ANNUAL REPORT 2022 (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.org

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	7889710484	9419142813	kvkjammu@gmail.com

1.4. Year of sanction: 1992

1.5. Staff Position (as on 31st Dec 2022)

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
1	Vacant							kvkjammu@gmail.com	
2	Senior Scientist (SMS)	Dr. Punit Choudhary	46	Ph.D Forestry	131400-217100 139400 (Level 13 A)	Oct 2014	Temp	9419142813 pmdchoudhary@gmail.com	Gen
3	Subject Matter Specialist	Dr Ravneet Kour	48	Ph D Vegetable Sciences	56100-177500 89900 (Level 11)	March 2019	Temp	9796423952 kourravneet24@yahoo.com	Gen
4	Subject Matter Specialist	Dr Sheetal Badyal	48	Ph.D Home Science	79800-211500 98200 (Level 12)	March 2016	Temp	9419211529 badyalsheeetal10@gmail.com	Gen
5	Subject Matter Specialist	Dr Prem Kumar	46	Ph.D Fisheries	68900-205500 75300 (Level 11)	May 2010	Temp	9419200152 pk_singh1@yahoo.com	Gen
6	Subject Matter Specialist	Dr. Muneeshwar Sharma	45	Ph.D Plant Pathology	68900-205500 75300 (Level 11)	June 2021	Temp	9906235705 muneeshwarsharma@gmail.com	Gen
7	Subject Matter Specialist	Dr Amitesh Sharma	41	Ph.D Plant Breeding	68900-205500 71000 (Level 11)	June, 2020	Temp	7889464623 amiteshskuast@gmail.com	Gen
8	Computer Programmer	Er. Ashish Katoch	49	M. Tech	35400-112400 60400 (Level 6)	Dec.2003	Temp	9419141593 katochashish@gmail.com	Gen
9	Programme Assistant (Farm)	Dr. Raju Gupta	44	Ph.D Agronomy	35400-112400 47600 (Level 6)	Aug. 2008	Temp	9906711697	Gen

10	Programme Assistant (Trg)	Ms. Poonam Abrol	36	M.Sc. H. Science	35400-112400 42300 (Level 6)	June 2012	Temp	7889949440	Gen
11	Accountant / Superintendent	vacant							
12	Stenographer	Sh. Sahil Talgotra	34	B.Sc.	35400-112400 42300 (Level 6)	Jan 2022	Temp	talgotrasahil@gmail.com 9419223538	Gen
13	Driver	Sh. Manohar Lal	50	Matric	25800-81100 27900 (Level 4)	Sept. 2015	Temp	9906069720	Gen
14	Driver	Sh Vijay Kumar	40	Matric	25800-81100 27900 (Level 4)	March 2019	Temp	9796421118	Gen
15	Supporting staff	Sh. Satnam Singh	44	Under Matric	14800-47100 24800 (Level SL-1)	April 2005	Temp	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)	Exp. (Rs.)	Starting Date	Plinth area	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	Dec. 1995	144	06.63	-	-	Complete
5	Fencing	ICAR			6.95			Complete

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	270000	New Vehicle Sanction
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	27-04-2000	5,500.00	Working
Overhead Projector	03-08-1995	7,425.00	Working
Slide Projector	25-05-1996	12,327.00	Working
PA System (Ahuja)	09-06-1999	19,788.00	Working
Blue Star AC (2 Nos.)	12-01-1999	43116.00	Working
Photo Copier	26-03-2002	66015.00	Working
Computer with UPS & Printer	21-02-2005	69429.00	Working
OTG	17-03-2005	5695.00	Working
Sony Handy Camera	31-03-2005	33940.00	Not Working
Printer HP 5160	29-03-2005	6200.00	Working
Genset	18-08-2004	149200	Working
Panasonic KX-FT-903	05-09-2005	10500	Working
Aqua Guard	30-09-2005	8490	Not Working
LCD	29-05-2004	1,00,366	Working
UPS Uniline 1KVA (2 No.)	31-01-2007	9240	Working
Trolly for tractor	10-07-2007	72800	Working
Leveller	22-06-2005	8840	Working
Disc plough	22-06-2005	21500	Working
Tiller tyne	22-06-2005	15912	Working
Disc Harrow	22-06-2005	21000	Working
Seed-cum-fertilizer drill	12-03-2004	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	10-03-2020	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
Centrifugal Pump	28-01-2021	20349	Working
Brush Cutter	08-03-2021	23960	Working
Tractor Operated Boom Sprayer	22-03-2021	156000	Working
Mushroom Racks	23-03-2021	100832	Working
Spit AC 4 no	29-03-2021	149496	Working
Luminous battery	23-02-2021	15600	Working

Luminous inverter	12-02-2021	4983	Working
UPS (1 no's)	12-02-2021	2475	Working
Pulveriser SSW	10-03-2021	24996	Working
Microwave oven MC-28	11-03-2021	14940	Working
Pulveriser Semi-automatic	09-03-2021	24750	Working
Gas Stove	20-03-2021	18000	Working
Water purifier	19-03-2021	18797	Working
Viewsonic Projector	15-03-2021	46999	Working
Interactive panal LED	22-03-2021	138500	Working
Cabinet driers 16 trays SS 2 no's	19-03-2021	170000	Working
Deep freezer	13-03-2021	24150	Working
Printer HL-L32	23-03-2021	20937	Working
Refrigerator LG 3 Star	22-03-2021	24980	Working
Food warmer	20-03-2021	24999	Working
Pedestral Fan (Five no)	24-04-2021	14975	Working
Vacuum Packing machine	21-03-2021	54870	Working
Continuous Band sealing machine	27-03-2021	38350	Working
Mixer grinder	25-03-2021	5450	Working
Gas stove	22-03-2021	6000	Working
Cooper/steel Bottle	22-03-2021	2140	Working
Pressure Cooker	07-03-2021	1900	Working
Coffee machine	26-03-2021	5400	Working
Super Seeder	29-03-2022	3,03,450	Working
Laser Land Leveler	29-03-2022	3,75,900	Working
Lawn Mover Electric	29-03-2022	15,184	Working
Mist Blower	29-03-2022	20,733	Working
Chain Saw Battery	29-03-2022	15,945	Working
Earth Auger	29-03-2022	35,405	Working
HP Laptop (3 Nos)	27-12-2022	1,79,994	Working

1.8.A Details of SAC meeting conducted on 23rd August 2022

List of participants is enclosed as Annexure A

Salient Recommendations Suggestions/recommendations given by members	Action taken
Chief Agriculture Officer Jammu • Inclusion of training programmes on hydroponics in the annual action plan	Training programmes on hydroponics have been conducted in District level Training March 2023. **(Action by: Division of plant Physiology, SKUAST-J and KVK Jammu)**
• Remedial measures to prevent damage of structures of protected cultivation facilities at various locations in Jammu.	During Inservice and farmers Training on protected cultivation of vegetables & exotic vegetables & remedial measures discussed. **(Action by: Division of Vegetable Science and Floriculture, Division of Agricultural Engineering, SKUAST-J and KVK Jammu)**
Chief Animal Husbandry Department Jammu • More no of awareness Camp for farmers on prevailing Lumpy disease in various panchayats in collaboration with Animal Husbandry Department.	Awareness programmes for lumpy disease were conducted & free medicines distributed along with department of Animal Husbandary and F.V.Sc. & A.H. , SKUAST-J in different villages of district Jammu (Village Qutab Nizam, Sai Kalan, Kattal Battal, Atham etc). A joint press conference was also organized at KVK Jammu Included in the training calander 2023-24 **(Action by: Dean, F.V.Sc & A.H., SKUAST-Jammu, Dept. of Animal Husbandry,Jammu and KVK Jammu)**
Divisional Forest Officer, Social Forestry, Jammu • Inclusion of training on clonal propagation of tree species and nursery stocks for field staff.	**(Action by: Division of Agro-forestry, SKUAST-J, ACHR, Udheywala, SKUAST-J, Social Forestry department, Jammu, and KVK Jammu)**
CDPO, Jammu • Awareness camp on Poshan Vatikas to villages and aganwani centers with help of CDPO,RS Pura. • Awareness on rice based weaning diets with nutritional value in RS Pura block as it is rice growing area in collaboration with CDPO office.	Nutritive recipes demonstration on weaning food from cereals particularly rice at Balachak-18 participants on 29/11/2022 Demonstration nutritive rice based weaning food conducetd at KVK Jammu on 27/04/2023 with 27 participants. Included in the training calander 2023-24 **(Action by: Div. of Food Science & Technology, SKUAST-J, CDPO and KVK Jammu)**
Sheep Husbandry Officer, Jammu • In service training program on intensive sheep husbandry units and scientific practices.	**(Action by: Dean, F.V.Sc. & A.H, SKUAST-J, SAMETI, SKUAST-J, Sheep husbandry Dept. and KVK Jammu)**
Department of Sericulture • Since there is 100% loss during spin stage at many farmers unit therefore training programme for farmers supported by sericulture dept. may be organized at Jajhar Kotli.	Included in the training calander under HADP **(Action by: Div. of Sericulture, Sericulture Dept. and KVK Jammu)**
Horticultural Planning & Marketing Officer, Jammu • Training on e-NAM for officers • Training focused on grading and marketing of agricultural and horticultural produce.	Training on e NAM and grading and marketing have been conducted under District and divisional level training calander.

	Frequest meeting and Workshops and training are being conducted with the coordination of KVK Jammu for FPO KVK will be coordinating with ACHR for timely supply of planting material. Training on Dairy development has been proposed under HADP KVK Jammu has established a sale counter at KVK and facilitate the University sale center for farmers produce. 61 entreprenurship development programmes have been formulated for the benefit of farming communit and contact classes will be arranged at KVK for practicals. Promotion of little & proso + Bajra through demonstration at KVK Farm on 10/05/2023 Awareness programme have been conducted in different villages of district Jammu during 2022-23 in calloboration with FVSc & AH SKUAST J **(Action by: Division of Food Science and Technology, Division of Ag. Economics and Agri business, SKUAST-J, Dept. of Agriculture, Jammu and KVK Jammu)**
NABARD Jammu • Sensitization workshop of various stakeholder on FPOs	(**Action by: NABARD and KVK Jammu)**
Kisan Board Members/Board Members/Progressive farmers • S. Tejinder Singh Wazir demanded for availability of quality strawberry panting material at ACHR for the farmers. He suggested Animal Husbandry Dept. to develop vaccination calendar by village and block wise for lumpy disease.	**(Action by: ACHR, Udeywala, SKUAST-J and Dept. of Animal husbandry, Jammu)**
• Sh. Kulbushan Khajuria demanded for training with complete practical aspects on handling and management of mulching animals for farmers.	**(Action by: Dean, F.V.Sc. & A.H, SKUAST-J, and KVK Jammu)**
• Smt. Neelam Kumari sought the help in marketing of their products.	**(Action by: KVK Jammu)**
Mrs Ruchita Rane, Policy Advocacy Research Center, Mumbai • She suggested developing different entrepreneurship development programmes and their implementation through implementing task force. • She requested to focuses on promotion of millets crops with special precautions of nutritional content of varieties with production potential.	Various awareness programme has been conducted and a joint press conference was also organized at KVK Jammu Awareness Programme on promotion of Millets for youth at KVK Jammu on 13/04/2023 -70 participants Lecture delivered on promotion of Millets for nutritional security at Pargwal on 25/05/2023 -19 participants Prevention of Malnutrition in women & children through dietary modification with millets introduction in diet 03/05/2023

	KVK Jammu has established a sale counter at KVK and facilitate the University sale center for farmers produce ar Chatha and R S Pura Under process A phamphlet on all govt schemes has been published and nine Jan abhiyan for popularization of various schemes conducted by KVK Jammu. **(Action by: SKUAST-J, Div. of Plant Breeding & Genetics and KVK Jammu)**
Suggestions/recommendations by Dean, F.V.Sc &A.H. SKUAST-Jammu • Suggested for timely action for early detection, early treatment of disease with available vaccination and medicines to avoid mortality from Lumpy disease.	**(Action by: Dept. of Animal Husbandry Jammu and F.V.Sc. & A.H, SKUAST-J)**
Suggestions/recommendations by Director Extension, SKUAST-Jammu • Presented Extension strategies and roadmap for Agriculture development in Jammu region and ready to accept suggestions for improvement.	A good coordination has been maintained by KVK Jammu with all line department. KVK Jammu successfully conducted Divisional level and District level training under HADP where in officers of all line department participated. Lectures On Various HADP and other schemes is being delivered regularily by KVK scientist during the programme.
Directions/Recommendations by Prof. J.P. Sharma, Hon'ble Vice Chancellor, • SKUAST-J and Chairman, Scientific Advisory Committee Directed KVK Jammu to organized more programme on lumpy disease	**(KVK Jammu)**
• Conductance of training programmes on diversification and include the millets crop to increase nutritional value of farmers food.	**(Action by: Division of Plant breeding, SKUAST-Jammu and KVK Jammu)**
• Conduct of training programmes on Natural farming and establish a small demonstration block at KVK Technology Park to display.	**(Action by: Organic Research Center, SKUAST-J and KVK Jammu)**
• Aware about the FPOs and motivate the farmers to join/establish it.	**(Action by: KVK Jammu)**
• Advised the farmers to bring their product for sale at Chatha campus of the University where 2 shops are allocated with one staff only for this purpose.	**(Action by: Farmers, SHGs, JLG, FPOs)**
• Study on Economic viability of hydroponics for growing fodder for feeding animals.	**(Action by: Division of Plant physiology and Div. of AEABM, SKUAST-J)**
• 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**
• Include the lecture on Govt. Schemes in each programme to aware the farmers about different schemes.	**Action by: All line departments, KVK Jammu**

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

2. DETAILS OF DISTRICT 2022

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.

S.no.	Agro Ecological situation	Blocks	Farming system
1	(AES-I)	R.S. Pura, Satwari, Miran Sahib, Suchetgarh, Arnia	Agri+Animal Husbandry
2	(AES-II)	Bishnah, Marh, Mandal and few parts of satwari	Agri+Vegetable+AH+Horti
3	(AES-III)	Akhnoor, Chowki Choura, Maira Mandrian, Bhalwal Brahmana, Khour, Pargwal, Samwan, Kharah Bali, Mathwar	Agri+Animal Husbandry
4	(AES-IV)	Dansal, Nagrota and part of Bhalwal	Agri+AH+Horti+Poultry

Block wise Area under Irrigation

S. No.	Name of Block	Irrigated Area (ha)		Rainfed (Area in ha)
		Gross irrigated Area	Net Irrigated Area	Un-irrigted or Rainfed Area
1	Ranbir singh Pura	12297	6937	-
2	Bishnah	11369	5700	-
3	Arnia	10295	5290	-
4	Miran Sahib	4520	2730	-
5	Suchetgarh	18834	9507	-
6	Marh	19806	11682	1284
7	Mandal	8251	4351	539
8	Bhalwal	890	757	4086
9	Mathwar	262	140	3425
10	Satwari	420	240	1064
11	Dansal	248	134	2465
12	Nagrota	205	111	3593
13	Akhnoor	560	360	3817
14	Maira Mandrian	128	84	2231
15	Bhalwal Brahmana	2986	1773	3022
16	Chowki Chowra	60	40	1816
17	Khour	5790	3845	2482
18	Samwan	904	580	653
19	Kharah Balli	24	12	2067
20	Pargwal	5118	3475	1861
	Total	**102937**	**57748**	**34404**

Details of crops and Cropping System in the District

Season	Crop	AES-I	AES-II	AES-III	AES-IV
		Cropping system	**Cropping system**	**Cropping system**	**Cropping system**
Kharif & Rabi	Paddy-Maize	Paddy-toria-wheat	Paddy-toria-wheat	Paddy-toria-wheat Maize-Potato-Wheat	Paddy-toria-wheat Maize-toria-Gobi sarson

2.3 Soil type/s

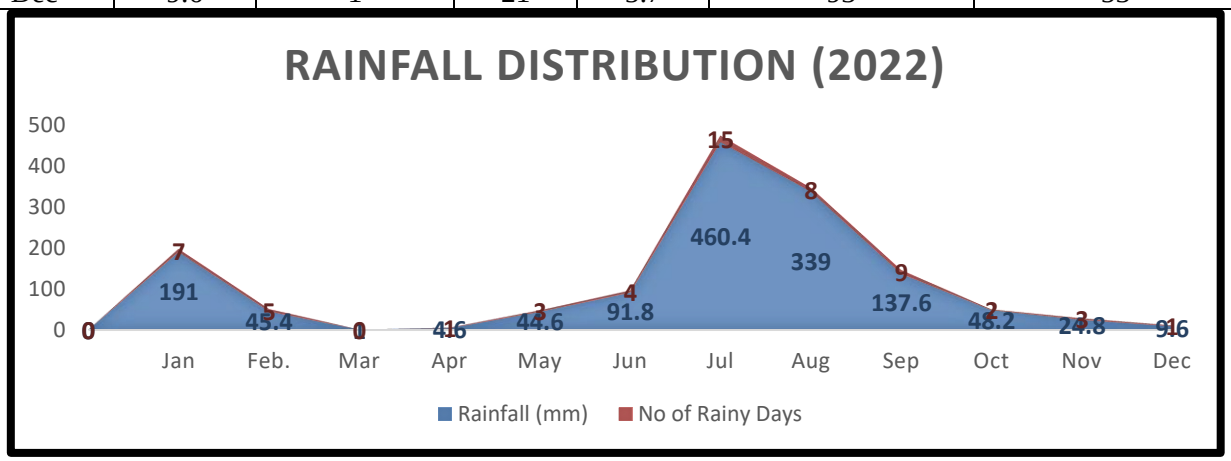
S. No	Soil type	Characteristics
1	Sandy loam	pH 7.7-8.1, EC-0.15-0.23, organic carbon 0.35-0.44 (low), N- low, P-medium, K- medium
2	Loamy sand	pH 7.2-7.5, EC-0.15-0.20, organic carbon 0.45-0.55 (low), N- low, P-medium, K- high
3	Clay loam	pH 7.1-7.8, EC-0.18-0.22, organic carbon 0.40-0.50(low), N- low, 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 (2022)

S. No	Crop	Area (ha)	Production (Qtls)	Productivity (Q/ha)
1	Paddy	58430	1689900	28.922
2	Wheat	50470	1113900	22.07
3	Maize	17765	329850	18.568
4	Pulses (Kharif)	2575	11985	4.654
5	Pulses (Rabi)	3640	24320	6.681
6	Millets	7030	41910	5.96
7	Oil Seed (Kharif)	550	2528	4.60
8	Oil Seed (Rabi)	1405	9054	6.445
9	Fodders (Kharif)	3788	31305	8.26
10	Fodders (Rabi)	3416.00	51438	15.06

2.5 Weather data (2022)

Month	Rainfall (mm)	No of Rainy Days	Temperature ^{0} C		Morning Relative Humidity (%)	Evening Relative Humidity (%)
			Max	Min		
Jan	191.0	7	16.1	7.4	92	73
Feb	45.4	5	21.0	6.5	91	54
Mar	1.0	0	30.5	13.2	83	44
Apr	4.6	1	37.9	18.0	54	20
May	44.6	3	38.3	21.9	51	28
Jun	91.8	4	38.9	24.3	56	33
Jul	460.4	15	33.5	25.8	88	72
Aug	339	8	34.1	26	85	67
Sep	137.6	9	33.4	23.6	88	62
Oct	48.2	2	31.2	17.3	85	48
Nov	24.8	3	25.8	10	90	48
Dec	9.6	1	21	5.7	93	53



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

Category	Population
Cattle	
Crossbred	2.49
Indigenous	4.57
Buffalo	2.59
Indigenous (Sheep)	1.03
Goats	2.5
Pigs	0.1
Hens	7.85

2.7 Details of Operational area / Villages (2022)

Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
R.S.Pura	Salher, Badyal, Kaloen, Suchetgarh Balachak Premachak Jindermelu Sai Kalan Qtabnizamdin	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
Akhnoor Pargwal	Garkhal Sungal Dhok jagir Jad	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
Bishnah	Harsa, Dabbar Deoli Laswara Sikandepur Batiyari	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
Nagrota Dansal	Katal Batal Kathar Nagrota Dhok Wazir	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
Bhalwal	Jandiyal Ranjan Garota Hassarwaan	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

2.8 Priority/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. Disease and Pest management
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
Resource mobilization	Promoting people's participation through community organization as Common Interest Groups (CIGs), Self Help Groups (SHGs), Farmer producer organizations (FPOs).

3. TECHNICAL ACHIEVEMENTS

3.A. Details of target and achievements of mandatory activities by KVK during 2021

OFT (Technology Assessment and Refinement)				FLD (Oilseeds, Pulses, Cotton, Other Crops/Enterprises)				
1				2				
Number of OFTs		Number of Farmers		Number of FLDs			Number of Farmers	
Targets	Achievement	Targets	Achievement		Targets	Achievement	Targets	Achievement
10	10	30	36	Wheat (25) Rabi 20-21	25	25	62	58
				Oilseed (10) Rabi 20-21	10	10	25	38
				Fodder (12.5) Rabi 20-21	12.5	12.5	32	75
				Oilseed (Rabi 2022-23)	40	40	100	296
				Wheat (Rabi 2022-23)	10	11.4	25	69
				Maize (Kharif 2022)	10	10.6	25	166
				Vegetables (Rabi 2022-23)	1.7	1.7	5	55
				Chickpea (Rabi 2021-22)	10	10	25	174
				Chickpea (Rabi 2022-23)	20	20	50	230
				Black Gram	20	20	50	224
				Millet (Kharif 2022)	1.0	1.8	3	26
				Fodder (Rabi 2022-23)	6	6	15	101
				Paddy (Kharif 2022)	10	10	25	50
				Marigold (Kharif 2022)	2	2	5	22

				Mushroom (Kharif 2022)	300 Bags	480 bags	24	24 persons
				Fisheries	10,000	10,000	10	10

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

FLD (Oilseeds) – Kharif 2022			
Number of FLDs		**Number of Farmers**	
Targets	**Achievement**	**Targets**	**Achievement**
Sesame (50)	136	50	136
FLD (Oilseeds) Rabi 2022-23			
Targets	**Achievement**	**Targets**	**Achievement**
Gobhi Sarson (50)	160	50	160

3.A.2 FLDs Conducted under CFLDs on Pulses

FLD (Pulses) *Kharif* 2022			
Number of FLDs		**Number of Farmers**	
Targets	**Achievement**	**Targets**	**Achievement**
Black Gram (50)	224	50	224
FLD (Pulses) *Rabi* 2022-23			
Targets	**Achievement**	**Targets**	**Achievement**
Chickpea (50)	230	50	230

Training (including sponsored, vocational and other trainings carried under Rainwater Harvesting Unit)					**Other Extension Activities**			
3					**4**			
Number of Courses			**Number of Participants**		**Number of activities**		**Number of participants**	
Clientele	**Targets**	**Achievement**	**Targets**	**Achievement**	**Targets**	**Achievement**	**Targets**	**Achievement**
Farmers	50	61	1000	1557	Field Days (6)	9	120	192
Rural youth	8	11	160	432	Kissan Mela (1)	4	500	2910
Extn. Functionaries	6	6	120	144	Kissan Sammelan (1)	1	100	36
					Exposure Visits (2)	6	100	3499
					Attended Conference (1)	2	150	5
					Important Days (4)	5	100	237
					Awareness Prog. (5)	20	440	906
					Lectures delivered (1)	4	50	164
					Swachta Pakhwara (1)	20	500	1641
					Webinars	2	25	207
					Exhibitions (2)	2	1000	1800
					Sponsored Prog.	1	200	19
					Agro Forestry	1		300
					Animal Science	2		99
					Home Science	1		54
					Horticulture	1		26
					Plant Protection	1		28
					Plant Protection (SCSP)	2		71
					Attended Seminars/Prog.	5		39
					Others	4		82

Seed Production (Qtl.)		Planting material (Nos.)	
5		6	
Target	**Achievement**	**Target**	**Achievement**
Paddy B-370 (80 qtls.)	72.10 qtls.	Fodder (Napier) 1500	2500
Wheat DBW 187 & DBW 173 (100 qtls.)	130 qtls. (aprox.)	Setaria (1500)	2500
		MPTS	

Livestock, poultry strains and fingerlings (No.)		Bio-products (Kg)	
7		8	
Target	***Achievement***	***Target***	***Achievement***
		Vermicompost	4586 Kg (Rs. 45,860/-)
		Mushroom	50 Kg (Rs. 5,000/-)

3.B. Abstract of interventions undertaken

S. No.	*Crop/ enterprise*	*Identified problem*	*Interventions*										
			Title of OFTs if any	*Flds If any*	*Number of Training (farmers)*	*Number of Training (Youths)*	*Number of Training (extension personnel)*	*Extension activities (No.)*	*Supply of seeds (Qtl.)*	*Supply of planting materials (No.)*	*Supply of livestock (No.)*	*Supply of bio products*	
												No.	Kg.
1.	Wheat	Low Productivity	Influence of coated urea on wheat yield under sub-tropical conditions of Jammu		3	1	2	3	10.20	-	-	-	-
2.	Wheat	Low yield and lack of knowledge about improved varieties	Assessment and Evaluation of improved varieties of wheat	Promotion and demonstration of of High Yielding Wheat Varieties						-	-	-	-
3.	Paddy	Heavy weed infestation in Direct Seeded Rice	Effect of different herbicides mixture on yield and economics of direct seeded rice (variety: Basmati 370) at farmer's fields.		1	1	1	3	0.06	-	-	-	-
4.	Paddy	Low yield and lack of knowledge about improved varieties	Assessment and Evaluation of Basmati rice MT 7 in comparison to other improved varieties	Promotion and demonstration of improved Basmati rice varieties	1	1	1	2	1.50	-	-	-	-
5.	Maize	Low yield due to poor disease management	Management of Turcicum leaf blight in maize	Promotion and demonstration of Hybrid Maize Varieties	1	2	1	2	2.0	-	-	-	-
6.	Millets	Introduction of Millets	Assessment and Evaluation of multicut	Promotion and demonstration of multicut varieties	2	-	-	2	0.32	-	-	-	-

			varieties for Millet grain production	for Millet grain production									
7.	Carrot	Low yield and lack of knowledge about improved/bio fortified varieties	Assessment and Evaluation of carrot varieties in district Jammu	Promotion and demonstration of bio fortified carrot varieties	1	1	-	-	0.04	-	-	-	-
8.	Beet Root	Low yield and lack of knowledge about improved varieties	Assessment and Evaluation of Beetroot varieties		1	-	-	-	0.04	-	-	-	-
9.	Onion	Low yield due to poor disease management	Management of Purple blotch in Onion		1	-	-	-		-	-	-	-
10.	Black Gram	Low yield in Organic Management System	Yield performance of mash in Organic Management System	Promotion and demonstration High yielding Urd bean varieties	1	1	1	1	2.0	-	-	-	-
	Chickpea	Lack of improved varieties		Promotion and demonstration improved Urd bean varieties	1	1	1	1	5.0	-	-	-	-
11.	Berseem	Lack of improved varieties		Promotion and demonstration improved Berseem	1	-	1	1	1.0	-	-	-	-
12.	Oats	Lack of improved varieties		Promotion and demonstration improved Oats	1	-	1	1	2.0	-	-	-	-
13.	Mushroom	Lack of High yielding Variety		Promotion and demonstration improved Strain	1	4	-	1	-	-	1900 Bags	-	-
13.	Fisheries	Lack of good quality feed	Assessment and Evaluation of floating	Promotion and demonstration	2	3	-	1	-	-	1000 0 finge	-	-

			feed for growth and quality	correct ratio of Indian Major Carps							rlings		
14.	Fisheries	Poor growth due to carbondioxide accumulation	Assessment and Evaluation of geolite on fish production	Promotion and demonstration correct ratio of Exotic Carps	2	3	-	1	-	-	10000 fingerlings	-	-
15	Introduction of Fruit plants	**Mango Amarpali** **Mango Dussehri** **Lime (Seeded)** **Guava (Layered)** **Lime (Budded/ Grafted)** **Papaya (Seeded)** **Bael**	Lack of Improved varieties	Promotion and demonstration of fruit and medicinal trees	04	01	02	03		**350** **400** **500** **500** **250** **200** **200**			
16	Varietal evaluation	Poultry	Introduction of new breed	Promotion and demonstration of Backyard Poultry- **Chabroo**	02	01		01			**758**		

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	Pulses	Vegetables	TOTAL
Varietal Evaluation	3	-	2	5
Weed Management	1	-	-	1
Integrated Nutrient Management	1	1	-	2
Integrated Disease Management	2	-	-	2
TOTAL	7	1	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

A.3. Abstract of the number of technologies assessed in respect of livestock / enterprises

Thematic areas	Fisheries
Production and Management	1
Feed and Fodder	1
TOTAL	**2**

3.2. Achievements on technologies Assessed and Refined

3.2.1. Technologies Assessed under various Crops (2022)

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	Wheat	Influence of Coated urea on wheat yield under sub-tropical conditions of Jammu	3	3	0.3
Varietal Evaluation	Paddy	Assessment of Evaluation of Basmati Rice MT 7 in comparison to other improved varieties	3	3	0.6
	Wheat	Assessment and Evaluation of improved varieties of Wheat	3	3	0.6
	Carrot	Evaluation of carrot varieties in district Jammu	3	3	0.15
	Beet Root	Evaluation of Beetroot varieties	3	3	0.4
	Millet	Assessment of multicut varieties for Millet production	3	3	0.3
Integrated Crop Management	Black Gram	Yield performance of mash in Organic Management System	3	3	0.3
Integrated Disease Management	Maize	Management of Turcicum leaf blight in maize	3	3	0.5
	Onion	Management of Purple blotch in Onion	3	3	0.15
Weed Management	Paddy	Effect of different herbicides mixture on yield and economics of direct seeded rice Jammu Basmati (variety: Basmati 370) at farmer's fields.	3	3	0.6
Total			**27**	**27**	**3.6**

3.2.3. Technologies assessed under Livestock and other enterprises

Thematic areas	*Name of the livestock*	*Name of the technology assessed*	*No. of trials*	*No. of farmers*
Production and management	Fisheries	Impact of floating feed on growth and production of fish	3	3
		Use of Geolite in fish production	3	3
		Total	**6**	**6**

B. Details of each On Farm Trial (2022)

A. Technology Assessment
Trial 1

1.	**Title**	**:**	**Management of Turcicum leaf blight in maize**
2.	Problem diagnose/defined	:	Low production due to Turcicum leaf blight disease
3.	Details of technologies selected for assessment/refinement	:	T1: Farmers Practice (No measures) T2: Three sprays of Mancozeb @ 2.5 gm/lt after the emergence of disease T3: Three sprays of Propiconazole @ 1ml/lt after the emergence of disease
4.	Source of technology	:	Package of practices of CSHPKV Palampur
5.	Production system thematic area	:	Rainfed cereal based system (Wheat - Maize)
6.	Thematic area	:	Integrated disease Management
7.	Performance of the Technology with performance indicators	:	Results recorded from the trial at farmers field revealed that the minimum % disease incidence (5 %) of Turcicum leaf blight in maize and maximum yield of 4260 Kg/ha was recorded from the Treatment III (three sprays of Propiconazole @ 1ml/lt after the emergence of disease) followed by Treatment II (three sprays of Mancozeb @ 2.5 gm/lt after the emergence of disease) 12.4 % disease incidence and 3500 Kg/ha yield, whereas, and maximum disease incidence (31 %) and lowest yield (2580 Kg/ha) was recorded from Treatment I Farmers practice (No measures).
8.	Final recommendation for micro level situation	:	Three sprays of Propiconazole @ 1ml/l after the emergence of disease for the control of Turcicum leaf blight in maize.
9.	Constraints identified and feedback for research	:	Non availability of quality plant protection chemicals in local.

