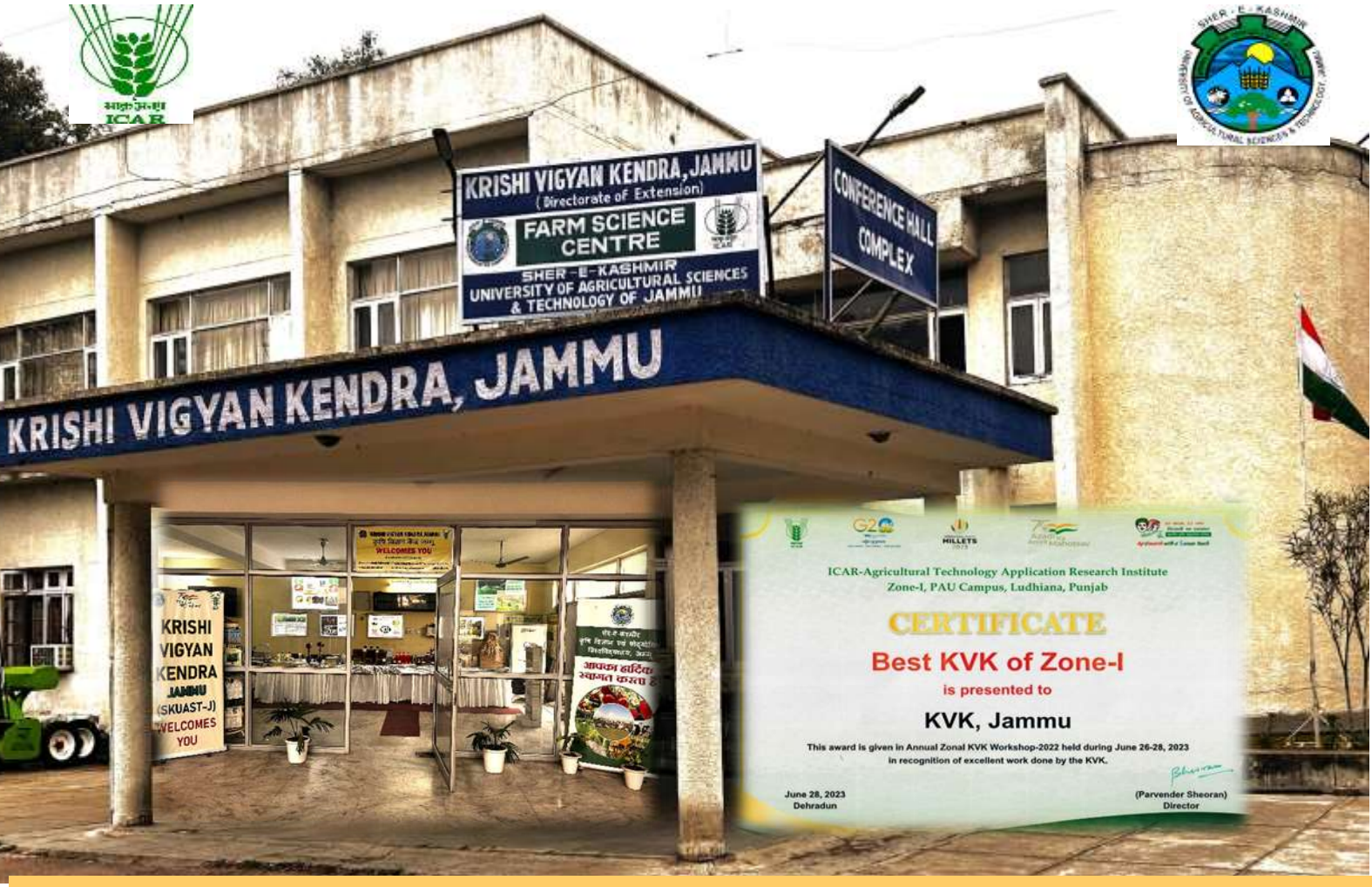
ANNUAL PROGRESS REPORT 2023 KVK JAMMU



KRISHI VIGYAN KENDRA JAMMU

DIRECTORATE OF EXTENSION

SHER-E-KASHMIR
UNIVERSITY OF AGRICULTURAL SCIENCES & TECHOLOGY OF JAMMU

Prepared & Compiled by

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ANNUAL REPORT 2023 (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

Year of sanction: 1992

1.4 Staff Position (as on 31st Dec 2023)

S. No.	Sanctioned post	Name of the incumbent	Age	Disciplin ewith highest degree obt.	Pay Band & Grade Pay (Rs.)	Date of joining at present Post	Permanent /Temporary	Contact Details	Category
1	Sr. Scientist & Head	Vacant						**kvkjammu@gmail.com**	
2	Chief Scientist (SMS)	Dr. Punit Choudhary	47	PhD Forestry	Level-14 ₹144200-218200 (GP 10000)	October 2014	Temp	**9419142813 pmd.choudhary@gmail.com**	Gen
3	Chief Scientist (SMS)	Dr Ravneet Kour	49	Ph D Vegetable Sciences	Level-14 ₹144200-218200 (GP 10000)	March 2019	Temp	**9796423952 kourravneet24@yahoo.com**	Gen
4	Chief Scientist (SMS)	Dr Sheetal Badyal	49	PhD Home Science	Level-14 ₹144200-218200 (GP 10000)	March 2016	Temp	**9419211529 badyalsheeetal10@gmail.com**	Gen
5	Subject Matter Specialist	Dr Prem Kumar	47	PhD Fisheries	Level-12 ₹79800-211500 (GP 8000)	May 2010	Temp	**9419200152 fish9897@gmail.com**	Gen
6	Subject Matter Specialist	Dr. Muneeshwar Sharma	46	PhD Plant Pathology	Level-11 ₹68900-205500 (GP 7000)	June 2021	Temp	**9906235705 muneeshwarsharma@mail.com**	Gen
7	Subject Matter Specialist	Dr Amitesh Sharma	42	PhD Plant Breeding	Level-10 ₹57700-182400 (GP 6000)	June 2020	Temp	**7889464623 amiteshskuast@gmail.com**	Gen

