PROFORMA FOR ANNUAL REPORT 2020 (Jan-Dec)

1. GENERAL INFORMATION ABOUT THE KVK

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

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
Dr Punit Choudhary		9419142813	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. Punit Choudhary	44	Ph.D Forestry	131400-217100 139400 (Level 13 A)	Oct 2014	Temporary	9419142813 pmdchoudhary@gmail.com	Gen
3	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
4	Subject Matter Specialist	Dr Ravneet Kour	47	Ph D Vegetable Sciences	56100-177500 89900 (Level 11)	March 2019	Temporary	9796423952 kourravneet24@yahoo.com	Gen
5	Subject Matter Specialist	Dr Sheetal Badyal	47	Ph.D Home Science	79800-211500 98200 (Level 12)	March 2016	Temporary	9419211529 badyalsheeetal10@gmail.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	Gen
7	Subject Matter Specialist	Dr Amitesh Sharma	40	Ph.D Plant Breeding	68900-205500 71000 (Level 11)	June, 2020	Temporary	7889464623 amiteshskuast@gmail.com	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	Ms. Poonam	31	M.Sc.	35400-112400	June 2012	**Temporary**	7889949440	Gen

	Assistant (Trg)	Abrol		H. Science	42300 (Level 6)				
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**	8803143001	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
4.	Demonstration Units	ICAR	December 1995	144	06.63	-	-	Complete
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
Digital Oxy meter	10-3-2020	10980	Working
Electromagnetic air pump	10-03-2020	5690	Working
Monkey repeller	19-03-2020	11000	Working
Heavy duty planker	20-03-2020	17678	Working
Bund maker	20-03-2020	18169	Working
Chain saw	20-03-2020	15529	Working
Zerotill drill	20-03-2020	50446	Working
Power weeder	20-03-2020	23276	Working
Cultivator	20-03-2020	30500	Working

1.8. A). Details SAC meeting* conducted in the year 2020 (January-December)

S. No.	Date	Name and Designation of Participants	No. of absentees	Salient Recommendations	Action taken
1.	21-09-2020	List enclosed as Annexure A	Nil	• Addition of farmers training programmes in the action plan on value addition / dairy products of milk so that farmers may get maximum benefits of their production. ***Joint Director, Animal Husbandry Jammu***	• Farmers training programmes on value added products of milk has been organized by KVK Jammu in the year 2020-21
				• Inclusion of training programmes on protected cultivation and quality planting material • Suggest viable alternative variety for HD 2967 for Jammu district ***CAO, Jammu***	• Vocational and In-service training programmes on protected cultivation and disease management in vegetable crops, and production of quality planting material has been conducted during the year2020-21. • HD-3086 has been promoted under FLD during 2019-20, 2020-21and is a viable option for HD-2967.
				• Preparation of DPR's for bankable IFS models for farmers of Jammu ***NABARD Jammu***	• DPR on Bankable project on IFS has been submitted to NABARD, Jammu
				• Inclusion of some training programmes on grading and marketing of agricultural produce. ***Horticultural Planning & Marketing Officer, Jammu***	• Two In-service trainings on Grading and marketing of fruits and vegetables crop has been conducted for officers f allied departments during the 2020-21

				• More activities on Animal Husbandry should be included in the action plan. • Include improved variety of fodder crops in FLD's and OFT's for popularity • Commodity based village should be adopted like mushroom, fisheries, poultry and honeybee. • University/ICAR varieties may be popularized under OFT and FLD Programmes. ***Director ATARI, Zone-1, Ludhiana***	• Two Training programmes on Feed and fodder management in milching animals, Disease management in Animals, one Clinical camp, 2 awareness programmes has been conducted • Covered 1.5 ha. Area in Oats and 2.5 ha.in Barseem fodder during the year2020-21 • Commodity based village has already been adopted by KVK Jammu in which for for Mushroom- Jindermelu and kaloen villages, for Fisheries- Gura manhasa and in poultry –jinder-lehar has been adopted • Varieties like RSPN-25, RSPR-69, RSPR-01, SJBR-123, 118, 138 are being promoted under FLD and OFT programme by KVK Jammu during the year 2020-21
				• Focus should be on participatory seed production programme. • Stressed on adoption of value	• Participatory seed production programme has been introduced this year in collaboration with Mega Seed Project SKUAST-J at jindermelu where in 35 no. Of farmers involved for certified Wheat production. • Three farmers training

				addition, processing and branding of agricultural produce to minimize the post harvest losses and to double farmer's income.	programmes on processing of fruits and vegetables, cereals and pulses, white button mushroom and oyster, 2 vocational training programmes on value added products of fruits, mushroom and fishes has been conducted during the year2020-21
				• Adoption of conservation and climate smart agriculture, vermicomposting & fodder production.	• Training programmes on Use of Hydroponics for vegetables, climate smart varieties of SJBR mustard and oilseed, Barseem and Oats are promoted KVK Jammu in the year2020-21. • Farmers and Vocational trainings has been organized for vermicompost production
				• Focused for popularization/dissemination of govt. schemes among the beneficiaries.	• Trainings cum Awareness programmes for the promotion of Govt. Schemes organized from time to time.
				• KVK Jammu and allied departments should work in coordination for the benefit of farmers. ***Chairman SAC*** ***Prof J P Sharma*** ***Vice Chancellor SKUAST J***	• KVK Jammu is actively being collaborating with the State Agril. Deptt and Allied departments, ATMA-Jammu, cooperatives like IFFCO, others voluntary and non-govt. organizations for the benefit of farmers community.

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

2. DETAILS OF DISTRICT 2020

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-Sarsoon-Wheat
5	Rice-Barseem-Vegetable
6	Sesamum-Wheat

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	63882	2188000	34.25065
2	Wheat	79936	2238288	**28.001**
3	Maize	14430	219210	15.19127
4	Pulses (Kharif)	4003	14892	3.72021
5	Pulses (Rabi)	364	2432	**6.681319**
6	Millets	3500	-	-
7	Oil seed	1405	15366	10.93665
8	Fodders (Kharif)	3962	34597	8.732206
9	Fodders (Rabi)	3416	51438	**15.058**
10	Vegetable	10450	-	-

2.5 Weather data (2020)

Month	Rainfall (mm)	No of Rainy Days	Temperature ^{0} C		Morning Relative Humidity (%)	Evening Relative Humidity (%)
			Maximum	Minimum		

Jan	81.6	5	16.6	6.4	91	63
Feb.	29.2	2	21.7	8	92	51
Mar	135.6	8	24	12.1	85	57
Apr	25.8	3	31.2	16.7	72	41
May	22.2	3	36.2	20.3	59	32
Jun	58.6	5	36.9	24.5	65	41
Jul	159	8	35.6	26	76	62
Aug	594.2	15	33.2	25.7	90	70
Sep	19	1	34.4	24.6	84	56
Oct	0	0	32.2	15.2	85	36
Nov	35.8	2	24.4	9.2	90	49
Dec	37.2	2	18.8	6	94	64

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		**20000.05**	
Marine			
Inland			
Prawn			
Scampi			
Shrimp			

2.7Details of Operational area / Villages (2020)

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	Salher, Badyal, Raipur Sazda, Kaloen, Suchetgarh Balachak Jindermelu Sai	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 Pargwal	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 Laswara	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	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 Hassarvaan	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, SKUAST-Jammu Basmati Rice varieties, SJBR 123, 118 & 138, Integrated Nutrient Management,Introduction of Pusa varieties in non-basmati growing areas.
Wheat	Introduction of High yielding varieties, Restricted irrigated variety JAUW 679 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, forage crops
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, Value addition
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 2020

OFT (Technology Assessment and Refinement)				FLD (Oilseeds, Pulses, Cotton, Other Crops/Enterprises)			
1				2			
Number of OFTs		Number of Farmers		Number of FLDs		Number of Farmers	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
9	12	27	31	Maize (25)	79	25	79
-	-	-	-	Paddy (25)	61	25	61
-	-	-	-	Wheat (25)	58	25	58
-	-	-	-	Oilseed (10)	38	10	38
-	-	-	-	Mushroom (10)	18	10	18
-	-	-	-	Oilseed (2.0)	16	5	16
-	-	-	-	Fisheries (10)	23	10	23
-	-	-	-	Floricultures (5)	20	5	20
-	-	-	-	Vegetable (2.25)	72	50	72
				Pulses (20.0)	178	50	178
-	-	-	-	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	40	48	800	932	Workshop (2)	4	200	278
Rural youth	5	5	100	104	Field Days (6)	8	200	311
Extn. Functionaries	4	4	40	59	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)	58.0 q	Fodder (Napier)	2000
Wheat HD 3086 (100 q)	140.51q	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	2000

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 different herbicides mixture on yield and economics of direct seeded rice at farmer's fields Evaluation of SKUAST-Jammu Basmati rice Varieties Evaluation of Pusa Basmati Varieties	Promotion and demonstration of Basmati variety for yield potential Demonstration of improved Pusa varieties under irrigated condition.	02	-	-	01	2.35	-	-	-	
2	Varietal evaluation	Maize	Low yield Lack of knowledge about improved hybrid Lack of labour and heavy weed infestation		Promotion of maize hybrid for yield. Promotion of Maize composite for higher productivity under rainfed conditins	01	-	-	01	1.0	-	-	-	
3	Varietal Evaluation	Knol-Khol	Low yield Lack of knowledge about improved hybrid	Evaluation of improved varieties of knol-khol under subtropical conditions of Jammu		02	-	-	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	Effect of clodinafop-propargyl+metsulfuron on weed density at 60 DAS, grain yield and economics of wheat Effect of sulfosulfuron+carfentrazone on weed density at 60 DAS, grain yield and economics of wheat Varietal evaluation of wheat in irrigated areas of Jammu district	Demonstration of high yielding rust resistant Wheat variety	02	-	-	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		Promotion and demonstration of high yielding variety	01	-	-	01	1.4	-	-	-	-
9	Varietal evaluation	Cabbage	Lack of improved variety	Evaluation of disease resistant varieties of cabbage		01	-	-	01	700.00g				
10	Varietal evaluation	Bottle guard	Lack of improved variety		Promotion and demonstration of high yielding variety	01	-	-	01					
11	Varietal evaluation	Tomato	Lack of improved variety		Promotion and demonstration of high yielding variety	01	-	-	01	600 g				
12	Varietal evaluation	Cauliflower	Lack of improved variety		Promotion and demonstration of high yielding variety	01	-	-	01	900.00g				
13	Varietal Evaluation	Shataver	Lack of improved variety	Assessment of Sataver accession		01	-	-	-	-	100			
14	Varietal Evaluation	Aloe vera	Lack of improved variety/accession	Evaluation of Aloe barbedensis for better yield		01					100			
15	Varietal evaluation	Marigold	Lack of Improved variety		Promotion and demonstration of high yielding variety	01		01	-	3000 g		-	-	-
16	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	2	-	-	-	3	-	-	2	7
Seed / Plant production	-	-	-	-	-	-	-	-	-
Weed Management	3	-	-	-	-	-	-	-	3
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	5	-	-	-	3	-	-	2	**10**

* *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	-	-	-	-	-	-	1	1
Disease of Management	-	-	-	-	-	-	-	-
Value Addition	-	-	-	-	-	-	-	-
Production and Management	-	-	-	-	-	-	1	1
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	Paddy	Evaluation of SKUAST-Jammu Basmati rice Varieties	03	03	0.45

Thematic areas	*Crop*	*Name of the technology assessed*	*No. of trials*	*Number of farmers*	*Area in ha (Per trail covering all the Technological Options)*
	Paddy	Evaluation of Pusa Basmati Varieties	05	05	0.5
	Knol-khol	Evaluation of improved varieties of knol-khol under subtropical conditions of Jammu			0.25
	Cabbage	Evaluation of disease resistant varieties of cabbage	03	03	0.25
	Raddish	Evaluation of Raddish Varieties in district Jammu	03	03	0.25
	Aloe Vera	Evaluation of Aloe barbedensis for better yield	03	03	0.25
Integrated Pest Management	-	-	-	-	-
	-	-	-	-	-
Integrated Crop Management	-	-	-	-	-
	-	-	-	-	-
Integrated Disease Management	-	-	-	-	-
	-	-	-	-	-
Small Scale Income Generation Enterprises	-	-	-	-	-
	-	-	-	-	-
Weed Management	Wheat	Effect of clodinafop-propargyl+metsulfuron on weed density at 60 DAS, grain yield and economics of wheat	04	04	0.4
	Wheat	Effect of sulfosulfuron+carfentrazone on weed density at 60 DAS, grain yield and economics of wheat	04	04	0.4
	Paddy	Effect of different herbicides mixture on yield and economics of direct seeded rice at farmer's fields	04	04	0.4
Resource Conservation Technology	-	-	-	-	-
	-	-	-	-	-
Farm Machineries	-	-	-	-	-
	-	-	-	-	-
Integrated Farming System	-	-	-	-	-
	-	-	-	-	-
Seed / Plant production	-	-	-	-	-
	-	-	-	-	-
	-	-	-	-	-
	-	-	-	-	-
	-	-	-	-	-
	-	-	-	-	-
Value addition	-	-	-	-	-
	-	-	-	-	-
Drudgery Reduction	-	-	-	-	-
	-	-	-	-	-
Storage Technique	-	-	-	-	-
	-	-	-	-	-
Mushroom cultivation	-	-	-	-	-
	-	-	-	-	-
Total			**26**	**26**	**2.9**

3.2.2.TechnologiesRefined 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	-	-	-	-	-
	-	-	-	-	-
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	Fisheries	Impact of feed supplement on fish production	3	3
Disease management				
Value addition				
Production and management	Fisheries	Assessment of floating feed on growth and production of fish	2	2
Feed and fodder				

Small scale income generating enterprises				
Total			**5**	**5**

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 assessment/refinement	:	T 1: Pusa Basmati 1121 T 2: Pusa Basmati 1637 T3: Pusa Basmati 1509
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 6.02 percent increase over T1 However T3 recorded 2.9 % 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)	38.0	T2 recorded 6.02 percent increase over T1 However T3 recorded 2.9 % increase over T1	
					ii. Pusa Basmati 1637		40.3		
					iii. Pusa Basmati 1509		39.9		

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
Pusa Basmati 1121	38.0	53600	1.79
ii. Pusa Basmati 1637	40.3	58660	1.9
iii. Pusa Basmati 1509	39.9	57780	1.93

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 T4: Basmati 118
4.	Source of technology	:	SKUAST Jammu
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 and T4 recorded 22.0 percent increase over T1 However T3 recorded 28.5 % 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)	34.0	T2 and T4 recorded 22.0 percent increase over T1 However T3 recorded 28.5 % increase over T1	Farmers satisfied with the performance of SJBR varieties
					T 2: Basmati 123		41.50		
					T3: Basmati 138		43.70		
					T3: Basmati 118		41.50		

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
T 1: Basmati 370 **(Recommended Practice)**	34.0	10800	2.4
T 2: Basmati 123	41.50	132300	3.15
T3: Basmati 138	43.70	141540	3.37
T4: Basmati 118	41.50	132300	3.15

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 direct seeded rice at farmer's fields**
2.	Problem diagnose/defined	:	Heavy weed infestation during direct seeded rice
3.	Details of technologies selected for assessment/refinement	:	T1;Bispyribac-sodium 25 g/ha (Farmer's practice) T2:Pendimethalin1000 g/ha (PRE) fbbispyribac-sodium 25 g/ha+ ethoxysulfuron- ethyl 18 g/ha T3:Cyhalofop-butyl + penoxsulam135 g/ha post 20 DAS
4.	Source of technology	:	SKUAST J/ DWR
5.	Production system thematic area	:	IrrigatedRice Wheat
6.	Thematic area	:	Weed Control
7.	Performance of the Technology with performance indicators	:	T2 recorded 32.5 percent increase in grain yield with 2.12 BC ratio
8.	Final recommendation for micro level situation	:	Pendimethalin1000 g/ha (PRE) fbbispyribac-sodium 25 g/ha+ethoxysulfuron- ethyl 18 g/ha is effective in controlling weed with more production than farmers practice
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
Paddy	Irrigated	Heavy weed infestation during direct seeded rice	Effect of different herbicides mixture on yield and economics of maize under rainfed conditions	4	Bispyribac-sodium 25 g/ha (Farmer's practice)	Grain Yield (Q/ha)	30.05	T2 recorded 32.5percent increase in grain yield with 2.12 BC ratio	
					Pendimethalin1000 g/ha (PRE) fb bispyribac-sodium 25 g/ha+ethoxysulfuron-ethyl 18 g/ha		39.8		
					Cyhalofop-butyl + penoxsulam 135 g/ha post 20 DAS		33.0		

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
Bispyribac-sodium 25 g/ha (Farmer's practice)	30.05	35042	1.54
Pendimethalin1000 g/ha (PRE) fbbispyribac-sodium 25 g/ha+ethoxysulfuron- ethyl 18 g/ha	39.8	50550	2.12
Cyhalofop-butyl + penoxsulam135 g/ha post 20 DAS	33.0	38200	1.65

Trial 5

1.	Title	:	**ASSESSMENT OF IMPROVED MAIZE POPCORN UNDER RAINFED CONDITIONS**
2.	Problem diagnose/defined	:	Lack of high yielding Maize POPCORN Varieties under Jammu condition
3.	Details of technologies selected for assessment/refinement	:	i. Vijay (Farmers practice) ii. SJPC-1
4.	Source of technology	:	SKAUST-J
5.	Production system thematic area	:	Irrigated cereal based system (Maize - Wheat)
6.	Thematic area	:	Popcorn evaluation
7.	Performance of the Technology with performance indicators	:	T2 (SJPC-1)Popcorn variety recorded less grain production as compared to control (Vijay composite) but economically fetched more returns.
8.	Final recommendation for micro level situation	:	Composite varietySJPC-1 may be adopted for cultivation in Jammy
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.