10. Process of farmers participation and their reaction : Farmers actively participated in the trial and were satisfied with the performance of chemicals and were ready to use it in the future for obtaining optimum yield.
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B: Results of On Farm Trials

Crop/enterprise : Maize

Farming situation : Rainfed

Problem Diagnosed : Low production due to Turcicum leaf blight disease

Title of OFT : Management of Turcicum leaf blight

No. of trials*	Technology assessed	Parameters	Data on the parameter	Results of assessment	Feedback from the farmer
05	Treatment-I Farmers Practice (No measures)	% disease incidence	31	Least % disease incidence was recorded after Three Sprays of Propiconazole @ 1 ml/lt after the emergence of disease	Farmers are satisfied with the results of the three Sprays of Propiconazole @ 1 ml/lt after the emergence of disease and are willing to apply the same in future in their fields
	Treatment II Three Sprays of Mancozeb @ 2.5 gm/l after the emergence of disease		12.4		
	Treatment- III Three Sprays of Propiconazole @ 1 ml/lt after the emergence of disease		5		

**** No. of farmers***

Technology Refined	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
12	13	14	15
Farmers Practice (No Chemical)	2580	27620	2.2
Three Sprays of Mancozeb @ 2.5 gm/l after the emergence of disease	3500	45170	2.92
Three Sprays of Propiconazole @ 1 ml/lt after the emergence of disease	4260	60081	3.81

Trial 2

1.	**Title**	**:**	**Effect of different herbicides mixture on yield and economics of direct seeded rice Jammu Basmati (variety: Basmati 370) at farmer's fields.**
2.	Problem diagnose/defined	:	Heavy weed infestation in Direct Seeded Rice(variety: Basmati 370)
3.	Details of technologies selected for assessment/refinement	:	T 1: Pendimethalin1000 g/ha (PRE) *fb* bispyribac-sodium 25g/ha+ ethoxysulfuron- ethyl 18 g/ha at 25 DAS T 2: Cyhalofop-butyl + penoxsulam 135 g/ha at 20 DAS T3: Bispyribac-sodium 25g/ha (Farmer's practice)
4.	Source of technology	:	SKUAST Jammu
5.	Production system thematic area	:	Irrigated cereal based system (Paddy - Wheat)
6.	Thematic area	:	Weed Control
7.	Performance of the Technology with performance indicators	:	T1 Pendimethalin1000 g/ha (PRE) *fb* bispyribac-sodium 25g/ha+ ethoxysulfuron- ethyl 18 g/ha at 25 DAS was effective in controlling weed density to the tune of 6.67 (no./m^2) thereby providing highest yield of 27 qt/ha w.r.t. T 2 & T3
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 (Basmati 370)	Irrigated	Heavy weed infestation in Direct Seeded Rice (variety: Basmati 370)	Effect of different herbicides mixture on yield and economics of direct seeded rice (variety: Basmati 370) at farmer's fields.	3	T 1: Pendimethalin1000 g/ha (PRE) *fb* bispyribac-sodium 25g/ha+ ethoxysulfuron- ethyl 18 g/ha at 25 DAS	Total weed density at 60 DAS (no./m^2)	5.99	T 1 was effective in controlkling weed density to the tune of 6.67 (no./m^2) thereby providing highest yield of 27 qt/ha w.r.t. T 2 & T3	Farmers were satisfied with the results of Spray of Pendimethalin1000 g/ha (PRE) *fb* bispyribac-sodium 25g/ha+ ethoxysulfuron-ethyl 18 g/ha at 25 DAS for weed control in Direct Seeded Rice (Basmati 370)
					T 2: Cyhalofop-butyl + penoxsulam 135 g/ha at 20 DAS		17.50		
					T3: Bispyribac-sodium 25g/ha (Farmer's practice)		20.05		

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
T 1: Pendimethalin1000 g/ha (PRE) *fb* bispyribac-sodium 25g/ha+ ethoxysulfuron-ethyl 18 g/ha at 25 DAS	2900	103600	2.59
T 2: Cyhalofop-butyl + penoxsulam 135 g/ha at 20 DAS	1929	60876	1.52
T3: Bispyribac-sodium 25g/ha (Farmer's practice)	1690	50360	1.26

Trial 3:

1.	**Title**	**:**	**Management of Purple blotch in Onion**
2.	Problem diagnose/defined	:	Low production due to Purple blotch in Onion disease
3.	Details of technologies selected for assessment/refinement	:	T1 Farmers Practice (No measures) T2 Seed Treatment of Trichoderma Viride @ 2 gm/Kg of seed + Three sprays of Trichoderma Viride @ 2 gm/lt T3 Seed Treatment of Trichoderma Viride @ 2 gm/Kg of seed + Three sprays of Propiconazole @ 1 ml/lt
4.	Source of technology	:	SKUAST Jammu
5.	Production system thematic area	:	Rainfed cereal based system (Maize Wheat)
6.	Thematic area	:	Weed Control
7.	Performance of the Technology with performance indicators	:	Results revealed that the minimum % disease incidence (19 %) of Purple blotch in Onion and maximum yield of 29.70 t/ha was recorded from the Treatment III (Seed Treatment of Trichoderma Viride @ 2 gm/Kg of seed + Three sprays of Propiconazole @ 1 ml/lt) followed by treatment II (Seed Treatment of Trichoderma Viride @ 2 gm/Kg of seed + Three sprays of Trichoderma Viride @ 2 gm/lt) recorded 45 % disease incidence and 20.46 t/ha Yield, whereas, maximum disease incidence (55 %) and lowest yield (15.86 t/ha) was recorded from Treatment I
8.	Final recommendation for micro level situation	:	Seed Treatment of Trichoderma Viride @ 2 gm/Kg of seed + Three sprays of Propiconazole @ 1 ml/lt after the emergence of disease for the control of Purple blotch in Onion.
9.	Constraints identified and feedback for research	:	Lack of awareness among farmers regarding quality plant protection (Biocontrol agents and chemicals), local market and reliability of farmer on shopkeepers for their selection.
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 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
Onion	Rainfed	Low production due to Purple blotch in Onion disease	Management of Purple blotch in onion	05	Farmers Practice (No measures)	% disease incidence	55	Least 19 % disease incidence and optimum yield of 29.70 t/ha was recorded after Seed Treatment of *TrichodermaViride* @ 2 ml/Kg of seed + Three sprays of Propiconazole @ 1 ml/lt after the emergence of disease.	Farmers are satisfied with the results of Seed Treatment of *TrichodermaViride* @ 2 ml/Kg of seed + Three sprays of Propiconazole @ 1 ml/lt after the emergence of disease and are willing to apply the same in future in their fields
					Seed Treatment of *Trichoderma Viride* @ 2 gm/Kg of seed + Three sprays of *Trichoderma Viride* @ 2 gm/lt		45		
					Seed Treatment of *Trichoderma Viride* @ 2 gm/Kg of seed + Three sprays of Novel Prime (Organic Fungicide) @ 1.5%		39		
					Seed Treatment of *TrichodermaViride* @ 2 ml/Kg of seed + Three sprays of Propiconazole @ 1 ml/lt		19		

**** No. of farmers***

Technology Refined	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
Farmers Practice (No measures)	15.86	149900	2.7
Seed Treatment of *Trichoderma Viride* @ 2 gm/Kg of seed + Three sprays of Trichoderma Viride @ 2 gm/lt	20.46	218100	3.46
Seed Treatment of *Trichoderma Viride* @ 2 gm/Kg of seed + Three sprays of Novel Prime (Organic Fungicide) @ 1.5%	21.50	233500	3.62
Seed Treatment of *TrichodermaViride* @ 2 ml/Kg of seed + Three sprays of Propiconazole @ 1 ml/lt	29.70	356000	4.98

Trial 4

1.	**Title**	**:**	**Yield performance of mash in Organic Management System**
2.	Problem diagnose/defined	:	Low production in Organic Management System
3.	Details of technologies selected for assessment/refinement	:	Farmers Practice (FYM) II Three sprays of Organic Liquid Nutrient @10 ml/lt at different growth stages. III Four sprays of Organic Liquid Nutrient @10 ml/lt at different growth stages.
4.	Source of technology	:	Navsari Agricultural University,Navsari, Gujarat
5.	Production system thematic area	:	Rainfed cereal based system (Maize Wheat)
6.	Thematic area	:	Organic Management
7.	Performance of the Technology with performance indicators	:	Results recorded from the trial at farmers field revealed that treatment III i.e. four sprays of Organic Liquid Nutrient @10 ml/lt at different growth stages gives better yield then other two treatments.
8.	Final recommendation for micro level situation	:	Four sprays of Organic Liquid Nutrient @10 ml/lt at different growth stages, gives better yield under organic management system
9.	Constraints identified and feedback for research	:	Non availability of Organic liquid nutrients
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

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
Mash	Rainfed	Low production in Organic Management system	Yield performance of mash in Organic Management System	05	Treatment-I Farmers Practice (only use of FYM)	Yield	2.79	Treatment III performs better than other treatments and shows significant difference	Farmers were actively participated in the process and data collection.
					Treatment II Three sprays of Organic Liquid Nutrient @10 ml/lt at different growth stages		3.63		
					Treatment- III Four sprays of Organic Liquid Nutrient @10 ml/lt at different growth stages		4.23		

**** No. of farmers***

Technology Refined	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
12	13	14	15
Farmers Practice (only use of FYM)	18414	12914	3.34
Three sprays of Organic Liquid Nutrient @10 ml/lt at different growth stages	23958	17758	3.86
Four sprays of Organic Liquid Nutrient @10 ml/lt at different growth stages	27918	21418	4.29

Trial 5

	Title	:	**Evaluation of carrot varieties in district Jammu**
2.	Problem diagnose/defined	:	Lack of improved varieties
3.	Details of technologies selected for assessment/refinement	:	T1: Farmer's Practice T2: Punjab carrot red T3: Pusakesar
4.	Source of technology	:	IARI New Delhi and PAU Ludhiana
5.	Production system thematic area	:	Irrigated cereal based system
6.	Thematic area	:	Varietal evaluation
7.	Performance of the Technology with performance indicators	:	T2 registered highest yield of 200q/ha over the farmer's practice (T1) which recorded a mean yield of 150 q/ha
8.	Final recommendation for micro level situation	:	*Punjab carrot red* may be recommended for cultivation under subtropical conditions of Jammu for October November sowing.
9.	Constraints identified and feedback for research	:	Availability of seed of improved varieties
10.	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

Results of On Farm Trials

Crop	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
Carrot	Irrigated	Lack of improved varieties	Evaluation of varieties of Carrot in district Jammu		T1: Farmer's Practice	Yield per hectare (q/ha)	150 q/ha		Farmers were satisfied with yield potential and quality of improved varieties
					T2: Punjab Carrot red		200 q/ha	T 2 registered increase in yield over farmer's practice	
					T3: Pusa kesar		180 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	15000	225000	145000	2.81
T2: Punjab Carrot Red	20000	300000	220000	3.75
T3: Pusa Kesar	18000	270000	190000	3.37

Trial 6

	Title	:	**Evaluation of Beetroot varieties**
1.	Problem diagnose/defined	:	Lack of improved varieties
2.	Details of technologies selected for assessment/refinement	:	T1: Farmer's Practice T2: Detroit dark red T3: Crimson globe
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 260 q/ha over the farmer's practice (T1) which recorded a mean yield of 220 q/ha
7.	Final recommendation for micro level situation	:	Detroit dark red may be recommended for cultivation under subtropical conditions of Jammu
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. Both the varieties (T2 and T3) performed well but Detroit dark red outperforms with respect to yield.

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
Beetroot	Irrigated	Lack of improved varieties	Evaluation of Beetroot varieties	4	T1: Farmer's Practice	Yield per hectare (q/ha)	220 q/ha		Farmers were satisfied with yield potential and quality of improved varieties.
					T2: Datroit dark red		260 q/ha	T 2 registered increase in yield over farmer's practice	
					T3: Crimson globe		240 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	22000	330000	250000	3.88:1
T2: Datroit dark red	26000	390000	310000	4.58:1
T3: Crimson globe	24000	360000	280000	4.25:1

Trial 7

	Title	:	**Assessment of Evaluation of Basmati Rice MT 7 in comparison to other improved varieties**
2.	Problem diagnose/defined	:	Lack of improved varieties
3.	Details of technologies selected for assessment/refinement	:	T1: Farmers Practice (Local Basmati) T2: SJR 118 T3: MT 7
4.	Source of technology	:	SKUAST Jammu
5.	Production system thematic area	:	Irrigated cereal based system
6.	Thematic area	:	Varietal evaluation
7.	Performance of the Technology with performance indicators	:	Results recorded from the trial at farmers field revealed that the Treatment III MT 7 out yield the other varieties
8.	Final recommendation for micro level situation	:	MT 7 can be used as alternative of other improved varieties
9.	Constraints identified and feedback for research	:	Availability of seed of improved varieties and low yield
10.	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

Results of On Farm Trial

Crop/ enterprise	*Farming situation*	*Problem Diagnosed*	*Title of OFT*	*No. of trials**	*Technology assessed*	*Parameters*	*Data on the parameter (q/ha.) & days*	*Results of assessment*	*Feedback from the farmer*
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*
Basmati Rice	Irrigated	Low production due to no	Management	05	Farmers Practice (Local Basmati)	Yield & Days to maturity	23.6	Results recorded from the trial at farmers field revealed that the Treatment V MT 7 out yield the other varieties in production and days to Maturity	Farmers are satisfied with the results of MT 7 and other improved varieties ad would like to corporate for next season to KVK Jammu for further evaluation
					SJR 118		36.37		
					SJR 123		33.53		
					SJR 138		32.24		
					MT 7		42		
					Farmers Practice (Local Basmati)		150		
					SJR 118		125		
					SJR 123		135		
					SJR 138		135		
					MT 7		120		

**** No. of farmers***

Technology Refined	**Production per unit kg/ha.*	*Net Return (Profit) in Rs. / unit*	*BC Ratio*
12	*13*	*14*	*15*
Farmers Practice (Local Basmati)	2360	52000	2.650943
SJR 118	3637	103080	3.85566
SJR 123	3353	91720	3.587736
SJR 138	3224	86560	3.466038
MT 7	4200	125600	4.386792

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

Trial 8

1	**Title of Technology Assessed**	**Evaluation of improved Wheat varieties**
2	Problem Definition	Lack of climate resilient varieties
3	Details of technologies selected for assessment	T1= Farmer Practice (Local variety) T2= HD 3086 T3= Pb1Zn T4= DBW 222 T5=JAUW 672
4	Source of technology	: PAU and SKUAST Jammu
5	Production system and thematic area	: Irrigated cereal based system
6	Thematic area	: Varietal Evaluation
7	Performance of the Technology with performance indicators	: Results recorded from the trial at farmers field revealed that the Treatment IV DBW 222 out yield the other varieties with average yield 47.60
8	Final recommendation for micro level situation	: DBW-222 and JAUW 672 can be promoted as climate resilient variety
9	Constraints identified and feedback for research	: Unavailability of quality seed during sowing moths and unpredictable weather.
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 (Q/ha.)***	***Results of assessment***	***Feedback from the farmer***
1	2	3	4	5	6	7	8	9	10
Wheat	Irrigated	Lack of climate resilient varities	Evaluation of improved Wheat varieties in Block R S Pura	05	T1= Farmer Practice (Local variety) T2=HD 3086 T3= PB1Zn T4=DBW 222 T5= JAUW 672	Yield per hectare (q/ha)	T1= 31.30 T2= 40.30 T3= 36.30 T4= 47.60 T5= 43.00	Results recorded from the trial at farmers field revealed that the Treatment IV DBW 222 out yield the other varieties	Inspite of untimely rains at the verge of harvesting DBW 222 outperformed in yield as compare to all other varieties

Technology Refined	****Production per unit***	***Net Return (Profit) in Rs. / unit***	***BC Ratio***
11	**12**	**13**	**14**
Treatment T1: Farmer Practice (Local seed)	3130	36569.50	2.09
Treatment T2: HD 3086	4030	54704.50	2.63
Treatment T3: PB 1-Zn	3630	46644.50	2.39
Treatment T4: DBW 222	4760	69414.00	3.07
Treatment T5: JAUW 672	4300	60145.00	2.80

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

Trial 9

Technology Assessment

1	**Title of Technology Assessed**	**Assessment of multicut varieties for Millet production**
2	Problem Definition	Low fodder production
3	Details of technologies selected for assessment	T1= Farmers Practice (Local variety) T2= PC 383 T3= K 19 T4= AA
4	Source of technology	: SKUAST Jammu
5	Production system and thematic area	: Irrigated cereal based system
6	Thematic area	: High Yielding variety
7	Performance of the Technology with performance indicators	: Results recorded from the trial at farmers field revealed that the Treatment T 2 and T 3 performed significantly with yield almost at par 12.80 q/ha. and 11.75 q/ha. respectively.
8	Final recommendation for micro level situation	: Both PC 383 and K 19 could be promoted for grain production and Sorghum variety AA will be be more remunerative for growing during rainy season.
9	Constraints identified and feedback for research	: Less grain production.
10	Process of farmer's participation and their reaction	: Laid OFT in their field, monitoring and data collection with their assistance.

A. 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 (Q/ha.)***	***Results of assessment***	***Feedback from the farmer***
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Fodder	Irrigated	Low fodder production	Promotion of multicut varieties for Millet production	05	T1= Farmer Practice (Local variety) T2= PC 383 T3= K-19 T4= AA	Yield per hectare (q/ha)	T1= 9.30 T2= 12.80 T3= 11.75 T4= 9.46	Results recorded from the trial at farmers field revealed that the Treatment T 2 and T 3 performed significantly with yield almost at par 12.80 q/ha. and 11.75 q/ha. respectively.	Farmers are satisfied with the results of Bajra PC 383 and K -19 ready to layout trial for next season to for further evaluation

Technology Refined	****Production per unit (Kg/Ha.)***	***Net Return (Profit) in Rs. / unit***	***BC Ratio***
11	***12***	***13***	***14***
Treatment T1: Farmer Practice (Local seed)	930	17500	1.71
Treatment T2: PC383	1280	31674.86	2.81
Treatment T3: K-19	1175	25716.50	2.47
Treatment T4: AA	946	17294.00	1.99

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

Trial 10

Technology Assessment

1	**Title of Technology Assessed**	**Influence of Coated urea on Wheat yield under sub tropical conditions of Jammu**
2	Problem Definition	Low production
3	Details of technologies selected for assessment	T1: Farmers Practice (Broadcasting) T2: 100 % of Rec. N through NCU + Rec. P, K & Zn (Recommended Practice) T3: 85 % of Rec. N through NCU + ZnCU+ Rec. P&K (New Intervention)
4	Source of technology	SKUAST J
5	Production system and thematic area	Irrigated Wheat Paddy
6	Thematic area	: INM
7	Performance of the Technology with performance indicators	: Results revealed that the Treatment T 2 and T 3 outperformed T1 significantly with yield almost at par with each other. New intervention did not provided significant differences in yield w.r.t T2
8	Final recommendation for micro level situation	: Both Recommended and New intervention may be taken up for consideration and there is 15% saving in Urea quantity
9	Constraints identified and feedback for research	: Lack of awareness.
10	Process of farmer's participation and their reaction	: Laid OFT in their field, monitoring and data collection with their assistance.

A. 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 (Q/ha.)*	*Results of assessment*	*Feedback from the farmer*
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Wheat	Irrigated	Un judicious use of Urea	**Influence of Coated urea on wheat yield under sub-tropical conditions of Jammu**	03	T:1Farmer's Practice	Yield per hectare (q/ha)	29.0	Results revealed that the Treatment T 2 and T 3 outperformed T1 significantly with yield almost at par with each other. New intervention did not provided significant differences in yield w.r.t T2.	Farmers are satisfied with the results of Recommended Practice (T2) and ready to layout trial for next season to for further evaluation
					TII: 100 % of Rec. N through NCU + Rec. P, K & Zn (Recommended Practice)		42.0		
					TIII:85 % of Rec. N through NCU + ZnCU+ Rec. P&K (New Intervention)		40.6		

Technology Refined	*Source of tech*	**Production per unit (Kg/Ha.)*	*Net Return (Profit) in Rs. / unit*	*BC Ratio*
11		***12***	***13***	***14***
Farmer's Practice	SKUAST J	29.0	30500	1.10
100 % of Rec. N through NCU + Rec. P, K & Zn **(Recommended Practice)**		42.0	54226	1.82
85 % of Rec. N through NCU + ZnCU+ Rec. P&K (**New Intervention)**		40.6	51455	1.72

Trial 11

B. 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 production of fish**	3	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- 29.0/ha. TO-II- 38.0q/ha TO-III- 50.0q/ha.	Fishes are healthy with improved growth. Increased production.

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	-	27.00	q/ha.	33600	3.24:1
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

Trial 12

1	Title of Technology Assessed	:	**Use of Geolite in fish production**
2	Problem Definition	:	Less production due to poor water quality
3	Details of technologies selected for assessment	:	T1= Farmer Practice (Homemade feed) T2= 15% water exchange weekly T3= 15% water exchange weekly &Geolite @20kg/acre
4	Source of technology	:	COF, Pantnagar
5	Production system and thematic area	:	Irrigated
6	Thematic area	:	Fish Farming and composite fish culture
7	Performance of the Technology with performance indicators		Geolite improve the water quality by removing the ammonia health, growth, mortality and production
8	Final recommendation for micro level situation	:	Farmer can use Geolite in fish ponds to remove toxic gases from water and to increase plankton growth.
9	Constraints identified and feedback for research	:	Unavailability in nearby markets. Standardization of quantity of Geolite corresponding to water exchange rate.
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	**Use of Geolite in fish production**	2	T1= Farmer Practice T2= 15% water exchange weekly T3= 15% water exchange weekly &Geolite @ 20kg/acre	Production, Growth	Production	Fish Production : TO-I- 27.0q/ha. TO-II- 38.0q/ha TO-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	-	27.00	q/ha.	33600	3.24:1
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

PART 4 - FRONTLINE DEMONSTRATIONS

4.A. Summary of FLDs implemented during 2022-23

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*	*G*	*Total*	
1	**Oilseeds**														
I.	Gobi Sarsoon	Irrigated	Rabi 2021-22	Gobi Sarson	RSPN- 25		Varietal evaluation	HYV	5	5	2	-	30	32	Nil
II.	Mustard	Rainfed		Mustard	RSPR-01			HYV	5	5	1	-	27	28	
III.	Mustard	Rainfed	Rabi 2022-23	Mustard	Giriraj			HYV	10	10	24	11	12	67	
IV.	Gobi Sarsoon	Irrigated	Rabi 2022-23	Gobi Sarson	RSPN- 25			HYV	10	10	59	-	34	93	
V.	Seasame	Rainfed	Kharif 2022	Seasame	Punjab Til-1			HYV	10	10	31	8	15	54	
VI.					HT-1			HYV	10	10	16	-	66	82	
2	**Cereals**														
I	Wheat	Irrigated/ Rainfed	Rabi 2021-22	Wheat	HD-3237		Varietal evaluation	HYV	3.0	3.60	7	-	04	11	
II					HD-3086			HYV	1.0	1.60	05	-	04	09	
III					DBW-222			HYV	1.0	1.0	03	-	05	08	
IV					PB-Zn			HYV	2.0	2.10	07	-	10	17	
V					JAUW-672			HYV	1.0	1.0	03	-	03	06	
VI					WH 1080			HYV	2.0	2.0	15	-	04	19	
VII	**Paddy**		Kharif 2022	Paddy	SJBR 123		Varietal evaluation	HYV	4	4	-	-	4	4	
VIII					SJBR 118			HYV	5	5	2	-	6	8	
IX					SJBR 138			HYV	4	4	6	-	4	10	
X					B-370			HYV	15	15	16	-	12	28	
XI	Maize	Rainfed	Kharif 2022	Maize	DKC 9144	Hybrid		HYV	10	10	62	23	56	141	

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	G	Total	
XII	Maize	Rainfed		Pop corn	SJPC1	Composite		HYV	-	0.6	-	10	15	25	
	Wheat	Rainfed/Irrigated	Rabi 2022-23	Wheat	PB-Zn-1				2	2	8		2	10	
					DBW-222			HYV	6.2	6.2	16	2	13	31	
					WH 1080				3.20	3.20	3	7	18	28	
3	**Fodder**														
I	Oats	Irrigated	Rabi 2022-23	Oats	Kent	HYV	Varietal evaluation	HYV	2.0	1	8	-	15	23	
II	Berseem	Irrigated	Rabi 2022-23	Berseem	Mascavi	HYV		HYV	5.0	5	41	25	12	78	
4	**Millets**														
I	Bajra	Rainfed	Kharif 2022	Bajra	PC 383	HYV	Varietal evaluation	HYV	-	0.9	7	4	7	18	
					Sukanya	HYV			-	0.9	7	4	7	18	
II	Sorghum	Rainfed	Kharif 2022	Sorghum	AA	HYV		HYV	-	0.9	7	4	7	18	
					SPV	HYV		HYV		0.9	7	4	7	18	
5	**Vegetables**														
I	Carrot	Irrigated	Rabi 22-23	Carrot	PCP-1	HYV	Varietal evaluation	HYV	-	0.2	06	-	4	10	
II	Carrot	Irrigated		Carrot	PCP-1	HYV		HYV	-	0.2	6	-	4	10	
III	Cauliflower	Irrigated	Rabi 2022-23	Cauliflower				HYV	-	0.4	7	2	11	20	
IV	Spinach	Irrigated	Rabi 2022-23	Spinach				HYV	-	0.2	4	1	5	10	
V	Beet Root	Irrigated	Rabi 2022-23	Beet Root				HYV	-	0.2	3	1	6	10	
6	**Pulses**														
I	Chickpea	Rainfed	Rabi 2021-22	Chickpea	GNG-2144/ PBG-8		Varietal evaluation	HYV	10.0	10.0	59	16	98	174	

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	G	Total	
II	Chickpea		Kharif 2022	Chickpea	GNG 1581			HYV	20.0	20	165	10	55	230	
III	Black Gram		Kharif 2022	Black Gram	PU-31			HYV	10.0	10.0	82	10	43	135	
IV	Black Gram		Kharif 2022	Black Gram	Him Mash 114			HYV	10.0	10.0	13	2	74	89	
7	**Floriculture**														
I	Marigold	Rainfed	Kharif 2022	Marigold	Pusa Bahar		Varietal Evaluation	Improved variety	2.0	2.0	19	0	3	22	
II	Marigold	Rainfed	Kharif 2022	Marigold	Pusa Narangi			Improved variety	2.0	2.0	0	0	3	3	
8	Button mushroom	Irrigated/rainfed	Rabi 2022	Button mushroom	U-3			HYV	500 bags	150 bags	20	0	6	26	
	Button mushroom	Irrigated/rainfed	Rabi 2022	Button mushroom	U-3			HYV	500 bags	1400 bags	71	0	0	71	
9	Poultry	-	Rabi 2021-22	Poultry	Chabro			Backyard Poultry	280no's	280 no's	20	-	-	20	
10	**FISHERIES**														
I	Fisheries	-	Rabi 2021-22	Fisheries	Fish feed			Floating feed	2 qtls	2 qtls					
								Sinking Pelleted feed	8 qtls	8 qtls	20	-	-	20	
II	Fisheries		Kharif 2022	Fisheries	Fish seed		Varietal Evaluation	-	100000 Nos.	100000 Nos.	10	-	-	10	

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

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	**Oilseed**											
I	Gobi Sarson	Irrigated	Rabi 2021-22	Gobi Sarson	RSPN- 25		Varietal evaluation	HYV	253	9.5	110	
II	Mustard	Rainfed			RSPR-01							
III	Mustard	Rainfed	Rabi 2022-23	Mustard	Giriraj			HYV				
IV	Gobi Sarsoon	Irrigated		Gobi Sarson	RSPN- 25			HYV				
V	Seasame	Rainfed		Sesame	Punjab Til-1			HYV				
VI	Seasame	Rainfed		Sesame	HT-1			HYV	253	9.5	110	
2	**Cereals**											
I	Wheat	Rainfed/Irrigated	Rabi 2021-22	Wheat	HD-3237		Varietal evaluatio	HYV	255	10.5	114	
II					HD-3086			HYV	255		114	
III					DBW-222			HYV	255	10.5	114	
IV					PB-Zn			HYV	255	10.5	114	
V					JAUW-672			HYV	255	10.5	114	
VI					WH-1080				255	10.5	114	
VII	Paddy		Kharif 2022	Paddy	SJBR 123		Varietal evaluation	HYV	255	10.5	114	
VIII					SJBR 118			HYV	255	10.5	114	
IX					SJBR 138			HYV	255	10.5	114	
X					B-370				255	10.5	114	
XII	Maize	Rainfed	Kharif 2022	Maize	DKC 9144	Hybrid	Varietal evaluation	HYV	255	9.6	114	
XII	Maize	Rainfed	Kharif 2022	Pop corn Composite	SJPC 1	Composite	Varietal evaluation	HYV	255	9.6	114	
					PB-Zn-1		Varietal Evaluation		255	9.6	114	
					DBW-222				255	9.6	114	
					WH 1080				255	9.6	114	
3	**Fodder**											
I	Oats	Rainfed/irrigated	Rabi 22-23	Oats	Kent			Variety	255	9.6	114	

Sl. No.	Category	Farming Situation	Season and Year	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Status of soil (Kg/Acre)			Previous crop grown
									N	P	K	
II	Berseem	Irrigated		Berseem	Mascavi		Varietal evaluation	Variety	255	9.6	114	
4	**Millets**											
I	Bajra	Rainfed	Kharif 2022	Bajra	PC 383 Sukanya	HYV	Varietal evaluation	HYV	255	9.6	114	
II	Sorghum	Rainfed		Sorghum	AA SPV	HYV		HYV	255	9.6	114	
5	**Vegetables**											
I	Carrot	Irrigated	Rabi 2022-23	Carrot	PCP-1		Varietal evaluation	Improved variety	255	9.6	114	
II	Carrot	Irrigated		Carrot	PCP-II			Improved variety	255	9.6	114	
III	Cauliflower	Irrigated		Cauliflower	Pusa Ashwani			Improved variety	255	9.6	114	
IV	Spinach			Spinach	All Green			Improved variety	255	9.6	114	
V	Bet Roat			Beet Roat	DDR			Improved variety	255	9.6	114	
6	**Pulses**											
I	Chickpea	Rainfed	Rabi 2021-22	Chickpea	GNG-2144/PBG-8		Varietal evaluation	Improved variety	255	9.6	114	
II	Chickpea		Kharif 2022		GNG 1581			Improved variety	255	9.6	114	
III	Black Gram			Black Gram	PU-31			HYV	253	9.5	110	
IV	Black Gram				Him Mash 114							
7	**Floriculture**											
I	Marigold	Rainfed	Kharif 2022	Marigold	Pusa Bahar		Varietal evaluation	Improved variety	253	9.5	110	
II	Marigold	Rainfed	Kharif 2022	Marigold	Pusa Narangi				253	9.5	110	
8	**Mushroom**											
I	Button mushroom	Irrigated/rainfed	Rabi 2022-23	Button mushroom	U-3		Varietal evaluation	HYV				
II	Button mushroom	Irrigated/rainfed	Rabi 2022-23	Button mushroom	U-3			HYV				
9	Poultry	-	2022-23	Poultry	Chabro		Varietal Evaluation	Variety				
9	**FISHERIES**											

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	Fisheries	-	Rabi 2022-23	Fisheries	Fish feed			Floating feed				
								Sinking Pelleted feed				
II	Fisheries		Kharif 2022	Fisheries	Fish seed			Variety				

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										
1	**Oilseeds**																		
I	Gobi Sarson	RSPN-25		Rainfed	32	5	24.0	19.6	20.0	15.0	33.3	28000.0	80000	52000.0	2.9	28000.0	64000.0	36000.0	2.3
II	Mustard	RSPR-01		Rainfed	28	5													
III	Mustard	Giriraj		Rainfed	67	10	16	14	15	13	15	32000	96000	64000.00	3.00	32000	76800	44800.00	2.40
IV	Gobi Sarsoon	RSPN-25		Rainfed	93	10	22	18	20	13	54	32000	72000	40000.00	2.25	32000	62400	40000.00	1.95
V	HYV (Sesame)	Punjab Til-1		Rainfed	54	10	6.7	4.6	5.7	4.0	42.5	25000.0	45600	20600	1.8	32000	62400	40000.00	1.95
VI	HYV (Sesame)	HT-2		Rainfed	82	10	6.8	4.7	5.9		47.5	25000.0	47200	22200.0	1.9	25000.0	32000.0	7000.0	1.3
2	**Cereals**																		
I	HYV (Wheat)	HD-3237		Irrigated			46.6	42.3	45.08	37.8	19.25	32000	97836.2	65836.20	3.06	32000	83167.00	51167	2.60
II		HD-3086		Rainfed			48	44.6	45.3	37.8	19.84	32000	98279.50	66279.50	3.07	32000	83167.00	51167	2.60
III		DBW-222		Irrigated/Rainfed			51.3	46.2	49.6	37.8	31.21	32000	106944.00	74944.00	3.34	32000	83167.00	51167	2.60
IV		PB-Zn 1					48.9	46.2	47.9	37.8	26.71	32000	103518.50	71518.50	3.23	32000	83167.00	51167	2.60
V		JAUW-672			6	1	52	46	49.56	37.8	31.11	32000	106863.40	74863.40	3.34	32000	83167.00	51167	2.60
VI		WH-1080					26	20.5	25.77	18.4	40.05	24800	58926.55	34126.55	2.38	24800	44076.00	19276	1.78
VII	HYV (Paddy)	SJBR 123		Irrigated	4	1	36.40	29.30	32.85	23.60	39.19	42400.00	149400.00	107000.00	3.52	42400.00	94400.00	52000.00	2.23
VIII		SJBR 118			5	1.7	44.80	21.00	34.96	23.60	48.14	42400.00	157840.00	115440.00	3.72	42400.00	94400.00	52000.00	2.23
IX		SJBR 138			10	1	36.00	28.00	31.33	23.60	32.75	42400.00	143320.00	100920.00	3.38	42400.00	94400.00	52000.00	2.23

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										
X		B-370					28.00	22.40	25.14	23.60	6.53	42400.00	128616.00	86216.00	3.03	42400.00	94400.00	52000.00	2.23
XI	HYV (Maize)	DKC 9144	Hybrid	Rainfed	141	10	27.40	21.00	23.80	20.50	16.10	22500	56695.00	34195.00	2.52	22500.00	40221.00	17721.00	1.79
XII	Maize	SJPC1	Composite	Rainfed	25	0.6	24.5	21.6	23.2	22.5	3.1	22500	81200	58700	2.60	22500	78450	56250	2.5
XIII	Wheat	PB-Zn-1	HYV	Irrigation	10	2.0	45.90	39.25	41.20	30.30	35.97	33500.00	90018.00	56518.00	2.69	32000.00	68054.50	36054.50	2.13
		DBW-222	HYV	Irrigation	31	6.2	49.20	40.35	49.60	30.30	63.70	33500.00	106944.00	73444.00	3.19	32000.00	68054.50	36054.50	2.13
		WH 1080	HYV	Rainfed	28	3.20	23.00	17.90	25.77	16.30	58.10	25200.00	58926.55	33096.55	2.31	24800.00	39844.50	15044.50	1.61
3	**Fodder**																		
I	Oats	Kent	HYV	Rainfed /irrigated	29	2.0	340	280	288	229	25.7	19500	54572	35172	1.80	19500	36640	17140	0.87
II	Berseem	Mascavi	HYV	Irrigated	147	5.0	646	536	594	448	32.5	22500	83160	60660	2.70	22500	62720	40220	1.79
4	**Millets**																		
I	Bajra	PC 383	HYV	Rainfed	18	0.9	15.60	4.60	10.72	8.95	19.77	24000	40192	16192	1.67	24000	36032	12032	1.51
		Sukanya	HYV		18	0.9	15.60	4.20	9.91	8.95	10.72	24000	38289	14288	1.59	24000	36032	12032	1.51
II	Sorghum	AA	HYV	Rainfed	18	0.9	11.60	6.40	8.83	8.20	7.6	24000	43476	19476	1.81	24000	36032	12032	1.51
		SPV	HYV		18	0.9	12.60	7.41	9.85	8.20	20.1	24000	46766	22766	1.95	24000	36032	12032	1.51
5	**Vegetables**																		
I	Carrot	PCP-1	Fortified Variety	Irrigated	10	0.2	470	415	430	400	7.5	130000	430000	300000	3.30	130000	400000	270000	3.07
II	Carrot	PCP-2		Irrigated	10	0.2	482	402	432	400	7.4	130000	432000	302000	3.32	130000	400000	270000	3.07
III	Cauliflower	Pusa Ashwani	variety	Irrigated	20	0.4	340	210	250	220	13.6	90000	250000	160000	2.77	90000	220000	130000	2.44

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										
IV	Spinach	All green	variety	Irrigated	10	0.2	345	200	260	230	13.1	90000	260000	170000	2.88	90000	230000	140000	2.55
V	Beetroot	DDR	variety	Irrigated	10	0.2	485	415	460	420	9.5	132000	460000	328000	3.48	132000	420000	288000	3.18
6	**Pulses**																		
I	Chic Pea	GNG-1581	variety	Raifed	230	20.0	18.8	16.8	17.8	14.5	22.7	40200	97900	57700	2.43	40200	79750	39550	1.98
II	Black Gram	PU-31	variety		135	10	4.8	4.4	4.6	3.2	43.75	17200	36800	19182	2.11	17200	25600	8400	1.48
		Him Mash	variety		189	10	4.7	4.2	4.7	3.2	46.87	17200	37600	19600	2.13	17200	25600	8400	1.48
7	**Floriculture**																		
I	Improved variety (Marigold)	Pusa Bahar		Rainfed	22	2.0	242	220	231	178	29	125600	462000	336400	3.67	125600	386000	230400	2.83
II	Improved variety (Marigold)	Pusa narangi		Rained	3	2.0	232	212	222	178	24.7	12600	444000	318400	3.53	125600	386000	230400	2.83
8	**Mushroom**																		
I	HYV (Button mushroom)	U-3		Rainfed	26	500 bags	3.15	1.65	2.11	1.38	52.90	110/Bag	316.50/bag	206.50/bag	2.88	110/bag	207/bag	97/bag	1.88
	HYV (Button mushroom)	U-3		Rainfed	71	1400	3.40	1.55	2.14	1.39	53.96	110/Bag	321/bag	211/bag	2.92	110/bag	208.5/bag	98.5/bag	1.89

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) (kg/Unit)				% 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										
Poultry	Backyard Poultry (24000 nos.)	Chabro (40 chicks/farmer)	60	60	120.0	100.0	110.0	-	100	8500	36000	27500	4.24	0	0	0	Poultry

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

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	Fish seed 18/5/22 (24500 nos.)	Exotic carps	16	1000	65	50	57.5	35	64	20000	86250	60250	4.31	18500	52500	34000	2.84
IMC & exotic	Fish seed 7/06/22 (10000 nos.)	Indian Major craps	10	1000	50	43	46.5	35	32.85	20000	69750	49750	3.49	18500	52500	34000	2.84

* 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

4.B.4. Other enterprises

Enterprise	Name of the technology demonstrated	Variety/ species	No. of Demo	Units/ Area {m^2}	Yield (q/ha)				% Increase	*Economics of demonstration (Rs./unit) or (Rs./m2)				*Economics of check (Rs./unit) or (Rs./m2)			
					Demo			Check if any		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
					H	L	A										
Button mushroom	New strain	U-3	26	500 bags	3.15	1.65	2.11	1.38	52.90	110/ Bag	316.50 /bag	206.50 /bag	2.88	110/ bag	207/bag	97/bag	1.88
Vermicompost	-	-	71	1400	3.40	1.55	2.14	1.39	53.96	110/ Bag	321/bag	211/bag	2.92	110/ bag	208.5/ bag	98.5/ bag	1.89

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

Sl.No.	Activity	No. of activities organised	Number of participants
1	Field days	9	140
2	Farmers Training	12	280
3	Media coverage	40	
4	Training for extension functionaries	03	58
5	Others (Please specify)		

Krishi Vigyan Kendra Jammu, R S Pura being frontier extension representative of recommended technologies developed by University had laid out total 419 FLDs covering 36.5 ha. during Rabi 2021-22 they covered 7 crops such as Oilseed, Wheat covering 6 varieties, Fodder (Oats & Berseem), Pulses

(chickpea), Button Mushroom & Floriculture (Marigold). Of these 6 wheat varieties 5 are sown in irrigated sown in conditions DBW-222, JAUW 672, Pb-Zn-1, HD 3086, HD 3237 of which first two varieties were at par in yield having % increase 31.22 and 31.11 over check and benefit cost ratio of 3.43 and 3.23 and one rainfed variety WH 1080 showing % age increase of 40.05 over check. During Kharif 2022 Krishi Vigyan Kendra Jammu laid out total 827 Frontline demonstrations covering 100.6 ha. mainly covering Paddy (4 varieties), Maize, pulses (Chickpea & Blackgram) and seasame. In basmati paddy 4 varieties were laid out in which SKUAST-Jammu released variety SJBR 118 outperformed in comparison to other 3 varieties such as SJBR 123 SJBR 138 and Basmati 370 in yield 34.86 q/ha. with 48.14 % increase and Benefit cost ratio of 3.72,3.52,3.38 and 3.03 respectively. In Rabi 2022-23 the rainfall and winds are extravagant just before the harvest. In Rabi total 5 crops were grown Oilseed, Wheat covering 3 varieties, Fodder (Oats & Berseem), vegetable, and Floriculture (Marigold). In wheat, DBW 222 outpeformed all other varieties in yield 49.60 q/ha. and 63.70% increase over check, indespite of unclaimant weather. The beneficiaries were very much satisfied with results and performance of the technologies disseminated by Krishi Vigyan Kendra Jammu, R S Pura and their timely backstopping the problems. The beneficiaries are also invited and shared their experiences during Kissan melas.

