	<i>Crop</i>	<i>Name of the technology assessed</i>	<i>No. of trials</i>	<i>Number of farmers</i>	<i>Area in ha (Per trail covering all the Technological Options)</i>
Seed / Plant production					
Value addition					
Drudgery Reduction					
Storage Technique					
Mushroom cultivation					
Total					

3.2.2. Technologies Refined under various Crops

<i>Thematic areas</i>	<i>Crop</i>	<i>Name of the technology assessed</i>	<i>No. of trials</i>	<i>Number of farmers</i>	<i>Area in ha (Per trail covering all the Technological Options)</i>
Integrated Nutrient Management					
Varietal Evaluation					
Integrated Pest Management					
Integrated Crop Management					
Integrated Disease Management	Paddy	Organic management of paddy blast	5	5	0.4
Small Scale Income Generation Enterprises					
Weed Management					
Resource Conservation Technology	Tomato	Use of different mulching materials and staking in tomato fields for higher yields	5	5	0.2
Farm Machineries					
Integrated Farming System					
Seed / Plant production					
Value addition					
Drudgery Reduction					

<i>Thematic areas</i>	<i>Crop</i>	<i>Name of the technology assessed</i>	<i>No. of trials</i>	<i>Number of farmers</i>	<i>Area in ha (Per trail covering all the Technological Options)</i>
Storage Technique					
Mushroom cultivation					
Total					

3.2.3. Technologies assessed under Livestock and other enterprises

<i>Thematic areas</i>	<i>Name of the livestock enterprise</i>	<i>Name of the technology assessed</i>	<i>No. of trials</i>	<i>No. of farmers</i>
Evaluation of breeds				
Nutrition management				
Disease management				
Value addition				
Production and management				
Feed and fodder				
Small scale income generating enterprises				
Total				

3.2.4. Technologies Refined under Livestock and other enterprises

<i>Thematic areas</i>	<i>Name of the livestock enterprise</i>	<i>Name of the technology assessed</i>	<i>No. of trials</i>	<i>No. of farmers</i>
Evaluation of breeds				
Nutrition management				
Disease management				
Value addition				
Production and management				
Feed and fodder				
Small scale income generating enterprises				
Total				

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

A. Technology Assessment

Trial 1

1) Title : Varietal performance of wheat in rainfed areas of Reasi

2) Problem diagnose/defined : Low yield of local variety

3) Details of technologies selected for assessment

/refinement : **Farmer Practice:** WH1080
Recommended: PBW 644

Intervention : HD3043
(Days of maturity 135-140 days)

4) Source of Technology: SKUAST-J

5) Production system

- thematic area :Miaze-Wheat
- 6) Thematic area : ICM
- 7) Performance of the Technology with performance indicators : Farmers were satisfied after observing the results
- 8) Final recommendation for micro level situation : HD3043 gave better results
- 9) Constraints identified and feedback for research :Farmers were satisfied after observing the results.
- 10) Farmer participation and their reaction :They showed keen interest in the 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
Wheat	Farming situation: Reasi district has diverse agroclimatic conditions/zones. Maize –Wheat is the prominent cropping system due to rainfed conditions. Beside cereals farmers also cultivating pulses, oilseeds and vegetables on small scale	Low yield of local variety	Varietal performance of wheat in rain fed areas of Reasi	Five	Farmer Practice WH1080 Recommended PBW 644 Intervention HD3043 (Days of maturity 135-140 days)	Plant height No. of effective Tillers(m ²) No. of grains per spike, Test Wt. Grain yield	102cm 94 40.51 38.68 4518 kg ha ⁻¹	Farmer Practice 2624 kg ha ⁻¹ Recommended 3312 kg ha ⁻¹ Intervention 3818 kg ha ⁻¹	Farmers keen to cultivate in next season

Trial 2

- 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 : Wheat-maize
- 6) Thematic area : thematic area
- 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	5	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 ults

* 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

Trial 3

- 1) Title : Integrated weed management in chickpea
- 2) Problem diagnose/defined : Low productivity due to weed in pulses
- 3) Details of technologies selected for assessment /refinement :
T1-One Hand weeding after 30DAS
T2- Pendimethalin 1.00 (kg/ha) , pre-emergence
T3-Imazethapyr 100g/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 : Awaited
- 8) Performance indicators :
Final recommendation for Technology with micro level situation : So far satisfactorily results
- 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 : So far 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
Chickpea	Rainfed	Low productivity due to weed in pulses	Integrated weed management in chickpea	5	T1-One Hand weeding after 30DAS	yield	Awaited	So far Imazethapyr100g /ha gave the better results as compared to T2 and T3	So far farmers were satisfied with the results and were ready to use this technology on their fields
					T2- Pendimethalin 1.00 (kg/ha) , pre-emergence				
					T3- Imazethapyr 100g/ha 15 and 30 DAS (50 g each)				

* No. of farmers

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
T1-One Hand weeding after 30DAS T2- Pendimethalin 1.00 (kg/ha) , pre-emergence T3-Imazethapyr 100g/ha 15 and 30 DAS (50 g each)	Awaited	Awaited	Awaited

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

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

Trial 4

- 1) Title : Management of mango malformation
- 2) Problem diagnose/defined : Low productivity of mango due to fruit drop

APR 2019-20 (April-December)

- 3) Details of technologies selected for assessment
/refinement : T0- farmer practice
T1- 15cm clippings
T2: NAA 200ppm
- 4) Source of technology : SKUAST-J
- 5) Production system
- thematic area : Rainfed
- 6) Thematic area : Integrated disease management
- 7) Performance of the : Awaited
- 8) Performance indicators :
Final recommendation for Technology with : So far satisfactorily results
micro level situation :
- 9) Constraints identified and
feedback for research : Lack of knowledge on mango formation
- 10) Process of farmers
participation and
their reaction : So far 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
Mango	Rainfed	Low productivity of mango due to fruit drop	Mango malformation	5	Blacking of panicles and low yield	T0- farmer practice T1- 15cm clippings T2: NAA 200ppm	T2 gave better results	Initial fruit set results were effective	Farmers were satisfied after observing the initial results

*** No. of farmers**

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
T0- farmer practice T1- 15cm clippings T2: NAA 200ppm	T0-3.1 tones/ha T2-4.3 tones/ha T3-4.6 tones/ha	T0-63000/ha T1-71000/ha T2-79500/ha	1:2.26 1:2.89

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

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

Trial 5

- 1) Title : Management of red pumpkin beetle in bottle gourd
- 2) Problem diagnose/defined : Low productivity in bottle gourd due to red pumpkin beetle
- 3) Details of technologies selected for assessment /refinement :
 - T1-Farmer practice
 - T2-Acetamitrid 1gm/litre of water
 - T3-Spray of Chloropyriphos 20 EC@2ml/litre of water
- 4) Source of technology : SKUAST-J
- 5) Production system thematic area : Rainfed
- 6) Thematic area : Integrated pest management
- 7) Performance of the Technology with Performance indicators :
 - T1:165 qt/ha
 - T2:210 qt/ha
 - T3:193 qt./ha
- 8) :Final recommendation for Technology with micro level situation : T2 gave better results (210 qt./ha) as compared to T1(165 qt./ha) & T3 (193 qt./ha)
- 9) Constraints identified and feedback for research : Lack of knowledge of pesticides and lack of availability of pesticides
- 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
Bottle gourd	Rainfed	Low productivity in bottle gourd due to red pumpkin beetle	Management of red pumpkin beetle in bottle gourd	5	T1-Farmer practice T2-Acetamitrid 1gm/litre of water T3-Spray of Chloropyriphos 20 EC@2ml/litre of water	yield	T1:165 qt/ha T2:210 qt/ha T3:193 qt./ha	T2 gave better results (210 qt./ha) as compared to T1(165 qt./ha) & T3 (193 qt./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-Acetamitrid 1gm/litre of water T3-Spray of Chloropyriphos 20 EC@2ml/litre of water	T1:165 qt/ha T2:210 qt/ha T3:193 qt./ha	T1-10100 T2-17200 T3-14100	T1-1:2.23 T2-1:2.82 T3-1:3.18

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

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

Trial 6

- 1) Title : Management of fruit cracking in Litchi var. Dehradun
- 2) Problem diagnose/defined : Low production in litchi due to fruit cracking.
- 3) Details of technologies selected for assessment
/refinement :T0= farmer practice (control)
T1=20ppm
T2= 30ppm
T3= 40ppm
4. Production system
- thematic area : Rainfed
5. Thematic area : Fruit Production
6. Performance of the
Technology with
performance indicators T2 (30ppm) gave the better results(18.75 qt/ha) as compared to
T1(17.60qt./ha) ,
T3(16.1 qt./ha) & T0(14.67 qt./ha) .
7. Final recommendation for
micro level situation : T2 (30ppm) gave the better results(18.75 qt/ha) as compared to
T1(17.60qt./ha) ,T3(16.1 qt.
/ha) &T0(14.67 qt./ha) .
- .
8. Constraints identified and
feedback for research : Lack of availability of quality growth regulators in Reasi distt.
9. 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
Litchi	Rainfed	Low production in litchi due to fruit cracking	Management of fruit cracking in Litchi var. Dehradun	5	T0= farmer practice (control) T1=20ppm T2= 30ppm T3= 40ppm	Yield	T0-14.67 qt./ha T1- 17.60qt./haT2- 18.75 qt/ha T3-16.1 qt./ha	T2 (30ppm) gave the better results(18.75 qt/ha) as compared to T1(17.60qt./ha) ,T3(16.1 qt./ha) & T0(14.67 qt./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
T0= farmer practice (control) T1=20ppm T2= 30ppm T3= 40ppm	T0-14.67 qt./ha T1-17.60qt./ha T2-18.75 qt/ha T3-16.1 qt./ha	T0-54000/ha T1-62400/ha T2-71500/ha T3-61300/ha	1:2.27 1:3.18 1:2.79

Trial 7:

- A. Technology Assessment
- 1) Title : Organic management of pod borer in chickpea.
 - 2) Problem diagnose/defined : Low yield of organic chickpea due to pod borer
 - 3) Details of technologies selected for assessment /refinement : T1-farmers practice
T2-Spray Neem Oil (3ml/lt. of water)
T3-Spray of panchgavya (10%)
 - 4) Source of Technology: SKUAST-J
 - 5) Production system thematic area : Rainfed
 - 6) Thematic area : Pulses production
 - 7) Performance of the Technology with performance indicators : Farmers were satisfied after observing the results of T2 i.e.19.70 qt/ha
 - 8) Final recommendation for micro level situation : T2 (19.70 qt/ha) gave the best results as compared to T1 (7 qt/ha), T3-(17.6 qt.ha)
 - 9) Constraints identified and feedback for research : Lack of knowledge of organic treatment of pod borer
 - 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 yield of organic chickpea due to pod borer	Organic management of pod borer in chickpea.	5	T1-farmers practice T2-Spray Neem Oil (3ml/lit. of water) T3-Spray of panchgavya(10%)	Yield	T2(19.70 qt/ha) gave the best results as compared to T1(7 qt/ha),T3- (17.6 qt.ha)	T2 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 T2-Spray Neem Oil (3ml/lit. of water) T3-Spray of panchgavya(10%)	7.0 q/ha 19.70 q/ha 17.6 q/ha	47400 143000 119400	1:2.21 1: 3.57 1:3.10

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

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

Trial 8

- A. Technology Assessment
- 1) Title : Organic management of fruit and shoot borer in brinjal.
 - 2) Problem diagnose/defined : Low yield of organic brinjal due to fruit and shoot borer
 - 3) Details of technologies selected for assessment /refinement : T1-farmers practice
T2-Spray Neem Oil (3ml/lt. of water)
T3-Spray of panchgavya (10%)
T4-Installation of pheromone traps.
 - 4) Source of Technology: SKUAST-J
 - 5) Production system
 - 6) thematic area : Rainfed
 - 7) Thematic area : Vegetables production
 - 8) Performance of the Technology with performance indicators : Farmers were satisfied after observing the results of T2 i.e.180 qt/ha
 - 9) Final recommendation for micro level situation : T2T2(180 qt/ha) gave the best results as compared to T1-(95 qt/ha), T3 -(167.6 qt/ha) & T4(163.2 qt/ha)1
 - 10) Constraints identified and feedback for research : Lack of knowledge of organic treatment of fruit and shoot borer
 - 11) Farmer participation and their reaction : Farmers were satisfied after observing the results of OFTs.

B). Results of On Farm Trials

Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment	Data on the parameter	Results
2	3	4	5	6	7	8	
Rainfed	Low yield of organic brinjal due to fruit and shoot borer	Organic management of fruit and shoot borer in brinjal.	5	T1-farmers practice T2-Spray Neem Oil (3ml/lt. of water) T3-Spray of panchgavya(10%) T4-Installation of pheromone traps.	Yield	T2T2(180 qt/ha) gave the best results as compared to T1-(95 qt/ha), T3 - (167.6 qt/ha) & T4(163.2 qt/ha)	T2 gave the better result

* No. of farmers

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
T1-farmers practice	95.0 q/ha	131000	1:2.10
T2-Spray Neem Oil (3ml/lt. of water)	180 q/ha	238000	1: 3.87
T3-Spray of panchgavya(10%)	167.0 q/ha	199200	1:3.21
T4-Installation of pheromone traps.	163.20 q/ha	177800	1:2.89

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

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

Trial 9

A. Technology Assessment

- 1) Title : Organic management of stem borer in maize crop
- 2) Problem diagnose/defined : Low yield of organic maize due to stem borer in maize crop
- 3) Details of technologies selected for assessment /refinement : T1-Farmers practice
T2-Spray neem oil 3ml/litre of water
T3-Spray of fermented butter milk(1 part) and cow urine(1part) and mix in water(20 parts)
- 4) Source of Technology: SKUAST-J
- 5) Production system
- 6) Thematic area : Rainfed
- 7) Performance of the Technology with performance indicators : Farmers were satisfied after observing the results of T2 i.e.32 qt/ha
- 8) Final recommendation for micro level situation : T2(32 qt/ha) gave the best results as compared to T1-(19.5 qt/ha),

APR 2019-20 (April-December)

T3 -(26.6 qt/ha)

- 9) Constraints identified and feedback for research : Lack of knowledge of organic treatment of maize stem borer
- 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
Maize	Rainfed	Low yield of organic maize due to stem borer in maize crop	Organic management of stem borer in maize crop	5	T1-Farmers practice T2-Spray neem oil 3ml/litre of water T3-Spray of fermented butter milk(1 part) and cow urine(1part) and mix in water(20 parts)	Yield	T2(32qt/ha) gave the best results as compared to T1-(19.5 qt/ha) and T3-(26.6 qt/ha).	T2 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 T2-Spray neem oil 3ml/litre of water T3-Spray of fermented butter milk(1 part) and cow urine(1part) and mix in water(20 parts)	19.5.0 q/ha 32.0 qt/ha 26.6 q/ha	23300 36800 27100	1:2.01 1: 3.81 1:2.90

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

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

A. Technology Assessment

- 1) Title : Organic management of insect-pests in cauliflower.
- 2) Problem diagnose/defined : Low yield of organic cauliflower due to different insects pests
- 3) Details of technologies selected for assessment /refinement : T1-Farmers practice
T2-Neem oil (3ml/litre of water)
T3-Installation of pheromone traps (12 nos./ha)
T4-Panchgavya (10%)
- 4) Source of Technology: SKUAST-J
- 5) Production system

- thematic area : Rainfed
- 6) Thematic area : Vegetables production
- 7) Performance of the Technology with performance indicators : Farmers were satisfied after observing the results of T2 i.e.180 qt/ha
- 8) Final recommendation for micro level situation : T2(180 qt/ha) gave the best results as compared to T1-(110 qt/ha), T3 -(161.5 qt/ha) & T4(164.30 qt/ha)
- 9) Constraints identified and feedback for research : Lack of knowledge of organic control of insects-pests in cauliflower.
- 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
Cauliflower	Rainfed	Low yield of organic cauliflower due to different insects pests	Organic management of insect-pests in cauliflower	5	T1-Farmers practice T2-Neem oil (3ml/litre of water) T3- Installation of pheromone traps (12 nos./ha) T4- Panchgavya (10%)	Yield	qt/ha) gave results as follows: T1-(110 qt/ha), T3 -(161.5 qt/ha) & T4(164.30 qt/ha)	T2 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	110.0 q/ha	123000	1:2.10
T2-Neem oil (3ml/litre of water)	180.0 q/ha	241500	1: 3.89
T3-Installation of pheromone traps (12 nos./ha)	161.50 q/ha	169200	1:2.38
T4-Panchgavya (10%)	164.30 q/ha	176700	1:2.76

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

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

Trial 10

- 1) Title : Cultivation of brinjal under agroforestry
- 2) Problem diagnose/defined : Non utilization of land under tree or horticulture plantation.
- 3) Details of technologies selected for assessment /refinement : T1 - Farmer's Practice
T2 - Under Tree
- 4) Source of technology : SKUAST Jammu
- 5) Production system thematic area : IFS
- 6) Thematic area : Agroforestry
- 7) Performance of the Technology with performance indicators : Results showed that brinjal yield was low under agroforestry but crop can be taken under trees and extra income can be generated with tree crops.
- 8) Final recommendation for micro level situation : The area under plantation can be used for vegetable cultivation, specially in initial years of plantation.