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 POPCORN Varieties under Jammu condition	Assessment of improved Maize Popcorn SJPC-1 under rainfed conditions	03	T1= Vijay	Grain Yield B:C ratio	18.9 q/ha		Farmer was responsive for adoption of maize composite
					T2= SJPC-1		16.5 q/ha	T2 (SJPC-1) Popcorn variety recorded less grain production as compared to control (Vijay composite) but economically fetched more returns.	

Technology Assessed	Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
T1= Vijay	18.9 q/ha	24465	1.09
T2= SJPC-1	16.5 q/ha	45500	2.21

Trial 6

	Title	:	**Evaluation of improved varieties of knol-khol under subtropical conditions of Jammu**
1.	Problem diagnose/defined	:	Lack of improved varieties
2.	Details of technologies selected for assessment/refinement	:	T1: Farmer's Practice T2: White Vienna T3: PusaVirat
3.	Source of technology	:	IARI New Delhi
4.	Production system thematic area	:	Irrigated cereal based system
5.	Thematic area	:	Varietal evaluation
6.	Performance of the Technology with performance indicators	:	T3 registered a mean yield of 185 q/ha over the farmer's practice (T1) which recorded a mean yield of 132 q/ha
7.	Final recommendation for micro level situation	:	*Pusavirat* may be recommended for cultivation under subtropical conditions of Jammu
8.	Constraints identified and feedback for research	:	Lack of seed of improved varieties
9.	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 8: 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
Knolkhol	Irrigated	Lack of improved varieties	Evaluation of improved varieties of knolkhol	5	T1: Farmer's Practice	No of leaves per plant Yield per hectare (q/ha)	10.12 132 q/ha		Farmers were satisfied with yield potential and quality of improved variety
					T2: White Vienna		11.96 165 q/ha	T 2 registered increase in yield and quality over farmer's practice	
					T3:Pusa Virat		12.48 185 q/ha	T 3 registered increase inyield 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	132q/ha	92400	47400	2.05:1
T2:Green Vienna	165/ha	115500	70500	2.56:1
T3:PusaVirat	185q/ha	129500	84500	2.87:1

Trial 7

	Title	:	**Evaluation of disease resistant varieties of cabbage**
1.	Problem diagnose/defined	:	Lack of improved varieities
2.	Details of technologies selected for assessment/refinement	:	T1: Farmer's Practice T2: PusaMukta T3: PusaDrum head
3.	Source of technology	:	IARI New Delhi
4.	Production system thematic area	:	Irrigated cereal based system
5.	Thematic area	:	Varietal evaluation
6.	Performance of the Technology with performance indicators	:	T3 registered highest yield of 396 q/ha over the farmer's practice (T1) which recorded a mean yield of 300 q/ha
7.	Final recommendation for micro level situation	:	*Pusa drum head*may be recommended for cultivation under subtropical conditions of Jammu
8.	Constraints identified and feedback for research	:	Lack of seed of disease resistant improved varieties
9.	Process of farmers participation and their reaction	:	Farmers participated in laying out of the OFT and in providing feedback and other data pertaining to OFT.

B 8: 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	5	T1: Farmer's Practice	Weight of the head Yield per hectare (q/ha)	1.0 kg 300 q/ha		Farmers were satisfied with yield potential and quality of improved varieties
					T2: PusaMukta		1.10 kg 330 q/ha	T 2 registered increase in yield and disease resistance over farmer's practice	
					T3: Pusa Drum head		1.32 kg 396q/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	300q/ha	180000	115000	2.76:1
T2: PusaMukta	330 q/ha	198000	133000	3.04:1
T3:Pusa Drum head	396q/ha	237600	172600	3.65:1

Trial 8

	Title	:	**Evaluation of radish varieties in district Jammu**
1.	Problem diagnose/defined	:	Lack of improved varieties
2.	Details of technologies selected for assessment/refinement	:	T1: Farmer's Practice T2: Japanese white T3: Pusa Himani
3.	Source of technology	:	IARI New Delhi
4.	Production system thematic area	:	Irrigated cereal based system
5.	Thematic area	:	Varietal evaluation
6.	Performance of the Technology with performance indicators	:	T2 registered highest yield of 370 q/ha over the farmer's practice (T1) which recorded a mean yield of 320 q/ha
7.	Final recommendation for micro level situation	:	*Japanese white* may be recommended for cultivation under subtropical conditions of Jammu for November December sowing.
8.	Constraints identified and feedback for research	:	Availability of seed of improved varieties
9.	Process of farmers participation and their reaction	:	Farmers participated in laying out of the OFT and in providing data pertaining to OFT. They were satisfied with the varieties tried under the subtropical conditions of Jammu

B 8: 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
Radish	Irrigated	Lack of improved varieties	Evaluation of varieties of radish in district Jammu	5	T1: Farmer's Practice	Yield per hectare (q/ha)	320 q/ha		Farmers were satisfied with yield potential and quality of improved varieties.
					T2: Japanese white		370 q/ha	T 2 registered increase in yield over farmer's practice	
					T3: PusaHimani		360 q/ha	T 3 registered increase in yield, 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	320 q/ha	192000	132000	3.20:1
T2: Japanese white	370 q/ha	222000	162000	3.70:1
T3:PusaHimani	360 q/ha	216000	156000	3.60:1

Trial 9:

	Title	:	**Evaluation of Aloe barbedensis for better yield**
1.	Problem diagnose/defined	:	Lack of good accession/variety
2.	Details of technologies selected for assessment/refinement	:	IC 111271 IC 111272 IC 112534
3.	Source of technology	:	SKUAST-Jammu
4.	Production system thematic area	:	Raifed cereal based system (Maize - Wheat)
5.	Thematic area	:	Varietal Evaluation
6.	Performance of the Technology with performance indicators	:	T1: Accession 111271 is found superior with respect to other two accessionsT2:111272 & T3:112534 and may be recommended for cultivation
7.	Final recommendation for micro level situation	:	Accession 111271 should be prefer for higher leaf weight and for more productivity
8.	Constraints identified and feedback for research	:	Lack of knowledge about Aloe vera accessions
9.	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
Aloe Vera	Rainfed	Evaluation of different accession of Shataver (*Asparagus recemosus*)	Varietal evaluation	3	IC 111271	No. of leaves plant-1 No. of harvestable leaves plant- Leaf yield plant-1 (kg)	14.00 6.67 0.96	T1: Accession 111271 is found superior with respect to other two accessionsT2:111272 & T3:112534 and may be recommended for cultivation	
					IC 111272		12.00 6.67 0.80		
					IC 112534		13.20 6.0 0.90		

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
IC 111271	14.00 6.67 0.96	295000.00	2.95:1
IC 111272	12.00 6.67 0.80	254000.00	2.54:1
IC 112534	13.20 6.0 0.90	269000.00	2.69:1

Trial 10:

	Title	:	**Effect of sulfosulfuron+carfentrazone, clodinafop-propargyl+metsulfuron on weed density at 60 DAS, grain yield and economics of wheat**
1.	Problem diagnose/defined	:	Lack of good accession/variety
2.	Details of technologies selected for assessment/refinement	:	Metribuzin 200 g/ha at 30-35 DAS (Farmer's practice) Clodinafop-propargyl+metsulfuron (60 +4 g/ha) at 30-35 DAS Sulfosulfuron+carfentrazone (25 + 20 g/ha) at 30-35 DAS
3.	Source of technology	:	SKUAST-J/DWR
4.	Production system thematic area	:	Irrigated cereal based system (Paddy - Wheat)
5.	Thematic area	:	Weed management
6.	Performance of the Technology with performance indicators	:	T2 recorded highest weed control along with statistically at par grain yield as compared to T3
7.	Final recommendation for micro level situation	:	T2 (Clodinafop-propargyl+metsulfuron (60 +4 g/ha) at 30-35 DAS) may be recommended for weed control and higher grain yield
8.	Constraints identified and feedback for research	:	Lack of knowledge about good weedicides /new chemical formulations
9.	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
Wheat	Irrigated	Lack of knowledge about good weedicides /new chemical formulations	Effect of sulfosulfuron+carfentrazone, clodinafop-propargyl+metsulfuron on weed density at 60 DAS, grain yield and economics of wheat	4	Metribuzin 200 g/ha at 30-35 DAS (Farmer's practice)	Total weed density at 60 DAS (no./m^2) Grain yield (q/ha)	8.00 35.1	T2 recorded highest weed control along with statistically at par grain yield as compared to T3	Satisfied
					Sulfosulfuron+carfentrazone (25 + 20 g/ha) at 30-35 DAS		4.00 40.68		
					Clodinafop-propargyl+metsulfuron (60 +4 g/ha) at 30-35 DAS		6.00 42.1		

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
Metribuzin 200 g/ha at 30-35 DAS (Farmer's practice)	8.00 35.1	60412	2.48
Sulfosulfuron+carfentrazone (25 + 20 g/ha) at 30-35 DAS	4.00 40.68	65313	2.63
Clodinafop-propargyl+metsulfuron (60 +4 g/ha) at 30-35 DAS	6.00 42.1	57068	2.38

Trial 11

A. Technology Assessment

1	Title of Technology Assessed	**Impact of feed supplement on fish production**
2	Problem Definition	Less production due to poor feed quality
3	Details of technologies selected for assessment	T1= Farmer Practice (Homemade feed) T2= Rice bran & oil cake at the ratio of 1:1 T3= Rice bran & oil cake mixed with mineral mixture @20gm/kg
4	Source of technology	: COF, Pantnagar
5	Production system and thematic area	: Fish Farming and composite fish culture
6	Thematic area	: Mineral mixture improve the health, growth and fish production
7	Performance of the Technology with performance indicators	: health, growth and production
8	Final recommendation for micro level situation	: Farmer can use mineral mixture in fish farming as they do in dairy farming.
9	Constraints identified and feedback for research	: Mixing every day is tedious job. Need to provide them with low cost feed mill at farm.
10	Process of farmer's participation and their reaction	: Laid OFT in their field, monitoring and data collection with their assistance

B). Results of On Farm Trials

Crop/ enterprise	*Farming situation*	*Problem definition*	*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
Fish culture	Irrigated	Low production, Poor growth	**Impact of feed supplement on fish production**	2	T1= Farmer Practice T2= Rice bran & oil cake at the ratio of 1:1 T3= Rice bran & oil cake mixed with mineral mixture @20gm/kg	Production, Growth	Production	Fish Production : TO-I- 29.0q/ha. TO-II- 38.0q/haTO-III. 46.0q/ha.	Fishes are healthy with improved growth. Increased production.

Contd..

Technology Assessed	*Source of Technology*	*Production*	*Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)*	*Net Return (Profit) in Rs. / unit(1000m^2)*	*BC Ratio*
11	12	13	14	15	16
Technology option 1 : T1	-	29.00	q/ha.	30000	3.22:1
Technology option 2 : T2	CIFRI	38.00	q/ha	40000	3.35:1
Technology option 3 : T3	COF, Pantnagar	46.00	q/ha.	51000	3.83:1

Trial 12

A. Technology Assessment

1	Title of Technology Assessed	**Impact of floating feed on growth and production**of fish
2	Problem Definition	Less production due to poor feed quality
3	Details of technologies selected for assessment	T1= Farmer Practice (waste from kitchen and any ratio) T2= Rice bran & oil cake at the ratio of 1:1 T3= Floating feed @2% body weight
4	Source of technology	: COF, Pantnagar
5	Production system and thematic area	: Fish Farming and composite fish culture
6	Thematic area	: Floating feed easy to use, reduce waste and higher production
7	Performance of the Technology with performance indicators	: health, growth and production
8	Final recommendation for micro level situation	: Farmer can use floating feed in intensive fish farming for higher production. At smaller level, it will increase their production cost.
9	Constraints identified and feedback for research	: Floating feed is costly
10	Process of farmer's participation and their reaction	: Laid OFT in their field, monitoring and data collection with their assistance

B). Results of On Farm Trials

Crop/ enterprise	*Farming situation*	*Problem definition*	*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
Fish culture	Irrigated	Low production, Poor growth	**Impact of floating feed on growth and productionof fish**	2	T1= Farmer Practice T2= Rice bran & oil cake at the ratio of 1:1 T3= Floating feed @2% body weight	Production, Growth	Production	Fish Production : TO-I- 29.0q/ha. TO-II- 38.0q/haTO-III. 50.0q/ha.	Fishes are healthy with improved growth. Increased production.

Contd..

Technology Assessed	*Source of Technology*	*Production*	*Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)*	*Net Return (Profit) in Rs. / unit(1000m^2)*	*BC Ratio*
11	12	13	14	15	16
Technology option 1 : T1	-	29.00	q/ha.	30000	3.22:1
Technology option 2 : T2	CIFRI	38.00	q/ha	40000	3.35:1
Technology option 3 : T3		50.00	q/ha.	55000	3.75:1

B. Technology Refinement: Nil

PART 4 - FRONTLINE DEMONSTRATIONS

4.A. Summary of FLDs implemented during 2020

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.	Gobi Sarsoon	Irrigated	Rabi 2019-20	Gobi Sarsoon	DGS-1			HYV	1.0	1.0	03		04	07	
II.					RSPN-25			HYV	1.0	1.0	05		05	10	
III.					RSPR-69			HYV	0.4	0.4	01		02	03	
IV	Mustard	Rainfed		Mustard	RSPR-01			HYV	1.6	1.6	02	08	08	18	
2	**Cereals**														
I.	Wheat	Irrigated		Wheat	HD-3086		Varietal evaluation	HYV	10.0	6.0	20	-	9	29	
II.		Rainfed		Wheat	WH-1080			HYV		4.0	9	10	10	29	
3	**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	
4	**Vegetables**														
I	Cauliflower	Irrigated	Rabi 2019-20		K-1			HYV	1.0	1.0	33	-	2	35	
	Pulses														
I	ChicPea	Irrigaed/Rainfed			PB-7		Varietal evaluation	HYV	10.0	10.0				119	
Kharif 2020		Irrigated/Rainfed													
5	**Pulses**														
I			Kharif 2020	Black Gram	PU-31			HYV	10.0	10.0					
6	**Cereals**								10.0	18.2					
I	Paddy	Irrigated		Paddy	B-370			HYV	8.0	10.0	1		17	18	
II					PUSA Basmati 1637		Varietal evaluation	HYV	2.0		6	-	3	9	
III					PUSA Basmati 1509			HYV	8.2		10	1	32	43	
IV	**Maize**	Rainfed			DKC-9144	Hybrid		HYV	3.0	5.0	2	4	25	31	
					Double deklab	Hybrid		HYV	2.0		8	9	1	18	
7	**Oilseed**														
I	Sesamum	Rainfed			PB-2			HVY	2.0	2.0	1	4	11	16	
8	**Vegetables**														
I	Tomato	Irrigated		Tomato		Roma Best of		HVY	1.0	1.0	17	-	3	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	
						All									
II	Bottle Guard	Irrigated		Bottle Guard		F 1 hybrid Lattoo		HVY	0.45	-	9	-	8	17	
9	**Floriculture**														
I	Marigold	Rainfed		Marigold	Pusa Basanti			HVY	1.0	1.0	20	-	-	20	
10	**Mushoom**														
I	Button mushroom	Irrigated/rainfed	Rabi 2019-20	Button mushroom	U-3			HVY	150 bags	150 bags	15	-	3	18	
	Vermicompost	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-
	IFS	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Apiculture	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Implements	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	**Poultry**	Rainfed/Irrigated	Rabi 2019-20	Poultry	Chabro		Varietal Evaluation	Backyard Poultry	500 no's	500 no's	27	-	-	27	-