KRISHI VIGYAN KENDRA, JAMMU
कृषि विज्ञान केन्द्र, जम्मू
FARMERS FIELD DAY
Sher-e-Kashmir University of Agricultural Sciences and Technology of Jammu
KRISHI VIGYAN KENDRA JAMMU
कृषि विज्ञान केंद्र जम्मू
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5. Achievements on Training (Including the sponsored, vocational, FLD and trainings under Rainwater Harvesting Unit):

a) Farmers' Training including sponsored training programmes (ON Campus)

Area of training	No. of courses	No. of Participants								
		General			SC/ST			Grand Total		
		M	F	T	M	F	T	M	F	T
Crop Production										
Resource Conservation Technologies	1	2	0	2	24	10	34	26	10	36
Integrated Crop Management	1	9	0	9	10	0	10	19	0	19
Production of organic inputs	1	1	0	1	6	0	6	7	0	7
Total	3	12	0	12	40	10	50	52	10	62
Livestock Production and Management										
Disease Management	1	16	2	18	0	0	0	16	2	18
Total	1	16	2	18	0	0	0	16	2	18
Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	2	1	2	3	6	47	53	7	49	56
Total	2	1	2	3	6	47	53	7	49	56
Plant Protection										
Integrated Disease Management	1	5	0	5	0	26	26	5	26	31
Total	1	5	0	5	0	26	26	5	26	31
Fisheries										
Composite fish culture	1	0	0	0	18	0	18	18	0	18
Breeding and culture of ornamental fishes	2	10	0	10	4	7	11	14	7	21
Others	1	5	0	5	23	0	23	28	0	28
Total	4	15	0	15	45	7	52	60	7	67
Capacity Building and Group Dynamics										
Formation and Management of SHGs	1	4	1	5	4	0	4	8	1	9
Entrepreneurial development of farmers/youths	2	7	10	17	4	14	18	11	24	35
Total	3	11	11	22	8	14	22	19	25	44
Agro forestry										
Integrated Farming Systems	1	2	1	3	10	7	17	12	8	20
Total	1	2	1	3	10	7	17	12	8	20
Grand Total	15	62	16	78	109	111	220	171	127	298

b) Training for Rural Youths including sponsored training programmes (ON Campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		M	F	T	M	F	T	M	F	T
Mushroom Production	3	6	1	7	65	34	99	71	35	106
Bee0keeping	1	21		21	15		15	36	0	36
Value addition	2	10	14	24	8	34	42	18	48	66
Sheep and goat rearing	1			0	34	7	41	34	7	41
other	1	5	2	7	2	0	2	7	2	9

c) Training programmes for Extension Personnel including sponsored training programmes (ON Campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops	2	38	7	45			0	38	7	45
Integrated Pest Management	2	30	13	43			0	30	13	43
Women and Child care	1		24	24		16	16	0	40	40
Other	1	15		15			0	15	0	15
Total	6	83	44	127	0	16	16	83	60	143

d) Details of vocational training programmes carried out by KVKs for rural youth

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop production and management										
Integrated crop management	1	5	2	7	2	0	2	7	2	9
Total	1	5	2	7	2	0	2	7	2	9
Livestock and fisheries										
Composite fish culture	1	7	10	17	8	20	28	15	30	45
Sheep and goat rearing	1	0	0	0	34	7	41	34	7	41
Total	2	7	10	17	42	27	69	49	37	86
Income generation activities										
Mushroom cultivation	1	6	1	7	18	10	28	24	11	35
Other	2	21	7	28	15	14	29	36	21	57
Total	3	27	8	35	33	24	57	60	32	92
Grand Total	6	39	20	59	77	51	128	116	71	187

A) OFF Campus

Farmers' Training including sponsored training programmes (OFF Campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		M	F	T	M	F	T	M	F	T
Crop Production										
Resource Conservation Technologies	1	18	1	19	11	0	11	29	1	30
Seed production	1	13	0	13	2	0	2	15	0	15
Integrated Crop Management	12	122	37	159	110	97	207	232	134	366
Integrated nutrient Management	1	6	2	8	30	2	32	36	4	40
Total	15	159	40	199	153	99	252	312	139	451
Horticulture										
a) Vegetable Crops										
Nursery raising	1	3	11	14	4	5	9	7	16	23
Others	1	19	0	19	3	0	3	22	0	22
Total (a)	2	22	11	33	7	5	12	29	16	45
b) Fruits										
Layout and Management of Orchards	2	19	11	30	20	46	66	39	57	96
Total (b)	2	19	11	30	20	46	66	39	57	96
Total(a0g)	4	41	22	63	27	51	78	68	73	141
Livestock Production and Management										
Dairy Management	4	49	4	53	31	10	41	80	14	94
Others				0			0	0	0	0
Total	4	49	4	53	31	10	41	80	14	94
Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	2	6	12	18	9	21	30	15	33	48
Designing and development for high nutrient efficiency diet	1	0	2	2	0	17	17	0	19	19
Processing & cooking	1	0	3	3	2	16	18	2	19	21
Value addition	3	0	32	32	0	36	36	0	68	68
Location specific drudgery reduction technologies	1	0	12	12	0	6	6	0	18	18
Women and child care	1	3	29	32	1	39	40	4	68	72
Total	9	9	90	99	12	135	147	21	225	246
Plant Protection										
Integrated Pest Management	2	20	3	23	21	7	28	41	10	51
Integrated Disease Management	3	40	0	40	21	1	22	61	1	62
Others	2	16	0	16	42	11	53	58	11	69
Total	7	76	3	79	84	19	103	160	22	182

Fisheries										
Integrated fish farming	2	28	6	34	3	1	4	31	7	38
Carp fry and fingerling rearing	1	13	2	15	1	0	1	14	2	16
Total	3	41	8	49	4	1	5	45	9	54
Grand Total	42	375	167	542	311	315	626	686	482	1168

b) Training for Rural Youths including sponsored training programmes (OFF Campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		M	F	T	M	F	T	M	F	T
Nursery Management of Horticulture crops	1	13	1	14	6	21	27	19	22	41
Bee0keeping	2	42	23	65	35	0	35	77	23	100
Other	2	55		55	43	6	49	98	6	104
Total	5	110	24	134	84	27	111	194	51	245

C) Consolidated table (ON and OFF Campus)

Details of above training programmes enclosed as Annexure "B".

Area of training	No. of courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop Production										
Resource Conservation Technologies	2	20	1	21	35	10	45	55	11	66
Seed production	1	13	0	13	2	0	2	15	0	15
Integrated Crop Management	13	131	37	168	120	97	217	251	134	385
Integrated nutrient Management	1	6	2	8	30	2	32	36	4	40
Production of organic inputs	1	1	0	1	6	0	6	7	0	7
Total	18	171	40	211	193	109	302	364	149	513
Horticulture										
a) Vegetable Crops										
Nursery raising	1	3	11	14	4	5	9	7	16	23
Others	1	19	0	19	3	0	3	22	0	22
Total (a)	2	22	11	33	7	5	12	29	16	45
b) Fruits										
Layout and Management of Orchards	2	19	11	30	20	46	66	39	57	96
Others				0			0	0	0	0
Total (b)	2	19	11	30	20	46	66	39	57	96
Total(a0g)	4	41	22	63	27	51	78	68	73	141
Livestock Production and Management										
Dairy Management	4	49	4	53	31	10	41	80	14	94
Disease Management	1	16	2	18	0	0	0	16	2	18
Total	5	65	6	71	31	10	41	96	16	112
Home Science/Women empowerment										

Household food security by kitchen gardening and nutrition gardening	4	7	14	21	15	68	83	22	82	104
Designing and development for high nutrient efficiency diet	1	0	2	2	0	17	17	0	19	19
Processing & cooking	1	0	3	3	2	16	18	2	19	21
Value addition	3	0	32	32	0	36	36	0	68	68
Location specific drudgery reduction technologies	1	0	12	12	0	6	6	0	18	18
Women and child care	1	3	29	32	1	39	40	4	68	72
Total	11	10	92	102	18	182	200	28	274	302
Plant Protection										
Integrated Pest Management	2	20	3	23	21	7	28	41	10	51
Integrated Disease Management	4	45	0	45	21	27	48	66	27	93
Others	2	16	0	16	42	11	53	58	11	69
Total	8	81	3	84	84	45	129	165	48	213
Fisheries										
Integrated fish farming	2	28	6	34	3	1	4	31	7	38
Carp fry and fingerling rearing	1	13	2	15	1	0	1	14	2	16
Composite fish culture	1	0	0	0	18	0	18	18	0	18
Breeding and culture of ornamental fishes	2	10	0	10	4	7	11	14	7	21
Others	1	5	0	5	23	0	23	28	0	28
Total	7	56	8	64	49	8	57	105	16	121
Capacity Building and Group Dynamics										
Formation and Management of SHGs	1	4	1	5	4	0	4	8	1	9
Entrepreneurial development of farmers/youths	2	7	10	17	4	14	18	11	24	35
Total	3	11	11	22	8	14	22	19	25	44
Agro forestry										
Integrated Farming Systems	1	2	1	3	10	7	17	12	8	20
Grand Total	57	437	183	620	420	426	846	857	609	1466

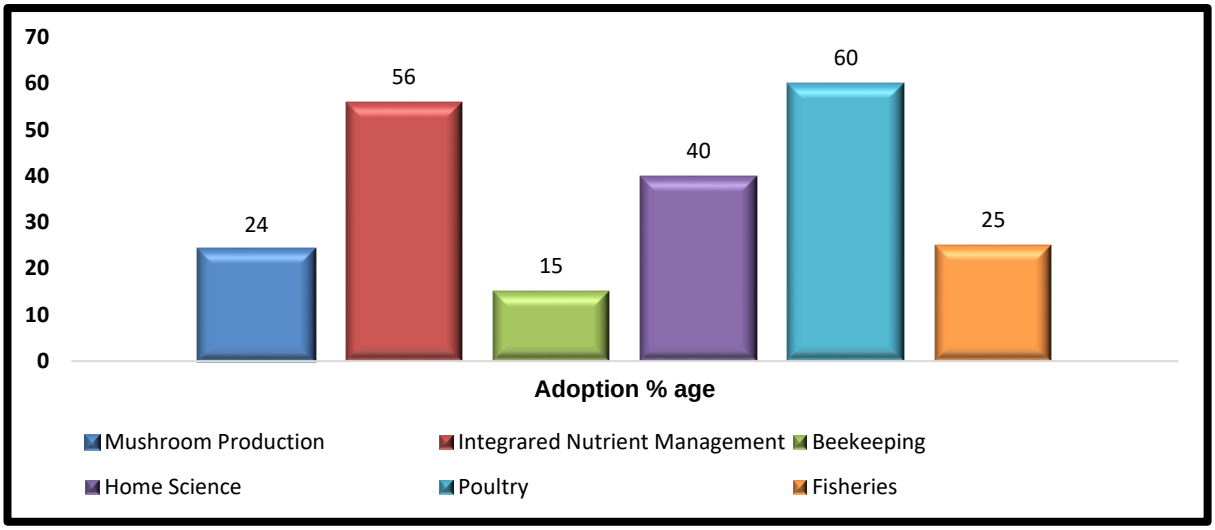
Nursery Management of Horticulture crops	1	13	1	14	6	21	27	19	22	41
Mushroom Production	3	6	1	7	65	34	99	71	35	106
Bee0keeping	3	63	23	86	50		50	113	23	136
Value addition	2	10	14	24	8	34	42	18	48	66
Sheep and goat rearing	1			0	34	7	41	34	7	41
other	3	60	2	62	45	6	51	105	8	113
Total	13	152	41	193	208	102	310	360	143	503
c) Training programmes for Extension Personnel including sponsored training programmes										
Productivity enhancement in field crops	2	38	7	45			0	38	7	45
Integrated Pest Management	2	30	13	43			0	30	13	43
Women and Child care	1		24	24		16	16	0	40	40
Other	1	15		15			0	15	0	15
Total	6	83	44	127	0	16	16	83	60	143
Crop production and management										
Integrated crop management	1	5	2	7	2	0	2	7	2	9
Livestock and fisheries										
Composite fish culture	1	7	10	17	8	20	28	15	30	45
Sheep and goat rearing	1	0	0	0	34	7	41	34	7	41
Total	2	7	10	17	42	27	69	49	37	86
Income generation activities										
Mushroom cultivation	1	6	1	7	18	10	28	24	11	35
Other	2	21	7	28	15	14	29	36	21	57
Total	3	27	8	35	33	24	57	60	32	92
Grand Total	6	39	20	59	77	51	128	116	71	187

ENTERPRENEURSHIP DEVELOPMENT THROUGH AGRICULTURE

Replacing the 36-year-old National Policy of Education with the new National Education Policy of 2020 (NEP), India aimed to create a sector, not only inclusive and interactive but rather holistic, with the overview of promoting the nation's development. A new set of vision and dimensions has been given to this policy, especially on the entrepreneurial front. NEP re-imagines Vocational Education, which was essentially perceived to be inferior to mainstream education. The role of entrepreneurship in economic development is substantial. After all, entrepreneurs don't just build businesses and grow their personal wealth; they also impact the economy by creating new jobs and opportunities, driving innovation, and developing new markets, products, and services. As per Global Entrepreneurship Monitor (GEM) India Report (21-22), India's entrepreneurial activity expanded in 2021, with its Total Entrepreneurial Activity rate (percentage of adults (aged 18–64) who are starting or running a new business) increased to 14.4% in 2021, up from 5.3% in 2020.

KVK Jammu is also contributing in developing new entrepreneurs by conducting various vocational training programmes for Rural Youth/Progressive farmers with a goal to develop entrepreneurship qualities among the trainees and also provide them initial support for establishing their enterprise in Mushroom cultivation, Beekeeping, fisheries, Poultry and processing of fruits and vegetables. Details of the training programmes are given below:

Crop / Enterprise	Training title*	No. of trainings conducted	Total trainees	Units Established
Mushroom Production	Mushroom Cultivation Techniques	1	62	15
Integrated Nutrient Management	INM for Input Dealers	1	25	14
Beekeeping	Scientific Bee Keeping	7	263	40
Home Science	Processing & Preservation of seasonal fruits & vegetables	1	25	10
Poultry	Backyard Poultry	1	40	24
Fisheries	Post harvest handling and value addition in fresh water fisheries	8	60	15



➢ ENTERPRENEURSHIP DEVELOPMENT IN MUSHROOM CULTIVATION:

KVK Jammu conducted a vocational training programme for rural youths and dropouts of different villages of Block R. S. Pura to develop entrepreneurship skills among them. During the training programme both theoretical and practical classes were conducted for the farmers and they were given hands on training of different steps involved in mushroom cultivation, thus applying the concept of learning by doing. They were also motivated to develop their own enterprise in Mushroom production. Out of total sixty two, 15 candidates successfully took Mushroom Cultivation as an enterprise. Adoption rate of establishment of mushroom unit as an enterprise was 24 % among the trainees. A total of 1000 ready to fruit bags were also distributed to the participants as a support and to encourage them to take it as an enterprise.

Sh. Girdari Lal of Village Bholi Chak, Block R. S. Pura after getting training from KVK Jammu established his own unit at large scale for the production of Button Mushroom and emerged as a successful entrepreneur by earning a profit of more than Rupees Six lakhs in a season. He also provided employment to four persons @ Rs. 6000/- per month to each.

- **ENTERPRENEURSHIP DEVELOPMENT THROUGH NUTRIENT MANAGEMENT COURSE FOR INPUT DEALERS:**

Two 15 Days Certificate course on 'Integrated Nutrient Management (INM) for input dealers' for selling fertilizers were conducted at KVK Jammu in the year 2021 &2022. In which 25 candidates from different Districts of Jammu Division got registered and successfully completed the course. All the Participants were trained practically and theoretically by different experts from Faculty of Agriculture Sciences (SKUAST-Jammu), Department of Agriculture, IFFCO and IPL. Two exposure visits were also conducted to fertilizer testing laboratories of SKUAST-Jammu. Fourteen out of 25 trainees were allotted the fertilizer licence with a Adoption of 56%.

- **ENTERPRENEURSHIP DEVELOPMENT IN BEE KEEPING:**

Seven training programmes on 'Scientific Bee Keeping' for rural youth and farmers sponsored by National Bee Board under Mini Mssion 1- National Bee Keeping and Honey Mission (NBHM). Six trainings were conducted offline and one in virtual mode for the farmers. Three trainings were conducted at the border villages of Suchetgarh, Sai kalan and Chakroi. Theoretical as well as practical training was also imparted to all the participants at their village, KVK Jammu and at AICRP on Honey at Chatha campus of SKUAST-Jammu. This training programme also concentrated on production & productivity improvement of various crops through adoption of scientific beekeeping by the farmers/ beekeepers. Thrust was given on setting up of the activities relating to capacity building of farmers/ beekeepers, developing bee breeder's facilitation/ assistance for adoption of scientific beekeeping by the trained farmers/ beekeepers/ entrepreneurs along with promotion of scientific beekeeping. As a result of these trainings Sh. Janak Raj from Village Jabowal, Block R. S. Pura established a apiary on the name of Sahil apiaries and now he is a successful entrepreneur in Bee Keeping with 200 boxes. He also gives employment to 6 persons @ Rs. 8000/- per month for whole year. He is earning 4 lakhs profit from this enterprise annually.

- **ENTERPRENEURSHIP DEVELOPMENT IN PROCESSING & PRESERVATION OF SEASONAL FRUITS AND VEGETABLES:**

One vocational training programme on Processing & Preservation of seasonal fruits & vegetables was conducted by KVK Jammu. In which 25 farm women were trained and out of which ten established their own processing centers and extended their outreach towards local market at small scale. In coming years they will try to approach new and bigger markets after the popularization of their product at local market. Adoption per cent of 40 was recorded among the trained candidates.

- **ENTERPRENEURSHIP DEVELOPMENT IN BACKYARD POULTRY:**

A training programme on promotion of backyard poultry for rural youth and dropouts to earn their livelihood was conducted by the KVK Jammu in which 40 number of rural youths from village Salehar, Block R.S. Pura participated. As a support to develop their own enterprise 30 numbers of poultry birds

of (Variety-Chabroo) were distributed to each participant. Twenty four units of poultry were established by the trainees with an Adoption of 60 %.

- **ENTERPRENEURSHIP DEVELOPMENT IN POST HARVEST HANDLING AND VALUE ADDITION IN FRESH WATER FISHERIES:**

Eight vocational trainings sponsored by CIPHET were conducted on Post harvest handling and value addition in fresh water fisheries to train rural youth for earning their livelihood and development of entrepreneur capabilities. A hands on training was given to the participants. A total of 60 rural youths from different villages of Jammu District participated and 15 of them successfully established their fisheries enterprise. Adoption of 25 % was recorded among the participants after the completion of training programme.

(D) Sponsored Training Programmes conducted by KVK

Topic	Date	SC /ST Male	SC/ST FeMale	OBC Male	OBC FeMale	Other Male	Other FeMale	Total Male	Total Female
Promotion of Organic sources of Nutrition for improving soil health of agriculture production systems	25-02-2022	18	0	0	0	18	6	36	6
Scientific Bee Keeping	07-Feb-22	15	0	0	0	21	0	36	0
Scientific Bee keeping	11-Feb-22	14	0	6	2	32	21	52	23
Scientific Bee Keeping	25-Feb-22	20	1	0	0	4	0	24	1

6. Extension Activities (including activities of FLD programmes) Jan-Dec 2022

Nature of Activity	Date	No. of Activities	SC/ST (Farmers)			OBC/Other (Farmers)			Extension Officials			Grand Total		
			(I)			(II)			(III)			(I+II+III)		
			M	F	T	M	F	T	M	F	T	M	F	T
Field Day														
Berseem	02-Feb-22	1	6	0	6	7	1	8	2	1	3	15	2	17
Sarson	18-Feb-22	1	4	0	4	12	0	12	2	1	3	18	1	19
Wheat	07-Apr-22	1	2	8	10	8	16	24	2	1	3	12	25	37
Wheat	08-Apr-22	1	2	0	2	18	0	18	2	1	3	22	1	23
Barseem	13-Apr-22	1	10	0	10	11	2	13	1	0	1	22	2	24
Chick pea	28-Apr-22	1	0	0	0	3	17	20	1	0	1	4	17	21
Til Crop	27-Sep-22	1	0	12	12	1	7	8	1	0	1	2	19	21
Maize crop	28-Sep-22	1	0	18	18	3	3	6	1	0	1	4	21	25
Mash	11-Oct-22	1	6	0	6	15	0	15	1	0	1	22	0	22
Total		**9**	**30**	**36**	**66**	**78**	**46**	**124**	**12**	**4**	**16**	**120**	**86**	**206**
Kisan Mela														
Krishi Mela 7th to 11th March 2022	07-Mar-22	1	2227	2101	4328	2328	4280	6608	200	150	350	4755	6531	11286
Kisan Bhagidari Prathmikta Hamari on Natural Farming	26-Apr-22	1	91	46	137	134	39	173	50	25	75	275	110	385
Krishak Mela 2022	17-Nov-22	1	0	0	0	1500	0	1500	35	15	50	1535	15	1550
Celebration of Kisan Divas	23-Dec-22	1	0	0	0	1100	0	1100	16	4	20	1116	4	1120
Total		**4**	**2318**	**2147**	**4465**	**5062**	**4319**	**9381**	**301**	**194**	**495**	**7681**	**6660**	**14341**
Special Days														
National Science Day	28-Feb-22	1	1	10	11	4	16	20	1	1	2	6	27	33
World Honeybee Day	20-May-22	1	5	2	7	10	0	10	1	1	2	16	3	19
World Yoga Day	21-Jun-22	1	7	17	24	32	44	76	1	1	2	40	62	102
ICAR Foundation Day Cum Ex traninees sammelan	16-Jul-22	1	6	8	14	19	17	36	1	1	2	26	26	52
World Soil Day	05-Dec-22	1	15	24	39		0	0	1	1	2	16	25	41
Total		**5**	**34**	**61**	**95**	**65**	**77**	**142**	**5**	**5**	**10**	**104**	**143**	**247**
Kisan Ghosthi		4	33	35	68	24	16	40	3	4	7	60	55	115
Exhibition		16	2418	2231	4649	5070	4352	10422	296	186	481	7785	6769	14553
Film Show		28	230	150	380	184	105	289	22	12	28	437	264	698
Method Demonstrations		31	471	330	801	456	160	576	0	0	0	927	478	1405
Farmers Seminar		8	173	88	261	182	10	192	9	3	12	364	101	465
Workshop		2	61	66	127	130	70	200	87	34	121	278	170	448
Group meetings		15	62	13	75	446	3	19	6	3	5	514	16	530

Lectures delivered as resource persons		18												
Newspaper coverage		72												
Radio talks		5												
TV talks														
Popular articles		22												
Extension Literature		2000												
Advisory Services		48												
Scientific visit to farmers field		42	516	366	882	555	210	725	15	4	19	1086	568	1654
Farmers visit to KVK		2371	580	550	1130	644	404	1048	107	90	193	1331	1044	2371
Diagnostic visits		25	45	36	81	99	50	149	15	4	19	159	90	249
Exposure visits		8												
Ex trainees Sammelan		2	106	61	167	31	19	50	4	0	2	141	80	219
Soil health Camp		1	15	24	39	0	0	0	1	0	1	16	24	40
Animal Health Camp		8	102	19	121	148	6	154	48	7	55	266	42	306
Agri mobile clinic		2	15	0	15	21	4	25	3	0	3	39	4	43
Soil test campaigns		1	15	24	39	0	0	0	1	0	1	16	24	40
Self Help Group Conveners meetings		1	0	0	0	38	0	38	1	2	3	39	2	41

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	**6000**	**416**	48	40	48		40	32	208

6.C. DETAILS OF TECHNOLOGY WEEK CELEBRATIONS during 2022 (January-December)

Types of Activities	No. of Activities	Number of Participants		
		M	F	Total
Gosthies	9	364	101	465
Lectures organized	36			
Exhibition	1	86	33	119
Film show	1	86	33	119
Fair	1	86	33	119
Distribution of Literature (No.)	12	364	101	465
Distribution of Seed (q)	2	86	33	119
Total number of farmers visited the technology week		364	101	465

- **KVK Jammu organized series of programme under SWACCHTA PAKHWARA (2022)**

Vermicomposting & Natural farming by utilizing cow dung and agricultural waste	KVK Jammu	03/10/2022	37	37
Management of Agricultural waste through composting	KVK Jammu	06/10/2022	37	37
Cleaning of bunds & boundaries	Pargwal	07/10/2022	16	16
Promotion of Green environment for clean environment	KVK Jammu	07/10/2022	16	16
Agricultural waste management through button mushroom production technology	KVK Jammu	10/10/2022	35	35
Cleanliness drive to promote sanitation and curb vector disease (Yellow Mosaic virus) in black gram	Panjgrain	11/10/2022	22	22
Cattle waste management, organic waste to wealth through vermicomposting	KVK Jammu	14/10/2022	37	37
Conversion of Bio Waste by Dingri Production	KVK Jammu	17/10/2022	35	35
Awareness Programme	Talhara	19/10/2022	21	21

- **Export Promotion Programme for Agricultural Produce in collaboration APEDA and BEDF (17-10-2022)**

APEDA and BEDF in collaboration with Krishi Vigyan Kendra, Jammu organized export promotion programme and kissan Sammelan. Sh Jugal Kishor Sharma Member Parliament Jammu Poonch Constituency was the Chief Guest and Prof J P Sharma Hon'ble Vice Chancellor SKUAST JAMMU was the Special Guest of Honour during the programme. During the technical programme Dr Ritesh Sharma Principal Scientist BEDF deliberated upon challenges and opportunities in export for Agricultural produce. Dr R K Salgotra Coordinator School of Biotechnology SKUAST JAMMU shared the potential of newly developed Jammu Basmati Varieties which are equivalent to taste and fragrance with respect to the traditional Basmati variety of R S Pura. Sh Subash Sharma Joint Director Extension Department of Agriculture briefed the participants about various schemes being run by the department for the farmer.Dr Fatima Kousar from regional office APEDA Jammu briefed about the

registration of FPO's for export of their produce. The programme was attended by more than 300 farmers/stakeholders including Ex MLA and DDC member Prof Garu Ram Bhagat, Smt Vidya Motan DDC Miransahib, Sarpanch Panch, President and Board of Directors of FPO on Mushroom and FPO on Basmati, Sarweshwar Pvt Ltd, DD Rice and other stakeholders of Jammu district.

Hon'ble Member Parliament Sh Jugal Kishore Sharma Inaugurated one day export promotion programme on Agricultural Produce at KVK Jammu

- **Awareness programmes under Jan Abhiyan:** KVK JAMMU conducted series of Awareness Programme under below mentioned themes at panchayat level under Jan Abhiyan Back to Village 4.0. of UT of Jammu and Kashmir to develop strategy for over all development of Agriculture and allied sectors in Jammu district.

Title of Programme	Panchayat	Date	Participants
Paddy Straw Management	Talha	19-10-2022	23
Fodder Production	Biaspur Parlah	20/10/2022	43
Jan Abhiyan program of mushroon processing	Kaloen	21/10/2022	33
Fisheries under Jan Abhiyan Back to Villafe 4.0	Nougran	21/10/2022	40
Jan Abhiyan on Agriculture Infrastructure Fund	Badyal Brahmna	25/10/2022	44
Jan Abhiyan under back to village programme	Mishriwala	27/10/2022	48
Jan Abhiyan under Back to Village (Value addition/processing of cereal, vegetable & fruit Crops)	Qutab Nizam	28-10-2022	54
Seed treatment of Rabi Crops	Galvadey Chak	29-10-2022	28

- **Jal Shakti Abhiyan (4th November 2022)**

A Kisan mela cum awareness camp was organized at village and panchayat Dhok Jagir Block Akhnoor under Jal Shakti Abhiyan to aware the people about the importance of water and methods to conserve it. The programme was attended by 117 nos. of farmers along with Panchsand Sarpanch of different panchayats.

- **World Soil Day (5th Dec. 2022)**

Krishi Vigyan Kendra, Jammu, organised World Soil Day in Collaboration with IFFCO Jammu at KVK Jammu, today to sensitize the stakeholders and being observed across the country. The programme was attended by Progressive farmers, including sarpanches, and panches. The program was organised in continuation to the various activities being undertaken by KVK Jammu for mass sensitization towards importance of Soil health Ecosystem. Prof. J P Sharma Vice Chancellor, SKUAST Jammu was the Chief Guest and Sh Dharminder Kumar DDC Bishnah was Guest of Honour.

