PROFORMA FOR ANNUAL REPORT 2019-20 (Apr-March)

1. GENERAL INFORMATION ABOUT THE KVK

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

Address	Telephone		E mail
	Office	FAX	
Krishi Vigyan Kendra, Jammu, SKUAST-J, R.S.Pura Jammu 181 102	01923-252929	01923-252929	kvkjammu@gmail.com Website-www.kvkjammu.nic.in

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, Jammu	0191-2262029	0191-2262029	vc@skuast.org

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

Name	Telephone / Contact		
	Residence	Mobile	Email
Vacant		09419212421	kvkjammu@gmail.com

1.4. Year of sanction: 1992

1.5. Staff Position (as on 31st Dec 2019)

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	Vacant						Temporary	Mo: kvkjammu@gmail.com	
2	Senior Scientist (SMS)	Dr. Rakesh Sharma	45	Ph.D Ag. Ext.	131400-217100 139400 (Level 13 A)	Oct 2014	Temporary	9419145253 sharmar1975@gmail.com	Gen
3	Senior Scientist (SMS)	Dr. Punit Choudhary	44	Ph.D Forestry	131400-217100 139400 (Level 13 A)	Oct 2014	Temporary	9419142813 pmdchoudhary@gmail.com	Gen
4	Subject Matter	Dr	47	Ph.D	79800-	March	Temporary	9419211529	Gen

	Specialist	Sheetal Badyal		Home Science	211500 98200 (Level 12)	2016		badyalsheeetal10@gmail.com	
5	Subject Matter Specialist	Dr Ravneet Kour	47	Ph D Vegetable Sciences	56100-177500 89900 (Level 11)	March 2019	Temporary	9796423952 kourravneet24@yahoo.com	Gen
6	Subject Matter Specialist	Dr Prem Kumar	45	Ph.D Fisheries	68900-205500 71000 (Level 11)	May 2010	Temporary	9419200152 pk_singh1@yahoo.com	-
7	Subject Matter Specialist	Vacant	-	-	-	-	Temporary		Gen
8	Computer Programmer	Sh. Ashish Katoch	45	M. Tech	35400-112400 60400 (Level 6)	Dec.2003	Temporary	9419141593 katochashish@gmail.com	Gen
9	Programme Assistant (Farm)	Sh. Raju Gupta	39	Ph.D Agronomy	35400-112400 47600 (Level 6)	Aug.2008	Temporary	9906711697	Gen
10	Programme Assistant (Trg)	Ms. Poonam Abrol	31	M.Sc. H. Science	35400-112400 42300 (Level 6)	June 2012	**Temporary**	7889949440	Gen
11	Accountant / Superintendent	Sh. Ashok Kumar	59	MA LLB	44900-142400 53600 (level 7)	Jan 2019	**Temporary**	9419861679	Gen
12	Stenographer	Sh. Samir Ji Raina	46	Gradution	25800-81100 27100 (Level 4)	Jan 2019	**Temporary**		Sc
13	Driver	Sh. Manohar Lal	49	Matric	25800-81100 27900 (Level 4)	Sept. 2015	**Temporary**	9906069720	Gen
14	Driver	Sh Vijay Kumar	40	Matric	25800-81100 27900 (Level 4)	March 2019	**Temporary**	9796421118	Gen
15	Supporting staff	Sh. Satnam Singh	44	Under Matric	14800-47100 24800 (Level SL-1)	April 2005	**Temporary**	88031430001	Gen
16	Supporting staff	Vacant		-	-	-	-		Gen

1.6. Total land with KVK (in ha):

:

S. No.	Item	Area (ha)
1	Under Buildings	570 m2 (0.244 ha)
2.	Under Demonstration Units	144 m2 (0.0016 ha)
3.	Under Crops	8 ha
4.	Orchard/Agro-forestry	0.1 ha
5.	Others (specify)	Crop cafeteria, fish pond, nursery (0.2 ha)

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	March 1999	582	30.62 lakh			
2.	Farmers Hostel	ICAR	March 2007	305	19.78			Complete
3.	Staff Quarters	ICAR	March 1994	140	08.23			Complete
	1	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-
	4	-	-	-	-	-	-	-
	5	-	-	-	-	-	-	-
	6	-	-	-	-	-	-	-
4.	Demonstration Units	ICAR	December 1995	144	06.63	-	-	Complete
	1	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-
	4	-	-	-	-	-	-	-
5	Fencing	ICAR			6.95			Complete
6	Rain Water harvesting system	-	-	-	-	-	-	-
7	Threshing floor	-	-	-	-	-	-	-
8	Farm godown	-	-	-	-	-	-	-

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Scooter	1996-97	26,777.00	59979.00	unserviceable
Jeep	2006-07	5,10,134.00	229960	Working
Tractor	2005-06	4,13,920.00	2675 (hrs)	Working

C) Equipment including Tractor & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
Microscope	27.04.00	5,500.00	Working
Overhead Projector	03.08.95	7,425.00	Working
Slide Projector	25.05.96	12,327.00	Working
PA System (Ahuja)	09.06.99	19,788.00	Working

Blue Star AC (2 Nos.)	12.01.99	43116.00	Working
Photo Copier	26.03.02	66015.00	Working
Computer with UPS & Printer	21.02.05	69429.00	Working
OTG	17.03.05	5695.00	Working
Sony Handy Camera	31.03.05	33940.00	Not Working
Printer HP 5160	29.03.05	6200.00	Working
Genset	18.08.04	149200	Working
Panasonic KX-FT-903	05-09-05	10500	Working
Aqua Guard	30-09-05	8490	Not Working
LCD	29.05.04	1,00,366	Working
UPS Uniline 1KVA (2 No.)	31.01.07	9240	Working
Trolly for tractor	10.07.07	72800	Working
Leveller	22.06.05	8840	Working
Disc plough	22.06.05	21500	Working
Tiller tyne	22.06.05	15912	Working
Disc Harrow	22.06.05	21000	Working
Seed-cum-fertilizer drill	12.03.04	20000	Working
HP Laptop (2 no)	31-03-2017	115000	Working
SONY LCD projector SW631	31-03-2017	91800	Working
GMETEL Podium	31-03-2017	149900	Working
Handy Cam Sony	31-03-2017	21500	Working
SHARP digital XEROX machine82000	31-03-2017	82000	Working
Globus ceramic steel Board	31-03-2017	44655	Working
Electrowall mounting display panal	31-03-2017	66868	Working
Magzine rak	31-03-2017	81000	Working
Mrida Parikshak Soil testing Kits (2 no)	31-03-2017	90300	Working
Electronic Weighing Balance	31-03-2019	44716	Working
pH meter	31-03-2019	21000	Working
Electric Conductivity meter	31-03-2019	29610	Working
Voltas burepurer	31-03-2019	8750	Working
Brother all in one Printer	31-03-2019	13000	Working

1.8. A). Details SAC meeting* conducted in the year 2019-20 (April-December)

S. No.	Date	Name and Designation of Participants	No. of absentees	Salient Recommendations	Action taken
1.	18/03/2019	List enclosed as Annexure B	Nil	• The **Chairman** directed to incorporate one vocational training programme under Veterinary sciences and Animal Husbandry and resource persons for the said trainings will be made available from FVSc & AH, R. S. Pura. • **Chairman** directed to identify the village for poultry development and organize training/frontline demonstrations. • **Chairman** directed to celebrate all the important days related to farming community with full enthusiasm and spirit.	Vocational training programme on Poultry farming conducted in collaboration with F.V.Sc. Training were organized and FLD were laid on backyard poultry. Important days like Women farmer day, Jai Kisan jai Vigyan, World soil day, World Fisheries day etc. were organized with full zeal.

				• Other than Basmati 370, newly released varieties of SKUAST-J of paddy should also be promoted under FLD. • With respect to RAWE student, **Chairmen** directed to involve students more in KVK field activities rather than classroom lecture.	The varieties of SKAUST-J namely SJR 129, RR 564, Basmati 123, 138 are promoted. RAWE students were involved in field activities.

SAC proceedings along with list of participants attached as Annexure "A"

2. DETAILS OF DISTRICT (2019-20 (April-December)

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

S. No	Farming system/enterprise
1	Rice-Wheat
2	Maize-Wheat
3	Wheat -Mash-Rice
4	Maize-Toria-Wheat
5	Rice-Barseem-Vegetable

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

S. No	Agro-climatic Zone	Characteristics
	Sub-tropical Zone	Situated between 300- 450m above mean sea level having severe winter, rare occurrence of frost and a hot spell of summer with concentration of precipitation in summer months.
S. No	**Agro ecological situation**	**Characteristics**
	Rainfed	The average rainfall of the District Jammu ranges between 750-900 mm. Agriculture in this area is complex, diverse and risk-prone and is characterized by low levels of productivity and low input usage. Vagaries of the monsoon result in wide variation and instability in yields.

2.3 Soil type/s

S. No	Soil type	Characteristics	Area in ha
1	Sandy loam	pH 7.7-8.1, EC-0.15-0.23, organic carbon 0.35-0.44 (low), N- low, P-medium, K- medium	-
2	Loamy sand	pH 7.2-7.5, EC-0.15-0.20, organic carbon 0.45-0.55 (low), N- low, P-medium, K- high	-
3	Clay loam	pH 7.1-7.8, EC-0.18-0.22, organic carbon 0.40-0.50(low), N- low, P-medium, K- medium	-
4	Silty clay loam	pH 7.4-7.6, EC-0.16-0.20, organic carbon 0.42-0.50 (low), N- low, P-medium, K- medium	-

2.4 Area, Production and Productivity of major crops cultivated in the district

S. No	Crop	Area (ha)	Production (Qtls)	Productivity (Qtls /ha)
1	Paddy	45300	1667040	36.80
2	Wheat	71100	2135133	30.03
3	Maize	12010	361020	30.06
4	Pulses	9572	133401	13.93
5	Millets	3500	-	-
6	Oil seed	6020	58458	9.71

7	Fodders	10550	-	-
8	Vegetable	10450	-	-

2.5 Weather data

Month	Rainfall (mm)	Temperature ^{0} C		Morning Relative Humidity (%)	Evening Relative Humidity (%)
		Maximum	Minimum		
April	42.4	33.5	17.1	74	35
May	5.6	37.7	20.0	52	25
June	24.2	40.5	24.1	50	29
July	322.8	34.7	26.3	81	60
August	172.7	33.7	25.9	87	65
September	168.2	33.0	24.6	89	66
October	30.6	29.4	17.2	87	53
November	77.4	24.0	13.0	90	50
December	83.8	16.2	7.2	92	67

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

Category	Population	Production	Productivity
Cattle			
Crossbred	2.49	-	-
Indigenous	4.57	-	-
Buffalo	2.59	-	-
Sheep			
Crossbred	-	-	-
Indigenous	1.03	-	-
Goats	2.5	-	-
Pigs	0.1	-	-
Crossbred	-	-	-
Indigenous	-	-	-
Rabbits	-	-	-
Poultry			
Hens	7.85	-	-
Desi	-	-	-
Improved	-	-	-
Ducks	-	-	-
Turkey and others	-	-	-

Category	**Area**	**Production (Qtls.)**	**Productivity**
Fish		**19600.33**	
Marine			
Inland			
Prawn			
Scampi			
Shrimp			

2.7Details of Operational area / Villages (2019-20 (April-December)

S.No.	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas

1	R.S.Pura	R.S.Pura	Shekachak Salher, Badyal, Raipur Sazda, Kaloyain, Suchetgarh	Paddy, Wheat, Oilseeds, Dairy, Vegetable Marigold Mushroom Fodder crops	• Low productivity of cereals, oilseeds and pulses. • Improper adoption of Package of Practices • Problem of yellow rust in wheat • Old marigold varieties. • low milk yield and improper management practices in animals.	• Increasing production of cereals, oilseeds and pulses by replacing varieties. • Promotion of new and high yielding marigold varieties, • Dairy development • Value addition • Mushroom cultivation • Fodder
2	Akhnoor	Akhnoor Pargwal	Garkhal Kaleeth Sungal	Oil seed, Chickpea, Mash, Maize Medicinal tree	• Low productivity of maize and Chickpea. • Lack of knowledge about rain-fed crop varieties	• Increasing productivity of rain-fed crops. • Promotion of INM and IDM in cereals, pulses and oilseeds • Medicinal trees
3	Bishnah	Bishnah	Chak Bhagwana, Kotla Deoli Saidgarh	Paddy, Wheat, Mash, Oilseeds, Dairy, Fodder grasses, Poultry	• Low productivity of cereals, oilseeds and pulses. • Problem of yellow rust in wheat • Lack of knowledge of Vaccination in cattle. • Low Milk Yield	• Increasing production of cereals, oilseeds and pulses by replacing variety. • Dairy development • Value addition • Ornamental fish culture • Fodder
4	Dansal	Nagrota Dansal	Sagoon Katal Batal Kathar	Paddy , Wheat, Maize, Marigold, Pulses and Oilseeds Fodder grasses Fisheries	• Low seed replacement rate • Lack of quality seed of paddy • Low productivity of cereals • Old marigold varieties.	• Seed replacement • Increasing productivity of cereals • Promotion of new and high yielding marigold varieties, • Fodder
5	Bhalwal	Bhalwal	Jandiyal Mathwar Ranjan Kley Hassarban	Maize Oilseed Pulses Medicinal trees Fodder grassrs	• Low productivity of cereals, oilseeds and pulses • Low productivity of maize and Chickpea. • Lack of knowledge about rain-fed crop varieties	• Seed replacement • Increasing productivity of cereals • Promotion of new and high yielding varieties

2.8Priority/thrust areas

Crop/Enterprise	Thrust area
Rice	Preservation and promotion of Basmati 370, Integrated Nutrient Management,Introduction of Pusa varieties in non-basmati growing areas.
Wheat	Introduction of High yielding varieties, Yellow rust resistant varieties. ICM in wheat
Maize	High yielding hybrids, disease and pest management.

Oilseeds	Seed replacement, High yielding newly released short duration varieties.
Pulses	Weed Management, High yielding varieties, Diversification, INM
Oats, Perennial grasses	Fodder intensification, high yielding perennial grass varieties.
Medicinal trees	Quality planting material production, production of superior clonal material
Fish farming	Promotion of composite fish culture, Ornamental fish farming and value addition
Mango, Amla, Ber, Citrus	Promotion of Horticulture in rain-fed areas
Dairy farming	Promotion of clean milk production, Milk preservation and processing.
Marigold	Introduction of high yielding varieties, increasing the area under cultivation.
Mushroom	Promotion of mushroom as an enterprise
Backyard Poultry	Promotion of backyard poultry as an income generation activity

3. TECHNICAL ACHIEVEMENTS

3.A. Details of target and achievements of mandatory activities by KVK during 2019-20 (April-December)

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
11	9	33	36	Maize (25)	81	25	81
-	-	-	-	Paddy (25)	84	25	84
-	-	-	-	Wheat (25)	58	25	58
-	-	-	-	Oilseed (10)	38	10	38
-	-	-	-	Mushroom (10)	17	10	17
-	-	-	-	Fisheries (10)	23	10	23
-	-	-	-	Floricultures (5)	40	5	40
-	-	-	-	Vegetable (5)	35	5	35
-	-	-	-	Fodder (12.5)	75	12.5	75

3.A.1 FLDs Conducted under CFLDs on Oilseed: NA

FLD (Oilseeds)			
Number of FLDs		Number of Farmers	
Targets	Achievement	Targets	Achievement

3.A.2FLDs Conducted under CFLDs on Pulses

FLD (Pulses)			
Number of FLDs		Number of Farmers	
Targets	Achievement	Targets	Achievement
20.0	17.0	50	225

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	Achievemen	Targets	Achieve	Targets	Achieve	Targets	Achieveme

		t		**ment**		**ment**		**nt**
Farmers	46	54	920	1214	Workshop (2)	4	200	278
Rural youth	6	6	120	147	Field Days (6)	8	200	311
Extn. Functionaries	7	7	105	134	Kissan Ghoshti (5)	7	125	433
					Farmer seminar (5)	12	500	718
					Method demonstrations (10)	18	200	489
					Important Days (4)	4	100	133
					Special days (5)	6	250	635
					Extrainees Sammalen (2)	1	40	21
					Exposure visit (4)	6	100	292
					Radio talks (5)	5		
					Swachta Pakhwara (1)	1	100	140
					Parthenium awareness week (1)	1	100	189
					Plantation drive (1)	4	100	207

Seed Production (Qtl.)		**Planting material (Nos.)**	
5		**6**	
Target	**Achievement**	**Target**	**Achievement**
Paddy B-370 (100 q)	42.0 q	Fodder (Napier)	1000
Wheat HD 3086 (100 q)	151.96q	Setaria	1000
		Medicinal plants	
		Harad Amla Lemon Grass Alovera Strawberry Morus	100 100 80 100 80 100
		MPTS	**1000**

Livestock, poultry strains and fingerlings (No.)		**Bio-products (Kg)**	
7		**8**	
Target	***Achievement***	***Target***	***Achievement***
		Vermicompost	2220
		Fish	25.0

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***	***Number of Training***	***Number of Training***	***Extension activities***	***Supply of seeds (Qtl.)***	***Supply of planting***	***Supply of livestock***	***Supply of bio products***

						(farmers)	*(Youths)*	*(extension personnel)*	*(No.)*		*materials (No.)*	*(No.)*	*No.*	*Kg*
1.	Varietal Evaluation	Paddy	Low yield Lack of knowledge about improved varieties Shortage of labour and heavy weed infestation	Effect of bispyribac herbicide for broad spectrum weed management in direct seeded basmati rice Effect of different weed management practices on growth and yield of direct seeded rice	Promotion and demonstration of Basmati variety for yield potential Demonstration of improved Pusa varieties under irrigated condition.	02	-	-	01	3.0	-	-	-	
2	Varietal evaluation	Maize	Low yield Lack of knowledge about improved hybrid Lack of labour and heavy weed infestation	Effect of different herbicides mixture on weed density and weed biomass at 60 DAS in maize	Promotion of maize hybrid for yield. Promotion of Maize composite for higher productivity under rainfed conditins	01	-	-	01	2.20q	-	-	-	
3	Varietal Evaluation	Cabbage		Promotion and Assessment of high yielding variety		01	-	-	01	0.280 g				
4	Fodder production	Berseem Oats	Lack of improved varieties	Assessment of improved berseem varieties for herbage production	Demonstration of high yielding Berseem Demonstration of high yielding Oats	02	-	01	01	0.60 q 2.0 q		-	-	
5	Varietal Evaluation	Wheat	Low yield and incidence of yellow rust	Varietal evaluation of wheat in irrigated areas of Jammu district	Demonstration of high yielding rust resistant Wheat variety	01	-	-	01	10.0	-	-	-	-
6	Varietal evaluation	Oilseed	Lack of short duration high yielding varieties		Demonstration of short duration high yielding mustard and Gobi Sarson	01	-	-	01	0.31	-	-	-	-

7	Varietal evaluation	Gram	Lack of knowledge about variety		Promotion and demonstration of high yielding chickpea variety under rainfed conditions of Jammu and Samba	02	-	-	01	5.0	-	-	-	-
8	Varietal evaluation	Mash	Lack of knowledge about variety High weed infestation	Effect of herbicidal combination for weed management in mash	Promotion and demonstration of high yielding variety	01	-	-	01	1.4	-	-	-	-
9	Varietal evaluation	Khol Khol	Lack of improved variety		Promotion and demonstration of high yielding variety	01	-	-	01	700.00g				
10	Varietal Evaluation	Shataver	Lack of improved variety	Assessment of Sataver assession		01	-	-	-	-	100			
11	Varietal evaluation	Marigold	Lack of Improved variety		Promotion and demonstration of high yielding variety	01		01	-	3000g		-	-	-
12	Breed	Chabro	Lack of Improved variety		Demonstration of backyard poultry	01	-	-	-		500 no			
13	Varietal evaluative	Mushroom	Lack of Improved variety		Demonstration of Improved variety	01	-	01	-	-	150 bags	-	-	-