4.A. 1. Soil fertility status of FLDs plots during 2020

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.	Gobi Sarsoon	Irrigated	Rabi 2019-20		DGS-1			HYV	253	9.5	110	Paddy
II.				Gobi Sarsoon	RSPN-25			HYV	253	9.5	110	Paddy
III.					RSPR-69			HYV	253	9.5	110	Paddy
IV	Mustard	Rainfed		Mustard	RSPR-01			HYV	253	9.5	110	Paddy
2	**Cereals**											
I.	Wheat	Irrigated		Wheat	HD-3086		Varietal evaluation	HYV	255	9.6	114	Maize
II.		Rainfed		Wheat	WH-1080			HYV	253	9.5	110	Maize
3	**Fodder**											
I	Oats	Rainfed/irrigated	Rabi 2019-20	Oats	Sabjar		Varietal evaluation	Variety	255	9.6	114	Maize/ Paddy
II	Berseem	Irrihgated		Berseem	Mascavi				255	9.6	114	Paddy
4	Vegetables											

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	
I	Cauliflower	Irrigated	Rabi 2019-20		K-1			HYV	255	9.6	114	Paddy
	Pulses											
I	Chikpea			Chikpea	PNG-7		Varietal Evaluation	KVY	255	9.6	114	Paddy
Kharif 2020												
5	**Pulses**											
I		Irrigated/ Rainfed	Kharif 2020	Chickpea	PU-31			HYV	253	9.5	110	Maize
6	**Cereals**											
I	Paddy	Irrigated	Kharif 2020	Paddy	B-370			HYV	255	9.6	114	Wheat
II			Kharif 2020		PUSA Basmati 1637		Varietal evaluation	HYV	255	9.6	114	Wheat
III			Kharif 2020		PUSA Basmati 1509			HYV	255	9.6	114	Wheat
IV	**Maize**	Rainfed	Kharif 2020		DKC-9144	Hybrid		HYV	253	9.5	110	Wheat
					Double deklab	Hybrid		HYV	253	9.5	110	Wheat
7	**Oilseed**											
I		Rainfed	Kharif 2020	Sesamum	PB-2			HVY	253	9.5	110	Wheat
8	**Vegetables**											
I		Irrigated	Kharif 2020	Tomato		Roma Best of All		HVY	255	9.6	114	Wheat
II		Irrigated	Kharif 2020	Bottle Guard		F 1 hybrid Lattoo		HVY	255	9.6	114	Oats/Wheat
9	**Floriculture**											
I		Rainfed	Kharif 2020	Marigold	Pusa Basanti			HVY	253	9.5	110	What
10	**Mushoom**											
I		Irrigated/ rainfed		Button mushroom	U-3			HVY				
	Vermicompost	-	-	-	-	-	-	-				
		-	-	-	-	-	-	-				
		-	-	-	-	-	-	-				
	IFS	-	-	-	-	-	-	-				
		-	-	-	-	-	-	-				
		-	-	-	-	-	-	-	255	9.6	114	
	Apiculture	-	-	-	-	-	-	-				
		-	-	-	-	-	-	-				
		-	-	-	-	-	-	-				
	Implements	-	-	-	-	-	-	-				
		-	-	-	-	-	-	-				
		-	-	-	-	-	-	-				
	Others (specify)	-	-	-	-	-	-	-				

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	
Sl. No.	Category	Farming Situation	Season and Year	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated				

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																			
I	Gobi Sarsoon	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
II		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
III		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
IV	Mustard	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
Cereals																			
I	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
II		WH-1080		Rainfed	29	4.0	28.0	20.0	20.86	19.7	5.88	20800	40156	19354	1.93	20000	37923	17922	1.89
Fodder																			
I	Oats	Sabjar		Rainfed/ irrigated	25	2.0	365	240	294	240	22.1	19500	44100	24600	1.26	19500	36000	16500	0.85
II	Berseem	Mascavi		Irrigated	50	3.0	680	540	625	540	12.28	22500	72600	50100	2.26	22500	64800	42300	1.88
Vegetables																			
I	Cauliflower	K-1		Irrigated	35	1.0	238	206	220	202	8.91	70500	264000	193500	3.74	69500	142400	72900	3.48
I	Chikpea	PBG-7		Irrigated/Rainfed	119	10	18.2	16.2	16.8	11.1	33.92	30525	60480	29955	1.98:1	28525	39960	11435	1.40:1
Pulses																			
I	Black Gram	PU-31		Rainfed	59	10	4.8	3.6	4.2	3	28.57	15600	25200	6400	1.61:1	15600	18000	2400	1.15:1
Cereals																			
I	Paddy	B-370		Irrigated	18	8	35.4	30.9	33.4	31.2	7.5	42000	143620	101620	2.42	42000	134160	92160	2.19

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										
II		PUSA Basmati 1637			10	2	41.5	39	40.3	38	6	30000	88660	58660	1.9	30000	83600	53600	1.79
II		PUSA Basmati 1509			43	8.2	46.6	38.0	39.9	38	6	30000	87780	57780	1.93	30000	83600	53600	1.79
Maize																			
I		DKC-9144		Rainfer	31	3	22.2	18.6	20.72	18.9	9.6	20500	47332	26832	1.3	20500	42962	22465	1.09
II		Double deklab			18	2	27.0	20.0	22.44	18.9	18.7	20500	49514	29014	1.42	20500	42962	22465	1.09
Sesamum																			
I	Til	PB-2		Rainfed	16	2	9.2	8.0	8.65	7.4	16	18000	59295	41295	2.2	18000	50727	32727	1.8
Vegetables																			
I	Tomato	Roma		Rainfed	20	1	130.4	116.6	123.5	112	11.68	62000	148200	86200	2.39	62000	133200	71200	2.14
II	Bottle Guard	Lattoo			17	0.25	360	318	339	280	17.4	118000	339000	221000	2.87	118000	280000	162000	2.37
Flowers																			
I	Marigold	Pusa Basanti		Rainfed	20	1	98.0	83.0	90	72	20	45000	198000	153000	4.40:1	45000	158400	113400	3.52:1
Mushroom																			
I	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

* 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 (20 chicks/farmer)	27	27	55	45	50	-	100	1200	8600	7400	7.16	0	0	0	0
Rabbitry																	
Pigerry																	
Sheep and goat																	
Duckery																	
Others (pl.specify)																	

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

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

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

4. B.3. Fisheries

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

					H	L	A										
IMC& exotic	New seed	Mix	23	1000	48	36	42	25	68	18000	63000	45000	3.5	13500	37500	24000	2.77
IMC& exotic	Pelleted Feed	Mix	15	1000	50	42	46	25	84	20000	69000	49000	3.75	13500	37500	24000	2.77

* 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 {m²}*	*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	150 bags	2.15	1.75	1.95	1.25	10.25	110	273	163	2.48	110	175	65	1.59
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	9		-
4	Training for extension	01	24	-

	functionaries			
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	13	3	16	0	0	0	13	3	16
Crop Diversification	-	-	-	-	-	-	-	-	-	-
Integrated Farming	-	-	-	-	-	-	-	-	-	-
Water management	-	-	-	-	-	-	-	-	-	-
Seed production	-	-	-	-	-	-	-	-	-	-
Nursery management	-	-	-	-	-	-	-	-	-	-
Integrated Crop Management	-	-	-	-	-	-	-	-	-	-
Fodder production	-	-	-	-	-	-	-	-	-	-
Production of organic inputs	-	-	-	-	-	-	-	-	-	-
II Horticulture										
a) Vegetable Crops										
Production of low volume and high value crops	-	-	-	-	-	-	-	-	-	-
Off-season vegetables	-	-	-	-	-	-	-	-	-	-
Nursery raising	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-
Disease Management	-	-	-	-	-	-	-	-	-	-
Feed management	-	-	-	-	-	-	-	-	-	-
Production of quality animal products	-	-	-	-	-	-	-	-	-	-
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	-	-	-	-	-	-	-	-	-	-
Design and development of low/minimum cost diet	-	-	-	-	-	-	-	-	-	-
Designing and development for high nutrient efficiency diet	-	-	-	-	-	-	-	-	-	-
Minimization of nutrient loss in processing	-	-	-	-	-	-	-	-	-	-
Gender mainstreaming through SHGs	-	-	-	-	-	-	-	-	-	-
Storage loss minimization techniques	-	-	-	-	-	-	-	-	-	-

Value addition	3	18	1	19	35	7	42	53	8	61
Income generation activities for empowerment of rural Women	-	-	-	-	-	-	-	-	-	-
Location specific drudgery reduction technologies	-	-	-	-	-	-	-	-	-	-
Rural Crafts	-	-	-	-	-	-	-	-	-	-
Women and child care										
VI Agril. Engineering										
Installation and maintenance of micro irrigation systems	-	-	-	-	-	-	-	-	-	-
Use of Plastics in farming practices	-	-	-	-	-	-	-	-	-	-
Production of small tools and implements	-	-	-	-	-	-	-	-	-	-
Repair and maintenance of farm machinery and implements	-	-	-	-	-	-	-	-	-	-
Small scale processing and value addition	-	-	-	-	-	-	-	-	-	-
Post Harvest Technology	-	-	-	-	-	-	-	-	-	-
VII Plant Protection										
Integrated Pest Management	-	-	-	-	-	-	-	-	-	-
Integrated Disease Management	-	-	-	-	-	-	-	-	-	-
Bio-control of pests and diseases	-	-	-	-	-	-	-	-	-	-
Production of bio control agents and bio pesticides	-	-	-	-	-	-	-	-	-	-
VIII Fisheries										
Integrated fish farming	2	6	0	6	26	0	26	32	0	32
Carp breeding and hatchery management	-	-	-	-	-	-	-	-	-	-
Carp fry and fingerling rearing	1	6	0	6	5	0	5	11	0	11
Composite fish culture	-	-	-	-	-	-	-	-	-	-
Hatchery management and culture of freshwater prawn	-	-	-	-	-	-	-	-	-	-
Breeding and culture of	1	6	0	6	2	0	2	8	0	8

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	1	13	1	14	12	5	17	25	6	31
Formation and Management of SHGs	-	-	-	-	-	-	-	-	-	-
Mobilization of social capital	-	-	-	-	-	-	-	-	-	-
Entrepreneurial development of farmers/youths	-	-	-	-	-	-	-	-	-	-
WTO and IPR issues	-	-	-	-	-	-	-	-	-	-
XI Agro-forestry										
Production technologies	1	8	0	8	4	0	4	12	0	12
Nursery management	-	-	-	-	-	-	-	-	-	-

Integrated Farming Systems	-	-	-	-	-	-	-	-	-	-
TOTAL	**10**	**70**	**5**	**75**	**84**	**12**	**96**	**154**	**17**	**171**
(B) RURAL YOUTH										
Mushroom Production	2	9	8	17	11	14	25	20	22	42
Bee-keeping	-	-	-	-	-	-	-	-	-	-
Integrated farming	-	-	-	-	-	-	-	-	-	-
Seed production										
Production of organic inputs	-	-	-	-	-	-	-	-	-	-
Integrated Farming	-	-	-	-	-	-	-	-	-	-
Planting material production	-	-	-	-	-	-	-	-	-	-
Vermi-culture	1	16	0	16	4	0	4	20	0	20
Sericulture	-	-	-	-	-	-	-	-	-	-
Protected cultivation of vegetable crops	-	-	-	-	-	-	-	-	-	-
Commercial fruit production	-	-	-	-	-	-	-	-	-	-
Repair and maintenance of farm machinery and implements	-	-	-	-	-	-	-	-	-	-
Nursery Management of Horticulture crops	-	-	-	-	-	-	-	-	-	-
Training and pruning of orchards	-	-	-	-	-	-	-	-	-	-
Value addition	-	-	-	-	-	-	-	-	-	-
Production of quality animal products	-	-	-	-	-	-	-	-	-	-
Dairying	-	-	-	-	-	-	-	-	-	-
Sheep and goat rearing	-	-	-	-	-	-	-	-	-	-
Quail farming	-	-	-	-	-	-	-	-	-	-
Piggery	-	-	-	-	-	-	-	-	-	-
Rabbit farming	-	-	-	-	-	-	-	-	-	-
Poultry production	-	-	-	-	-	-	-	-	-	-
Ornamental fisheries	-	-	-	-	-	-	-	-	-	-
Para vets	-	-	-	-	-	-	-	-	-	-
Para extension workers	-	-	-	-	-	-	-	-	-	-
Composite fish culture	1	12	0	12	8	0	8	20	0	20
Freshwater prawn culture	-	-	-	-	-	-	-	-	-	-
Shrimp farming	-	-	-	-	-	-	-	-	-	-
Pearl culture	-	-	-	-	-	-	-	-	-	-
Cold water fisheries	-	-	-	-	-	-	-	-	-	-
Fish harvest and processing	-	-	-	-	-	-	-	-	-	-

technology										
Fry and fingerling rearing	-	-	-	-	-	-	-	-	-	-
Small scale processing	-	-	-	-	-	-	-	-	-	-
Post Harvest Technology	-	-	-	-	-	-	-	-	-	-
Tailoring and Stitching	-	-	-	-	-	-	-	-	-	-
Rural Crafts	-	-	-	-	-	-	-	-	-	-
TOTAL	**4**	**37**	**8**	**45**	**23**	**14**	**37**	**60**	**22**	**82**
(C) Extension Personnel										
Productivity enhancement in field crops	-	-	-	-	-	-	-	-	-	-
Integrated Pest Management	-	-	-	-	-	-	-	-	-	-
Integrated Nutrient management	-	-	-	-	-	-	-	-	-	-
Rejuvenation of old orchards	-	-	-	-	-	-	-	-	-	-
Protected cultivation technology	-	-	-	-	-	-	-	-	-	-
Formation and Management of SHGs	-	-	-	-	-	-	-	-	-	-
Group Dynamics and farmers organization	1	17	0	17	1	0	1	18	0	18
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	1	11	1	12	3	1	4	14	2	16
Household food security	1	0	13	13	0	0	0	0	13	13
Women and Child care	1	0	12	12	0	0	0	0	12	12
Low cost and nutrient efficient diet designing	-	-	-	-	-	-	-	-	-	-
Production and use of organic inputs	-	-	-	-	-	-	-	-	-	-
Gender mainstreaming through SHGs	-	-	-	-	-	-	-	-	-	-

TOTAL	**4**	**28**	**26**	**54**	**4**	**1**	**5**	**32**	**27**	**59**

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	8	57	8	65	75	17	92	132	25	157
Cropping Systems	-	-	-	-	-	-	-	-	-	-
Crop Diversification	-	-	-	-	-	-	-	-	-	-
Integrated Farming	-	-	-	-	-	-	-	-	-	-
Water management	-	-	-	-	-	-	-	-	-	-
Seed production	-	-	-	-	-	-	-	-	-	-
Nursery management	-	-	-	-	-	-	-	-	-	-
Integrated Crop Management	-	-	-	-	-	-	-	-	-	-
Fodder production	-	-	-	-	-	-	-	-	-	-
Production of organic inputs	-	-	-	-	-	-	-	-	-	-
II Horticulture										
a) Vegetable Crops										
Production of low volume and high value crops	4	19	14	33	31	13	44	50	27	77
Off-season vegetables	-	-	-	-	-	-	-	-	-	-
Nursery raising	3	5	10	15	32	14	46	37	24	61
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	2	14	2	16	18	10	28	32	12	44
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	-	-	-	-	-	-	-	-	-	-
Disease Management	1	0	0	0	6	16	22	6	16	22
Feed management	1	16	2	18	0	0	0	16	2	18
Production of quality animal products										
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	-	-	-	-	-	-	-	-	-	-
Design and development of low/minimum cost diet	3	15	18	33	0	25	25	15	43	58
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	8	13	0	21	21	5	29	34
Income generation activities for empowerment of rural Women	1	0	0	0	0	14	14	0	14	14

Location specific drudgery reduction technologies	1	0	0	0	0	23	23	0	23	23
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	1	17	1	18	2	0	2	19	1	20
Carp fry and fingerling rearing	2	27	2	29	3	0	3	30	2	32
Composite fish culture	1	11	0	11	0	0	0	11	0	11
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	1	14	0	14	5	8	13	19	8	27
Mobilization of social capital	-	-	-	-	-	-	-	-	-	-
Entrepreneurial development of farmers/youths	3	24	13	37	33	19	52	57	32	89
WTO and IPR issues	-	-	-	-	-	-	-	-	-	-
XI Agro-forestry										
Production technologies	5	11	21	32	49	5	54	60	26	86
Nursery management	-	-	-	-	-	-	-	-	-	-
Integrated Farming Systems	-	-	-	-	-	-	-	-	-	-
TOTAL	38	227	99	326	250	185	435	477	284	761
(B) RURAL YOUTH										
Mushroom Production	-	-	-	-	-	-	-	-	-	-