कृषि विज्ञान केंद्र आर एस पुरा ने विश्व मृदा दिवस मनाया

कठुआ केसरी ब्यूरो

आर एस पुरा। जम्मू के प्रशासनिक नियंत्रण के तहत प्रो जे पी शर्मा माननीय कुलपति के गतिशील नेतृत्व और डॉ एस के गुप्ता निदेशक विस्तार के समग्र पर्यवेक्षण के तहत काम करते हुए, केवीके जम्मू में इफको जम्मू के सहयोग से विश्व मृदा दिवस का आयोजन किया। आज हितधारकों को संवेदनशील बनाने और देश भर में मनाया जा रहा है। कार्यक्रम में सरपंचों और पंचों सहित प्रगतिशील किसानों ने भाग लिया। मृदा स्वास्थ्य पारिस्थितिकी तंत्र के महत्व के प्रति व्यापक संवेदनशीलता के लिए केवीके जम्मू द्वारा की जा रही विभिन्न गतिविधियों को जारी रखने के लिए कार्यक्रम का आयोजन किया गया था। जे पी शर्मा वाइस चांसलर, स्कास्ट जम्मू मुख्य अतिथि थे और धर्मिंदर कुमार डीडीसी बिश्नाह गेस्ट ऑफ ऑनर थे।

सभा को संबोधित करते हुए प्रो जे पी शर्मा, वाइस चांसलर स्कास्ट जम्मू ने मृदा परीक्षण, मृदा स्वास्थ्य, कृषि उत्पादों के विपणन और ब्रांडिंग सहित कृषि के विभिन्न पहलुओं पर बात की। प्रो जे पी शर्मा ने भी प्रतिभागियों से प्रतिक्रिया प्राप्त करने का सुझाव दिया और साथ ही केवीके अधिकारियों से बाद में प्रशिक्षुओं की मदद करने के लिए जोर दिया। धर्मिंदर कुमार ने अपने संबोधन में केवीके जम्मू को धन्यवाद दिया और जम्मू जिले के बिश्नाह ब्लॉक के अनुसूचित जाति समुदाय के उत्थान के लिए उनके प्रयासों की सराहना की। प्रारंभ में डॉ. पुनीत चौधरी, मुख्य वैज्ञानिक और प्रमुख केवीके जम्मू ने प्रतिभागियों का स्वागत किया और पूरे विश्व में विश्व मृदा दिवस मनाने के महत्व के बारे में बताया। इफको के विवेक ने रासायनिक उर्वरकों के विवेकपूर्ण उपयोग और नैनो यूरिया के उपयोग पर जोर दिया। इस अवसर पर मृदा परीक्षण के लिए विभिन्न पंचायतों से मिट्टी के नमूने एकत्र किए गए, जिसका संचालन इफको डॉ. मुनीश्वर शर्मा, वैज्ञानिक पौध संरक्षण ने कार्यक्रम की कार्यवाही की. कार्यक्रम में भाग लेने वाले अन्य लोगों में केवीके जम्मू के डॉ. अमितेश शर्मा, डॉ. राजू, डॉ. सतबीर और सहित शामिल थे। कार्यक्रम का समापन डॉ. रवनीत कौर मुख्य वैज्ञानिक केवीके जम्मू द्वारा धन्यवाद प्रस्ताव के साथ हुआ।

- **KISAN DIVAS CUM FAIR IN COLLABORATION WITH DEPARTMENT OF AGRICULTURE AND AMAR UJALLA., 23RD DEC, 2022**

Dr Mangala Rai Former DG ICAR and Secretary DARE and Prof J P Sharma Hon'ble Vice Chancellor SKUAST Jammu inaugurated one day kisan Mela organised on the occasion of Kisan Diwas by Krishi Vigyan Kendra, Jammu in collaboration with Department of Agriculture and Amar Ujalla. Large number of farmers, agriculture entrepreneurs, private companies, public representatives, line departments/stake holders shall be participated in the event. Dr K K

Sharma, Director Agriculture, Sh Ram Sewak KAS Director Horticulture, Sh Joginder Paul Mehta, State Marketing Manager IFFCO, officers from other line department, progressive farmers of Jammu district also putforth their views during the programme. More than 1000 farmers/stakeholder participated in the mela and more than 100 stall were depiced during the mela by Agriculture and allied sector prive, public and Govt institutions. Progressve farmers were aslo awarded during the programme.

➢ ONE DAY WORKSHOP ON PROMOTION OF AGROFORESTRY IN J&K :

Department of Social Forestry J&K in collaboration with Sher-e-Kashmir University of Agriculture Science & Technology (SKAUST), Jammu at KVK Jammu at R S Pura organised a one-day workshop to facilitate the consultation amongst stake holders to promote development of Wood Based Industries in Jammu as well as Kashmir region. The one-day event was chaired by Commissioner Sectary Forest Ecology & Environment Department J&K Sh. Sanjeev Kumar Verma IAS. While speaking on the occasion he appreciated the initiative which could go a long way in identifying the strength areas and challenges in promoting the development of Wood Based Industries in UT of Jammu and Kashmir.

One Day Workshop on Promotion of Agroforestry in Jammu & Kashmir: Opportunities and Challenges at KVK Jammu in a collaboration with Social Forestry Department UT of J&K

National Campaign on Poshan Abhiyan and Tree Plantation organized by KVK Jammu

National level campaign on PoshanVatika and Tree plantation on the occasion of Prof S K Gupta Director Extension SKUAST JAMMU, SmtVidyaMottan, DDC Miran sahib, Dr Sonika Sudan BDO Arnia, S. Nirmal Singh, Manager, Kisan Call center, IFFCO presided over during the programme along

with more than 100 farmers and adolescent girls. During the programme, a cake made of pearl millet (Bajra) and value added Makhanas with sesame and jiggery provided by division of Post-Harvest Technology, SKUAST-J were served to Kanya's during the programme. All the farmers were provided a kit of vegetable seeds of Rabi season and fruit plants namely Guava (Variety L 49) and Citrus for their kitchen gardens. Expert lecture on nutritional aspects of fruits, vegetable and animal sources were delivered during the programme by DrPunit Choudhary, Sr Scientist & Head, Dr Ravneet Kour, Scientist and Dr Prem Kumar, Scientist, KVK Jammu respectively.

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	Paddy Wheat	B-370 DBW-222 DBW-173	72 q 130q	350000 450000	**Provided to Mega Seed Projects SKUAST Jammu for onward submission to DoA**

B) PLANTING MATERIALS

Major group/class	Crop	Variety	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
FRUITS	**Guava**	**L-49**	**50**	**2500**	**10**
VEGETABLES	**Bottle Guard**	**-**	**200-**	**10000**	**-**
FOREST SPECIES	Fodder (Napier)		2000 No. of Strips	40000	
	Setaria		2000 No. of Strips	40000	
	Harad Amla Lemon Grass Alovera		200	5000	

C) BIO PRODUCTS

Major group/class	Product Name	Species	Quantity		Value (Rs.)	Provided to No. of Farmers
			No	(kg)		
BIOFERTILIZERS						
1	Vermicomost	-	-	**46.86**	**46860**	-

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

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

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

Item	*Title*	*Authors name*	*Number of copies*
Research papers	1. Adoption of Organic Farming for Sustainable Livelihood and Environment Security at Indo-Pak International Boarder. Journal of Community Mobilization and Sustainable Development (2) pp 637-641 2. Marketing Analysis of Harad (Terminalia Chebula) and Constraints Faced in Jammu District of Jammu and Kashmir – Union	**Punit Choudhary**, Ravneet Kour, Prem Kumar, Sheetal Badyal, Amitesh Sharma, Muneeshwar Sharma and Raju Gupta. 2022. Honey Kumar, Anil Bhat, **Punit Choudhary**, Malika Sharma, Sabbey	-

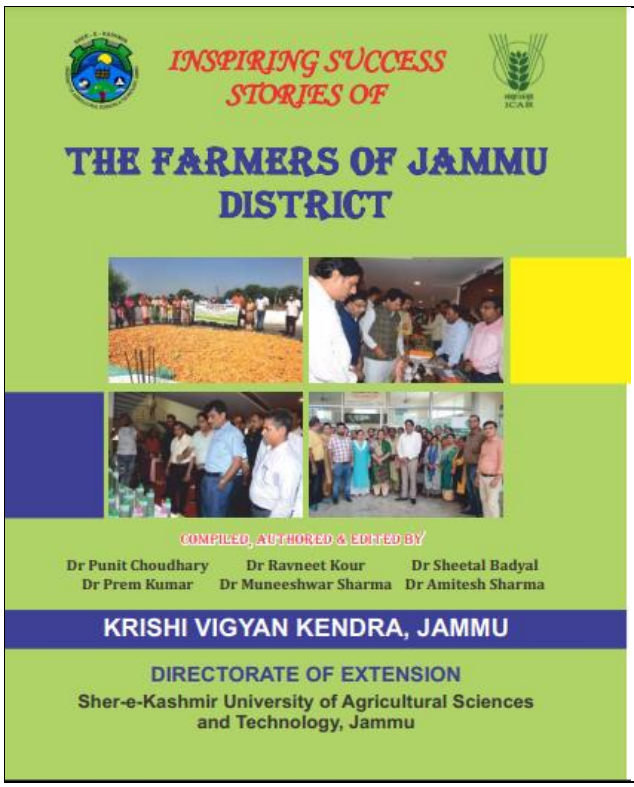
Item	*Title*	*Authors name*	*Number of copies*
	Territory. Journal of Community Mobilization and Sustainable Development (1) pp 233-236	Sharma and Rakesh Sharma. 2022	
	3. An economic analysis of production of Harad (*Terminalia chebula*) and constraints faced in its cultivation in Jammu" *The Indian Forester, 148(5) : 503-508, 2022*	Honey Kumar, Anil Bhat, **Punit Choudhary** and Malika Sharma. 2022	
	4. Climate Change Threatens the Blue Economy, Food Millions of People Rely On? Journal of Community Mobilization and Sustainable Development Volume 2 (Seminar Special Issue) May 26-28, 2022: pp 398-407	Akhil Gupta, Prem Kumar and J.P. Sharma. 2022.	
	5. Kitchen Garden: A Sustainable Alternative for Food and Nutritional Security Journal of Community Mobilization and Sustainable Development Volume 2 (Seminar Special Issue) May 26-28, 2022: pp 422-427	Sheetal Badyal, Ravneet Kour, Neerja Sharma, Puneet Choudhary, Prem Kumar, Muneeshwar Sharma and Amitesh Sharma. 2022.	
	6. A Study of Economics analysis of Hybrid Marigold Production in Jammu District of J&K Journal of Community Mobilization and Sustainable Development Volume 2 (Seminar Special Issue) May 26-28, 2022: pp 428-431	Raju Gupta, Prem Kumar, Punit Choudhary and Pawan Sharma. 2022.	
	7. Existing Marketing System and Price Spread of Fish Marketing in the Jammu Division of JK-UT Journal of Community Mobilization and Sustainable Development Volume 2 (Seminar Special Issue) May 26-28, 2022: pp 611-616	Prem Kumar, Sudhakar Dwivedi, Vikas Kumar and Sushma Sharma. 2022.	
Book	1. "Technology Application And Adaptation For Climate Smart Agriculture" edited by, International Books & Periodical Supply Service. ISBN : 978-93-94023-38-3 E-ISBN : 978-93-94023-39-0	Dr. Sameera Qayoom, Purshottam Singh, Vinod Gupta, Punit Choudhary, Susheel, Latief Ahmad Sofi and Prem Kumar. 2022	-
	2. Agricultural Trade and Profitability. 2022. New Delhi Publishers	Sudhakar Dwivedi, Jyoti Kachroo, S p Singh, Anil Bhat, Pawan Kr Sharma,	

Item	*Title*	*Authors name*	*Number of copies*
	3. 'SMARIKA: Prakritik, vaidic avam Jaivik kheti' was edited and published. 15th January 2022. 4. A book tiltled "Bhartiya Krishi: Prakritik avam Aadhunik Prodhyogikiya" 2022.	Prem Kumar and Rekha Nair. Prem Kumar et al., January 2022. S K Gupta, Pawan K Sharma and Prem Kumar. March 2022.	
Book Chapters	1. Harad (Terminalia Chebula): Production to Profitability IN: Transforming Agriculture for Self-Reliant India Eds: Sameera Qayoom, R. Roy Burman, Amit K. Goswami, Rakesh Sharma, Anil Bhat, Subhashree Sahu, Girijesh Singh Mahra. 101-113p International Books & Periodical Supply Service. ISBN : 978-93-94023-33-8. . 361 p 2. Agroforestry and Its Roles, Adoption, Constraints and Potentials: Global Perspectives. IN: Transforming Agriculture for Self-Reliant India Eds: Sameera Qayoom, R. Roy Burman, Amit K. Goswami, Rakesh Sharma, Anil Bhat, Subhashree Sahu, Girijesh Singh Mahra.181-205p. International Books & Periodical Supply Service. ISBN : 978-93-94023-33-8. . 361 p 3. Carbon Sequestration Potential of Agroforestry Systems: An Overview. In Technology Application And Adaptation For Climate Smart Agriculture" edited by Dr. Sameera Qayoom, Purshottam Singh, Vinod Gupta, Punit Choudhary, Susheel, Latief Ahmad Sofi and Prem Kumar. 2022, International Books & Periodical Supply Service.219-231 p ISBN : 978-93-94023-38-3 E-ISBN : 978-93-94023-39-0 4. Lab-grown Meat: Economics, challenges and Prospects. In Book Institutional Changes for Agricultural Development.	Anil Bhat, Punit Choudhary, Sabbey Sharma, Vinod Gupta, Rakesh Sharma and Narinder Panotra. 2022. Puneet Choudhary, Kamal Kishor Sood and Sandeep Sehgal. 2022. Vishal Mahajan, Punit Choudhary, N.S. Raina and Pawan K. Sharma. 2022. Arvind Kumar, Sudhakar Dwivedi, Prem Kumar and Firdous Kousar. 2022.	

Item	*Title*	*Authors name*	*Number of copies*
	Editors Sudhakar Dwivedi et al., New Delhi Publishers, pp. 1-15. 5. Nano-foodis the economic prospective of the food industry. In Book Institutional Changes for Agricultural Development. Editors Sudhakar Dwivedi et al., New Delhi Publishers, pp. 43-54. 6. Economic Impact of Mastitis on the Milk procession Industry. 2022. In Book Agricultural Trade and Profitability. Editors Sudhakar Dwivedi, Jyoti Kachroo, S p Singh, Anil Bhat, Pawan Kr Sharma, Prem Kumar And Rekha Nair. New Delhi Publishers, pp. 223-230. 7. Economic Impact of artificial fibre on the woollen textile industry. 2022. In Book Agricultural Trade and Profitability. Editors Sudhakar Dwivedi, Jyoti Kachroo, S p Singh, Anil Bhat, Pawan Kr Sharma, Prem Kumar and Rekha Nair. New Delhi Publishers, pp. 231-239. 8. Economic Fisheries and Aquaculture: Sunrise sector for boosting Indian Economy. 2022. In Book Agricultural Trade and Profitability. Editors Sudhakar Dwivedi, Jyoti Kachroo, S p Singh, Anil Bhat, Pawan Kr Sharma, Prem Kumar and Rekha Nair. New Delhi Publishers, pp. 240-250. 9. Parmparik avam adhunik Krishi ka samanvay: sehat, utpadan tatha paryavaran ke liye. 2022. 10. Jammu aur Kashmir rajya me matsya palan ke avsar, badhayein avam takniki. 2022.	Arvind Kumar, Sudhakar Dwivedi, Prem Kumar and Sakshi Sharma. 2022. Arvind Kumar, Sudhakar Dwivedi, Neelesh Sharma and Prem Kumar. 2022. Arvind Kumar, Sudhakar Dwivedi, Prem Kumar and Pranav Kumar. 2022. Prem Kumar, Punit Choudhary, Arvind Kumar, Sudhakar Dwivedi and Shafeeqa Jan. 2022. S K Gupta, Prem Kumar and Pawan Kumar Sharma. Pp 1-9. Prem Kumar, Punit Choudhay avam Muneeshwar	
Lead Lecture	"Fisheries Sector and its Economic significance in India" during 30th Annual conference of AERA on Institutional Changes for Inclusive and Sustainable Agricultural Development w.e.f.. December 21-23, 2022 at SKUAST-Jammu. Pp 67-72.	Prem Kumar, Punit Choudhary, Ravneet Kour, Sheetal Badyal, Arvind Kumar and Akhil Gupta. 2022.	

Item	*Title*	*Authors name*	*Number of copies*
Technical bulletins	1. Krishi vigyan Kendra Jammu at a glance. 2. Krishi Sambandhut sarakari yojnayein, 3. Recirculatory aquaculture ki jankari 4. How to establish Fish feed mill 5. Kya karien machliyon ki achi paidawar ke liye	Punit Chodhary, Pawan K Sharma, Prem Kumar, Ravneet Kour, Sheetal Badyal, Muneeshwar Sharma, Amitesh Sharma and Raju Gupta	200 200 25 25 25
Training Manual	1. A training manual on "Post harvest management & value addition of Fishes" for farmers, Extension functionaries of Fisheries Department, and other stake holders during 3 days training programme at KVK Jammu w.e.f. 29/12/2021 - 31/12/2021. Under SCSP project sponsored by ICAR-CIFT.	Prem Kumar, Punit Choudhay, Sahar Masud, Ravneet Kour, Sheetal Badyal, Muneeshwar Sharma and Amitesh Sharma.	25
	2. A training manual on "Machli ke mulya sanvardhit utpad" for farmers, Extension functionaries of Fisheries Department, and other stake holders during 3 days training programme at KVK Jammu w.e.f. 19/01/2022 -21/01/2022. Under SCSP project sponsored by ICAR-CIFT.	Prem Kumar, Punit Choudhay, Sahar Masud, Ravneet Kour, Sheetal Badyal, Muneeshwar Sharma and Amitesh Sharma.	25
	3. A training manual on "Machli ke utpadon dwara udyamita vikas" for farmers, Extension functionaries of Fisheries Department, and other stake holders during 3 days training programme w.e.f. 25/01/2022 -27/01/2022. Under SCSP project sponsored by ICAR-CIFT.	Prem Kumar, Vinod Gupta and Vijay Kumar Sharma.	25
	4. A training manual on "Machli ke utpad avam unka vyavsay" for farmers, Extension functionaries of Fisheries Department, and other stake holders during 3 days training programme w.e.f. 19/03/2022 -21/03/2022. Under SCSP project sponsored by ICAR-CIFT.	Prem Kumar, Vishal Mahjan, Brajesh Azrawat and Vishal Sharma.	25
	5. Training Mannual on Scientific Bee Keeping prepared under Mini Mission "National Beekeeping & Honey Mission sponsored by Nation Bee Board Govt, of India	Punit Choudhary, Ravneet Kour, Prem Kumar, Sheetal Badyal, Amitesh Sharma, Muneeshwar Sharma	300

Item	*Title*	*Authors name*	*Number of copies*
Folders /leaflets	1. Biofloc system for intensive fish production	Prem Kumar, Punit Choudhary, Rakesh Sharma, SheetalBadyal, Ravneet Kour and Poonam Abrol	100
	2. Cultivation of medicinal trees (Harad and Aonla) for higher income	Punit Choudhary, Rakesh Sharma, SheetalBadyal, Ravneet Kour and Prem Kumar	100
TOTAL	**34**		**1025**



EFFECT OF DFI INTERVENTION — KVK Jammu

Name of farmer: **Satpal**
Address: **Suchetgarh R S Pura**
Mobile Number: **9419614984**
Age: **52**
Education: **Under Matric**
Size of land holding (in acre): **3.0 + 2.0 lease**

Before Intervention

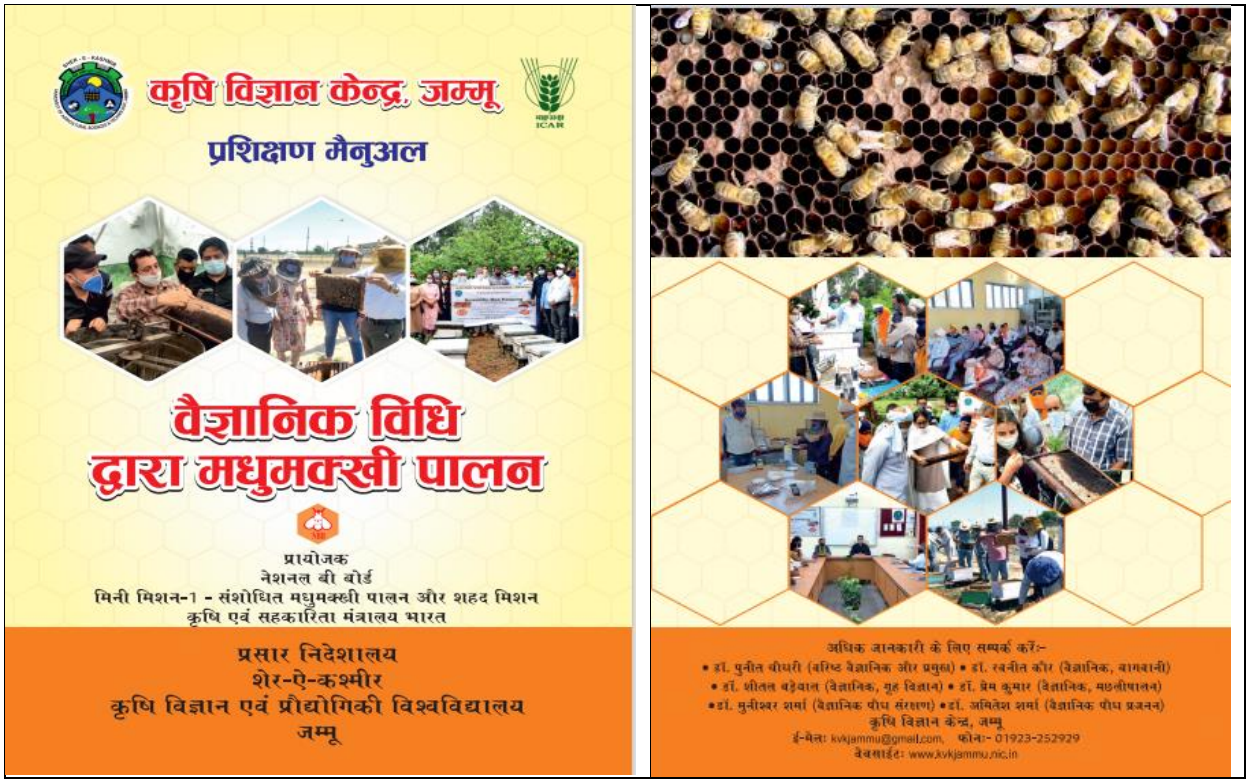
Component Description		Benchmark (Baseline period 2016-17)			
Components	Names	Area (Acre)/Number	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)
Field Crop 1	Paddy	3	12	104000	78400
Field Crop 2	Wheat	3	11	66800	36800
Livestock 1	Cows/buffalo	15	100	900000	600000
Other enterprise (Specify)	Fodder	2	200	140000	100000
Total					815200

Status in 2020

Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (Acre)/No	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)	Production	Income
Field Crop 1	Paddy	3	13	120000	96000	8.33	22.44
Field Crop 2	Wheat	3	12	70800	40800	8.33	10.86
Livestock 1	Cows/buffaloes	30	200	1800000	1200000	100	100
Other enterprise (Specify)	Fodder	2	400	440000	320000	100	20
Total					1656800		**100 %**

Brief: The farmer used to get annual income of Rs. 815200/- from cereal cultivation and dairying. He faced problems like marketing & lack of improved breeds. With DFI interventions like Dairy farming and fodder production etc., he is getting annual income of Rs. 1656800/- .

1



(C) Details of Electronic Media Produced: (18)

Developed Videos of Progressive Farmers of Jammu District

S. No.	Name	Village	Crop
1	Nirmala Kumari	Jagwal	Bee Keeping
2	Kulbhushan Khajuria	Sohanjana	Dairy Farming, Vermicompost
3	Vinod Kumar	Kaloen	Mushroom, flouriculture
4	Joginder Singh	Qutab Nizam	Diversification
5	Puran Singh	Purobana	Pulses
6	Ramesh Chander	Purobana	Diversification
7	Santosh Kumari	Qutab Nizam	Mushroom
8	Sohan Lal Sharma	Badyal Brahmna	Brocolli
9	Suresh Kumar	Qutab Nizam	Paddy
10	Swarn Lal	Suchetgarh	Organic Basmati
11	Tarsem Kumar Sharma	Badyal Brahmna	Vegetables
12	Balraj Singh	Dabbar	Fish Farming
13	Kuldeep Raj	Kotli Charkan	Fish Farming
14	Rameshwar Singh	Deolian Khour	Fish Farming
15	Kamla Kumari	Hassarwan, Mishriwala	Vertical Farming
16	Som Dutt	Hassarwan, Mishriwala	Integrated farming
17	Girdhari Lal	RS Pura	Mushroom Farming
18	Ajit Singh	Bishnah	Diversification

Youtube links:

https://youtu.be/gnF4zVc3yyg ; **https://youtu.be/1yyXgQRHm5o**

KVK JAMMU IN NEWS (2022)

Verma chairs one-day workshop on promotion of Wood based Industries in J&K

GJ REPORT
JAMMU, AUG 25: Department of Social Forestry J&K in collaboration with Sher-e-Kashmir University of Agriculture Science & Technology (SKUAST)-Jammu today organised a one-day workshop to facilitate the consultation amongst stakeholders to promote development of Wood Based Industries in Jammu as well as in Kashmir region.

The one-day event was chaired by Commissioner Secretary, Forest, Ecology & Environment Department, Sanjeev Kumar Verma.

employment opportunities, increase the income of farmers and boost the industrial activities as has been demonstrated in the states like Haryana, Punjab and western UP.

P.C.C.F./Director Department of Social Forestry, J&K, Ravi Jaggi while delivering opening remarks informed that Department of Forestry in last decades has played key role in establishing the ... of Tree Farming ...

VC, SKAUST-J, Dr. J.P Sharma honouring Commissioner Secretary, Forest, Ecology & Environment Department, Sanjeev Kumar Verma at Jammu

VC SKUAST-Jammu inaugurates Training on Quality Seed Production

JL NEWS SERVICE

JAMMU, Feb 10: Prof. J.P. Sharma, Vice Chancellor, SKUAST-Jammu today inaugurated training programme on Quality Seed Production on Field crops organised by Mega Seed Project in collaboration with Vigyan Kendra, R S Pura ...

Government schemes of Bharat with a ...

Puneet Choudhary, Scientist & Head, KVK Jammu formally welcomed participants and ...

STATE TIMES • Wednesday • April 27, 2022

KVK Jammu organises Kisan Mela on 'Kisan Bhagidari Prathmikta Hamari'

STATE TIMES NEWS

JAMMU: Krishi Vigyan Kendra (KVK) Jammu working today the leadership of Prof. J.P. Sharma, Vice Chancellor, SKUAST-Jammu organized a Mega Kisan Mela on theme 'Kisan Bhagidari Prathmikta Hamari' wherein a large number of farmers, farm women, Panches, Sarpanches, Agri-entrepreneurs from different blocks of Jammu district participated.

De Garu Ram Bhagat, DDC R S Pura and Ex-MLA was Chief Guest, whereas Dr. S.K Gupta, Director Extension, SKUAST-Jammu, Brihash Darminder Kumar, DDC Mirpur Sahib, Vidya Motan, Chief Agriculture Officer Arvind Para, Chief ...

Gupta in his address to the farmers stressed on Post Production Processing, Value addition, marketing and branding of the produce of the farmer for making the agriculture more profitable. At the outset Dr. Punit Choudhary, Senior Scientist ...

posting as their alternatives. Progressive farmers were awarded for their contribution in the field of organic agriculture, Horticulture, Fisheries, Animal Husbandry, IFFCO and ...

Kour, Scientist Horticulture, Dr. Prem Kumar, Scientist Fisheries, Dr. Sheetal Badyal, Scientist Home Science, Dr. Muneeshwar Sharma, Scientist Plant Protection, Dr. Amitesh Sharma, Scientist ...

Dignitaries releasing a folder on various schemes being run for the welfare of the farming community prepared by team of KVK Jammu.

Dairy farmers suffer losses due to outbreak of Lumpy Skin Disease

GJ REPORT
JAMMU, AUG 18: Krishi Vigyan Kendra (KVK) Jammu in collaboration with ...ulty of Veterinary ...ences and Animal ...bandry, R S Pura, ...TAST-Jammu and ...artment of Animal ...bandry, J&K today ...nised a press conference ... Lumpy Skin Disease ...D) to aware the livestock ...ers about the disease.

...rof. M.S. Bhadwal, ..., highlighted the problems associated with the outbreak of the disease in Jammu ...nce of UT of J&K in ...ular. The dairy farmers ... great stress and heavy ...d losses due to the outbreak of this disease in dairy ...ls. He informed that ...s therapeutic and preventive measures are being ...ry the state department ...imal Husbandry and ...ST-Jammu to cash and ...

minimize the effects of this disease. He informed that a Quick Response Team (QRT) of SKUAST-Jammu has visited many disease-affected areas and dairy clusters, and prescribed treatment along with preventive measures. The University has set up a toll free No. 18001807196 to advise and help the farmers. He advised farmers not to panic, and contact quick response team of the University for any help. Dr Altaf Ali, Chief Animal Husbandry, Jammu said that a Rapid Response ... (RRT) of veterinary ... block wise has been ...ed to supervise this outbreak.

Dairy farmers ... to restrict the movement of animals to different ... it can further spread ... to other areas. ... also advised to ...

KVK Jammu and faculty of Veterinary Sciences and Animal Husbandry of SKUAST-Jammu addressing the media on Thursday.

control measures in and around the sheds of animals and vaccinate healthy live-stock. ...

sion has been reported. Cattle are primarily affected. The major ...

अभी पानी का मोल नहीं समझे तो आने वाले समय में भुगतने होंगे गंभीर परिणाम

संवाद सहयोगी, आरएसपुरा : कृषि विज्ञान केंद्र जम्मू ने वीरवार को जम्मू कश्मीर देहाती सेवा संस्था के सहयोग से गांव जिंदडमेलू में एक दिवसीय जागरूकता कार्यक्रम आयोजित किया। इसमें किसानों को सरकार द्वारा शुरू किए गए जल शक्ति अभियान के बारे में जागरूक किया गया। बताया गया कि अभी पानी का मोल नहीं समझे तो आने वाला समय संकट वाला होगा। जम्मू कश्मीर देहाती सेवा संस्था के प्रधान गारा राम मोटन की अध्यक्षता में आयोजित कार्यक्रम में शेर ए कश्मीर कश्मीर कृषि विश्वविद्यालय के निदेशक एक्सटेंशन डा. एसके गुप्ता मुख्य अतिथि थे।

इसके अलावा कृषि विज्ञान केंद्र जम्मू के प्रमुख डा. पुनीत चौधरी, डा. प्रेम के साथ कृषि विज्ञान के अन्य अधिकारी व कृषि क्षेत्र से जुड़े हुए लोग भी उपस्थित रहे। इस दौरान कृषि विज्ञान केंद्र की तरफ से किसानों को सब्जियों एवं ...

किसानों को बीज उपलब्ध करवाते हुए • जागरण

- कृषि विज्ञान केंद्र की ओर से जिंदडमेलू में जागरूकता कार्यक्रम
- किसानों को सरकारी योजनाओं की भी दी गई जानकारी

जा रहा है, ताकि किसानों को पानी की बचत के बारे में जागरूक बनाया जा सके। उन्होंने कहा कि हमें पानी का उतना ही इस्तेमाल करने की जरूरत है, जिससे फसल को ... मिल सके। ...

नेता सतपाल ... अधिकारी गिर... कहा कि प्रध... योजना के तह... की जो राशि मि... गई है। उन्होंने ... के पास अलाट... योजना का ... क्षेत्र के किस...

HFRI Shimla in collaboration with KVK Jammu organises training programme

STATE TIMES NEWS

JAMMU: Himalayan Forest Research Institute (HFRI) Shimla collaborated with Krishi Vigyan Kendra (KVK) Jammu and Sustainability Management and Productivity Forest Solutions (SMPFS) ...

...ed KVK Jammu officials showing a programme.

Speaking ... Dr. S.K. Gupta, Registrar told that ... collaborative ... through ...

5 जम्मू मंगलवार 06, दिसंबर 2022

केवीके जम्मू ने विश्व मृदा दिवस

संवाददाता

...र कर एक ... 5 दिसंबर ... मिशन ... ...

...का आयोजन किया गया था। उ... ने दी शर्मा उद्यान शास्त्र, ... सलाह जम्मू मुख्य अतिथि थे और धर्मिंदर कुमार डीडीसी ... विशेषज्ञ तंत्र और अन्य थे।

...करने का मुख्य दिन और ... तथा ही केवीके अधिकारियों ... के बाद में प्रशिक्षुओं की मदद ... करने के लिए जोर दिया। ... धर्मिंदर कुमार ने अपने ...

...सरा को संबोधित करते हुए ... ने दी शर्मा उद्यान शास्त्र, ... सलाह जम्मू ने मृदा परीक्षण, ... स्वास्थ्य, कृषि उत्पादों के ... और प्रशिक्षण सहित कृ... विभिन्न गतिकृषि पर ...

...उपयोग में केवीके जम्मू के ... व्यवहार दिया और जम्मू जिले के ... के विशाल स्तरीय के अनुसूचि... पत्र जाति समुदाय के उत्थान के लिए उनके प्रयासों की ... उपहार की। प्राय में डॉ ...

प्रतिभागियों का स्वागत किया और पूरे विश्व में विश्व मृदा दिवस मनाने के महत्व के बारे में बताया। इसके बाद विशेष ने रासायनिक उर्वरकों के विवेकपूर्ण उपयोग और गैर यूरिया के उपयोग पर जोर दिया। इस अवसर पर मृदा परीक्षण के लिए विभिन्न पदार्थों से मिट्टी के नमूने एकत्र किए गए, जिसका सघन ... इसके डॉ. मुनीश्वर शर्मा, वैज्ञानिक पौध संरक्षण ने कार्यक्रम की कार्यवाही की। कार्यक्रम में भाग लेने वाले अन्य लोगों में केवीके जम्मू के डॉ. अमितेश शर्मा, डॉ. एस. डी. सतपीर और सात्विक शामिल थे। कार्यक्रम का समापन डॉ. रश्मीता और मुख्य वैज्ञानिक केवीके जम्मू द्वारा ...

KVK Jammu holds Scientific Advisory Committee meeting

Excelsior Correspondent

JAMMU, Aug 23: Krishi Vigyan Kendra (KVK) Jammu, working under the Administrative control of SKUAST- Jammu, conducted 19th Scientific Advisory Committee (SAC) meeting today under the chairmanship of Vice-Chancellor Prof J P Sharma, at KVK R S Pura, Jammu.

The meeting was attended by Director Extension, SKUAST-Jammu, Director, ICAR-ATARI, Zone-1, Ludhiana, Dean, FVSc & AH, SKUAST-Jammu, ...istrict Heads of Line ...epartments, Representative ...om NABARD, Lead Bank, ...DPO, DFO (SF), Heads of ...ivisions of Faculty of ...gricultural Sciences of ...KUAST-Jammu, Kisan Board ...embers, progressive farmers ...Jammu district and others.

In his address, Prof J P ...harma stressed upon diversifi...tion, value addition of agricul...re products and adoption of ...condary agriculture. He also ...vised to focus on entrepre...urship development of rural ...outh of the district.

Prof Sharma suggested to ...udy the economic impact of ...e various newly generated ...chnologies viz, Hydrophonic ...stem, Nano Urea etc for its ...ass adoption at farmers level. ...ice Chancellor emphasised on ...e creation of nutritional gar...ns at various level with the ...tervention of SKUAST- J and ...VKs at various levels.