8	Programme Assistant (Computer)	Vacant							
9	Programme Assistant (Farm)	Dr. Raju Gupta	45	Ph.D Agronomy	Level-10 ₹57700-182400 (GP 6000)	August 2008	Temp	**9906711697 rajukvkpoonch@ gmail.com**	Gen
10	Programme Assistant (Training)	Ms. Poonam Abrol	37	PhD Ext.Edu & Comm. Mgt	Level-10 ₹57700-182400 (GP 6000)	June 2012	Temp	**9419206862 Poonamabrol22@gmail. com**	Gen
11	Accountant/ Superintendentnt	Vacant							
12	Stenographer	Sh. Sahil Talgotra	34	B.Sc.	Level-6 ₹ 35400-112400 (GP 4200)	January 2022	Temp	**9419223538 talgotrasahil@gmail.com**	Gen
13	Driver	Sh. Manohar Lal	51	Matric	2 Level-6 ₹ 35400-112400 (GP 4200)	September 2015	Temp	**9906069720**	Gen
14	Driver	Sh Vijay Kumar	41	Matric	Level-4 25800-81100 (GP 2400)	March 2019	Temp	**9796421118**	Gen
15	Supporting staff	Sh. Satnam Singh	45	Under Matric	Level-2 ₹19900-63200 (GP 1900)	April 2005	Temp	**8803143001**	Gen
16	Supporting staff								

1.5 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)

1.6 Infrastructural Development:

1.6.1 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

1.6.2 Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Scooter	1996-97	26,777.00	59979	unserviceable
Jeep	2006-07	5,10,134.00	289180	unserviceable
Tractor	2005-06	4,13,920.00	2675 (hrs)	Working
Bolero	2023	9,41,019.00	11430	Working

1.6.3 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 Uni line 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 11 tynes	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
Electro wall mounting display panel	31-03-2017	66868	Working
Magazine 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
Zero till 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
Dell AIO Desktop (3 Nos)	05-01-2023	1,82,700	Working
Water Dispenser	27-02-2023	7,996	Working
Microtek UPS (04 Nos.)	09-03-2023	20,000	Working
Water Purifier	14-03-2023	12,102	Working
HP Laptop (2 Nos)	24-03-2023	1,15,800	Working
Digital Signage (02 Nos.)	25-03-2023	1,49,800	Working
Revolving Chairs (25 Nos)	27-03-2023	1,00,000	Working
Split AC (01 No.)	29-03-2023	40,580	Working
Stablizer for AC	29-03-2023	7,420	Working
Modular Table (10 Nos.)	29-03-2023	49,990	Working
3 Seater Sofa Set (07 Nos.)	30-03-2023	1,49,996	Working

1.8. A). Details SAC meeting* conducted in the year 2022-23 (January-December)

Action taken report of 19th SAC meeting of KVK, Jammu

S. No.	Salient Recommendations	Action taken
Suggestions/recommendations given by members		

1	**<u>Chief Agriculture Officer Jammu</u>** Inclusion of training program on hydroponics in the annual action plan **(Action: 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: Division of Vegetable Science & Floriculture, Division of Agricultural Engineering, SKUAST-J and KVK Jammu)**	Training program on hydroponics have been conducted in both Divisional level and District level Trainings dated 28-01-2023 and 11-02-2023, 11-04-2023 in which 451 officers participated. During In-service and farmers Training on protected cultivation of vegetables & exotic vegetables & remedial measures discussed.
2	**<u>Chief Animal Husbandry Department Jammu</u>** Organize more 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., Dept. of Animal Husbandry, Jammu & KVK Jammu)**	Awareness program 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, Athem etc). A joint press conference was also organized at KVK Jammu
3	**<u>Divisional Forest Officer, Social Forestry, Jammu</u>** 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)**	Included in the training calendar 2023-24. Two training Medicinal and aromatic plants were conducted covering the nurserystock preparation dated 22-02-2024 in which 25 participants and entrepreneurs participated and two training program for the officers under HADP MAP Project were conducted.
4	**<u>CDPO, Jammu</u>** Awareness camp on Poshan Vatikas to villages and Aganwari 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)**	Nutritive recipes demonstration on weaning food from cereals particularly rice at Balachak to 18 participants on 29/11/2022. Demonstration on nutritive rice based weaning food conducted at KVK Jammu on 27/04/2023with 27 participants.
5	**<u>Sheep Husbandry Officer, Jammu</u>** In service training program on intensive sheep husbandry units and scientific practices was proposed. **(Action by: Dean, F.V.Sc. & A.H,**	Conducted three trainings on Sheep and Goat farming and value addition at KVK Jammu under HADP on 27-01-2023 and 11- 04-2023 & one training for farmers

	SKUAST- J, SAMETI, SKUAST-J, Sheep husbandry Dept. and KVK Jammu)	29-08-2023 in collaboration with FVSc & AH
6	**<u>Department of Sericulture</u>** Since there is 100% loss reported at spin stage by many farmers. A training programme for farmers supported by sericulture dept. may be organized at Jajhar Kotli. **(Action by: Div. of Sericulture, Sericulture Dept. and KVK Jammu)**	Two training program on promotion of Sericulture were conducted on 12-01-2023 and 22-02-2023 in which all divisional level and district level officers participated.
7	**<u>Horticultural Planning & Marketing Officer, Jammu</u>** Training on e-NAM for officers Training focusing on grading and marketing of agricultural and horticultural produce were proposed. **(Action by: Division of Food Science and Technology, Division of Ag. Economics and Agri business, SKUAST-J, Dept. of Agriculture, Jammu and KVK Jammu)**	Training on e-NAM and grading and marketing have been conducted under District level training calendar of HADP in which 168 officials participated. One farmer training program of 5 days on business and marketing opportunities of Horticulture crops was also organized 21-25 April, 2024 in which lecture on e-NAM grading and marketing were also delivered
8	**<u>NABARD Jammu</u>** Sensitization workshop of variousstakeholder on FPOs (**Action by: NABARD and KVK Jammu)**	Frequent meeting, workshops and training are being conducted for FPO's in coordination ofKVK Jammu for FPO.
9	**<u>Kisan Board Members/Board Members/ Progressive farmers</u>** S. Tejinder Singh Wazir demanded for availability of quality strawberry planting material at ACHR for the farmers. He suggested Animal Husbandry Dept. to develop vaccination calendar (village and block wise) for lumpy disease. **(Action by: ACHR, Udheywala, SKUAST-Jand Dept. of Animal husbandry, Jammu)** Sh. Kulbushan Khajuria demanded for training with complete practical aspects on handling and management of milching animals for farmers. **(Action by: Dean, F.V.Sc. & A.H, SKUAST- J, and KVK Jammu)** Smt. Neelam Kumari sought the help in	KVK is coordinating regularly with quality planting material production units viz ACHR, RRSS, Raya etc for timely supply of planting material to farming community. Three trainings, one on Dairy development underHADP and 02 trainings on nutrition &animal health and composite feed blocks on 21- 02-2024 and 01-03-2024 were organized in collaboration with FVSc & AH, SKUAST-J, R.S. Pura. 05 animal camps also organized by KVK Jammu under SCSP Project during March, 2023. KVK Jammu has established a sale counter at KVK and facilitates the University sale center for farmers produce