- 9) Constraints identified and feedback for research : farmers who were not using their land under agroforestry were satisfied with the results of OFT. They showed keen interest to adopt the technology.
- 10) Process of farmers participation and their reaction : Initially farmers were worried that the results will be satisfactory or not, but when trial was conducted, the nearby farmers appreciated the technology and shown their interest to adopt the 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
Brinjal	Rainfed	Non utilization of land under tree or horticulture plantation.	Cultivation of brinjal under agroforestry	5	T1 - Farmer's Practice	yield	9865	Yield was low under trees	Farmers were satisfied with the results
					T2 - Under Tree		6685		

* No. of farmers

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
T1 - Farmer's Practice	9865	98650	1:1.35
T2 - Under Tree	6685	66850	1:0.57

*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 11

- A. Technology Assessment
- 1) Title : Organic management of paddy blast
 - 2) Problem diagnose/defined : Low yield of organic maize due to stem borer in maize crop
 - 3) Details of technologies selected for assessment /refinement : T1-Farmers practice
T2-Spray neem oil 3ml/litre of water
T3-Spray of fermented butter milk(1 part) and cow urine(1part) and mix in water(20 parts)
 - 4) Source of Technology: SKUAST-J
 - 5) Production system thematic area : Rainfed
 - 6) Thematic area : Maize production
 - 7) Performance of the Technology with performance indicators : Farmers were satisfied after observing the results of T2 i.e.32 qt/ha
 - 8) Final recommendation for micro level situation : T2(32 qt/ha) gave the best results as compared to T1-(19.5 qt/ha), T3 -(26.6 qt/ha)
 - 9) Constraints identified and feedback for research : Lack of knowledge of organic treatment of maize stem borer
 - 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
Maize	Rainfed	Low yield of organic maize due to stem borer in maize crop	Organic management of stem borer in maize crop	5	T1-Farmers practice T2-Spray neem oil 3ml/litre of water T3-Spray of fermented butter milk(1 part) and cow urine(1part) and mix in water(20 parts)	Yield	T2(32qt/ha)gave the best results as compar ed to T1-(19.5 qt/ha) and T3-(26.6 qt/ha).	T2 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 T2-Spray neem oil 3ml/litre of water T3-Spray of fermented butter milk(1 part) and cow urine(1part) and mix in water(20 parts)	19.5.0 q/ha 32.0 qt/ha 26.6 q/ha	23300 36800 27100	1:2.01 1: 3.81 1:2.90

B. Technology Refinement

Trial 1

1	Title of Technology Assessed	Use of different mulching materials in tomato crop for higher yields
2	Problem Definition	: Low yield of potato due to poor moisture
3	Details of technologies selected for assessment	: T0- farmers practice T1= Rice straw T2=Maize straw T3=Sawdust
4	Source of technology	: SKUAST-J
5	Production system and thematic area	: Wheat-maize veg.system
6	Performance of the Technology with performance indicators	: T0-185 qt/ha T1-240 qt/ha T2-270qt/ha T3-237 qt/ha
7	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	Farmers are satisfied with the result of OFT and are ready to transplant the onion in time
8	Final recommendation for micro level situation	: Transplanting time 3rd week of Dec.(25 th of Dec.) was found best with the maximum result.
9	Constraints identified and feedback for research	:
10	Process of farmer's participation and their reaction	Farmers were satisfied with the result of OFT and were ready to transplant the onion crop in time.

<i>Crop/ enterprise</i>	<i>Farming situation</i>	<i>Problem definition</i>	<i>Title of OFT</i>	<i>No. of trials</i>	<i>Technology Refined</i>	<i>Parameters of refinement</i>	<i>Data on the parameter</i>	<i>Results of refinement</i>	<i>Feedback from the farmer</i>
1	2	3	4	5	6	7	8	9	10
Wheat	Rain fed	Low yield of potato due to poor moisture	Use of different mulching materials in tomato crop for higher yields	4	T0- farmers practice T1= Rice straw T2=Maize straw T3=Sawdust	Yield	T0-185 qt/ha T1-240 qt/ha T2-270qt/ha T3-237 qt/ha	T2 gave the better results.	Farmers were satisfied after observing the results of OFT

<i>Technology Refined</i>	<i>Source of Technology</i>	<i>Production</i>	<i>Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)</i>	<i>Net Return (Profit) in Rs. / unit</i>	<i>BC Ratio</i>
11	12	13	14	15	16
T0- farmers practice T1= Rice straw T2=Maize straw T3=Sawdust	SKUAST-Jammu	T0-185 qt/ha T1-240 qt/ha T2-270qt/ha T3-237 qt/ha	Qt/ha	148000 197000 211000 189000	1:2.59 1:3.10 1:3.72 1:3.01

**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 Assessment
- 1) Title : Organic management of paddy blast
 - 2) Problem diagnose/defined : Low yield of organic paddy due to paddy blast
 - 3) Details of technologies selected for assessment /refinement : T1-Farmers practice
T2-Treatment with beejamrit (10%)
T3-Spray of Panchgavya, cow urine and fermented butter milk (10%)
 - 4) Source of Technology: SKUAST-J
 - 5) Production system thematic area : Rainfed
 - 6) Thematic area : Wheat-Paddy production
 - 7) Performance of the Technology with performance indicators : Farmers were satisfied after observing the results of T3 i.e.33.4 qt/ha
 - 8) Final recommendation for micro level situation : T2 (27 qt/ha) gave the best results as compared to T1-(19.8 qt/ha), T3 -(33.4 qt/ha)
 - 9) Constraints identified and feedback for research : Lack of knowledge of organic treatment of paddy blast
 - 10) Farmer participation and their reaction : Farmers were satisfied after observing the results of OFT.

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
Paddy	Rainfed	Low yield of organic paddy due to paddy blast	Organic management of paddy blast	5	T1-Farmers practice T2-Treatment with beejamrit (10%) T3-Spray of Panchgavya, cow urine and fermented butter milk (10%)	Yield	T2(27qt/ha),T1(19.8qt/ha), T3 -(33.4 qt/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 T2-Treatment with beejamrit (10%) T3-Spray of Panchgavya, cow urine and fermented butter milk (10%)	T2(27qt/ha), T1(19.8qt/ha), T3 -(33.4 qt/ha)	32100 25700 37900	1:2.87 1: 1.98 1:3.24

PART 4 - FRONTLINE DEMONSTRATIONS

4.A. Summary of FLDs implemented during 2020 (Jan-Dec)

Sl. No.	Category	Farmin g Situatio n	Seaso n and Year	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrate d	Area (ha)		No. of farmers/ demonstration				Reasons for shortfall in achieveme nt
									Propose d	Actual	SC/S T	OBC	Other s	Tota l	
	Oilseeds	Rainfed	Khari f 2020												
		Rainfed	Rabi 2020	Gobi Sarson	DGS-1	-	Improved varieties	Improved variety	13.5	12	8	0	62	70	Due to COVID -19
		Rainfed	Khari f 2020	Sesamum	RT-351	-	Improved varieties	Improved variety	10	6.5	4	1	20	25	
	Pulses	Rainfed				-									
		Rainfed	Rabi 2020	Chickpea	GNG-2144	-	Improved varieties of pulses	Improved var. of chickpea	10	10	13	4	71	88	
		Rainfed	Khari f 2020	Black Gram	PU-31	-	Improved varieties of Pulses	Improved var. of black gram	10	3.1	1	1	21	23	Due to COVID -19
	Cereals														
		Rainfed	Khari f 2020	Green Gram	IPM-2-3	-	Improved varieties of Pulses	Improved var. of black gram	2	2.6	3	1	12	16	
		Rainfed	Rabi 2020	wheat	WH-1080	-	High yielding varieties of wheat	Improved varieties	5	6.35	17	0	31	48	
	Millets	Rainfed	Khari f 2020	Maize	DKC-8144	Hybrid	Hybrid var.	Hybrid var	5	5	4	0	23	27	
	Vegetables	Rainfed	Khari f 2020- 21												

Sl. No.	Category	Farmin g Situatio n	Seaso n and Year	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrate d	Area (ha)		No. of farmers/ demonstration				Reasons for shortfall in achieveme nt
									Propose d	Actual	SC/S T	OBC	Other s	Tota l	
		Rainfed	2020-21	Okra, bottle gourd, bitter gourd, winter vegetables	Paravani Kranti, King of Market, Pride of India, White Vienna etc.			Hybrid var and improved varieties	2	2	2	1	32	35	
	Flowers														
	Fruit														
		Rainfed	2020-21	Button mushroom & Dhingri(Oyste r)	Agricus sp. & Pleurotus sp.		Scientific mushroom cultivation	Agricus sp. & Pleurotus sp.	-	380 bags	7	13	40	60	
	Spices and condiments														
	Commercial														
	Medicinal and aromatic														
	Fodder														
		Rainfed	Rabi 2020-21	Oats	Kent	Improve d variety	Improved varieties	Improved varieties	2	2	4	4	9	17	
		Rainfed	Khari f	Sorghum	SSG	Hyb.	Improved varieties	Improved varieties	2	2	4	2	18	24	

Sl. No.	Category	Farmin g Situatio n	Seaso n and Year	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrate d	Area (ha)		No. of farmers/ demonstration				Reasons for shortfall in achieveme nt
									Propose d	Actual	SC/S T	OBC	Other s	Tota l	
			2020- 21												
	Dairy														
	Poultry														
	Piggery														
	Sheep and goat														
	Button mushroom														
	Vermicompo st														
	IFS														
	Apiculture														
	Implements														
	Others (specify)														

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	OBC	Others	Total	

4.A. 1. Soil fertility status of FLDs plots during 2020 (Jan-Dec)

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	
	Oilseeds											
	Pulses											
	Cereals											
	Millets											
	Vegetables											
	Flowers											
	Fruit											
	Spices and condiments											
	Commercial											
	Medicinal and aromatic											

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	
	Fodder											
	Plantation											
	Dairy											
	Poultry											
	Piggery											
	Sheep and goat											
	Button mushroom											
	Vermicompost											
	IFS											
	Apiculture											
	Implements											

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	
	Others (specify)											

B. Results of Frontline Demonstrations

4.B.1. Crops

4.B.1. Crops																			
Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	No. of Demos.	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										
							H	L	A										
Oilseeds	Sesame	RT-351		Rainfed	25	6.5	6.5	3.5	6.2	3.5	77.14	6350	26900	20550	31:120	5600	13800	8200	1.2:46
	G.Sarson	DGS-1		Rainfed	70	12.0	12.5	6.5	9.32	5.4	72.59	15500	46900	31400	01:030	13200	26650	13450	01:020
Pulses	Blackgram	PU-31		Rainfed	23	3.1	7.8	5.7	7.5	4.6	63.04	16700	51600	34900	01:031	15200	39600	24400	01:026
	Chickpea	GNG-2144		Rainfed	88	10	12.2	5.6	8.8	5.6	57.14	9630	44900	35270	01:047	9240	31100	21860	01:034
	Greengram	IPM-2-3		Rainfed	16	2.6	7.4	5.4	6.7	4	67.5	11340	41900	30,560	01:037	9700	26100	16400	01:027
Cereals	Maize	DKC-8144	Hybrid	Rainfed	27	5	34.30	22.5	30.5	17.5	74.28	16900	44300	27400	01:026	13090	23400	10310	01:018
	Wheat	HD-3086		Rainfed	48	6.35	32.5	20.2	30.5	20.3	50.24	15060	39900	24840	01:026	10060	23200	13140	01:023
Millets																			

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	No. of Demos.	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										
Vegetables	Okra,radish,cabbage,k nolkhol etc.	King of Market,W hite Vienna,Pr ide of India etc.		Rainfed	50	2	230	210	220	155	41.93								
Flowers																			
Fruit	Strawberry	Chandler		Rainfed	7	0.13	230	200	210	140	43.75	220,000	675000	385000	01:03.1	178000	340000	162,000	01:01.9
Spices and condiments																			
Commercial																			
Medicinal and aromatic																			
Fodder																			
	Sorghum	SSG	Hyb.	Rainfed	24	2	430	350	420	325	29.23	31500	60500	29000	01:01.9	30100	45050	14950	1:1.49
	Oat	Kent		Rainfed	24	2	405	210	310	190	63.15	25500	49760	24600	01:01.9	23500	34600	11100	01:01.5

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	No. of Demos.	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										
Mushroom	Oyster mushroom	Pleurotus sp.		Rainfed	50	280													

* 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

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

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

4.B.2. Livestock and related enterprises

A.3.2. 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																	
Rabbitry																	
Piggery																	
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.)