Earlier, at the outset, Dr ...nit Choudhary, Chief ...ientist & Head, KVK Jammu, presented power point presentation of KVK activities for the year 2021-22 and proposed action plan for the year 2022-23.

Dr S K Gupta, Director Extension, SKUAST-Jammu, said that the valuable information and suggestions by the line departments will be helpful in designing a comprehensive action plan of KVK Jammu.

Dr M S Badwal, Dean, Faculty of Veterinary Sciences and Animal Husbandry, SKUAST-J, assured that the faculty of Veterinary Sciences will render help for solving the problems of livestock farmers.

The officers of line departments suggested their requirements regarding extension needs in their disciplines. The Heads of Divisions of Faculty of Agricultural Sciences of SKUAST-Jammu were present and provided their valuable inputs during the meetings. Kisan Board members namely S Tajinder Singh and Kulbushan Khajuria also put forth farmer's perception and expectations from KVK Jammu.

Dr Ravneet Kour, Chief Scientist (Horticulture); Dr Sheetal Badyal, Sr Scientist (Home Science); Dr Prem Kumar, Scientist (Fisheries); Dr Muneeshwar Sharma, Scientist (Plant Protection); Dr Amitesh Sharma, Scientist (PBG); Dr Raju Gupta, S Satbir Singh, Ashish Katoch, Sahil Talgotra were also present during the meeting.

On the occasion, the Custom Hiring Centre of farm machinery and food machinery at KVK Jammu was also inaugurated by the Vice Chancellor.

SKUAST-Jammu Vice Chancellor & others releasing a book-...t during Scientific Advisory Committee meeting of KVK Jammu ...n Tuesday.

अमर उजाला • जम्मू • amarujala.com • जम्मू, सोमवार, 24 दिसंबर 2022

कृषि क्षेत्र के रोडमैप से जम्मू-कश्मीर में खुलेगा निवेश का द्वार: मंगला राय

बोले- कृषि क्षेत्र की तस्वीर व तकदीर बदलने के लिए हिंदुस्तानी सोच चाहिए, पश्चिमी देशों की किताबों को पढ़ने से नहीं होगा बदलाव

पुराने की सामर्थ्य बढ़ने पर किसान होंगे खुशहाल

1972 का फारगूसन ट्रैक्टर रहा आकर्षण

विभिन्न क्षेत्रों में बेहतर काम करने वाले दर्जनभर किसानों को किया सम्मानित

कारतूसकारों को मिली खेती की नई राह

9.A. Success stories/Case studies,

- **WOMEN EMPOWERMENT**

It is an established fact that proper development of a country cannot be fully realised as long as its women are confined to subordinate positions. Empowerment of women plays a vital role in the progress of a nation, a community and especially in a family. Empowerment is a multidimensional process which provides varying opportunities to a group or an individual to work in various aspects of life. It helps to create the ability of knowledge and resources, provides autonomy in decision making which in turn enables women to enrich their lives. Thus women empowerment helps women to self-control the circumstances that influence their lives and helps free them from limits that have been imposed on them through customs, traditions and practices. In view of these, greater emphasis is being laid over the active involvement of women in all spheres of life and owing to massive contribution of rural women in agriculture and allied sectors. KVK Jammu in its pursuit of empowering women, is providing awareness to women about their social, educational, economic and political rights. Evidently, women empowerment is an outcome of achieving gender equality, gaining self – confidence, building productive capacity, getting power in taking decisions and gaining control over resources. Realising entrepreneurship as the key to success for socio-economic development and the way to become self-dependent in form of finance , KVK Jammu has laid greater importance on entrepreneurial activities through various skill development trainings and establishment of micro enterprises, thus providing productive outlets to the talents, financial independence, stimulate personal savings, promote industrial linkages, improve rural welfare, health of vulnerable population and generally raise the level of popular participation in the economy . KVK has formulated various skill and vocational trainings and has launched various awareness programs and campaigns such as visual films, street plays, nukkad nattaks, use of social media platforms, FM services, Kissan melas , Rural Exhibitions Celebration of Women day, Mahila kissan diwas, for effective involvement of Illiterate rural women. At the same time various workshops and seminars were also organized for capacity building of literate women especially about various financial, social and agricultural schemes. With regard to women empowerment, KVK Jammu has always worked towards removing hurdles so that women could empower themselves by initiating professional activities and to a large extent, it is on a progressive path which can be inferred by an overwhelming majority of women farmers, Women SHGs, women welfare groups, ICDS personels, Krishi sakhi’s and pashu sakhi’s visiting, participating and seeking capacity building at KVK Jammu.

1.0 Graduate Woman Cultivates an Empowered Future with Mushroom Cultivation: An Intervention by KVK-Jammu, R S Pura

Introduction

This is the success tale of an educated woman entrepreneur who was struggling for a job during COVID-19. Ms. Ruchy Raina, 37, is a resident of Block Miran-Sahib, Jammu. She has a post-graduate degree in Food Science and Technology and worked as a private teacher in a nearby town before the lockdown, but owing to a lack of funds, these private schools had to close and lay off their staff. The COVID-19 epidemic and subsequent lockdown in 2020 led to restrictions throughout the UT of Jammu and Kashmir, affecting almost every sector's livelihood system. But her determination and ability to seek opportunities made her an inspiring woman. Though she is well-educated, besides running after a fancy job, she has taken up agriculture as a vocation. She is doing mushroom cultivation at home and has established herself as a successful mushroom grower in her area.

Motivation and training

- In 2021, when Ruchy had to leave her job due to the pandemic, one of her friends who was already working at KVK Jammu informed her about the different vocational and skill development trainings provided by KVK Jammu. She was always fascinated by the mystique of mushrooms and expressed her desire to take part in mushroom cultivation training. She enrolled herself in the seven-day training course on "Mushroom Cultivation Techniques" under the AICRP in KVK Jammu. Where she learned about the technical knowledge of compost preparation for mushrooms, its harvesting, packaging, and marketing.
- She was also provided with 10 prepared mushroom bags as training material or a trial to practise the learning. She has harvested 30 kg of mushrooms from those 10 bags. This achievement by Ruchy encouraged her to continue with mushroom cultivation.
- She has taken a keen interest in the agriculture field and participated in the routine farmer trainings and awareness programmes organised by KVK. She was also motivated by the scientists at KVK Jammu to initiate the business and was supported throughout the success journey.
- She has participated in the various exposure visits organised by KVK Jammu for the development of skills and to interact with the other successful mushroom growers in Jammu.
- Her knowledge has been broadened by her frequent visits to SKUAST-J and KVK Jammu, and she receives assistance from various other sources.
- According to her, the fellow farmers also encouraged and supported her during her initial work.

The Initiation: Technical assistance

After witnessing the profitable mushroom harvesting from the trial bags, she is zealous to take this training to the next level. In the year 2022, she prepared 10 quintals of mushroom compost using scientific techniques. She prepared 120 bags from 10 quintals. KVK Jammu provided valuable assistance to her by providing training, raw materials (spawn), diagnostic and monitoring visits by KVK scientists in her mushroom unit from time to time, and solving technical problems encountered in the field. Finally, she saw the fruits of her hard work and obtained almost 3 tonnes of mushrooms from 10 quintals of compost. This results in a profit that is three times bigger than her real cost of production. She markets her produce in the local market of Miran-Sahib and restaurants, and she sells mushrooms to the vegetable vendors.

Achievements

- She is now continuing this venture and has established a permanent unit in her home. She cultivated both button and oyster mushrooms on her farm. She has started making pickles from overgrown mushrooms to reduce harvest losses during peak hours and reap benefits by adding value to the crop.
- During this year, she has also had the opportunity to work at KVK Jammu as a data entry operator in the project "Doubling Farmer Income, Sponsored by...
- Another milestone has arrived in her life when she was informed by KVK Jammu Scientists about the UDGAM-Agripreneurship orientation programme under RKVY-RAFTAAR sponsored by the Ministry of Agriculture and Farmers Welfare, GOI, New Delhi, India. She registered and successfully completed the 2-month training course from 18-01-22 to 17-03-22 and was awarded a certificate of completion for the same.
- Due to her unwavering determination and dedication, she also added a feather to her cap by getting selected in the UDGAM Scheme under RKVY-RAFTAR. Her innovative product, "fortified cottage cheese," was not only liked by the panel but also selected for the grant in aid of INR 5 lakhs to start the enterprise.
- She has registered her company, NUTRICHIP AGRI LLP, in the Ministry of Corporate Affairs and in Micro, Small, and Medium Enterprise under registration number UDYAM-JK-07-0029543.

Awards and Recognition

- Awarded with the Progressive Women Farmer Award in the Northern India Regional Agriculture Fair-2021-22 from October 7–11, 2021, organised by SKUAST-Jammu, Chatha
- She got an appreciation certificate from the Northern Army Commander as a successful woman entrepreneur on Vijay Diwas organised in Kaluchak and exhibited her stall during the event.

- Participated and was felicitated in the Seed Season 1 Startup Event for Entrepreneurial Development held on March 17, 2023, organised by the Model Institute of Engineering and Technology, FICCI FLO JK&L, in collaboration with the Maharaja Hari Singh Foundation.
- Her innovative product story got documented in the book "Successful Journey of Agri Startups" by the Agri-Business Incubator, SKUAST-Jammu

Future plans:

While discussing her future plans for improving this venture. She stated her desire to take this enterprise to new heights by creating a permanent structure for year-round mushroom farming and also going for further value-adding by making mushroom powder and pickles. She also intends to expand her products and will start production of cottage cheese soon after getting the grant in aid under the UDGAM scheme.

Ruchy Raina is a visionary entrepreneur and a devoted mushroom grower in her area. By selling mushrooms monthly, she is getting an average income of Rs 12,000–15,000 per month. Her entrepreneurial skills and adaptability not only enabled her mushroom unit to flourish during the pandemic but also made a lasting impact on others lives. Her success story inspires other women by demonstrating that opportunities for growth and success can appear even in the darkest of situations. She is a well-educated woman from a non-agricultural background. Her inclination towards agriculture proved that only agriculture and allied sectors are sustainable livelihood options with immense opportunity.

Trainings received:

KRISHI VIGYAN KENDRA, JAMMU
(DIRECTORATE OF EXTENSION)
Sher-e-Kashmir
University of Agricultural Sciences & Technology of Jammu
CERTIFICATE
This certificate is issued to
FOR SUCCESSFUL COMPLETION OF SEVEN DAYS VOCATIONAL TRAINING
ON
"MUSHROOM CULTIVATION TECHNIQUES"
FOR RURAL YOUTH
Organized in Collaboration with AICRP Mushroom
Sr. Scientist & Head
KVK Jammu
Director Extension
SKUAST Jammu

शेर-ए-कश्मीर
कृषि विज्ञान एवं प्रौद्योगिकी विश्वविद्यालय जम्मू
उत्तर भारत क्षेत्रीय कृषि मेला 2021–22
(Northern India Regional Agriculture Fair 2021-22)
नवोन्मेषी किसान सम्मेलन
प्रमाण पत्र
प्रमाणित किया जाता है कि श्री/श्रीमती Ruchi Raina
को दिनांक 7 से 11 अक्टूबर 2021 तक आयोजित कृषि मेले के नवोन्मेषी किसान
पुरस्कार प्रदान किया गया।
डॉ. एस. के. गुप्ता
डॉ. जग. पाल. शर्मा
प्रो. जे.पी. शर्मा
IFFCO

2.0 Journey of Nirmala in Bee Keeping - from Challenges to Success

SOURCES OF MOTIVATION & TECHNOLOG ADOPTED

Smt. Nirmal Devi is a resident of border village Jabowal, situated 500 meters away from International Indo Pakistan border in Arnia sector of Jammu. Her husband was doing a lower rung marketing job which was not sufficient to run the family expenses. In order to improve the economic status of the family, she developed interest in apiculture with just two bee boxes as a hobby after meeting a relative in Ludhiana, which she recollects was a turning point in her life. Later, she engaged herself in this occupation and incresed the capacity to 100 bee colonies.

In 2012, at the age of 37 years, Nirmala convinced by honey production, felt that bee keeping could provide a solution to her growing family and financial needs. She gathered first-hand information on various avenues on bee keeping and visited various departments for technical knowhow. It was in the year 2015, Nirmala along with her husband visited SKUASTJ during Kisan Mela. Thereafter, she visited KVK Jammu for further technical knowledge and hand holding to commercially venture into the profession of apiculture. Both Nirmala and her husband started visiting KVK Jammu to attend farmer and vocational training programs, melas, fairs, etc. After, getting skill trainings from KVK Jammu (Scientific Bee keeping under Mini Mission-1) in the year 2019, 2020 and 2021, she started processing and value addition of honey and specialized in production of various by-products like Bee Wax, Pollen, Propolis. Steadily she increased the honey bee production and presently she has around 500 bee colonies. Moreover, her entire family is engaged in this profession and sell various Honey products.

Smt. Nirmala Kumari during Field Operations

Smt. Nirmala Kumari displaying the products in different Exhibitions

Under the direct guidance of KVK Jammu she has chalked out production and marketing strategies to accrue maximum benefits. A brief outline of which is given below:

Collection of honey from different flowers

Season	Flora	Location
Dec- Feb	Mustard	Ganga Nagar, Rajasthan
March- April	Multi flora	Sidhra, Jammu
May- June	Jamun	Akhnoor, Jammu
July-September	Artificial Feeding	Suchetgarh, Jammu
Oct- November	Toria	Ludhiana, Amritsar

Achievements

In spite of lot of challenges in transportation of bee colonies from hills to plains in search of different kinds of flora, Nirmala manages to keep the venture profitable with her sheer dedication and commitment for the business. She gets good support from her husband and family members for round the

year Honey bee production and processing. The Honey collected from the upper reaches of the hills fetches them good value as compared to honey from plain areas. She has entered into micro processing and value addition of Honey. Presently, she sells the Honey and its products under the brand name "***Sahil Aparies"*** which is registered with FSSAI. People in the market have started recognising her enterprise not only by brand but by its quality and wide range of products.

Importance for other farmers

Nirmala and her husband have started horizontal spread of technology in different ways by providing practical demonstrations to fellow farmers and youth of the area alongwith KVK Jammu. Nirmala has also started involving other women in micro processing and has provided seasonal employment to ladies of the area. She has become a role model for youth and women for taking bee keeping to new heights under agri entrepreneurship, leading to livelihood security for landless and marginal farmers and women.

Economic benefits from production and value addition of honey Bee Products:

S. No.	Year	Honey Bee Colonies (Nos.)	INCOME (in Rs.)
1	2018-19	150	2,75,000/-
2	2019-20	300	4,75,000/-
3	2020-21	400	6,50,000/-
4	2021-22	500	8,00,000/-

Products manufactured: Honey, Wax, Pollen, Royal Jelly, Propalis, Soap, Chocolate, Honey dipped Almonds, Candles, Honey shampoo

Honey Products & By-Products

Awards and Recognitions

Smt. Nirmala Kumari receiving various awards from dignitaries including Union Agriculture Minister and Minister of State

Krishi Vigyan Kendra Jammu and various other organisations and dignitaries have recognized the achievements of Smt. Nirmala Kumari. Her efforts have been appreciated by many dignitaries like Sh. Narander Singh Tomar, Union Minister of Agriculture, GoI, Sh. Kailash Choudhary, MoS, Agriculture, GoI, Sh. Manoj Sinha, LG, J&K, Sh. JP Sharma, Vice Chancellor, SKUAST-J, etc.

Awards received by Smt. Nirmala Kumari during various programs

3.0 NUTRITION SENSITIVE AGRICULTURE RESOURCE INNOVATION (NARI)

In pursuit of achieving National developmental goals, Nutrition and health status plays an important role. Owing to magnitude of malnutrition in children and chronic energy deficiencies in adults, micronutrient malnutrition and diet related diseases are highly prevalent. Therefore under NARI (Nutrition sensitive Agriculture Resource Innovation) Flagship program of ICAR , KVK Jammu is also implementing the same in two Kandi villages of Jammu district. These Nuti-Smart villages under this flagship program are being given special coverage. During current year these villages have been widely advocated nutritional sensitive agriculture practices, improved crop varieties, and crop led nutritional security.

NARI (Nutrition Agriculture Resource Innovation)

- KVK is implementing this flagship program in two villages vis-à-vis Kattal Batal in Nagrota and Premachak in RS Pura tehsil of Jammu
- Promotion of agricultural practices for sustainable food and nutritional availability
- Use of natural and eco friendly inputs for farm and family living
- Introduction of biofortified crops.
- Demonstration of value added products
- KVK has promoted nutri smart kitchen gardens by distributing vegetable seed kits. Demonstrated nutritional recipes from locally grown fruits and vegetables.

Summary of activities

	Area (ha/ no. of Unit/Enterprise)	No. of farmers/ beneficiaries
FLD		
Nutritional Garden	**1.5**	**30**
Bio-fortified Crops	**0.7**	**43**
Value addition (in no. of Unit or no. of Enterprise)	**3**	**81**
Other Enterprises (in no. of Unit or no. of Enterprise)-Millets	**1.2**	12
Kitchen Garden Kits		**43**
	Number of Programme/activity	**No. of farmers/ beneficiaries**
Training Programmes	**9**	**240**
Extension Activities	**7**	**199**

Details of Nutrition Garden

State	KVK District	Name of Nutri Smart Village	Types	Jan - Dec 2022			
				Type of Activity (OFT/FLD)	Established (Number)	Area (Sqm)	No of beneficiaries
J&K	Jammu	Kattal Battal & Prema Chak	**Backyard/ Kitchen garden**	FLD	30	15000	30

Biofortified crops in Nutri Smart Village

Type of Activity (OFT/FLD)	Category of crop (cereal/pulses/oilseed/ fruits & vegetables/others	Name of Crop	Name of variety	Area (ha)	No of Beneficiaries
FLD	vegetables	carrot	PC161,PC162	0.2	33
	cereals	wheat	PBZn1	0.5	10

Value Addition

Type of Activity (OFT/FLD)	Name of Crop/vegetables/fruits/other	Name of Value added product	No. of farmers/ beneficiaries
Demonstration on enhancing Nutritive Value of pulses	Pulses	Sprouts	22
Demonstration on processing of Wheat	Wheat	Dalia	36
Value addition of Rice	Rice	Poha	23

Trainings (2022)

Thematic Area of Training	No of courses	No. of beneficiaries	Date
Scientific Cultivation of Gobi Sarson	1	37	24-11-2022
Scientific Cultivation of Maize 136	1	36	12-05-2022
Nursery Management in Vegetables	1	23	30-05-2022
Prevention of Malnutrition in women and Adolescent girls through dietary modification	1	23	10-06-2022
Enhancing nutri. value of cereais,pulses	1	15	08-07-2022
Drudgery reducing tech, for household operations with special reference to nut.recipies 1	1	18	18-08-2022
Processing of Fruits, veg. & cereals	1	23	22-08-2022
Dem. on enhancing nut. Value of pulses	1	16	26-08-2022
Management of Orchards and pulse crop	1	49	07-09-2022

Extension Activities

April 2022 to March 2023		
Title of Activity	**No of activities**	**No of beneficiaries**
Awareness prog on pulses	4	109
Exposure visit	2	46
Field Days chick pea, maize, blackgram	2	44

In this endeavour KVK -Jammu has promoted Nutri-smart kitchen gardens and also distributed large number of Vegetable Seed Kits (Rabi-Kharif), KVK has also demonstrated various

nutritive recipes practically from locally available and garden grown raw fruits and vegetables. Various farmer training programs, Frontline demonstrations like cereals including high quality protein maize, Millets (Pearl millet),oilseeds crops ,Pulses (Chikpea,Mash),Fruit seedlings and Medicinal plants etc. have been distributed along with promotion of organic agricultural practices for healthy and sustainable food and nutritional availability for all particularly vulnerable groups.

4.0 Mushroom Cultivation as Agri-enterprises and Entrepreneurship development

INTRODUCTION

KVK Jammu 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. Sh. Girdari Lal is a resident of village Chak Wahabdin situated at International Indo Pakistan border in R. S. Pura sector of Jammu is one out of 62 trainees of the Vocational training conducted on ‘Mushroom Cultivation Techniques’ in the year 2021. He is a progressive, hardworking youth having a landholding of 1 hectare (ha) in Paddy-Wheat cropping system. Since his childhood he is looking after his agriculture land. After the completion of his Matric, he dropped out from the school and devoted his full time to agriculture. But his earnings from traditional agriculture farming were not sufficient to run the day to day expenses of his family.

KVK INTERVENTION

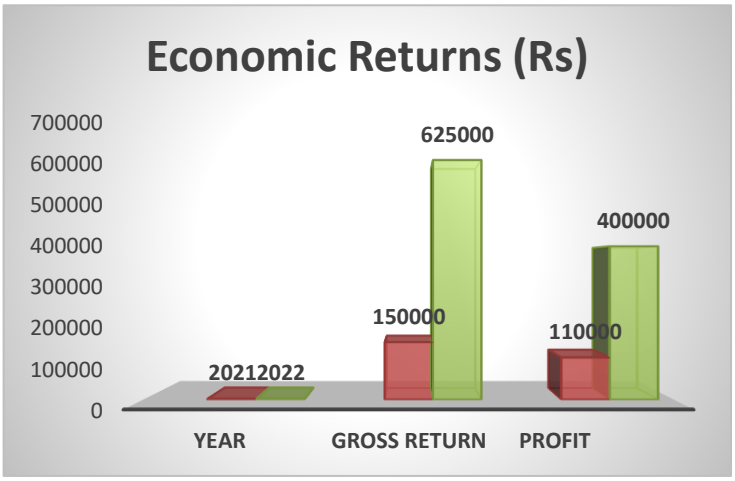
Girdari Lal decided to establish a Mushroom enterprise to increase his income. He tried to establish Mushroom Unit in the year 2019 and 2020 and was not successful and his unit was in loss due to lack of proper training. He was never demoralized by two unsuccessful attempts and these did not cause any hindrance to his fiery spirit. He learnt from his fellow villagers and friends that KVK Jammu imparts Vocational training on 'Mushroom Cultivation Techniques' and then he came to the KVK Jammu for further guidance and help in learning new techniques of Mushroom cultivation starting from compost preparation to harvesting. He joined 15 Days Vocational Training on Mushroom Cultivation Techniques in the batch of 2021 started by KVK and improved his skills by learning new techniques and scientific methods involved in Mushroom Cultivation from day one till harvesting during this period practically at KVK Jammu. KVK Jammu 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 Girdari lal 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.

PARTICIPATION IN CAPACITY BUILDING PROGRAMMES AT KVK JAMMU

ECONOMICS:

In the year 2021 he prepared the compost from 20 quintals of wheat straw and earned a profit of Rs. 110000/- in four months and provided employment to one person @ Rs. 5000/- per month for four months, whereas, In the year 2022 he prepared compost of 100 quintal wheat straw for his unit and earned a profit of Rs. 400000 in four months. He provided employment to 4 persons @ Rs. 6000/- per month for four months this year. There was a five times increase in his Mushroom unit

YEAR	CROPS GROWN	Compost (q)	B:C ratio
2021-22	Button Mushroom	20	3.75
2022-23	Button Mushroom	100	5



IMPACT

In the pursuit to become a role model, accruing more benefits Girdari lal 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. He has inspired many rural youths of adjoining villages. In the next season he will go for round the year mushroom production. He is selling his fresh produce in the local market and providing supply to army. People have started recognizing him because of quality of his produce. Whereas Girdari 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. Girdari Lal and his family is fully involved in the cultivation of button mushroom during the season by helping him in picking and grading and packing of the produce.

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)

ITK 1: Traditional Management of Animal Health Care

- To protect the cattle`s against cold during harsh winters is given chapatti with old one or two years mango pickle (100 gm).

Symptoms: Cattle skin hair shows prickled appearance.
Repetition: After every month

ITK 2: **Traditional Management of Animal Health Care**

- To cure the indigestion in cattle`s, 500 ml syrup made from boiling of 20 gms Ajwaiin and 20 gms Soehe in 1000 ml of water. The whole solution when remains half (500 ml) is administered orally through 500 ml bottle.

Symptoms: Blotting .
Repetition: If needed after 4-5 days.

ITK 3: **Management of different Diseases and Pests in vegetable crops**

- To cure the infestation of aphids in Solanaceous, Brassicaceae, Cucurbits etc. crop fields (such as Potato, Radish etc). In potato crop aphids are the main cause for transmitting plant diseases. So, the sprinkling of Kitchen ash on potato plant at initial appearance of 5 aphids/leaves in the field is the best remedial measure to minimize the loss and prevent hazardous health issues caused due to residual effect of insecticides sprinkled on infected leaves.

Symptoms: Leaves not open properly and remain less in size
Repetition: Repeat sprinkling of Kitchen ash, If needed after 3-4 days ofinsect scouting.

ITK 4 Indigenous Technology Knowledge (ITK`s)

1.	Title of the ITK	Indigenous Wastewater management system
2.	Description of the ITK	Farmer is using waste water from the village for use in production of vegetables
3.	Innovativeness	Diverted waste water from the whole village and used drilled plastic bottles along with sand for purification and further use in the production of vegetables in the rainfed kandi areas of Jammu district
4.	Location/Area of use of the ITK (village/distt.)	Jandial Village of Bhalwal Block of Jammu
5.	Name and address of the discloser/facilitator or Farmers(s) Name if any?	Sh Santok Chan S/o Pidu Ram
6.	Rationality and Cost effectiveness	Very limited cost is involved
7.	Extent of use	For use in 0.5 acres of farm

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: 22
ii. No. of farm families selected: 600
iii. No. of survey/PRA conducted: 54

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 equipment purchased with amount :

S. 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 2022 (January-December) :

Details	No.	No. of Farmers	No. of Villages	Amount realized
Soil Samples	50	50	5	-

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 :

Details	No. of Samples	No. of Farmers	No. of Villages	Amount realized
Soil Samples	50	50	5	-

10. IMPACT

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

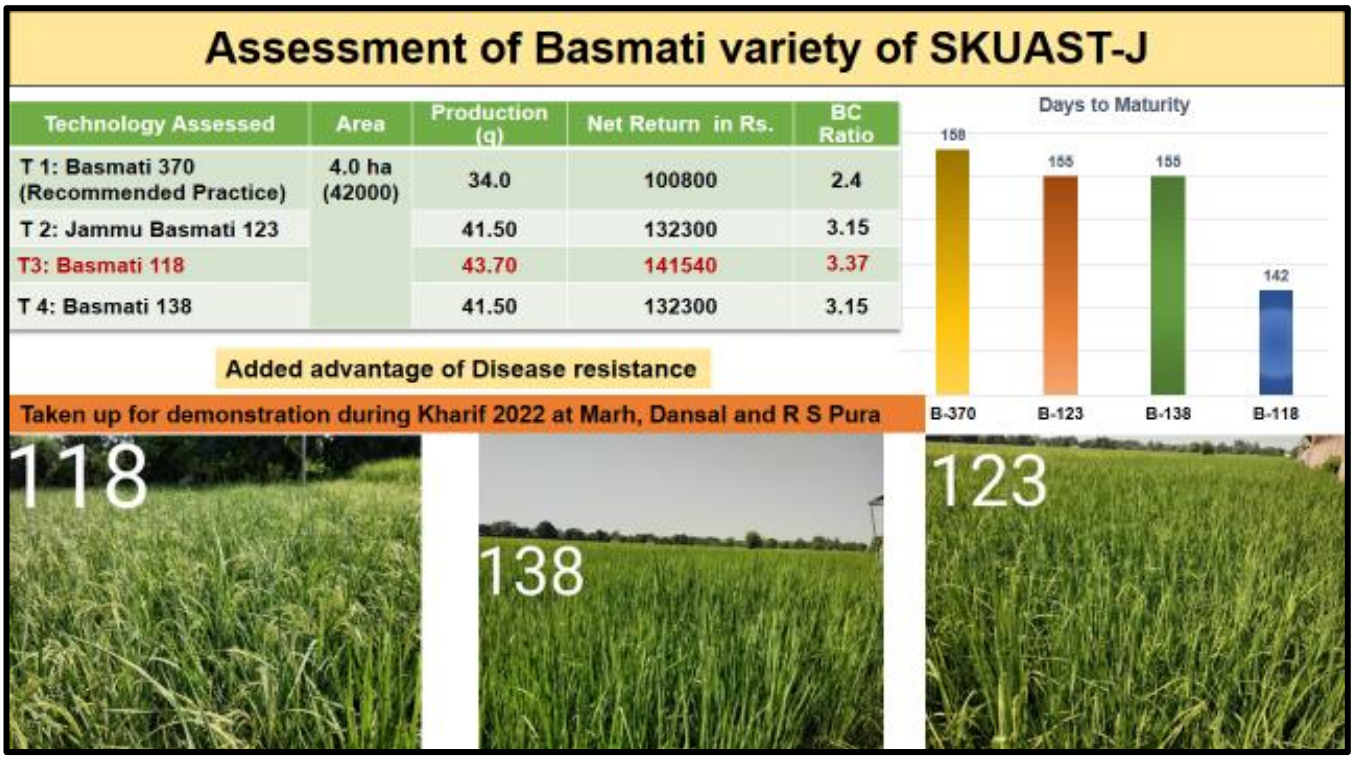
- **Impact of technology assessment of Basmati Varieties on yield and economics of the paddy crop.**

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, 2020 and 2021 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.



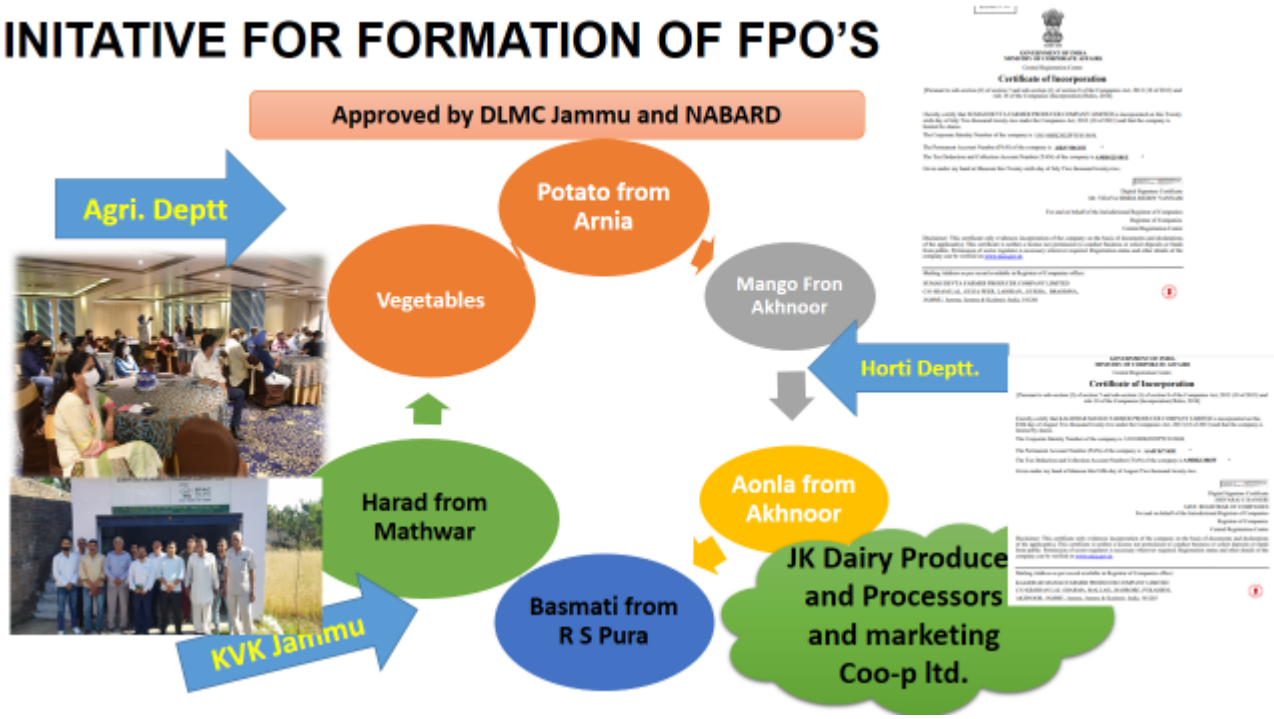
Technology Assessed	Area	Production (q)	Net Return in Rs.	BC Ratio
T 1: Basmati 370 (Recommended Practice)	4.0 ha (42000)	34.0	100800	2.4
T 2: Jammu Basmati 123		41.50	132300	3.15
T3: Basmati 118		43.70	141540	3.37
T 4: Basmati 138		41.50	132300	3.15

- **FARMERS PRODUCER ORGANISATION DURING 2022**

Six FPO's have been registered in the year 2022 with the calloboration of KVK Jammu and CBBO's are working in close coordination with KVK for all procedures.

FPO's	Registration Date	Focused Crop	No of members
SUMAH DEVTA FARMER PRODUCER COMPANY LIMITED	26 July 2022	Amla	226
DANSAL AGRO FARMER PRODUCER COMPANY LIMITED	28 Aug 2022	Maize	234
KALIDHAR MANGO FARMER PRODUCER COMPANY LIMITED	05 Aug 2022	Mango	120

PROGRESSIVE MUSHROOM GROWERS FARMERS PRODUCERS COOPERATIVE LTD	03 Oct 2022.	Mushroom	130
J&K BASMATI FARMERS PRODUCERS COOPERATIVE LTD.	20 Aug 2022	Rice	60



➢ BRANDING AND MARKETING OF PRODUCE OF FARMER

Focus of KVK Jammu is on the adoption of proper branding, linking marketing of produce of farmers and later on mobilization of farmers into Farmers Producer organization. An iniative of Vice Chancellor Prof J P Sharma regarding Branding and marketing of products of SHG's supported by KVK Jammu. KVK Jammu has established a sale counter at KVK and facilitate the University sale center for farmers produce. KVK as already been awarded by Krishi Alert Award during 2021 for its initiative.

HAND CRAFTED "Karwanda" PRODUCTS FROM SHG OF BHALWAL

SH BHARAT BUSHAN DDC CHAIRMA JAMMU, DR A K MEHTA CHIEF SECERATRY UT OF J&K ISPECTING THE PRODUCTS DURING EXHIBITION

- **FLD'S ON BIOFORTIFIED CROPS**

About 43.5 per cent children in the country are facing problem of malnutrition. The biofortified crops are a sustainable way to alleviate malnutrition among the children and women. The biofortified varieties are 1.5 to 3.0 times more nutritious than the traditional varieties. Keeping in view the FLD's on biofortified crops were planned. **In 2022-23,** Frontline Demonstrations in 2 ha area were laid with biofortified varieties of carrot released by PAU Ludhiana.Frontline demonstrations were conducted on different vegetables (cucurbits, brinjal, chilli, cauliflower,

spinach, radish, onion) through distribution of vegetable kits to 100 number of beneficiaries covering approximately 5 ha of area in district Jammu both in kharif and rabi seasons in the year 2022-23. The varieties released by IARI Pusa New Delhi were demonstrated. OFT's and FLD's on Beetroot were also conducted and it is being promoted by KVK Jammu keeping in view its nutritional and commercial value..