	marketing of their products. **(Action by: KVK Jammu)**	at Chatha and R.S. Pura.
10	**<u>Mrs Ruchita Rane, Policy Advocacy Research Center, Mumbai</u>** Suggested developing different entrepreneurship development programs and their implementation through implementing task force. She requested to focus on promotion of millets crops with special precautions about their nutritional content of varieties along with production potential. **(Action by: SKUAST-J, Div. of Plant Breeding & Genetics and KVK Jammu)**	61 entrepreneurship development programs were formulated for the benefit of farming community under DAKSH Kisan Portal & contact classes have been arranged at KVK for practical sessions. Promotion of little, proso millet and Bajra have been demonstrated at KVK Farm during Kharif 2023 in collaboration with Division of Agronomy, SKUAST-J, R.S. Pura. 7 demonstrations of Barnyard millet were also laid at village Ambran in collaboration with Deptt. of Agriculture, Jammu
11	**<u>Suggestions/recommendations by Dean, F.V.Sc &A.H, SKUAST-Jammu</u>** Suggested for timely action for early detection, early treatment of disease with available vaccination and medicines to avoid mortality due to Lumpy disease. **(Action by: Dept. of Animal Husbandry Jammu and F.V.Sc. & A.H, SKUAST-J)**	Six Awareness programme have been conducted in different villages of district Jammu during 2022-23 in collaboration with FVSc & AH SKUAST Jammu.
12	**<u>Suggestions/recommendations by Director Extension, SKUAST-Jammu</u>** Presented Extension strategies & roadmap for agriculture development in Jammu region and ready to accept suggestions for improvement.	-
13	**<u>Directions/Recommendations by Prof. J.P. Sharma, Hon'ble Vice Chancellor</u>**	
	SKUAST-J and Chairman, Scientific Advisory Committee directed KVK Jammu to organize more programme on lumpy disease **(KVK Jammu)**	Various awareness programs have been conducted at KVK Jammu and a joint press conference was also organized in the month of August, 2023.

	Conductance of training programs on crop diversification and inclusion of millets crop to optimize nutritional status of farmers diet. **(Action by: Division of Plant Breeding & Genetics, SKUAST-Jammu and KVK Jammu)**	Awareness Programme on promotion of Millets for rural youth was organized at KVK Jammu on 13/04/2023 in which 70 rural youth/ progressive farmers participated. Series of lectures were also delivered on promotion of Millets for nutritional security at Pargwal on 25/05/2023 alongwith a lecture on prevention of Malnutrition in women &children through dietary modification with millets in diet on 03/05/2023.
	To conduct training programs on Natural farming and establish a small demonstration block at KVK Technology Park for display. **(Action by: Organic Research Center, SKUAST-J and KVK Jammu)**	04 programs exclusively on Natural farming by KVK Jammu and 08 programs in collaboration with CONF SKUAST – J Chatha on Natural farming during 2023-24 in which 363 farmers/farmwomen participated and small practical demonstration is also available at KVK Jammu
	Promotion/Awareness about the FPOs and motivate thefarmers to join/establish it. **(Action by: KVK Jammu)**	Seven FPO's have been registered and working under direct guidance of KVK Jammu
	Advised the farmers to bring their products for sale at Chatha campus of the University where 2 shops are allocated with one staff only forthis purpose. **(Action by: Farmers, SHGs, JLG, FPOs)**	KVK Jammu has established a sale counter at KVK and facilitating the University sale counters where farmers produce can be sold out.
	Study Economic viability of hydroponics for growing fodder for feeding animals. **(Action by: Division of Plant physiology and Div. of AEABM, SKUAST-J)**	Economics were calculated by Div. of Plant Physiology. Total Cost of production amounting to Rs. 72,000/month with a total revenue of 60,000/month with a total Profit of Rs. 12,000/month for lettuce has been estimated by the division.
	Suggested to focus on popularization/ dissemination of govt. schemes among the beneficiaries. **(Action by: Directorate of Extension, SKUAST-J)**	A pamphlet on all govt. schemes was published and distributed during nine Jan Abhiyan programs conducted by KVK Jammu.
	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)**	A good coordination has been maintained by KVK Jammu with all line departments. KVK Jammu successfully conducted Divisional level and District level training under HADP where in officers of all line departments participated.
	Include the lecture on Govt. Schemes in each programme to aware the farmers about different schemes. **(Action by: All line departments, KVK Jammu)**	Lectures on Various HADP and other schemes is being delivered regularly by KVK scientist during the programme.