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	3	-	-	-	2	-	-	1	6
Seed / Plant production	-	-	-	-	-	-	-	-	-
Weed Management	1	-	-	-	-	-	-	-	-
Integrated Crop Management	-	-	-	-	-	-	-	-	-
Integrated Nutrient Management	-	-	-	-	-	-	-	-	-
Integrated Farming System	-	-	-	-	-	-	-	-	-
Mushroom cultivation	-	-	-	-	-	-	-	-	-

Drudgery reduction	-	-	-	-	-	-	-	-	-
Farm machineries	-	-	-	-	-	-	-	-	-
Value addition	-	-	-	-	-	-	-	-	-
Integrated Pest Management	-	-	-	-	-	-	-	-	-
Integrated Disease Management	-	-	-	-	-	-	-	-	-
Resource conservation technology	-	-	-	-	-	-	-	-	-
Small Scale income generating enterprises	-	-	-	-	-	-	-	-	-
TOTAL	4	-	-	-	2	-	-	1	**7**

* *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	-	-	-	-	-	-	-	-	-
Integrated Nutrient Management	-	-	-	-	-	-	-	-	-
Integrated Farming System	-	-	-	-	-	-	-	-	-
Mushroom cultivation	-	-	-	-	-	-	-	-	-
Drudgery reduction	-	-	-	-	-	-	-	-	-
Farm machineries	-	-	-	-	-	-	-	-	-
Post Harvest Technology	-	-	-	-	-	-	-	-	-
Integrated Pest Management	-	-	-	-	-	-	-	-	-
Integrated Disease Management	-	-	-	-	-	-	-	-	-
Resource conservation technology	-	-	-	-	-	-	-	-	-
Small Scale income generating enterprises	-	-	-	-	-	-	-	-	-
TOTAL	-	-	-	-	-	-	-	-	-

* *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	-	-	-	-	-	-	2	2
Disease of Management	-	-	-	-	-	-	-	-
Value Addition	-	-	-	-	-	-	-	-
Production and Management	-	-	-	-	-	-	-	-
Feed and Fodder	-	-	-	-	-	-		
Small Scale income generating enterprises	-	-	-	-	-	-	-	-
TOTAL	-	-	-	-	-	-	2	2

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	Cabbage	Evaluation of disease resistant cabbage varieties	06	06	0.03
	Maize	Evaluation of Maize Composite undr Rainfed subtropics of Jammu	05	05	0.5
	Knol-Khol	Evaluation of Knol-Khol varieties under subtropical conditions of Jammu	06	06	0.03
	Shataver	Evaluation of different accession of Shataver (*Asparagus recemosus*)	03	03	0.15
	Paddy	Assessment of Basmati variety of SKUAST-J	04	04	0.4
		Assessment of Pusa Basmati varieties	03	03	0.4
Integrated Pest Management	-	-	-	-	-
	-	-	-	-	-
Integrated Crop Management	-	-	-	-	-
	-	-	-	-	-
Integrated Disease Management	-	-	-	-	-
	-	-	-	-	-
Small Scale Income Generation Enterprises	-	-	-	-	-
	-	-	-	-	-
Weed Management	Maize	Effect of different herbicides mixture on weed density and weed biomass at 60 DAS in maize at farmers field.	05	05	0.5

Thematic areas	*Crop*	*Name of the technology assessed*	*No. of trials*	*Number of farmers*	*Area in ha (Per trail covering all the Technological Options)*
	-	-	-	-	-
Resource Conservation Technology	-	-	-	-	-
	-	-	-	-	-
Farm Machineries	-	-	-	-	-
	-	-	-	-	-
Integrated Farming System	-	-	-	-	-
	-	-	-	-	-
Seed / Plant production	-	-	-	-	-
	-	-	-	-	-
	-	-	-	-	-
	-	-	-	-	-
	-	-	-	-	-
	-	-	-	-	-
Value addition	-	-	-	-	-
	-	-	-	-	-
Drudgery Reduction	-	-	-	-	-
	-	-	-	-	-
Storage Technique	-	-	-	-	-
	-	-	-	-	-
Mushroom cultivation	-	-	-	-	-
	-	-	-	-	-
Total			**32**	**32**	**2.01**

3.2.2.Technologies Refined under various Crops

Thematic areas	*Crop*	*Name of the technology assessed*	*No. of trials*	*Number of farmers*	*Area in ha (Per trail covering all the Technological Options)*
Integrated Nutrient Management	-	-	-	-	-
	-	-	-	-	-
Varietal Evaluation	-	-	-	-	-
	-	-	-	-	-
Integrated Pest Management	-	-	-	-	-
	-	-	-	-	-
Integrated Crop Management	-	-	-	-	-
	-	-	-	-	-
Integrated Disease Management	-	-	-	-	-
	-	-	-	-	-
Small Scale Income Generation Enterprises	-	-	-	-	-
	-	-	-	-	-
Weed Management	-	-	-	-	-
	-	-	-	-	-
Resource Conservation Technology	-	-	-	-	-
	-	-	-	-	-
Farm Machineries	-	-	-	-	-
	-	-	-	-	-
Integrated Farming System	-	-	-	-	-
	-	-	-	-	-
Seed / Plant production	-	-	-	-	-

Thematic areas	*Crop*	*Name of the technology assessed*	*No. of trials*	*Number of farmers*	*Area in ha (Per trail covering all the Technological Options)*
	-	-	-	-	-
Value addition	-	-	-	-	-
	-	-	-	-	-
Drudgery Reduction	-	-	-	-	-
	-	-	-	-	-
Storage Technique	-	-	-	-	-
	-	-	-	-	-
Mushroom cultivation	-	-	-	-	-
	-	-	-	-	-
Total	-	-	-	-	-

3.2.3. Technologies assessed under Livestock and other enterprises

Thematic areas	*Name of the livestock enterprise*	*Name of the technology assessed*	*No. of trials*	*No. of farmers*
Evaluation of breeds				
Nutrition management	Fish	Impact of feed supplement on fish production Assessment of floating feed on growth and production of fish	5	3
Disease management		-	-	-
Value addition		-	-	-
Production and management		-	-	-
Feed and fodder		-	-	-
Small scale income generating enterprises		-	-	-
Total			5	3

3.2.4. Technologies Refined under Livestock and other enterprises

Thematic areas	*Name of the livestock enterprise*	*Name of the technology assessed*	*No. of trials*	*No. of farmers*
Evaluation of breeds	-	-	-	-
Nutrition management	-	-	-	-
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

Title : **Assessment of Pusa basmati varieties**

2. Problem diagnose/defined : Low productivity of Pusa Basmati 1121 varieties

3. Details of technologies selected for : T 1: Pusa Basmati 1121
T 2: Pusa Basmati 1637

	assessment/refinement		T3: Pusa Basmati 1728
4.	Source of technology	:	IARI New Delhi
5.	Production system thematic area	:	Irrigated cereal based system (Paddy - Wheat)
6.	Thematic area	:	Varietal Evaluation
7.	Performance of the Technology with performance indicators	:	T2 recorded 26.7 percent increase over T1 However T3 recorded 6.7 % increase over T1
8.	Final recommendation for micro level situation	:	Pusa Basmati 1637 may be grown as replacement of Pusa Basmati 1121
9.	Constraints identified and feedback for research	:	Water scarcity at the time of sowing
10.	Process of farmers participation and their reaction	:	Farmers participated from seed to seed in laying out of the OFT. Moreover they fully cooperated in providing feedback and other data pertaining 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
Bengalgram	Rainfed	Low productivity of Pusa Basmati 1121 varieties	Varietal evaluation	3	Pusa Basmati 1121	Yield (q/ha)	30.0	T2 recorded 26.7 percent increase over T1 However T3 recorded 6.7 % increase over T1	
					ii. Pusa Basmati 1637		38.0		
					iii. Pusa Basmati 1728		32.0		

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
Pusa Basmati 1121	30.0	39500	2.34
ii. Pusa Basmati 1637	38.0	57900	2.96
iii. Pusa Basmati 1728	32.0	43100	2.49

Trial 2

	Title	**:**	**Assessment of Basmati varieties of SKUAST-Jammu**
2.	Problem diagnose/defined	:	Low productivity of Basmati 370 varieties
3.	Details of technologies selected for assessment/refinement	:	T 1: Basmati 370 T 2: Basmati 123 T3: Basmati 138
4.	Source of technology	:	IARI New Delhi
5.	Production system thematic area	:	Irrigated cereal based system (Paddy - Wheat)
6.	Thematic area	:	Varietal Evaluation
7.	Performance of the Technology with performance indicators	:	T2 recorded 36.4 percent increase over T1 However T3 recorded 6.742.2 % increase over T1
8.	Final recommendation for micro level situation	:	Basmati 138 may be grown as replacement of Basmati 370. Moreover matures 20-25 days earlier as compared to T1 (B-370)
9.	Constraints identified and feedback for research	:	Water scarcity at the time of sowing
10.	Process of farmers participation and their reaction	:	Farmers participated from seed to seed in laying out of the OFT. Moreover they fully cooperated in providing feedback and other data pertaining 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	Assessment of Basmati varieties of SKUAST-Jammu	Varietal evaluation	3	T 1: Basmati 370	Yield (q/ha)	22.5	T2 recorded 36.4 percent increase over T1 However T3 recorded 6.742.2 % increase over T1	
					T 2: Basmati 123		30.7		
					T3: Basmati 138		32.0		

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
T 1: Basmati 370 **(Recommended Practice)**	22.5	30650	1.89
T 2: Basmati 123 (**New Intervention)**	30.7	54430	2.57
T3: Basmati 138	32.0	58200	2.68

Trial 3:

	Title	:	**Evaluation of different accession of Shataver (*Asparagus recemosus*)**
2.	Problem diagnose/defined	:	Lack of Shataver varieties
3.	Details of technologies selected for assessment/refinement	:	T1: IC471923 T2:IC471922 T3:IC471899
4.	Source of technology	:	
5.	Production system thematic area	:	Raifed cereal based system (Maize - Wheat)
6.	Thematic area	:	Varietal Evaluation
7.	Performance of the Technology with performance indicators	:	T3 recorded 186 percent increase over T1 w r t tuber Yield, However T3 recorded 179% increase in plant height over T1
8.	Final recommendation for micro level situation	:	IC471923 accession of shataver should be prefer for higher tuber fresh weight for more productivity
9.	Constraints identified and feedback for research	:	Lack of knowledge about shataver accessions
10.	Process of farmers participation and their reaction	:	Farmers participated actively in laying out of the OFT. Moreover they fully cooperated in providing feedback and other data pertaining 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
Shataver	Rainfed	Evaluation of different accession of Shataver (*Asparagus recemosus*)	Varietal evaluation	3	T3:IC471899	Tubers Dry yield/ ha in tonns Plant Height (m) Length of longest tubers (cm)	1.39 3.17 31.44	T3 recorded 186 percent increase over T1 w r t tuber Yield, However T3 recorded 179% increase in plant height over T1	
					T2:IC471922		3.88 3.07 30.86		
					T1: IC471923		3.98 3.20 29.88		

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
T3:IC471899	1.39 3.17 31.44	29500.00	1.73:1
T2:IC471922	3.88 3.07 30.86	154000.00	3.85:1
T1: IC471923	3.89 3.20 29.88	159000.00	3.97:1

Trial 4

	Title	:	**Effect of different herbicides mixture on yield and economics of maize under rainfed conditions**
2.	Problem diagnose/defined	:	Heavy weed infestation and lack of improved herbicides
3.	Details of technologies selected for assessment/refinement	:	Atrazine 1000 g/ha at 0-3 DAS Tembotrione 100 g/ha+atrazine 500 g/ha at 15-20 DAS Atrazine 1000 g/ha fbtembotrione 100 g/ha
4.	Source of technology	:	SKUAST J/ DWR
5.	Production system thematic area	:	Raifed Maize Wheat
6.	Thematic area	:	Varietal Evaluation
7.	Performance of the Technology with performance indicators	:	T2 recorded 23.75 percent increase in grain yield with 81.79 pe cent decrease in total weed biomass over T1
8.	Final recommendation for micro level situation	:	Tembotrione 100 g/ha+atrazine 500 g/ha at 15-20 DAS is recommended for effective weed control in Maize under rainfed condition
9.	Constraints identified and feedback for research	:	Timely spray of weedicide should be done.
10.	Process of farmers participation and their reaction	:	Farmers participated actively in laying out of the OFT. Moreover they fully cooperated in providing feedback and other data pertaining 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
Maize	Rainfed	Effect of different herbicides mixture on yield and economics of maize under rainfed conditions	Varietal evaluation	3	Atrazine 1000 g/ha at 0-3 DAS	Grain Yield (Q/ha) Total weed biomass (g/m^{-2})	18.80 82.79	T2 recorded 23.75 percent increase in grain yield with 81.79 pe cent decrease in total weed biomass over T1	
					Tembotrione 100 g/ha+atrazine 500 g/ha at 15-20 DAS		23.76 8.43		
					Atrazine 1000 g/ha fbtembotrione 100 g/ha		22.92 13.41		

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
Atrazine 1000 g/ha at 0-3 DAS	18.80 82.79	24043	2.18
Tembotrione 100 g/ha+atrazine 500 g/ha at 15-20 DAS	23.76 8.43	36313	2.46
Atrazine 1000 g/ha fbtembotrione 100 g/ha	22.92 13.41	30120	2.25

Trial 5

1.	Title	:	**ASSESSMENT OF IMPROVED MAIZE COMPOSITE UNDER RAINFED CONDITIONS**
2.	Problem diagnose/defined	:	Lack of high yielding Maize composite Varieties under Jammu condition
3.	Details of technologies selected for assessment/refinement	:	i. Vijay (Farmers practice) ii. PMS-4
4.	Source of technology	:	SKAUST-J
5.	Production system thematic area	:	Irrigated cereal based system (Maize - Wheat)
6.	Thematic area	:	Composite evaluation
7.	Performance of the Technology with performance indicators	:	T2 (PMSY-4) composite variety recorded 10.1 % increase in grain production as compared to control (Vijay composite).
8.	Final recommendation for micro level situation	:	Composite variety PMSY-4 may be adopted for cultivation instead of hybrid maize varieties.
9.	Constraints identified and feedback for research	:	Lack of rainfall at the critical stages reduced grain formation. However, concurrent year trials of maize composites will provide some substantive recommendations
10.	Process of farmers participation and their reaction	:	Farmers participated from seed to seed in laying out of the OFT. More over they fully cooperated in providing feedback and other data pertaining OFT.

Photographs of OFT on Maize

Results of On Farm Trials

B.1

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials	Technology Assessed	Parameters	Data on the parameter	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Maize	Rainfed	Lack of high yielding Maize composite Varieties under Jammu condition	Assessment of improved Maize composite under rainfed conditions	08	T1= Vijay	Grain Yield B:C ratio	16.8 q/ha		Farmer was responsive for adoption of maize composite
					T2= PMSY-4		18.5 q/ha	10.1 % increase in grain production as compared to control (Vijay)	

Technology Assessed	Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
T1= Vijay	16.8 q/ha	14068	1.76
T2= PMSY-4	18.5 q/ha	17060	1.92

Trial 6:

	Title	:	**Evaluation of improved varieties of knol-khol under subtropical conditions of Jammu**
2.	Problem diagnose/defined	:	Lack of improved varieities
3.	Details of technologies selected for assessment/refinement	:	T1: Farmer's Practice T2: Green Vienna T3: Pusa Virat
4.	Source of technology	:	IARI New Delhi
5.	Production system thematic area	:	Irrigated cereal based system
6.	Thematic area	:	Improved varieties
7.	Performance of the Technology with performance indicators	:	T 3 registered a mean yield of 180 q/ha over the farmer's practice (T1) which recorded a mean yield of 130 q/ha
8.	Final recommendation for micro level situation	:	Pusa virat may be recommended for cultivation under subtropical conditions of Jammu
9.	Constraints identified and feedback for research	:	Lack of seed of improved varieties
10.	Process of farmers participation and their reaction	:	Farmers participated in laying out of the OFT. Moreover they fully cooperated in providing feedback and other data pertaining to OFT.

B 6: Results of On Farm Trials

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials	Technology Assessed	Parameters	Data on the Parameter	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Knol khol	Irrigated	Lack of improved varieties	Evaluation of improved varieties of knol khol	4	T1: Farmer's Practice	No of leaves per plant Yield per hectare (q/ha)	10.10 130q/ha		Farmers were satisfied with yield potential and quality of improved variety
					T2: Green Vienna		11.90 170q/ha	T 2 registered increase in yield and quality over farmer's practice	
					T3:Pusa Virat		12.30 180q/ha	T 3 registered increase in yield and quality over farmer's practice	

Technology Assessed	Production per unit	Gross income	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14	15
T1: Farmer's Practice	130q/ha	104000	59000	1: 2.31
T2: Green Vienna	170/ha	136000	91000	1: 3.02
T3: Pusa Virat	180q/ha	144000	99000	1: 3.20

Trial 7

	Title	:	**Evaluation of disease resistant varieties of cabbage**
2.	Problem diagnose/defined	:	Lack of improved varieties
3.	Details of technologies selected for assessment/refinement	:	T1: Farmer's Practice T2: Pusa Mukta T3: Pusa Drum head
4.	Source of technology	:	IARI New Delhi
5.	Production system thematic area	:	Irrigated cereal based system
6.	Thematic area	:	Improved varieties
7.	Performance of the Technology with performance indicators	:	T3 registered highest yield of 345 q/ha over the farmer's practice (T1) which recorded a mean yield of 185 q/ha
8.	Final recommendation for micro level situation	:	Pusa drum head may be recommended for cultivation under subtropical conditions of Jammu
9.	Constraints identified and feedback for research	:	Lack of seed of disease resistant improved varieties
10.	Process of farmers participation and their reaction	:	Farmers participated in laying out of the OFT. Moreover they fully cooperated in providing feedback and other data pertaining to OFT.