1.2. Cases of large scale adoption

- **Large Scale adoption of Fish farming at Paragwal area of Jammu District**

Aquaculture may be the tool to fill in the gap of low productivity of agriculture system and to enhance the farmer's income through diversified farming. Farming fish responsibly and sustainably is the solution to providing future generations with access to healthy and environmentally friendly protein options. Not only is aquaculture necessary, it is also a sustainable option for consumers, especially in comparison to other farmed proteins. Fish is highly resource efficient and it has the highest protein retention compared to other meat products. It also has the lowest feed conversion ratio among the same forms of protein. Aquaculture also has lower greenhouse gas emissions than other types of farming.

Fisheries and Aquaculture in J&K

Traditionally, fisheries in Jammu and Kashmir have been developed and popularized as sport fisheries, primarily as a means of attraction for tourists. During the past few years, there has been a reorientation towards development of fisheries as a major food resource.

Fisheries is a promising sector in Jammu district which has been registering consistent growth during the past decades. The availability of vast water area covered under various resources provides immense scope for fisheries and aquaculture development.

The requirement of fish in the UT is 1.5 lakh tons while total fish production of the state is approximately 2.07 lakh quintals only which indicates around 6 times deficit from the requirement. Therefore, J&K import the fish from neighboring and other states to meet the domestic needs. Of the 2.07 lakh quintals production, Kashmir Province accounts for 60% while Jammu Province accounts only 30%. This amount is insufficient to meet the demand and there is a big gap between demand and supply of fish even as only 50 per cent of the UT's population consumed fish. Fish is a valuable element of diet of the local people throughout the year. The state's share in Indian fish production has declined from about 0.39 per cent during the 1980-81 to 0.21 per cent in 2015-16 implying lower pace of growth in state's fish production compared to Indian production. The growth rate estimates for in the state revealed that it had a significant growth though the growth was more pronounced in Jammu Province of the state. Total fish production in Jammu province has increased considerably.

Large scale adoption of fish farming at Paragwal, Jammu

Beginning

Farmer Sh. Sandhok Singh from Gurha Mansa, Paragwal is one of the pioneer farmers who thought to take a trial of fish farming in Jammu district after listening the benefits of aquaculture. He constructed his own fish pond having 1.5 kanal water area during the year 2005-06 and started Carp Culture. He tried to gain the knowledge of fish from different channels and he approached to the fisheries department also for technical guidance and training regarding carp culture. The department provided him technical guidance and training for carp rearing, pond management etc. First year results were not so motivating for him but it was enough to give him confidence that he could be the master of fish farming. With the passage of time, he gained experience in the aquaculture. He worked very hard and started earning a good income from his unit. Moving one step ahead, he established contacts with local Army/ BSF installations for sale of his fish production. While doing business, he realized that he needs large quantity of fish for completing the demand of these establishments.

Sandhok Singh started motivating his friends and fellow farmers to adopt aquaculture which will provide them good income and reduce their losses of crops due to unpredictability of weather. He informed the fellow farmers about diversified agriculture farming and requested to attend them the camps organized on various technologies of Agriculture. During attending these camps, he himself came to know about the incentives and subsidies announced by the Government to promote fish farming. He applied for financial assistance during the year 2014-15 under the Centrally Sponsored Scheme (RKVY) to construct one more fish pond having 2 kanal water area. He started earning very handsome amount and it started visible in his living status. He proved to his fellow farmers that hard work and right selection of enterprise can bring great success in the life of young farmers.

Observing the success, earnings and changes in purchasing power of Sandhok Singh, other fellow farmers and unemployed youth also attracted towards fish farming and started carp culture as their source of livelihood after availing financial assistance under the CSS/RKVY. His close friend Sh. Ajay Kumar Singh constructed two fish ponds and after getting the expertise, he also started getting good earnings. Like this, many other neighboring farmers from nearby villages also constructed fish ponds and started fish farming. Till now, more than 25 fish ponds has been constructed in this area and all ponds are functioning well with good profit and every pond owner is happy with the performance of fish farming. Every year 3 to 4 new ponds are getting constructed by the farmers after observing the production and potential of fish farming.

Role of KVK Jammu

Sh. Sandhok Singh came in touch with KVK Jammu during the year 2018-19 when he observed slow growth and mortality in his fish pond. The fisheries scientist of KVK Jammu along with Senior Scientist and Head visited the village, interacted with villagers and guide them about scientific fish farming to earn more profit with good management practices. Afterwards neither the fish farmers of this area left KVK Jammu nor KVK Jammu left them alone. The group of fish farmers are receiving regular training from KVK Jammu which includes all the component of agriculture and they were motivated to follow Integrated fish farming system as all the farmers are having house hold animals.

KVK Jammu is continuously promoting the farmers and providing front line demonstrations on recent technologies to the fish farmers. The have been demonstrated for these technologies from last 4 years

- Demonstration of impact of good quality fish seed on fish production
- Demonstration of IMC and exotic carp ratio on fish production
- Demonstration of three tier fish farming
- Demonstration of impact of good water quality management on fish production
- Demonstration on Best Pond management practices for higher production

KVK Jammu laid On Farm Trials also on different technologies which includes-

- Assessment of impact of pelleted sinking feed on fish production
- Assessment of impact of floating fish feed on fish production
- Assessment of impact of different fish stocking ration on fish production
- Assessment of impact of zeolite on pond water quality

After experience, smallholder farmers of this area understand fish farming as a farm activity that could be used as a diversification and aquaculture could contribute to their development, poverty reduction, and social equity through provision of food and income. Government of India is also promoting Aquaculture in big way by providing 40-60% financial assistance to fish farmers under Pradhan Mantri Matsya

Sampda Yojna (PMMSY) to start their enterprise which covers every aspect of fish farming. This policy instrument to encourage smallholder farmers living in rural settlements to adopt aquaculture, particularly fish production. KVK Jammu provide information of all the government schemes to the farmers which benefit them to expand their business. KVK Jammu provide them training courses and technical assistance at every step so that they become successful and provide job and opportunity to others.

- **ADOPTION OF ORGANIC FARMING FOR SUSTAINABLE LIVELIHOOD AND ENVIRONMENT SECURITY AT INDO-PAK INTERNATIONAL BOARDER**

Introduction: The Indian aromatic rice, often called 'Basmati' is nature's gift to north-west region of Himalaya. It is cultivated on the foot hills of the Himalayas in the northwestern parts of Indian sub-continent comprising the states of Haryana, Punjab, Uttaranchal, Western Uttar Pradesh, Jammu & Kashmir, Himachal Pradesh and Delhi. As regards, Jammu & Kashmir it plays an important role in the livelihood of people of this hilly and sub-mountainous state. 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 42 thousand hectares with production of 9.8 lakh quintals and productivity of 23.29 quintals per hectare. Most of the information we have so far is about common varieties, and our knowledge on indigenous basmati rice is still incomplete. Morerover, traditional basmati strains are so mixed with the new dwarf varieties that is is very difficult to differentiate them on the basis of phenological and morphological characters. R. S. Pura area in Jammu region of Jammu and Kashmir State is known by basmati rice. The aroma of basmati grown in this area is having appeasing fragrance but lags in export due to short grain size.

"Basmati" is long grain aromatic rice grown for many centuries in the specific geographical area, at the Himalayan foot hills of Indian sub-continent, and owes its origin to Jammu region. Basmati is preferential kharif crop for rice growing farmers of Jammu province. Grown on an area of 42 thousands ha, basmati has potential to cover acreage upto 60,000 ha if supported by innovative scientific technologies. Basmati rice is blessed with elongation of grain length at least twice of their original size when cooked along with characteristics of soft and fluffy texture, delicious taste, superior aroma and distinct flavor but due to short grain length and lodging during flowering did not give better returns to the farmers.

Table 1 Area and production of rice in Jammu And Kashmir State

State/District	Area (000 ha)	Production (000 q)	Productivity (q/ha)
Rice area			
Jammu & Kashmir	265.88	4548.0	17.11
Basmati rice area			
Jammu	26.60	509.12	19.14
Samba	7.725	226.72	29.35
Kathua	6.845	236.15	34.50
G. Total	**41.343**	**971.99**	**23.29**

Source: Digest of Statistics, Directorate of Economics and Statistics, Govt. of J&K

Basmati rice has occupied a prominent position in R. S. Pura area of Jammu not only because of their high quality but also that they had been considered auspicious. However in an era of semi-dwarf rices where high yield has been the main focus, the traditional basmati rice accessions got ignored. Lower sub tropical part of Jammu region falls inside geographical indicator (GI) area of basmati where number of traditional basmati land races are being cultivated. These basmati land races are known to have specific adaptation and their quality is fully expressed if grown in the specific region. Genetic erosion has been more intense for these traditional basmati landraces and rate of replacement of landraces is very fast due to their poor inherent yield potential, susceptibility to prevailing diseases and insect pests, and no

incentive for growing such landraces. Accordingly, these genetic wealth are disappearing from their native place and are in immediate danger. Moreover, landraces are so mixed that there is need to collect the local landraces from different basmati rice growing areas of Jammu, purify them and further release to the farmers.

Agro-climatic conditions of basmati growing areas of Jammu region (R. S. Pura, Bishnah, Arnia, Khour areas) develops a peculiar aroma and mouth feel taste in basmati compared to the basmati varieties grown in adjoining Punjab and other basmati growing regions of the country. Hence, R. S. Pura basmati rice has occupied a prominent position in J & K state because of their high quality and palatability.

Material and Method: The total area of village Suchetgarh is 1500 acres of which 1000 is cultivated and 900 acre comes under Organic Basmati cultivation. The present household of Suchetgarh comprised of 180 families all are small scale farmers (>2ha. area) and involved in farming. The organic farmers now believes that the yields from organic farming are of high quality and far better than that obtained from using chemical pesticide and fertilizer.

Around five hundred farm families of Sucetgarh and adjoining villages are either directly or indirectly dependent upon this Basmati 370 for their livelihood and employment however in the last two decades' excessive use of fertiliser and pesticides to increase production has also augmented the investment costs investment costs, burdening the already troubled farmers.

The area of organic Basmati rice having considerable irrigation facilities was selected in the village Suchetgarh in union territory of Jammu and Kashmir. The farmers had formed the cluster and had initiated the organic cultivation of Basmati but they were lacking the knowledge of technical know how and application of all the organic inputs. Pre-seasonal interaction was conducted during the initiation year, 2016-17 and collected information on existing practices, yields, profits and problems faced by the farmers. Based on the collected information, technological gaps were identified and with the improved package of practices, a total area of 10.0 ha with 20 farmers was covered. Basmati fields from adjacent area in the cluster village were considered as control (farmer's practice) who were practicing their own technical know how. The demonstrations were laid out for three consecutive years from 2016-17 to 2018-19. In each year, FLD's, a preseasonal training and four trainings during the crop period were conducted to prepare the farmers on implementation of selected package of practices. The critical inputs were supplied to the farmers like seed, T. viridi, PSB were provided by KVK Jammu and remaining inputs like vermicompost and green manures were arranged by farmers on their own. Data on cost of cultivation, yield and gross returns were collected from each selected farmer as well as from non-practicing farmer for the comparison. From the collected data, mean values for cost of cultivation, yield, gross returns, net profits and B:C ratio were worked out.

Output

Considering the importance of Organic farming and its export potential at premium prices, In 2012, the Department of Agriculture, Jammu Division with technical Know-How of KVK Jammu and Scientists of SKUAST-Jammu, APEDA and other stakeholders such as Sarweshvar Rice Mills, various organic service providing agencies introduced a project to produce organic basmati rice in Suchetgarh, The first crop of organic basmati was planted in 2016. The project was named as Suchetgarh Organic Basmati Rice Cluster (SOBRC), and undertaken by three villages (Suchetgarh, Korotana Khurd and Bidipur Jattan). Now as apart of the project SOBRC cluster succeeded in encouraging 769 families comes under organic farming covering 1100 acres of the 1500 acres. However organic production requires knowledge and its management intensive. It is not simply the final product that matters but the whole production process which must be inspected and approved by certification bodies.

In terms of productivity Jammu has 55 % less productivity and stands third following Kathua and Samba. Interestingly the low productivity is due to non adoption of Conventional farming. Table 2 describes the performance of 52 FLDs laid out by KVK Jammu in the year 2019 and 2020 shows an increase in average yield of 14.3% in both the years on comparison with check which shows that technologies and their dissemination through front line Demonstration is more helpful to increase the productivity.

ASCI certified vermicompost producer Sh Swaran Lal and his companion farmers, from Suchetgarh Jammu's R S Pura, a village situated at Indo Pakistan Border neither knows about Niti Aayog nor its CEO, but the born-farmers are working hard to get their livelihood from producing one of the finest qualities of Basmati Rice in the region and renowned in the world, with the help of Krishi Vigyan Kendra, Jammu SKUAST –JAMMU (KVK).

SOBRC cluster emerged as torch bearer in this agriculture development of the Block R S Pura. Before trainings, organic farming for tem was using cow dung, poultry manure, homemade neem extract and less production. Over the time this definition changed and farming shifted from production centric to quality production, sustainable better soil health and quality productivity. Later they synchronized the indigenous technolology knowledge with them by adding scientifically proven organic solutions from KVK Jammu experts. To augment the project a success KVK Jammu conducted trainings, Frontline demonstrations, Method demonstrations of Biofungicides and Biopesticides, Varietal On farm trials of Basmati 370 and its derivatives developed by SKUAST-Jammu, planted and distributed Neem saplings. Krishi Vigyan Kendra Jammu provided training on the use of organic fertilizers, Bio inoculants and also provided Crop Guard (Tricoderma), Rhizobium, Neem Oil and other organic adjuvants for seed and soil

treatments. Farmers were also provided complete training regarding preparation of vermicompost and at present most of the farmers are having their own vermicompost unit.

SOBR cluster were provided sheller on 80 % subsidy. These Mini Rice shellers will help the growers to promote their Brand organic Basamti through direct marketing and get higher returns with the elimination of middlemen. Department of Agriculture in technical consultation with KVK Jammu is providing all sort of benefits including latest machinery Biofertilizers, Bio Pesticides and establishment of Vermi compost unit etc.on subsidized costs to the farmer. The formation of FPO's (submitted to NABARD by KVK Jammu), Brand popularization and proper marketing of the organic produce of Basmati are the main aims of the intensified efforts of KVK under the SOBRC project. Moreover, exposure visits to Organic Farming Research Centre SKUAST- Jammu, demonstrations sessions and capacity building of extension functionaries through In-Service trainings were also organised for guiding team of Local Resource Persons (volunteer LRPs) representing 10 groups of SOBRC cluster and to enable them to produce true-to- type high quality aromatic Basmati Rice through organic means for improved marketability and export for higher economic returns as per Organic India standards under Participatory Guarantee System (PGS).

OUTCOME:

The impact of all the activities in last three years has also be analysed to formulate the future plan of action. It has been analysed that Organic farming may not immediately increase the crop production but it will certainly encourage sustainable farming by maintaining the health of Soil and water level. Using Dhaincha as green manure crop reduces nitrogen levels upto 20%. Now many Government Service Providing Agencies, Biofertilizer and biopesticide manufacturing companies, SKUAST-Jammu, Sudhmahadev vegetabe producer company limited, YS Sons agrotech limited, Actech Information System, Alpha Enviromental Systems, International Panacea Ltd, KRIBHCO and Prathisthta (NPK organic nutritional and complete Fertilizer) and Neem india products pvt. Ltd made interventions and demonstration their organic products and supported the project SOBR.

As the cost for production increases, the likelihood of the adoption of organic farming decreases. Intuitively, the level of costs that a certain farming system necessitates would really affect the adoption decision of an individual negatively. Among the factors considered to affect the adoption decision of the farmers to convert to organic farming, gender, education, farming experience, farm size, yield, and cost per hectare were the ones seen to be important.

Farmers with bigger farms tend to be less likely to adopt organic farming. In our case study All of the organic rice farmers operate at a relatively smaller scale than the conventional growers. Their areas reach no more than 2.5 ha. Farmers with bigger land holdings are less likely to adopt organic farming

practices. Probable reason could be the acknowledged fact that the management of bigger organic farms would be much more difficult due to the intensive labor requirement.

During initial stages. different organic interventions such as seed and nursery treatment with biofungicides, having mini Rice Sheller on subsidized rates, organic fertilizer (FYM, Compost Vermicompost), Vermiwash, Vermibeds to prepare Vermicompost, resultant into decrease in production which leads to less cost benefit ratio and over the period when the resource generation and production cycle from the field starts to work the organic carbon and soil ecosystem improved and increased the net profit. Farmers who got PGS India Organic Certificate they sold their shelled basmati rice produce on remunerative rates as compare to conventional Basmati grower and Organic basmati grower without scope certificate. Additional support in the form of guidance received from KVK, SKUAST-Jammu and APEDA scientists to produce true to type seed of Basmati 370 and helping in marketing and proper branding like SS etc., till there is scope to increase manifold the farmer income through organic Basmati. Impact of Frontline demonstrations on yield, economics and adoption of marigold cultivation were also in line with the study

2.0 Cluster front Line demonstration under Krishi Vigyan Kendra Jammu

Cluster frontline demonstration is a unique approach by the Indian Council of Agricultural Research on Oilseed and Pulse crops to provide a direct interface between scientists and farmers where farmers are guided by the KVK scientists during demonstrations in implementation of improved technologies like seed treatment, IPM, INM, land preparation etc . Demonstrated fields are regularly monitored by the scientists. Cluster Frontline Demonstration project started since 2015-16 under NFSM and NMOOP.

Salient features of CFLD pulses and oilseeds by KVK Jammu:

Under ATARI Ludhiana CFLD Pulses Programme was implemented through Krishi Vigyan Kendra Jammu in district Jammu in 2016-17.

I. A total of 20 ha area and 247 number of demonstrations under pulses were conducted in the year 2021-22 in Kharif and Rabi seasons. The crops demonstrated were black gram and chickpea. During the period, 10 ha area and 79 number of demonstrations under oilseeds were also conducted in Rabi season.

II. In 2022-23 (40 ha area in 454 Demonstrations) under pulses and (40 ha in 241 demonstrations) under oilseeds was laid in Kharif and Rabi seasons. The crops demonstrated under CFLD pulses were blackgram and chickpea. The oilseed crops demonstrated were til, mustard and Gobhisarson.

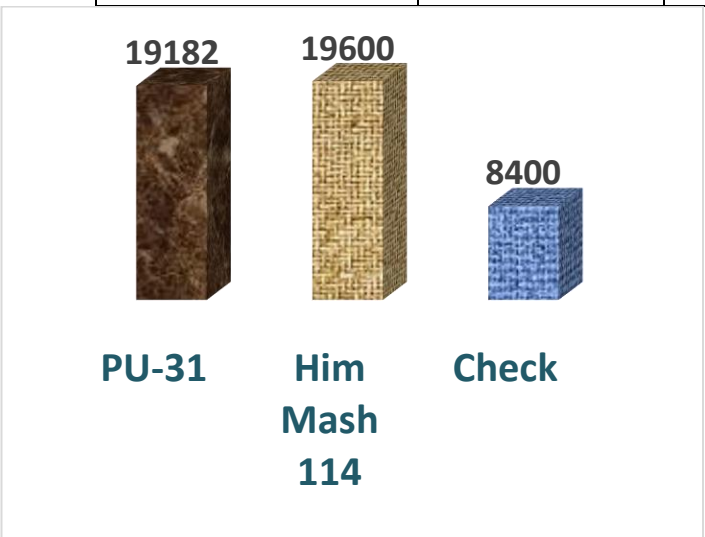
III. More than 30 villages were covered under the programme with major focus on rainfed areas under pulses. The farmers were facing problems in terms of low productivity, low quality, low net income etc. The major farming system of the area is Paddy-Wheat and Paddy-Maize. Diversification in crops was brought under CFLD programme

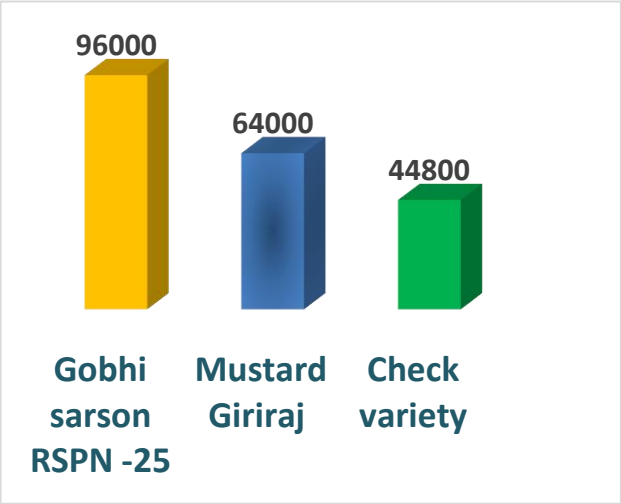
IV. The farmers were guided regarding the scientific cultivation of crops during the training programmes. Several awareness programmes were conducted for the famers to update them about new technologies as well as to facilitate their interaction with the innovative farmers as well as other stakeholders in the farming. Field diagnostic visits were conducted to address the problems of insects, pests and diseases. Agro advisory and consultancies were given from time to time.

V. New improved varieties of pulses and oilseeds were introduced and demonstrated under CFLD programme which resulted in **10-25% increase** in production and subsequently **20 -50% increase** in net income of the farmers

Performance of various technological inputs under CFLD

Technology	No of Demo	Yield (q/ha)	Per cent increase (%)
PU-31	135	4.6	30.43
Him Mash 114	89	4.7	46.87
P-Til-1	54	5.7	42.5
HT-1	82	5.9	47.5
Giriraj	67	15	14.28
RSPN- 25	93	20	25
GNG 1581	230	17.8	18.85





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.
- Promotion and assessment of newly developed basmati varieties namely Jammu Basmati 118, Jammu Basmati 123 and Jammu Basmati 138 helped the farmers to get maximum benefits from their produce and rebuild their shattering confidence. These varieties possessed desirable basmati quality characters like Head Rice Recovery (HRR), grain length, desirable amylose content, soft gel consistency and aroma. During kharif 2022 more than 1000 hectare area was under Jammu Basmati 118 in Jammu. Over 5000 hectare in basmati rice growing areas of Jammu is now under SJBR 118.
- 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. It is also observed that basmati production is increased by 10-20% just by adopting green manuring of Dhaincha.
- 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.
- 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

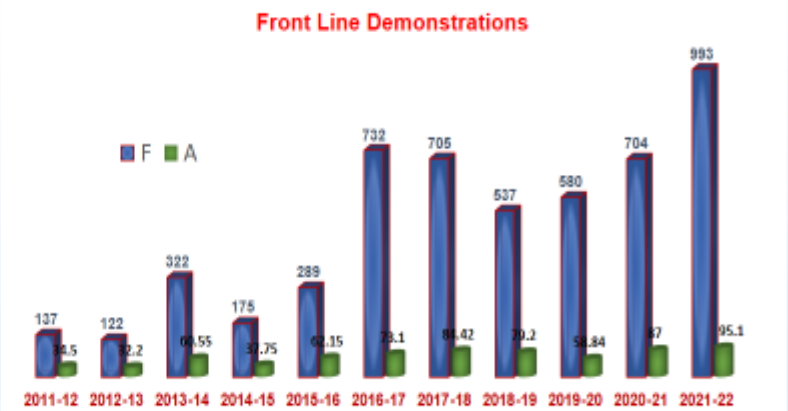
like women and children and additional income to women through value addition and micro processing for domestic and village level marketing.

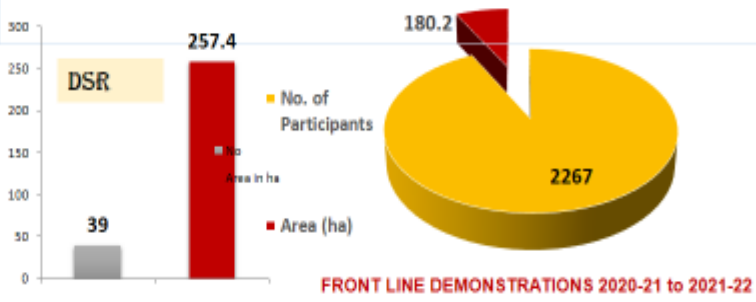
- Diversification through dissemination of vegetable cultivation technologies like trench cultivation and protected cultivation of cucurbit crops were demonstrated in the winter season.
- Women empowerment programs have also been in focus for the reporting period .A large number of women have been mobilized 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.

TECHNOLOGICAL DEMONSTRATIONS

Thematic areas/ Category	2011-2022	
	D	A
Cereals & millets	1345	302.34
Pulses	1277	150.72
Oilseeds	588	71.2
Fruit crops	11	0.9
Flower crops	250	12.2
Vegetable crops	415	36.1
Medicinal & aromatic plants	351	25.75
Fodder crops	267	25
Livestock & Fisheries	86	1000
Mushroom and Biofertilizer	365	36

D : No. of demonstrations A: Area in ha.





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 Aquaculture Worker.

11.0 LINKAGES

11.1 Functional linkage with different organizations

Name of organization	Nature of linkage
Department of Agriculture	Krishi Vigyan Kendra is regularly conducting training programmes for the Officials of Department of Agriculture. Officers Workshops are held in the University for giving them Monthly advisories on crop husbandry. Joint diagnostic Visits, Surveys of disease incidence, Joint implementation of Projects, Participation in SAC and ATMA meetings, Participation in Kissanmelas, Awareness camps, Kissan Ghoshthies and Farmer field schools.
Animal Husbandry Department	In service Trainings for field Officers in collaboration with Faculty of Veterinary sciences. Participation in SAC and other meetings, Organizing Clinical Camps, Promotion Of Backyard Poultry.
Department of Horticulture	Organizing training programmes and demonstrations for Field Officers and technicians. Members of SAC and other state sponsored schemes as Micro irrigation.
Forest Department	Participation in Plantation Drives, Workshop, Resource persons in awareness camps, members of SAC.
Fisheries Department	Organising training programmes and demonstrations for fish growers. Trainings for centrally sponsored schemes beneficiaries are held at KVK. On farm trials for Problem solving of growers.
Directorate of fodder development	Participating in meeting and sponsored laying of FLDs on fodder
Nehru Yuva Kendra	Organizing training for rural youth. Utilising these volunteers in extension activities of KVK.
IFFCO	Promotion of Balanced fertilizers and their participation in awareness camps, Coordination at district level for kisan mela.
KRIBHCO	These institutes helps with critical inputs for better crop yields and their participation in awareness Camps
NABARD State Bank of India	Supporting formation of SHGs and farmers clubs, Banks and other financial agencies are contacted for further financial assistance for starting new units, NABARD has sanctioned a project on Multiplication of medicinal Plants at KVK Jammu.
National Fertilizer Ltd.	Conducted training Programme in collaboration with NFL in KVK adopted villages.
ATMA	Conductance of Farmers School, Farmer-Scientist interactions, Exposure visits and technology refinement, regular visits to ATMA villagesalong with department of Agriculture and BTM's.
Private Organizations	To provide better marketing facility, Exhibition and display in kissanmelas, campaigns, field days

Radio Kashmir Jammu	Radio Talks and for Mass dissemination of Technical Knowledge given By KVK for Farmers.
PCRA	A memorandum has been signed between petroleum conservation regulatory authority and KVK for promoting oil conservation in farm machinery and also for better maintenance of farm machinery.
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.

KRISHI VIGYAN KENDRA JAMMU has been a facilitation center for most of the HOLISTIC AGRICULTURE DEVELOPMENT PROGRAMME initiated in the UT of J&K having a total layout of Rs 5013 Crores with convergence of all Center Sector Schemes, UT level and CAPEX Schemes with integration of all the line department.

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.)
PCRA	March 2022	PCRA Chandigarh	10000.00
Export Promotion Programme	October 2022	BEDF APEDA	100000.00
Workshop on Social Forestry	August 2022	Social Forestry Dept J&K	100000.00
Judicious use of Pesticides	July 2022	Parjat Industries	80000.00
MAP Cultivation	Jamuary 2022	HFRI Shimla	80000.00

11.3 Details of linkage with ATMA

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

Coordination activities between KVK and ATMA during 2022 (January-December)

S. No.	*Programme*	*Particulars*	*No. of programmes attended by KVK staff*	*No. of programmes Organized by KVK*
01	**Meetings**	**Farmers Scientist interaction** **Action Plan meeting**		**2**
02	**Research projects**	**Technology park and Crop Cafeteria**		**2**
03	**Extension Programmes**			
	Kisan Mela	Participated	2	-
	Exposure visit	Venue		2

12. PERFORMANCE OF INFRASTRUCTURE IN KVK

12.1 Performance of demonstration units (other than instructional farm)

S. 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	0.04	-	Manure	45.86	19000	45860	Functional
2	Fish Pond	2012	0.02	Mixed	Fish				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	**31.07.2022**	**18.11.2022**	**4.4**	**Basmati 370**	**Seed**	**72.10 qt.**	**130000**	**awaited**	**With Megaseed Project SKUAST-Jammu**
Wheat	**05.12.2022**	**27.04.2023**	**5**	**DBW-173 and DBW 187**	**Seed**	**130 qt.**	**105000**	**awaited**	
Fodder	**25/05/2022**	**3/07/2022**	**1.2**	**SSG**	**Fodder**	**-**	**6,500**	**38,500**	**Revolving Fund**

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**	**45.86**	**19000**	**45860**	

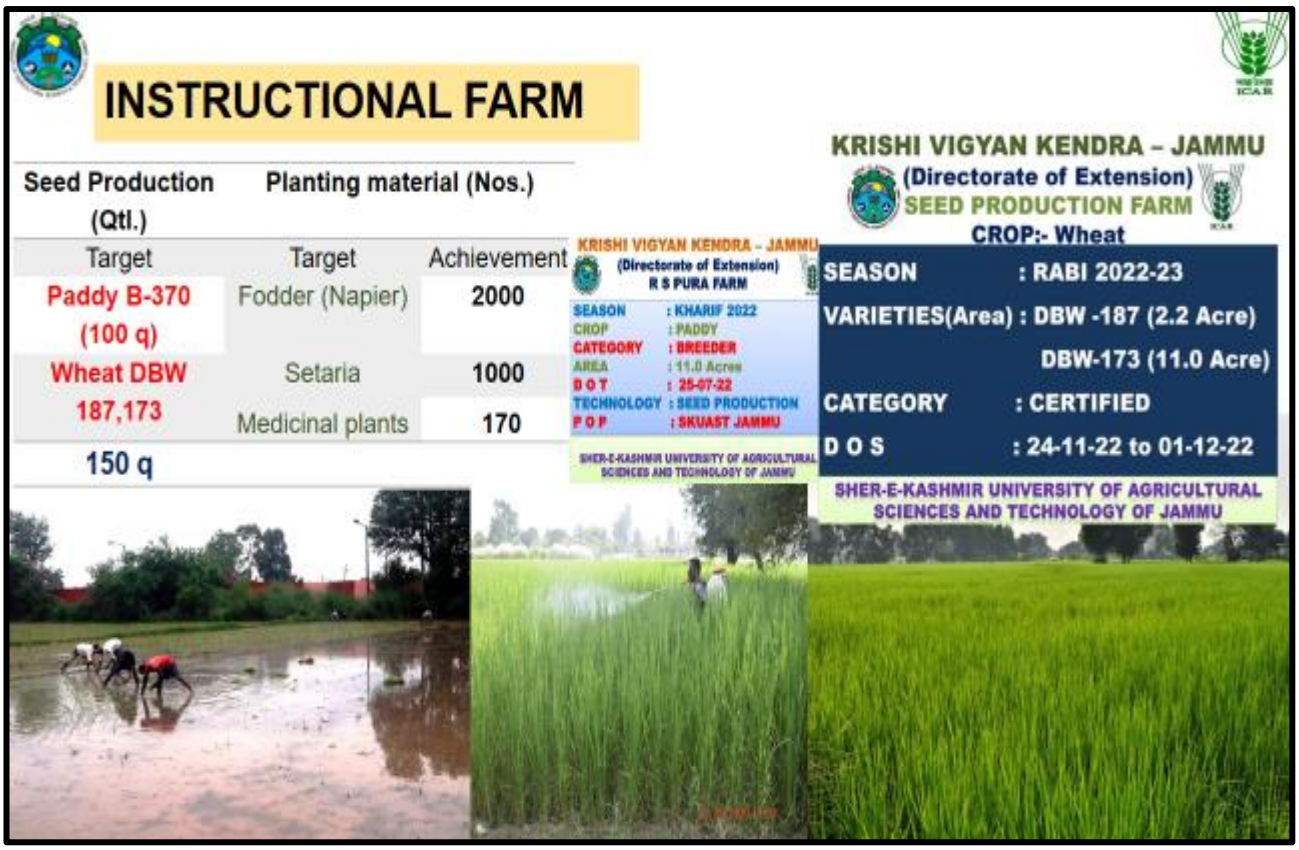
13. FINANCIAL PERFORMANCE

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 2022-23 (Rs in Lakhs)