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

2. DETAILS OF DISTRICT 2023

District Profile (Jammu)

Geographical Area	2342 kms	No. of Villages	915
Population	15.30 lakh	Cultivated Area (Ha.)	176534
Sex Ratio	880	Irrigated Area (Ha.)	57748
Literacy Rate	83.45%	Cropping Intensity (%)	191.69
No. of Constituencies	11	Average Holding (ha.)	0.74
No. of Tehsils	21	FOFs	130270
No. of Blocks	20	Marginal Famers (Nos.)	101838
Agri- Sub Divisions	4	Small Farmers (Nos.)	19862
Agriculture Zones	21	Semi Medium Farmers (Nos)	7256
Agriculture Circles	130	Medium farmers (Nos.)	1256
No. of Panchayats	305	Large Farmers (Nos.)	58

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

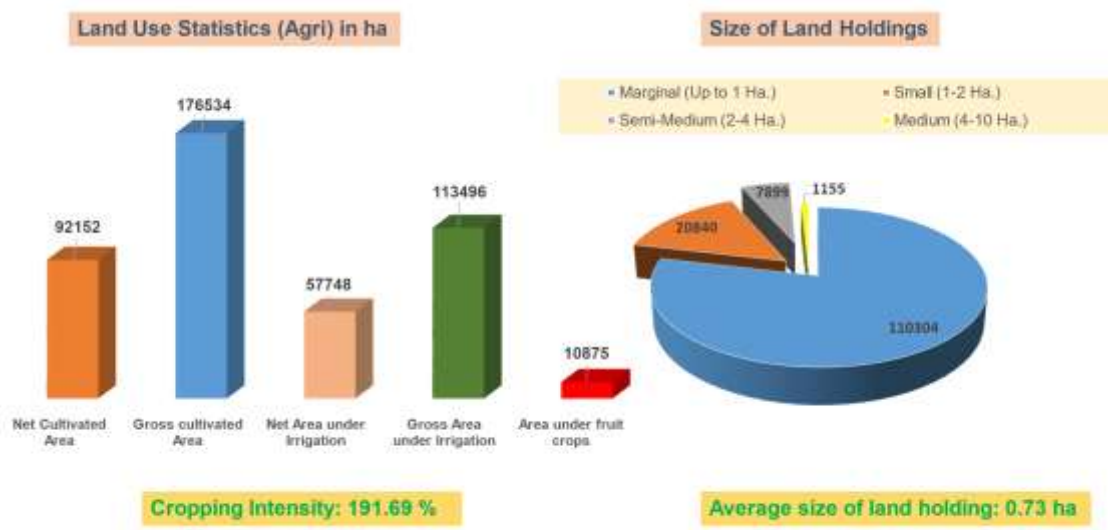
2.2 Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

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

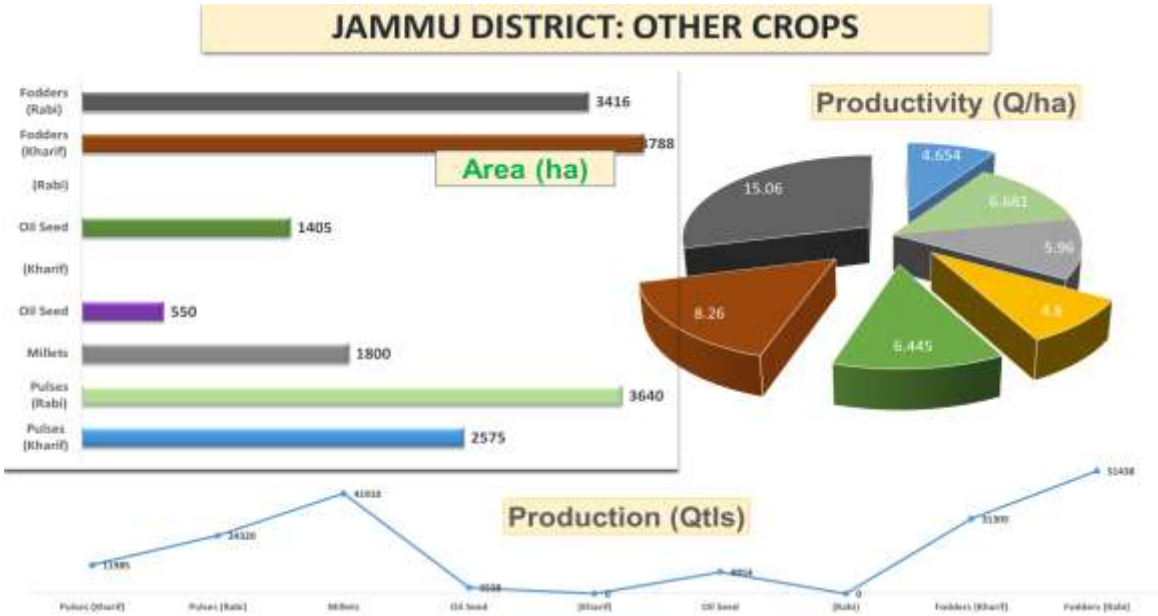
Season	Crop	AES-I	AES-II	AES-III	AES-IV
		Cropping system	**Cropping system**	**Cropping system**	**Cropping system**
Kharif & Rabi	Paddy-Maize	Paddy-toria-wheat	Paddy-toria-wheat	Paddy-toria-wheat Maize-Potato-Wheat	Paddy-toria-wheat Maize-toria-Gobi sarson

2.3 Soil type/s

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

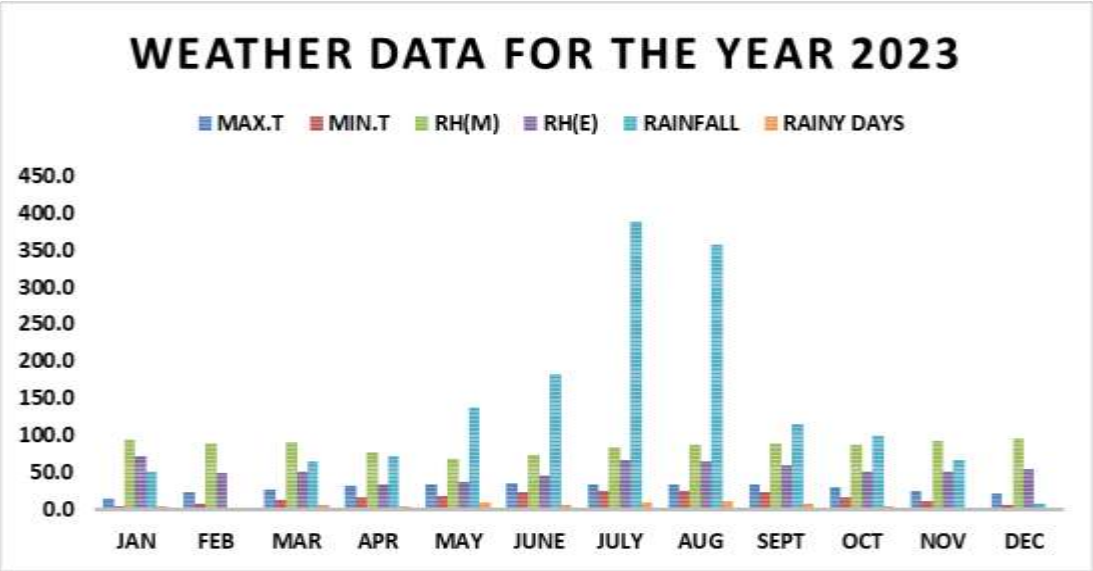
2.4 Area, Production and Productivity of major crops cultivated in the district (2023)