<i>Data on other parameters in relation to technology demonstrated</i>		
<i>Parameter with unit</i>	<i>Demo</i>	<i>Check if any</i>

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
					H	L	A								
Common crops															
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	Button Mushroom	Agri cus sp.	2	100 bags													
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	3	44	
2	Farmers Training	57	1064	
3	Media coverage	48		
4	Training for extension functionaries	6	77	
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	1	14	0	14	11	0	11	25	0	25
Water management										
Seed production										
Nursery management	1	08	0	08	07	0	07	15	0	15
Integrated Crop Management										
Fodder production										
Production of organic inputs										
II Horticulture										
a) Vegetable Crops										
Production of low volume and high value crops	1	10	0	10	09	0	09	09	10	19
Off-season vegetables	1	0	05	05	0	20	20	0	25	25
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										
Cultivation of Fruit	1	30	0	30	11	0	11	41	0	41
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										

Plant propagation techniques	1	06	02	08	02	0	02	08	02	10
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										
Production and management technology	1	09	01	10	04	01	05	13	02	15
Post harvest technology and value addition										
III Soil Health and Fertility Management										
Soil fertility management	1	16	0	16	11	0	11	26	0	26
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										
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
X Capacity Building and Group Dynamics										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths	1	07	0	07	0	01	01	07	01	08
WTO and IPR issues	1	04	0	04	0	15	15	19	0	`19
XI Agro-forestry										
Production technologies	1	26	0	26	0	0	0	26	0	26
Nursery management										
Integrated Farming Systems	1	05	0	05	06	0	06	11	0	11
TOTAL	12	135	8	143	61	37	98	196	45	241
(B) RURAL YOUTH										
Mushroom Production										
Bee-keeping										
Integrated farming										
Seed production										
Production of organic inputs										
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										
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										
(C) Extension Personnel										
Productivity enhancement in field crops										
Integrated Pest Management										
Integrated Nutrient management										
Rejuvenation of old orchards										

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										
Gender mainstreaming through SHGs										
TOTAL										

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	1	07	0	07	16	0	16	23	0	23
Resource Conservation Technologies	1	10	0	10	6	4	10	16	4	20
Cropping Systems	1	13	0	13	04	0	04	17	0	17
Crop Diversification										
Integrated Farming	2	04	01	05	25	10	35	29	11	40
Water management										
Seed production	1	02	0	02	17	0	17	19	0	19
Nursery management										
Integrated Crop Management	1	11	0	11	7	0	7	18	0	18
Fodder production	1	0	19	19	0	06	06	0	25	25

Production of organic inputs	1	20	0	20	0	0	0	20	0	20
II Horticulture										
a) Vegetable Crops										
Production of low volume and high value crops	1	0	0	0	38	0	38	38	0	38
Off-season vegetables										
Nursery raising	1	11	0	11	0	0	0	11	0	11
Exotic vegetables like Broccoli	1	04	04	08	0	0	0	04	04	08
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	1	08	0	08	10	0	10	18	0	18
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques	2	06	02	08	12	0	12	18	2	20
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	0	34	34	0	0	0	0	34	34
e) Tuber crops										
Production and Management technology										

Processing and value addition										
f) Spices										
Production and Management technology	1	03	0	03	13	01	14	13	01	17
Processing and value addition	1	0	04	0	10	10	20	10	14	24
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
III Soil Health and Fertility Management										
Soil fertility management	1	05	0	05	5	10	15	10	10	20
Soil and Water Conservation	1	06	0	06	14	0	14	20	0	20
Integrated Nutrient Management	1	12	0	12	11	0	11	23	0	23
Production and use of organic inputs	1	14	0	14	07	0	07	21	0	21
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient Use Efficiency										
Soil and Water Testing	1	0	10	10	0	23	23	0	33	33
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	1	0	04	04	0	10	10	04	10	14
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	04	03	07	03	04	07	07	07	14
Organic manures production	1	18	0	18	0	0	0	18	0	18
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
X Capacity Building and Group Dynamics										
Leadership development	1	0	07	07	0	19	19	0	26	26

Group dynamics	1	04	01	05	0	05	05	04	06	10
Formation and Management of SHGs	2	0	12	12	0	10	10	0	22	22
Mobilization of social capital	2	0	0	0	10	05	15	10	05	15
Entrepreneurial development of farmers/youths	5	35	04	39	18	06	24	53	22	75
WTO and IPR issues	3	60	07	67	13	0	13	73	7	80
XI Agro-forestry										
Production technologies	2	11	0	11	09	01	10	20	01	21
Nursery management	2	12	0	12	9	01	10	21	1	12
Integrated Farming Systems	3	12	10	22	11	06	19	23	16	39
TOTAL	47	292	122	414	268	141	409	560	263	823
(B) RURAL YOUTH										
Mushroom Production										
Bee-keeping										
Integrated farming	2	4	6	10	26	10	36	30	16	46
Seed production										
Production of organic inputs	1	9	0	9	11	0	11	20	0	20
Integrated Farming	2	16	0	16	21	7	28	37	7	44
Planting material production										
Vermi-culture										
Sericulture										
Protected cultivation of vegetable crops										
Commercial fruit production	1	5	0	5	30	0	30	35	0	35
Repair and maintenance of farm machinery and implements										
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Value addition	2	0	15	15	9	11	20	9	26	35
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	8	34	21	55	97	28	127	131	49	180
(C) Extension Personnel										
Productivity enhancement in field crops	1									14
Integrated Pest Management										
Integrated Nutrient management										
Rejuvenation of old orchards	2									24
Protected cultivation technology										
Formation and Management of SHGs										
Group Dynamics and farmers organization										
Information networking among farmers	1									12
Capacity building for ICT application	1									14
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	1									13
Gender mainstreaming through SHGs										
TOTAL	6									77

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										
1 Crop Production	1	14	0	14	11	0	11	25	0	25
Weed Management	1	07	0	07	16	0	16	23	0	23
Resource Conservation Technologies	1	10	0	10	6	4	10	16	4	20
Cropping Systems	1	13	0	13	04	0	04	17	0	17
Crop Diversification										
Integrated Farming	3	18	01	19	36	10	46	54	11	65
Water management										
Seed production	1	02	0	02	17	0	17	19	0	19
Nursery management	1	08	0	08	07	0	07	15	0	15
Integrated Crop Management	1	11	0	11	7	0	7	18	0	18
Fodder production	1	0	19	19	0	06	06	0	25	25
Production of organic inputs	1	20	0	20	0	0	0	20	0	20
II Horticulture										
a) Vegetable Crops										
Production of low volume and high value crops	2	10	0	10	47	0	47	57	0	57
Off-season vegetables	1	0	05	05	0	20	20	0	25	25
Nursery raising	1	11	0	11	0	0	0	11	0	11
Exotic vegetables like Broccoli	1	04	04	08	0	0	0	04	04	08
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	2	38	0	38	21	0	21	59	0	59
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques	3	12	04	16	14	0	14	26	4	30
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	0	34	34	0	0	0	0	34	34
e) Tuber crops										
Production and Management technology										
Processing and value addition										
f) Spices										
Production and Management technology	1	03	0	03	13	01	14	13	01	17
Processing and value addition	1	0	04	0	10	10	20	10	14	24
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology	1	09	01	10	04	01	05	13	02	15
Post harvest technology and value addition										
III Soil Health and Fertility Management										
Soil fertility management	2	21	0	21	16	10	26	37	10	37

Soil and Water Conservation	1	06	0	06	14	0	14	20	0	20
Integrated Nutrient Management	1	12	0	12	11	0	11	23	0	23
Production and use of organic inputs	1	14	0	14	07	0	07	21	0	21
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient Use Efficiency										
Soil and Water Testing	1	0	10	10	0	23	23	0	33	33
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	1	0	04	04	0	10	10	04	10	14
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	04	03	07	03	04	07	07	07	14
Organic manures production	1	18	0	18	0	0	0	18	0	18
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
X Capacity Building and Group Dynamics										
Leadership development	1	0	07	07	0	19	19	0	26	26
Group dynamics	1	04	01	05	0	05	05	04	06	10
Formation and Management of SHGs	2	0	12	12	0	10	10	0	22	22
Mobilization of social capital	2	0	0	0	10	05	15	10	05	15
Entrepreneurial development of farmers/youths	6	42	04	46	18	07	25	60	11	71
WTO and IPR issues	4	64	07	71	13	15	28	77	22	99
XI Agro-forestry		0	0	0	0	10	10	0	10	10
Production technologies	3	37	0	37	09	01	10	46	01	47
Nursery management	2	12	0	12	9	01	10	21	1	12
Integrated Farming Systems	3	17	10	27	17	06	23	34	27	61
TOTAL	59	427	130	557	329	178	507	756	308	1064
(B) RURAL YOUTH										
Mushroom Production										

Bee-keeping										
Integrated farming	2	4	6	10	26	10	36	30	16	46
Seed production										
Production of organic inputs	1	9	0	9	11	0	11	20	0	20
Integrated Farming	2	16	0	16	21	7	28	37	7	44
Planting material production										
Vermi-culture										
Sericulture										
Protected cultivation of vegetable crops										
Commercial fruit production	1	5	0	5	30	0	30	35	0	35
Repair and maintenance of farm machinery and implements										
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Value addition	2	0	15	15	9	11	20	9	26	35
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	8	34	21	55	97	28	127	131	49	180
(C) Extension Personnel										
Productivity enhancement in field crops	1									14
Integrated Pest Management										
Integrated Nutrient management										
Rejuvenation of old orchards	2									24
Protected cultivation technology										
Formation and Management of SHGs										
Group Dynamics and farmers organization										
Information networking among farmers	1									12
Capacity building for ICT application	1									14
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	1									13
Gender mainstreaming through SHGs										
TOTAL	6									77

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

Date	Client ele	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
06.1.	Farme	Intrgated	Agrono	INM	1 day	Off	12	0	12	11	0	11	23	0	23

20	rs	nutrient management in rabi crops	my			campu s									
07.1.20	Farmers	Nursery management of horticulture crops	Hort.	Nursery management	1 day	Oncampus	08	0	08	07	0	07	15	0	15
14.1.20	Farmers	Entrepreneurship development in mushroom cultivation	Ext.Education	Enterprunership development	1 day	Off campus	06	0	06	08	0	08	14	0	14
15.1.20	Farmers	Training prog. on strategy to double farmer income	Ext.Education	Doubling farmer income	1 day	Off campus	0	0	0	10	05	15	10	05	15
22.1.20	Farmers	Training programme on organic farming for sustainable agriculture	Ext.Education	organic farmimg	1 day	Off campus	18	0	18	0	0	0	18	0	18
30.1.20	Farmers	Agroforestry for climate change mitigation	Agroforestry	Climate Change	1 day	Oncampus	26	0	26	0	0	0	26	0	26
11.2.20	Farmers	Integrated farming system under rainfed conditions	Agronomy	IFS	1 day	Oncampus	14	0	14	11	0	11	25	0	25
12.2.20	Farmers	Integrated weed management in Rabi crops	Agronomy	IWM	1 day	Off campus	07	0	07	16	0	16	23	0	23
14.2.20	Farmers	Organic farming principles and practices	Agronomy	Organic farmimg	1 day	Off campus	20	0	20	0	0	0	20	0	20
17.2.20	Farmers	Production of horticulture crops and	Hort.	orchard management	1 day	Oncampus	10	0	10	09	0	09	09	10	19

		orchard management													
18.2.20	Farmers	Advantages of high density plantings for Farmers	Hort.	high density planting	1 day	Oncampus	30	0	30	11	0	11	41	0	41
22.2.20	Farmers	Soil health card and its importance	Agronomy	Soil health	1 day	Oncampus	16	0	16	11	0	11	26	0	26
25.2.20	Farmers	Natural farming for small and marginal farmers	Agronomy	Soil health	1 day	Off campus	14	0	14	07	0	07	21	0	21
26.2.20	Farmers	Formation strengthening and management of SHGs	Ext.Education	SHGs	1 day	Off campus	0	07	07	0	19	19	0	26	26
8.3.20	Farmers	Training program on nutri-gardens for angadwari workers	Hort.	nutri-gardens	1 day	Oncampus	0	05	05	0	20	20	0	25	25
14.7.20	Farmers	Grafting methods in fruit crops	Hort.	Propagation	1 day	Off campus	0	0	0	10	0	10	10	0	10
20.7.20	Farmers	Training programme on SHGs and management	Ext.Education	SHGs	1 day	Off campus	04	01	05	0	05	05	04	06	10
17.7.20	Farmers	Shield budding and inarching graftings in fruit crops	Hort.	Propagation	1 day	Off campus	06	02	08	02	0	02	08	02	10
1.9.20	Farmers	Training programme on Agri Entrepreneurship	Ext.Education	Enterprunership dev.	1 day	Oncampus	07	0	07	0	01	01	07	01	08
2.9.20	Farmers	Awareness programme cum training	Ext.Education	Organic farming	1 day	Off campus	04	04	08	0	0	0	04	04	08

		programme on organic vegetables													
4.9.20	Farmers	Pro and cons of Agrochemicals in agriculture	Agronomy	ICM	1 day	Off campus	11	0	11	7	0	7	18	0	18
9.9.20	Farmers	Atamni Bahar in Agriculture	Agronomy	Atamni Bahar	1 day	Off campus	10	0	10	6	4	10	16	4	20
23.9.20	Farmers	Important agroforestry systems for hilly areas	Agroforestry	ICM	1 day	Off campus	0	0	0	09	01	10	09	01	10
18.9.20	Farmers	Intercropping for maximum production	Agroforestry	ICM	1 day	Off campus	8	2	10	3	0	3	10	03	13
23.9.20	Farmers	Conservation of through agroforestry	Agronomy	ICM	1 day	Off campus	0	0	0	9	01	10	9	1	10
24-9-2020	Farmers	Online farmers training programme on agri-entrepreneurship development in rural areas	Ext. Education	agri-entrepreneurship	1 day	Online	10	0	10	0	0	0	10	0	10
27.9.20	Farmers	Soil health for soil and natural farming	Agronomy	Soil health	1 day	Off campus	05	0	05	5	10	15	10	10	20
7.10.20	Farmers	Scientific Cultivation of rabi crops	Agronomy	ICM	1 day	Off campus	13	0	13	04	0	04	17	0	17
14.10.20	Farmers	High density varieties of apple for higher yield	Hort.	ICM	1 day	Off campus	08	0	08	10	0	10	18	0	18
20.10.20	Farmers	Benefits of Agroforestry Practices	Agroforestry	ICM	1 day	Off campus	11	0	11	0	0	0	11	0	11
28.1	Farmers	Important	Agroforestry	ICM	1 day	Off	01	08	09	0	06	06	01	14	15

0.20	rs	fooder trees for agrofoertry plantation	estry			campu s									
31.1 0.20	Farme rs	Online training prog. on SHGs & women empowerment	Ext.Edu cation	SHGs	1 day	Online (KVK)	0	0	0	0	10	10	0	10	10
13.1 0.20	Farme rs	Scientific seed productio n of rabi crops	Agrono my	ICM	1 day	Off campu s	02	0	02	17	0	17	19	0	19
29.1 0.20	Farme rs	Economic s of ultra high density planting of apple	Hort.	ICM	1 day	Off campu s	0	0	0	38	0	38	38	0	38
03.1 1.20	Farme rs	Use of hybrid varieties in vegetable crops for hiher yield	Hort.	ICM	1 day	Off campu s	11	0	11	0	0	0	11	0	11
05.1 1.20	Farme rs	Training cum awareness progrome on petroleum conservati on	Ext.Edu cation	Resourc e conserv ation	1 day	Off campu s	18	04	22	05	0	05	23	04	27
10.1 1.20	Farme rs	Training cum awareness progrome on petroleum conservati on	Ext.Edu cation	Resourc e conserv ation	1 day	Off campu s	31	0	31	01	0	01	32	0	32
11.1 1.20	Farme rs	Organic farming for sustainabl e agricultur e	Ext.Edu cation	Organic farming	1 day	Off campu s	04	03	07	03	04	07	07	07	14
13.1 1.20	Farme rs	Training prog on agri enterprun ership in rural areas	Ext.Edu cation	Agri enterpru nership	1 day	Off campu s	12	0	12	0	0	0	12	0	12

19.1 1.20	Farmers	Role of agroforestry in agriculture	Agroforestry	ICM	1 day	Off campus	12	0	12	0	0	0	12	0	12
26.1 1.20	Farmers	Scientific weed management in rabi crops	Agronomy	ICM	1 day	Off campus	0	0	0	11	09	20	11	09	20
27.1 1.20	Farmers	Intercropping for maximum yield production	Agroforestry	ICM	1 day	On campus	05	0	05	06	0	06	11	0	11
04.1 2.20	Farmers	IFS for sustainable Agriculture	Agronomy	ICM	1 day	Off campus	04	01	05	14	01	15	18	02	20
10.1 2.20	Farmers	Entrepreneurship dev. in beekeeping	Ext.Education	Entrepreneurship dev.	1 day	Off campus	07	04	11	05	0	05	12	04	16
11.1 2.20	Farmers	Benefits of agroforestry practices	Agroforestry	ICM	1 day	Off campus	03	0	03	08	0	08	11	0	11
21.1 2.20	Farmers	Awareness programme on MAPS	Agroforestry	ICM	1 day	On campus	09	01	10	04	01	05	13	02	15
29.1 2.20	Farmers	Scientific management in rabi crops	Agronomy	ICM	1 day	Off campus	0	19	19	0	06	06	0	25	25
31.1 2.20	Farmers	Self help groups and women entrepreneurship	Ext.Education	Self help groups	1 day	Off campus	0	12	12	0	0	0	0	12	12
07.0 1.21	Farmers	Value addition in loose flowers	Hort.	Value addition	1 day	Off campus	0	34	34	0	0	0	0	34	34
12.1. 21	Farmers	Scientific cultivation of turmeric	Agronomy	ICM	1 day	Off campus	03	0	03	13	01	14	13	01	17
21.1. 21	Farmers	Entrepreneurship development in mushroom cultivation	Ext.Education	SHGs	1 day	Off campus	0	04	04	0	10	10	04	10	14

		n among SHGs													
5.2.2.1	Farmers	Soil fertility for small holders	Agronomy	Soil Health	1 day	Off campus	0	10	10	0	23	23	0	33	33
8.2.2.1	Farmers	Awareness cum training programme on PCRA	Ext.Education	Resource conservation	1 day	Off campus	11	03	14	07	0	07	18	03	21
12.1.21	Farmers	Scientific cultivation of turmeric	Agronomy	ICM	1 day	Off campus	0	04	0	10	10	20	10	14	24
12.2.21	Farmers	Soil health on integral and beneficial agriculture	Agronomy	Soil health	1 day	Off campus	06	0	06	14	0	14	20	0	20
4.3.2.1	Farmers	Sustainable agriculture for rural development	Ext.Education	Sustainable agriculture	1 day	On campus	04	0	04	0	15	15	19	0	19
24.3.21		Training programme on commercial agriculture farm	Ext. Education	Sustainable agriculture	1 day	Off campus	0	0	0	05	06	11	05	06	11