B 7: Results of On Farm Trials

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials	Technology Assessed	Parameters	Data on the Parameter	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Cabbage	Irrigated	Lack of disease resistant varieties	Evaluation of disease resistant varieties of cabbage	4	T1: Farmer's Practice	Weight of the head Yield per hectare (q/ha)	0.80 kg 228 q/ha		Farmers were satisfied with yield potential and quality of improved varieties
					T2: Pusa Mukta		1.0 kg 285 q/ha	T 2 registered increase in yield and disease resistance over farmer's practice	
					T3: Pusa Drum head		1.20 kg 342 q/ha	T 3 registered increase in yield, quality of head and disease resistance over farmer's practice	

Technology Assessed	Production per unit	Gross income	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14	15
T1: Farmer's Practice	228 q/ha	136800	82800	1: 2.53
T2: Pusa Mukta	285 q/ha	171000	117000	1: 3.16
T3: : Pusa Drum head	342 q/ha	205200	151200	1: 3.80

B. Technology Refinement: Nil

PART 4 - FRONTLINE DEMONSTRATIONS

4.A. Summary of FLDs implemented during 2019-20

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	
1	Oilseeds														
I.		Irrigated	Rabi 2019-20	Gobi Sarson	DGS-1		Varietal Evaluation	Variety	1.0	1.0	03		04	07	
II.					RSPN-25			HYV	1.0	1.0	05		05	10	
III.				Mustard	RSPR-69			HYV	0.4	0.4	01		02	03	
IV.					RSPR-01			HYV	1.6	1.6	02	08	08	18	
2	Pulses														
I.		Raifed/Irrigated	Kharif 2019	Chick Pea	PBG-7		Varietal evaluation		10.0	10.0	59	05	55	109	
II.				Urd Bean	PU-31				7.0	7.0	62	-	46	108	
3	Cereals														
A	Paddy	Irrigated	Kharif 2019	Paddy											
I.					B-370		Varietal evaluation	HYV	10.0	6.8	19	-	15	34	
II.					B-564			HYV		2.0	13	-	4	17	
III.					SJR-129			HYV		1.44	3	-	6	9	
IV.					Pusa-1637			HYV	2.0	2.0	2	-	12	14	
V.					Pusa-1728			HYV	1.6	1.6	-	-	10	10	
B	Maize														
I.		Rainfed	Khaif 2019	Maize		Double deklab		Hybrid	10.0	10.0	16	-	65	81	
C	Wheat														
I.		Irrigated	Rabi 2019-20	Wheat	HD-3086			HYV	10.0	6.0	20	-	9	29	
II.					WH-1080			HYV		4.0	9	10	10	29	
D	Millets														
E	Vegetables														
I.	Cauliflower	Irrigated	Rabi 2019-20		K-1			HYV	1.0	1.0	33	-	2	35	
		Irrigated		Tomato	Roma Best of All				1.0	1.0	17	-	3	20	
F	Flowers											-	11	40	
I.		Rainfed	Kharif 2019	Marigold	Pusa Narangi		Varietal evaluation	Open pollinated Variety	2.0	2.0	29	-	11	40	
G	Fruit														
H	Spices and condiments														
	Commercial														

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	
I	Medicinal and aromatic														
J	Fodder														
I.	Oats	Rainfed/irrigated	Rabi 2019-20	Oats	Sabjar		Varietal evaluation	Variety	2.0	2.0	13	08	04	25	
II.	Berseem	Irrihgated		Berseem	Mascavi				3.0	3.0	15	-	35	50	
K	Dairy														
L	Poultry	Raifed/Irrigated	Rabi 2019-20	Poultry	Chabro		Varietal Evaluation		500 no's	500 no's	27	-	-	27	
M	Piggery														
	Sheep and goat														
	Button mushroom	Irrigated/rainfed	Rabi 2019-20	Button mushroom	U-3				150 bags	150 bags	15	-	3	18	
	Vermicompost	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-
	IFS	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Apiculture	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Implements	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Others (specify)	-	-	-	-	-	-	-	-	-	-	-	-	-	-

4.A. 1. Soil fertility status of FLDs plots during 2019-20

Sl. No.	Category	Farming Situation	Season and Year	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Status of soil (Kg/Acre)			Previous crop grown
									N	P	K	
1	Oilseeds											
I.		Irrigated	Rabi 2019-20	Gobi Sarson	DGS-1		Varietal Evaluation	Variety	253	9.5	110	Paddy
II.					RSPN-25			HYV	253	9.5	110	Paddy

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	
III.				Mustard	RSPR-69			HYV				
IV.					RSPR-01			HYV				
2	Pulses											
I.		Raifed/Irrigated	Kharif 2019	Chck Pea	PBG-7				255	9.6	114	Maize
II.				Urd Bean	PU-31							Maize
3	Cereals											
A	Paddy	Irrigated	Kharif 2019	Paddy								
I.					B-370		Varietal evaluation	HYV	253	9.5	110	Wheat
II.					B-564			HYV	253	9.5	110	
III.					SJR-129			HYV	253	9.5	110	
IV.					Pusa-1637			HYV	253	9.5	110	
V.					Pusa-1728			HYV	253	9.5	110	
B	Maize											
I.		Rainfed	Kharif 2019	Maize		Double deklab		Hybrid	255	9.6	114	
C	Wheat											
I.		Irrigated	Rabi 2019-20	Wheat	HD-3086			HYV	253	9.5	110	Paddy
II.					WH-1080			HYV	253	9.5	110	Maize
D	Millets											
E	Vegetables											
I.	Cauliflower	Irrigated	Rabi 2019-20	Cauliflower	PSBK-1			HYV	253	9.5	110	Paddy
				Tomato	Roma Best of All				253	9.5	110	
F	Flowers											
II.		Rainfed	Kharif 2019	Marigold	Pusa Narangi		Varietal evaluation	Open pollinated Variety	255	9.6	114	Paddy
G	Fruit											
H	Spices and condiments											
	Commercial											
I	Medicinal and aromatic											
J	Fodder											
III.	Oats	Rainfed/irrigated	Rabi 2019-20	Oats	Sabjar		Varietal evaluation	Variety	255	9.6	114	Miaze
IV.	Berseem	Irrihgated		Berseem	Mascavi				255	9.6	114	Paddy
K	Dairy											
L	Poultry	Raifed/Irrigated	Rabi 2019-20	Poultry	Chabro		Varietal Evaluation		255	9.6	114	

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	
M	Piggery											
N	Sheep and goat											
O	Button mushroom	Irrigated/ rainfed	Rabi 2019-20	Button mushroom	U-3							
P	Vermicompost											
Q	IFS											
R	Apiculture											
R	Implements											
T	Others (specify)											

B. Results of Frontline Demonstrations

4.B.1. Crops

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	No. of Demo.	Area (ha)	Yield (q/ha)				% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
							Demo			Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
							H	L	A										
Oilseeds																			
	Gobi Sarson	DGS-1			07	1.0	15.0	13.8	14.3	12.3	16.2	19900	60060	41060	2.06	19900	51666	33160	1.66
		RSPN-25			10	1.0	12.9	10.9	12.4	12.3	1.4	1990	54180	34280	1.72	19900	51666	33160	1.66
	Mustard	RSPR-69			03	0.4	10.8	8.2	9.63	8.54	12.7	18300	40446	22146	1.21	18300	35868	17568	0.96
		RSPR-01			18	1.6	5.0	4.49	4.67	4.09	14.2	16500	19916	3114	1.18	16500	17178	670.0	1.04
Pulses																			
	Chck Pea	PBG-7		Raifed/Irrigated	109	10.0			16.8	11.1	33.92	39960	60480	29955	1.98	28525	39960	11435	1.40
	Urd Bean	PU-31			108	7.0	4.20	2.4	3.14	2.98	4.14	16500	18840	2340	1.14	16500	17880	1380	1.08
Cereals																			
	Paddy			Irrigated															
		B-370			34	6.8	28.0	15.0	23.44	20.5	14.3	34400	70320	35920	2.04	34400	61500	27100	1.79
		B-564			17	2.0	40.0	28.0	34.6	25.5	35.7	34400	95150	60750	2.77	34400	70125	35725	2.04
		SJR-129			9	1.44	50.0	32.0	39.2	25.0	56.8	34400	78400	44000	2.28	34400	72500	38100	2.11
		Pusa-1637			14	2.0	36.0	30.0	33.2	25.0	32.8	29500	76310	46860	2.59	29500	57500	28000	1.59

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	No. of Demo.	Area (ha)	Yield (q/ha)				% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
							Demo			Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
							H	L	A										
		Pusa-1728			10	1.6	28.0	25.0	26.2	25.0	4.8	29500	602160	30760	2.04	29500	57500	28000	1.59
	Maize	Double deklab		Rainfed	81	10.0	20.6	13.68	17.00	15.68	8.41	19500	33920	14420	1.74	19500	31597	12097	1.62
	Wheat	HD-3086		Irrigated	29	6.0	32.0	26.0	28.6	26.5	1056	22800	55153	32350	1.41	22800	51012	28211	1.23
		WH-1080			29	4.0	28.0	20.0	20.86	19.7	5.88	20800	40156	19354	1.93	20000	37923	17922	1.89
							Crop in field												
Millets																			
Vegetables																			
	Cauliflower	PSBK-1		Irrigated	35	1.0	238	206	220	202	8.91	70500	264000	193500	3.74	69500	142400	172900	3.48
	Tomato	Roma			20	1.0	130.4	116.6	123.5	112.0	11.68	62000	148200	86200	2.39	62000	133200	71200	2.14
Flowers																			
	Marigold	Pusa Narangi		Rainfed	40	2.0	87	83	85	70	28.75	45000	195500	150500	4.34	45000	161000	11600	3.57
Fruit																			
Spices and condiments																			
Commercial																			
	Button Mushroom	U-3			18	150 bags	2.15	1.75	1.95	1.25	10.25	110	273	163	2.48	110	175	65	1.59
Medicinal and aromatic																			
Fodder																			
	Oats	Sabjar		Rainfed/ irrigated	25	2.0	365	240	294	240	22.1	19500	44100	24600	1.26	19500	36000	16500	0.85
	Berseem	Mascavi		Irrihgated	50	3.0	680	540	625	540	12.28	22500	72600	50100	2.26	22500	64800	42300	1.88

* 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.)

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

4.B.2. Livestock and related enterprises

Type of livestock	*Name of the technology demonstrated*	*Breed*	*No. of Demo*	*No. of Units*	*Yield (q/ha)*				*% Increase*	**Economics of demonstration Rs./unit)*				**Economics of check (Rs./unit)*			
					Demo			*Check if any*		*Gross Cost*	*Gross Return*	*Net Return*	*** BCR*	*Gross Cost*	*Gross Return*	*Net Return*	*** BCR*
					H	L	A										
Dairy																	
Poultry	New Breed	Chabro	27	27	Under observation												
Rabbitry																	
Pigerry																	
Sheep and goat																	
Duckery																	
Others (pl.specify)																	

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

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

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

4. B.3. Fisheries

Type of Breed	Name of the technology demonstrated	Breed	No. of Demo	Units/ Area (m^2)	Yield (q/ha)				% Increase	*Economics of demonstration Rs./unit) or (Rs./m2)				*Economics of check Rs./unit) or (Rs./m2)			
					Demo			Check if any		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
					H	L	A										
Common carps	New seed		23	0.1	Under observation												
Others (pl.specify)	Feed	Floating	15	0.1													

* 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	New strain	U-3	18	8	Under observation												
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	9	311	-
2	Farmers Training	6	128	-
3	Media coverage	1		-
4	Training for extension functionaries	01	24	-
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	1	19	0	19	4	0	4	23	0	23
Crop Diversification	-	-	-	-	-	-	-	-	-	-
Integrated Farming	2	15	0	15	8	8	16	31	0	31
Water management	-	-	-	-	-	-	-	-	-	-
Seed production	-	-	-	-	-	-	-	-	-	-
Nursery management	-	-	-	-	-	-	-	-	-	-
Integrated Crop Management	1	12	1	13	2	0	2	14	1	15
Fodder production	-	-	-	-	-	-	-	-	-	-
Production of organic inputs	-	-	-	-	-	-	-	-	-	-
II Horticulture										
a) Vegetable Crops										
Production of low volume and high value crops	-	-	-	-	-	-	-	-	-	-
Off-season vegetables	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-
Management of young plants/orchards	-	-	-	-	-	-	-	-	-	-
Rejuvenation of old orchards	-	-	-	-	-	-	-	-	-	-
Export potential fruits	-	-	-	-	-	-	-	-	-	-
Micro irrigation systems of orchards	-	-	-	-	-	-	-	-	-	-
Plant propagation techniques	-	-	-	-	-	-	-	-	-	-
c) Ornamental Plants										
Nursery Management	-	-	-	-	-	-	-	-	-	-
Management of potted plants	-	-	-	-	-	-	-	-	-	-
Export potential of ornamental plants	-	-	-	-	-	-	-	-	-	-
Propagation techniques of Ornamental Plants	-	-	-	-	-	-	-	-	-	-
d) Plantation crops										
Production and Management technology	-	-	-	-	-	-	-	-	-	-
Processing and value addition	-	-	-	-	-	-	-	-	-	-
e) Tuber crops										
Production and Management technology	-	-	-	-	-	-	-	-	-	-
Processing and value addition	-	-	-	-	-	-	-	-	-	-
f) Spices	-	-	-	-	-	-	-	-	-	-
Production and Management technology	-	-	-	-	-	-	-	-	-	-
Processing and value addition	-	-	-	-	-	-	-	-	-	-
g) Medicinal and Aromatic Plants										
Nursery management	-	-	-	-	-	-	-	-	-	-
Production and management	-	-	-	-	-	-	-	-	-	-

technology										
Post harvest technology and value addition	-	-	-	-	-	-	-	-	-	-
III Soil Health and Fertility Management										
Soil fertility management	-	-	-	-	-	-	-	-	-	-
Soil and Water Conservation	-	-	-	-	-	-	-	-	-	-
Integrated Nutrient Management	-	-	-	-	-	-	-	-	-	-
Production and use of organic inputs	-	-	-	-	-	-	-	-	-	-
Management of Problematic soils	-	-	-	-	-	-	-	-	-	-
Micro nutrient deficiency in crops	-	-	-	-	-	-	-	-	-	-
Nutrient Use Efficiency	-	-	-	-	-	-	-	-	-	-
Soil and Water Testing	-	-	-	-	-	-	-	-	-	-
IV Livestock Production and Management										
Dairy Management	-	-	-	-	-	-	-	-	-	-
Poultry Management	-	-	-	-	-	-	-	-	-	-
Piggery Management	-	-	-	-	-	-	-	-	-	-
Rabbit Management	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
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	2	5	0	5	35	11	46	40	11	51
Income generation activities for empowerment of rural Women	-	-	-	-	-	-	-	-	-	-
Location specific drudgery reduction technologies	1	0	5	5	0	14	14	0	19	19
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 CapacityBuilding and Group Dynamics										
Leadership development	-	-	-	-	-	-	-	-	-	-
Group dynamics	-	-	-	-	-	-	-	-	-	-
Formation and Management of SHGs	-	-	-	-	-	-	-	-	-	-
Mobilization of social capital	-	-	-	-	-	-	-	-	-	-
Entrepreneurial development of farmers/youths	-	-	-	-	-	-	-	-	-	-

WTO and IPR issues	-	-	-	-	-	-	-	-	-	-
XI Agro-forestry										
Production technologies	-	-	-	-	-	-	-	-	-	-
Nursery management	-	-	-	-	-	-	-	-	-	-
Integrated Farming Systems	-	-	-	-	-	-	-	-	-	-
TOTAL	**7**	**51**	**6**	**57**	**49**	**33**	**82**	**108**	**31**	**139**
(B) RURAL YOUTH										
Mushroom Production	1	0	0	0	0	21	21	0	21	21
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	1	1	0	1	27	0	27	28	0	28
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	1	0	0	0	22	1	23	22	1	23
Fry and fingerling rearing	-	-	-	-	-	-	-	-	-	-
Small scale processing	-	-	-	-	-	-	-	-	-	-
Post Harvest Technology	-	-	-	-	-	-	-	-	-	-
Tailoring and Stitching	-	-	-	-	-	-	-	-	-	-
Rural Crafts	2	0	12	12	0	33	33	0	39	39
TOTAL	**5**	**1**	**12**	**13**	**49**	**55**	**104**	**50**	**61**	**111**
(C) Extension Personnel										
Productivity enhancement in field crops	1	13	2	15	3	1	4	16	3	19
Integrated Pest Management	1	21	0	21	1	0	1	22	0	22
Integrated Nutrient management	-	-	-	-	-	-	-	-	-	-
Rejuvenation of old orchards	-	-	-	-	-	-	-	-	-	-
Protected cultivation technology	-	-	-	-	-	-	-	-	-	-
Formation and Management of SHGs	-	-	-	-	-	-	-	-	-	-
Group Dynamics and farmers organization	-	-	-	-	-	-	-	-	-	-
Information networking among farmers	1	25	1	26	0	0	0	25	1	26
Capacity building for ICT application	-	-	-	-	-	-	-	-	-	-
Care and maintenance of farm machinery and implements	-	-	-	-	-	-	-	-	-	-
WTO and IPR issues	1	17	0	17	1	0	1	18	0	18
Management in farm animals	1	9	0	9	1	0	1	10	0	10
Livestock feed and fodder production	1	11	1	12	3	1	4	14	2	16
Household food security	-	-	-	-	-	-	-	-	-	-
Women and Child care	-	-	-	-	-	-	-	-	-	-
Low cost and nutrient efficient diet designing	2	0	19	19	0	18	18	0	37	37

Production and use of organic inputs	-	-	-	-	-	-	-	-	-	-
Gender mainstreaming through SHGs	-	-	-	-	-	-	-	-	-	-
TOTAL	**8**	**96**	**23**	**119**	**9**	**20**	**29**	**105**	**43**	**148**

B) **OFF Campus**

Thematic area	**No. of courses**	**Participants**								
		Others			**SC/ST**			**Grand Total**		
		Male	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
(A) Farmers & Farm Women										
I Crop Production										
Weed Management	-	-	-	-	-	-	-	-	-	-
Resource Conservation Technologies	-	-	-	-	-	-	-	-	-	-
Cropping Systems	2	29	0	29	27	0	27	56	0	56
Crop Diversification	-	-	-	-	-	-	-	-	-	-
Integrated Farming	-	-	-	-	-	-	-	-	-	-
Water management	-	-	-	-	-	-	-	-	-	-
Seed production	-	-	-	-	-	-	-	-	-	-
Nursery management	2	12	18	30	5	1	6	35	1	36
Integrated Crop Management	-	-	-	-	-	-	-	-	-	-
Fodder production	2	1	0	1	27	4	31	28	4	32
Production of organic inputs	-	-	-	-	-	-	-	-	-	-
II Horticulture										
a) Vegetable Crops										
Production of low volume and high value crops	4	16	10	26	33	34	67	49	44	93
Off-season vegetables	-	-	-	-	-	-	-	-	-	-
Nursery raising	2	0	2	2	2	37	39	2	39	41
Exotic vegetables like Broccoli										
Export potential vegetables	1	0	16	16	0	2	2	0	18	18
Grading and standardization	-	-	-	-	-	-	-	-	-	-
Protective cultivation (Green Houses, Shade Net	-	-	-	-	-	-	-	-	-	-

etc.)										
b) Fruits										
Training and Pruning	-	-	-	-	-	-	-	-	-	-
Layout and Management of Orchards	-	-	-	-	-	-	-	-	-	-
Cultivation of Fruit	1	15	1	16	5	9	14	20	10	30
Management of young plants/orchards	1	9	0	9	15	0	15	24	0	24
Rejuvenation of old orchards	-	-	-	-	-	-	-	-	-	-
Export potential fruits	-	-	-	-	-	-	-	-	-	-
Micro irrigation systems of orchards	-	-	-	-	-	-	-	-	-	-
Plant propagation techniques	-	-	-	-	-	-	-	-	-	-
c) Ornamental Plants	-	-	-	-	-	-	-	-	-	-
Nursery Management	1	15	1	16	5	9	14	20	10	30
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	3	24	2	26	39	10	49	63	12	75
Processing and value addition	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-
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	1	0	0	0	6	16	22	6	16	22
Poultry Management	-	-	-	-	-	-	-	-	-	-
Piggery Management	-	-	-	-	-	-	-	-	-	-
Rabbit Management	-	-	-	-	-	-	-	-	-	-
Disease Management	1	22	4	26	2	2	4	24	6	30
Feed management	-	-	-	-	-	-	-	-	-	-
Production of quality animal products	-	-	-	-	-	-	-	-	-	-
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	1	0	0	0	0	17	17	0	17	17
Design and development of low/minimum cost diet	1	0	0	0	0	20	20	0	20	20
Designing and development	-	-	-	-	-	-	-	-	-	-

for high nutrient efficiency diet										
Minimization of nutrient loss in processing	2	6	17	23	6	36	42	12	53	65
Gender mainstreaming through SHGs	-	-	-	-	-	-	-	-	-	-
Storage loss minimization techniques	-	-	-	-	-	-	-	-	-	-
Value addition	3	15	21	36	1	54	55	16	75	91
Income generation activities for empowerment of rural Women	-	-	-	-	-	-	-	-	-	-
Location specific drudgery reduction technologies	2	0	9	9	0	38	38	0	47	47
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	3	42	2	44	7	1	8	49	3	52

Carp breeding and hatchery management	1	12	0	12	1	0	1	13	0	13
Carp fry and fingerling rearing	1	1	0	1	11	0	11	12	0	12
Composite fish culture	-	-	-	-	-	-	-	-	-	-
Hatchery management and culture of freshwater prawn	3	1	0	1	47	1	48	48	1	49
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	5	3	8	19	3	22	24	6	30
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 CapacityBuilding and Group Dynamics										
Leadership development	1	0	0	0	20	4	24	20	4	24
Group dynamics	1	18	0	18	2	0	2	20	0	20