Bee-keeping	-	-	-	-	-	-	-	-	-	-
Integrated farming	-	-	-	-	-	-	-	-	-	-
Seed production	-	-	-	-	-	-	-	-	-	-
Production of organic inputs	-	-	-	-	-	-	-	-	-	-
Integrated Farming	-	-	-	-	-	-	-	-	-	-
Planting material production	-	-	-	-	-	-	-	-	-	-
Vermi-culture	-	-	-	-	-	-	-	-	-	-
Sericulture	-	-	-	-	-	-	-	-	-	-
Protected cultivation of vegetable crops	-	-	-	-	-	-	-	-	-	-
Commercial fruit production	-	-	-	-	-	-	-	-	-	-
Repair and maintenance of farm machinery and implements	-	-	-	-	-	-	-	-	-	-
Nursery Management of Horticulture crops	-	-	-	-	-	-	-	-	-	-
Training and pruning of orchards	-	-	-	-	-	-	-	-	-	-
Value addition	-	-	-	-	-	-	-	-	-	-
Production of quality animal products	-	-	-	-	-	-	-	-	-	-
Dairying	-	-	-	-	-	-	-	-	-	-
Sheep and goat rearing	-	-	-	-	-	-	-	-	-	-
Quail farming	-	-	-	-	-	-	-	-	-	-
Piggery	-	-	-	-	-	-	-	-	-	-
Rabbit farming	-	-	-	-	-	-	-	-	-	-
Poultry production	-	-	-	-	-	-	-	-	-	-
Ornamental fisheries	-	-	-	-	-	-	-	-	-	-
Para vets	-	-	-	-	-	-	-	-	-	-
Para extension workers	-	-	-	-	-	-	-	-	-	-
Composite fish culture	-	-	-	-	-	-	-	-	-	-
Freshwater prawn culture	-	-	-	-	-	-	-	-	-	-
Shrimp farming	-	-	-	-	-	-	-	-	-	-
Pearl culture	-	-	-	-	-	-	-	-	-	-
Cold water fisheries	-	-	-	-	-	-	-	-	-	-
Fish harvest and processing technology	-	-	-	-	-	-	-	-	-	-
Fry and fingerling rearing	-	-	-	-	-	-	-	-	-	-
Small scale processing	-	-	-	-	-	-	-	-	-	-
Post Harvest Technology	-	-	-	-	-	-	-	-	-	-

Tailoring and Stitching	-	-	-	-	-	-	-	-	-	-
Rural Crafts	-	-	-	-	-	-	-	-	-	-
TOTAL	-	-	-	-	-	-	-	-	-	-
(C) Extension Personnel										
Productivity enhancement in field crops	-	-	-	-	-	-	-	-	-	-
Integrated Pest Management	-	-	-	-	-	-	-	-	-	-
Integrated Nutrient management	-	-	-	-	-	-	-	-	-	-
Rejuvenation of old orchards	-	-	-	-	-	-	-	-	-	-
Protected cultivation technology	-	-	-	-	-	-	-	-	-	-
Formation and Management of SHGs	-	-	-	-	-	-	-	-	-	-
Group Dynamics and farmers organization	-	-	-	-	-	-	-	-	-	-
Information networking among farmers	-	-	-	-	-	-	-	-	-	-
Capacity building for ICT application	-	-	-	-	-	-	-	-	-	-
Care and maintenance of farm machinery and implements	-	-	-	-	-	-	-	-	-	-
WTO and IPR issues	-	-	-	-	-	-	-	-	-	-
Management in farm animals	-	-	-	-	-	-	-	-	-	-
Livestock feed and fodder production	-	-	-	-	-	-	-	-	-	-
Household food security	-	-	-	-	-	-	-	-	-	-
Women and Child care	-	-	-	-	-	-	-	-	-	-
Low cost and nutrient efficient diet designing	1	0	12	12	0	0	0	0	12	12
Production and use of organic inputs	-	-	-	-	-	-	-	-	-	-
Gender mainstreaming through SHGs	-	-	-	-	-	-	-	-	-	-
TOTAL	1	0	12	12	0	0	0	0	12	12

C) Consolidated table (ON and OFF Campus)

Thematic area	No. of	Participants

	courses	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	8	57	8	65	75	17	92	132	25	157
Cropping Systems	1	13	3	16	0	0	0	13	3	16
Crop Diversification	-	-	-	-	-	-	-	-	-	-
Integrated Farming	-	-	-	-	-	-	-	-	-	-
Water management	-	-	-	-	-	-	-	-	-	-
Seed production	-	-	-	-	-	-	-	-	-	-
Nursery management	-	-	-	-	-	-	-	-	-	-
Integrated Crop Management	-	-	-	-	-	-	-	-	-	-
Fodder production	-	-	-	-	-	-	-	-	-	-
Production of organic inputs	-	-	-	-	-	-	-	-	-	-
II Horticulture										
a) Vegetable Crops										
Production of low volume and high value crops	4	19	14	33	31	13	44	50	27	77
Off-season vegetables										
Nursery raising	3	5	10	15	32	14	46	37	24	61
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	2	14	2	16	18	10	28	32	12	44
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	-	-	-	-	-	-	-	-	-	-
Disease Management	1	0	0	0	6	16	22	6	16	22
Feed management	1	16	2	18	0	0	0	16	2	18
Production of quality animal products	-	-	-	-	-	-	-	-	-	-
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	-	-	-	-	-	-	-	-	-	-
Design and development of low/minimum cost diet	3	15	18	33	0	25	25	15	43	58
Designing and development for high nutrient efficiency diet	-	-	-	-	-	-	-	-	-	-
Minimization of nutrient loss in processing	-	-	-	-	-	-	-	-	-	-
Gender mainstreaming through SHGs	-	-	-	-	-	-	-	-	-	-
Storage loss minimization techniques	-	-	-	-	-	-	-	-	-	-
Value addition	5	23	9	32	35	28	63	58	37	95
Income generation activities for empowerment of rural Women	1	0	0	0	0	14	14	0	14	14
Location specific drudgery reduction technologies	1	0	0	0	0	23	23	0	23	23
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	2	6	0	6	26	0	26	32	0	32
Carp breeding and hatchery management	1	17	1	18	2	0	2	19	1	20
Carp fry and fingerling rearing	3	33	2	35	8	0	8	41	2	43
Composite fish culture	1	11	0	11	0	0	0	11	0	11
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes	1	6	0	6	2	0	2	8	0	8
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	1	13	1	14	12	5	17	25	6	31
Formation and Management of SHGs	1	14	0	14	5	8	13	19	8	27
Mobilization of social capital	-	-	-	-	-	-	-	-	-	-
Entrepreneurial development of farmers/youths	3	24	13	37	33	19	52	57	32	89
WTO and IPR issues	-	-	-	-	-	-	-	-	-	-
XI Agro-forestry										
Production technologies	5	11	21	32	49	5	54	60	26	86
Nursery management	-	-	-	-	-	-	-	-	-	-
Integrated Farming Systems	-	-	-	-	-	-	-	-	-	-
TOTAL	**48**	**297**	**104**	**401**	**334**	**197**	**531**	**631**	**301**	**932**
(B) RURAL YOUTH										
Mushroom Production	2	9	8	17	11	14	25	20	22	42
Bee-keeping										
Integrated farming										
Seed production										

Production of organic inputs										
Integrated Farming										
Planting material production	1	16	3	19	4	3	7	20	6	26
Vermi-culture	1	16	0	16	4	0	4	20	0	20
Sericulture	-	-	-	-	-	-	-	-	-	-
Protected cultivation of vegetable crops										
Commercial fruit production	-	-	-	-	-	-	-	-	-	-
Repair and maintenance of farm machinery and implements	-	-	-	-	-	-	-	-	-	-
Nursery Management of Horticulture crops										
Training and pruning of orchards	-	-	-	-	-	-	-	-	-	-
Value addition	-	-	-	-	-	-	-	-	-	-
Production of quality animal products	-	-	-	-	-	-	-	-	-	-
Dairying										
Sheep and goat rearing	-	-	-	-	-	-	-	-	-	-
Quail farming	-	-	-	-	-	-	-	-	-	-
Piggery	-	-	-	-	-	-	-	-	-	-
Rabbit farming	-	-	-	-	-	-	-	-	-	-
Poultry production	-	-	-	-	-	-	-	-	-	-
Ornamental fisheries	-	-	-	-	-	-	-	-	-	-
Para vets	-	-	-	-	-	-	-	-	-	-
Para extension workers	-	-	-	-	-	-	-	-	-	-
Composite fish culture	1	12	0	12	8	0	8	20	0	20
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	**5**	**38**	**15**	**53**	**25**	**26**	**51**	**63**	**41**	**104**

(C) Extension Personnel										
Productivity enhancement in field crops										
Integrated Pest Management										
Integrated Nutrient management										
Rejuvenation of old orchards										
Protected cultivation technology										
Formation and Management of SHGs										
Group Dynamics and farmers organization	1	17	0	17	1	0	1	18	0	18
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	1	11	1	12	3	1	4	14	2	16
Household food security	1	0	13	13	0	0	0	0	13	13
Women and Child care	1	0	12	12	0	0	0	0	12	12
Low cost and nutrient efficient diet designing	-	-	-	-	-	-	-	-	-	-
Production and use of organic inputs	-	-	-	-	-	-	-	-	-	-
Gender mainstreaming through SHGs	-	-	-	-	-	-	-	-	-	-
TOTAL	**4**	**28**	**26**	**54**	**4**	**1**	**5**	**32**	**27**	**59**

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

FARMERS TRAINING PROGRAMME

FIELD DAY ON TIL

FRONTLINE DEMONSTRATIONS ON MAIZE

FRONTLINE DEMONSTRATIONS ON MASH

INTERACTION MEETING WITH MARKETING EXPERTS TO BOOST BRANDING AND MARKETING OF FARMERS PRODUCE

18TH SCIENTIFIC ADVISORY COMMITTEE MEET

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	
Nursery Manage	13th Feb	Nursery	Entrepreneurship	05	16	3	19	4	3	7	20	7	27				

ment	to 3rd March 2020	raising as an enterprise	development														
Compost Preparation	15 Oct 2020 -22nd Oct 2020	Mushroom Cultivation	Entrepreneurship development	07	1	6	07	2	14	15	3	19	21				
Vermicompost	24/01/2020 To 07/03/2020	Vermicompost producer	Entrepreneurship development	35	16	0	16	4	0	4	20	0	20				
Mushrom	16th feb to 29th march 2020	Mushroom Grower	Entrepreneurship development	35	8	1	9	9	2	11	17	3	20				
Fisheries	07/02/2020 To 14t/03/2020	Aquaculture worker	Entrepreneurship development	35	12	0	12	8	0	8	20	0	20	Individual	6	6	2

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


IN SERVICE TRAINING PROGRAMME

VOCATIONAL TRAINING PROGRAMME

(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	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
2		Awareness cum training programme on PCRA	Resource conservation	Resource conservation	1		3	37	14	51	39	9	48	76	23	99	PCRA	

(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							3									60

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

Sl. No.	Nature of Extension Activity	Topic / crop	No. of activities	Participants											
				Farmers (Others) (I)			SC/ST (Farmers) (II)			Extension Officials (III)			Grand Total (I+II+III)		
				M	F	T	M	F	T	M	F	T	M	F	T
1	Field Day	Marigold 15/01/2020	1	2	9	11	2	9	11	2	2	4	6	20	26
2	Field Day	Cauliflower 11/02/2020	1	3	0	3	11	5	16	2	3	5	16	8	24
3	Field day	Paddy 30/09/2020	1	19	0	19	2	0	2	1	0	1	22	0	22
4	Field day	Maize	1	15	10	25	0	0	0	2	1	3	17	11	28

		07/10/2020													
5	Field day	Mash 08/10/2020	1	0	0	0	13	2	15	1	1	2	14	3	17
6	Field day	Till 23/10/2020	1	15	3	18	0	0	0	2	3	5	17	6	23
	Total		6	**54**	**22**	**76**	**28**	**16**	**44**	**10**	**10**	**20**	**92**	**48**	**140**
7	Kisan Mela	**19/12/2020**	**1**	**102**	**30**	**132**	**30**	**60**	**90**	**30**	**10**	**40**	**162**	**100**	**262**
8	Kisan Ghosthi	**24/02/2020**	1	45	0	45	0	0	0	2	3	5	47	3	50
9	Exhibition														
10	Film Show														
11	Method Demonstrations	24/09/2020 19-09-20	2	0	25	25	35	0	35	0	0	0	35	25	60
12	Farmers Seminar														
13	Workshop	06-02-20	1	22	0	22	28	0	28	0	0	0	50	0	50
14	Group meetings														
15	Lectures delivered as resource persons		18												
16	Newspaper coverage														
17	Radio talks		10												
18	TV talks														
19	Popular articles														
20	Extension Literature		700												
21	Advisory Services		50												
22	Scientific visit to farmers field		47												
23	Farmers visit to KVK		357												357
24	Diagnostic visits	03-08-20 11-08-20 12-08-20 13-08-20 25-09-20	5												
25	Exposure visits		1	5	-	5	-	-	-	-	-	-	5	-	5
26	Ex-trainees Sammelan	03/11/2020	1	18	0	18	2	2	4	0	0	0	20	2	22
27	Soil health Camp														
28	Animal Health Camp	24/02/2020 27/07/2020	2	51	0	0	0	0	0	5	0	5	56	0	56
29	Agri mobile clinic	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	Soil test campaigns		-	-	-	-	-	-	-	-	-	-	-	-	-
31	Farm Science Club Conveners meet		-	-	-	-	-	-	-	-	-	-	-	-	-
32	Self Help Group Conveners meetings		-	-	-	-	-	-	-	-	-	-	-	-	-
33	Mahila Mandals Conveners meetings		-	-	-	-	-	-	-	-	-	-	-	-	-
34	Celebration of important days (specify)														

i)	Breast Feeding Week	06/08/2020	1	0	0	0	4	26	30	0	0	0	4	26	30
ii)	Poshan Mah	02/09/2020	1												
35	Celebration of Special days (specify)														
i)	International Women's Day	08/03/2020	1	0	22	22	0	32	32	2	1	3	2	55	57
ii)	World Environment Day-Plantation Drive	05/06/2020	1	-	-	-	-	-	-	-	-	-	-	-	-
iii)	Van Mahotsava Celebration-Plantation Drive	27/07/2020	1	-	-	-	-	-	-	-	-	-	-	-	-
iv)	Parthenium Eradication Drive	17/08/2020	1												
v)	Women Farmers day	15/10/2020	1	4	10	14	3	14	17	0	0	0	7	24	31
vi)	World Fisheries Day	21/11/2020	1	10	3	13	10	0	10	0	0	0	20	3	23
vii)	World Soil Day	15/12/2020	1	9	15	24	15	21	36	0	0	0	24	36	60
	ICAR Foundation Day	16/07/2020	1	10	5	15	4	1	5	0	0	0	14	6	20
viii)	**Grand Total**		8	33	55	88	32	68	100	2	1	3	67	124	191
36	**Webinars**	28-01-20 28-06-20 09-08-20 29-08-20 10-09-20 13-09-20 25-09-20 26-09-20 29-09-20 01-10-20	10												
37	**Official Meetings**	04-06-20 20-06-20 23-06-20 06-07-20 10-07-20 21-10-20	6												
38	**Awareness Programs**		6	180	38	218	2	7	9	0	0	0	182	45	227
39	**Farmer Scientist Interaction**	25-12-20	1	10	22	32	52	29	81	0	0	0	62	51	113
40	**Other Promotion of Organic vegetable production**	13-08-20	1												
41	**Seed Production**	19-11-20	1	5	1	6	23	6	29	0	0	0	28	7	35
42	**Plantation Drive**	19-11-20	1												
	Total		**84**	**512**	**270**	**831**	**296**	**298**	**594**	**61**	**35**	**96**	**969**	**603**	**1929**

PARTHENIUM AWARENESS PROGRAMME

STAKE HOLDERS MEET CUM WORKSHOP ON MAP'S

FARMER SCIENTIST INTERACTION CUM KISAN SAMMALEN

EXPOSURE VISIT OF FARM WOMEN TO MUSHROOM UNIT KALOE

Celebration of Nutrition Month Activities (Poshan Mah)

Date	Program name	Participants	Venue
02-09-20	Awareness programme on Poshan Mah	38	Jandiyal
03-09-20	Training prog on role of fruits and vegetables in providing micro nutrients and boosting immunity	30	Kattal Batal
04-09-20	Lecture deliverd on Macro & Micro nutrients through Fish diet	11	KVK Jammu
04-09-20	Radio talk on "Mota Ananj Sehat da Khajana"		
05-09-20	Delivered lecture on Health benefits of fish	19	Gho Manhasa
14-09-20	Delivered Lecture on Health benefits of consuming vegetables	18	Amb
17-09-20	Awareness programme in collaboration with IFFCO on Kitchen Gardening and distribution of Nutri Kits	45	Flora
18-09-20	Demonstration cum Meeting with Anganwari workers on layout of Kitchen Gardens at Anganwari centers and distribution of Nutri Kits	6	Prema Chak
19-09-20	Lecture delivered on Nutri Thali and local Nutri foods and distributed Nutri kits to participants	36	Gagian
19-09-20	In Service Training program on Biofortified varieties for alleviating malnutrition	14	Gagian
22-09-20	Inservice training program on Nutri gardens for alleviating mal nutrition and distributed Nutri Kits	15	KVK Jammu
23-09-20	Promotion of Nutri diets slogan at Anganwaris	22	Fattu Chak, Khana Chak
24-09-20	Demonstration Cum Lecture on layout of Kitchen Garden Models & role of green leafy vegetables in providing essential micronutrients in diet and distributed Nutri kits	28	Prema Chak
25-09-20	Demonstration Cum Lecture on Nutri Garden & Nutri Thali alongwith distribution of kitchen garden kits	15	Khana Chargal
26-09-20	Participation in Webinar on role of balanced nutrition in mitigating mal nutrition	9	RS Pura
28-09-20	Lecture on Nutritive value of Mushrooms and Value added products for supplementing protien in diet	18	KVK Jammu

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	15000	50	5	2	40	2	2	1	

6.C. DETAILS OF TECHNOLOGY WEEK CELEBRATIONS during 2020 (April-December)

No. of Technology week celebrated	Types of Activities	No. of Activities	Number of Participants	Related crop/livestock technology
	Gosthies	1		Animal/Livestock
	Lectures organised	8	-	Crop & Livestock
	Exhibition		-	
	Film show		-	
	Fair		--	
	Farm Visit		-	
	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)	100	-	Natural Seaweed etracts
	Distribution of fingerlings	-	-	-
	Distribution of Livestock specimen (No.)	-	-	-
	Total number of farmers visited the technology week	-	15000	

Week Long Awareness Programme Conducted by KVK Jammu on FM Tadka

14 STATE TIMES • Friday • October 23, 2020

VC SKUAST-J chairs 18th Scientific Advisory Committee meeting of KVK Jammu

■ STATE TIMES NEWS

JAMMU: Prof J P Sharma, Vice Chancellor SKUAST-J on Thursday suggested for adoption of income oriented activities for achieving the aim of doubling farmers' income by 2022.