(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 elsewhere
					Others			SC/ST			Total						
					Male	Female	Total	Male	Female	Total	Male	Female	Total	Type of units	Number of units	Number of persons employed	
Floriculture	1-4 Jan - 2020	Entrepreneurship development in Floriculture	ICM	4	4	6	10	10	4	14	14	10	24	3	3	3	
Agroforestry	11.02.	Agroforestry	ICM	5	11	0	11	4	7	11	15	7	22				

	20 to 15.02.20	y Techniques for income generation															
Floriculture	19 to 24 Oct.2020	Entrepreneurship Development in Floriculture	ICM	5	0	0	0	16	6	22	16	6	22	2	2		
Agroforestry	9-16-11-2020	Training on value addition of forest products for rural livelihood	Value addition	55	0	0	0	9	11	19	9	11	19				
Value addition in fruits and vegetables	23-27-11-2020	Training programme on value addition in fruits and vegetables	Value addition	05	0	15	15	0	0	0	0	15	15	4	4	2	
IFS	7-12/12/2020	Integrated Farming system	IFS	05	5	0	5	17	0	17	22	0	22				
IFS	24-26-12-2020	Entrepreneurship development in organic hort.	IIFS	03	5	0	5	30	0	30	35	0	35	2	2	2	
Vermicompost	27 to 31 Dec 202	Vermicompost as an enterpr	Organic Farming	05	9	0	9	11	0	11	20	0	20				

	0	rise for rural youth															
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*training title should specify the major technology /skill transferred

(E) Sponsored Training Programmes conducted by KVK, Reasi

Sl. No	Date	Title	Discipline	The mat ic are a	Dura tion (days)	Clien t (PF/ RY/E F)	No. of cour ses	No. of Participants									Spon sorin g Agen cy	Amount of fund received (Rs.)
								Others			SC/ST			Total				
								M ale	Fe mal e	Tota l	Ma le	Fe ma le	Tot al	Ma le	Fe mal e	To tal		
1	30.01.2020	Org anic far min g	Agr i	Trai nin g pro g. on org anic far min g	1 days	Farm ers	4									52	Deptt . of Agri.	
2	19.02.2020 20.02.2020 for 2 days	Co mm erci al agri .	Agr i	Trai nin g pro gra mme for div ersi fied agri .	2 days	Farm ers	8									50	Deptt . of Agri.	
3	19.02.2020 20.02.2020 for 2 days	Org anic far min g	Agr i	Trai nin g pro g. on org anic far min g	2 days	Farm ers	8									45	Deptt . of Agri.	
4	23-24-12-2020	Org anic hort .	Hort.	Trai nin g pro g. On org anic hort .	2	Farm ers	4									9	Deptt . of Hort.	

5	24-26-3-2020	Organic hort.	Hort.	Training prog. On organic hort.	3	Farmers	6									35	Deptt. of Hort.	
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(F) Skill Development Training under ASCI Conducted by selected KVKs

Sl. No	Date	Title	Discipline	Thematic area	Duration (days)	Client (PF/R/EF)	No. of courses	No. of Participants					
								Others			SC/ST		
								Male	Female	Total	Male	Female	Total
1	20.1.20 to 24.2.20	Nursery Worker	Hort.	Nursery Raising	35	RY	35	5	0	5	15	0	15
2	20.1.20 to 24.2.20	Vermi-compost Producer	Agronomy	Organic Farming	35	RY	35	10	0	10	10	0	10
								15	0	15	25	0	25
Total													

6. Extension Activities (including activities of FLD programmes) Jan-Dec 2020

Sl. No.	Nature of Extension Activity	Topic / crop	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
	Field Day	Field day on sesame, 22.10.2020	1	11	8	19	0	0	0	-	-	-	11	8	19
	Field Day	Field day on maize, 28.10.2020	1	0	0	0	7	3	10	-	-	-	7	3	10
	Field day	Field day on black gram, 2.11.2020	1	14	1	15	0	0	0	-	-	-	14	1	15
	Total		3	25	9	34	7	3	10				32	12	44
	Kisan Mela(organized)	Kisan Mela at Talwara	1												179
	Kisan Mela(attended)	Kisan Mela(attended)	3												1150
	Total														
	Kisan		2												205

	Ghosthi														
	Exhibition		8												1200
	Film Show		8												220
	Method Demonstrations		1												17
	Farmers Seminar														
	Workshop		3												
	Group meetings		5												45
	Lectures delivered as resource persons		28												310
	Newspaper coverage		48												
	Radio talks														
	TV talks		5												
	Popular articles		92												
	Extension Literature		7												1000
	Advisory Services		16												
	Scientific visit to farmers field		26												82
	Farmers visit to KVK														930
	Diagnostic visits														66
	Exposure visits		4												110
	Ex-trainees Sammelan														
	Soil health Camp		1												36
	Animal Health Camp														
	Agri mobile clinic														
	Soil test campaigns														
	Farm Science Club Conveners meet														
	Self Help Group Conveners meetings		7												77
	Mahila Mandals Conveners meetings		6												64
	Celebration of important days (specify)														

i)	International Women's Day(8.3.20)		0	16	16	0	36	36	1	1	2	53	1	54	
ii)	Mahilla Kisan Diwas(15-10-20)														
iii)	World Soil Day(5-12-2020)														
	Celebration of Special days (specify)														
i)	Celebration of Mahatma Gandhi Birth Anniversary(2-10-2020)		9	3	12	0	0	0	0	0	0	9	3	12	89
ii)	Celebration of POSHAN MAAH		5												124
ii)															62
	Grand Total		315	39	75	9	37	46	3	1	4	100	25	125	439

* Example for guidance only

6. B. Kisan Mobile Advisory Services Jan-Dec 2020

Kisan Mobile Advisory									
Name of the KVK	No. of farmers Covered	No. of Advisories Sent	Type of messages						
			Crop	Livestock	Weather	Marketing	Awareness	Other enterprise	Any other

6.C. DETAILS OF TECHNOLOGY WEEK CELEBRATIONS during Jan-Dec 2020

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

7. Production and supply of Technological products Jan-Dec 2020

A) SEED MATERIALS

Major group/class	Crop	Variety	Quantity (qtl.)	Value (Rs.)	Provided to No. of Farmers
CEREALS					
	Wheat	WH-1080	20qt(approx.)		
	Maize	Double Deklab	25qt.	36000	
	Oat	Sabzar	0.12 qt		
OILSEEDS					
	Mustard	DGS-1	1.0 qt		
	Til	RT-351	0.35 qt.		
PULSES					
	Blackgram	PU-31	0.90		
VEGETABLES					
	Okra	Varsha Uphaar	0.10		
FLOWER CROPS					
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					
	Vegetables Seedlings	Pride of India, White Vienna, King of Market, Pusa Purple Long, Pride of India	7500		
FOREST SPECIES					

ORNAMENTAL CROPS					
	Marigold Seedlings	Hybrid, Pusa Narangi & Pusa Basanti	7500		
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						

SHEEP AND GOAT						
POULTRY						
FISHERIES						
Others (Specify)						

* An example for guidance only

PART 8 – PUBLICATION, SUCCESS STORY, SWTL, TECHNOLOGY WEEK AND DROUGHT MITIGATION Jan-Dec 2020

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

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

(B) **KVK e-News Letter** – (Name, Date of start, periodicity, Name of the Website uploaded)

(C) Literature developed/published

<i>Item</i>	<i>Title</i>	<i>Authors name</i>	<i>Number of copies</i>
Research papers	A study on media preferences of organic farmers of hilly areas of J & K. International Journal of Chemical Studies.pp.898-900.	Lal, B. and Tandon,V.(2020).	
	STUDY TO DEVELOP AN APPROPRIATE MODEL FOR IMPROVING THE COMMUNICATION BEHAVIOUR OF FARMERS. International Journal of Agriculture Sciences.pp.9490-9492.	Lal, B. (2020).	
	Communication Behaviour of Maize Growers in Hilly District Reasi of J&K. <i>Journal of Community Mobilization and Sustainable Development</i> Vol. 15(2), 436-440, May-August, 2020.	Lal, B. and Tandon, V.(2020).	
	Study on Yield of <i>Kharif</i> Vegetable Crops under Poplar based Agroforestry System in Subtropics of Jammu, Jammu and Kashmir. <i>International Journal of Agriculture Sciences</i> , ISSN: 0975-3710 & E-ISSN: 0975-9107, 12(18), 10192-10194.	Upadhyay L., et al., (2020)	
	A Study on Performance of <i>Lycopersicon esculentum</i> under	Upadhyay, L., S. K. Gupta, Sandeep Sehgal and Arvinder	

<i>Item</i>	<i>Title</i>	<i>Authors name</i>	<i>Number of copies</i>
	Poplar Based Agroforestry System in Subtropics of Jammu (J&K). <i>International Journal of Current Microbiology and Applied Science</i> 9(09): 2893-2899.	Kumar (2020)	
	“Forest and grassland resources” in the course sustainable natural resource management for M. Sc. (Environmental science) course of IGNOU Delhi.	Upadhyay, L. (2020)	
	“Sustainable harvesting of biodiversity” in the course sustainable natural resource management for M. Sc. (Environmental science) course of IGNOU Delhi.	Upadhyay, L. (2020)	
Books	Diversified farming in J&K	Dr.Banarsi Lal, Dr.Pawan Kumar Sharma and Dr.AS Charak	Astral International Pvt.Ltd.
	Krishi Vigyan Kendra (KVK), Reasi-A Journey with the Farmers	Dr.Banarsi Lal, Sh.Lalit Upadhaya, Dr.Suja Nabi Qureshi, Dr.Sanjay Kaushal, Dr.Mandeep Singh Azad, Dr.Arinder Kumar Sh.Jagdish Kumar	14
Technical reports			
Technical bulletins	Bhderwah Rajmash.	Dr.Banarsi Lal, Dr.AS Charak and Dr.Narinder Paul	
	Kishtwar Saffron.	Dr.Banarsi Lal, Dr.AS Charak and Dr.Narinder Paul	
Popular articles(2020)	Lemon Grass: A Viable Crop:	Dr.Banarsi Lal, Dr.Lalit Mohan Gupta, Dr.Suja Nabi Qureshi and Dr.Lalit Upadhaya	
	Challenges, opportunities in agricultural sector	Dr.Banarsi Lal & Dr. Pawan Sharma	1-1-2020, State Times
	Heinous crimes against women	Dr.Banarsi Lal & Dr. Pawan Sharma	8-1-2020, State Times
	Communication support for sustainable agriculture	Dr.Banarsi Lal & Dr. Pawan Sharma	13-1-2020, State Times
	Rural youths and sustainable development	Dr.Banarsi Lal & Dr. Pawan Sharma	13-1-2020, Early Times
	Promotion of group entrepreneurship	Dr.Banarsi Lal & Dr. Pawan Sharma	17-1-2019, Early Times
	Need of road safety	Dr.Banarsi Lal & Dr. Pawan Sharma	23-1-2020, Daily Excelsior
	Spirit of the Indian Republic	Dr.Banarsi Lal & Dr. Pawan Sharma	27-1-2020, Early Times
	Human resource development through KVKs	Dr.Banarsi Lal & Dr. Pawan Sharma	9-2-2020, State Times
	Combat Malnutrition in children	Dr.Banarsi Lal & Dr. Pawan Sharma	10-2-2020, State Times
	Strengthening agricultural extension for	Dr.Banarsi Lal & Dr. Pawan	11-2-2020, State Times

<i>Item</i>	<i>Title</i>	<i>Authors name</i>	<i>Number of copies</i>
	rural prosperity	Sharma	
	Rural tourism for sustainable development	Dr.Banarsi lal &Dr. Pawan Sharma	12-2-2020, Early Times
	Impact of climate change on livestock production	Dr.Banarsi lal &Dr. Pawan Sharma	15-2-2020, Early Times
	Transformation in rural areas through ICTs	Dr.Banarsi lal &Dr. Pawan Sharma	16-2-2020, Early Times
	Potential of agro-ecotourism in Reasi distt. of J&K	Dr.Banarsi lal &Dr. Pawan Sharma	17-2-2020, State Times
	Attracting and retaining youths in agriculture	Dr.Banarsi lal &Dr. Pawan Sharma	19-2-2020, Early Times
	Promotion of Urban Agriculture	Dr.Banarsi lal &Dr. Pawan Sharma	24-2-2020, Early Times
	Need of agro-processing for doubling the farmers income	Dr.Banarsi lal &Dr. Pawan Sharma	25-2-2020, Early Times
	Agro-ecotourism-For sustainable development in J&K	Dr.Banarsi lal &Dr. Pawan Sharma	7-3-2020, Early Times
	Empowering rural women through agriculture	Dr.Banarsi lal &Dr. Pawan Sharma	10-3-2020, Early Times
	Hydroponics farming	Dr.Banarsi lal &Dr. Pawan Sharma	17-3-2020, State Times
	Promoting group entrepreneurship for development	Dr.Banarsi lal &Dr. Pawan Sharma	20-3-2020, State Times
	Organic farming and rural entrepreneurship development	Dr.Banarsi lal &Dr. Pawan Sharma	25-3-2020, State Times
	Role of social media in agriculture	Dr.Banarsi lal &Dr. Pawan Sharma	25-3-2020, Early Times
	Role of Social Media in Agriculture	Dr.Banarsi lal &Dr. Pawan Sharma	25-3-2020, Early Times
	Water and climate change	Dr.Banarsi lal &Dr. Pawan Sharma	31-3-2020, State Times
	Sustainable agricultural practices	Dr.Banarsi lal &Dr. Pawan Sharma	1-4-2020, State Times
	Environmental Education—Need of the hour	Dr.Banarsi lal &Dr. Pawan Sharma	2-4-2020, State Times
	Strengthening Rural-Urban Linkages	Dr.Banarsi lal &Dr. Pawan Sharma	2-4-2020, Early Times
	Disaster Management for Sustainable Development	Dr.Banarsi lal &Dr. Pawan Sharma	6-4-2020, Early Times
	Ensuring Sustainable Development with Organic Farmers	Dr.Banarsi lal &Dr. Pawan Sharma	8-4-2020, Early Times
	Strategies for Sustainable Dairy Farming	Dr.Banarsi lal &Dr. Pawan Sharma	11-4-2020, State Times
	Innovative farmer from Reasi District of J&K	Dr.Banarsi lal &Dr. Pawan Sharma	11-4-2020, State Times
	Vermicompost— Black gold for farmers	Dr.Banarsi lal &Dr. Pawan Sharma	12-4-2020, State Times
	Hydroponics for Clean and Green Areas	Dr.Banarsi lal &Dr. Pawan Sharma	12-4-2020, Early Times
	Pandemic and Farmers of India	Dr.Banarsi lal &Dr. Pawan Sharma	16-4-2020, Early Times
	Yoga-Art and Science for a Healthy Life	Dr.Banarsi lal &Dr. Pawan Sharma	17-4-2020, Early Times
	Need to Safeguard our Heritage Monuments	Dr.Banarsi lal &Dr. Pawan Sharma	19-4-2020, Early Times
	Ensuring sustainable development with organic farming	Dr.Banarsi lal &Dr. Pawan Sharma	20-4-2020, State Times
	Exploring the strawberry cultivation in	Dr.Banarsi lal &Dr. Pawan	20-4-2020, Early Times