Formation and Management of SHGs	1	14	0	14	5	8	13	19	8	27
Mobilization of social capital	2	43	16	59	0	0	0	43	16	59
Entrepreneurial development of farmers/youths	1	12	0	12	11	0	11	23	0	23
WTO and IPR issues	-	-	-	-	-	-	-	-	-	-
XI Agro-forestry										
Production technologies	1	16	0	16	12	0	12	28	0	28
Nursery management	1	14	2	16	7	3	10	21	5	26
Integrated Farming Systems	3	15	31	46	13	15	28	28	46	74
TOTAL	**50**	**357**	**155**	**512**	**328**	**324**	**652**	**703**	**461**	**1164**
(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	1	16	3	19	4	3	7	20	7	27
Training and pruning of orchards	-	-	-	-	-	-	-	-	-	-
Value addition	1	0	14	14	0	22	22	0	36	36
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	**1**	**0**	**14**	**14**	**0**	**22**	**22**	**0**	**36**	**36**
(C) Extension Personnel										
Productivity enhancement in field crops	-	-	-	-	-	-	-	-	-	-
Integrated Pest Management	-	-	-	-	-	-	-	-	-	-
Integrated Nutrient management	1	11	3	14	6	0	6	17	3	20
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	**1**	**11**	**3**	**14**	**6**	**0**	**6**	**17**	**3**	**20**

C) Consolidated table (ON and OFF Campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
(A) Farmers & Farm Women										
I Crop Production										
Weed Management	-	-	-	-	-	-	-	-	-	-
Resource Conservation Technologies	-	-	-	-	-	-	-	-	-	-
Cropping Systems	3	48	0	48	31	0	31	79	0	79
Crop Diversification	-	-	-	-	-	-	-	-	-	-
3	2	15	0	15	8	8	16	31	0	31
Water management										
Seed production	-	-	-	-	-	-	-	-	-	-
Nursery management	-	-	-	-	-	-	-	-	-	-
Integrated Crop Management	3	24	19	43	7	1	8	49	2	51
Fodder production	2	1	0	1	27	4	31	28	4	32
Production of organic inputs	-	-	-	-	-	-	-	-	-	-
II Horticulture										
a) Vegetable Crops										

Production of low volume and high value crops	4	16	10	26	33	34	67	49	44	93
Off-season vegetables										
Nursery raising	2	0	2	2	2	37	39	2	39	41
Exotic vegetables like Broccoli										
Export potential vegetables	1	0	16	16	0	2	2	0	18	18
Grading and standardization	-	-	-	-	-	-	-	-	-	-
Protective cultivation (Green Houses, Shade Net etc.)	-	-	-	-	-	-	-	-	-	-
b) Fruits										
Training and Pruning	-	-	-	-	-	-	-	-	-	-
Layout and Management of Orchards	-	-	-	-	-	-	-	-	-	-
Cultivation of Fruit	1	15	1	16	5	9	14	20	10	30
Management of young plants/orchards	1	9	0	9	15	0	15	24	0	24
Rejuvenation of old orchards	-	-	-	-	-	-	-	-	-	-
Export potential fruits	-	-	-	-	-	-	-	-	-	-
Micro irrigation systems of orchards	-	-	-	-	-	-	-	-	-	-
Plant propagation techniques	-	-	-	-	-	-	-	-	-	-
c) Ornamental Plants										
Nursery Management	1	15	1	16	5	9	14	20	10	30
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	3	24	2	26	39	10	49	63	12	75
Post harvest technology and value addition	-	-	-	-	-	-	-	-	-	-
III Soil Health and Fertility Management										
Soil fertility management	-	-	-	-	-	-	-	-	-	-
Soil and Water Conservation	-	-	-	-	-	-	-	-	-	-
Integrated Nutrient Management	-	-	-	-	-	-	-	-	-	-
Production and use of organic inputs	-	-	-	-	-	-	-	-	-	-
Management of Problematic soils	-	-	-	-	-	-	-	-	-	-
Micro nutrient deficiency in crops	-	-	-	-	-	-	-	-	-	-
Nutrient Use Efficiency	-	-	-	-	-	-	-	-	-	-
Soil and Water Testing	-	-	-	-	-	-	-	-	-	-
IV Livestock Production and Management										
Dairy Management	1	0	0	0	6	16	22	6	16	22
Poultry Management	-	-	-	-	-	-	-	-	-	-
Piggery Management	-	-	-	-	-	-	-	-	-	-
Rabbit Management	-	-	-	-	-	-	-	-	-	-
Disease Management	1	22	4	26	2	2	4	24	6	30
Feed management	-	-	-	-	-	-	-	-	-	-
Production of quality animal products	-	-	-	-	-	-	-	-	-	-
V Home Science/Women empowerment										
Household food security by	1		0		0					

kitchen gardening and nutrition gardening		0		0		17	17	0	17	17
Design and development of low/minimum cost diet	1	0	0	0	0	20	20	0	20	20
Designing and development for high nutrient efficiency diet	2	6	17	23	6	36	42	12	53	65
Minimization of nutrient loss in processing	-	-	-	-	-	-	-	-	-	-
Gender mainstreaming through SHGs	-	-	-	-	-	-	-	-	-	-
Storage loss minimization techniques	-	-	-	-	-	-	-	-	-	-
Value addition	6	20	21	41	41	71	112	61	92	153
Income generation activities for empowerment of rural Women	2	0	9	9	0	38	38	0	47	47
Location specific drudgery reduction technologies	1	0	5	5	0	14	14	0	19	19
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	3	42	2	44	7	1	8	49	3	52
Carp breeding and hatchery management	1	12	0	12	1	0	1	13	0	13
Carp fry and fingerling rearing	1	1	0	1	11	0	11	12	0	12
Composite fish culture	3	1	0	1	47	1	48	48	1	49
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	5	3	8	19	3	22	24	6	30
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 CapacityBuilding and Group Dynamics	-	-	-	-	-	-	-	-	-	-
Leadership development	1	0	0	0	20	4	24	20	4	24
Group dynamics	1	18	0	18	2	0	2	20	0	20
Formation and Management of SHGs	1	14	0	14	5	8	13	19	8	27
Mobilization of social capital	2	43	16	59	0	0	0	43	16	59
Entrepreneurial development of farmers/youths	1	12	0	12	11	0	11	23	0	23
WTO and IPR issues	-	-	-	-	-	-	-	-	-	-
XI Agro-forestry										
Production technologies	1	16	0	16	12	0	12	28	0	28
Nursery management	1	14	2	16	7	3	10	21	5	26
Integrated Farming Systems	3	15	31	46	13	15	28	28	46	74
TOTAL	**57**	**408**	**161**	**569**	**377**	**357**	**734**	**811**	**492**	**1303**
(B) RURAL YOUTH										
Mushroom Production	1	0	0	0	0	21	21	0	21	21
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	1	16	3	19	4	3	7	20	7	27
Training and pruning of orchards	-	-	-	-	-	-	-	-	-	-
Value addition	1	0	14	14	0	22	22	0	36	36
Production of quality animal products	-	-	-	-	-	-	-	-	-	-

Dairying	-	-	-	-	-	-	-	-	-	-
Sheep and goat rearing	-	-	-	-	-	-	-	-	-	-
Quail farming	-	-	-	-	-	-	-	-	-	-
Piggery	-	-	-	-	-	-	-	-	-	-
Rabbit farming	-	-	-	-	-	-	-	-	-	-
Poultry production	1	1	0	1	27	0	27	28	0	28
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	1	0	0	0	22	1	23	22	1	23
Fry and fingerling rearing	-	-	-	-	-	-	-	-	-	-
Small scale processing	-	-	-	-	-	-	-	-	-	-
Post Harvest Technology	-	-	-	-	-	-	-	-	-	-
Tailoring and Stitching	-	-	-	-	-	-	-	-	-	-
Rural Crafts	2	0	12	12	0	33	33	0	45	45
TOTAL	**7**	**17**	**29**	**46**	**53**	**80**	**133**	**70**	**110**	**180**
(C) Extension Personnel										
Productivity enhancement in field crops	1	13	2	15	3	1	4	16	3	19
Integrated Pest Management	1	21	0	21	1	0	1	22	0	22
Integrated Nutrient management	1	11	3	14	6	0	6	17	3	20
Rejuvenation of old orchards	-	-	-	-	-	-	-	-	-	-
Protected cultivation technology	-	-	-	-	-	-	-	-	-	-
Formation and Management of SHGs	-	-	-	-	-	-	-	-	-	-
Group Dynamics and farmers organization	-	-	-	-	-	-	-	-	-	-
Information networking among farmers	1	25	1	26	0	0	0	25	1	26
Capacity building for ICT application	-	-	-	-	-	-	-	-	-	-

Care and maintenance of farm machinery and implements	-	-	-	-	-	-	-	-	-	-
WTO and IPR issues	1	17	0	17	1	0	1	18	0	18
Management in farm animals	1	9	0	9	1	0	1	10	0	10
Livestock feed and fodder production	1	11	1	12	3	1	4	14	2	16
Household food security	-	-	-	-	-	-	-	-	-	-
Women and Child care	-	-	-	-	-	-	-	-	-	-
Low cost and nutrient efficient diet designing	2	0	19	19	0	18	18	0	37	37
Production and use of organic inputs	-	-	-	-	-	-	-	-	-	-
Gender mainstreaming through SHGs	-	-	-	-	-	-	-	-	-	-
TOTAL	**9**	**107**	**26**	**133**	**15**	**20**	**35**	**122**	**46**	**168**

Details of above training programmes enclosed as <u>Annexure "B"</u>.

(D) Vocational training programmes for Rural Youth

Crop / Enterprise	Date	Training title*	Identified Thrust Area	Duration (days)	No. of Participants									Self employed after training			Number of persons employed else where
					Others			SC/ST			Total						
					Male	Female	Total	Male	Female	Total	Male	Female	Total	Type of units	Number of units	Number of persons employed	
Rural Craft	27/5/19	Rural Craft (cushion making /file folders etc.	Entrepreneurship development	05	0	6	6	0	15	15	0	21	21			4	
Value Addition	11/06/19	Processing/value addition of fruits & vegetables.	Entrepreneurship development	05	0	14	14	0	22	22	0	36	36			1	
Skill Upgradation	25/06/19	Skill upgradation of SHGs	Skill upgradation.	05	0	6	6	0	18	18	0	18	18			2	
Poultry Farming	17/10/19	Poltry farming	Entrepreneurship development	05	1	0	1	27	0	27	28	0	28				
Mushroom	18/10/19	Compost preparation for Mushroom	Round the year Mushroom Cultivation	05	0	0	0	0	21	21	0	21	21				
Value Addition	20/11/19	Value addition of fresh and frozen fruits	Entrepreneurship development	05	0	0	0	22	1	23	22	1	23				
Nursery Management	13th Feb to 3rd March 2020	Nursery raising as an enterprise	Entrepreneurship development	05	16	3	19	4	3	7	20	7	27				

***training title should specify the major technology /skill transferred**

(E) Sponsored Training Programmes conducted by KVK

Sl. No	Date	Title	Discipline	Thematic area	Duration (days)	Client (PF/RY/EF)	No. of courses	No. of Participants									Sponsoring Agency	Amount of fund received (Rs.)
								Others			SC/ST			Total				
								Male	Female	Total	Male	Female	Total	Male	Female	Total		

1	11/9/19	Disease control on FMD and Brucellosis	livestock	Disease management	1	PFRY	5	40	27	67	24	20	44	64	47	111		15000.00
2	17/9/19	Plantation drive	Agroforestry	Avenue plantation	1	PF/RY/EF	1	120	43	163	106	40	146	226	83	309	IFFCO	10000.00
3	22/10/19	Fertiliser application programme	Integrated nutrient management	Soil science	1	PF/RY	4	25	3	28	80	50	130	105	53	158	MOA	50000.00
4	14/11/19	Agriculture marketing infrastructure	Marketing	Marketing	1	PF/EF	4	30	1	31	18	1	19	48	2	50	NIAM	17000.00
5	24/12/19	Awareness programme on medicinal plants	Medicinal plants	Medicinal plants	1	PF/RY/EF	5	21	17	38	11	22	33	32	39	71	RCFC NMPB	25000.00
6	6/03/20	Awareness programme on bureau of energy efficiency	Resource conservation	Resource conservation	1	PF/RY/EF	1	61	10	71	15	12	27	76	32	108	PEDA	33597.00

(F) Skill Development Training under ASCI Conducted by selected KVKs: Nil

Sl. No	Date	Title	Discipline	Thematic area	Duration (days)	Client (PF/RY/EF)	No. of courses	No. of Participants								
								Others			SC/ST			Total		
								Male	Female	Total	Male	Female	Total	Male	Female	Total
1	24/01/2020 To 07/03/2020	Vermicompost producer	Agroforestry	Organic production	35	**PF/RY/EF**	1	16	0	16	4	0	4	20	0	20
2	16th feb to 29th march 2020	Mushroom Grower	Home science	Mushroom production	35	**PF/RY/EF**	1	8	1	9	9	2	11	17	3	20

3	07/02/2020 To 14t/03/2020	Aquaculture worker	Fisheries	Fish production	35	**PF/RY/EF**	1	12	0	12	8	0	8	20	0	20
Total																

6. Extension Activities (including activities of FLD programmes)

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)		
				M	F	T	M	F	T	M	F	T	M	F	T
1.	Field Day	Wheat	1	21	1	22	10	2	12	0	0	0	31	34	65
		Gram	2	28	23	51	19	4	23	0	0	0	47	27	74
		Oil seeds	1	2	0	2	20	5	25	0	0	0	22	5	27
		Maize	1	7	1	8	19	10	29	0	0	0	26	11	37
		Paddy	2	23	1	24	45	0	45	0	0	0	68	1	69
		Pulses	1	21	1	22	17	0	17	0	0	0	38	1	39
		Marigold	1	2	9	11	2	9	11	2	2	4	6	20	26
		Cauliflower	1	0	0	0	11	8	19	2	2	4	13	10	23
	Total		**10**	**104**	**36**	**140**	**143**	**38**	**181**	**4**	**4**	**8**	**251**	**109**	**360**
2.	Kissan Ghoshti	Paramparagat kheti	1	9	0	9	19	1	20	0	0	0	28	1	29
		Organic farming	3	154	12	166	86	22	99	6	4	10	246	38	284
		Pulses	1	10	2	12	11	3	14	0	0	0	21	5	26
		Floriculture	2	5	7	12	3	12	15	0	0	0	8	19	27
		Biofertilizer/fertilizer application	2	53	10	63	96	59	155	0	0	0	149	69	218
3.	Exhibition	KVK stalls	3	-	-	-	-	-	-	18	22	40	-	-	800
4.	Film Show		12												
5.	Method Demonstrations	Paddy,wheat,maize, vegetables, value addition, fisheries.	18	241	14	255	121	42	163	0	0	0	383	56	489
6.	Farmers Seminar	Parthenium	4	52	53	105	31	53	84	0	0	0	83	106	189
		Swachhta	2							9	6	15			140
		Pulse Cultivation	2	13	8	21	26	35	61	0	0	0	39	43	82
		Fertilizer application	1	25	3	28	80	50	130	0	0	0	105	53	158
		Agri Marketing	1	30	1	31	18	1	19	0	0	0	48	2	50
		Stubble burning	1	18	_	18	2	_	2	0	0	0	20	0	20
		Mushroom cultivation	1	12	2	14	40	26	66	0	0	0			80
		Medicinal Plantation	1	21	17	38	11	22	33	0	0	0			71
		Breast feeding week	1	0	55	55	0	188	188	0	14	14			257
7.	Workshop	Pesticide free basmati	1	17	0	17	0	13	13	0	0	0			30
		Animal disease control for FMD	1	40	27	67	24	20	44	0	0	0			111
		Plantation Program	1	37	2	39	78	20	98	0	0	0			137
		Stake holder meet on medicinal plants (RCFC-II)	1	22	0	22	28	0	28	10	3	13	60	3	63
8.	Lectures delivered as resource person		28	-	-	-	-	-	-	-	-	-			-
9.	Group meetings	Abhilasha, Pragati, Nisha	7	4	16	20	6	44	50						70
10.	Newspaper coverage		31	-	-	-	-	-	-	-	-	-	-	-	-
11.	Radio talks	Medicinal trees	2												
		Breast feeding and health	1												
		Millets	1												
12.	TV talks	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13.	Popular articles		4	-	-	-	-	-	-	-	-	-	-	-	-
14.	Extension Literature		12	-	-	-	-	-	-	-	-	-	-	-	1300

15.	Advisory Services		43	-	-	-	-	-	-	-	-	-	-	-	700
16.	Scientific visit to farmers field		57	-	-	-	-	-	-	-	-	-	-	-	412
17.	Farmers visit to KVK														
18.	Diagnostic visits	Fish Farming	1	-	-	-	1	-	-	-	-	-	-	-	
		Mushroom units	2	3	0	3	3	0	3	0	0	0	6	0	6
19.	Exposure visits	Vermicompost	2	98	69	167	7	13	20	1	1	2	106	83	189
		Bee Keeping	1	4	8	12	8	2	10	1	1	2	13	11	24
		Agri-hoti	1	9	0	9	18	0	18	0	0	0	27	0	27
		Value addition	1	8	13	21	3	4	7	0	0	0	11	17	28
		Mushroom cultivation	1	18	0	18	4	0	4	2	0	2	24	0	24
20.	Exposure visit to kvk jammu	Udhampur	1	6	0	6	6	0	6	-	-	-	12	0	12
		Reasi	1	24	0	24	12	0	12	-	-	-	36	0	36
		SKUAST-K	1	13	5	18	11	8	19	-	-	-	24	13	37
		Poultry mega event , Samba	1	7	0	7	4	0	4	-	-	-	11	0	11
		MAP's RCFC SKUAST-K	1	5	0	5	0	0	0	-	-	-	5	0	5
		Kishtwar	1	32	10	32	17	1	18	-	-	-	40	1	50
		Ramban	1	36	0	36	6	0	6	-	-	-	42	0	42
		Reasi	1	33	0	33	0	5	5	-	-	-	33	5	38
		Total	8	156	15	171	61	9	70	-	-	-	212	19	231
21.	Ex-trainees Sammelan	Kisaan aur Vigyaan	1	8	3	11	6	4	10	0	0	0	14	7	21
22.	Soil health Camp	Fertiliser application	1	12	9	21	24	27	51	0	0	0	36	36	72
23.	Animal Health Camp		1	51	0	51	0	0	0	15	8	23	66	8	74
24.	Agri mobile clinic														
25.	Seed treatment campaigns		2	22	0	22	9	0	9	-	-	-	-	-	31
26.	Farm Science Club Conveners meet		-	-	-	-	-	-	-	-	-	-	-	-	-
27.	Self Help Group Conveners meetings		1	6	0	6	0	0	0	0	0	0	6	0	6
28.	Mahila Mandals Conveners meetings		-	-	-	-	-	-	-	-	-	-	-	-	-
29.	Celebration of important days (specify														
1		Earth Day	1	8	3	11	11	4	15	0	0	0	19	7	26
2.		World Enviornmen t Day	1	26	20	46	0	0	0	0	0	0	26	0	46
3.		ICAR day	1	15	7	22	7	2	9	0	0	0	22	9	31
4.		World Fisheries Day	1	6	1	7	22	1	23	0	0	0	28	2	30
5.		Women Farmer Day	1	0	20	20	0	21	21	0	0	0	0	41	41
6.		Kisan Diwas	1	0	0	0	20	17	37	0	0	0	20	17	37
7.		Technology week	1	92	6	98	136	77	213	19	4	23	234	83	317
8.		Nutrition Week	2	12	55	67	8	28	36	0	0	0	20	83	103
9.		Plantation Drive	1	37	2	39	78	20	98	0	0	0	115	22	137
10.		International Women's Day	1	0	21	21	1	32	33	5	3	8	6	56	62
11.	Others	Webcasting of Prime Minister at KVK jammu	1	52	0	52	24	5	29	6	3	9	82	8	90
	Total		**256**	**1123**	**462**	**1585**	**1130**	**840**	**1969**	**50**	**48**	**98**	**1962**	**863**	**7034**