S. No.	Budget Head	Revised Estimate 2022-23				Total Release (incl. O.B)	Expenditure 2022-23				Closing Balance
		Other than TSP,SCSP	TSP	SCSP	Total		Other than TSP,SCSP	TSP	SCSP	Total	
1	2	3	4	5	6 (3+4+5)	7	8	9	10	11 (7+9+10)	12 (7-11)
1	Works										
2	Equipment			49709	49709	55092			48000	48000	7092
5	Vehicle & Vessels			831291	831291	831291			831291	831291	0
6	Farm/Small Implements					150					150
7	Furniture & fixtures			300000	300000	300000			299995	299995	5
	Total - CAPITAL	**0**	**0**	**1181000**	**1181000**	**1186533**	**0**	**0**	**1179286**	**1179286**	**7247**
9	**Pay & Allowances**	**23700000**			**23700000**	**23699931**	**23606788**			**23606788**	**93143**
	Grants in Aid – General										
10	Travelling Allowance (Domestic)	121000			121000	121000	95661			95661	25339
11	A. Research Expenses	75000			75000	75000	74142			74142	858
	B. Operational Expenses	250000			250000	250000	249180			249180	820
	C. Infrastructure (Rent,Electricity, Water charges, Veh running exp, insurance)	50000			50000	50000	48582			48582	1418
	D. Communication (Postage and telephone)	10000			10000	10000	9744			9744	256
	E. Others (excluding TA) (Printing and stationery consumable, Advertising, Legal Professional charges)	41000			41000	41000	40716			40716	284
	H. Other Miscellaneous	151000			151000	151000	150046			150046	954
	I. Repair & Maintenance										
	(i) Equipment , Vehicle & Others	51000			51000	51000	16430			16430	34570
	(ii) Office building	51000			51000	51000	17834			17834	33166
	SCSP			1200000	1200000	1202448			1198683	1198683	3765
12	Revolving Fund										
	Total Recurring Contingency	**679000**	**0**	**1200000**	**1879000**	**1881448**	**606674**		**1198683**	**1805357**	**76091**
	Grants in Aid-General (RC+TA)	**800000**	**0**	**1200000**	**2000000**	**2002448**	**702335**		**1198683**	**1901018**	**101430**
	Total (Capital + General)	**800000**	**0**	**2381000**	**3181000**	**3188981**	**702335**		**2377969**	**3080304**	**108677**
	Grand Total (Capital + Salary +General)	**24500000**	**0**	**2381000**	**26881000**	**26888912**	**24309123**		**2377969**	**26687092**	**201820**



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
2019-20	1907090.77	170926.00	33400.00	2044616.77
2020-21	2044616.77	5670691.00*	6830490.00**	884817.77
2021-22	884817.77	486830.00	246663.00	1124984.77
2022-23 (upto ending December	1124984.77	170162.00	334417.90	960728.87

*FDR Closure @ 44,35,798/-
**FDR @ 65,00,000/-
Net effective balance of FDR @ 67,74,568/- as on 03.03.2022

14. Details of HRD activities attended by KVK staff during 2022 (January-December)

Name of the staff	*Designation*	*Title of the training programme*	*Institute where attended*	*Date*
Dr Punit Choudhary	Chief Scientist and Head	National facilitators Development programme by MANAGE Hyderabad	Virtual mode	7-12 February 2022
Dr Punit Choudhary	Chief Scientist and Head	National Workshop on Innovative Agriculture organized by NITI Aayog GOI	Vigyan Bhawan New Delhi	25th April ,2022
Dr Amitesh Sharma	*Scientist*	Promotion of Drones : Issues, Challenges and way forward organized by DGCA/ICAR ATARI	ICAR, New Delhi	2nd May, 2022
Dr Punit Choudhary Dr Prem Kumar Dr Amitesh Sharma	Chief Scientist and Head Scientist Scientist	10th National Seminar on "Sustainable Development: Beyond 4.0" organized by Society for Community Mobilization	SKUAST-K, Kashmir	26-28 May, 2022
Dr Punit Choudhary	Chief Scientist and Head	12th Biennial National Conference of KVKs organized by ICAR	Y.S. Parmar university OF Horticulture and forestry, Nauni	1-2 June, 2022
Dr Punit Choudhary	Chief Scientist and Head	Online Workshop of All India Fodder Production Officers organized by ICAR Indian Grassland and Fodder research Institute	Virtual mode	28-30 June, 2022
Dr Amitesh Sharma	*Scientist*	Drones for Agricultural Development organized by Manage, Hyderabad	Online Mode	11-15th July, 2022
Dr Punit Choudhary	Chief Scientist and Head	Multistakeholder Convention organized by Department of Agriculture and farmers welfare J&K	SKICC, Srinagar	18-19th July, 2022
Dr Punit Choudhary	Chief Scientist and Head	International Conference on "Harnessing Indian Agriculture for Indigenous and global Prosperity" organized by Bhartiya Agro Economic research Centre and Bhartiya Kisan sangh in collaboration with ICAR	A.P. Shinde Symposium Hall, NASC Complex, ICAR, New Delhi	22-23 July, 2022
Dr Punit Choudhary	Chief Scientist and Head	One Day Workshop on "Promotion of Agroforestry in Jammu & Kashmir: Opportunities and Challenges" organized by Department of social forestry J&K and KVK Jammu	KVK Jammu	25th August, 2022
Dr Punit Choudhary	Chief Scientist and Head Chief Scientist Sr. Scientist Scientist Scientist Scientist	*International Conference 2022 (IESIC 2022)* on "Sustainable Agricultural Innovations for Resilient Agri-Food Systems	Indian Ecological Society, at SKUAST J	13-15 Oct, 2022

Dr Punit Choudhary Dr Ravneet Kour Dr Sheetal Badyal Dr Prem Kumar Dr Muneeshwar Sharma Dr Amitesh Sharma	Chief Scientist and Head Chief Scientist Sr. Scientist Scientist Scientist	Regional Conference on "Specialty Agriculture in the context of farm economy of Himalayan Region" organized by Division of Agricultural Economics & Agri-Buisness Management, SKUAST-J in collaboration with Indian Society of Agricultural Economics, Mumbai.	Main Campus, SKUAST-Jammu, Chatha	21-22nd September, 2022
Dr Punit Choudhary	Chief Scientist and Head	Interface with Award winning KVKs Building of Success of the National / Zonal Awardees with Scientist of KVKs of NEH Region	College of Post Graduate Studies in Agricultural Sciences, Umiam, Meghalaya.	28-30th September, 2022

15. Details of Important Programs/Events conducted in KVKs during 2022 (January-December)

Farmers' participatory seed production of major cereal crops in Block RS Pura

The improved varieties are always in high demand, but there has always been shortage of the certified seeds of these varieties, especially of Rice, wheat and maize. The potential yield of crop depends on the quality of the seed used for cultivation of crop. Use of quality seeds alone can enhance the crop productivity by 15-25%. One of the main reasons for low productivity of crops is unavailability of reliable quality seeds in the local markets. To enhance productivity, seed should be of high quality, which will express full potential yield of the genotype under favourable cultivation environments. Therefore, there is urgent need to establish quality seed sources at least for major crops of Jammu & Kashmir.

To ensure availability of quality seed a Farmers' participatory seed production was carried out by Krishi Vigyan Kendra (KVK) Jammu SKUAST Jammu with Seed Processing Centre SKUAST Jammu under ICAR Mega seed Project between 2019-2022.Firstly, the two blocks of District Jammu were selected such as Bishnah and RS Pura and quality seed of Basmati of Foundation and certified class of 600 quintals and 2000 quintals were distributing among the paddy and Wheat farmers covering an area of 30 ha. and 20 ha. respectively during Kharif and Rabi season covering almost 150 farmers. Farmers

were empowered through six field level and one institutional training. It was revealed that average increase in three years of seed yield of improved varieties over the local variety was 30.3 and 25.8% . The Benefit Cost ratio was higher as 2.62 and 2.93, under improved varieties over the local as 1.23 and 1.9 in Rice and wheat, respectively. It was observed that the Local farmers of block RSPURA and Bishnah blocks of Jammu district get certified seeds of paddy and wheat, particularly rice at reasonable price through this Farmers Participatory Seed Production programme of KVK Jammu and seed processing unit SKUAST-Jammu.

Moving towards Organic ecosystem of Block R S Pura

Krishi Vigyan Kendra Jammu always takes lead to launch and implement Agriculture government policies for sustainable development for farmers and all. Our central government started promoting organic management after seeing the delirious repercussions of modern chemical agriculture. Though yields exploded. The technology spread across the world as it was considered the revolution in agriculture. Flash forward to today, and many people are marveling at organic farming again. This is after learning that conventional farming methods come with a host of problems including health-related diseases like cancer, pollution, degradation of soil and water, and impact on domestic animals.

KVK Jammu through his mandated activities create awareness among stakeholders. In 2022 KVK Jammu added organic component in its action plan and started to conduct trainings and how to do nutrition management in organics to prepare Paushtik Panchgavya, Vermiwash, Waste decomposer, Vermicompost, Trichoderma etc. In 2022 KVK Jammu also distributed Paushtik Panchagavya, waste

decomposer etc. better nutrition management. Breaking the myth organic leads to less production some farmers started reduce their dependence on chemical fertilizer almost 50% . It is also observed that basmati production is increased by 10-20% just by adopting green manuring of Dhaincha. In Organics, the problem of lodging in Basmati is also resolved with high fragrance and platability. In all almost 140 farmers taking technical guidance and help from scientists of KVK Jammu even 5-7 are totally adapted organic management system.

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

- **KVK Jammu role during Lumpy Skin Disease during 2022**

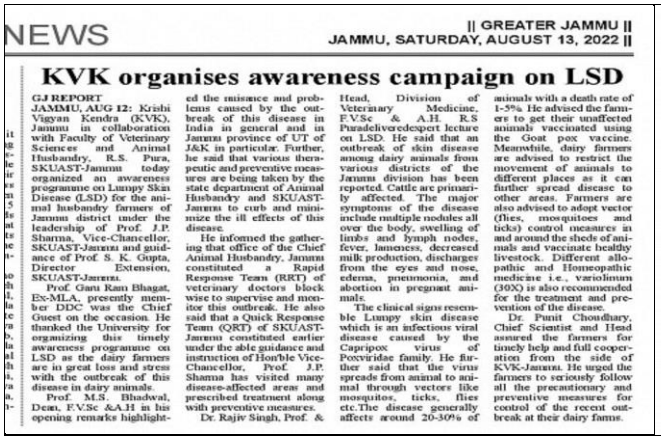
India has the largest livestock population in the world and comprises 15% of the world's animal population. As per the Basic Animal Husbandry Statics report - 2021, the total livestock population is 536.76 million in India. In the Indian economy, livestock plays a key role and the sector of livestock contributes about 6.20 % of the total GDP and 31.0 % of the total GDP for agriculture (BAHS, 2021). Livestock provides livelihood to 2/3rd of rural communities in India (economic survey 2020-21). In the Indian economy, animal husbandry plays a key role. Approximately 20.5 million people directly and indirectly rely on livestock. Livestock production is the endeavour of the small holders (marginal, small and land less) and over 80 percent of all species of livestock of this region are owned by this section of farmers. In hilly and temperate regions, over 70 % of the population directly or indirectly depends on livestock as an alternative source of income. In north India livestock farming is an integral component of the mixed farming system. But recently emerged Lumpy skin disease (LSD) was one of the devastating viral disease of cattle and buffaloes in the country caused significant economic losses and still of concern. Farmers suffered heavy losses in form of reduced milk production, extra expenditure on medicines, shortage of vaccines, mortality of animals, reduced sale of milk due to fear among people etc.

During this time, Krishi Vigyan Kendra Jammu played a significant role in curbing the disease menace with its limited resources in collaboration with Faculty of Veterinary Sciences and Animal Husbandry, R.S. Pura and Department of Animal Husbandry, Jammu. Krishi Vigyan Kendra Jammu worked on war foot to provide relief to the affected farmers in form of information, training programme, field visits, mass awareness camps, awareness through press and media coverage, consultation, distribution of medicines, telephonic consultation and connecting the farmers to the experts and Scientists during the outbreak in Jammu districts.

KVK Jammu established a bridge between the farmers and experts of Faculty of Veterinary Sciences and Animal Husbandry due to its outreach among the farmers. The farmers who did not know

where to go for help, they were keep contacting to KVK scientists and personnel. The list of programmes organised by KVK Jammu is given below-

S. No.	Name of the Programme	Date	Description
1.	Deworming in Farm Animals & Lumpy Disease	10-08-22	Training Programme
2.	Lumpy Disease (Feed & Fodder management in Milch Animals)	17-08-22	Training Programme
3.	Management of Lumpy Skin Disease	03-09-22	Training Programme
4.	Awareness Program on Lumpy Skin Disease	07-09-22	Training Programme
5.	Training cum awareness programme for Krishi/pashu sakhis of Block Bhalwal	08-09-22	Awareness programme
6.	Lumpy Skin Disease	19-09-22	Awareness Prog
7.	Joint Press Conference with Dept. of Animal Husbandry and FVSC&AH SKUAST-Jammu at KVK Jammu	12-08-2022	More than 25 media houses



NEWS

|| GREATER JAMMU ||
JAMMU, SATURDAY, AUGUST 13, 2022 ||

KVK organises awareness campaign on LSD

GJ REPORT
JAMMU, AUG 12: Krishi Vigyan Kendra (KVK), Jammu in collaboration with Faculty of Veterinary Sciences and Animal Husbandry, R.S. Pura, SKUAST-Jammu today organized an awareness programme on Lumpy Skin Disease (LSD) for the animal husbandry farmers of Jammu district under the leadership of Prof. J.P. Sharma, Vice-Chancellor, SKUAST-Jammu and guidance of Prof. S. K. Gupta, Director Extension, SKUAST-Jammu.

Prof. Ganu Ram Bhagat, Ex-MLA, presently member DDC was the Chief Guest on the occasion. He thanked the University for organizing this timely awareness programme on LSD as the dairy farmers are in great loss and stress with the outbreak of this disease in dairy animals.

Prof. M.S. Bhadwal, Dean, F.V.Sc &A.H in his opening remarks highlighted the miasmce and problems caused by the outbreak of this disease in India in general and in Jammu province of UT of J&K in particular. Further, he said that various therapeutic and preventive measures are being taken by the state department of Animal Husbandry and SKUAST-Jammu to curb and minimize the ill effects of this disease.

He informed the gathering that office of the Chief Animal Husbandy, Jammu constituted a Rapid Response Team (RRT) of veterinary doctors block wise to supervise and monitor this outbreak. He also said that a Quick Response Team (QRT) of SKUAST-Jammu constituted earlier under the able guidance and instruction of Hon'ble Vice-Chancellor, Prof. J.P. Sharma has visited many disease-affected areas and prescribed treatment along with preventive measures.

Dr. Rajiv Singh, Prof. & Head, Division of Veterinary Medicine, F.V.Sc & A.H. R.S Puradeliveredexpert lecture on LSD. He said that an outbreak of skin disease among dairy animals from various districts of the Jammu division has been reported. Cattle are primarily affected. The major symptoms of the disease include multiple nodules all over the body, swelling of limbs and lymph nodes, fever, lameness, decreased milk production, discharges from the eyes and nose, edema, pneumonia, and abortion in pregnant animals.

The clinical signs resemble Lumpy skin disease which is an infectious viral disease caused by the Capripox virus of Poxviridae family. He further said that the virus spreads from animal to animal through vectors like mosquitos, ticks, flies etc.The disease generally affects around 20-30% of animals with a death rate of 1-5%. He advised the farmer to get their unaffected animals vaccinated using the Goat pox vaccine. Meanwhile, dairy farmers are advised to restrict the movement of animals to different places as it can further spread disease to other areas. Farmers are also advised to adopt vector (flies, mosquitoes and ticks) control measures in and around the sheds of animals and vaccinate healthy livestock. Different allopathic and Homeopathic medicine i.e., variolinum (30X) is also recommended for the treatment and prevention of the disease.

Dr. Punit Choudhary, Chief Scientist and Head assured the farmers for timely help and full cooperation from the side of KVK-Jammu. He urged the farmers to seriously follow all the precautionary and preventive measures for control of the recent outbreak at their dairy farms.

Dairy farmers suffer losses due to outbreak of Lumpy Skin Disease

GJ REPORT
JAMMU, AUG 18: Krishi Vigyan Kendra (KVK) Jammu in collaboration with Faculty of Veterinary Sciences and Animal Husbandry, R S Pura, SKUAST-Jammu and Department of Animal Husbandry, J&K today organised a press conference on Lumpy Skin Disease (LSD) to aware the livestock farmers about the disease.

Prof. M.S. Bhadwal, Dean, highlighted the problems associated with the outbreak of the disease in Jammu province of UT of J&K in particular. The dairy farmers are in great stress and have suffered losses due to the outbreak of this disease in dairy animals. He informed that various therapeutic and preventive measures are being taken by the state department of Animal Husbandry and SKUAST-Jammu to curb and minimize the effects of this disease. He informed that a Quick Response Team (QRT) of SKUAST-Jammu has visited many disease-affected areas and dairy clusters, and prescribed treatment along with preventive measures. The University has set up a toll free No. 18001807196 to advise and help the farmers. He advised farmers not to panic, and contact quick response team of the University for any help. Dr Altaf Ali, Chief Animal Husbandry, Jammu said that a Rapid Response Teams (RRT) of veterinary doctors block wise has been constituted to supervise and monitor this outbreak.

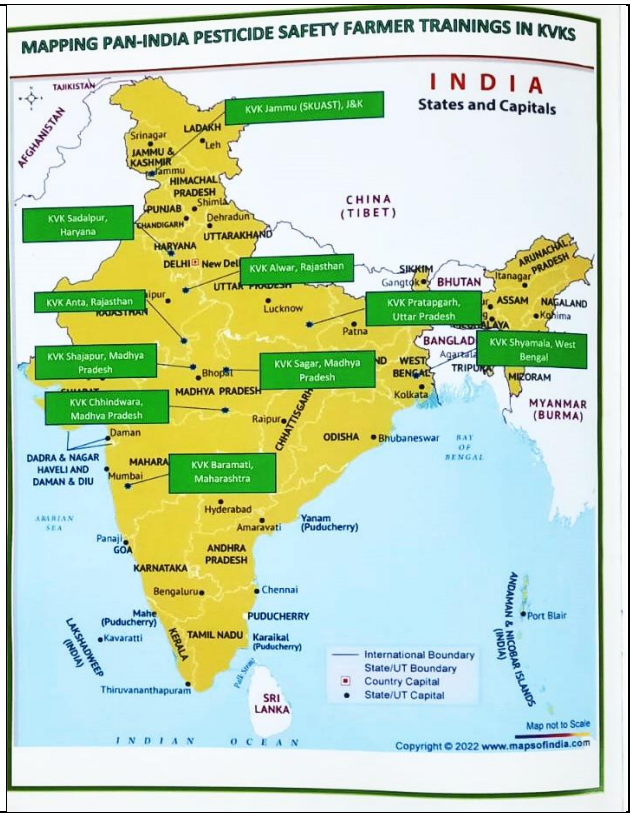
Dairy farmers are advised to restrict the movement of animals to different places as it can further spread disease to other areas. Farmers are also advised to adopt vector (flies, mosquitoes and ticks) control measures in and around the sheds of animals and vaccinate healthy livestock.

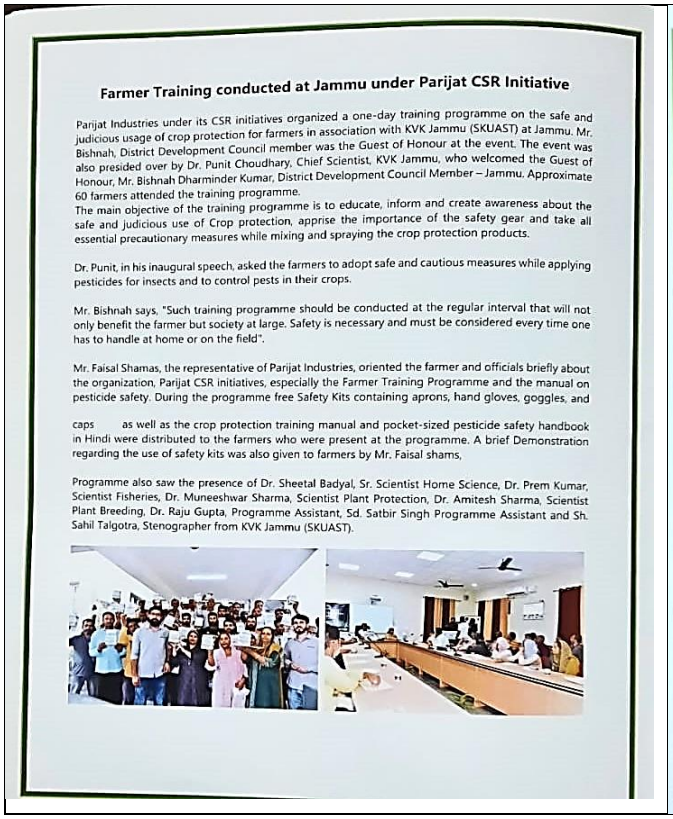
Thirty-four block level teams at various VAS centers with their phone numbers has been formed. A call center has been established with no. 18001807205 to help the farmers. Dr. Rajiv Singh, Head, Division of Veterinary Medicine, said that an outbreak of skin disease among dairy animals from various districts of the Jammu division has been reported. Cattle are primarily affected.

The major symptoms of the disease include multiple nodules all over the body, swelling of limbs and lymph nodes, fever, lameness, decreased milk production, discharges from the eyes and nose, edema, pneumonia, and abortion in pregnant animals. The clinical signs resemble Lumpy skin disease which is an infectious viral disease caused by the Capripox virus of Poxviridae family.

KVK Jammu and faculty of Veterinary Sciences and Animal Husbandry of SKUAST-Jammu addressing the media on Thursday.

- **Calloborative Programme with Parijat Industries: A PAN INDIA initiative for safe and Judicious use f Pesticides at KVK Jammu**





Farmer Training conducted at Jammu under Parijat CSR Initiative

Parijat Industries under its CSR initiatives organized a one-day training programme on the safe and judicious usage of crop protection for farmers in association with KVK Jammu (SKUAST) at Jammu. Mr. Bishnah, District Development Council member was the Guest of Honour at the event. The event was also presided over by Dr. Punit Choudhary, Chief Scientist, KVK Jammu, who welcomed the Guest of Honour, Mr. Bishnah Dharminder Kumar, District Development Council Member – Jammu. Approximate 60 farmers attended the training programme.

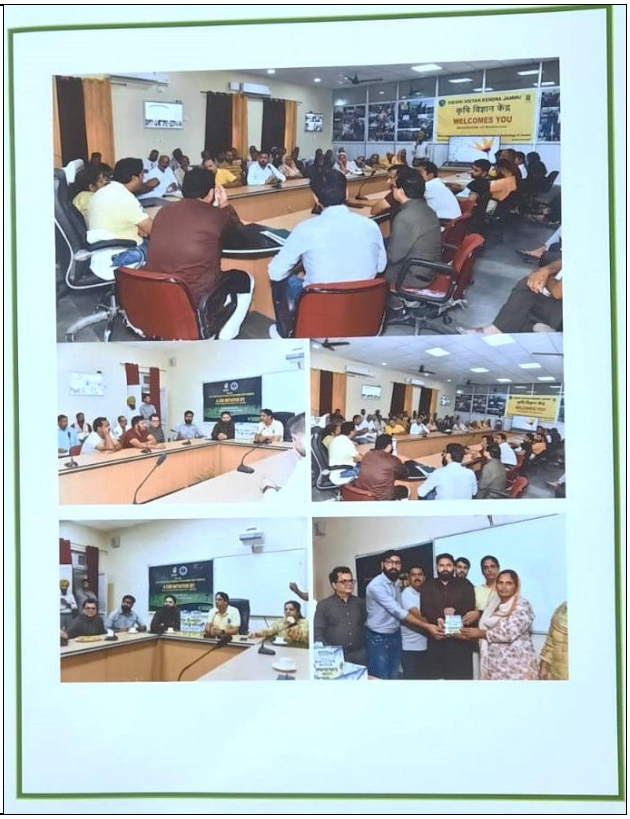
The main objective of the training programme is to educate, inform and create awareness about the safe and judicious use of Crop protection, apprise the importance of the safety gear and take all essential precautionary measures while mixing and spraying the crop protection products.

Dr. Punit, in his inaugural speech, asked the farmers to adopt safe and cautious measures while applying pesticides for insects and to control pests in their crops.

Mr. Bishnah says, "Such training programme should be conducted at the regular interval that will not only benefit the farmer but society at large. Safety is necessary and must be considered every time one has to handle at home or on the field".

Mr. Faisal Shamas, the representative of Parijat Industries, oriented the farmer and officials briefly about the organization, Parijat CSR initiatives, especially the Farmer Training Programme and the manual on pesticide safety. During the programme free Safety Kits containing aprons, hand gloves, goggles, and caps as well as the crop protection training manual and pocket-sized pesticide safety handbook in Hindi were distributed to the farmers who were present at the programme. A brief Demonstration regarding the use of safety kits was also given to farmers by Mr. Faisal shams,

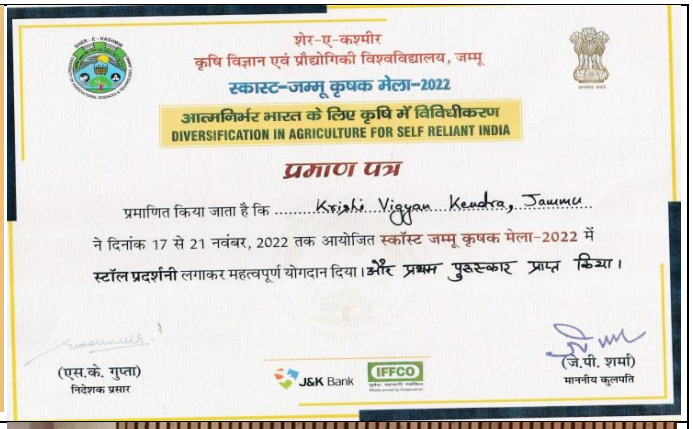
Programme also saw the presence of Dr. Sheetal Badyal, Sr. Scientist Home Science, Dr. Prem Kumar, Scientist Fisheries, Dr. Muneeshwar Sharma, Scientist Plant Protection, Dr. Amitesh Sharma, Scientist Plant Breeding, Dr. Raju Gupta, Programme Assistant, Sd. Satbir Singh Programme Assistant and Sh. Sahil Talgotra, Stenographer from KVK Jammu (SKUAST).

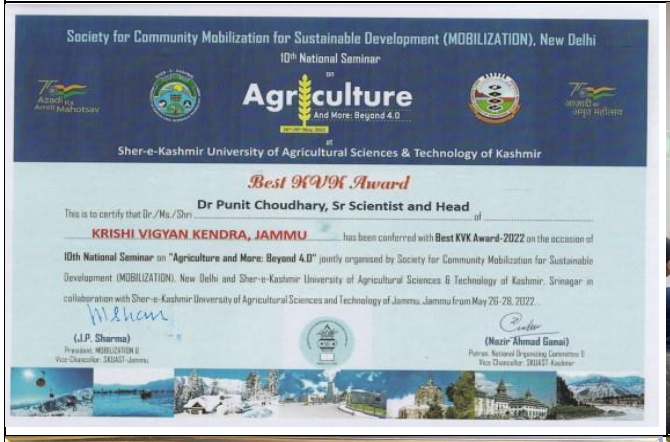


AWARDS & APPRECIATIONS (2022)

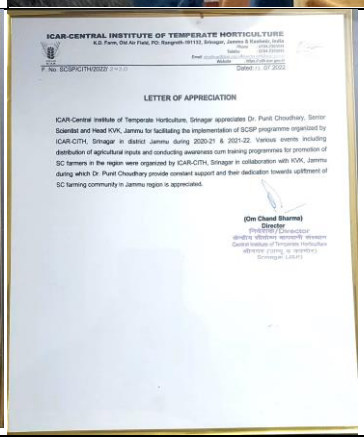
S. No.	Award
1.	Best KVK Award to KVK Jammu in 10th National Seminar on “Sustainable Development: Beyond 4.0”organized by Society for Community Mobilization
2.	Best KVK Professional Award to Dr. Prem Kumar 10th National Seminar on “Sustainable Development: Beyond 4.0”organized by Society for Community Mobilization
3.	Certificate of Appreciation to KVK Jammu in Regional Conference on “Specialty Agriculture in the context of farm economy of Himalayan Region” organized by Division of Agricultural Economics & Agri-Buisness Management, SKUAST-J in collaboration with Indian Society of Agricultural Economics, Mumbai w.e.f. 21-22nd September,2022.
4.	Best Presentation Award to Dr. Perm Kumar SMS KVK JAMMU in Regional Conference on “Specialty Agriculture in the context of farm economy of Himalayan Region” organized by Division of Agricultural Economics & Agri-Business Management, SKUAST-J in collaboration with Indian Society of Agricultural Economics, Mumbai w.e.f. 21-22nd September,2022.
5.	First Award During Krishak Mela 2022 held at SKUAST Jammu w.e.f 17-21 Nov, 2022
6.	3rd Prize - for best stall in Exhibition during 5 days Krishi Mela 2022 held at SKUAST-Jammu from 7-11 March, 2022
7	Letter of Appreciation by Director CITH, Srinagar J&K for active coordination in SCSP Pogrammes at Jammu.
8	Letter of Appreciation by IFFCO Jammu

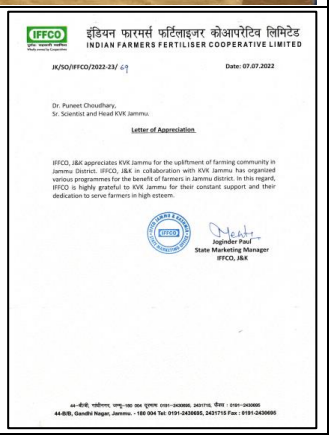
शेर-ए-कश्मीर
कृषि विज्ञान एवं प्रौद्योगिकी विश्वविद्यालय, जम्मू
पांच दिवसीय स्कास्ट-जम्मू कृषि मेला-2022
प्राकृतिक एवं आधुनिक प्रौद्योगिकियां
प्रमाण पत्र
प्रमाणित किया जाता है कि ...KRISHI VIGYAN KENDRA, Jammu.....SKUAST-Jammu
को दिनांक 7 से 11 मार्च, 2022 तक आयोजित पांच दिवसीय स्कॉस्ट जम्मू कृषि मेला-2022 में स्टॉल
प्रदर्शनी प्रतियोगिता (सरकारी वर्ग) में प्रथम/द्वितीय/तृतीय/सान्त्वना पुरस्कार प्रदान किया गया।
(एस.के. गुप्ता) निदेशक प्रसार
(जे.पी. शर्मा) कुलपति


शेर-ए-कश्मीर
कृषि विज्ञान एवं प्रौद्योगिकी विश्वविद्यालय, जम्मू
स्कास्ट-जम्मू कृषक मेला-2022
आत्मनिर्भर भारत के लिए कृषि में विविधीकरण
DIVERSIFICATION IN AGRICULTURE FOR SELF RELIANT INDIA
प्रमाण पत्र
प्रमाणित किया जाता है कि .....Krishi Vigyan Kendra, Jammu
ने दिनांक 17 से 21 नवंबर, 2022 तक आयोजित स्कॉस्ट जम्मू कृषक मेला-2022 में
स्टॉल प्रदर्शनी लगाकर महत्वपूर्ण योगदान दिया। और प्रथम पुरस्कार प्राप्त किया।
(एस.के. गुप्ता) निदेशक प्रसार
(जे.पी. शर्मा) माननीय कुलपति


Society for Community Mobilization for Sustainable Development (MOBILIZATION), New Delhi
10th National Seminar on Agriculture And More: Beyond 4.0
Sher-e-Kashmir University of Agricultural Sciences & Technology of Kashmir
Best KVK Award
Dr Punit Choudhary, Sr Scientist and Head
KRISHI VIGYAN KENDRA, JAMMU
(J.P. Sharma)
(Nazir Ahmad Ganai)

Regional Conference on Specialty Agriculture in the Context of Farm Economy of Himalayan Region
September 21-22, 2022
ISAE-22 SKUAST-J
Certificate of Appreciation
This certificate is presented to Krishi Vigyan Kendra Jammu, SKUAST - Jammu
in appreciation of his/her tireless efforts for Mobilizing the Farmers during the Regional Conference on "Specialty Agriculture in the Context of Farm Economy of Himalayan Region" organized by Division of Agricultural Economics and Agribusiness Management, Sher-e-Kashmir University of Agricultural Sciences and Technology of Jammu in collaboration with Indian Society of Agricultural Economics, Mumbai w.e.f. September 21st-22nd, 2022.
(J.P. Sharma) Vice-Chancellor, SKUAST-Jammu


ICAR-CENTRAL INSTITUTE OF TEMPERATE HORTICULTURE
LETTER OF APPRECIATION
(Om Chand Sharma) Director


इंडियन फारमर्स फर्टिलाइजर कोआपरेटिव लिमिटेड
INDIAN FARMERS FERTILISER COOPERATIVE LIMITED
JK/SO/IFFCO/2022-23/ 69
Date: 07.07.2022
Dr. Puneet Choudhary, Sr. Scientist and Head KVK Jammu.
Letter of Appreciation
IFFCO, J&K appreciates KVK Jammu for the upliftment of farming community in Jammu District. IFFCO, J&K in collaboration with KVK Jammu has organized various programmes for the benefit of farmers in Jammu district. In this regard, IFFCO is highly grateful to KVK Jammu for their constant support and their dedication to serve farmers in high esteem.
Jogender Paul, State Marketing Manager, IFFCO, J&K

EXTERNALLY FUNDED PROJECT AT KVK JAMMU

Title	Funding Agency	Year of Start	Duration of Project	Total approved budget of the Project (Lacs)	PI of the Project
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	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

Education Division, ICAR, New Delhi					Dr. Muneeshwar Sharma Dr. Amitesh Sharma
Establishment of ornamental fish breeding and culture unit for bio resource conservation and livelihood	DBT GOI	2022-25	3 Years	52.55	PI Dr. Prem Kumar Co-PI Dr. Punit Choudhary Dr. Sheetal Badyal
AICRP on Arid Legume	AICRP	2020-22	2 Years	300000	Co PI Dr. Punit Choudhary
Collaborative Technology dissemination Programme	CIFT	2021-22	1 Year and 2 months	900000	PI Dr. PremKumar

Participation in Kisan Melas at SKUAST Jammu

Annexure-A

MINUTES OF 19th SCIENTIFIC ADVISORY COMMITTEE MEETING OF KRISHI VIGYAN KENDRA, JAMMU

Date: 23st August 2022 **Venue: KVK-Jammu**

The 19th Scientific Advisory Committee (SAC) meeting of Krishi Vigyan Kendra, Jammu was held in the Conference Hall of KVK Jammu on 23rd August, 2022 under the Chairmanship of **Prof. J.P. Sharma, Hon'ble Vice Chancellor, SKUAST Jammu**. Dr S.K. Gupta, Director Extension, SKUAST Jammu, Dr M.S. Bhadwal, Dean F.V.Sc. & A.H, SKUAST-J, Ms Ruchita Rane (*Policy Advocacy Research Center, Mumbai),* Scientists from KVK Jammu, Heads of Divisions SKUAST- Jammu, Chief Agriculture Officer, Chief Animal Husbandry Officer, Divisional Forest officer (SF), Lead Bank Manager, District Development Manager NABARD, CDPO R S Pura and District Heads from other line departments, Kisan Board Members and progressive farmer and farm women members (Annexure -1) attended the meeting.