He was chairing the 18th Scientific Advisory Committee meeting of Krishi Vigyan Kendra Jammu working under the administrative control of Sher-e Kashmir University of Agricultural Sciences and technology of Jammu.

Prof J P Sharma also advised KVK Jammu to explore the possibilities of sensor based irrigation system, conservation agriculture, increased fertilizer and water use efficiency models along with climate smart agriculture. Vice chancellor also advocated for promotion of various schemes of AtmaNirbhar Bharat during their awareness programme. Dr J P Sharma deliberated upon the creation of protected cultivation structures, integrated farming system and establishment of processing cum value addition unit at each KVK.

Director ICAR-ATARI Zone I Ludhiana, Dr Rajbir Singh, participated through virtual mode in the meeting. In his remarks Dr Rajbir Singh appreciated the efforts of KVK Jammu and also suggested to work on the Agri-Horticulture system with more focus on the Animal Husbandry sector and adoption of Fisheries for sustainable and increased production in the district.

Earlier, at the outset, Director Extension, SKUAST-J, Dr S K Gupta, welcomed all the district heads of Agriculture, Animal Husbandry, Sheep Husbandry, Fisheries, Forest, Lead bank, NABARD, Horticulture marketing etc. in the meeting and informed that Scientific advisory committee meetings are conducted to review the progress report and finalize the annual action plan for the upcoming year.

Sr Scientist and Head KVK Jammu, Dr Punit Choudhary presented the detailed overview of the activities conducted for the benefits of the farming community of Jammu district and also proposed an annual action plan for the upcoming year.

Dean FVSc & AH, Dr M S Bhadwal provided on spot suggestion for up-gradation of annual action plan of KVK Jammu. Scientist Home Science, Dr Sheetal Badyal, conducted the proceeding of the meeting, whereas Scientist Horticulture, Dr Ravneet Kour recorded the proceedings.

The meeting concluded with a vote of thanks by Dr Prem Kumar, Scientist Fisheries.

Er Ashish Katoch, Raju Gupta, Poonam Abrol, S Satvir Singh and Ashok Kumar also helped in smooth conduct of the programme.

VC SKUAST-J, Prof J P Sharma and others releasing a brochure.

Director Law Enforcement (AP&FWD) for upgradation of POS

■ STATE TIMES NEWS

SRINAGAR: The Director Law Enforcement Agriculture Production & Farmer's Welfare Department (AP&FWD) J&K,

KVK-J organises awareness-cum-training programme on Kissan scheme

Scientist, KVK Jammu, Dr. Sheetal Badyal interacting with women during a programme.

■ STATE TIMES NEWS

JAMMU: Krishi Vigyan Kendra (KVK)-Jammu working under the overall guidance of Prof. J.P Yojna a flagship programme of Ministry of Agriculture and Farmers' Welfare, GoI.

The programme was conducted by Dr. Sheetal Badyal, ete. and provided extension literature to the farmers urging them to view the live telecasting with full enthusiasm so as to take maximum benefits from it.

The farmers of the area participated in the programme appreciated the strenuous efforts of Prime Minister for their remarkable achievements in agricultural and allied sectors even during the prevailing pandemic situation. The programme was also supported by CSS and various SHGs operational in

KVK Jammu celebrates ICAR Foundation Day

KVK officials during a meeting at Jammu.

■ STATE TIMES NEWS

R S PURA: KVK Jammu celebrated 92nd ICAR Foundation Day on Thursday at KVK Jammu RS Pura under the guidance of Prof. JP Sharma, Vice Chancellor, SKUAST-Jammu.

The programme started with online message from Prof. SK Gupta, Director Extension SKUAST Jammu. He urged upon the KVK to work with utmost dedication for the welfare of farming community. Dr. Punit Choudhary, Sr. Scientist & head welcomed the participants and apprised them regarding the mandates of Krishi Vigyan Kendra.

Dr. Ravneet Kour, Scientist Horticulture briefed about the role of ICAR and activities being under taken by the KVK Jammu. Dr. Sheetal Badyal shared the latest information regarding various schemes and Skill development programs of Govt. of India and farmer scientist interaction was also held. The program was attended by farmers, RAWE students and all staff members of KVK Jammu including Er. Ashish Katoch, Raju Gupta, Satbir Singh and Poonam Abrol.

DAILY EXCELSIOR, JAMMU

VC SKUAST-J Prof JP Sharma and other officers du Scientific Advisory Committee meeting on Thursday.

VC SKUAST- J for promotin income oriented agri activitie

Excelsior Correspondent

JAMMU, Oct 22: Prof J P Sharma, Vice Chancellor SKUAST-J today suggested for adoption of income oriented activities for achieving the aim of doubling farmers' income by 2022.

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Progressive farmers Jammu region also put forth the views during the meeting.

दैनिक सवेरा 4/5

किसान मेले में मौजूद वीसी जे.पी. शर्मा व अन्य।

सामका में वी.सी. स्कास्ट ने किया किसान मेले का शुभारंभ

जम्मू, 19 दिसंबर (भूपेन्द्र) : सामका आर.एस.पुरा में एस.सी.एस.पी. के तहत कृषि विज्ञान केन्द्र जम्मू की तरफ से किसान मेले का आयोजन किया गया। मेले का उद्घाटन वाइस चांसलर स्कास्ट जम्मू प्रोफैसर जे.पी. शर्मा ने किया। इस मेले में किसानों व अन्य विभागों द्वारा स्टाल भी लगाए हुए थे। वीसी जे.पी. शर्मा ने मेले में लगाए स्टालों का निरीक्षण किया और वहां पर लगाई प्रदर्शनी में लगाए फल, सब्जियों व फसलों को पैदा करवाने वाले किसानों का मार्गदर्शन करते हुए उन्हें सरकारी स्कीमों का लाभ उठाने के प्रति प्रेरित किया। अपने संबोधन में शर्मा ने कहा कि भारत सरकार ने किसानों की आय दोगुनी करने को लेकर कई स्कीमें चलाई हैं। उक्त स्कीमों की जानकारी किसानों को दी जाए इसके लिए इस तरह के कार्यक्रमों का आयोजन किया जा रहा है ताकि ऐसे मेलों में विभागीय पदाधिकारी, वैज्ञानिक व विशेषज्ञ किसानों का आवश्यक जानकारी दे सकें। उन्होंने किसानों से नई तकनीक से खेतीबाड़ी करने के साथ लघु उद्योगों को शुरू करने की अपील की ताकि उनकी आय दोगुनी हो सके।

अब कृषि तकनीक को खेत तक ले जाने की जरूरत

जागरण संवाददाता, जम्मू : शेर-ए-कश्मीर यूनिवर्सिटी आफ एग्रीकल्चर, साइंसेज एंड टेक्नोलॉजी (स्कास्ट) के उप कुलपति प्रो. जेपी शर्मा ने कहा कि कृषि क्षेत्र में विकास की अपार संभावनाएं हैं। ग्रामीण युवा आगे आएं और कृषि क्षेत्र में काम करें, क्योंकि आने वाला समय कृषि का ही है। इसी के बल पर देश आत्मनिर्भर बनेगा। वह शनिवार को स्कास्ट जम्मू के चट्टा कैंपस में आयोजित पांच किसान मेला लगा जिसमें खेती की वहीं किसानों का मनोरंजन करने के साथ के लिए त्रिकटा नगर के मोहन यह मर

किसान मेले के समापन समारोह में स्कास्ट के उप कुलपति से पुरस्कार पाते किसान व कृषि विज्ञान केंद्र के वैज्ञानिक • जागरण

उन्नत किसान सम्मानित

जम्मू संभाग के उन्नत किसानों को इनाम देकर सम्मानित किया गया। इनमें हल्दी का स्टाल लगाने वाले किसान दूजा सिंह, जम्मू के किसान मुल्कदर सिंह, राजेंद्र प्रसाद, विक्रांत चाढ़क शामिल थे। पुरस्कार पाकर किसान उत्साहित हैं।

KVK organises farmer-scientist interaction, Kisan Sammalen

■ STATE TIMES NEWS

JAMMU: Krishi Vigyan Kendra (KVK) Jammu working under the leadership of Prof J P Sharma Vice Chancellor SKUAST Jammu and guidance of Prof S K Gupta Director Extension SKUAST Jammu organised Farmer Scientist interaction and Kisan Sammalen on the occasion of release of PM Kisan Samman Nidhi 7th Installment.

Large number of progressive farmers, farm women, Panchs and Sarpanchs from different villages of Jammu district attended the Sammalen and interacted with the scientist at KVK.

Dr Vikas Tandon Professor Biotechnology, Dr Punit Choudhary Sr Scientist and Head KVK Jammu, Dr Kamlesh Bali Associate Professor Entomology, Dr Vishal Raina Scientist Megaseed Projects SKUAST-J, Dr Sheetal Badyal Scientist Home Science, Dr Prem Kumar Scientist Fisheries and Dr Raju Gupta interacted with the farmers and provided guidance for cultural practices to be carried in for current Rabi crop.

A live webcasting programme of Prime Minister Narendra Modi was also visualized on the occasion.

Progressive farmers namely Girdhari Lal and Som Dutt also spoke on the occasion.

At the outset Dr Punit Choudhary welcomed the dignitaries and farmers in the Sammalen and urged the farmers to gain the maximum knowledge from the scientists. Message of Swachatta was also given on the occasion.

Prem Kumar conducted the proceedings of the programme and the programme concluded with vote of thanks by Dr Sheetal Badyal.

Satbir Singh, Er Ashish Katoch, Ashok Kumar, Poonam Abrol and ICICI Foundation also helped in smooth conduct of the programme.

KVK Jammu official speaking during a programme.

KVK Jammu in News

Date-wise Report on Week long celebration of 2nd Oct 2020			
Date	Name of activities	Number of Farmer participated	Number of employees/students participated
28/09/2020	Organization of Swachhta Abhiyan at KVK Jammu	11	8
29/09/2020	Debate among farmers on Life of Father of nation	7	7
30/09/2020	Cleanliness and clean agricultural practices	20	2
1/10/2020	Online discussion on Gandhian philosophy	15	8
2/10/2020	Drawing Competition from School students and Online Ghandhi Jayanti Celebration and swachta Pledge along with SKUAST-J on virtual mode		53

Week long celebration

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	14051	400000(Appx)	Kept for processing with Megaseed

					SKUAST-J
	Paddy	B-370	58.0	275440 (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)		2000	2000	
	Setaria		1000	1000	
	Medicinal plants				
	Harad Amla Lemon Grass Alovera		150 150 50 100		**20**
	MPTS		1000	3000	
ORNAMENTAL CROPS	-	-	-	-	-
PLANTATION CROPS	-	-	-	-	-
Fodder	**Sorghum**	**SSG**		**49000**	**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**		**2000**	**16000**	
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						
	-	-	-	-	-	-
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	1. Heterosis in intra-specific hybrids of Grewiaoptiva: An important fodder tree of North Western HimalayasJournal of Pharmacognosy and Phytochemistry. 9(1): 884-887	Saresh NV, Verma A, Singh NB, **Choudhary P**, Sankanur M, Sapana Thakur and Meena D. 2020.	
	2. Studies on the Physical Characteristics, Properties and productivity potential of exotic and indigenous bamboos in rainfed subtropical environment. Journal of Pharmacognosy and Phytochemistry 9(3):1552-1558	Vipan Guleria, **Punit Choudhary**, Amol Vashisth, Atul Gupta and Thiru Selvan. 2020.	

Item	Title	Authors name	Number of copies
	3. Dynamics of Interactions in Medicinal Based Agroforestry Systems. In: Dynamics of Interactions in Medicinal Based Agroforestry Systems In : Agribusiness Development Planning and Management edited by Anil Bhat and Jyoti Kachroo © New Delhi Publishers, New Delhi: 2021, 69-78. ISBN: 978-81-948993-6-5, DOI: 0.30954/NDP.agribusiness.2020.7	Vipan Guleria and Punit Choudhary. 2020.	
	4. Terminalia chebula (Harar) Characterization by using Morphological Descriptors in Himalayan Region. The Ind. For. 147(2), 154-159	Vipan Guleria, Punit Chaudhary , Amol Vashisth , Kamal Sharma , Thiru Selvan , Sanjeev Thakur, 2021.	
	5. Carbon sequestration potential of trees in arable land-use and allometric modelling for dominant tree species in sub-tropics of Jammu and Kashmir. Journal of Environmental Biology (42) 414-419	Vishal Mahajan, P. Choudhary, N.S. Raina and P. Sharma, 2021.	
	6. Impact of frontline demonstrations on yield, economics and adoption of marigold cultivation. Journal of Krishi Vigyan, 8(2):2020	Kour Ravneet, Badyal S., Kumar R., Choudhary P. and Kumar P.	
Book	Prospects and Potential of Fish Farming in Jammu and Kashmir. Published by SKUAST-J	Sahar Masud, Akhil Gupta, Raj Kumar, Prem Kumar	30
Book Chapters	1. World fish production Scenario	Prem Kumar	
	2. Culture technology of catfish (Pangasius)	Prem Kumar	
	3. Culture Technology of Trout fish	Prem Kumar	
	4. Biofloc technology of fish farming	Prem Kumar	
	5. Recirculating Aquaculture System	Prem Kumar	
	6. Aquaponics	Prem Kumar	
	7. SWOT analysis of fisheries in Jammu &	Prem Kumar	

Item	*Title*	*Authors name*	*Number of copies*
	Kashmir 8. Government Support for fisheries	Prem Kumar	
Technical reports	Operational Guidelines for Grameen Bhandaran Yojana: Capital Investment Subsidy For Construction/ Renovation of Rural Godown.	Rakesh Shrama, Punit Choudhary, Prem Kumar, Pawan Sharma, Ravneet Kour, Sheetal Badyal, Poonam Abrol, Satvir Singh and Raju Gupta.	
Technical bulletins	1. Kenchua Khad 2. Harad medicinal tree propagation and value addition 3. Swach Machli Utpadan aur Matsya prasanskaran.	Punit Choudhary, SheetalBadyal, Prem Kumar, Rakesh Sharma, Raju Gupta PoonalAbrol PunitChoudhary, PoonalAbrol, SheetalBadyal, VikasTandon, Rakesh Sharma, Raju Gupta Prem Kumar, Arvind Kumar, Sunil Kumar, Neelesh Sharma, Pranav Kumar, Ankur Rastogi, Atul Anand 2020. Published under DST project.	200 200 25
Popular articles			
Training Manual	1. VERMICOMPOST PRODUCTION Entrepreneurial Activity In Agriculture Training manual III 2. AQUACULTURE WORKER A training manual (ASCI) 3. A training manual on “Khumb utpadan taknik” published by KVK R.S. Pura, Jammu.	Punit Choudhary, Prem Kumar SheetalBadyal, Rakesh Sharma, Ravneet Kour, Raju Gupta Poonam Abrol Prem Kumar, Punit Choudhary, Rakesh Sharma SheetalBadyal, Ravneet Kour, Poonam Abrol Sheetal Badyal, Rakesh Sharma, Punit Choudhary, Prem Kumar and Ravneet Kaur (2020).	25 copies 25 copies 25 copies
Extension literature	Crop insurance scheme	Rakesh Sharma, Punit Choudhary and Prem Kumar	

Item	*Title*	*Authors name*	*Number of copies*
	Success Stories. Publish under DST project SEED/WTP/088/2015	Arvind Kumar, Sunil Kumar, Neelesh Sharma, Pranav Kumar and Prem Kumar 2020.	
Folders /leaflets	Biofloc system for intensive fish production	Prem Kumar, Punit Choudhary, Rakesh Sharma, SheetalBadyal, Ravneet Kour and Poonam Abrol	
	Cultivation of medicinal trees (Harad and Aonla) for higher income	Punit Choudhary, Rakesh Sharma, SheetalBadyal, Ravneet Kour and Prem Kumar	
	Formation and management of SHGs	Rakesh Sharma, Punit Choudhary, Prem Kumar, SheetalBadyal, Ravneet Kour	
	Scientific cultivation of fodder crops	Punit Choudhary, Rakesh Sharma, Ravneet Kaur, SheetalBadyal and Prem Kumar	
	Value addition of Pangas Fish	Prem Kumar, Punit Choudhary, Rakesh Sharma, SheetalBadyal, Ravneet Kour and Poonam Abrol	
TOTAL			

(C) Details of Electronic Media Produced: Nil

S. No.	Type of media (CD / Software)	Title of the programme	Number
1	FM Tadka	Farm to Table A Week Long Awareness proramme-	6

(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 enterprise 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	2,30000

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.