Kharif 2023				
S.no	**Crop**	**Area (Ha.)**	**Production (Qtls./ha.)**	**Productivity (Qtls./ha.)**
1.	Paddy			
	Basmati	32900	904750.00	27.50
	Non Basmati	13900	657470.00	47.30
2.	Maize	18711	633554.46	33.86
3.	Pulses (Kharif)	3900	35295.00	9.05
4.	Oilseed (Kharif)	1905	13811.25	7.25
5.	Vegetables (Kharif)	4004	75244.52	181.13
6.	Fodder	7997	2439085.00	305.00
	Millets			
7.	Bajra	1633	2744.00	16.99
8.	Kudo Millets	20.4	244.80	12.00
9.	Barnyard Millets	18.8	244.40	13.00
10.	Foxtail Millets	24.5	318.50	13.00
11.	Little Millets	11.3	142.80	12.64
Rabi 2023-24				
12.	Wheat	69900	206112.00	30.40
13.	Pulses (Rabi)	4010	4413.15	13.50
14.	Oilseeds (Rabi)	7800	4354.35	10.50
15.	Vegetables (Rabi)	7320	136829.40	201.13
16.	Fodder (Rabi)	8710	5835700.00	670.00



2.5 Weather data (2023)

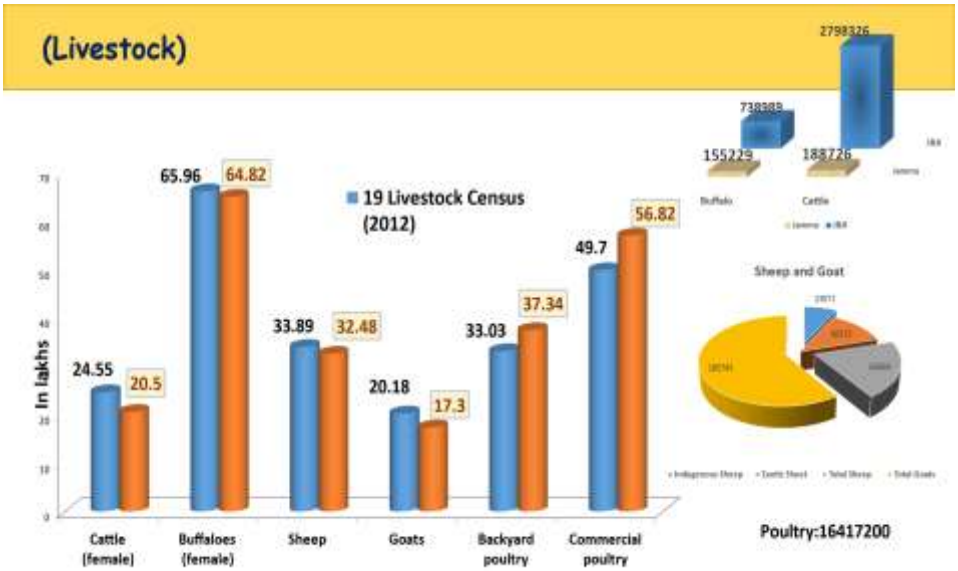
MONTH	MAX.T	MIN.T	RH(M)	RH(E)	RAINFALL	RAINY DAYS
JAN	15.9	5.1	94.8	72.1	51.8	4
FEB	24.5	8.0	88.9	49.2	0.4	0
MAR	27.1	12.6	91.2	51.0	65.4	6
APR	32.2	16.0	77.2	34.3	71.4	5
MAY	34.1	19.1	68.0	38.0	138.4	10
JUNE	36.2	24.2	74.0	47.0	182.0	6
JULY	33.6	25.5	85.0	67.0	388.8	10
AUG	34.8	25.2	87.0	66.0	356.2	12
SEPT	33.9	23.1	89.0	60.0	114.6	8
OCT	30.3	16.3	88.0	51.0	100.0	4
NOV	26.2	10.9	92.0	51.0	66.8	3
DEC	21.4	5.9	96.0	54.0	9.0	2



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

Category	Population	Production	Productivity
Cattle	1,87,000	1898.28	
Crossbred	2.49	-	-
Indigenous	4.57	-	-
Buffalo	1,22,900	-	-
Sheep	**0**		
Crossbred	-	-	-
Indigenous	1.03	-	-
Goats	2.5	-	-
Mules	172		
Donkey	13		
Pigs	100	-	-
Crossbred	-	-	-
Indigenous	-	-	-
Rabbits	**0**	-	-
Poultry			
Hens	7.85	-	-
Fowls	16417200		
Desi	-	-	-
Improved	-	-	-
Ducks	**0**	-	-
Turkey and others	**0**	-	-

Category	Area	Production (Qtls.)	Productivity
Fish	-	**20000.05**	-
Marine			
Inland			
Prawn			
Scampi			
Shrimp			



2.7 Details of Operational area / Villages (2023)

S.No.	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	R.S.Pura	R.S.Pura	Salher, Badyal, 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
2	Akhnoor	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
3	Bishnah	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
4	Dansal	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
5	Bhalwal	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
Millets	Promotion of millets production and its nutritional importance
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 2023

OFT (Technology Assessment and Refinement)				FLD (Oilseeds, Pulses, Cotton, Other Crops/Enterprises)				
1				2				
Number of OFTs		Number of Farmers		Number of FLDs			Number of Farmers	
Targets	Achievement	Targets	Achievement		Targets	Achievement	Targets	Achievement
9	11	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 2023			
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