6. B. Kisan Mobile Advisory Services

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
Jammu	5000	36			36				

6.C. DETAILS OF TECHNOLOGY WEEK CELEBRATIONS during 2019-20 (April-December)

No. of Technology week celebrated	Types of Activities	No. of Activities	Number of Participants	Related crop/livestock technology
	Gosthies	1	66	Nimal/Livestock
	Lectures organised	12	-	Crop & Livestock
	Exhibition	5	-	Crop & H Sc
	Film show	5	-	Organic farming, Fisheries, Mushroom
	Fair	-	--	-
	Farm Visit	5	-	KVK Farm & TVCC
	Diagnostic Practicals	-	-	-
	Distribution of Literature (No.)	300	-	Crop/mushroom/Processing/Fisheries
	Distribution of Seed (q)	-	-	-
	Distribution of Planting materials (No.)	1000	-	Agroforestry/Horticuture plants
	Bio Product distribution (Kg)	-	-	-
	Bio Fertilizers (q)	125	-	Natural Seaweed etracts
	Distribution of fingerlings	-	-	-
	Distribution of Livestock specimen (No.)	-	-	-
	Total number of farmers visited the technology week	-	334	

7. Production and supply of Technological products

A) SEED MATERIALS

Major group/class	Crop	Variety	Quantity (qtl.)	Value (Rs.)	Provided to No. of Farmers
CEREALS	Wheat	HD 3086	156.98	470000(Appx)	Kept for processing with Megaseed SKUAST-J
	Paddy	B-370	42.0	126000 (Appx)	Kept for processing with Megaseed SKUAST-J
OILSEEDS	-	-	-	-	-
PULSES	-	-	-	-	-
VEGETABLES	-	-	-	-	-
FLOWER CROPS	-	-	-	-	-
OTHERS (Specify)	-	-	-	-	-

B) PLANTING MATERIALS

Major group/class	Crop	Variety	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
FRUITS	-	-	-	-	-
	-	-	-	-	-
	-	-	-	-	-
	-	-	-	-	-
SPICES	-	-	-	-	-
	-	-	-	-	-
	-	-	-	-	-
VEGETABLES	-	-	-	-	-
	-	-	-	-	-
	-	-	-	-	-
	-	-	-	-	-
FOREST SPECIES	Fodder (Napier)		1000	1000	
	Setaria		1000	1000	

	Medicinal plants				
	Harad Amla Lemon Grass Alovera Strawberry Morus		100 100 80 100 80 100		**20**
	MPTS		1000	3000	Distributed free of cost to 100 farmers on 17 Sept 2019
ORNAMENTAL CROPS	-	-	-	-	-
PLANTATION CROPS	-	-	-	-	-
Fodder	**Sorghum**	**SSG**		**45000**	**Auctioned**

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	**Vermicompost**	**Eisenia foetida**		**2220**	**17760**	
1	-	-	-	-	-	-
2	-	-	-	-	-	-
3	-	-	-	-	-	-
4	-	-	-	-	-	-
BIO PESTICIDES	-	-	-	-	-	-
1	-	-	-	-	-	-
2	-	-	-	-	-	-
3	-	-	-	-	-	-
4	-	-	-	-	-	-

D) LIVESTOCK: NA

Sl. No.	Type	Breed	Quantity		Value (Rs.)	Provided to No. of Farmers
			(Nos	Kgs		
Cattle	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
SHEEP AND GOAT	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
POULTRY	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
FISHERIES	**Grass Carp**		**25.0**		**3870**	
	-	-	-	-	-	-

Others (Specify)	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-

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

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

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

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

(C) Literature developed/published

Item	***Title***	***Authors name***	***Number of copies***
Research papers	Initiatives of Krishi Vigyan Kendra (KVK) in Doubling of Farmers Income: A Case Study of Village Sagoon, Jammu. Journal of Community Mobilization and Sustainable Development. (in Press) Microsatellite markers (SSR'S) for revealing polymorphism and identification among Willows clones. *Journal of Plant Development Sciences.* Vol. 11(9) : 525-530. Effect of Mineral Mixture on Growth, Feed Utilization and Economics of Composite Fish Farming. *Agro-economist: An international Journal* Dec 2019	Rakesh Sharma, Punit Choudhary and Vikas Tandon 2019 PunitChoudhary*, N.B. Singh and Avanish Sharma. 2019 Prem Kumar, Sanjay Khar, Punit Choudhary, Rakesh Sharma and Sushma Sharma	
Abstract in Conference	Effect of Mineral Mixture on Growth, Feed Utilization and Economics of Composite Fish Farmingin National seminar on Science and Technology: Rural development 10-11 Dec, 2019. Organized by Govt. Degree College Samba in collaboration with Indian Science Congress Association, Jammu Chapter	Prem Kumar, Sanjay Khar, Punit Choudhary, Rakesh Sharma, Sushma Sharma and Poonam Abrol	
Technical reports	Operational Guidelines for Grameen Bhandaran Yojana: Capital Investment Subsidy For Construction/ Renovation of	Rakesh Shrama, Punit Choudhary, Prem Kumar, Pawan Sharma, Ravneet Kour, Sheetal Badyal,	

Item	*Title*	*Authors name*	*Number of copies*
	Rural Godown.	Poonam Abrol, Satvir Singh and Raju Gupta. 2019.	
	NABARD Project Report	Punit Choudhary, Rakesh Sharma and Vikas Tandon	
Technical bulletins			
Popular articles			
Training Manual	Use of immunostimulants and probiotics in Aquaculture	Prem Kumar, Rakesh Sharma, Punit Choudhary and Sheetal Badayal	
Extension literature	Crop insurance scheme	Rakesh Sharma, Punit Choudhary and Prem Kumar	
Folders /leaflets	Biofloc system for intensive fish production	Prem Kumar, Punit Choudhary, Rakesh Sharma and Poonam Abrol	
	Cultivation of medicinal trees (Harad and Aonla) for higher income	Punit Choudhary, Rakesh Sharma and Prem Kumar	
	Formation and management of SHGs	Rakesh Sharma, Punit Choudhary and Prem Kumar	
	Scientific cultivation of fodder crops	Punit Choudhary, Rakesh Sharma and Ravneet Kaur	
	Value addition of Pangas Fish	Prem Kumar, Punit Choudhary, Rakesh Sharma and Poonam Abrol	
TOTAL	**13**		

(C) Details of Electronic Media Produced: Nil

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

(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)

1.0 Title: Mushroom Cultivation: A Successful Venture for Border Farmers.

Introduction: KVK Jammu, since its inception in 1992 has been training farmers in various agri-enterprises recognizing the fact that complete absence of on-farm employment for a considerable time period during the year, lack of resources and knowledge about use of agro-waste in mushroom production keep the farmers dependent on traditional crops for their livelihoods. With all its historical background and nutritive importance, it is of paramount importance that large number of farmers/ rural youth be made aware of successful cultivation and economic benefits of mushroom production. In the efforts to increase his income, Ashish decided he would rather diversify instead of practicing routine agriculture. Sh.Ashish Sharma a resident of small village Panjora,Block & Tehsil Marh,District Jammu and is located on the International Border of India Pakistan. He is a progressive,hardworking youth having marginal landholding less than 0.2 hectare (ha). But the meager landholding, under the shadow of the distress of Pakistan Border, does not cause any hindrance in his fiery spirit to come out of the quagmire of poverty and becoming a successful entrepreneur.

Ashish, only brother of his five sisters, exhausting all his efforts to get a job after his high school education, started helping his ailing father who was a tractor driver and used to plough land of his adjoining farmers besides taking care of his own 0.2 ha land. Finding family income quite meager to sustain, his father suggested him to join him in his work. Ashish recalls it was after his elder sister's marriage when he visited her house and saw mushroom producefirst time. During his successive visits to his sister's house, one day he decided to try the same at his place. He aftergetting some information from his brother-in-law, also googled to know about method and materials and landed up buying readymade mushroom bags from the market. His first attempt with this readymade material did not turn out to be that satisfactory. Then, he visited the agriculture department who recommended him to contact Krishi Vigyan Kendra (KVK) Jammu.It was in the year 2017 that Ashish first time heard of KVK Jammu from agriculture office and later visited KVK Jammu in the month of April and thereafter became a frequent visitor in many programs and sought advise and technical guidance of concerned scientists regarding mushroom cultivation and other viable agri-ventures .Among different agro enterprises, mushroom cultivation is one which has the potential for bioconversion of agricultural, industrial, forestry and household wastes into nutritious food. Mushroom cultivation can effectively utilize agro residues for production of protein rich foods and play crucial role in management of different agro residues. It consists of different activities such as spawn production, compost making, processing and mushroom cultivation etc. and each of these is an enterprise in itself.

This turned out to be the turning point for Ashish and his family. He started visiting KVK for attending farmer trainings, programmes and melas/fairs along with a fellow youth.

With the realization of the importance of cultivating mushroom as an additional source of income, Ashish decided to undergo skill training in mushroom production. In the year 2018-19, he enrolled

himself for 200 hours skill trainings on “Mushroom growers- Small entrepreneurs” sponsored by Agriculture Skill Council of India (ASCI) and successfully completed the certificate course. After the invention of KVK Jammu, he started cultivating 2 different species of mushrooms, viz. white button, and oyster mushroom. However, he has commercialized only in one of them. , i.e. button mushroom and mushroom.

In spite of a lot of hindrances in its cultivation and high labor requirement, he manages to take maximum possible yield from his unit. Due to extensive training, he has improved his production potential, marketing, negotiating skills and above all his confidence level. Under the direct guidance of KVK, he has chalked out production and marketing strategies to get maximum benefits.

KVK INTERVENTION: KVK Jammu, recognizing the value of mushroom production in uplifting the economy of marginal, small and landless farmers, lays special emphasis on providing/conducting extension activities, skill trainings, and exhibitions for rural youth, farmers and farm women. Exposure visits are also planned for farmers to promote mushroom production units on large scale. Since the past 3 years, KVK is providing 200 hour skill trainings sponsored by ASCI. Moreover, it facilitates the mushroom growers not only in providing technical inputs but also assist in procuring good quality spawn and other critical inputs in addition to conducting diagnostic visits to mushroom units at farmer’s field.

Exhaustive skill training comprising of theoretical as well as practical knowledge, exposure visits regular interactions with like KVK scientists and experts from allied departments like EDI, mushroom development department, NABARD etc. has provided Ashish Sharma enough technical input to shape him into an innovative farmer who has developed improved methods of mushroom cultivation by using different strains of spawn after intervention of KVK Jammu.

IMPACT;In the pursuit to become a role model, accruing more benefits Ashish is transforming from a seasonal producer to a round the year mushroom producer. He is selling his fresh produce in the market and providing supply to army in nearby Akhnoor tehsil. People have started recognizing him because of quality of his produce. Whereas Ashish has started horizontal spread of the technology in different ways by motivating his fellow farmers and unemployed youth , he has become a role-model for rural youth for taking mushroom cultivation a potential entreprise for agri-preneurship development leading to sustainable livelihood security. The trainee increased the unit size between 2016-17 and 2019-20 by more than 800 percent.

ECONOMIC BENEFITS				
SNO.	YEAR	CROPS GROWN	UNIT SIZE	INCOME(rupees)
1.	2016-17	Button Mushroom	120 bags	16000
2.	2017-18	Button Mushroom	250 bags	45000
3.	2018-19	Button Mushroom	800bags	1,72000
4.	2019-20	Button Mushroom	1100 bags	Awaited

Recognitions:KVK has recognized achievements of Sh. Ashish Sharma and recommended his name to various agencies to come forward in helping him by providing him loan facility and other government benefits. He was awarded as best innovative farmer of Jammu province by Confederation of Indian Industry (CII) in November 2019.

2.0 Title: Impact of Basmati-564 paddy on yield and farmers income

Introduction: Basmati rice is a scented variety of superfine rice grown in R.S. Pura, Bishnah, Satwari, Miran Sahib Teshils of Jammu district. Basmati rice is preferred by consumers all over the world due to its flavour and palatability. Basmati rice is highly priced in the domestic as well as international markets. In Jammu and Kashmir State, basmati rice is being grown in Jammu region, in three districts namely, Jammu, Samba and Kathua. The area under basmati cultivation is 29840 hectares with production of

923250 quintals and productivity of 30.94 quintals per hectare. The basmati 370 variety of paddy takes 155 days for maturity. Thus, late maturity of B-370 effects the timely sowing of wheat.

Output: KVK Jammu laid frontline demonstrations of Basmati 564 paddy variety on farmers field in the *kharif* 2019 as this variety has similar characteristics as of basmati 370 with added features of more yield and matures 15-20 days earlier than basmati 370. The grain quality of basmati 564 is at par with that of basmati 370 and it is resistant to lodging and other biotic stresses having semi-dwarf plant type.

Outcome: The outcome of technology demonstrated by the KVK Jammu helped the farmers to get yield @ 34.6q/ha which is 35.7% more than the traditional basmati 370. Moreover, it got matures earlier than Basmati 370 by 20-25 days.

Impact: The cultivation of Basmati 564 paddy variety helped farmer's earned a net profit of Rs. 60750/ha. Thus if this variety will be adopted by the basmati growers of Jammu district, there will be an additional income of Rs 25025/ha than Basmati 370.

Title 3.0 Impact of technology assessment of Basmati Varieties on yield and economics of the paddy crop.

Introduction: Basmati rice is a scented variety of superfine rice grown in R.S. Pura, Bishnah, Satwari, Miran Sahib Teshils of Jammu district. Basmati rice is preferred by consumers all over the world due to its flavour and palatability. Basmati rice is highly priced in the domestic as well as international markets. In Jammu and Kashmir State, basmati rice is being grown in Jammu region, in three districts namely, Jammu, Samba and Kathua. The area under basmati cultivation is 29840 hectares with production of

923250 quintals and productivity of 30.94 quintals per hectare. The basmati 370 variety of paddy takes 155 days for maturity. Thus, late maturity of B-370 effects the timely sowing of wheat.

Output: KVK Jammu laid on farm trails of Basmati 123 and 138 paddy varieties on farmers field in the *kharif* 2019 as these varieties have similar characteristics as of basmati 370 with added features of more yield and matures 20-25 days earlier than basmati 370. The grain quality of basmati 123 and 138 is at par with that of basmati 370.

Outcome: The outcome of trails conducted by the KVK Jammu helped the farmers to get yield @ 30.7 and 32 q/ha respectively which is 36.4 and 42.2 percent more than the traditional basmati 370. Moreover, it got matures earlier than Basmati 370 by 20-25 days.

Impact: The results of basmati 123 and 138 helped farmer's earned a net profit of Rs. 54430 and 58200/ha, respectively. Thus if these varieties will be adopted by the basmati growers of Jammu district, there will be an additional income of Rs 23780 and 27550 per ha more than Basmati 370.

4.0Fish Farming for employment as well as nutritional security

Introduction:S. Malkit Singh S/o S. Daler Singh resident of village Kadyal, Jammuat the age of twenty five proved that hard work and right selection of enterprise can bring great success in the life of young farmers of the district. After realizing his weakness in studies, he started looking after agriculture and farm activities. After long discussion, he convinced his family to start aquaculture and constructed a pond of 1500m^2. The production (300 kg) of first year was encouraging but not upto the satisfaction after which he contacted KVK Jammu for technical details and scientific farming. KVK Jammu laid front line

demonstration of fisheries at his field and briefed him with all the latest technologies and calendar of activities to follow. He followed all the instruction and achieved the production 650 kg of fishes during 2019. He is now going to construct one more pond and planning to integrate the poultry farming also. He showed the farmers of his village and nearby area that the farmers can earn their livelihood, improve their socio-economic status and can also mitigate their own nutritional problems along with climate change. He is also helping in providing employment and livelihoods opportunities to other people which conceded that aquaculture has been a success thus far.

Achievements: He started fish farming in year 2017 with one pond. By the end of year 2020, he is planning to have 3 ponds after achieving the success in aquaculture farming.

S.No.	Year	Unit	Amount Spent (Rs.)	Gross return (Rs.)	Net profit	B:C ratio
1	2017	1	22000	Indicated in next year after getting production.		
2	2018	1	25000	48000	26000	1.18
3	2019	1		97500	72500	2.90

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	Cucurbits	Dusting with ash for control of beetles	Plant Protection to save vegetable crops
2	Maize	Beating of drum and firing of crackers	To divert wild animals from crop damage
3	Cereal crops	Use of drek leaves as bedding	Safe storage of food grains

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

- **Identification of courses for farmers/farm women**: Group discussion and PRA was conducted at the village level. In this, assessment of village existing situation, assessment of their agricultural needs, trainings they have already participated, trainings they wish to participate, requirement of farmers, etc. These are recorded in the village and later analyzed in the office. Later on action programmes are formulated for successive years.

- **Rural Youth**:The training needs of rural youth were identified through discussions. Then priorities of the village youth are identified, looking into their resources, their trainings are finalized

- **In-service personnel**; During SAC meetings, the district heads were consulted before finalization of the action plan.

9.E. Field activities

i. Number of villages adopted: 21
ii. No. of farm families selected: 630
iii. No. of survey/PRA conducted: 5

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

Status of establishment of Lab : functional

1. Year of establishment :2006
2. List of equipments purchased with amount :

Sl. No	Name of the Equipment	Qty.	Cost
1	Water distillation unit	1	31667
2	Willy Grinding Mill	1	19406
3	P.H. meter	1	16706
4	Precisa analytical balance	1	52594
5	Kahn Shaking Machine	2	29358
6	Oven	1	12900
7	Spectrophotometer	1	151340
8	Flamephotometer	1	31149
9	EC meter	1	15729
10	Hot plate	1	1153
11	Kjeldhal Distillation and digestion unit	2	37695
	Total	**13**	**399397**

3. **Details of samples analyzed / Soil Health Cards issued during 2019-20 (April-December) :**

Details	No.	No. of Farmers	No. of Villages	Amount realized
Soil Samples	30	30	04	-
Water Samples	-	-	-	-
Plant Samples	-	-	-	-
Soil Health Cards Issued	-	-	-	-

1. Status of mini soil testing labs/kit : 2
2. Year of procurement of lab/kit : 2016-17
3. No. of mini labs with the KVK : 2
4. Type of mini labs (Name of lab/Kkt) : mridaparikshak

4 **Details of samples analyzed through mini soil kit / Soil Health Cards issued during 2019-20 (April-December) :**

Details	No. of Samples	No. of Farmers	No. of Villages	Amount realized
Soil Samples	30	31	04	-
Water Samples	-	-	-	-
Soil Health Cards Issued	-	-	-	-

10. IMPACT

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

Name of the technology	No of participants	% of adoption	Change in income (Rs)	
			Before (Rs /unit)	After (Rs/unit)

Improved varieties of marigold	80	74%	10450	18040

10.2. Cases of large scale adoption

1.0 Impact of Adoption of Commercial Floriculture Enterprise on Farmers Income

Introduction: Nagrota and Bhalwal blocks are located in Jammu district of Jammu and Kashmir Union Territory. The major farming system of the area was Maize-Wheat, Mash-Wheat, Maize-Oilseed which was not much profitable. KVK emphasized on diversification and awareness regarding cultivation of marigold crop in addition to their traditional crops among the farmers was created.