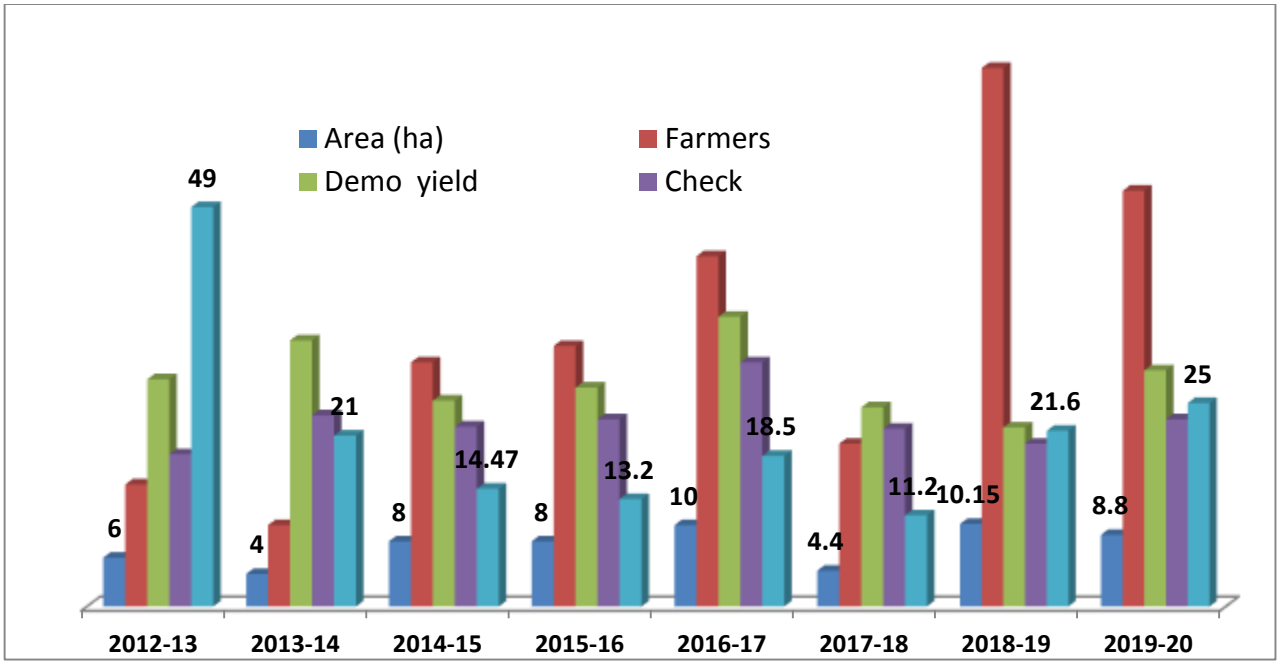
Outcome: The outcome of technology demonstrated by the KVK Jammu helped the farmers to get yield @ 34.6q/ha which is 35.7% more than the traditional basmati 370. Moreover, it got matures earlier than Basmati 370 by 20-25 days.

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.

4.0 Fish Farming for employment as well as nutritional security

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

5.0 Agri Echo tourism- Environment friendly and changing the lives

Dr. Uttam Singh Sambyal S/o Late Thakur Jaswant Singh, IPS is the resident of Gandhi Nagar, Jammu, Jammu and Kashmir Union Territory. He did his MBBS from Government College and joined as medical officer in health department of Jammu and Kashmir. While examining the patients and the going through different cases, he think about root causes. He understand the stressful working environment, pollution, adulterated food and drinks, hectic lifestyle, no working break etc. affecting the health of people adversely.

He is having 100 kanal of land at Village Malhori Jagir, Bajalta Jammu which is kandi area and it was barren due to water scarcity. Considering the below given facts, he planned to develop this land for the purpose of Echo-tourism and as social responsibility.

1- It will tap the vast market of inland urban Agro-eco-tourism is the new value-added agricultural business for improving the incomes and potential economic viability of small farms and rural communities.
2- The place will provide a chance to the tourists who want to take a break from a mechanical life and enjoy the peace and tranquillity of rural life in its natural abundance.
3- It will create tourism facility as well as help in boosting state economy by attracting the local people and tourists who visits Maa Vaishno devi every year
4- It will offer pure, farm-fresh and organic produce to travellers and urban people
5- It will be a role model for others too to adopt Echo tourism which is environment friendly and sustainable
6- It will also help to promote educational activity and motivate the young students to attach with their own land.
7- The symbiosis between tourism and agriculture that can be found in agritourism is a key element of eco-friendly and socially responsible tourism.
8- In agritourism subsector, increasing the involvement of local communities, especially the poor, in the tourism value chain can contribute to the development of local economy and poverty reduction.
9- There is increasing evidence that more sustainable tourism in rural areas can lead to more positive poverty-reducing effects. Nowadays more and more travellers are found to favour environment-friendly tourism and are willing to pay for related experiences. Traditional mass tourism has reached a stage of steady growth but agro-eco-tourism, nature, heritage, cultural, and "soft adventure" tourism too are doing well and are predicted to grow rapidly over the next two decades.

Therefore, he started develop his land 10 years ago. He met with many challenges, constraint and problems but he did not surrender and tried to remove all the hurdles. Mostly, he promoted local trees and shrubs to keep intact the natural flora and fauna and conserve the original germplasm. He brought different fruit and ornamental trees from various part of country and abroad also to increase the aesthetic beauty of the place. He is knowing that it is the form of tourism that capitalises on rural culture as a tourist attraction. It has gained a new dimension as a potential income- and employment-generating activity. Travel and tourism are human resource-intensive, employing, directly and indirectly. Concentrating on agritourism will reinforce the employment potential of the tourism sector with increased local hiring and sourcing and significant opportunities in tourism oriented toward local culture

and the natural environment. This can include the local supply of products, labour, and tourism services. It can promote regional development and helps to conserve diversity in plant and wildlife.

Dr. Uttam Singh Sambyal developed his farm organically. He adopted organic agriculture and horticulture which involves growing of turmeric, fruits, vegetables, flowers by following essential principals of organic agriculture and use of organic manure. Organic Farming is rapidly increasing due to the awareness among the consumers regarding the ill effects of inorganic fertilizers, insecticides and pesticides on the health and environment. Due to health benefits, the organically produced products fetch higher prices in comparison to inorganically produced crops, therefore, the organic food sector has become an attractive opportunity for the farmers to fetch more income as markets are growing rapidly for such products.

In addition to organic farming, other recreational facilities has also been developed by him to attract more people and make their trip memorable. Some of these are-

1. Adventure sports,
2. Children Park,
3. Chullha Rasoi,
4. Hunters zone restaurants
5. Birds collection

Recently, he collaborated with Colonel Sunil Singh Sambyal (Retd) to establish and install Biofloc unit containing 9 PVC tanks supported by iron mesh of the capacity 10000 litres each within an area of approximately 4500 sq feet for fish farming at his farm which is providing mutual benefit to both of them. These tanks have the capacity to produce about 7.5 tonnes of fish in a span of 6-7 months. Biofloc Technology encompasses converting largely undigested fish feed proteins, into protein rich fish feed with the help of probiotic culture in the water medium in the form of floc. Biofloc technology can help in boosting fish farming in Jammu and Kashmir Union Territory at large scale and reduce the import of fishes from neighbouring states. Biofloc Aquaculture technology is ideal for farmers with small land holdings and limited water resources.

Colonel Sunil Singh Sambyal (Retd) and Dr Uttam Singh Sambyal with Biofloc Unit

Mr Navin Choudhary, Principal Secretary to Fisheries, Animal-Sheep Husbandry, Agriculture, Horticulture and Cooperative visited Biofloc unit

Hon'ble Vice Chancellor Prof. J.P. Sharma observing organically produced products for sale

Hon'ble Vice Chancellor Prof. J.P. Sharma, SKAUST-J visited the farm and interacting

Impact

He is the role model for the farmers of Jammu and Kashmir UT to bring this concept in reality. Many things he has started at first which has never been adopted by any other person e.g. Biofloc unit. These start-up are motivating the fellow farmers as well as Government functionaries to promote which may help in employment as well as income generation. It will help for the development of rural youth and farmers to adopt organic farming and agri-tourism.

Economic Return

Dr Uttam Singh Sambyal is running this project primarily on no profit no loss basis. His aim to introduce youngsters to the farming with new methods which will bring proud in them to be a farmer cum entrepreneur. The new technology and enterprises will help hand in practice for interested farmers and youth.

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	100	100	5	-
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	25	25	5	-
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.

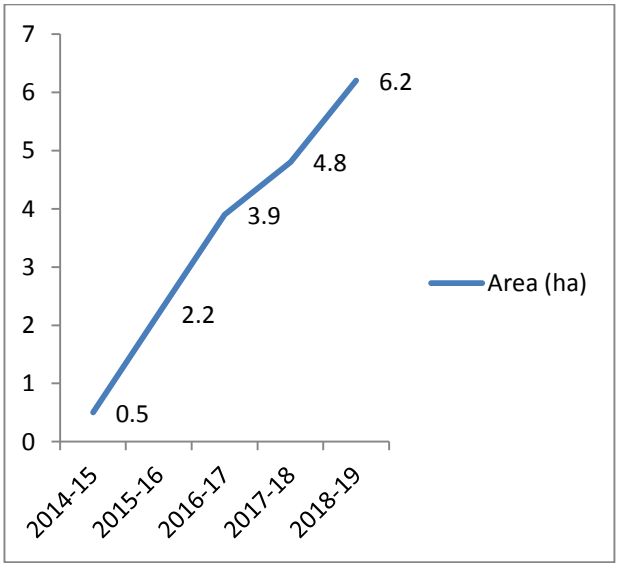
Output: KVK Jammu distributed literature of the commercial floriculture among the farmers to update their technical know how. Now more and more farmers are coming up for adoption of this enterprise.

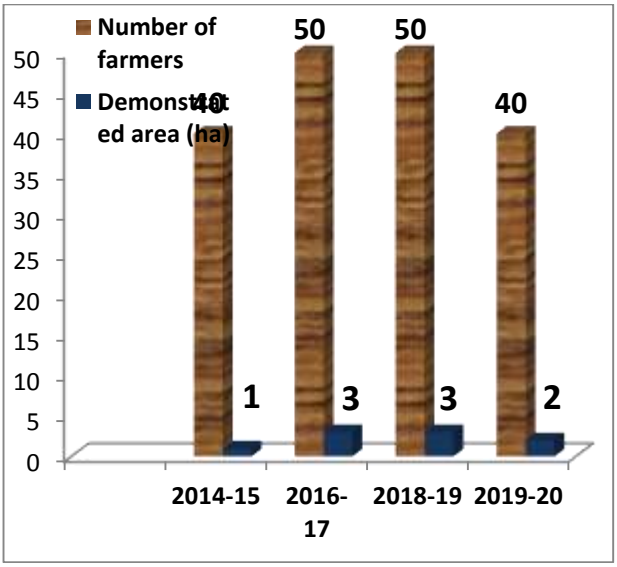
They are attending the different programmes being organised by the KVK from time to time. The FLD's on marigold with improved varieties have exposed the farmers to new technologies and imparting of trainings on technical know-how has updated the farmersknowledge regarding potential of floriculture as 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.





Trend of Area under Floriculture in the operational villages (in ha)

2.0 LIVELIHOOD SECURITY OF FARMERS OF KANDI VILLAGES OF JAMMU REGION OF JAMMU AND KASHMIR THROUGH SUPERIOR CLONES OF HARAD

Punit Choudhary, Rakesh Sharma, Vikas Tandon, Sheetal Badyal, Prem Kumar, Raju Gupta & Poonam Abrol

Harad,Behraand 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 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 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

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 and Behra has been achieved at KVK Jammu.

Superior planting stock procured from Dr Y S Parmar University of Horticulture and Forestry Solan Research Horticulture research Station Nurpur Jachh, H P, Rainfed Research Sub-Station for Sub-Tropical Fruits, Raya of SKUAST-J and quality planting material developed at KVK Jammu were provided to 308 farm families of Mathwar, Rabta, Sagun, Kharota, Kathar, Chawa and other villages during the month of July- August, 2016 -2019 for laying out frontline demonstrations of superior clones with the objective of gradual replacement of the inferior clones and for promotion of cultivation of medicinal trees in Kandi villages of Jammu and Samba districts for achieving sustainable livelihood options.

DETAIL OF PLANTING MATERIAL DISTRIBUTED FOR LAYING OUT FRONTLINE DEMONSTRATION (2016-2019)

Villages Covered	Quality Planting material	Beneficiaries			No of plants
		ST/SC	Gen	Total	
2016-17					
Mohargarh	**Aonla, Harad**	**10**	**8**	**18**	**200**

	Behra				
Rabta	**Aonla Harad Behra**	**4**	**16**	**20**	**200**
Mathwar	**Aonla Harad Behra**	**11**	**38**	**49**	**550**
Total		**25**	**62**	**87**	**950**
2017-18					
Sagun	**Aonla**	**7**	**38**	**45**	**170**
Khrota bhata	**Aonla Harad Behra Jamun**	**11**	**-**	**11**	**165**
Kishanpur Manwal	**Reetha, Harad**	**-**	**3**	**3**	**115**
Deon	**Aonla**	**-**	**1**	**1**	**25**
Tredia Ramgarh	**Aonla**	**1**	**-**	**1**	**1**
Rabta	**Harad Behra, Jamun, Aonla**	**1**	**13**	**14**	**175**
Mathwar*	**Harad, Aonla Behra, Jamun**	**12**	**43**	**55**	**600**
Total		**32**	**98**	**130**	**1351**
2018-19					
Mathwar Chawa, Garota, Manwal	**Aonla Harad Behra Jamun, Lasuda Reetha**	**25**	**64**	**89**	**1068**
KVK Smba, KVK Reasi,					**125**
Total		**25**	**64**	**89**	**1193**
		2019			
Reasi	**Aonla Harad Behra, Lesuda**	**-**	**02**	**-**	**50**
Total		**-**	**02**	**-**	**50**
Grand Total		**82**	**164**	**308**	**3659**

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.

Refresher workshop cum interaction (Farmers and Industry/stakeholders) for farmers and farm women form different blocks of Jammu and Samba districts engaged in the cultivation of medicinal trees, Scientists in the field of Agril Extension, Agroforestry, Agricultural Marketing, Plant protection, Food processing, Horticulture from SKUAST-Jammu, stakeholders form Industry (Dabur), Horticulture Department Jammu, State Medicinal Plant Board (J&K), NABARD, JKEDI, Horticulture Planning and Marketing Jammu conducted in order to developing a market channel at Jammu. Progressive farmers were

Out Come &Economic impact: 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 has ventured 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 medicinal treecrops among the rural masses.
- Side veneer grafting performed during the during last week of March and continued upto 1st week of April in Harad, Behra with capping of poly caps for maintaining humidity and hardening of grafts in the green house should be adopted trees for successful production of superior germplasm
- Results on OFT's revealed that survival percentage ranged between 66.5 per cent to 72 per cent for Harad, 76 percent for Behra and 69-73 percent for different clones of Aonla.
- 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.
- Linkages between department namely SKUAST-Jammu, Agriculture marketing and planning, Horticulture, State medicinal plant board J&K, Forest and Dabur Pvt ltd have also been developed during refresher workshop for the betterment of the farming community. Farmers have already developed market linkage for the sale of dried fruits of Aonla and Harad at Majeeth Mandi Amritsar during the exposure visit by KVK.