Item	Title	Authors name	Number of copies
	Reasi distt. of J&K	Sharma	
	Public-Private Partnership(3P) in Agriculture	Dr.Banarsi lal &Dr. Pawan Sharma	20-4-2020, Early Times
	Agro-ecotourism-A boon for the farmers of J&K	Dr.Banarsi lal &Dr. Pawan Sharma	22-4-2020, Early Times
	Need to Combat the Climate Crisis	Dr.Banarsi lal &Dr. Pawan Sharma	24-4-2020, Early Times
	Strengthening Panchayats for Rural Development	Dr.Banarsi lal &Dr. Pawan Sharma	25-4-2020, Early Times
	Human Resource Development (HRD) through KVKs	Dr.Banarsi lal &Dr. Pawan Sharma	25-4-2020, State Times
Training Manual			
Extension literature	जैविक खेती-समय की जरूरत	लेखक इस प्रकार हैं- डॉ. बनारसी लाल, आई/सी, सीनियर साइंटिस्ट व केवीके के प्रमुख रियासी, Dr.SK गुप्ता, निदेशक विस्तार, एसकेयूएसटी-जे, डॉ ललित उपाध्याय, एसएमएस, केवीके, रियासी, डॉ संजय कौशल, एसएमएस, केवीके, रियासी, डॉ सुजा नबी कुरैशी, एसएमएस, केवीके, रियासी व जगदीश कुमार, कंप्यूटर प्रोग्रामर, केवीके, रियासी (शोर-ए-कश्मीर कृषि विज्ञान एवं प्रौद्योगिकी विश्वविद्यालय-जम्मू)	
	स्वयं सहायता समूहों के माध्यम से ग्रामीण महिलाओं का सशक्तिकरण	डॉ. बनारसी लाल*, डॉ. शीतल बडयाल*, डॉ. सुजा नबी कुरैशी*, डॉ. ललित उपाध्याय***** * I/C, सीनियर साइंटिस्ट-सह-हेड, कृषि विज्ञान केंद्र, रियासी-१८२३०१ **एसएमएस, केवीके, आरएस पुरा, जम्मू*** एसएमएस, केवीके, रियासी और ***एसएमएस, केवीके, रियासी, *Comp. प्रोग्रामर, केवीके, रियासी, शोर-ए-कश्मीर कृषि विज्ञान एवं प्रौद्योगिकी विश्वविद्यालय-जम्मू।	
	कृषि विज्ञान केंद्र (केवीके) रियासी: सफलता की राह पर	लेखक हैं: डॉ. बनारसी लाल, मै/सी, सीनियर साइंटिस्ट-सह-हेड, केवीके, रियासी, डॉ. सुजा नबी कुरैशी, एसएमएस केवीके, रियासी, डॉ. संजय कौशल, एसएमएस, केवीके रियासी, डॉ. ललित उपाध्याय, एसएमएस, केवीके, रियासी के एसएचओ जगदीश कुमार,	

Item	Title	Authors name	Number of copies
		कंप्यूटर प्रोग्रामर, केवीके, रियासी, डॉ. अरविंदर कुमार, फार्म मैनेजर, केवीके, रियासी व Dr.SK गुप्ता, निदेशक विस्तार.	
Folders /leaflets	Renewable energy for environment conservation	Lalit Upadhyay, Sanjay Koushal, Arvinder Kumar, Lobzangstanzen, Pretty Chaudhary	
	Spices cultivation for doubling farmers income	Lalit Upadhyay et. al.	
	Neembughasutpadantaknik (Hindi)	Lalit Upadhyay et. al.	
	Dhev: a multipurpose tree	Lalit Upadhyay et. al.	
TOTAL			

(C) Details of Electronic Media Produced

S. No.	Type of media (CD / Software)	Title of the programme	Number
1			

(D) Mobile App developed by KVK

S.No.	Name of KVK	Name of Mobile App Developed	Year in which App is Developed	No. of Users downloaded the App	Type of information offered by the App(seeds, fertilizers, market prices, weather etc.)

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

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

- 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
- 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
- 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

TITLE

Introduction

KVK intervention

Output

Outcome

Impact

Augmenting the Income of Rural Women of Hilly Areas through Parshad Making: A Success Story
INTRODUCTION:

Shri Mata Vaishno Devi Shrine is the world famous pilgrimage centre in Reasi district of J&K. Reasi district is said to be an abode of Shri Mata Vaishno Devi Shrine. Every year millions of devotees from across the nation visit this holy shrine to pay homage. There is an immense scope of Parshad in the area. The devotees use Parshad while paying homage at shrine and they also take the Parshad along with them at their native places as a pious gift for others. This shrine is surrounded by green luscious mountains. This place has its own attraction and many devotees visit this religious spot every year with full fervor and enthusiasm. Katra is the base camp of this holy Shrine which is about 50 Kms. from Jammu.



SHG is an informal association of 10-15 women who voluntarily come together for saving of credit and enhances the members' financial security. The primary purpose of SHG is to improve the socio-economic status of poor rural women, especially to increase their income. Self Help Groups (SHGs) have been instrumental in women empowerment by enabling them to work together. It is a process which ultimately leads to self fulfillment of each member of group. Poverty continues to be a serious concern in hilly district Reasi of Jammu and Kashmir where about 37.93% of people are below poverty line. Gender mainstream lining strategy aims to raise the socio-economic status of rural women of hilly areas by improving their income and employment. Self Help Groups (SHGs) strategy also adopts the same philosophy and aims at bringing the neglected rural woman into mainstream of economic development through saving and income generation strategy. SHGs are considered as self-driven movements impacting specially the rural poor people. SHG formation provides monetary and moral support to individual members. Women's SHGs are transforming the face of the Indian villages. Trainings and economic independence have empowered the women and lives of women from underprivileged groups have undergone a sea change as it provide an opportunity to women to interact with each other, understand their common problems, channel their savings and encourage for development. SHGs provide the benefits of economics in certain areas by undertaking common action programmes like cost effective credit delivery system, generating a forum for collective learning with rural people, creating democratic culture, developing entrepreneurial culture, providing a base for dialogue and cooperation, developing credibility and power to assure participation. Self Help Groups have been recognised in all over India as one of the most suitable tools for delivering microfinance to the poor people. The SHGs are like precious diamond whose quality depends on the way they are shaped. By observing the benefits of SHGs and scope of Parshad in the Shri Mata Vaishno Devi Shrine, Katra, KVK Reasi encouraged the women of hilly areas to form SHG on Parshad Making.

Smt. Sudesh Kumari is from village Serwad village in Reasi distt. of J&K. Her village is about 4 Km away from the world famous place Katra. She is 53 years old housewife. She has two sons and one daughter. Her husband, Sh. Prem Singh is a small farmer who was using the traditional technologies in agriculture. She is 53 years old housewife belongs to a farming family and her education is of middle standard. Her husband is a small farmer who was using the traditional agriculture. It was very difficult for her to mitigate the basic needs of her family as the family was using the traditional technologies in agriculture. She along with nine other women of her village thought to form a Self Help Group (SHG). In 2008 they approached to the KVK, Reasi for the guidance. Now she has emerged as the successful group leader in the area.

KVK Intervention:

A baseline survey of the village was conducted by KVK team which revealed that there was immense scope of Parshad making/food processing due to Shri Mata Vaishno Devi Shrine near Serwad village. KVK Scientists guided the women in the formation, management and strengthening of SHG and also motivated them for the Parshad Making.



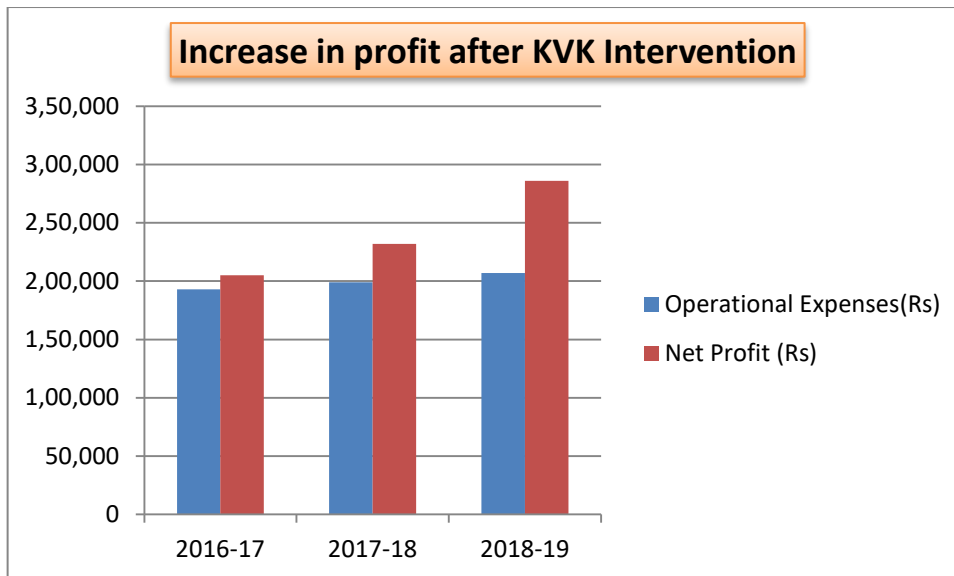
KVK endeavoured to aware, train and motivate the hilly women farmers. They were guided to have fortnight meetings to develop a healthy rapport among themselves. The name of the group was decided by the group members as “Vaishno Devi Mahila Dal” by its 10 members. KVK, Reasi scientists rigorously imparted the training programmes on SHGs formation, management and strengthening of SHGs. Technical skills on Parshad Making were also imparted by the KVK scientists. Apart from training programmes, KVK scientists conducted farmers-scientists interactions, radio talks, TV talks, film shows, special group meetings, exposure visits etc. for the SHG. Technical bulletins and other extension literature on SHGs were provided to the SHG members. The advantages of groups were elaborated to SHG members. The group president, secretary and treasurer were selected and group members were advised to save the money. The homogeneity of groups in terms of their socio- economic status was also considered while forming the group. They were guided for the proper book keeping. More than 20 training programme conducted by KVK for SHG members proved a convincing tool and played a significant role in creating interest and capacity building among the group members. With the technical assistance of KVK, the quality and quantity of Parshad increased. SHG members were facilitated to create the marketing channel of their produce which ultimately gave the results. Now they sale their produce to the Vaishno Devi Shrine Board.



Output:

Before KVK interventions rural women's of Serwad village were in despair as they were lacking the sources for their livelihood. They were unable to mitigate the basic needs of their families. Continuous guidance and vocational trainings provided by the KVK helped SHG members to mechanize the process of Parshad Making, packaging and marketing. With the introduction of scientific methods of Parshad Making, they raised their annual income up to Rs. 2,05,000/ha in 2016-17 to Rs.2, 86,000/ha in 2018-19. By making the Parshad in a scientific way, the SHG members are fetching more money.

S. No.	Year	Enterprise taken	Operational Expenses(Rs.)	Total Output(Rs.)	Net Profit(Rs.)
1.	2016-17	Parshad Making	1,93,000	3,98,000	2,05,000
2.	2017-18	Parshad Making	1,99,000	4,31,000	2,32,000
3.	2018-19	Parshad Making	2,07,000	4,93,000	2,86,000



Outcome:

Initially the SHG was preparing only about 50 qtls. of Parshad per annum and there was less demand due to poor quality. But with the KVK interventions, the quality and quantity of Parshad increased. Presently they are producing more than 320 qtls of Parshad per annum. The Parshad of Vaishno Devi Mahila Dal is in great demand and devotees visiting across the nation liked this Parshad due to its purity and unique taste. Shri Mata Vaishno Devi Shrine Board is purchasing the Parshad of this group at a very high rate and the demand is increasing year after year. This helped to increase the income of the group. Now many other traders are also coming forward to purchase their Parshad. The quality of the product increased its demand. The net income of the group has increased from 2.05 lakh in 2016-17 to 2.86 lakh in 2018-19. By observing the successful results of Vaishno Devi Mahila Dal, the other rural women from the adjoining villages such as Aghar Jitto, Gern, Sool, Chamada, Didi More, Chamba etc. are also coming forward for SHGs formation and start the entrepreneurship on Parshad Making. With the introduction of scientific techniques for Parshad Making, the SHG members are able to generate extra income. Now they are able to mitigate their basic needs and are able to send their children for higher education. With the generation of extra income, the group members developed confidence among themselves and they gained recognition in their area. A self-reliance and entrepreneurial spirit have been developed among the SHG members. Their new attitude towards scientific method of Parshad Making has been developed. With the scientific Parshad Making the socio-economic status of the SHG members have been improved. Serwad women's group success in Parshad Making is inspiring the other rural women of the area for Parshad making in a scientific way for the better economic returns. Now the other rural women's of the area take opinion from Vaishno Devi Mahila Dal members about the scientific Parshad Making practices. "Vaishno Devi Mahila Dal" has proved that how women can organise together to beat the poverty and despair. This group is progressing day-by-day.

Impact:

It has been observed that around Rs 90/- are consumed in preparing 1Kg of Parshad and it is sold @ Rs.180/kg. Now the group has started to produce more than 320 qtls. of Parshad/annum. Presently the annual net income of the group is Rs.2,86,000/-.SHG helped to brought the economic upliftment, developed leadership qualities among the members and inculcated great confidence among the group members. With the increase in the income of group, the women members get respect from their families and are recognised by the other members of the community. By observing the successful result of "Vaishno Devi Mahila Group" in Serwad, the other women of the area have shown keen interest in SHG formation. With the formation of SHG women developed confidence to mitigate their basic needs. The members of this SHG have become pillars for the growth and sustainability of their families. They have become torchbearers for the other women of the area and now they are advising the other women to form SHGs to come out from the poverty. The product of this group is displayed in the various exhibitions held in the district and out of district. The group leader of this group Smt.Sudesh Kumari now provides consultancy services to other new SHGs. She has become the driving force for the many rural women of the hilly areas in the district. Her daughter completed her Post Graduation and appointed as the Govt.School Teacher. Presently Smt.Sudesh Kumari has a very good Pucca house and a car also. KVK, Reasi is striving hard for women empowerment through SHGs in Reasi district. Hon'ble Ex-DDG Education, ICAR, Dr.PS Rathore, Hon'ble Ex-Vice Chancellor of SKUAST-J, Dr.PK Sharma, Deputy Commissioner of Reasi distt., KVK, Reasi scientists, SKUAST-J scientists and many other officers from different organisations appreciated the group for its splendid performance. The group was also awarded by the Union Minister, Dr.Jitendra Singh during his visit at KVK, Reasi in 2016.



S.Gurdev Singh Success Story

S.Gurdev Singh S/O S. Chatter Singh is a 66 years old progressive farmer of village Bharakh which is about 40 km away from Reasi town of Jammu and Kashmir. The population of his village is 4800 with 70 per cent of literacy rate. His educational qualification is up to matric. His family comprises of his wife, one daughter and one son.