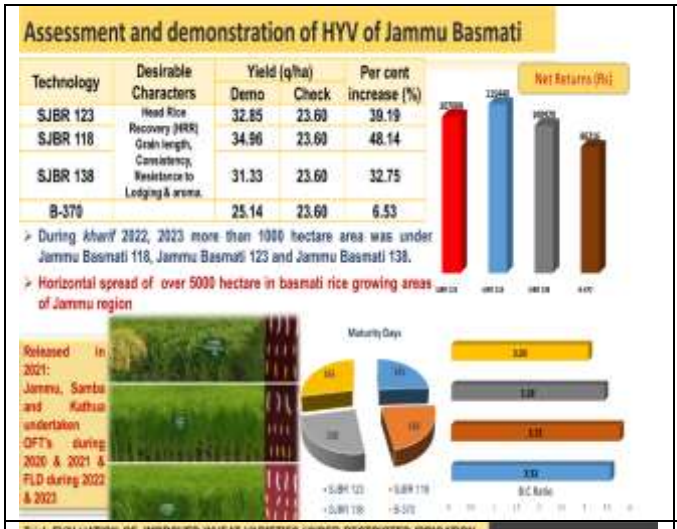
3.A.2 FLDs Conducted under CFLDs on Pulses

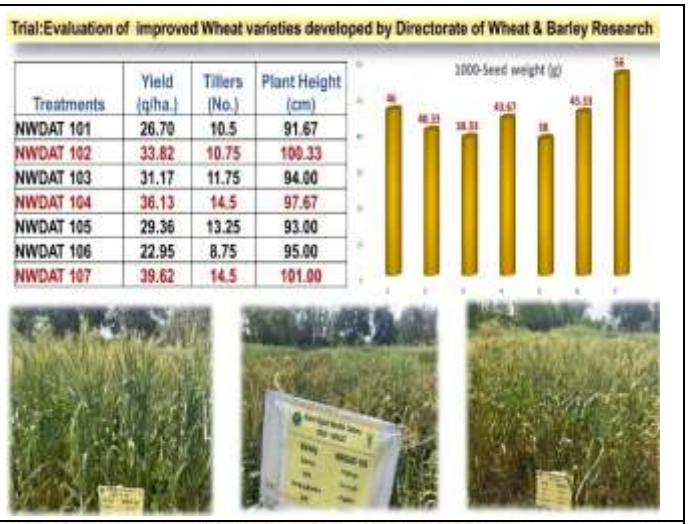
FLD (Pulses) *Kharif* 2022			
Number of FLDs		**Number of Farmers**	
Targets	**Achievement**	**Targets**	**Achievement**
Black Gram (50)	224	50	224
FLD (Pulses) *Rabi* 2022-23			
Targets	**Achievement**	**Targets**	**Achievement**
Chickpea (50)	230	50	230

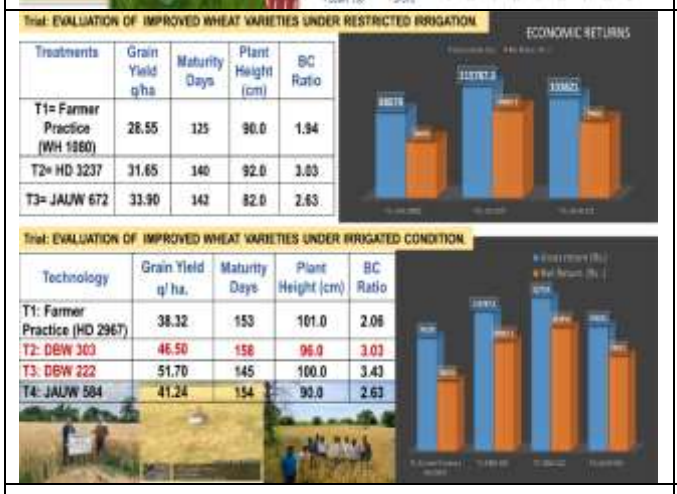
Training (including sponsored, vocational and other trainings carried under Rainwater Harvesting Unit)					**Other Extension Activities**			
3					**4**			
Number of Courses			**Number of Participants**		**Number of activities**		**Number of participants**	
Clientele	**Targets**	**Achievement**	**Targets**	**Achievement**	**Targets**	**Achievement**	**Targets**	**Achievement**
Farmers	50	61	1000	1557	Field Days (6)	9	120	192
Rural youth	8	11	160	432	Kisan Mela (1)	4	500	2910
Extn. Functionaries	6	6	120	144	Kisan 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 Program	1	200	19
					Agro Forestry	1		300
					Animal Science	2		99
					Home Science	1		54
					Horticulture	1		26
					Plant Protection	1		28

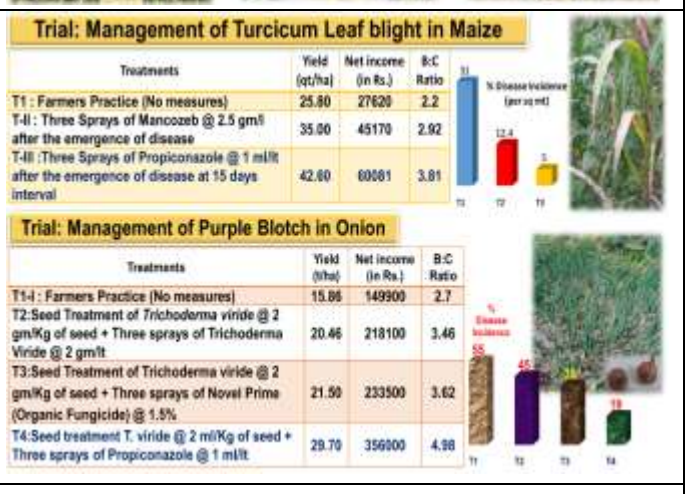
					Plant Protection (SCSP)	2		71
					Attended Meeting/Seminar	2		35
					Attended Training Programs	3		4
					Others	4		82

Seed Production (Qtl.)		Planting material (Nos.)	
5		6	
Target	**Achievement**	**Target**	**Achievement**
Paddy B-370 (80 qtls.)	75 qtls.	Fodder (Napier) 1500	2000
Wheat DBW 187 & DBW 173 (100 qtls.)	146.93 qtls. (aprox.)	Setaria (1500)	2000
		MPTS	200