Collection And Marketing

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.

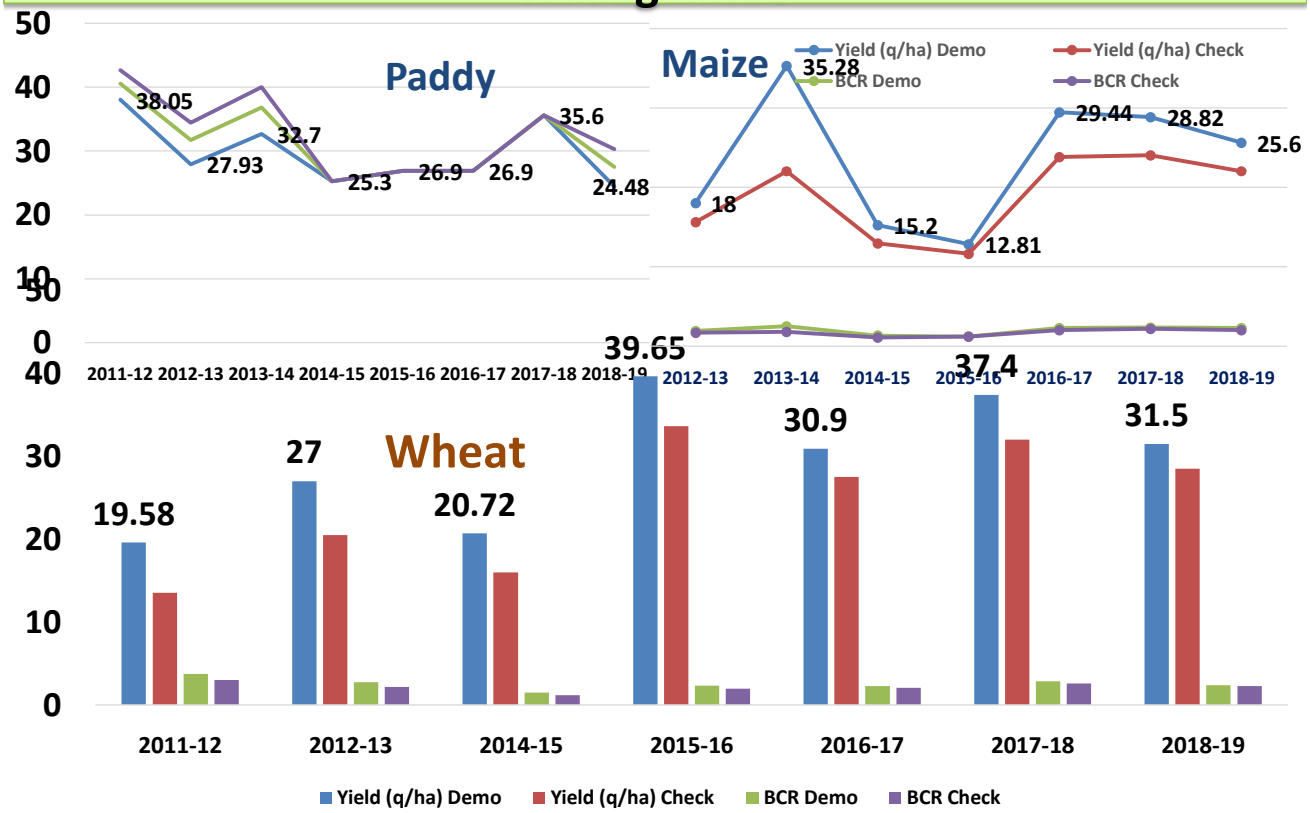
- Similarly during this period Mushroom cultivation has been popularized in near and far villages of the district by organising short training courses ranging from 2-5 days and also one week to 35 days as per farmer's needs. 35 to 44% participating farmers have shown keen interest in adopting mushroom 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.

Impact of performance of varieties/technologies/products through FLDs



- 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 activities through front line demonstrations and trainings on rearing of cultivable fish species, ornamental fishes and value addition after harvesting of Fishes. Many farmers launched their own enterprises in value addition of fishes and earning handsome income. Fish production of Jammu district is rising every year due to awareness and adoption.

10.4 Impact of ASCI training Programmes

Krishi Vigyan Kendra, Jammu has been assigned three 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, Mushroom Cultivation and Aquaculture Worker.

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
3	Aquaculture Worker	20	200hrs	25	5

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. Aquaculture Worker trainees were made familiar with different culture techniques of fish farming and trained in handling water quality, pond preparation, feed management etc..

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 May2020	DAC	180000.00 110000.00
Unmnat Bharat Abhiyan	2018-2020	IIT	175000.00
PCRA	DEC 2020	PCRA Chandigarh	20000.00

11.3 Details of linkage with ATMA

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

S. No.	Programme	Nature of linkage	Remarks
1	Training Progrmme	Recourse Person	
	Kisan mela	Coordination	

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**	**Farmers Scientist interaction Action Plan meeting**	2	-	
02	**Research projects**				
03	**Training programmes**	2	-	2	
04	**Demonstrations**				
05	**Extension Programmes**				
	Kisan Mela	Kisan Pakhwada Farmers Scientist interaction	2	-	-
	Technology Week				
	Exposure visit				
	Exhibition	2	2	-	
	Soil health camps				
	Animal Health Campaigns				
	FFS				
06	**Publications**				

S. No.	Programme	Particulars	No. of programmes attended by KVK staff	No. of programmes Organized by KVK	Other remarks (if any)
	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:

S. No.	Programme	Nature of linkage	Remarks
1	**Pradhan Mantri Matsya Sampda Yojna**	**Member of District Level Committee**	

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**	**20.37**	**10000.0**	**16296**	**Functional**
2	**Fish Pond**	**2012**	**0.02**	**Mixed**	**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 2010	28th Nov 2020	3.6	B-370	Foundation	58.0 q	112565	Awaited	With Megaseed Projects SKUAST-J
Wheat	26th Nov 2020 2-17th		8.0	HD 3086	Foundation	170.0 q	109523		

	Dec 2020								
Pulses	-	-	-	-	-	-	-	-	-
Grams	-	-	-	-	-	-	-	-	-
Oilseeds	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
Fibers	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
Floriculture	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
Vegetables	-	-	-	-	-	-	-	-	-
								-	-
Others (specify)									
Fodder	13th June 2020	4th Aug 2020	2.0	SSG	Fodder	-	49000.00		

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**	**20.37**	**10000.0**	**16296**	

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 2200-21 (rs in Lakhs)

SL. No	Budget Head	Other than SCSP	Expenditure	TSP	SCSP	Expenditure	Balance
	Grant for creation of Capital Assets						
1	Works						
	A. Land Building						
	B. Building						
	(i) Office Building						
	(ii) Residential building						
	(iii) Minor Works						
2	Equipment's	0.00		0.00	**9.25**	**9.12**	**0.13**
3	Information Technology	0.00		0.00	0.00		
4	Library Books and Journals						
5	Vehicle & Vessels	0.00		0.00	0.00		
6	Farm Implements/Small Implements	0.00			**2.00**	**2.00**	**Nil**
7	Furniture and fixtures						
8	Others						
	Total-CAPITAL (Grants for creation of Capital Assets)	0.00		0.00	**11.25**	**11.12**	**0.13**
1.	Grant in Aid Salary						
a	Pay and allowances	181.61	**181.61**				
b	Total Pay and Allowances						
c	Grant in Aid-General						
2	Travelling allowance (Domestic)	0.20	0.03				0.17
a	Travelling allowance (Foreign)						
	Total TA						
3	A. Research Expenses	1.00	1.00	-			Nil
	B. Operational Expenses	1.00	1.00	-			Nil

	C. Infrastructure	1.00	0.80				0.20
	D. Communication	0.40	0.25				0.15
	E. Other	1.00	1.00				Nil
	F. Publicity and Exhibitions						
	G. Guest house maintenance						
	H. Other Misc	3.00	2.85				0.15
	I. Repair and maintenance						
	(i) Equipment, Vehicle & Others	0.60	0.49				0.11
	(ii) Office building	3.00	3.00				Nil
	(iii) Residential building				**20.31**	**20.31**	Nil
	REVOLVING FUND	**0.00**		**0.00**	**0.00**	**0.00**	
	Total Recurring contingence	**11.00**					
	Grant in Aid-General (RC+TA)	**11.20**					
	Grant Total (capital+Salary+General)	**192.80**	**192.03**	**0.00**	**31.56**	**31.43**	**0.91**

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 2020 (April-December)

Name of the staff	*Designation*	*Title of the training programme*	*Institute where attended*	*Date*
Dr Punit Choudhary Dr Ravneet Kour Dr Sheetal Badyal Dr Prem Kumar	Sr Scientist Scientist Scientist Scientist	Webinar on Farmers Producer Organisation towards doubling farmers income-co organisers	Co-Organizer	29-07-2020
		Agrivision Punjab-Role of Agri entrepreneur in AtamNirbhar Bharat	Participated	13-09-20
		Role of Balanced Nutrition Mitigating Malnutrition	Participated	26-09-20
		National Level consultation on – POP od BPKP-Natural Farming	Participated	29-09-20
		International Webinar on Bamboo Bioengineering towards Developing-Entrepreneurship and conserving Natural Resource	Participated	24-09-20

15. Details of Important Programs/Events conducted in KVKs during 2020 (April-December)

Sl.No	Date	Title	Discipline	Duration (days)	Sponsoring Agency	Amount of fund received (Rs.)
1	19-12-2020	Farmers fair cum Kisan Mela on the eve of Launch of Vice Chancellor to Village Programme at SAMKA Jammu		1		80000.00

Kisan Mela organised by KVK Jammu

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

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
Evaluation and standardization of agro-techniques of important medicinal plants of Jammu subtropics	RCFC NMPB-II	2018-20	2 years	2.67	Dr Punit Choudhary (Co-PI)
Augmenting livelihood opportunities for Scheduled Caste Community of Bishnah Block of Jammu District through agro-technological interventions submitted under Scheduled Caste Sub Plan (SC-SP)of Agricultural Education Division, ICAR, New Delhi	Agricultural Education Division, ICAR, New Delh	2020-23	3 years	294.0	Dr Punit Choudhary CoPI's Dr Ravneet Kour Dr Sheetal Badyal Dr Prem Kumar

Annexure-A

MINUTES OF 18th SCIENTIFIC ADVISORY COMMITTEE MEETINGOFKRISHI VIGYAN KENDRA, JAMMU

Minutes of 18th Scientific Advisory Committee Meeting of KVK Jammu

Date: October 21st 2020 Venue: KVK-Jammu

The 18th Scientific Advisory Committee (SAC) meeting of Krishi Vigyan Kendra, Jammu was held in theConference Hall of FVSc & AH R.S. Pura on 21st October, 2020 under the Chairmanship of Prof. J.P. Sharma, Hon'ble Vice Chancellor, SKUAST Jammu. The meeting was also attended by**Dr Rajbir Singh,**Director ATARI Zone-1, ICAR, PAU Ludhiana through virtual mode, **Dr S.K.Gupta**, **Director Extension SKUAST Jammu**,**Dr M.S. Bhadwal, Dean F.V.Sc. & A.H SKUAST-J**, Scientists from KVK Jammu, Heads of Divisions SKUAST- Jammu, District officers from line departments and progressive farmers **(Annexure -1).**

At the outset, **Dr S.K.Gupta, Director Extension SKUAST Jammu** extended warm welcome to the Chairman and participants of the meeting followed by formal introduction of the participants.

Dr Punit Choudhary Sr. Scientist & Head KVK Jammu presented the annual progress report w.e.f April 2019 to Sept. 2020 and proposed action plan of KVK Jammu for the year 2020-21 as per the agenda items.

Agenda Item I: Confirmation of proceedings of 17th SAC Meeting of KVK Jammu

The house confirmed the proceedings of 17th SAC meeting of KVK Jammu.

Agenda Item II: Action taken on the recommendations of 17th SAC Meeting

Senior Scientist and Head discussed the action taken report on the recommendations of 17th SAC Meeting.

Agenda Item III: Activities taken up by KVK Jammu

Senior Scientist and Head KVK Jammu presented the activities conducted and Expenditure incurred by KVK Jammu w.e.f April 2019 to Sept. 2020 before the house.

Agenda Item IV: Proposed Action Plan 2020-21 of KVK Jammu

Senior Scientist and Head presented the proposed Action Plan for 2020-21. The suggestions/recommendations given by the Hon'ble Chairman and members are detailed below;

Suggestions/recommendations given by members

Joint Director, Animal Husbandry Jammu

- Addition of farmers training programmes in the action plan on value addition / dairy products of milk so that farmers may get maximum benefits of their production.

(Action by; Dean, F.V.Sc & A.H. SKUAST-Jammu, Deptt. of Animal Husbandry Jammu and KVK Jammu)

Chief Agriculture officer Jammu

- Inclusion of training programmes on protected cultivation and quality planting material**(Action by; Division of Vegetable Science and Floriculture SKUAST-Jammu, KVK Jammu and Deptt. of Agriculture, Jammu)**

- Promotion of agri-horti based farming system in areas affected by monkey menace. **(Action by; Division of Agroforestry, Division of Horticulture, SKUAST-J and KVK Jammu)**

- Recommendation for some area specific farm machines from SKUAST-J
  (Action by; Division of Agricultural engineering, SKUAST-J)

- Suggest viable alternative variety for HD 2967 for Jammu district

(Action by; Division of Agronomy, SKUAST-J, KVK Jammu)

DDM, NABARD Jammu

- Suggested for preparation of DPR's for bankable IFS models for farmers of Jammu

(Action by; Division of Ag. Economics and Agri business Management, Farming System Research, SKUAST-J and KVK Jammu)

Joint Director Sheep husbandry Jammu

- Stressed for agroclimatic suitable breeds for fulfilling the demand of mutton in the union territory of J and K.

(Action by; Dean F.V.Sc. & A.H, SKUAST-J)

- Demanded for rapid diagnostic kits for far flung areas for diagnosis of diseases of animals.

(Action by; Dean, F.V.Sc. & A.H, SKUAST-J)

Horticultural Planning & Marketing Officer, Jammu

Focussed on inclusion of some training programmes on grading and marketing of agricultural produce.
Raised attention on non availability of land along the highways for direct marketing of agricultural produce.

(Action by; Division of Food Science and Technology, Division of Ag. Economics and Agri buisness, SKUAST-J, Deptt of Agriculture, Jammu and KVK Jammu)

Progressive farmers

- Mr. Vinod Kumar raised concern over non availability of good quality spawn in Jammu district.

(Action by; Division of Plant Pathology, SKUAST-J and Deptt. of Agriculture, Jammu)

- Mr. Swarn lal raised concern over certification of organic Basmati-370.

(Action by; Deptt. of Agriculture, Jammu)

- Stressed for focus on sheep farming and allocation of govt. schemes for sheep farming in the border villages of district Jammu.

(**Action by; Deptt. of Sheep husbandry Jammu, F.V.Sc. &A.H, SKUAST-J and KVK Jammu)**

Head of Division, Vet. Microbiology, F.V.Sc.& A.H SKUAST-J

- Revise or increase the number of clinical veterinary camps in the district.

(Action by; KVK Jammu and F.V.Sc. & A.H SKUAST-J)

Suggestions/recommendations by **Dean, F.V.Sc &A.H. SKUAST-Jammu**

- Proposed to conduct inservice training programme on artificial insemination and silage making as per request of Chief Animal Husbandry Officer Jammu.

(Action by; Deptt. of Animal Husbandry Jammu and F.V.Sc. & A.H SKUAST-J)

- Informed the house that information on various Govt. schemes has been documented by Faculty of Veterinary sciences and shall be ready in few days for dissemination among the farmers. He further informed that sub clinical diagnostic kits for mastitis has also been developed by F.V.Sc.

(Action by; Deptt. of Animal husbandry Jammu, Dean F.V.Sc. & A.H SKUAST-J and KVK Jammu)

Suggestions/recommendations by **Dr. Rajbir Singh, Director ATARI, Zone-1, Ludhiana**

- More activities on Animal Husbandry should be included in the action plan.
- Include improved variety of fodder crops in FLD's and OFT's for popularity
- Commodity based village should be adopted like mushroom, fisheries, poultry and honeybee.
- Trainings on ICT tool should be given to the scientists of KVK Jammu.
- University/ICAR varieties may be popularized under OFT and FLD Programmes.