At the outset, Dr Punit Choudhary, Chief Scientist & Head, KVK Jammu extended warm welcome to the Chairman and members of the meeting followed by formal introduction of the participants.

During the meeting the following agendas were put forth for discussion and approval.

Agenda Item I: Confirmation of proceedings of 18th SAC Meeting of KVK Jammu
The house confirmed the proceedings of 18th SAC meeting of KVK Jammu.

Agenda Item II: Action taken on the recommendations of 18th SAC Meeting
Chief Scientist and Head discussed the action taken report on the recommendations of 18th SAC Meeting.

Agenda Item III: Activities taken up by KVK Jammu
Chief Scientist and Head KVK Jammu presented the annual progress report and activities conducted w.e.f Sept. 2020 to July 2022 and Expenditure incurred by KVK Jammu for the year 2020-21 and 2021-22 before the house.

Agenda Item IV: Proposed Action Plan 2022-23 ***of KVK Jammu***
Chief Scientist and Head presented the proposed Action Plan for year 2022-23.The suggestions/recommendations given by the Hon'ble Chairman and members are detailed below:

Suggestions/recommendations given by members

Chief Agriculture Officer Jammu

- Inclusion of training programmes on hydroponics in the annual action plan
  (Action by: Division of plant Physiology, SKUAST-J and KVK Jammu)
- Remedial measures to prevent damage of structures of protected cultivation facilities at various locations in Jammu.
  (Action by: Division of Vegetable Science and Floriculture, Division of Agricultural Engineering, SKUAST-J and KVK Jammu)

Chief Animal Husbandry Department Jammu

- More no of awareness Camp for farmers on prevailing Lumpy disease in various panchayats in collaboration with Animal Husbandry Department.

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

Divisional Forest Officer, Social Forestry, Jammu

- Inclusion of training on clonal propagation of tree species and nursery stocks for field staff.

(Action by: Division of Agro-forestry, SKUAST-J, ACHR, Udheywala, SKUAST-J, Social Forestry department, Jammu, and KVK Jammu)

CDPO, Jammu

- Awareness camp on Poshan Vatikas to villages and aganwani centers with help of CDPO, RS Pura.
- Awareness on rice based weaning diets with nutritional value in RS Pura block as it is rice growing area in collaboration with CDPO office.

(Action by: Div. of Food Science & Technology, SKUAST-J, CDPO and KVK Jammu)

Sheep Husbandry Officer, Jammu

- In service training program on intensive sheep husbandry units and scientific practices.

(Action by: Dean, F.V.Sc. & A.H, SKUAST-J, SAMETI, SKUAST-J, Sheep husbandry Dept. and KVK Jammu)

Department of Sericulture

- Since there is 100% loss during spin stage at many farmers unit therefore training programme for farmers supported by sericulture dept. may be organized at Jajhar Kotli.

(Action by: Div. of Sericulture, Sericulture Dept. and KVK Jammu)

Horticultural Planning & Marketing Officer, Jammu

- Training on e-NAM for
- Training focused on grading and marketing of agricultural and horticultureal produce.

(Action by: Division of Food Science and Technology, Division of Ag. Economics and Agri business, SKUAST-J, Dept. of Agriculture, Jammu and KVK Jammu)

NABARD Jammu

- Sensitization workshop of various stakeholder on FPOs

(Action by: NABARD and KVK Jammu)

Kisan Board Members/Board Members/Progressive farmers

- S. Tejinder Singh Wazir demanded for availability of quality strawberry panting material at ACHR for the farmers. He suggested Animal Husbandry Dept. to develop vaccination calendar by village and block wise for lumpy disease.

(Action by: ACHR, Udeywala, SKUAST-J and Dept. of Animal husbandry, Jammu)

- Sh. Kulbushan Khajuria demanded for training with complete practical aspects on handling and management of mulching animals for farmers.

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

- Smt. Neelam Kumari sought the help in marketing of their products.

(Action by: KVK Jammu)

Mrs Ruchita Rane, Policy Advocacy Research Center, Mumbai

- She suggested developing different entrepreneurship development programmes and their implementation through implementing task force.
- She requested to focuses on promotion of millets crops with special precautions of nutritional content of varieties with production potential.

(Action by: SKUAST-J, Div. of Plant Breeding & Genetics and KVK Jammu)

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

- Suggested for timely action for early detection, early treatment of disease with available vaccination and medicines to avoid mortality from Lumpy disease.

(Action by: Dept. of Animal Husbandry Jammu and F.V.Sc. & A.H, SKUAST-J)

***Suggestions/recommendations by* Director Extension, SKUAST-Jammu**

- Presented Extension strategies and roadmap for Agriculture development in Jammu region and ready to accept suggestions for improvement.

***Directions/Recommendations by* Prof. J.P. Sharma, Hon'ble Vice Chancellor, SKUAST-J and Chairman, Scientific Advisory Committee**

- Directed KVK Jammu to organized more programme on lumpy disease

(KVK Jammu)

- Conductance of training programmes on diversification and include the millets crop to increase nutritional value of farmers food.

(Action by: Division of Plant breeding, SKUAST-Jammu and KVK Jammu)

- Conduct of training programmes on Natural farming and establish a small demonstration block at KVK Technology Park to display.

(Action by: Organic Research Center, SKUAST-J and KVK Jammu)

- Aware about the FPOs and motivate the farmers to join/establish it.

(Action by: KVK Jammu)

- Advised the farmers to bring their product for sale at Chatha campus of the University where 2 shops are allocated with one staff only for this purpose.

(Action by: Farmers, SHGs, JLG, FPOs)

- Study on Economic viability of hydroponics for growing fodder for feeding animals.

(Action by: Division of Plant physiology and Div. of AEABM, SKUAST-J)

- 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)

- Include the lecture on Govt. Schemes in each programme to aware the farmers about different schemes.

(Action by: All line departments, KVK Jammu)

Dr. Prem Kumar (Scientist, Fisheries) conducted the proceedings of the meeting whereas the minutes of meeting were recorded by Dr Ravneet Kour (Chief Scientist, Horticulture) and Dr. Prem Kumar. The meeting ended with vote of thanks by Dr Ravneet Kour.

ANNEXURE -1

List of participants of 19th Scientific Advisory Committee meeting of KVK-Jammu held on 23rd August, 2022

S. No.	Name	Designation
1	Prof. J P Sharma	Hon'ble Vice-Chancellor, SKUAST-J
2	Dr. SK Gupta	Director Extension, SKUAST-J
3	Dr. MS Bhadwal	Dean, FVSc & AH, SKUAST J R S Pura
4	Ms. Ruchita Rane	Head, PARC, Mumbai
5	Dr. Punit Choudhary	Chief Scientist & Head, KVK-Jammu
6	Sh. Arvind Baru	Chief Agriculture Officer, Jammu
7	Dr. Ram Gopal Sharma	Asstt. Soil Conservation Officer
8	Dr. Sayed Altaf	CAHO Jammu
9	Sh. Alok Kr. Maurya, IFS	DFO, Social Forestry
10	Ms. Ateeksha Sethi	CDPO RS Pura
11	Sh. Sanjeev Kumar	DDM NABARD
12	Sh. BK Raina	Lead Bank Officer
13	Dr. Rahul Dev Dingra	VAS (District Sheep Husbandary Officer)
14	Dr. Inayat Fazli	Project Executive Officer, Sericulture
15	Sh. Rahul Sharma	Inspector, Fishries
16	Sh. Sourabh Sangral	Area Marketing Officer, HP&M
17	Dr. RK Gupta	Professor & Head, Division of Entomology
18	Dr. Amrish Vaid	Professor & Head, Division of Plant Pathology
19	Dr. LM Gupta	Professor & Head, Division of Agroforestry
20	Dr. Anju Bhat	Professor & Head, Division of FST
21	Dr. Tuhina Dey	Professor & Head, Division of PBG
22	Dr. Amit Jasrotia	Professor & Head, Division of Fruit Science
23	Dr. Arvind Kumar	Assoc. Prof. Division of LPT
24	Sh. Kulbhushan Khajuria	Member, Kisan Board
25	S. Tajinder S Wazir	Member, Kisan Board
26	Sh. Swarn Lal, Sarpanch	Farmer, Suchetgarh
27	Smt. Sunita Devi	Progressive Farm Woman, Kaloen
28	Sh. Vinod Kumar	Farmer, Kaloen
29	Smt. Kamla Rani	Progressive Farm Woman
30	Smt. Neelam Kumari	Progressive Farm Woman
31	Smt. Munni Devi	Progressive Farm Woman

32	S. Parminder Singh	Development Officer, ICICI Bank
33	Dr. Ravneet Kour	Chief Scientist, Horticulture, KVK Jammu
34	Dr. Sheetal Badyal	Sr. Scientist (Home Science) KVK-Jammu.
35	Dr. Prem	SMS, Fisheries, KVK Jammu
36	Dr. Muneeshwar Sharma	SMS, Plant Protection, KVK Jammu
37	Dr. Amitesh Sharma	SMS, Plant Breeding, KVK Jammu

ANNEXURE "B"

Farmer Training Programs

Topic	Date	Discipline	SC		ST		OBC		Others		Total		G. Total
			M	F	M	F	M	F	M	F	M	F	
Insect Pest Management in Wheat Crops	04-01-2022	Plant Protection	15	7	0	0	0	0	1	1	16	8	24
Quality Seed Production of Pulses & Oilseeds	17-02-2022	PBG	10	3	0	0	0	0	7	0	17	3	20
Nutri Garden for sustainable food security & nutritional diversity	22-02-2022	Home Science	8	4	0	0	0	0	6	12	14	16	30
Safety parameters in insecticide usage	28-02-2022	Plant Protection	6	0	0	0	2	2	17	0	25	2	27
Management of stored grain pests	02-03-2022	Plant Protection	3	0	0	0	0	0	16	0	19	0	19
Organic source of Nutritution	17-03-2022	PBG	30	2	0	0	0	0	6	2	36	4	40
Scientific cultivation of Maize	12-05-2022	Agronomy	6	26	0	0	0	0	1	3	7	29	36
Scientific cultivation of Paddy	17-05-2022	Agronomy	10	0	0	0	0	0	9	0	19	0	19
Seed Traetment for effective control of seed & soil borne diseases	17-05-2022	Agronomy	1	0	0	0	1	0	18	0	20	0	20
Seed Treatment of Paddy	18-05-2022	Agronomy	0	26	0	0	0	0	5	0	5	26	31
Composite Fish Culture	18-05-2022	Fisheries	18	0	0	0	0	0	0	0	18	0	18
Scientific cultivation of Blackgram	26-05-2022	Agronomy	0	0	0	0	8	17	2	0	10	17	27
Nursery Management in Vegetable Crops	30-05-2022	Horticulture	4	5	0	0	0	0	3	11	7	16	23
Kitchen gardening for ensuring nutritional adequacy of families	31-05-2022	Home Science	4	29	0	0	0	0	1	2	5	31	36
Fish feed management for higher income	01-06-2022	Fisheries	23	0	0	0	0	0	5	0	28	0	28
Training cum Sensitization of FPOs of Jammu (Basmati)	07-06-2022	Awareness Prog	4	0	0	0	0	0	7	1	11	1	12
Scientific cultivation of Black Gram	09-06-2022	Horticulture	15	2	0	0	0	0	9	1	24	3	27

Prevention of Malnutrition in women & adolescent girls through dietary modification	10-06-2022	Home Science	1	5	0	0	0	0	3	14	4	19	23
Group meeting on finalization of FPO on Basmati for RS Pura Block	14-06-2022	Extn. Edu.	4	0	0	0	0	0	4	1	8	1	9
Scientific cultivation of Til	20-06-2022	Agronomy	3	1	0	0	0	0	10	1	13	2	15
Scientific cultivation of Til crop	24-06-2022	Agronomy	6	4	0	0	0	0	5	2	11	6	17
Quality seed production in black gram	06-07-2022	Agronomy	2	0	0	0	0	0	13	0	15	0	15
Scientific cultivation of Til crop	07-07-2022	Agronomy	37	5	0	0	0	0	30	0	67	5	72
Enhancing nutritive value of creals & pulses	08-07-2022	Home Science	2	18	0	0	0	0	0	0	2	18	20
Empowering Farm women through agro based activities	14-07-2022	Home Science	0	12	0	0	0	2	0	5	0	19	19
Crop Protection for farmers: Safety Parameters during use of pesicides in agriculture	14-07-2022	Plant Protection	39	11	0	0	0	0	0	0	39	11	50
Nutritive recepies for enhancing nutritive content of foods for family health	15-07-2022	Home Science	0	17	0	0	0	0	0	2	0	19	19
Insect Pest & disease management in Tomato	25-07-2022	Plant Protection	7	0	0	0	7	0	6	0	20	0	20
Insect Pest & disease management in Paddy Nursery	29-07-2022	Plant Protection	13	1	0	0	0	0	8	0	21	1	22
Deworming in Farm Animals & Lumpy Disease	10-08-2022	Animal Science	9	0	0	0	0	0	8	0	17	0	17
Lumpy Disease (Feed & Fodder management in Milch Animals)	17-08-2022	Animal Science	0	0	0	0	0	0	27	0	27	0	27
Drudgery reducing techniques for household persons	18-08-2022	Home Science	0	6	0	0	0	0	0	12	0	18	18
Processing of seasonal fruit, vegetables & cereals	22-08-2022	Home Science	2	16	0	0	0	0	0	3	2	19	21

Demonstration on enhancing nutritive value of Pulses (sproating) under NARI	26-08-2022	Home Science	0	6	0	0	0	0	0	10	0	16	16
Vermicompost Preparation	30-08-2022	Agronomy	0	6	0	0	0	0	1	0	1	6	7
Management of Orchards	31-08-2022	Horticulture	12	18	0	0	14	8	5	1	31	27	58
Management of Orchards	01-09-2022	Horticulture	4	23	4	5	0	0	0	2	8	30	38
Management of Lumpy Skin Disease	03-09-2022	Animal Science	4	4	3	0	0	0	9	3	16	7	23
Awareness Program on Lumpy Skin Disease	07-09-2022	Animal Science	6	3	9	3	0	0	5	1	20	7	27
various Govt. Schemes	08-09-2022	Awareness Prog	0	14	0	0	0	2	0	7	0	23	23
Demonstration on Healthy & Nutritious Diets for pregnant Women	09-09-2022	Home Science	0	22	0	0	0	0	0	8	0	30	30
Integrated Fish Farming	12-09-2022	Fisheries	1	1	0	0	4	2	9	2	14	5	19
Lumpy Skin Disease	19-09-2022	Awareness Prog	0	0	0	0	0	0	16	2	16	2	18
Carp fry & fingerling rearing	07-10-2022	Fisheries	1	0	0	0	0	0	13	2	14	2	16
Jal Shakti Abhiyan	22-10-2022	Awareness Prog	17	2	0	0	7	1	22	0	46	3	49
Culture of Ornamental fishes	25-10-2022	Fisheries	2	7	0	0	0	0	3	0	5	7	12
Scientific Cultivation of Pulses (Chickpea)	27-10-2022	Agronomy	19	8	0	0	3	3	14	5	36	16	52
Scientific cultivation of Root Crops	28-10-2022	Horticulture	3	0	0	0	0	0	19	0	22	0	22
Awareness on Pulses	02-11-2022	Agronomy	3	12	2	2	0	0	1	2	6	16	22
Scientific cultivation of Chick Pea	03-11-2022	Agronomy	4	2	0	0	1	0	16	1	21	3	24
Processing of vegetables for pickle making	07-11-2022	Home Science	0	6	0	0	0	1	0	15	0	22	22
Scientific cultivation of Mustard	09-11-2022	Agronomy	0	0	0	0	0	0	15	2	15	2	17
Composite Fish Culture	09-11-2022	Fisheries	2	0	0	0	1	0	6	0	9	0	9
Integrated Fish Farming	10-11-2022	Fisheries	2	0	0	0	0	0	15	2	17	2	19
Processing of Mushrooms for value added products	11-11-2022	Home Science	0	24	0	0	0	0	0	6	0	30	30

Improved fodder production	24-11-2022	Agronomy	10	7	0	0	0	0	2	1	12	8	20
Scientific cultivation of Gobi Sarson	24-11-2022	Agronomy	2	30	3	2	0	0	0	0	5	32	37
Nutrigardening for sustainable food security & food diversity	29-11-2022	Home Science	1	17	0	0	0	0	0	0	1	17	18

In Service Training Programs

Topic	Date	Discipline	**Total Male**	**Total Female**	**G. Total**
Quality Seed production of Rabi Crops	10-Feb-22	Crop Production	25	0	25
Insect Pest management in vegetable & fruit crops	28-Feb-22	Horticulture	13	9	22
Quality Seed Production in Field Crops	22-Aug-22	Seed Production	13	7	20
For Anganwari workers on Poshan Abhiyan	17-Sep-22	Home Science	0	41	41

Vocational Training Programs

Topic	Date	Discipline	SC		ST		OBC		Other		Total		G. Total
			M	F	M	F	M	F	M	F	M	F	
Nursery Raising as an enterprise	09-Feb-22	Horticulture	5	21	0	1	0	0	13	1	18	23	41
Computation & preparation of balanced ration for different live stock	14-Feb-22	Animal Science	0	0	0	0	0	0	55	0	55	0	55
Value addition of milk, meat & their products	17-Feb-22	Fisheries	8	20	0	0	0	1	7	9	15	30	45
Feed Resource Development & preparation of silage	17-Mar-22	Animal Science	43	6	0	0	0	0	0	0	43	6	49
Scientific Goat Rearing	21-Mar-22	Animal Science	34	7	0	0	0	0	0	0	34	7	41
Hand Made Chocolates in coordination with UMEED-Self Help Groups (2 Days)	12-Jul-22	Home Science	0	14	0	0	0	2	0	5	0	21	21
Mushroom Cultivation Techniques	26-Sep-22	Plant Protection	18	10	0	0	0	0	6	1	24	11	35
15 Days course on Integrated Nutrient Management	31-Oct-22	Agronomy	1	0	1	0	0	0	5	2	7	2	9

Sponsored Training Programs

Topic	Date	Discipline		SC		ST		OBC		Other		Total
		M	F	M	F	M	F	M	F	M	F	
Promotion of Organic sources of Nutrition for improving soil health of agriculture production systems	25-02-2022	18	0	0	0	0	0	18	6	36	6	42
Scientific Bee Keeping	07-Feb-22	15	0	0	0	0	0	21	0	36	0	36
Scientific Bee keeping	11-Feb-22	14	0	0	0	6	2	32	21			
Scientific Bee Keeping	25-Feb-22	20	0	0	1	0	0	4	0			

ANNEXURE "C"

District Profile – I

Jammu district is situated on the banks of the river Tawi and is surrounded by the Himalayas in the north and the northern-plains in the south. Jammu is the second most populous city of the union territory. Jammu is known as the City of Temples for its ancient temples. Jammu district is extended along the whole length of the international border with Pakistan. It shares its border with Kathua, Rajouri, Udhampur, Reasi, and Samba district in the north, in the east and in the southeast respectively. The climatic conditions of the area are humid subtropical with extreme summer highs reaching 46°C, and temperatures in the winter months occasionally falling below 4°C. June is the hottest month with average highs of 40.6°C, while January is the coldest month with average lows reaching 7°C. Average yearly precipitation is about 42 inches (1,100 mm) with the bulk of the rainfall in the months from June to September.

Total geographical area of Jammu district is 1070km^2 with 21 tehsils. It is the most populous district in the Indian state of Jammu and Kashmir and the largest city is Jammu. As of 2011 it is the most populous district of Jammu and Kashmir. District has a population of around 15.29Lacs out of which rura population is 7.65 lakhs and urban population is 7.64 as per census 2011 and district is further divided into 4 Agriculture Sub-Divisions, 21 agriculture zone,20 blocks, 305 Panchayats and 915 revenue villages. The rural population depends mainly on agriculture and the land of an area is irrigated and fertile except for the Kandi. So it becomes a challenge to increase agriculture production to produce more & more from less and less of land without compromising with quality and quantity. The Research & Extension efforts made so far have concentrated in improving the productivity of single crop/enterprise without paying much attention to the associated areas.During the last two decades the agriculture scenario has changed in the district. The overall cropping intensity has increased which is an indicator to show the efforts laid by researchers, Extension agency& farmers. The productivity of major food grain crops has registered considerable increase over the years. However, the trends have changed farmers by shifting from traditional crops to high value vegetables, medicinal plants, Horticulture, Mushroom, Apiculture, etc. Wheat, paddy and maize are mainly grown crops while pulses, oilseeds, fodder and vegetables are the other crops grown in Jammu district.One of the most famous local Basmati rice is produced in the Ranbir Singh Pura tehsil and is highly in demand across the country for its aromatic and organic nature.

Location:

Jammu is located at 32.73°N 74.87°E. It has an average elevation of 300 m (980 ft). Jammu lies at uneven ridges of low heights at the Shivalik hills. It is surrounded by the Shivalik range to the north, east, and southeast while the Trikuta Range surrounds it in the northwest.

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

S. No.	Particulars	Unit	Total
A	**Administration Setup**		
1.	Administrative Sub-Divisions	No.	8
2.	Tehsils	No.	21
3.	Agriculture Sub Divisions	No.	4
4.	Agri -Circles	No.	128
5.	Agri-Zones	No.	21
6.	Rural Development Blocks	No.	20
7.	Panchayats/ villages	No.	305/915
8.	Villages electrified	No.	915
9.	Villages connected by roads	No.	915
B	**Population & Farm Operating Families**		
1	Population	Lacs	15.30
(i)	Rural population	%	50
2	Farm Operating Families	Lacs	1.30
3	Cultivators	Lacs	0.48
4	Agricultural Labourers	Lacs	0.16
5	BPL Population	Lacs	1.59
6	SC Population	Lacs	3.78
7	ST Population	Lacs	0.69
C	**Land Use Classification**		
1	**Total Geographical area**	Km^2	1070
2	Area as per village papers	Ha	99634
3	Area Under different Crops(Food Crops &Vegetables)	Ha	176534
4	Area under Fruit Crops	Ha	10875
5	Area not available for cultivation	Ha	69072
6	Land put to Non Agricultural uses	Ha	34816
7	Barren and uncultivable land (Waste land)	Ha	34256
8	Marshy and water logged area	Ha	NA
9	Land under still water	Ha	NA
10	**Other uncultivated land excluding fallow land**	Ha	26605
(i)	Permanent pastures and other grazing land	Ha	2861
(ii)	Land under miscellaneous tree crops not included in area sown	Ha	8005
(iii)	Culturable waste land	Ha	15739
	Total (i-iii)		26605
11	**Fallows Lands**		
(i)	Fallow land other fallows than current	Ha	851
(ii)	Current Fallows	Ha	11557

	Total (i-ii)	**Ha**	**12408**
D	**Land Use Statistics(Agri)**		
1	According to Village Papers	Ha	-
2	Net Cultivated Area	Ha	92152
3	Gross cultivated Area	Ha	176534
4	Net Area under Irrigation	Ha	57748
5	Gross Area under Irrigation	Ha	113496
6	Cropping Intensity	%	191.69
7	Area under fruit crops	Ha	10875
E	**Size ofLand Holdings (2020-21)**		
1	Marginal (Upto 1 Ha.)	No.	110304
2	Small (1-2 Ha.)	No.	20840
3	Semi-Medium (2-4 Ha.)	No.	7899
4	Medium (4-10 Ha.)	No.	1155
5	Large (10 & Above Ha.)	No.	-
6	All Classes	No.	140246
7	Average size of land holding	Ha	0.73
F	**Livestock Population**	Lacs	Total livestock population- 3.09 lac (Cattle - 1.86 lac , Buffaloes –1.23 lac, Poultry-16.4 crores)

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**

1. 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.

2. 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

3. 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

4. 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

Block wise Crop Calendar of Major Agriculture Crops in Jammu District

Crops	AES-I			AES-II			AES-III			AES-IV		
	R.S. Pura, Satwari, Miran Sahib, Suchetgarh, Arnia			Bishnah, Marh, Mandal and few parts of satwari			Akhnoor, Chowki Choura, Maira Mandrian, Bhalwal Brahmana, Khour, Pargwal, Samwan, Kharah Bali, Mathwar			Dansal, Nagrota and part of Bhalwal		
	Sowing	Harvesting	Peak Marketing	Sowing	Harvesting	Peak Marketing	Sowing	Harvesting	Peak Marketing	Sowing	Harvesting	Peak Marketing
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Paddy Basmati-370	JUNE-JULY	OCT-NOV	NOV-DEC	JUNE-JULY	OCT-NOV	NOV-DEC	JUNE-JULY	OCT-NOV	NOV-DEC			
Paddy other fine varities	JUNE-JULY	OCT-NOV	NOV-DEC	JUNE-JULY	OCT-NOV	NOV-DEC	JUNE-JULY	OCT-NOV	NOV-DEC	JUNE-JULY	OCT-NOV	NOV-DEC
Maize				MAR-APR	JUN-JULY	JULY	JUNE-JULY	OCT	NOV	JUNE-JULY	OCT	NOV
Wheat	NOV-DEC	APR-MAY	MAY	NOV-DEC	APR-MAY	MAY	NOV-DEC	APR-MAY	MAY	NOV-DEC	APR-MAY	
Bajra							JUNE-JULY	OCT	NOV	JUNE-JULY	OCT	NOV
Pulses	JUNE-JULY and OCT-NOV	OCT and MAR	MAR	FEB-MAR, JUNE-JULY and OCT-NOV	JUN, OCT and MAR	JUN, OCT and MAR	JUNE-JULY and OCT-NOV	OCT and MAR	OCT and MAR	JUNE-JULY and OCT-NOV	OCT and MAR	OCT-MAR
Oil seeds	JUNE-JULY and OCT-NOV	OCT AND MAR-APR	APR	JUNE-JULY and OCT-NOV	OCT AND MAR-APR	OCT and APR	JUNE-JULY and OCT-NOV	OCT AND MAR-APR	OCT and APR	JUNE-JULY and OCT-NOV	OCT AND MAR-APR	NOV AND APR
Potato	OCT-	FEB-MAR	MAR	OCT-	FEB-MAR	MAR	JUNE-JUL	OCT and MAR	MAR			

	NOV			NOV			Y and OCT - NOV					
Vegetables	MAR-APR and SEP - OCT	JUNE-JULY and JAN - FEB	JULY and FEB	MAR-APR and SEP - OCT	JUNE-JULY and JAN – FEB	JULY and FEB	MAR-APR and SEP - OCT	JUNE-JULY and JAN - FEB	JULY and FEB	JUN - JULY	OCT-NOV	OCT-NOV
Sugarcane				JUN - JULY	NOV-DEC	DEC						

Total area under different crops in Jammu District 2022

S.NO	Name of the Crop	Area in Hectares		
		Rabi	**Kharif**	**Total**
1	**Paddy Basmati-370**	-	31502	31502
2	**Paddy other fine varieties**	-	1400	1400
3	**Paddy coarse**	-	13769	13769
4	**Maize**	-	18991	18991
5	**Wheat**	69851	-	69851
6	**Fodder**	7896	6840	14736
7	**Bajra**	-	3400	3400
8	**Pulses**	3382	3151	6533
9	**Oil seeds**	4515	1912	6427
10	**Potato**	157	-	157
11	**Vegetables**	6241	3417	9658
12	**Sugarcane**	110	-	110
	TOTAL	92152	84382	176534

Area, Production & Average Yield of Kharif/Rabi crops of Jammu District during 2020-21

S. NO	Crop	Area (Ha)	Production (MT)	Yield (Qtls per Ha)
1	**Paddy**	46500	151125.00	32.50
2	**Maize**	18991	48427.05	25.50
3	**Wheat**	67800	177839.40	26.23
4	**Pulse (*Kharif*)**	3100	3875.00	12.50
	Pulse (*Rabi*)	3269	4413.15	13.50
5	**Oil Seeds (*Kharif*)**	1760	1232.00	7.00
	Oil Seeds (*Rabi*)	4147	4354.35	10.50
6	**Vegetables (*Kharif*)**	3330	59275.55	178.00
	Vegetables (*Rabi*)	6803	136829.40	201.13
7	**Fodder (*Kharif*)**	6900	207000.00	300.00
	Fodder (*Rabi*)	8044	563080.00	700.00

-

<u>Block wise nutrient status under Soil Health Card Scheme Model Village -1(2019-20) in respect of District –Jammu</u>

A: <u>MACRONURIENTS:</u>

S.NO	Name of the Block	Target	Organic Carbon %			Nitrogen (Kg/ha)			Phosphorus (Kg/ha)			Potash(Kg/ha		
			L (<O.50)	M (<0.75)	H (>0.75)	L (<280)	M (280-560>	H (>560)	L (<10)	M (10-25)	H (>25)	L (<120)	M (120-280)	H (>280)
1	**Akhnoor**	1100	1079	21	0	884	216	0	1079	21	0	108	971	21
2	**Bhalwal**	694	626	68	0	532	162	0	630	62	2	82	605	7
3	**Bishnah**	399	390	9	0	325	74	0	398	1	0	23	373	3
4	**Dansal**	33	32	1	0	27	6	0	33	0	0	27	6	0
5	**Khour**	1127	1113	14	0	885	242	0	1122	3	2	20	1107	0
6	**Marh**	249	203	46	0	177	30	42	206	42	1	204	41	4
7	**Nagrota**	29	19	6	4	15	7	7	4	18	7	9	20	0
8	**R.S.Pura**	862	835	26	1	669	193	0	861	0	1	15	841	6
9	**Satwari**	303	294	9	0	230	73	0	294	4	5	75	214	14
10	**Suchetgarh**	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	**4796**	**4591**	**200**	**5**	**3744**	**1003**	**49**	**4627**	**151**	**18**	**563**	**4178**	**55**

B: Micronutrients:

S. No.	Name of the Block	Target	Sulphur		Zinc		Copper		Manganese		Iron		pH			Electrical Conductivity		
			Def. (< 10 ppm)	Suff. (> 10 ppm)	Def. (<0.6 ppm)	Suff. (>0.6 ppm)	Def. (<0.2 ppm)	Suff. (>0.2 ppm)	Def. (<2.0 ppm)	Suff. (> 2 ppm)	Def. (<4.5 ppm)	Suff. (>4.5 ppm)	Acidic (<7.0)	Alkaline (>7.0)	Neutral	Slight (< 2.0)	Moderate (2.0 - 3.0)	Strong (>3.0)
1	**Akhnoor**	1100	16	1084	27	1073	1	1099	3	1097	1	1099	162	810	128	1100	0	0
2	**Bhalwal**	694	0	694	80	614	64	630	63	631	63	631	151	292	251	694	0	0
3	**Bishnah**	399	51	348	7	392	399	0	399	0	399	0	27	318	54	399	0	0
4	**Dansal**	33	10	23	0	33	0	33	0	33	0	33	5	23	5	33	0	0
5	**Khour**	1127	28	1099	29	1098	2	1125	1	1126	3	1124	288	634	205	1127	0	0
6	**Marh**	249	2	247	44	205	42	207	42	207	42	207	71	99	79	249	0	0
7	**Nagrota**	29	0	29	5	24	1	28	3	26	3	26	0	0	29	29	0	0
8	**R.S.Pura**	862	46	816	26	836	3	859	1	861	0	862	162	577	123	862	0	0
9	**Satwari**	303	49	254	3	300	0	303	0	303	0	303	31	180	92	303	0	0
10	**Suchetgarh**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		4796	202	4594	221	4575	512	4284	512	4284	511	4285	897	2933	966	4796	0	0

5. **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 (aindeges 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
1.	SJBR-118		2021	SKUAST-J
2.	SJBR-123		2021	SKUAST-J
3	SJBR-138		2021	SKUAST-J
4.	WH-1080		2011	IARI, New Delhi
5	HD 3086	Wheat	2013	IARI, New Delhi
6.	UNNAT-PBW 550		2017	PAU Ludhiana
7.	HT-1	Sesamum	2018	HAU
8.	RSPN-25	Gobi Sarson	2005	SKUAST-J
9.	RSPR-69	Mustard	2017	SKUAST-J
10	RSPR-01		2005	SKUAST-J
11	Basmati 564	Paddy	2014	SKUAST-J
12	Jammu Basmati		2017	SKUAST-J
13	Napier Hybrid	Perennial Grasses	2000	IGFRI
14	SJPC-1	Composite Maize	2017	SKUAST-J
15	PBG-7	Chick Pea	2014	PAU Ludhiana
16	PU-31	Urd Bean	2008	GB Pant Univ
17	Double Deklab DKC4194	Maize	-	-
18	Sabzar	Oats	2005	SKUAST-K

3. Activity Chart

Crop/Animal/ Enterprise	Problem	Cause	Solution	Activity	Reference of Technology
	Low productivity of Wheat	1. Mismatching Of varieties for Sowingtime. 2. Rain fed farming 3. Poor soil moisture conservation.	-Recommendation of varieties according to sowing time. -Introduction and use of drought resistant varieties - Integrated nutrient management strategy	-On farm trails - Demonstrations - Trainings - Diagnostic visits Field days	S. no 4, 5 & 6 of the Inventory of latest technology available

Wheat		4. Imbalanced nutrient management. 5. Poor weed management . 6. Seed borne diseases	-use of basal NPK and N through broadcasting at proper 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 1,2,3, 11 & 12 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 15 & 16 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 8,9 and 10 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 13 & 18 of the Inventory of latest technology available
Maize	Low productivity of Maize under rainfedareas of distt. Jammu	1) Non adoption/ Poo adoption of hybrids/ Composite 2) Imbalanced fertilizer application 3) Improper Weed management	1) Popularization of Hybrids /Composite of Maize Convincing farmer to use balanced fertilizer doses Adoption of proper	Single component FLD to demonstrate HYV's Training and FLD programme	S no 14 & 17 of the Inventory of latest technology available

		4) Insect pest infestation	weed management Practices. Disease and pest management through IPM.		

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) SJBR 118: Released in 2021 having a yield potential of 45 .66 q ha 140-145-155 with maturity day
2) SJBR 113 Released in 2021 having a yield potential of 42 q ha with 150-155 maturity day
3) SJBR 138:Released in 2021 having a yield potential of 44.00 q ha with 150-155 maturity day
4) DBW 222: A spring wheat variety released in 2020 with semi-erect habit, flowers in around 95 days, matures in 143 days, and is classified as a medium maturity group.
5) 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.
6) 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.
7) 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.
8) 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.
9) 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.
10) Jammu Basmati 129: Released in 2017. AV maturity of this variety is 130-35 days with Av yield of 40±5 q/ha.
11) 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.
12) 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.
13) 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.
14) 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.