The Journey

Village Bharakh is about 40 km away from Reasi town. The village is 100 per cent rain fed and it is very difficult for the farmers to increase their crops production. S.Gurdev Singh is having 1.5 ha of land with meager income resources. Before 2012, he was growing maize, wheat, few medicinal and aromatic plants and few local varieties of vegetables. All his agricultural produce was almost consumed by his family with very small surplus. The traditional farming was not generating extra income for him. Then he came in contact with the KVK, Reasi scientists. A base line survey of village Bharakh was done by the KVK scientists and it was observed that majority of varieties of different crops including vegetables used by the farmers were traditional which their forefathers were using from years ago. There were no proper scientific agricultural technologies to be utilized by the villagers and production was very poor. The Krishi Vigyan Kendra, Reasi scientists along with the allied departments imparted awareness/ training programmes on “Commercial Vegetables/fruits growing” and

introduced the improved and hybrid seeds of the vegetables by laying Front Line Demonstrations (FLDs). The training on beekeeping and MAP were also imparted by KVK, Reasi scientists.

The farmers including S. Gurdev Singh were also taken for the exposure visits at KVK, Reasi and SKUAST-J. It was intensively done to improve the vegetables/fruits production in the village 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 guiding the farmers for the scientific commercial vegetables/fruits growing and assessing and refining the new technologies suitable for the farmers of Bharakh village. 20 interested vegetable growers (including S. Gurdev Singh) were identified and hybrid /improved vegetables seeds were provided by the KVK scientists with technical guidelines. Farmers including S. Gurdev Singh were simultaneously guided for scientific beekeeping and MAP. They were also guided how to save their crops from insect-pests and diseases. They were constantly motivated how they can raise their socio-economic status by growing the vegetables/fruit crops. S. Gurdev Singh is having around 1.5 ha of fertile land which is suitable for the vegetables/fruits growing. When he initiated the vegetables/fruits growing in his land, he was using the traditional technologies. The result was that the yield was very poor. He was not having assured source of irrigation. By using the local varieties he was able to earn only Rs.65, 700/ha annually.

Start Up

He established a bore well at his farm as irrigation was primarily needed for the commercial fruits and vegetables. He along with his wife started to grow the commercial vegetables and fruits without any labour from outside. He followed the scientific guidelines provided by the KVK, Reasi scientists. The improved/hybrid varieties seeds of vegetables were provided by KVK, Reasi and the orchard planting material was provided from the Deptt. of Horticulture.

Present Scenario:

He used the improved/hybrid varieties of vegetables/fruits and he was able to earn Rs. 1.92 lakh/ha annually from the same piece of land. With his income he purchased TV, refrigerator, cooler etc. His overall socio-economic status improved. His son educated up to graduation and he married his daughter with his farm income. A transformation happened in his life. Now S. Gurdev Singh is confident as his income has increased and he is feeling more secure by growing the vegetables/fruits under the guidance of KVK scientists. He also started some income from his beekeeping unit. He has started applying FYM and other organic inputs in his fields for organic vegetables/fruits. S. Gurdev Singh has established a vegetables/fruits/honey sale counter at his home.

Constraints Identified:

Initially he faced problem because of lack of technical knowledge. Then he was technically supported by KVK, Reasi scientists. He was lacking quality seeds and other agro-inputs. He was lacking transportation and marketing facilities. Agro-processing of fruits, vegetables and MAP was also a great hurdle for him.

Lesson for other farmers

Now S. Gurdev Singh has become a motivating factor for other farmers of his area and they have started to adopt the same technologies as used by him. A self-reliance and entrepreneurial spirit has been developed by him. Many farmers come to him for his opinion towards commercial fruits and vegetables cultivation. He has become a ray of hope for the other farmers of the area and has become a role model for other farmers of his area.

Awards and Recognition

S. Gurdev Singh has gained recognition by winning many exhibition awards farmers' fairs held at district and state level. He has exhibited some outstanding materials in different exhibitions conducted by the SKUAST-J and also by state department of agriculture/horticulture. He has emerged as a progressive farmer of his area. With the increase in his income by the vegetables growing his respect and recognition has also been increased in the area. Keeping his performance in vegetables growing in view, he was awarded by Hon'ble Union Minister, Dr. Jatinder Singh as an innovative farmer in the farmers fair organised by Krishi Vigyan Kendra, Reasi at its campus in 2016-17. He has got progressive farmer award from Hon'ble Ex-Min. of J&K, Sh. Ajay Nanda during the prog. organised by Deptt. of Agri., Reasi in 2017. He has also got 2nd Prize in the Fruit Show organised by Deptt. of Hort., Reasi in 2007. Got appreciation from Hon'ble VC of SKUAST-J, Prof. JP Sharma during his visit at KVK, Reasi in 27th of June, 2020. He was awarded as the Progressive Farmer Award by the Hon'ble VC of SKUAST-J, Prof. JP Sharma in the Kisan Mela organised by KVK, Reasi at Talwara, Reasi. He has also been awarded as an Innovative Farmer Award by the Hon'ble VC of SKUAST-J, Prof. JP Sharma during the inauguration programme at KVK, Samba on 8-1-2021. S. Gurdev Singh is very eager to learn scientific vegetables/fruits growing. He is very hard working and have positive attitude towards agriculture.

Exposure Visits: He has visited many times SKUAST-J and PAU-Ludhiana. He has also visited many times KVK, Reasi. In 2020 he went the national level tour organized by the National Board of Medicinal Plants and visited CIMAP-Lucknow and many other important institutions.

Conclusion: S. Gurdev Singh has emerged a successful farmer of his area but wants to excel more. He expects financial support, processing facilities from Government. He expects new technologies and new varieties of fruits and vegetables from SKUAST-J. He wants more technical know from KVK, Reasi.



Sh. Tilak Raj Success Story

Sh. Tilak Raj is a 66 years old progressive farmer of village Sirah which is 7.5 km away from famous religious place Katra in Reasi district of Jammu and Kashmir. His family comprises his wife and five children. He is having 5 acres of land. Total population of his village is 1450 with 68 per cent literacy rate. He is matriculate and his family comprises of 8 persons.

The Journey

Sirah village is about 7.5 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. The major occupation of the people is agriculture but there is no source of irrigation and the village is totally rain fed. He is having 5 acres of land which is totally rain fed. Initially he was growing maize, wheat and few local varieties of vegetables as his forefathers were doing. He was using the traditional technologies in his fields and monkeys and boars were the great problems in his fields. All the agricultural produce was consumed by his family with very little surplus to sell. His farming system was deteriorating and he was unable to mitigate the basic needs of his family. With traditional technologies he was able to generate only Rs.81, 000/ha. In 2009-10 he initiated the scientific agriculture on a small scale. Right from this year he was stressing on diversified agriculture. He used local resources and started growing of maize, wheat, fruits and vegetables. Initially he got mediocre results and also got some failures especially in fruits and vegetables. He was lacking the scientific knowledge of mushroom cultivation. Then in 2010-11, he came in contact with the KVK scientists. KVK scientists started regularly visiting his farm and they scientifically guided him and motivated him to use new technologies at his farm. He has also developed a marketing channel to sell his produce. Scientific cultivation of cereals, fruits and vegetable changed his life. There is a great demand of his farm produce in Jammu region. Year by year he was generating more income and now with the introduction of lemon grass farming he is generating Rs.2.85 lakh income/ha.

Start Up

KVK in the form of farmer's trainings, vocational trainings, front line demonstrations, farmer-scientists interaction, farmers' exposure visit, dissemination of production technologies through radio, TV, literature has led to increase in diversification in agriculture at Sh. Tilak Raj fields. Slowly but surely many more farmers of the area are becoming interested in diversification in agriculture. He followed the scientific guidelines provided by the KVK, Reasi scientists. The improved/hybrid varieties seeds of vegetables were provided by KVK, Reasi and the orchard planting material was provided from the Deptt. of Horticulture.

Present Status

Presently he is having reaper-cum-combiner, rotameter, disc harrow, seed-cum-fertilizer drill, maize Sheller, two thrashers, two tractors and two trucks. He is also having 115 mango plants, 130 guava plants, 8 litchi plants, 60 banana plants, 35 citrus plants, 15 aonla plants and 7 pear plants. He is scientifically growing pulses, oilseeds, spices, lemon grass etc. at his farm. He has about 10 Kanals area under lemon grass. Lemon grass at his field has become centre of attraction in the area as it is helpful to fetching more money for him. With his efforts lemon grass unit distillation unit has been established in his village. He has done value addition in lemon grass farming by which he is generating more money and employment in the area. He has given employment to more than 40 women members of SHGs. He has mobilized more than 30 farmers for lemon grass farming. He is also having one gobar gas plants and one vermicompost unit. By the scientific diversified farming he is able to generate Rs.2.85 lakh income/ha.

Constraints Identified:

Initially Sh.Tilak Raj faced problem because of lack of technical knowledge. Then he was technically supported by KVK, Reasi scientists. He was lacking quality seeds and other agro-inputs. He was lacking transportation and marketing facilities. Lack of processing facilities for lemon grass.

Lesson for other farmers

Sh.Tilak Raj has developed confidence in him and has become a credible source of agricultural information. He has become a motivating factor for other farmers of his area and they have started to adopt the same technologies as used by him. A self-reliance and entrepreneurial spirit has been developed by him. Many farmers come to him for his opinion towards diversified farming. He has become a ray of hope for the other farmers of the area. He is gradually diverting the farmers of his area towards scientific diversified farming. Sh. Tilak Raj success in diversification in agriculture is inspiring the other farmers of his area in shifting the villagers towards diversification in agriculture for better economic returns. He is having good rapport with the KVK scientists and always participates in the training programmes and farmers' fairs conducted by the Krishi Vigyan Kendra, Reasi.

Awards and Recognisations:

Sh.Tilak Raj was felicitated by the Ex-Governor of J&K, Sh. N.N. Vohra in a farmer fair organised by the Sher-e-Kashmir University of Agricultural Sciences and Technology, Jammu as an innovative farmer. He was also awarded as an Innovative Farmer Award by Hon'ble Union Min. of India, Dr.Jatinder Singh during the Kisan Mela held at KVK on 15 April, 2016, He also got Best Farmer award from former Min. of J&K, Sh.Ajay Nandaji during the prog. organised by the Deptt. of Agri., Reasi. He was awarded as the Progressive Farmer Award by the Hon'ble VC of SKUAST-J, Prof.JP Sharma in the Kisan Mela organised by KVK,Reasi at Talwara, Reasi. He has also been awarded an Innovative Farmer Award by the Hon'ble VC of SKUAST-J, Prof.JP Sharma during the inauguration programme at KVK, Samba on 8-1-2021.

Exposure Visits: He has visited many times SKUAST-J. He has also visited many times KVK, Reasi. In 2020 he went for the national level tour organized by the National Board of Medicinal Plants and visited CIMAP-Lucknow and many other important institutions.

Conclusion: Sh.Tilak Raj has emerged a successful farmer of his area but wants to excel more. He expects financial support, processing facilities from Government. He expects new technologies and new varieties of fruits and vegetables from SKUAST-J. He wants more technical know from KVK, Reasi. He wants trainings on value addition in medicinal and aromatic plants. Efforts of Sh. Tilak Raj have given new shape to the diversification in agriculture. The quantity and quality of agricultural production have been increased by his efforts. His efforts are attracting the other farmers of this area also towards diversification in agriculture.



From Coal Mines to an Innovative Farmer

Background: Reasi district of J&K is an abode of Mata Vaishno Devi and endowed with vast bio-diversity and agro-climatic diversity. This hilly district lies between 33°05' N Latitude and 74°50' E Longitude. Total geographical area of the district is nearly 1700 Sq. Km. and is spread over the three main agro-climatic zones. The lower hills of Katra, Painthal, Reasi, Pouni, Talwara fall in the subtropical belt while Arnas, Kanthan, Thanpal, Judda, Dharmari etc. fall in the higher intermediate zone. Buddan, Mahore, Chasana, Lar, Deval etc. comprises of higher temperate zone. Mean annual rainfall varies from 1000-1100mm with intensity ranging from the drizzling to the torrential rain in the district. Rainfall is well distributed from May-September, July being the wettest. Rainfall is moderate in other months of the year. Sometimes dry spell prevails from the month of Dec-March. Large variation in agro-climatic conditions at micro level are observed due to mountainous terrain and high peaks in the district. The district has immense potential in horticultural crops as every year lakhs of devotees visit at Vaishno Devi Shrine, Shiv Khori and various other religious spots of the district and there is great demand of fruit crops in the district. Irrigation is a major constraint for the fruit crops production in the district as major area of the district is rain fed with only about 6 per cent irrigated area.

S.Harjeet Singh is 68 years old progressive farmer from Bharakh village in Pouni block of Reasi distt. of J&K. He is having two daughters and one son. He retired from Coal Mines Limited in 2012. After his retirement he planned to be a progressive orchardists' and set a live example to the other farmers of the area. He is having around 1 ha (20 Kanals) of land. He was keenly interested in the horticultural crops production. With his own efforts and KVK, Reasi technical guidelines he established an orchard comprising of about 200 fruit crops of different varieties. Initially he felt great difficulty to save his orchard as he was lacking the source of irrigation to irrigate his orchard. Due to lack of irrigation source his fruit yield and quality was very poor. Initially he used to irrigate his orchard manually but it was very difficult for him to irrigate such a big orchard. His increasing age was also coming in the way to irrigate his 1 ha (20 Kanals) of orchard. He was direly need of irrigation for his horticultural crops. He was lacking the irrigation resources as most part of the area is rain fed. Sometimes he was thinking to leave the horticultural crops production but simultanseouly he was thinking to do something new.

Innovation: S.Harjeet Singh thought to develop an innovative method of irrigation. With his strenuous efforts he designed the underground method of irrigation especially for his orchard. Due to deficient irrigation sources, spreading system of irrigation was not successful. Also due to uneven distribution of land (sloppy and hilly) drip irrigation systems are also not successful in the area. Moreover, it was a costly affair for him. In order to overcome all these problems, S.Harjeet Singh designed and developed an innovative underground method of irrigation especially for his orchard. This is a unique method of irrigation especially for the fruit plants. He designed this method of irrigation by utilizing the iron pipes (underground) by which the fruit plants are irrigated efficiently with the least wastage of water and labour. Under this method, every fruit plant is having a common source of irrigation but every fruit plant can be irrigated individually according to the need as there are different underground points for irrigation in his orchard. This method of irrigation is very cheap, efficient and simple and

can be used even by the small orchardists. S.Harjeet Singh has also installed CCTV cameras in his orchard in order to overcome the problem of fruit thefts and also for the care of his orchard.

Significance: Use of underground method of irrigation in the orchard increased his fruit crops yield with the least wastage of water and labour. This method of irrigation is safe, cheap and can be implemented by the illiterate, small and marginal farmers and even by the female orchardists. The underground pipes are not affected by the animals and have a long lasting life. Use of underground method of irrigation and CCTV cameras in the orchards can sustain the horticultural crops production and thus can enhance the income and employment among the farmers of the area. CCTV cameras also helped to increase the profit from the fruit crops in his orchard as the crops are protected from the trespassers and wild animals. Both the techniques are environment friendly and accepted by the farming community of the area. Both the techniques increased the fruit crops production of S.Harjeet Singh and thus assisted him to become an entrepreneur in the area. He applies only the organic practices in his orchard and thus produces organic and safe fruits. He has established a marketing outlet at his home and people from the area used to purchase his organic fruits at a good price. During the lockdown period when there was difficulty for the people of the area to purchase the fruits from outside, S.Harjeet Singh provided quality fruits to the people of his area. Now he has developed a high tech orchard with full mechanization. He is having power tiller, knapsack sprayers, hand sprayers, bush cutters, secateurs etc. in his orchard.

Impact: S.Harjeet Singh innovations are proving boon to him. With his innovations he has started to generate Rs.1.50 lakh from his newly established orchard. His annual income is increasing year after year. By observing the successful results of this method of irrigation and use of CCTV cameras in S. Harjeet Singh orchard, many other farmers of the area are also coming forward to use these innovations in their orchards. Underground method of irrigation can reduce the conflicts over irrigation and it is totally safe and cheap. S.Harjeet Singh has made not only made his horticultural crops sustainable but has also shown a new path to other farmers of the area who can also reap the benefits of these innovations. These innovations can increase the area under horticultural crops in the district and thus can help to uplift the socio-economic status of the farmers.