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

		Vermicompost	4000 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	Promotion and demonstration of improved	1	1	1	2	1.50	-	-	-	-

			comparison to other improved varieties	Basmati rice varieties									
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 varieties for Millet grain production	Promotion and demonstration of multicut varieties for Millet grain production	2	-	-	2	0.32	-	-	-	-
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 feed for growth and quality	Promotion and demonstration correct ratio of Indian Major Carps	2	3	-	1	-	-	10000 fingerlings	-	-
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-**Chabro**	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	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Tuber Crops	TOTAL
Varietal Evaluation	3	-	-	-	2	-	-	-	5
Seed / Plant production	-	-	-	-	-	-	-	-	-
Weed Management	1	-	-	-	-	-	-	-	1
Integrated Crop Management	-	-	-	-	-	-	-	-	-
Integrated Nutrient Management	1	-	1	-	-	-	-	-	2
Integrated Farming System	-	-	-	-	-	-	-	-	-
Mushroom cultivation	-	-	-	-	-	-	-	-	-
Drudgery reduction	-	-	-	-	-	-	-	-	-
Farm machineries	-	-	-	-	-	-	-	-	-
Value addition	-	-	-	-	-	-	-	-	-
Integrated Pest Management	-	-	-	-	-	-	-	-	-
Integrated Disease Management	2	-	-	-	-	-	-	-	2
Resource conservation technology	-	-	-	-	-	-	-	-	-
Small Scale income generating enterprises	-	-	-	-	-	-	-	-	-
TOTAL	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

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Tuber Crops	TOTAL
Varietal Evaluation	-	-	-	-	-	-	-	-	-
Seed / Plant production	-	-	-	-	-	-	-	-	-
Weed Management	-	-	-	-	-	-	-	-	-
Integrated Crop Management	-	-	-	-	-	-	-	-	-
Integrated Nutrient Management	-	-	-	-	-	-	-	-	-
Integrated Farming System	-	-	-	-	-	-	-	-	-
Mushroom cultivation	-	-	-	-	-	-	-	-	-
Drudgery	-	-	-	-	-	-	-	-	-

reduction									
Farm machineries	-	-	-	-	-	-	-	-	-
Post Harvest Technology	-	-	-	-	-	-	-	-	-
Integrated Pest Management	-	-	-	-	-	-	-	-	-
Integrated Disease Management	-	-	-	-	-	-	-	-	-
Resource conservation technology	-	-	-	-	-	-	-	-	-
Small Scale income generating enterprises	-	-	-	-	-	-	-	-	-
TOTAL	-	-	-	-	-	-	-	-	-

*****_Technology that is refined in collaboration with ICAR/SAU Scientists for improving its effectiveness._

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

Thematic areas	Cattle	Poultry	Sheep	Goat	Piggery	Rabbitary	Fisheries	TOTAL
Evaluation of Breeds	-	-	-	-	-	-	-	-
Nutrition Management	-	-	-	-	-	-	-	-
Disease of Management	-	-	-	-	-	-	-	-
Value Addition	-	-	-	-	-	-	-	-
Production and Management	-	-	-	-	-	-	1	1
Feed and Fodder	-	-	-	-	-	-	1	1
Small Scale income generating enterprises	-	-	-	-	-	-	-	-
TOTAL	-	-	-	-	-	-	2	2

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

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

3.2. Achievements on technologies Assessed and Refined

3.2.1. Technologies Assessed under various Crops (2023)

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

Thematic areas	*Crop*	*Name of the technology assessed*	*No. of trials*	*Number of farmers*	*Area in ha (Per trail covering all the Technological Options)*
	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 Pest Management	-	-	-	-	-
	-	-	-	-	-
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
Small Scale Income Generation Enterprises	-	-	-	-	-
	-	-	-	-	-
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
Resource Conservation Technology	-	-	-	-	-
	-	-	-	-	-
Farm Machineries	-	-	-	-	-
	-	-	-	-	-
Integrated Farming System	-	-	-	-	-
	-	-	-	-	-
Seed / Plant production	-	-	-	-	-
	-	-	-	-	-
	-	-	-	-	-
	-	-	-	-	-
Value addition	-	-	-	-	-
	-	-	-	-	-
Drudgery Reduction	-	-	-	-	-
	-	-	-	-	-
Storage Technique	-	-	-	-	-
	-	-	-	-	-
Mushroom cultivation	-	-	-	-	-
	-	-	-	-	-
Total			**27**	**27**	**3.6**

3.2.2. Technologies Refined under various Crops

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

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

3.2.3. Technologies assessed under Livestock and other enterprises

Thematic areas	*Name of the livestock enterprise*	*Name of the technology assessed*	*No. of trials*	*No. of farmers*
Evaluation of breeds	-	-	-	-
Nutrition management	-	-	-	-
Disease management	-	-	-	-
Value addition	-	-	-	-
Production and management	Fisheries	Impact of floating feed on growth and production of fish	3	3
		Use of Geo-lite in fish production	3	3
Feed and fodder				
Small scale income generating enterprises				
Total			6	6

3.2.4. Technologies Refined under Livestock and other enterprises: Nil

B. Details of each On Farm Trial (2023)

Trial 1: Crop production

1) **Title** : **Assessment of Evaluation of improved varieties in comparison to Local Basmati**
2) Problem diagnose/defined : Assessing the performance of improved Varieties on yield basis
3) Details of technologies selected for assessment /refinement : I Farmers Practice (Local Basmati)
   II SJR 118
   III SJR 123
   IV SJR 138
4) Source of technology : SKUAST-Jammu
5) Production system thematic area : Irrigated
6) Thematic area : Varieties
7) Performance of the Technology with Performance indicators : Results recorded from the trial at farmers field revealed that the yield of Treatment III (SJR 123) performs well.
8) Final recommendation for Micro level situation. : Improved Basmati varieties can be used as alternative of Local variety available.
9) Constraints identified and feedback for research : Break yield barrier due to low yield and lodging in local Basmati
10) Process of farmers participation and their reaction: Farmers actively participated in the process from seed sowing to the harvesting. He also recorded the data on days to maturity and yield.