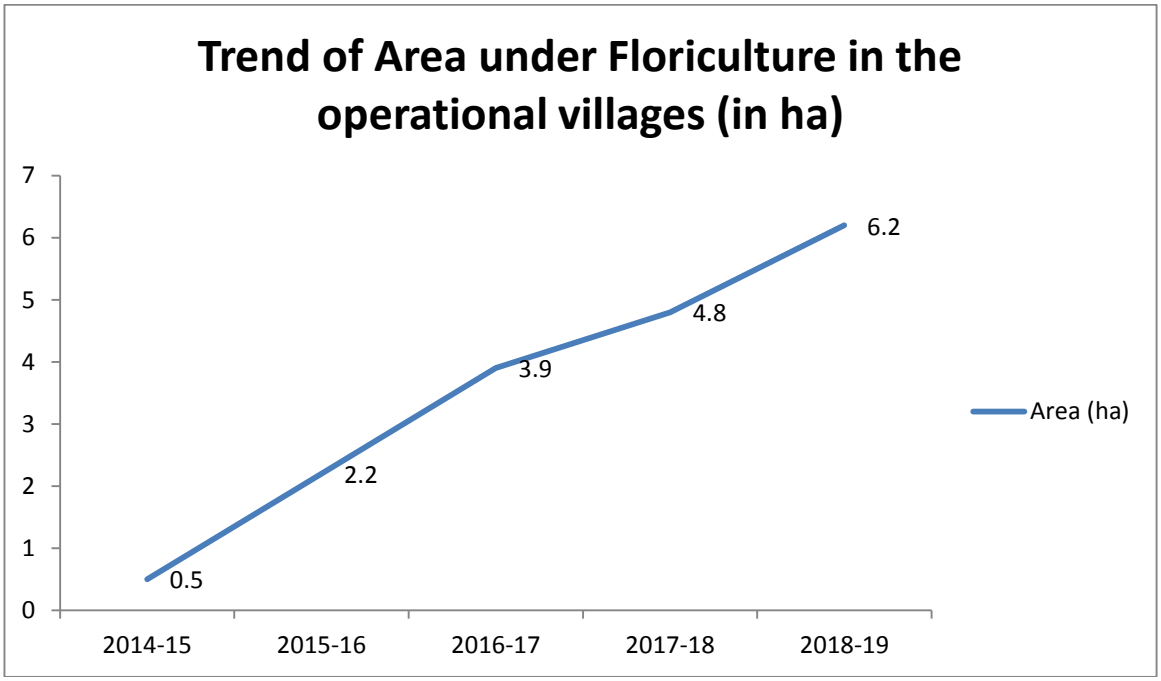
KVK intervention: KVK Jammu organized several training programmes for farmers and farmer women of the panchayats between 2014-15 to 2018-19 to update their knowledge about commercial floriculture and to enhance their technical skills.With the intervention of KVK, the farmers started cultivation of marigold crop. Frontline demonstrations of improved varieties of marigold were conducted. As compared to local check, 28-30 percent higher yields were recorded from demonstrations. The increase in yield and subsequently addition to their annual income contributed to adoptionof marigold cultivation in these villages.

Output: KVK Jammu distributed literature of the commercial floriculture among the farmers to update their technical know how. Now more and more farmers are coming up for adoption of this enterprise. They are attending the different programmes being organised by the KVK from time to time. The FLD's on marigold with improved varieties have exposed the farmers to new technologies and imparting of trainings on technical know-how has updated the farmers knowledge regarding potential of floriculture as a subsidiary source of income.

Outcome: KVK is playing a vital role in raising socio-economic status of farmers. The outcome of KVK interventions was very encouraging and it led to adoption of new enterprise in adjoining villages too. The farmers welcomed the move and other farmers were also motivated to adopt the marigold cultivation. The area under nearby villages has also been brought under cultivation of marigold. The average production of marigold obtained by the farmer's ranges between 60-80 quintals per hectare. There has been 30-40 percent increase in the yield.

Impact: As a result of KVK interventions, the rate of adoption of marigold cultivation has increased. Between 2014-15 to 2018-19, the area under marigold cultivation has expanded from 0.5 to 6.2 hectares under these cluster villages. This is contributed to the frontline demonstrations, trainings and awareness programmes conducted by KVK as well as incentives provided by the department of floriculture in some of the villages. The results revealed that the KVK activities had good impact over farming community of Jammu district.

With the introduction of new varieties, round the year cultivation of marigold has been possible. This has led to an average 50-90 percent increase in the income of the farmer depending upon the number of crops harvested. As recorded the cultivation of marigold is more profitable as compared to traditional crops on same piece of land and it has added to their annual income.



2.0 Sustainable Livelihood Security of Farmers of Kandi Villages of Jammu Region of Jammu and Kashmir through superior clones of Harad.

Harad and Aonla based agro-forestry practices are being adopted by the farmers of Kandi belts of Jammu district according to their needs and circumstances. These medicinal trees are growing naturally in the forest area, village common lands popularly known as Ghasni under traditional agroforestry systems and on the bunds of farmer's fields are the source of livelihood for the resource poor farm families of the villages. Large number of farm families from Kandi belt of different blocks namely Akhnoor, Mathwar, Bhalwal, Nagrota and Dansal are solely dependent upon the collection and sale of fruits of these medicinal trees grown wild on farm bunds and boundaries. The average farm of the farmers of these blocks ranged between 0.5 and 1.0 ha. The major crops cultivated by farmers in *kharif* season are maize, mash and sesamum and in *rabi* season wheat, chickpea and oilseed crops. The productivity of these crops dependent upon timely rainfall. In the year 2016-17, the productivity of maize was 18.6q/ha, mash 3.8q/ha, sesamum 3.5q/ha, wheat 12q/ha, chickpea 5.2q/ha and oilseed 3.8q/ha.The annual income per household from agriculture ranges between Rs. 35000 and Rs. 50000 per year. This meagre income is not suffice to run a family of average 6 members per family.

Harad based agroforestry system: In these circumstances, farmers having Harad trees in their uncultivable and fragile lands helped farmers with an addition earnings. The average yield of green fruit of Harad ranges between 100-120 kg per tree, whereas there are reports of trees bearing 5-7 quintals (q) of fruits/tree generating an average income of Rs. 1600-2000 per tree per year. As per local survey report, there are 7000-8000 wild and planted Harad trees in Mathwar village alone have a green and dry fruit production trade of more than 350 tonnes and 15-20 tonnes respectively that gets exported to Pakistan and gulf countries through Amritsar border fetching a total income of more than 40 lakhs per annum.

Marketing: The annual demand for the Harad fruit is 6778.4 tonnes which is growing @ 4.6%. The fresh and dried fruit has a ready market and has export potential to Pakistan and Gulf countries. Trees grow naturally on the bunds of farmer's fields or village common lands popularly known as Ghasni. The owners of the trees do not give any extra care to the trees except lopping of the branches every third year. The harvesting of fruits starts from August- September and continues till January. Fruit is marketed in two ways. During August- September, the fruit harvested in green stage is sent to Delhi, Hoshiarpur or Amritsar markets. The raw fruit is either exported to Pakistan and other foreign countries or used for making preserve by the local units. The remaining fruit retained by the farmer is harvested during December- January. The fruit is dried by the farmers, graded according to weight and shape and sent to markets for sale. Majority (90%) of the trees bear fruits of inferior quality. The cost of picking, grading and transportation being the same for low as well as good quality fruits and profit margins are far less for low quality fruits.

KVK intervention in replacement of inferior planting material with superior clones: KVK Jammu of SKUAST-J and Dr Y S Parmar University of Horticulture and Forestry, Solan have standardized techniques of vegetative propagation of these medicinal plants. Side veneer, Cleft, wedge grafting was successful in getting good graft plants in good time speeding up for formation of a clonal bank for this species. The technique envisages growing of seedling in poly bags, grafting, capping with poly caps and hardening of grafts in the green house. By using modified side veneer grafting, 80-90 % success in grafting of Harad has been achieved at KVK Jammu.

With the continuous efforts of KVK Jammu to provide superior planting material of Harad, capacity buildings programme, exposure visits and laying out frontline demonstration and on farm trials at the farmers field will result in production of quality and large sized fruits that will help farmers in doubling their income. Now the farmers have become desirous of having plants which come into bearing early and with better yield attributes. Framers are also motivated to form commodity interest groups namely Mathwar farmer club and Krishak Mahilla club for better marketing of their produce. Linkages between department namely SKUAST-Jammu, Agriculture marketing and planning, Horticulture, Forest

and social welfare departments have also been developed for the betterment of the farming community. Trainings programmes on value addition and post harvesting handling by the KVK has also improved returns for the farmers engaged in the enterprise..

CAPACITY BUILDING PROGRAMMES

COLLECTION AND MARKETING

Economic benefits: With coming up of superior grafting clones of Harad, the expected economic returns from these grafted clones at an early bearing age of 7-8 years will Rs 593750 per ha that will be almost double than the existing seedling plantations fetching an amount of Rs 300000 that too after 12-15 years of bearing. Standardization of the scientific production technology and capacity building will boost the adaptation and cultivation of medicinal trees in the district which in future will serve as a repository for supply of quality planting material to farming community of Jammu region. With the increase in availability of quality planting material, the farmers will venture into adoption of technology and gradual replacement of inferior plating stock with high value superior clones. Consequently, there will be development of entrepreneurship for commercialization of these crops among the rural masses.

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

- The focus of KVK activities have been on agri-based enterprises in view of doubling farmer's income by the year 2022 through mushroom cultivation, marigold production, vegetable production, backyard poultry , fisheries, medicinal plants/trees etc.
- During the period under report, a boost has been observed in farmers particularly farm women's endevour towards adoption of commercial floriculture in marigold production.KVK has introduced new improved varieties of Pusa Basanti and Pusa Narangi in new areas of Jammu district and promoted round the year cultivation through frontline demonstrations. An overwhelming response has been received by the farming community owing to their yield potential and hence economic benefits.
- Disease resistant varieties in vegetable production have also been promoted particularly Disease resistant Cabbage and late varieties of Knol-Khol have been introduced and appreciated by farmers.
- Similarly during this period Mushroom cultivation has been popularized in near and far villages of the district by organising short training courses ranging from 2-5 days and also one week to 35 days as per farmer's needs. 35 to 44% participating farmers have shown keen interest in adopting mushroom cultivation.However10-14 % to the growers have adopted this enterprise ranging from 5qtls to 65 qtls .The farmers have reported to gain double rather more than that of their investment from this venture.
- Large scale impetus has been given to vermicomposting technology through short and long duration trainings owing to focus on Organic agriculture.KVK has promoted and assisted progressive farmers in various villages in setting up of vermicompost units also by providing worms and other technical inputs. Encouraging 15-18% progressive farmers have adopted the technology for domestic and about 5-6% has started commercial units at small scale.
- KVK has introduced Basmati 564 and 129 in and around areas of two Tehsils namely R.S.Pura and Akhnoor

  as second alternative for farmers. However farmers have highly appreciated both the varieties owing to early maturity and high yielding potential and therefore high economic gains. Farmers have reported 15-20% additional yield in comparison to Basmati 370 traditionally grown in these areas.
- Similarly short duration Pusa1637 variety introduced by KVK has been highly appreciated in new areas in comparison to Pusa Basmati-1121 owing to prevalence of high incidence of Bakana disease in the crop.
- Backyard poultry and kitchen gardening has been promoted at micro level in various areas in view of ensuring nutritional adequacy for the farm family particularly vulnerable groups like women and children and additional income to women through value addition and micro processing for domestic and village level marketing.
- Women empowerment programs have also been in focus for the reporting period .A large number of women have been mobilized in agriculture and allied activities through vocational and skill trainings in value addition ,micro- processing of cereals & pulses, fruits & vegetables, milk & milk products as well as skill training in handicraft making, stitching and tailoring etc ,through SHG formation approach in coordination with allied departments and local NGO's.
- KVK has also focused on fisheries during this year through front line demonstrations and trainings on rearing of cultivable fish species.

10.4 Impact of ASCI training Programmes

Krishi Vigyan Kendra, Jammu has been assigned two training programmes under Agriculture Skill Council of India with the objective to train and develop rural youths as small entrepreneurs in the field of Vermicompost Production and Mushroom Cultivation.

The detail of the training programme is as under:

S No	Title of Training Programme	No of participants	Duration	Adoption percentage	No of units established
1	Vermicompost Producer	20	200 hrs	45%	09
2	Mushroom Grower	20	200 hrs	60%	12

Trainees were made familiar with working in agricultural environment, possessed techniques of handling organic wastes, farm or dairy wastes and maintaining aseptic conditions. The incumbent assigned with the role of a vermicompost producer and mushroom grower are made competent in producing good quality vermicompost/mushroom using correct species/strains, materials and techniques in appropriate site/location.

11.0 LINKAGES

11.1 Functional linkage with different organizations

Name of organization	Nature of linkage
Agriculture Department	Conducting training programme in collaboration with Deptt.
Animal Husbandry Department	Conducting training programme in collaboration with Deptt.
Horticulture Department	Demonstrations especially of fruits and vegetables
Forest Deptt.	Participation in meetings, Resource persons
Fisheries Department	Participation in meetings, demonstration
Directorate of fodder development	Participating in meeting and sponsored laying of FLDs on fodder
Nehru Yuva Kendra Jammu	Training for rural youth jointly
Directorate of Maize	FLDs/OFT of maize
IFFCO	These institutes are being contacted for getting financial assistance for establishing unit for different beneficiaries and their participation in meetings
KRIBHCO	These institutes are being contacted for getting financial assistance for establishing unit for different beneficiaries and their participation in meetings
Central Co-op. Bank Jammu NABARD	Banks and other financial agencies are contacted for further financial assistance for starting new units, under KVK.
National Horticulture Board	For establishment of orchids
State Bank of India	For financing and formation of SHGs
National Fertilizer Ltd.	Conducted training Programme in collaboration with NFL.
Indian Institute of Integrative medicine, Jammu	Association with Jammu arogya project and for training of farmers in Medicinal plants.

HFRI Shimla	Training programme for spread of commercially important medicinal plants suited to Jammu Plains.
NMPB RCFC Kashmir	

11.2 List special programmes undertaken by the KVK, which have been financed by State Govt./Other Agencies

Name of the scheme	Date/ Month of initiation	Funding agency	Amount (Rs.)
Cluster FLD's on pulses	May-2019	DAC	180000.00
Cultivation of MAP's	March 2018	RCFC NMPB	25000.00
Disease control on FMD and Brucellosis	Sept 2019	Dept of Animal Husbandry and Fisheries	15000.00
Plantation drive	Sept 2019	IFFCO	10000.00
Fertiliser application programme	Oct 2019	DAC	50000.00
Agriculture marketing infrastructure	Nov 2019	NIAM	17000.00

11.3 Details of linkage with ATMA

a) Is ATMA implemented in your district **Yes**/No

S. No.	Programme	Nature of linkage	Remarks

Coordination activities between KVK and ATMA during 2019-20 (April-December)

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

11.4 Give details of programmes implemented under National Horticultural Mission: NA

S. No.	Programme	Nature of linkage	Constraints if any

11.5 Nature of linkage with National Fisheries Development Board: NA

S. No.	Programme	Nature of linkage	Remarks

11.6. Details of linkage with RKVY:NA

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Remarks

12. PERFORMANCE OF INFRASTRUCTURE IN KVK

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	2008	0.02	-	Manure	22.20q	10000.0	17760	Functional
2	Fish Pond	2012	0.02	Common carp	Fish	25.35 kg	-	3870	Functional

12.2 Performance of instructional farm (Crops) including seed production

Name Of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty.	Cost of inputs	Gross income	
Cereals									
Rice	31st Aug 2019	3rd Nov 2019	3.2	B-370	Foundation	42.0 q	104323	Awaited	With Megaseed Projects SKUAST-J
Wheat	18-20th Nov 2019 9-28th Dc 2019		8.0	HD 3086	Foundation	156.98 q	94546		
Pulses	-	-	-	-	-	-	-	-	-
Grams	-	-	-	-	-	-	-	-	-
Oilseeds	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
Fibers	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
Floriculture	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-

Vegetables	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
Others (specify)									
Fodder	8th July 2019	15th Oct 2019	2.0	SSG	Fodder		45000.00		

A.3 Performance of production Units (bio-agents / bio pesticides/ bio fertilizers etc.,)

Sl. No.	Name of the Product	Qty	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	
1	**Vermicompost**	**22.20**	**10000.0**	**17760**	

12.4 Performance of instructional farm (livestock and fisheries production)

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

12.5 Utilization of hostel facilities: Nil

Accommodation available (No. of beds) =

Months	*No. of trainees stayed*	*Trainee days (days stayed)*	*Reason for short fall (if any)*
April 2017			
May 2017			
June 2017			
July 2017			
August 2017			
September 2017			
October 2017			
November 2017			
December 2017			
January 2018			
February 2018			
March 2018			

12.6. Database management

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

12.7 Rainwater Harvesting: NA

Training programmes conducted using Rainwater Harvesting Demonstration Unit

Date	Title of the training course	Client (PF/RY/EF)	No. of Courses	No. of Participants including SC/ST			No. of SC/ST Participants		
				Male	Female	Total	Male	Female	Total

Demonstrations conducted using Rainwater Harvesting Demonstration Unit: NA

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

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, R.S.pura	R.S.pura	0025040100040224
With KVK	J&K Bank	R.S.pura	0025040500026430

13.2 Utilization of KVK funds during the year 19-20

SL. No	Budget Head	Sanctioned	Released	Expenditure	Balance
	Grant for creation of Capital Assets				
1	Works				
	A. Land Building				
	B. Building				
	(i) Office Building				
	(ii) Residential building				
	(iii) Minor Works	5.00	5.00	5.00	0.00
2	Equipment's (Small)	2.0	2.0	1.72	0.28
3	Information Technology	0.15	0.15	0.00	0.15
4	Library Books and Journals				
5	Vehicle & Vessels	0.00	0.00	0.00	0.00
6	Livestock				
7	Furniture and fixtures				
8	Others				
	Total-CAPITAL (Grants for creation of Capital Assets)	7.15	7.15	6.72	0.43
1.	Grant in Aid Salary				
a	Pay and allowances	125.00	125.00	125.00	0.00
b	Total Pay and Allowances	125.00	125.00	125.00	0.00
c	Grant in Aid-General				
2	Travelling allowance (Domestic)	0.60	-	0.45	0.15
a	Travelling allowance (Foreign)				
	Total TA				
3	A. Research Expenses	18.85	-	13.62	5.23
	B. Operational Expenses		-		
	C. Infrastructure	0.60		0.60	0.00
	D. Communication	0.40		0.15	0.25
	E. Other	0.40		0.25	0.15
	F. Publicity and Exhibitions				
	G. Guest house maintenance				
	H. Other Misc	0.40		0.12	0.28
	I. Repair and maintenance				
	(i) Equipment, Vehicle & Others				
	(ii) Office building	0.20		0.0	0.20
	(iii) Residential building				
	REVOLVING FUND	**0.00**	**0.00**	**0.00**	**0.00**
	Total Recurring contingence				
	Grant in Aid-General (RC+TA)				
	Grant Total (capital+Salary+General)	**153.6**		**146.91**	**6.69**

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 2013 to March 2014	4133994.26	842027.00	496470.00	4479551.26
April 2014 to March 2015	4479551.26	531402.00	252399.00	4758554.26
April 2015 to March 2016	4751741.26	4,89583.00	311774.00	4929549.44
April 2016 to March 2017	4929549.44	454578.00	99774.00	5284353.44
April 2017 to March 2018	5284353.44	725000.00	588000	5303000.00
April 2018 to Dec 2019	5303000.00	522837.00	31450.00	5855287

14. Details of HRD activities attended by KVK staff during 2019-20 (April-December)

Name of the staff	*Designation*	*Title of the training programme*	*Institute where attended*	*Date*
Dr Sheetal Badyal	SMS Home Science	Stress Management	SAMETI-J	14th June 2019
		Entrepreneurship development through diversification		18-21 June 2019
Dr Prem Kumar	SMS Fisheries	Master Trainer TOT	ASCI	1-3rd Dec 2019

15. Details of Important Programs/Events conducted in KVKs during 2019-20 (April-December)

Sl.No	Date	Title	Discipline	Duration (days)	Sponsoring Agency	Amount of fund received (Rs.)
1	11/9/19	Disease control on FMD and Brucellosis	livestock	1	MoAH&F	15000.00
2	17/9/19	Plantation drive	Agro forestry	1	IFFCO	10000.00
3	22/10/19	Fertiliser application programme	Integrated nutrient management	1	MOA	50000.00
4	14/11/19	Agriculture marketing infrastructure	Marketing	1	NIAM	17000.00
5	24/12/19	Awareness programme on medicinal plants	Medicinal plants	1	RCFC NMPB	25000.00

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

<u>Externally Funded Project</u>

External funded Projects Completed

Title	Funding Agency	Year of Start	Duration of Project	Total approved budget of the Project (Lacs)	PI of the Project
Production and demonstration of quality planting material of commercially important medicinal trees for livelihood security	NABARD	2016-19	3 years	6.32 lakhs	Dr Punit Choudhary

Establishment of nursery cum production unit of quality planting material of commercially important medicinal trees/crops of jammu subtropics	NMPB RCFC Kashmir	2018-20	2 years	6.00 Lac	Dr Punit Choudhary

Annexure-A

MINUTES OF 17th SCIENTIFIC ADVISORY COMMITTEE MEETINGOFKRISHI VIGYAN KENDRA, JAMMU

The seventeenth Scientific Advisory Committee (SAC) meeting of Krishi Vigyan Kendra (KVK) Jammu, R.S.Pura was held under the Chairmanship of **Dr. K. S. Risam**, Hon'ble Vice Chancellor, SKUAST-J in the Conference hall of F.V.Sc & A.H., R. S. Pura on 18thMarch, 2019.