Recognition: Due to his innovations, S.Harjeet Singh has been appreciated many times by the KVK, Reasi scientists, SKUAST-J Scientists, Department of Horticulture and allied sectors officials. He was awarded as the 'Best Innovator Award' by the Hon'ble Ex-VC of SKUAST-J, Prof.PK Sharma during the National Conference organized by SIDAVES at SKUAST-J in 2019. He has also been appreciated by the worthy DC, Reasi, Mrs.Indu Kanwal Chib because of his innovations in horticulture.

Way forward: Underground method of irrigation and use of CCTV cameras in the orchards can directly enhance the income and employment of the farmers of hilly areas. Underground method of irrigation is very efficient, cheap, time and labour saving. CCTV cameras can protect the crops from thefts and even from the wild animals. Hence, both the innovations can be boon for the orchardists. These innovations can be implemented by the other orchardists especially in the rainfed areas to uplift their socio-economic status. Both these innovations are eco-friendly and can sustain the livelihood of the farmers of hilly areas. S.Harjeet Singh has given a new ray of hope to the farmers of rain fed areas of J&K. Thus, both the innovations are futuristic and can be boon for the other orchardists of rain fed hilly areas of J&K.



Success Story of a Tribal Farmer

Organic Farming brings Prosperity to the Tribal Farmers of Hilly Areas

Sh.Md.Sadiq S/O Sh. Haji Mohd. Din is a progressive farmer of village Talwara which is about 6 km away from Reasi town of Jammu and Kashmir. He has been educated up to 4th class. His family comprises his wife, 4 sons and three daughters. He is having 2 acres of land, 5 buffalows, 3 heifers, 2 oxes, 42 sheep and goats and 18 poultry birds. Before KVK interventions he was growing maize, wheat and few local varieties of vegetables by using the traditional technologies. 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 Talwara village was done by the KVK team of scientists and it was observed that majority of farmers of the village were interested in the organic farming especially in vegetables and spices. Krishi Vigyan Kendra (KVK), Reasi scientists repeatedly approached to the farmers of this village and motivated them for the organic farming. There were no proper scientific organic 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 guided the farmers on commercial organic farming. They were also educated on organic dairy and poultry farming. Scientific guidelines on organic goat and sheep rearing was also provided to the farmers. Farmers were guided on Integrated Farming System to generate more money. In

the beginning the farmers were advised to avoid the agro-chemicals in their crops so that that the can be grown organically. The farmers were also guided for the establishment of vermicompost units in their farms and they were suggested to use the organic inputs. In the beginning the farmers faced lot of problems as they were not getting the desired yields of their crops. The management of insect-pests and plant diseases was done by using the organic inputs. The farmers were guided on organic formulations and some quality organic inputs were also provided to the farmers by the KVK. The Krishi Vigyan Kendra scientists assessed and refined the organic farming technologies suitable for the farmers of that particular area. Exposure visits of farmers were also organized by the KVK. After a practice of three years on organic farming the certification of their products was done by the Intertech India Ltd. through Agricultural and Processed Food Products Export Development Authority (APEDA). Farmers were consistently motivated for organic farming by the KVK scientists.

Income difference between the traditional method of farming and organic farming method adopted by Sh.Mohd.

Sadiq

Component	Area	Intervention	Gross cost	Gross return	Net profits	B:C Ratio
Traditional Method of Farming	2 acres	Use of local varieties, unscientific methods of farming	59380	122900	63520	1:2.06
Organic Farming Method	2 acres	Use of organic farming production technology	62200	239000	176800	1:3.84

Sh.Mohd.Sadiq was having very fertile 2 acres of land which was suitable for the different crops. His methods for different crops production, dairy farming, backyard poultry farming and goat and sheep 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 with poor quality. As is evident from the above table that by using the traditional technologies he was able to earn only Rs. 63520/- annually from his 2 acre farm. But when he followed the scientific organic farming practices followed by KVK scientists for the commercial organic farming he was able to earn Rs. 176800/- annually from the same piece of land. Now Sh.Mohd. Sadiq was confident as his income has increased and he was feeling more secure by establishing an organic farm under the guidance of KVK. Now Sh.Mohd. Sadiq is inspiring the other farmers of his area and they are coming forward for organic farming.

Recognition:

Sh. Sh.Mohd. Sadiq has gained recognition by his efforts on organic farming. He was also awarded during the Sheep and Goat Show organised by the Deptt. of Sheep and Husbandry, Reasi (J&K). He has also been highly appreciated by the KVK, Reasi scientists and allied sector departments. In 2017 his efforts on organic farming were highly appreciated by Dr.PK Sharma, the then Vice Chancellor of SKUAST-J during his visit at Sh.Mohd. Sadiq field. He has emerged as a progressive farmer of his area and other farmers of the area are also showing interest for commercial organic farming.





Best Farm Practices to Combat COVID-19

Marketing Support to the Strawberry Growers by KVK, Reasi

Background

- ❖ Strawberry is an important cash crop in Reasi distt. of J&K.
- ❖ KVK, Reasi scientists provided technical guidelines to the strawberry growers of the distt.
- ❖ COVID-19 lockdown became hurdle for the growers to sale their produce.
- ❖ On an average, 105 qt/ha of strawberry can be harvested (equivalent to Rs. 7.5 lakh/ ha) in the district due to suitable climatic conditions.
- ❖ Farmers were very disappointed as they were unable to sale their strawberry produce due to lockdown.



Contribution: KVK, Reasi, J&K

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Best Farm Practices to Combat COVID-19

Marketing Support to the Strawberry Growers by KVK, Reasi

Action points

- ❖ KVK, Reasi came forward to help the farmers during lockdown period.
- ❖ KVK, Reasi I/C, Sr.Scientist-cum-Head approached to the district administration. With the help of DC, Reasi, the growers were linked to the police personnels who purchased the strawberry at a very good price. Some other govt. officials also came forward to purchase the strawberry.
- ❖ It developed confidence among the growers as they generated extra income during the lockdown period.
- ❖ Their success story was covered by DD News.
- ❖ KVK, Reasi brought smile on the face of farmers during tough time.



Contribution: KVK, Reasi, J&K

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

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

S. No.	Crop / Enterprise	ITK Practiced	Purpose of ITK
1	Vegetables	Use of ash to control red pumpkin beetle in cucurbits	to control red pumpkin beetle in cucurbits
2	-do-	Use of ash to supply nutrients in cucurbits and vegetable crops to increase the yield	to supply nutrients in cucurbits and vegetable crops to increase the yield
3	Maize	Control of weeds in maize crop by ploughing in between the plants of maize crop	Control of weeds
4	Cucurbits	Sorghum and cucurbits are sown together to control the insects-pests	to control the insects-pests
5	Cereals	Leaves of trees are used to increase the fertility in maize and wheat crop	to increase the fertility in maize and wheat crop
6	Wheat	Leaves of Neem plant , Bana(Vytusnigundu) and Eucalyptus sp. plant are used to store the wheat grains and protect from stored grain pests	to store the wheat grains and protect from stored grain pests
7	Cereals	Use of kerosene oil to protect the field crops from termite attack	to protect the field crops from termite attack
8	Wheat	Protection of wheat crop from rabbits attack by using the white cloths and polythene sheets on sticks	Protection of wheat crop from rabbits attack
9	Maize	Mixed cultivation of maize and cowpea to protect the maize crop	to protect the maize crop from boars

		from boars	
10	Vegetables	Staking of cucurbits, peas and tomato to increase the yield and also to get the good quality of crop	to get the good quality of crop
11	Maize	Use of cow urine mix with the cow dung to control the insect-pests in maize crop	to control the insect-pests in maize crop
12	Animals	Use of saunf, gur and mustard oil after boiling it and then filtering it to control bloating in animals	to control the insect-pests in maize crop
13	livestock	Bleeding from certain parts of animals to control the bloating in animals	animals to control the bloating in animals
14	Livestock	Mixture of cotton and ghee to control the diarrhoea in animals	animals to control the bloating in animals
15	Livestock	Use of Methi and gur mixture to control the diarrhoea in animals in winters	to control the diarrhoea in animals in winters
16	Livestock	Gur and saunf mixture to control the diarrhoea in animals in winters	to control the diarrhoea in animals in winters
17	Livestock	17. Use of mixture of mustard oil and lassi to control the Diarrhoea in animals in summers	to control the Diarrhoea in animals in summers
18	Livestock	Hooka (tobacco) water is used to save the animal if bitten by snake or any other poisonous organism	to save the animal if bitten by snake or any other poisonous organism
19	Livestock	Use of kerosene oil to control the ticks and mites in animals	to control the ticks and mites in animals
20	Livestock	Use of Dhaman plant leaves to increase the yield of milk in animals	to increase the yield of milk in animals
21	Livestock	Use of mixture of salt, mustard oil and turmeric to control the foot and mouth disease in animals	to control the foot and mouth disease in animals
22	Livestock	Black ink and ghee or oil to protect the animals from wounds infection	to protect the animals from wounds infection
23	Fruits	Use of ripening of mango by using the wheat straw	Use of ripening of mango
24	Livestock	Use of protein rich concentrate (mixture of wheat brawn, cotton cakes, mustard cakes, salt and chickpea bran) to increase the milk yield in animals	Use of ripening of mango
25	Cereals	Protect wheat crop from rabbits attack by sowing lentil in fields	Protect wheat crop
26	Wheat	Protection of wheat crop from rodents by giving the flour with ghee	Protect wheat crop
27.	Crops	Rat killing by desi ghee mixture with the flour.	Mixture of desi ghee & flour kills rats in the organic belts of Reasi distt.
28.	Onion	Purple blotch in onion	By making a sol. by mixing turmeric and lassi.

9.D. Indicate the specific training need analysis tools/methodology followed for

-Identification of courses for farmers/farm women:-we do the base line survey of the villages where we have to introduce the technology. Through base line survey we assess the felt and unfelt need of the villagers. We consult with the village head and progressive farmers. We also consider the opinion of distt. Heads and progressive farmers in SAC meeting for deciding the training courses.

-Rural Youth: We consider the interest of the rural youth in particular location. Also we consider the availability of markets of the particular products which they can produce after getting vocational trainings. While consider the vocational trainings of the rural youth, we take the local available materials for the training purpose.

-In-service personnel: We provide the abreast knowledge of different agricultural activity according to the needs of the district.

8. E. Field activities

- i. Number of villages adopted-4
- ii. No. of farm families selected-105
- iii. No. of survey/PRA conducted-12

9.F. Activities of Soil and Water Testing Laboratory / Plant Health Clinic

- Status of establishment of Lab : Mini soil testing lab has been established
1. Year of establishment : 2016-17
 2. List of equipments purchased with amount : Different reagents, soil testing equipment, weighing machine etc.

Sl. No	Name of the Equipment	Qty.	Cost
1	Soil Testing Kit	1	86,000
2	Soil Testing Kit	1	86,000
3	Soil Testing Kit	1	86,000
Total		3	2,58,000

3. Details of samples analyzed / Soil Health Cards issued during 2020 (Jan-Dec) :173

Details	No.	No. of Farmers	No. of Villages	Amount realized
Soil Samples	145	145	5	
Water Samples				
Plant Samples	20	20	4	
Soil Health Cards Issued	140	140	5	

4. Status of mini soil testing labs/kit : Has been established. Needs some reagents and solutions
5. Year of procurement of lab/kit : 2016-17
6. No. of mini labs with the KVK :3
7. Type of mini labs (Name of lab/Kkt) :Soil Testing Kits

8. Details of samples analyzed through mini soil kit / Soil Health Cards issued during 2020 (Jan-Dec) :

Details	No. of Samples	No. of Farmers	No. of Villages	Amount realized
Soil Samples	145	145	5	
Water Samples				
Soil Health Cards Issued	140	140	5	

10. IMPACT

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

Name of specific technology/skill transferred	No. of participants	% of adoption	Change in income (Rs.)	
			Before (Rs./Unit)	After (Rs./Unit)
1.Training programme on	72	45	73,000/ha	2,55,000/ha

commercial organic farming				
2.Training programme on commercial floriculture	66	45	1,09,600/ha	3,00,500/ha
3.Entrepreneurship development in agriculture	26	30	65,000/ha	1,75,000/ha
4.Poultry farming as an entrepreneurship	30	33	30,000-40,000/per year/per 1000bird unit(6-7 lots per year)	100000-115000 /per year/per 1000 bird unit(6-7 lots per year)
5.Processing of mango and other locally available fruits	26	30	For household use	54,000/unit/year
6.Processing of fruits and vegetables	123	36	For household use	62,000/year
7.Training programme on scientific cultivation of mushroom/dhingri	45	21	-	98,500/unit/year

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)**

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, Neemoil, 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. Farmers are selling their organic farm produce in nearby army camps, local market and even at Jammu.

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 8 to 10 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.

Lemongrass Farming : Another case of large scale adoption is cultivation of lemon grass in the district Reasi especially in Painthal belt. KVK Reasi actively took up promotion of lemon grass farming since 2016. Through continuous awareness and trainings camps people of the area were motivated to cultivate lemon grass on commercial scale. CIMAP-Lucknow and IIM-Jammu co-ordinated KVK, Reasi in promotion of lemon grass farming. Since the area is famous for holy shrine of Vaishno Devi there is immense demand of lemon grass oil and its diffusers. Thus efforts were made to encourage farmers to this enterprise. A village Sirah in Reasi was particularly chosen for laying out demonstrations and also for creating awareness about benefits of flower cultivation. Krishna variety of lemon grass have been introduced in the area. Farmers are generating about Rs. 2.30 lakh/ha by growing lemon grass farming. This crop has proved as a boon for the farmers of hilly areas of Reasi distt.

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 Jan-Dec 2020

Name of organization	Nature of linkage
1. Department of Agriculture	Trainings/FLDs/OFTs/KissanMelas /ATMA/ RKVY etc.
2. Department of Horticulture	Trainings/FLDs/OFTs/ KissanMelas/ 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 self-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 Jan-Dec 2020

Name of the scheme	Date/ Month of initiation	Funding agency	Amount (Rs.)