(Action by; KVK Jammu)

Suggestions/recommendations by **Prof. J.P. Sharma, Hon'ble Vice Chancellor SKUAST-J and Chairman, SAC meeting**

- Stressed on adoption of value addition, processing and branding of agricultural produce to minimize the post harvest losses and to double farmer's income.

- Conductance of regular training programmes on processing and value addition for the farmers of Jammu.

(Action by; Division of Food Science and Technology SKUAST-Jammu, Division of Agril. Economics and Agribusiness management, SKUAST-J and KVK Jammu)

- Focus should be on participatory seed production programme.

(Action by; Nodal Officer Mega Seed Project (ICAR) SKUAST-J, Deptt. of Agriculture Jammu and KVK Jammu)

- Conduct of training programmes on value addition of milk.

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(Action by; Dean F.V.Sc. & A.H. SKUAST-J& KVK Jammu)

- Training programmes on grading, packaging and marketing of agriculture produce.

(Action by; Division of Food Science and Technology SKUAST-Jammu, Division of Agril Economics & agribusiness Management Jammu, and KVK Jammu)

- Adoption of conservation and climate smart agriculture, vermicomposting & fodder production.

(Action by; KVK Jammu)

- Focused for popularization/dissemination of govt. schemes among the beneficiaries.

(Action by; Directorate of Extension, SKUAST-J)

- KVK Jammu and allied departments should work in coordination for the benefit of farmers.

(Action by; Directorate of Extension, SKUAST-J, KVK Jammu and All Departments)

Dr. Sheetal Badyal, Scientist Home Science, conducted the proceedings of the meeting whereas the minutes of meeting were recorded by Dr Ravneet Kour (Scientist Horticulture). The meeting ended with vote of thanks by Dr Prem Kumar, Scientist Fisheries of KVK Jammu

List of participants of 18th Scientific Advisory Committee (SAC) Meeting of Krishi Vigyan Kendra, Jammu, R.S. Pura held on 21st October, 2020

S.No.	Name of Officer/Official/Farmer	Designation	Contact No.
1	Prof. J. P. Sharma	Vice-Chancellor, SKUAST-Jammu	
2	Dr. Rajbir Singh	Director ATARI, Zone-1 ICAR,PAU, Ludhiana	8587956728
3	Dr. S.K. Gupta	Director Extension SKUAST-Jammu	9419124146
4	Dr. M.S. Badwal	Dean,F.V.Sc. &AH, SKUAST-J R.S. Pura	9419136239
5	Dr. D.S. Bindra	Joint Director Animal Husbandry Deptt.	9419203063
6	S. Arvinder Singh Reen	Chief Agriculture. Officer, Jammu	9419131201
7	Dr. Tara Chand	Joint Director(Farm) Sheep Husbandry, Jammu	9419131950
8	Sh. Priya Ranjan	Distt. Dev. Officer, NABARD,Jammu	6006110575
9	Sh. Jagmohan Singh	Fisheries Extn. Officer Jammu	9419138742
10	Dr. Anju Bhat	Prof. & Head FST, SKUAST-Jammu	9419236484
11	Dr. H.R. Bhardwaj	Prof. &Head VSR. F.V.Sc. & AH,R.S. Pura	9419313766
12	Dr. V.S. Wazir	Prof. & Head Vety.Microbiology, F.V.Sc. & AH,R.S.Pura	9419189356
13	Dr. R.K. Sharma	Prof. & Head Animal Nutrition, F.V.Sc. & AH,R.S. Pura	9419160249

14	Dr. Jyoti Kachroo	Prof. & Head AEABH	9419241713
15	Dr. Amrish Vaid	Nodal officer(Seed) MSP,SKUAST-J	9419151649
16	Dr Amit Jasrotia	Prof. & Head Division of Fruit Science	9419181572
17	Dr. Punit Choudhary	Senior Scientist & Head KVK-Jammu	7889710484
18	Dr. Ravneet Kour	SMS(Horticulture) KVK-Jammu	9796423952
19	Dr. Sheetal Badyal	SMS(Home Science) KVK-Jammu	9149501131
20	Dr. Prem Kumar	SMS(Fisheries) KVK-Jammu	9419200152
21	Dr. Ashwani Kumar Sharma	Assoc. Director Extn. DOE,SKUAST-J Chatha	9419145510
22	Dr. Ashwani Jojra	SDAO, Marh, Agri. Deptt Jammu	9419129299
23	Dr. Sahil Pangotra	Technical Officer Sheep Husbandry Deptt.Jammu	9596247077
24	Sh. Sisar Khajuria	AEE Irrigation R S Pura	9419190211
25	Sh.Pradeep Singh	Range officer Social Forestry Jammu	9682112924
26	Sh.Suresh Raina	Lead Distt. Manager SBI, Jammu	9419112325
27	Sh. Priya Parchar	Area Mktg Officer Hort.(Planning & Mktg)	9419206349
28	Sh. Aneyatullah	Asstt. Director(Marketing)	9596998224
29	Sh. N. P. Singh	SDAO, R.S. Pura Agri. Deptt.	8803561559
30	Sh. Ram Gopal Sharma	ASCO, Jammu Agri. Drptt.	9419150639
31	Smt. Sunita Devi	Progressive farm Women, Kaloen	9906410619
32	Sh. Vinod Kumar	Mushroom Grower, Kaloen	9906107541
33	Sh. Swarn Lal	Farmer Organic Basmati Suchetgarh	8082306960
34	S. Iqbal Singh	Fisheries Chak Mohd. Yar	8803142497
35	Smt. Neelam Kumari	Rural Craft Farm women	9469077093
36	Sh. Raju Gupta	Prog.Asstt.(Farm) KVK-Jammu	9906711697
37	Er. Ashish Katoch	Comp. Programmer KVK-Jammu	9419141593

38	S. Satbir Singh	Progg. Asstt.(Trg.)	9149464891
39	Mrs. Poonam Abrol	Prog. Asstt.(Trg..) KVK-Jammu	9419206862
40	Sh. Ashok Kumar	Head Assistant KVK-Jammu	9419861679

ANNEXURE "B"

S No	Date	Client	Topic	Discipline	Thematic Area	Venue	Other Participants			SC/ST Participants			Total Participants		
							M	F	T	M	F	T	M	F	T
1.	12-Jan-20	Farmer	Management of parasitic diseases in animals	Animal Science	AS-Disease Management	Kapoorpur	0	0	**0**	6	16	**22**	6	16	22
2.	29-Jan-20	Farmer	Formation & management of SHGs	Extn. Edu.	Extn-Formation & management of SHGs	Kaloen	14	0	**14**	5	8	**13**	19	8	27
3.	24-Feb-20	Farmer	Cultivation & value addition of Oyster Mushroom (Dhingri)	Home Science	HS-Others	On Campus	5	0	**5**	30	5	**35**	35	5	40
4.	03-Jun-20	Farmer	Composite Fish culture	Fisheries	F-Composite fish culture	Gho Manhasa	10	1	**11**	0	0	**0**	10	1	11
5.	08-Jun-20	Farmer	Processing of cereals & pulses in wake of COVID for nutritional adequacy	Home Science	HS-Design and development of low/minimum cost diet	Kana Chargal, Dansal	14	3	**17**	0	0	**0**	14	3	17
6.	12-Jun-20	Farmer	Training and demonstration of direct seeded rice (DSR) technology	Crop Production	Cropping Systems	On Campus	13	3	**16**	0	0	**0**	13	3	16
7.	17-Jun-20	Farmer	Nursery Management in vegetable crops	Horticulture	Nursery Raising	Kattal Batal	5	10	**15**	0	0	**0**	5	10	15
8.	01-Jul-20	Farmer	Scientific cultivation of Mash	Crop Production	CP-Resource Conservation Technologies	Assarwan	5	0	**5**	7	5	**12**	12	5	17
9.	02-Jul-20	Farmer	Scientific cultivation of Marigold	Horticulture	Propagation techniques of Ornamental Plants	Jandiyal	4	1	**5**	11	8	**19**	15	9	24
10.	03-Jul-20	Farmer	Nursery management in vegetable crops	Horticulture	Nursery Raising	Kattal Batal	0	0	**0**	10	2	**12**	10	2	12
11.	07-Jul-20	Farmer	Scientific cultivation of Til	Crop Production	CP-Resource Conservation Technologies	Kanna Chargal	18	3	**21**	1	1	**2**	19	4	23
12.	24-Jul-20	Farmer	Scientific cultivation of Marigold	Horticulture	Propagation techniques of Ornamental Plants	Jandiyal	10	1	**11**	7	2	**9**	17	3	20
13.	07-Aug-20	Farmer	Kitchen gardening for ensuring nutritional adequecy of families	Home Science	HS-Design and development of low/minimum cost	Panj Peer	0	0	**0**	0	25	**25**	0	25	25

S No	Date	Client	Topic	Discipline	Thematic Area	Venue	Other Participants			SC/ST Participants			Total Participants		
					diet										
14.	09-Aug-20	Farmer	Awareness cum training prog on PM Kisan schemes	Extn. Edu.	Extn-Entrepreneurial development of farmers/youths	Bala Chak	0	0	**0**	6	15	**21**	6	15	21
15.	10-Aug-20	Farmer	Empowering farm women through agro based entrepreneur activities	Home Science	Women Empowerment	Bala Chak	0	0	**0**	0	14	**14**	0	14	14
16.	11-Aug-20	Farmer	Scientific cultivation of rice	Crop Production	CP-Resource Conservation Technologies	Chorli, Bishnah	14	1	**15**	2	0	**2**	16	1	17
17.	12-Aug-20	Farmer	Cultivation of medicinal trees (Jamun, Harad & Aonla) for higher income	Agro Forestry	AF-Production technologies	Jandiyal	2	1	**3**	12	1	**13**	14	2	16
18.	13-Aug-20	Farmer	Scientific cultivation of Maize	Crop Production	CP-Resource Conservation Technologies	Harssawan	1	0	**1**	6	8	**14**	7	8	15
19.	14-Aug-20	Farmer	Processing of seasonal fruits & vegetables	Home Science	HS-Value addition	Premachak	0	0	**0**	0	21	**21**	0	21	21
20.	01-Sep-20	Farmer	Cultivation of medicinal trees for higher income	Agro Forestry	AF-Production technologies	Jandiyal lower	0	0	**0**	14	1	**15**	14	1	15
21.	02-Sep-20	Farmer	Disease management in summer vegetables	Horticulture	Others	Jandiyal	1	0	**1**	13	0	**13**	14	0	14
22.	03-Sep-20	Farmer	Role of fruits and vegetables in boosting immunity of body	Home Science	HS-Design and development of low/minimum cost diet	Kattal Batal	1	15	**16**	0	0	**0**	1	15	16
23.	04-Sep-20	Farmer	Carp fry & fingerling rearing	Fisheries	F-Carp fry and fingerling rearing	On Campus	6	0	**6**	5	0	**5**	11	0	11
24.	05-Sep-20	Farmer	Carp breeding techniques	Fisheries	F-Carp breeding and hatchery management	Gho Manhasa	17	1	**18**	2	0	**2**	19	1	20
25.	08-Sep-20	Farmer	Onsite production of organic inputs	Agro Forestry	AF-Production technologies	On Campus	8	0	**8**	4	0	**4**	12	0	12
26.	09-Sep-20	Farmer	Culture of Ornamental fishes	Fisheries	F-Breeding and culture of ornamental fishes	On Campus	6	0	**6**	2	0	**2**	8	0	8

S No	Date	Client	Topic	Discipline	Thematic Area	Venue	Other Participants			SC/ST Participants			Total Participants		
27.	24-Sep-20	Farmer	Drudgery reducing techniques for household and agricultural operations	Home Science	HS-Location specific drudgery reduction technologies	Prema Chak	0	0	**0**	0	23	**23**	0	23	23
28.	25-Sep-20	Farmer	Processing & preservation of white button mushroom	Home Science	HS-Value addition	Kana Chargal	5	8	**13**	0	0	**0**	5	8	13
29.	06-Oct-20	Farmer	Scientific cultivation of Cole crops	Horticulture	Others	Badyal Brahmna	16	1	**17**	0	0	**0**	16	1	17
30.	08-Oct-20	Farmer	Insect & disease management in Marigold crops	Horticulture	Nursery Raising	Jandiyal	0	0	**0**	22	12	**34**	22	12	34
31.	12-Oct-20	Farmer	Scientific cultivation of Rabi fodder	Agro Forestry	AF-Production technologies	Kotla, Bishnah	0	0	**0**	19	3	**22**	19	3	22
32.	16-Oct-20	Farmer	Feed & Fodder Management in milching Animals & their waste management	Animal Science	AS-Feed & fodder technologies	Abdulian	16	2	**18**	0	0	**0**	16	2	18
33.	17-Oct-20	Farmer	Scientific cultivation of Oilseed crops	Crop Production	CP-Resource Conservation Technologies	Simbli Morh, Batera	12	2	**14**	7	0	**7**	19	2	21
34.	19-Oct-20	Farmer	Winter care of fishes & its feeding	Fisheries	F-Carp fry and fingerling rearing	Chak Mohd	14	0	**14**	2	0	**2**	16	0	16
35.	28-Oct-20	Farmer	Processing & value addtion of oyster	Home Science	HS-Value addition	On Campus	8	1	**9**	3	1	**4**	11	2	13
36.	30-Oct-20	Farmer	Cultivation of root crops	Horticulture	Others	Chak Rakwal	2	13	**15**	6	9	**15**	8	22	30
37.	01-Nov-20	Farmer	Processing of white button mushroom	Home Science	HS-Processing & cooking	On Campus	5	0	**5**	2	1	**3**	7	1	8
38.	02-Nov-20	Farmer	Petroleum Conservation	Extn. Edu.	Extn-Others	On Campus	13	1	**14**	12	5	**17**	25	6	31
39.	04-Nov-20	Farmer	Integrated Fish Farming	Fisheries	F-Integrated fish farming	On Campus	6	0	**6**	13	0	**13**	19	0	19
40.	05-Nov-20	Farmer	Scientific cultivation of Chick Pea	Crop Production	CP-Resource Conservation Technologies	Ranjan, Kot Bhalwal	0	0	**0**	20	1	**21**	20	1	21
41.	11-Nov-20	Farmer	Cultivation of vegetable root crops	Horticulture	Others	Assarwan	0	0	**0**	12	4	**16**	12	4	16
42.	12-Nov-20	Farmer	Scientific cultivation of Wheat	Crop Production	CP-Resource Conservation Technologies	Assarwan	2	0	**2**	10	2	**12**	12	2	14

S No	Date	Client	Topic	Discipline	Thematic Area	Venue	Other Participants			SC/ST Participants			Total Participants		
43.	13-Nov-20	Farmer	Scientific cultivation of Chick Pea	Crop Production	CP-Resource Conservation Technologies	Gharkhal	5	2	**7**	22	0	**22**	27	2	29
44.	17-Nov-20	Farmer	Integrated Fish Farming	Fisheries	F-Integrated fish farming	On Campus	0	0	**0**	13	0	**13**	13	0	13
45.	21-Nov-20	Farmer	Fish Feed Management of fry & fingerlings	Fisheries	F-Carp fry and fingerling rearing	Gura Manhasa	13	2	**15**	1	0	**1**	14	2	16
46.	05-Dec-20	Farmer	Awareness Program- PCRA	Extn. Edu.	Extn-Entrepreneurial development of farmers/youths	Kattal Batal	21	13	**34**	0	0	**0**	21	13	34
47.	07-Dec-20	Farmer	Vermicompost Production	Agro Forestry	AF-Production technologies	Nagrota	1	20	**21**	0	0	**0**	1	20	21
48.	23-Dec-20	Farmer	Awareness Program- PCRA	Extn. Edu.	Extn-Entrepreneurial development of farmers/youths	Jindermelu	3	0	**3**	27	4	**31**	30	4	34

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-01		2005	SKUAST-J	
7.	Basmati 564	Paddy	2014	SKUAST-J	
8.	Jammu Basmati		2017	SKUAST-J	
9.	Napier Hybrid	Perennial Grasses	2000	IGFRI	
10	SJPC-1	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 DKC4194	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	-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	-On farm trails - Demonstrations - Trainings - Diagnostic visits Field days	S. no 1, 2 & 3 of the Inventory of latest technology available

		management . 6. Seed borne diseases	time and in proper 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	1) Non adoption/ Poo adoption of	1) Popularization of Hybrids /Composite	Single component FLD to demonstrate HYV's	S no 10 and 13 of the

Maize	of Maize under rainfedareas of distt. Jammu	hybrids/ Composite 2) Imbalanced fertilizer application 3) Improper Weed management 4) Insect pest infestation	of Maize Convincing farmer to use balanced fertilizer doses Adoption of proper weed management Practices. Disease and pest management through IPM.	Training and FLD programme	Inventory of 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.