Dr. M. M. S. Zama, Dean, F.V. Sc& A.H., **Dr. R. K. Arora**, Associate Director Extension& I/C KVKs, SKUAST-J, **District Heads**from different line departments, nominated members from Faculty of Veterinary Sciences and Animal Husbandry and Faculty of Agriculture of SKUAST-J, Chief Scientist and Head KVK-Jammu, Senior Scientists, SMS's and Programme Assistants of KVK Jammu, progressive farmers/ farm women member participated in the meeting.

At the outset, Dr. Vikas Tandon, Chief Scientist and Head KVK Jammu presented a formal welcome address and appraised the house about the active participation of KVK Jammu in various activities related to the welfare of the farming community.

In his presidential address, **Dr. K. S. Risam**, Hon'ble Vice Chancellor, SKUAST-J appreciated the working of KVK Jammu and directed to increase its outreach further to the farming community. During the meeting, the chairman made the following directions:

- KVK Jammu to expand its area of work in entire agriculture sectors involving livestock, apiculture, sericulture, fisheries etc.
- Well planned action plan covering all sector of agriculture for mitigating and addressing farmer's issues.
- Proper feedback of the training programmes imparted by KVKs and further documentation of constraints and success stories.
- Maximum enrollment of the new farmers on the portal
- Involvement of scientific staff of KVK Jammu in teaching and guiding M.Sc. and Ph.D. students for utilization of their respective expertise

(**Action: Dean, FOA; Dean, F. V. Sc & A. H; Dean, F.B. Sc. ; Registrar; KVK Jammu)**

The technical session commenced with the presentation of **Dr. Vikas Tandon**, Chief Scientist and Head, KVKJammu as per the agenda items.

Agenda No. 1: Confirmation of the Proceedings of 16th SAC meeting

The proceedings of the 16th SAC meeting were circulated among all the members of SAC vide letter **No. AUJ/KVK/F-33/2018-19/1103-15 dated 07/03/2019**. Since no queries were received from any of the members on the proceedings, it was resolved unanimously by the house to confirm the proceedings of 16th SAC meeting.

Agenda No. 2: Action Taken Report of 16thSAC meeting

Chief Scientist and Head, KVK-Jammu presented the action taken report on the issues raised in 16th SAC meeting. The suggestions received from the members are given below:

Regarding action taken on including more number of training programmes under Veterinary Sciences and Animal Husbandry and incorporating UMMB technology and area specific mineral mixture as OFT or FLD's, DrVikasTandon informed that three trainings on animal husbandry were conducted for farmers and world rabies day was also celebrated in the KVK.

In this regard,**Chairman** directed to conduct some more training programme on different aspects of livestock framing and may utilize the resource person from F.V.Sc. and A.H.

(Action: KVK Jammu &Dean, F. V. Sc & A. H)

Regarding sensitizing the farmers about Farmer Producer organization (FPO's), DrVikasTandon informed the house that Training programmes and campaigns have been conducted to sensitize farmers to form self-help groups and farmer interest groups. He informed the house that one refresher workshop on 02-01-2019 was organized to educate farmers onFarmer Producer Organization (FPO) under NABARD project.

In this regard,**Chairman** directed to document the information of different FPOs running in Jammu district and bring them forward. KVK is also required to document the impact of programmes organised for formulation of FPOs during 2018-19.

(Action: KVK Jammu)

Regarding "**Rejuvenation of senile and old orchards**" and a training programme on "Grafting and budding of Horticulture fruit trees", DrVikasTandonreplied that one month training was conducted for rural youth and field workers on Plant propagation and rejuvenation of old orchards in collaboration with Horticulture Department. Vice Chancellor asked for follow-up of the one month training conducted by the KVK.

Regarding backyard poultry development, Chief Scientist informed that backyard poultry has been promoted under the various training programmes.

In this regard, **Chairman** directed to identify the village for poultry development and organize training/frontline demonstrations. **Dean, F.V.Sc. & AH** assured KVK Jammu to provide guidance and technical expertise from the faculty. **Chief Animal Husbandry Officer**offered to provide the chicks to KVK Jammu on bill basis.

(Action: KVK Jammu, Dean, F. V. Sc & A. H and CAHO, Jammu)

Regarding celebration of World's Women Day,Chief Scientist informed that KVK Jammu has celebrated women farmer day and also felicitated the women farmers on the occasion. Apart from this KVK also invited women farmers to live webcasting programme of Hon'ble Prime minister of India on SHG's. KVK has also sent progressive women for exhibiting their products and were felicitated by the D.G. ICAR, New Delhi. Recently on the occasion of International Women's Day, KVK Jammu's women farmers to visit ATARI, Ludhiana and were recognized for their entrepreneurial activities.

Chairman directed to celebrate all the important days related to farming community with full enthusiasm and spirit.

(Action: KVK Jammu)

Agenda No. 3: Presentation of progress report (2018 -2019)

The progress report of KVK Jammu for2018-19was presented before the house. **Chairman** directed to make charts depicting land holdings and crop-wise area details.

(**Action: KVK Jammu)**

Agenda No.4: Fund utilization for the year 2018-19

The budget allocation and utilization of funds for the year 2018-19 was presented before the house and resolved as approved.

Agenda No. 5: Proposed Action Plan for the year 2019-20

Chief Scientist and Head, KVK-Jammupresented the Annual Action plan of KVK-Jammu for the year 2019-20 and following suggestions were proposed by the house:

The**Chairman**directed to study the impact assessment of different training programmes. He directed to incorporate one vocational training programme under Veterinary sciences and Animal

Husbandry and resource persons for the said trainings will be made available from FVSc & AH, R. S. Pura.

(Action: KVK Jammu; FVSc. & AH R S Pura)

Chairmaninstructed to promote University released varieties under various FLD programme undertaken by KVKs.

(Action: KVK Jammu)

Dr. Rajinder Peshin, Professor, SKUAST-J suggested that other than Basmati 370, newly released varieties of SKUAST-J of paddy should also be promoted under FLD. He further suggested that with Basmati 370 variety some critical inputs may be used for laying out FLDs.

(Action: KVK Jammu)

With respect to RAWE student,**Chairmen** directed to involve students more in KVK field activities rather than classroom lecture.

(Action: KVK Jammu)

Chief Animal Husbandry Officer suggested toinclude a training programme on quail farming in Akhnoor area in collaboration with department who will provide beneficiaries.

(Action: KVK Jammu; FVSc & AH, R. S.Pura; Dept. of Animal Husbandry, Jammu)

Chairmandirected Chief Scientist & Head to plan an exposure visit of farmers of Jammu district.

(Action: KVK Jammu)

Rapporteurs- Dr. Punit Choudhary

Dr. Prem Kumar

List of participants of 17th Scientific Advisory Committee meeting KVK-Jammu held on 18thMarch, 2019

S. No.	Name	Designation
1	Dr. KS Risam	Hon'ble Vice-Chancellor ,SKUAST-J
2	Dr. R.K. Arora	Associate Director Extension(KVK)
3	Dr. MMS Zama	Dean, FVSc & AH
4	Dr. Vikas Tandon	Chief. Scientist & Head, KVK-Jammu
5	Sh. SK Langer	Chief Agriculture Officer, Jammu
6	Dr. Mohd. Ismail	CAHO Jammu
7	Dr. Ajitpal Singh	VAS, RS Pura
8	Sh. Sandeep Kumar	DLSMS (Path.) Jammu
9	Sh. Rakesh Kumar	Horticulture Development Officer, Jammu
10	Sh. Roshan Lal Bhagat	SDAO, RS Pura
11	Sh. BB Sidha	Dy. Project Director ATMA
12	Sh. Ravinder Kachroo	Dy. Project Director ATMA
13	Dr. Shalini Suri	Prof. & Head, Div. of Vety. Anatomy, FVSc. & AH
14	Dr. B.C. Sharma	Professor & Head, Agronomy
15	Dr. L.M. Gupta	Associate Professor(Agro-forestry)
16	Dr. RK Sharma	Professor & Head, ANN
17	Dr. Rajinder Peshin	Professor (Agriculture Extension)
18	Dr. SK Gupta	Prof. & Head, Division of PBG
19	Sh. Davinder Singh	HDO

20	Dr. A.K. Pathak	Asstt. Professor(Animal Nutrition)
21	Dr. Rakesh Sharma	Sr. Scientist(Extension) KVK-Jammu
22	Dr. Punit Choudhary ,	Sr. Scientist (Agro forestry) KVK-Jammu
23	Dr. Sheetal Badyal	SMS(Home Science)KVK-Jammu.
24	Dr. Prem	SMS, Fisheries, KVK Jammu
25	Sh. Swarn Lal, Sarpanch	Farmer, Suchetgarh
26	Sh. Raghubir Singh	Farmer, Fatehpur shekhan
27	Sh. Prem Chand	Farmer, Kattal Batal
28	Sh. Balwant Singh	Farmer, Katal Batal
29	Vinod Kumar	Farmer, Kaloen
30	Sunita Devi	Farmer, Kaloen

ANNEXURE "B"

Date	Clientele	Title of the training programme	Discipline	Thematic area	Duration in days	Venue (Off / On Campus)	Number of other participants			Number of SC/ST			Total number of participants		
							Male	Female	Total	Male	Female	Total	Male	Female	Total
22/4/19	Farmers	Nursery raising of prominent fodder trees and grasses	Agroforestry	Fodder production	01	Off Campus	14	2	16	7	3	10	21	5	26
24/4/19		Various government schemes to promote Aquaculture	Fisheries	Promotion of govt.Schemes.	01	Off Campus	13	1	14	0	0	0	13	1	14
25/4/19		Ensuring nutritional security of the farm families through kitchen gardening	Home Science	Kitchen gardening for nutritional security	01	Off Campus	0	0	0	0	17	17	0	17	17
29/4/19		De-worming and vaccination in farm animals	Animal Science	Farm animal	01	Off Campus	22	4	26	2	2	4	24	6	30
2/5/19		Group approach to address marketing problem	Agriculture Extension	Group approaches	01	Off Campus	18	0	18	2	0	2	20	0	20
3/5/19		Agri based entrepreneurial activities for empowering farm women	Home Science	Enterpreneuralship dev.	01	Off Campus	0	9	9	0	15	15	0	24	24
9/5/19		Cultivation of medicinal and aromatic plants for higher income (Lemon grass Aloe vera, Stevia)	Agroforestry	Medicinal plants	01	Off Campus	22	0	22	11	0	11	33	0	33
20/5/19		Composite fish Culture	Fishries	Fish farming	01	Off Campus	1	0	1	23	0	23	24	0	24
21/5/19		Integrated Crop management in Rice	Crop Protection	Crop management	01	On Campus	9	0	9	0	8	8	17	0	17

23/5/19		Mitigating Malnutrition in women and adolescent girls through dietary modification	Home Science	Mitigating malnutrition	01	Off Campus	0	0	0	0	20	20	0	20	20
24/5/19		Breeding of IMC and Exotic carps	Fishries	Breeding	01	Off Campus	12	0	12	1	0	1	13	0	13
27/5/19		Scientific cultivation of Rice	Crop Production	Crop production	01	On Campus	12	1	13	2	0	2	14	1	15
31/5/19		Nursery raising technique of Kharif vegetables	Horticulture	Nursury management	01	Off Campus	0	0	0	2	13	15	2	13	15
4/6/19		Value added products from mango	Home Science	Value addition	01	Off Campus	0	7	7	0	29	29	0	36	36
6/6/19		Multipurpose tree and fodder grasses	Agroforestry	Fodder requirement	01	Off Campus	16	0	16	12	0	12	28	0	28
12/6/19		Scientific cultivation of Maize	Crop Production	Crop Production	01	Off Campus	0	18	18	2	1	3	20	1	21
24/6/19		Management of fruit drop in fruit crop	Horticulture	Management in horticulture	01	Off Campus	9	0	9	15	0	15	24	0	24
24/6/19		Drudgery reducing technologies for household and agriculture operation	Home Science	Home Science	01	On Campus	0	5	5	0	14	14	0	19	19
1/7/19		Integrated fish farming	Fishries	Fish farming	01	Off Campus	18	1	19	3	1	4	21	2	23
4/7/19		Scientific cultivation of black gram	Agroforestry	Crop production	01	Off Campus	13	0	13	15	0	15	28	0	28
15/7/19		Cultivation of medicinal trees for higher income	Agroforestry	Medicinal trees	01	Off Campus	2	2	4	13	0	13	15	2	17
16/7/19		Sensitizing farmers to avail crop insurance	Extension Education		01	Off Campus	31	6	37	0	0	0	31	6	37

		against natural calamities													
19/7/19		Introduction to aquaculture and various schemes	Fisheries		01	Off Campus	0	0	0	10	0	10	10	0	10
25/7/19		Disease management in summer vegetables	Horticulture		01	Off Campus	1	9	10	3	5	8	4	14	18
29/7/19		Crop fish and fingerling rearing	Fisheries		01	Off Campus	1	0	1	11	0	11	12	0	12
31/7/19		Scientific cultivation of solaneceous vegetables	Horticulture		01	Off Campus	0	1	1	1	29	30	1	30	31
2/8/19		Scientific cultivation of cabbage	Horticulture		01	Off Campus	15	0	15	0	0	0	15	0	15
9/8/19		Agroforestry for sustainable land use	Agroforestry		01	Off Campus	4	8	12	2	4	6	6	12	18
22/8/19		Nursery management of vegetable crops	Horticulture		01	Off Campus	0	0	0	29	0	29	29	0	29
27/8/19		Enhancing the nutritive and economic value of cereals and pulses through processing	Home Science		01	Off Campus	0	0	0	2	21	23	2	21	23
28/8/19		Value addition of seasonal fruits and vegetables	Home Science	Value addition	01	Off Campus	0	4	4	0	25	25	0	39	39
29/8/19		Nursery management in vegetables	Horticulture	Nursery management	01	Off Campus	0	2	2	0	24	24	0	26	26
4/9/19		Entrepreneurship opportunities in vegetables	Extension Education	Entrepreneurship Development	01	Off Campus	12	0	12	11	0	11	23	0	23
5/9/19		Cultivation of Medicinal & aeromatic plants	Agroforestry	Medicinal and aromatic plants	01	Off Campus	0	0	0	15	10	25	15	10	25
6/9/19		Management of locally available agro-forestry trees and perennial grasses for sustainable fodder production	Agroforestry	Management of of agroforestry	01	Off Campus	2	7	9	6	3	9	8	10	18
12/9/19		Leadership development among rural youth	Extension Education		01	Off Campus	0	0	0	20	4	24	20	4	24
13/9/19/		Mobilization of farmers for community action	Extension Education		01	Off Campus	12	10	22	0	0	0	12	10	22

20/9/19		Importance of INM in horticulture	Horticulture		01	Off Campus	4	17	21	4	4	8	8	21	29
26/9/19		Scientific cultivation of marigold	Horticulture		01	Off Campus	15	1	16	5	9	14	20	10	30
27/9/19		Fish feed management	Fisheries		01	Off Campus	11	0	11	4	0	4	15	0	15
1/10/19		Processing and preservation of locally available seasonal vegetables	Horticulture		01	Off Campus	6	17	23	4	15	19	10	32	42
24/10/19		Composite fish culture	Fisheries		01	Off Campus	0	0	0	14	1	15	14	1	15
25/10/19		Scientific cultivation of chick pea	Crop Production		01	Off Campus	16	0	16	12	0	12	28	0	28
25/10/19		Scientific cultivation of chick pea	Crop Production		01	Off Campus	12	0	12	3	0	3	15	0	15
30/10/19		Scientific cultivation of Rabi Fodder (Oats &Barseem)	Agroforestry		01	Off Campus	1	0	1	13	1	14	14	1	15
5/11/19		Scientific cultivation of fodder crops	Agroforestry		01	Off Campus	9	16	25	5	8	13	14	24	38
20/11/19		Scientific cultivation of cole crops	Horticulture		01	Off Campus	0	16	16	0	2	2	0	18	18
21/11/19		Scientific cultivation of wheat	Crop Production		01	On Campus	6	0	6	8	0	8	14	0	14
22/11/19		Scientific cultivation of Barseem	Crop Production		01	On Campus	19	0	19	4	0	4	23	0	23
19/12/19		Scientific cultivation and value addition of button mushroom	Home Science		01	On Campus	0	0	0	5	6	11	5	6	11
20/12/19		Processing of Anola as entrepreneurial activity for women groups	Home Science		01	Off Campus	0	0	0	0	23	23	0	23	23
26/12/19		Improvement of low nutritive value of low quality roughages	Animal Science		01	Off Campus	0	0	0	14	3	17	14	3	17
27/12/19		Value added products from Mushroom	Home Science		01	Off Campus	15	0	15	1	0	1	16	0	17
30/12/19		Production and processing of	Agroforestry		01	Off Campus	5	3	8	19	3	22	24	6	30

		Vermicompost													
12/01/2020		Management of parasitic diseases in animals	Animal Science		1	Off Campus	0	0	0	6	16	22	6	16	22
29/01/2020		Formation & management of SHGs	Agri Extension		1	Off Campus	14	0	14	5	8	13	19	8	27
24/02/2020		Cultivation and value addition of Oyster mushrooms	Home Science		1	On Campus	5	0	5	30	5	35	35	5	40
		Total			**57**		**408**	**161**	**569**	**377**	**357**	**734**	**811**	**492**	**1303**

ANNEXURE "C"

District Profile – I

Jammu District is called as the city of temples and is also the winter capital of state. The city was Founded by Raja JambuLochan who lived in 14th Century B.C. Jammu is situated around river Tawi and is bound by Udhampur district in the north and north east, Samba district in the east and south east, Pakistan (Sialkote) in the west and Rajouri district in the northwest. It is located 74^0 24' and 75^0 18' east longitude and 32^0 50' and 33^0 30' north latitude. The district falls under sub-mountainous region. The Shivalik ranges rise gradually from behind the Jammu town and merge the Indo Gangetic Plains in the South spreading over an area of 2336 sq.kms (2011 census). Jammu also serves as base camp for the holy shrine of Mata Vaishno Devi. The temperature varies from cold in winter with minimum temperature touching even 0.9'C to heat wave in summers when the temperature shoots upto 46^0C. Jammu district has population of 15.29 lakhs, out of which rural population is 7.65 lakhs and urban population is 7.64 lakhs. The male and female population in rural area is 4.02 lakhs and 3.63 lakhs and in urban area 4.12 and 3.52 lakhs, respectively (2011 census). The literary rate of the district is 77%. The district comprises four tehsils i.e. Jammu, R.S.Pura, Akhnoor and Bishnah. The entire district can be divided into two distinct portions. The area forming north of Jammu-Chhamb road and Jammu-Pathankot road which is known as Kandi area is comparatively under-developed and is mostly minted. The area south of these roads is largely fed by canal and tube wells for irrigation purposes and is relatively more prosperous. As per the census of 2011 Jammu District consists of 780 inhabited villages.