11.3 Details of linkage with ATMA Jan-Dec 2020

a) Is ATMA implemented in your district Yes/No

S. No.	Programme	Nature of linkage	Remarks
1.	Kisan Ghosties	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 Jan-Dec 2020

S. No.	Programme	Particulars	No. of programmes attended by KVK staff	No. of programmes Organized by KVK	Other remarks (if any)
01	Meetings	4	4		
02	Research projects				
03	Training programmes	4	4		
04	Demonstrations				
05	Extension Programmes				
	Kisan Mela	1	1		
	Technology Week				
	Exposure visit	4	4		
	Exhibition	6	6		
	Soil health camps	1	1		
	Animal Health Campaigns				
	FFS	2	2		
06	Publications				
	Video Films	8			
	Books	1			
	Extension Literature	300			
	Pamphlets	70			
	Others News coverage	3			
07	Other Activities				

11.4 Give details of programmes implemented under National Horticultural Mission Jan-Dec 2020

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 Jan-Dec 2020

S. No.	Programme	Nature of linkage	Remarks
1	Awareness among the farmers regarding fish farming	Provided assistance in selection of beneficiaries	

11.6. Details of linkage with RKVY Jan-Dec 2020

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

12. PERFORMANCE OF INFRASTRUCTURE IN KVK Jan-Dec 2020**12.1 Performance of demonstration units (other than instructional farm)**

Sl. No.	Demo Unit (Mention the name of Demo Unit)	Year of estt.	Area	Details of production			Amount (Rs.)		Remarks
				Variety	Produce	Qty.	Cost of inputs	Gross income	
1	Vermicompost unit	2015				40qt.			
2	Poultry	2014	25 birds	Chabrown and Kadaknath		25 chicks			
3	Green shade/poly house net unit	2016		For vegetable seedlings	In progress	1000 plants of different vegetables			
4	Hydroponic Unit	2020		For organic vegetables		Organic leafy vegetables			

12.2 Performance of instructional farm (Crops) including seed production Jan-Dec 2020

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.25	April,24	2.0 ha	WH-1080	Seed and straw	20 qt(approx.)		15700 wheat straw	
Maize	June 10	Sept.24	2.0 ha	Double Deklab	Grain and straw	25qt.	14,300	36,000	
Oat	Nov.6	April.22	0.2 ha	Sabzar	Fodder				
Pulses									
Blackgram	June 18	Oct.10	0.3ha	PU-31	Seed	0.90qt.			
Chickpea	Nov.10	April 13	0.3ha	GNG-2144	Seed	1.0 qt.			
Pea									
Oilseeds									
G.Sarson	Nov.2	April 12	0.3	DGS-1	Seed	1.0 qt			
Fibers									
Floriculture									
Fruits									
Vegetables	Nov.8 and 10 April	Jan.10 and June 15	0.1	Seli Special	Vegetables				
Others									

(specify)									
Others (specify)									

12.3 Performance of production Units (bio-agents / bio pesticides/ bio fertilizers etc.) Jan-Dec 2020

Sl. No.	Name of the Product	Qty	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	
1	Vermicompost	40 qt			

12.4 Performance of instructional farm (livestock and fisheries production) Jan-Dec 2020

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) = 40

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
January 2020	35	2 days	Due to COVID-19 farmers avoided to visit
February 2020			
March 2020			
April 2020			
May 2020			
June 2020			
July 2020			
August 2020			
September 2020			
October 2020			
November 2020			
December 2020	44	9 farmers stayed for 2 days & 35 farmers stayed for 3 days	

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/R/Y/E F)	No. of Courses	No. of Participants including SC/ST			No. of SC/ST Participants		
				Male	Female	Total	Male	Female	Total

Demonstrations conducted using Rainwater Harvesting Demonstration Unit

APR 2020 (Jan-Dec)

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

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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 2020-21 (up to March 2021)

S. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	Pay & Allowances	140.31		140.31
2	Traveling allowances	1.00		0.67
3	Contingencies	22.10		14.68
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)			
B	POL, repair of vehicles, tractor and equipments			
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)			
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)			
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)			
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)			
G	Training of extension functionaries			
H	Maintenance of buildings			
I	Establishment of Soil, Plant & Water Testing Laboratory			
J	Library			
TOTAL (A)		163.41		155.66
B. Non-Recurring Contingencies				
1	Works			
2	Equipments including SWTL & Furniture			
3	Vehicle (Four wheeler/Two wheeler, please specify)			
4	Library (Purchase of assets like books & journals)			
TOTAL (B)				
C. REVOLVING FUND				

GRAND TOTAL (A+B+C)			
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13.3 Status of revolving fund (Rs. in lakhs) for the last five 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 2016 to March 2017	6,22,829.00	130256.00	5880.00	768531.00
April 2017 to March 2018	768531.87	149770 .00	-	933274.87
April 2018 to March 2019	933274.87	199676.00	Nil	1132950.87
April 2019 to December 2019	1132950.87	74916.13	Nil	1207867.00
Jan 2020 to December 2020	1207867.00	310057.00	1,43,900	1374024.00(including 7 lakh FD)

14. Details of HRD activities attended by KVK staff during (Jan-Dec) 2020

Name of the staff	Designation	Title of the training programme	Institute where attended	Date
Dr.Banarsi Lal	I/C,KVK ,Reasi	Attended Workshop of ARYA(Online)	ATARI-Ludh.	2-6-2020
Dr.Banarsi Lal	I/C,KVK ,Reasi	Attended workshop on CFLDs(Online)	ATARI-Ludh.	4-6-2020
Dr.Banarsi Lal	I/C,KVK ,Reasi	Attended webinar on World Environment Day (Online)	Samgra Vikas Welfare Society	6-5-2020
Dr.Banarsi Lal	I/C,KVK ,Reasi	Attended National Workshop of ARYA (Online)	ICAR	
Dr.Banarsi Lal	I/C,KVK ,Reasi	Attended Zonal Workshop of KVKs(Online)	ATARI-Ludh.	7-7-2020
Dr.Banarsi Lal	I/C,KVK ,Reasi	Attended session on Environment Conservation	Rivers,ISHA Foundation	25-7-2020
Dr.Banarsi Lal	I/C,KVK ,Reasi	Attended webinar on Production of Basmati Rice in J&K UT	SKUAST-J&Basmati Export Dev.Foundation	27-8-2020
Dr.Banarsi Lal	I/C,KVK ,Reasi	Attended webinar on AGRIHORT J&K-Re-boot & Reimagine J&K'S Agri/Hort.	CII	27-8-2020
Dr.Banarsi Lal	I/C,KVK ,Reasi	Attended webinar on on Balance Nutrition in Mitigating Malnutrition	ATARI-Ludh.	26-9-2020
Dr.Banarsi Lal	I/C,KVK ,Reasi	Attended Farms Apps Programme	ATARI-Ludh.	29-9-2020
Dr.Banarsi Lal & Dr.Suja Nabi Qureshi	I/C,KVK ,Reasi	Attended webinar on Bharatiya Prakriti Krishi Paddati(BPKP)	ATARI-Ludh.	30-9-2020
Dr.Banarsi Lal	I/C,KVK ,Reasi	Attended ZREAC Meeting	SKUAST-J	25-11-2020
Dr.Banarsi Lal	I/C,KVK ,Reasi	Attended curtain raising ceremony of Agril Scientist Meet,India International Science Festival(Online)	ICAR	
Dr.Sanjay Kaushal	SMS ,Agronomy	1.“Climate Risk Assessment And Its Management Through Agrometeorological Approaches”, 1.	Organized by Dryland Agriculture Research Station, Rangreth SKUAST, Kashmir,	1. w.e.f 21-30 Oct, 2020.

Dr.Sanjay Kaushal	SMS ,Agronomy	2.National Webinar on Precision Nutrient Management for Sustainable Soil Health and Crop Productivity	Department of Soil Science and Agricultural Chemistry, College of Agriculture Banda University of Agriculture and Technology, Banda-210001 (U.P.)	6-7 November, 2020
Dr.Sanjay Kaushal	SMS ,Agronomy	3.Migration and feminization of Agriculture in India: Challenges and Opportunities	Organised by JNKVV, College of Agriculture, Tikamgarh, M.P.	
Dr.Sanjay Kaushal	SMS ,Agronomy	4.One day webinar on climate change	GNDU, Amritsar	on 26.12.2020
Lalit Upadhyay	SMS	National innovative training program on recent technologies of agribusiness Management and agri-entrepreneurship	NADCL (online)	October 8-28, 2020
Lalit Upadhyay	SMS	induction/ orientation program for faculty in universities/ colleges/ Institutes of Higher Education	Ramanujan college, New Delhi (online)	June 26 to July 24 2020
Lalit Upadhyay	SMS	International training on agriculture 4.0 Precision and automated agriculture Technologies	MPKV rahuri (online)	28 September to 2nd October 2020
Lalit Upadhyay	SMS	Understanding Biometrical Genetics	SKUAST Kashmir (online)	7 to 16 September 2020
Lalit Upadhyay	SMS	Online training program on vegetable nursery management and quality transplant production	RLBCAU Jhansi	17 July 2020
Dr.Lalit Upadhyay	SMS, Agronomy	□ International web conference "Perspective on agricultural and Applied Sciences in covid-19 scenario"		October 4-6, 2020

15. Details of Important Programs/Events conducted in KVKs during 2020 (Jan-Dec) (With 4-5 Photographs (JPEG Format).

(Please furnish detailed information for each Program/Event)

- (a) Hon'ble VC Visit at KVK, Reasi on 27-6-2020: Hon'ble VC of SKUAST-J, Prof.JP Sharma visited at KVK, Reasi on 27-6-2020 and interacted with the farmers from different areas at KVK, Reasi. He also inaugurated the newly furnished training hall of KVK, Reasi.
- (b) SAC at KVK, Reasi: KVK, Reasi organized 11th SAC at KVK, Reasi on 21-11-2020 chaired by Hon'ble VC of SKUAST-J, Prof.JP Sharma. Director Ext. of SKUAST-J, statutory officers and Heads from line deptts. also participated.
- (C) KVK, Reasi organized KISAN MELA at Talwara village on 28-12-2020. Hon'ble VC of SKUAST-J, Prof.JP Sharma was the Chief Guest. Number of farmers throughout the distt. participated in the event.

16. 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
2. Agricultural and allied census
3. Agro-climatic zones
4. Agro-ecosystems
5. Major and micro-farming systems
6. Major production systems like rice based (rice-rice, rice-green gram, etc.), cotton based, etc.
7. Major agriculture and allied enterprises

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

Include

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

Technology Inventory and Activity Chart - III

Include

- 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
- Inventory of latest technology available *

Sl. No	Technology	Crop/enterprise	Year of release or recommendation of technology	Source of technology	Reference/citation
1	Seed treatment in various crops	Cereals/pulses/vegetables	-	SKUAST-J	
2	Introduction of high yielding varieties in different crops	Wheat, Paddy, pulses, oilseed		SKUAST-J, PAU, CSKHPKV	
3	Introduction of hybrids in maize	Maize	-	PAU	
4	Introduction of high yielding vegetable varieties.	Cucurbits, okra, tomato, capsicum, brinjal etc.	-	-	
5	Management of rhizome rot in Ginger.	Ginger	-	SKUAST-J	
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

3. Activity Chart

Crop/Animal/Enterprise	Problem	Cause	Solution	Activity	Reference of Technology
Wheat	Low productivity of wheat under rainfed conditions	1) Imbalance fertilizer application 2) disease occurrence 3) Low yield due to nutrient deficiency	1.Application of recommend dose of Nutrients 2.Integrated Disease Management	1. Single component FLD to demonstrate effect of recommended dose of nutrients 2. Training and FLD programme on integrated disease management in wheat 3. OFT on disease management in wheat	
Soybean					
Mulberry					
Jersy Cow					

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

Include

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

Minutes of 11th Scientific Advisory Committee Meeting held on 21.11.2020 at Krishi Vigyan Kendra, Reasi

11th Scientific Advisory Committee Meeting was held on 21.11.2020 at Meeting Hall of KVK Reasi under the Chairmanship of Prof. J.P Sharma, Hon'ble Vice Chancellor, SKUAST-Jammu. The Meeting was attended Dr. S.K. Gupta, Director Extension, Dr. R.K Gupta, Director Research, Dr. Deepak Kher, Planning and Monitoring Officer, Sh. Iqbal Singh, Executive Engineer Estate Division and officers from allied departments and farmers as members of SAC. Dignitaries and members were formally welcomed by Dr. S.K Gupta, Director Extension, SKUAST Jammu. Dr. Banarsi Lal, I/C Sr. Scientist & Head, KVK Reasi presented the work done of KVK w.e.f. April 2018 and also the Action Plan for the year 2020-21.

The following Deliberations took place during the meeting

- Deputy Director ATMA, Reasi suggested that seeds of improved varieties be made available at KVK itself. He also suggested that a comprehensive plan may be proposed/prepared for marketing of ginger and turmeric. He emphasized that a Lemon Grass Processing unit may be setup at KVK Reasi. (Action: KVK, Reasi).
- Deputy Director ATMA, Reasi suggested for the OFT on management of rhizome rot in ginger. (Action: KVK, Reasi).
- District Agriculture Officer Reasi suggested for laying out On Farm Trial on improved varieties of wheat. (Action: KVK, Reasi).
- Distt. Horticulture Office Reasi suggested for training on propagation techniques for field officials and farmers. (Action: KVK, Reasi).
- District Floriculture Officer Reasi raised problem of snail attack on flower crops and its solution and also requested that seed availability be ensured for different flower plants. (Action: KVK, Reasi).
- DDM NABARD Reasi requested that a Bee Keeping project in collaboration with KVK and another project proposal on Mushroom/Dhingri cultivation should be submitted for funding. He also asked for round the year training on Mushroom cultivation. (Action: KVK, Reasi).
- Deputy Director ATMA, Reasi advised to establish an IFS unit and hydroponic unit for demonstrations at KVK. (Action: KVK, Reasi).
- DEE informed that Hydroponic unit has already been setup at KVK and IFS is under process. (Action: KVK, Reasi).

9. Asstt. Director Fisheries raised concern about the training programmes on pisciculture. (Action: KVK, Reasi).
10. Chief Animal Husbandry Officer, Reasi discussed that they are conducting Artificial Insemination in the district but wants that a study may be conducted by KVK regarding cost effectiveness of AI in the district. (Action: KVK, Reasi).
11. Chief Animal Husbandry Officer, Reasi suggested need for the hatchery units establishment in the district. (Action: KVK, Reasi).
12. Progressive Farmers S. Jatinder Pal Singh Sodhi, Dera Baba suggested that as youth are less inclined towards agriculture, motivational programme may be conducted for motivating youth towards agriculture. (Action: KVK, Reasi).
13. Director Research asked for the introduction of composites of maize with hybrids. (Action: KVK, Reasi).
14. Director Research asked for the exposure visits of farmers so that they can be abreasted with the latest agricultural knowledge. (Action: KVK, Reasi).
15. Director Research suggested the seed production by the farmers. (Action: KVK, Reasi).
16. Hon'ble Vice Chancellor stressed that KVK and allied departments should work together to develop the market linkage of the farmers produce. (Action: KVK, Reasi).
17. Hon'ble Vice Chancellor suggested to conduct the ex-trainees sammelen. (Action: KVK, Reasi).
18. Hon'ble Vice Chancellor during his remarks stressed that focus should be given on value addition, marketing and profitable farming rather than stressing only on increasing production for doubling farmers' income. (Action: KVK, Reasi).

The meeting ended with vote of thanks by Dr. Sanjay Koushal, SMS, KVK, Reasi.

List of participants of 11th SAC meeting held on 21-11-2020

S. No.	Name	Designation
30.	Prof. JP Sharma	Hon'ble Vice Chancellor of SKUAST-J, Chairman
31.	Dr. SK Gupta	Director Extension, SKUAST-J
32.	Dr. RK Gupta	Director Research, SKUAST-J
33.	Dr. Deepak Kher	Distt. Planning and Monitoring, SKUAST-J
34.	Dr. JS Soodan	Prof. & Head, TVCC
35.	Dr. Rakesh Sharma	Sr. Scientist, SKUAST-J
36.	Dr. Narinder Panotra	Scientist, SKUAST-J
37.	S. Iqbal Singh	Executive Engineer, SKUAST-J
38.	Dr. Sandeep Sharma	Distt. Horticulture Officer, Reasi
39.	Sh. Amit Sharma	Distt. Agriculture Officer, Reasi
40.	Sh. Ravinder Kumar	Distt. Agriculture Officer, Reasi
41.	Sh. Adarsh Gupta	DDM, NABARD
42.	Dr. Ajay Sharma	CAHO, Reasi
43.	Dr. Sanjesh Gupta	AD, Fisheries Deptt., Reasi
44.	Sh. Ravi Kumar	Branch Manager, J&K Bank, Dera Baba
45.	Sh. Romesh Khosa	Dy. Project Director, ATMA, Reasi
46.	S. Jasmeet Singh	AEA, Reasi
47.	Sh. Arjun Singh Parihar	Asstt. Floriculture Reasi/Udh.
48.	S. Jatinder Pal Singh Sodhi	Progressive Farmer
49.	Smt. Sunita Devi	Progressive woman farmer
50.	Dr. Banarsi Lal	I/C, Sr. Scientist & Head
51.	Dr. Lalit Upadhyay	SMS, Agroforestry
52.	Dr. Sanjay Koushal	SMS, Agronomy
53.	Dr. Suja Nabi Qureshi	SMS, Horticulture
54.	Dr. Arvinder Kumar	Farm Manager
55.	Dr. Langzung Stanzin	SMS, DAMU
56.	Smt. Sudesh Kumari	Progressive woman farmer
57.	Sh. Prem Singh	Progressive farmer
58.	Sh. Jagdish Kumar	Prog. Asstt. (Comp.)