Population Density

As per the census of 2011, the district has a population of 15.29 lakh. The average density of population in the district as per census of 2011 is 653 persons per sq km. Schedule caste population in the district is 3.78 lakh which works out to be 24.71%of total population. (census 2011)

Occupation Pattern

According to census of 2001 the occupation pattern of the District is such that the number or Cultivators is 112480.

District at a Glance

I.	Geographical Area (Sq.km)	:	2336
a.	No of sub divisions	:	04
b.	No. of community development blocks	:	08
c.	No. of villages	:	780
II.	Agro climatic Zone	:	Subtropical
III.	Agro climatic characteristics		
a.	Temperature °C		

Minimum : 4°C
Maximum : 47°C
b. Rainfall (average in mm) : 1135 mm
c. Humidity (highest in monsoon month) : 90%

1. Agricultural and allied census

The total area of Jammu district is 2342 square kilometers (census 2011). In 2011-12, the net area sown was 0.91 lakh hectare. Adding to it, the area sown more than once which was of the order of 0.951 lakh hectare. The gross cultivated area works out to be 1.857 lakh hectare.

Land use statistics

1. Population : 15.29 lakh (as per census 2011)
2. Area according to village paper : 2.37 lakh ha
3. Area under forests : 0.30 lakh ha
4. Land put to non agricultural use : 0.35 lakh ha
5. Barrel and un cultivable land : 0.34 lakh ha
6. Permanente pastures and grossing : 0.04 lakh ha
7. Cultivable waste land : 0.12 lakh ha
8. Current follow : 0.17 lakh ha

Size of holdings

	Size/class (ha)	Nos (%)	Area (%)
a)	Below 0.5	61532	48.68
b)	0.5-1.0	34903	27.62
c)	1.0-2.0	19925	15.76
d)	2.0-3.0	6621	5.24
e)	3.0-4.0	2403	1.90
f)	4.0-5.0	597	0.47
g)	5.0-7.5	308	0.24
0	07.5-10.0	58	0.05
h)	10.0-20.0	22	0.02
i)	20.0 and above	20	0.02
All size classes		**126389**	**100.0**

Irrigation facilities from different sources (ha)

S.No	Source	Area (ha)
1.	By Canal	49886
2.	By Well/Tubewell/others	2405
3.	Springs/Tanks	1627
4.	Others	2161
Total irrigated area		**56079**

2. Agro-climatic zones

Jammu District has a sub tropical climate with hot and dry climate in summer and cold climate in winter. Being in the foothills of the mountains, nights are generally cooler that what they are in the neighbouring areas of Punjab. Minimum and Maximum temperature is around 4ºC respectively. Rainy season usually starts from the end of June or the beginning of July. Average rainfall in the district is about 1246 mm.

Irrigated Sub-Tropical Zone

It includes irrigated areas of Satwari, Bishnah, R.S.Pura, Marh and Bhalwal. The unirrigated area falls Akhnoor, Dansal and Khour blocks.

3. Agro-ecosystems

Existing Farming systems in different blocks

S. No.	Agro Ecological Situation	Blocks	Farming System
1	(AES-I)	R.S. Pura and Bishnah	Agri + Animal Husbandry
2	(AES-II)	Marh and Satwari	Agri + Vegetable +AH Horti
3	(AES-III)	Khour and Akhnoor	Agri + Animal Husbandry
4	(AES-IV)	Bhalwal and Dansal	Agri+AH+Horti+ Poultry

4. Major and micro-farming systems

Season	Crop	AES-I	AES-II	AES-III	AES-IV
		Cropping System	**Cropping System**	**Cropping System**	**Cropping System**
Kharif& Rabi	Paddy-Maize	Paddy-Oilseed-wheat	Paddy-Oilseed-wheat	Maize-Oilseed-wheat Maize-Patato-wheat	Maize-Oilseed-wheat Maize-Mustard

5. Major production systems like rice based (rice-rice, rice-green gram, etc.), cotton based, etc.

- Paddy-Maize
- Paddy-Oilseed-wheat
- Paddy-Oilseed-wheat
- Maize-Oilseed-wheat
- Maize-Patato-wheat
- Maize-Mustard

6. **Major agriculture and allied enterprises:** Crop wise area sown under different crops in Jammu district

S.No	Crop	Season	Unit	Marh	R.S.Pura	Akhnoor	Dansal	Total
1	Wheat	Rabi	Ha	18450	21500	20350	10700	71000
2	Maize	Kharif	Ha	4550	-	3300	4150	12000
3	Paddy	Kharif	Ha	12000	25000	7800	200	45000
4	Bajra	Kharif	Ha	500	-	2000	1000	3500
5	Pulses	Kharif	Ha	1000	2350	1400	2000	6750
		Rabi	Ha	1000	100	2200	1200	4500
6	Oilseed	Kharif	Ha	800	-	600	600	2000
		Rabi	Ha	1100	1400	1500	700	4700
7	Fodder	Kharif	Ha	800	600	600	500	2500
		Rabi	Ha	2550	2500	2200	800	8050
8	Vegetables	Kharif	Ha	1700	380	990	240	3310
		Rabi	Ha	3320	1650	1480	240	6690
	Sub Total:	**Kharif**	**Ha**	**21300**	**28330**	**16690**	**8690**	**75,010**
		Rabi	**Ha**	**26470**	**27150**	**27730**	**13640**	**94,990**
	Total		**Ha**	**47770**	**55480**	**44420**	**22330**	**170000**

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

Details of PRA

S.No	*Name of the cluster*	*Major crops and enterprises*	*Major problems identified*	*Intervention needed*
1	R.S.Pura	Paddy, wheat, fodder, dairy, Fish Production	Problem of yellow rust in wheat, lack of knowledge of vaccination in cattle, low milk yield, traditional fish farming system, low fish production, unavailability of fish seeds, poor management, lack of knowledge of use of fish feed, unavailability of fish feed, poor post harvest Management. Low productivity and poor quality of fodder	• Promotion of yellow resistant varieties • Dairy development • Scientific Fish farming • Feed management • Pond management • Value addition • Ornamental fish culture • Promotion of high yielding Oats varieties
2	Akhnoor	Gobhisarson, Mustard, Gram, Mash, Wheat, Maize, Mango, Ber, Anola&Grasses	Low productivity of oilseeds, pulses and cereals, Poor germination and problem of cutworm damage in maize, Unscientific practices in ber, post harvest management in Mango and Anola, low productivity and poor quality of fodder	• Increasing productivity of rain-fed crops • INM and IDM • Promotion of PHT on Mango and Anola • Promotion of perennial grasses
3	Bishnah	Paddy, wheat, mash, moong, potato, grasses, dairy, Fish Production	Low productivity of cereals and pulses, proper package of practices not followed, problem of yellow rust in wheat, lack of knowledge of Vaccination in cattle, low Milk Yield	• Increasing production of cereals and pulses by replacing variety and INM. • Dairy development • Potato seed promotion • Ornamental fish culture • Promotion of perennial grasses
4	Dansal	Paddy , wheat, vegetables, Mushroom, Marigold, Oats	Lack of quality seed in vegetables and marigold, Low productivity of cereals, Insect Pest and Disease, Post Harvest Management in vegetables and Diseases in mushroom and its management. low productivity and poor quality of fodder	• Replacement of seed. • INM and IDM • Promotion of PHT • Increasing productivity of cereals • Promotion of vegetables& Marigold • Promotion of high yielding Oats varieties
5	Bhalwal	Wheat, Maize, Chick Pea, Mash, Oats	Low productivity of cereals, pulses and poor quality of fodder	• Replacement of seed. • INM and IDM • Increasing productivity of cereals • Promotion of high yielding Oats varieties

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

SWOT ANALYSIS OF THE DISTRICT

SWOT analysis is a strategic planning method used to evaluate the Strengths, Weaknesses, Opportunities and Threats involved in any venture. SWOT also encompasses a comprehensive analysis of the development parameters linked with economic performance of the State thereby enabling the policy makers and researchers to reorient themselves to the prevailing conditions. Thus while discussing the problems of the district it is important to look also at its strengths first. In this endeavor an in-depth analysis of SWOT was undertaken in a participatory manner to place the extension and technology dissemination efforts in perspective so that success can be achieved in pursuit of serving farming community.

SWOT Analysis of Agriculture and Allied Sector

Strengths

1. The factors required for successful cultivation of paddy (Basmati) are available in the district.
2. Productive and fertile soils with 62% irrigated area.
3. The soils are fit for intensive cultivation.
4. Good scope for diversification in agriculture, which will generate employment especially rural employment.
5. Farmers are respective and willing to adopt improved farm technologies.
6. Agriculture has forward and backward linkages with other activities particularly the agro based activities. As per the latest census, out of 100 main workers 27.5% exclusively dependent upon agriculture.
7. Large number of skilled and semi skilled agricultural labour.

Weaknesses

1. As against the national average of 382 persons per sq.km, density of population of the district Jammu is 653 persons per sq. km (as per 2011 census).
2. Area under commercial crops is very less.
3. Average farm size vey less and more than 90% farmers are marginal and small category.

4. The small and fragmented holdings make the adoption of farm mechanization very difficult that influences adversely the farmer's income.
5. Inadequate soils health management practices.
6. Inefficient and improper water management especially in paddy crop.
7. Critical technological gaps in specific areas of crop production viz, seed treatment, balance fertilization, weeds control and disease management.
8. Basic infrastructure like roads and communication are miserably poor.
9. Marketing facilities are inadequate.
10. Poor adoption level of FYM, green-manuring, vermi-composting and crop/farm residues
11. Inadequate availability of quality seeds for various crops.
12. Non exploitation of potential man power, especially youths.
13. Lack of proper knowledge and indifferent attitude towards crucial farm/crop management practices/operations.
14. The dependency of farmers on monsoons due to inadequate irrigation facilities.
15. Access of small and marginal farmers to agricultural credit is limited.
16. Wastage of agricultural produce due to lack of processing units.

Opportunities

1. Concentrating issues confronting agriculture like seed replacement ratio, irrigation facilities, marketing etc.
2. Quality seed can increase yield by 25-30 %.
3. Immense scope for increasing the cropping intensity.
4. Wide scope of co-operative farming system.
5. There is an opportunity in the diversification of land.
6. High demand for basmati rice in the international market because of taste and flavour.
7. HYV seeds of different crops are suitable for the situation.

8. There is scope for opening more outlets, establishing new units of vermi-compost.

Threats

1. Agriculture is already over-laboured, warrants check and controls.
2. Alarming depletion of ground water in the middle reaches and rising alkalinity and salinity problem in the lower belts of district.
3. Degradation of soil fertility with declining status of potash and micro nutrients (imbalance use of fertilizers)
4. Excessive soil erosion which results into loss in soil fertility.
5. Imbalance fertilizer application deteriorates soil health and effects productivity.
6. Declining factor productivity and rising cost of cultivation.
7. Increasing farmers inability to invest in agriculture production system as majority of the farmers are marginal or small and moreover resource poor.

Horticulture Sector

Strengths

1. Abundant potential and infrastructure for horticulture development in the district.
2. District is abounding in fruit crops like Mango, Ber, Jamun and Citrus which have high commercial value

Weaknesses

1. Insufficient availability of quality planting material
2. Lack of assured irrigation in more than 60 % area of district.
3. Inadequate popularization of advance mechanization
4. Poor soil status in the district
5. Poor economic status of farming community
6. Lack of integrated pest management (IPM) technology for horticulture crops
7. Inadequate post-harvest infrastructure results in wastage of the produce.

8. Inadequacy of agro-processing facility

Opportunities

1. Soil and agro-climatically there exists immense scope for increasing the area under horticulture.
2. Establishment of Cold Storage facilities to improve price stabilization, manipulation of supply to the advantage of the seller and for better sorting, grading and packaging facilities.

Threats

1. Changing climatic scenario may adversely affect horticulture crops and disinterest farming community
2. Poor market infrastructure for marketing the fruit crops
3. Inadequate post harvest/ value addition units

Animal Husbandry Sector

Strength

1. Traditional expertise in cattle rearing with almost every farm household possessing milch animals in variable numbers
2. Ample marketing avenues of animal based products and by products in and around the district
3. Poultry expansion has potential as main feed ingredient "Yellow maize" is available in abundance.
4. Livestock sector engages a sizeable number of workforce in processing, transportation and sale of animal products

Weakness

1. Absence of organized viable milk marketing network.
2. High mortality and poor growth in calves
3. Infertility and delayed calving
4. Repeated breeding and long calving interval
5. Poor disease management and breed up-gradation services
6. Low milk yield of buffalos and cows

7. Lack of proper management and feeding practices
8. Low availability of good quality feed & green fodder.
9. High cost of feed, medicines/vaccines and chicks
10. Small and scattered herds
11. Unscientific practices

Opportunity

1. High demand for milk and other animal based products offers higher returns.
2. Tremendous scope for self employment and income generation.
3. Increased availability of organic manure fir vermin-compost units
4. Bridging yield gaps

Threats

1. Non descript poor graded bulls used for Breeding of cattle
2. Economic loss due to threat of out breaks of Poultry Diseases
3. Poultry feed expensive on account of import of other feed stuffs from other parts of country.

Fisheries Sector

Strengths

1. Fish production, productivity and acreage increasing steadily over years
2. Vast unfulfilled demand for fish with easy market accessibility
3. Greater people participation and generation of employment opportunities especially for landless and marginal farmers

Weakness

1. Weak infrastructure for fish seed production and genetic up-gradation
2. Lack of farmer oriented activities e.g. trainings, demonstrations, exposure visits, awareness camps etc. to update farmer's practices of fish production and management

3. Inadequate quality seed availability of high yielding fresh water fish

Opportunity

1. Immense scope for fish seed (fingerling) production to cater the needs of fish farmers
2. Ample scope for mobilizing untapped water resources such as water logged area and soil for aquaculture
3. Integrated fish farming

Threats

1. High mortality in juvenile and adult fish
2. Absence of any reputed centre/ source of fish feed, fisheries management institute
3. Lack of post harvest management practices by farmers
4. Poor facilities for soil and water sample testing, disease diagnosis and post harvest infrastructures

Technology Inventory and Activity Chart - III

Include

Technology Inventory and Activity Chart – III

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

2. Inventory of latest technology available

S. No	Technology	Crop/enterprise	Year of release or recommendation of technology	Source of technology	Reference/citation
1.	WH-1080	Wheat	2011	IARI, New Delhi	
2.	HD 3086		2013	IARI, New Delhi	
3	UNNAT-PBW 550		2017	PAU Ludhiana	
4.	RSPN-25	Gobi Sarson	2005	SKUAST-J	
5	RSPR-69	Mustard	2017	SKUAST-J	
6.	RSPR-03		2005	SKUAST-J	
7.	Basmati 564	Paddy	2014	SKUAST-J	
8.	Jammu Basmati		2017	SKUAST-J	
9.	Napier Hybrid	Perennial Grasses	2000	IGFRI	
10	PMSY-4	Composite Maize	2017	SKUAST-J	
11	PBG-7	Chick Pea	2014	PAU Ludhiana	
12	PU-31	Urd Bean	2008	GB Pant Univ	
13	Double Deklab	Maize	-	-	
14	Sabzar	Oats	2005	SKUAST-K	

3. Activity Chart

Crop/Animal/ Enterprise	Problem	Cause	Solution	Activity	Reference of Technology
Wheat	Low productivity of Wheat	1. Mismatching Of varieties for Sowingtime. 2. Rain fed farming 3. Poor soil moisture conservation. 4. Imbalanced nutrient management. 5. Poor weed management .	-Recommendation of varieties according to sowing time. -Introduction and use of drought resistant varieties - Integrated nutrient management strategy -use of basal NPK and N through broadcasting at proper time and in proper	-On farm trails - Demonstrations - Trainings - Diagnostic visits Field days	S. no 1, 2 & 3 of the Inventory of latest technology available

		6. Seed borne diseases	proportion. -Proper and timely weed management - Seed treatment with chemicals.		
Paddy	Low yield of traditional Basmati rice	Low seed replacement rate Imbalance fertilizer application Poor Weed management Poor pest management	- Enhancement in seed replacement rate -Introduction high yielding Basmati varieties - Proper and timely weed management - Seed treatment with chemicals.	On farm trails - Demonstrations - Trainings - Diagnostic visits Field days	S. no 7 & 8 of the Inventory of latest technology available
Pulses	Low productivity of Pulses under rainfed conditions	Low productivity due to cultivation of local varieties. Improper fertilizer application Growing pulses on Unsuitable land. 4. Occurrence of insects/ diseases.	- Use of recommended Verities. -Growing pulses on suitable land. - Timely and proper use of plant protection material for control of pod borer in gram. -Balanced fertilizer Application	-Demonstration - Trainings - Field days	S. no 11 & 12 of the Inventory of latest technology available
Oilseeds	Low productivity of Oilseeds	1. Use of local germplasam for sowing 2. Unscientific Sowing. 3. Improper fertilizer use 4. Crop infestation with insects.	-Use of HYV Varieties. - Balanced fertilizer Application. - Timely and proper use Insecticides	-Demonstration - Trainings - Field days	S. no 4,5 and 6 of the Inventory of latest technology available
Fodder crops	Low Productivity	Lack of Knowledge No availability of high yielding fodder grasses/ crops	Introduction high yielding perennial fodder grasses Introduction of HYV of forage crops	-Trainings -Demonstrations	S. no 14 of the Inventory of latest technology available
	Low productivity of Maize	1) Non adoption/ Poo adoption of hybrids/ Composite	1) Popularization of Hybrids /Composite of Maize	Single component FLD to demonstrate HYV's Training and FLD	S no 10 and 13 of the Inventory of

Maize	under rainfedareas of distt. Jammu	2) Imbalanced fertilizer application 3) Improper Weed management 4) Insect pest infestation	Convincing farmer to use balanced fertilizer doses Adoption of proper weed management Practices. Disease and pest management through IPM.	programme	latest technology available

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

a. Detailed account on varietal/breed characters for each of the variety/breed selected for FLD and OFT:

1) HD-3086: Released in 2012 for timely sown under irrigated conditions. Av seed yield is 50.4 q/ha and matures in 143days. Possesses resistance against leaf rust and yellow rust diseases.
2) HD-1080: Released in 2011 for timely sown under raifed conditions. Av seed yield is 23-25 q/ha and matures in 135-140 days.
3) Unnat 550: Released in 2017 is a yellow rust resistant version of PBW 550. Its average plant height is 86 cm and matures in about 145 days. Its average grain yield is 23.0 quintals per acre. It is resistant to yellow and brown rusts and susceptible to loose smut.
4) RSPN 25: Released in 2005 for timely sown irrigated conditions. Av seed yield is 15-20 q/ha. Seed contains 39 % oil. AV maturity of this variety is 145-155 days.
5) Basmati 564: Released in 2014 for having grain quality at par with B-370. AV maturity of this variety is 130-35 days with Av yield of 30-40 q/ha.
6) Basmati-370: Traditional timely sown under irrigated conditions. Av seed yield is 35 q/ha and matures in 150 days. Long cylinder grain highly aromatic, non sticky and soft texture.
7) Jammu Basmati 129: Released in 2017. AV maturity of this variety is 130-35 days with Av yield of 40±5 q/ha.
8) PBG-5: Released in 2012 with production potential of 17-19 q/ha. It is semi erect with dark green foliage and thick stemmed. It takes 112 days to flower and matures in 164 days.
9) PMSY-3: Composite variety released in 2017 for mid hill of Jammu province with av grain yield of 50-60q.ha and matures in 130-135 days. Moderately resistant to leaf blight, stem borer and blister beetle.
10) Pu-31: Released in 2008 is a YMV resistant/tolerant variety. Av yield is 12, 5 q/ha and AV maturity of this variety is 85-95 days.
11) RSPR 69: Release in 2017. AV maturity of this variety is 135-145 days with Av yield of 15-16 q/ha having 39.4 % oil content/.