Results of On Farm Trial 1:

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 non-availability of Improved Variety	Management	05	Farmers Practice (Local Basmati)	Yield & Days to maturity	21.9	Results recorded from the trial at farmers field revealed that the Treatment 2 out yield the local basmati in production and at par with SJR 123.	Farmers are satisfied with the results of SJR 123 and other improved varieties and would ready to evaluate for next season too for KVK Jammu.
					SJR 118		39.67		
					SJR 123		40.63		
					SJR 138		38.24		
					Farmers Practice (Basmati 370)		155		
					SJR 118		120		
					SJR 123		134		
					SJR 138		135		

* 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)	2190	74150.00	2.75
SJR 118	3967	138247.00	4.26
SJR 123	4063	142183.00	4.35
SJR 138	3824	132384.00	4.12

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

Trial 2:

1.	**Title**	**:**	**Evaluation of Radish varieties in district Jammu**
2.	Problem diagnosed/defined	:	Lack of improved varieties
3.	Details of technologies selected for assessment/refinement	:	T1: Farmer's Practice T2: Pusa Reshmi T3: Pusa Desi
4	Source of technology	:	IARI New Delhi
5	Production system thematic area	:	Irrigated cereal based system
6	Thematic area	:	Varietal evaluation
7	Performance of the Technology with performance indicators	:	T2registered highest yield of 350q/ha over the farmer's practice (T1) which recorded a mean yield of 300q/ha
8	Final recommendation for micro level situation	:	Pusa-Reshmi 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

B 8: Results of On Farm Trials

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials	Technology Assessed	Parameters	Data on the Parameter	Results of assessment	Feedback from the farmer
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Radish	Irrigated	Lack of improved varieties	Evaluation of Radish varieties in district Jammu	5	T1: Farmer's Practice	Yield per hectare (q/ha)	300 q/ha		Farmers were satisfied with yield potential and quality of improved varieties.
					T2:Pusa Reshmi		350 q/ha	T 2 registered increase in yield over farmer's practice	
					T3: Pusa Desi		325q/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	300 q/ha	300000	160000	2.14
T2: Pusa Reshmi	350 q/ha	350000	210000	2.50
T3: Pusa Desi	325 q/ha	325000	185000	2.32

Trial 3

	Title	**:**	**Evaluation of Onion varieties in district Jammu**
1.	Problem diagnose/defined	:	Lack of improved varieties
2.	Details of technologies selected for assessment/refinement	:	T1: Farmer's Practice T2: Pusa Red T3: Pusa Madhavi
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 200 q/ha over the farmer's practice (T1) which recorded a mean yield of 150 q/ha
7.	Final recommendation for micro level situation	:	Pusa 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 Pusa Red outperforms with respect to yield.

OFT ON EVALUATION OF ONION VARIETIES IN DISTRICT JAMMU

B 8: Results of On Farm Trials

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials	Technology Assessed	Parameters	Data on the Parameter	Results of assessment	Feedback from the farmer
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Onion	Irrigated	Lack of improved varieties	Evaluation of Onion varieties in district Jammu	4	T1: Farmer's Practice	Yield per hectare (q/ha)	150 q/ha		Farmers were satisfied with yield potential and quality of improved varieties.
					T2: Pusa Red		200 q/ha	T 2 registered increase in yield over farmer's practice	
					T3: Pusa Madhavi		175 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	150 q/ha	225000	125000	2.25
T2: Pusa Red	200 q/ha	300000	200000	3.0
T3: Pusa Madhavi	175 q/ha	262500	162500	2.62

Trial 4

1	**Title of Technology Assessed**	**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	T1= Farmer 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 and 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 (8.6 %) of Turcicum leaf blight in maize and maximum yield of 4120 Kg/ha was recorded fromthe Treatment III (three sprays of Propiconazole @ 1ml/lt afterthe emergence of disease) followed by Treatment II (three sprays of Mancozeb @ 2.5 gm/lt after the emergence of disease) 13.8 % disease incidence and 3300 Kg/ha yield, whereas, maximum disease incidence (32 %) and lowest yield (2480 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 nearby local market.
10	Process of farmer's 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.

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
Maize	Rainfed	Low production due to Turcicum leaf blight disease	Management of Turcicum leaf blight	05	Treatment-I: Farmers Practice (No measures)	% disease incidence	32	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		13.80		
					Treatment- III: Three Sprays of Propiconazole @ 1ml/lt after the emergence of disease		8.60		

**** No. of farmers***

Technology Refined	*Productionper unit	Net Return (Profit) inRs. / unit	BC Ratio
12	13	14	15
Farmers Practice (No Chemical)	2480	27332	2.2
Three Sprays of Mancozeb @ 2.5 gm/l after the emergenceof disease	3300	43970	2.92
Three Sprays of Propiconazole @ 1 ml/lt after theemergence of disease	4120	61108	3.81

***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 5

1	**Title of Technology Assessed**	**Evaluation of improved Wheat varieties under Irrigated conditions**
2	Problem Definition	Lack of varieties
3	Details of technologies selected for assessment	T1= Farmer Practice (Local variety) T2= DBW303 T3= DBW 222 T4= JAUW 584
4	Source of technology	: IIWBR 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 46.76
8	Final recommendation for micro level situation	: DBW-222 can be promoted as high yielding variety.
9	Constraints identified and feedback for research	: Unavailability of quality seed during sowing months.
10	Process of farmer's participation and their reaction	: Laid OFT in their field, monitoring and data collection with their assistance.

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	Need of improved varieties	Evaluation of improved Wheat varieties under irrigated conditions	04	T1= Farmer Practice (Local variety) T2= DBW303 T3= DBW 222 T4= JAUW 584	Yield per hectare (q/ha)	T1= 29.54 T2= 42.54 T3= 46.76 T4= 36.24	Results recorded from the trial at farmers field revealed that the Treatment III DBW 222 out yield the other varieties	Inspite of heavy 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)	1988.63	39772.5	1.32
Treatment T2: DBW 303	3944.38	78887.5	2.629583
Treatment T3: DBW 222	4428.955	88579	2.952633
Treatment T4: JAUW 584	3004.8	60096	2.0032

***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:6

1	**Title of Technology Assessed**	**Assessment of Evaluation of improved varieties of Mash**
2	Problem Definition	Lack of varieties
3	Details of technologies selected for assessment	T1 Farmers Practice (Local trailing type) II Uttara III PU 31 IV SML-31
4	Source of technology	: 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 farmer's field revealed that the Treatment T3 HD2967 outperformed the other varieties with an average yield 37.86 q/ha., followed by T4 JAUW 672, 33.9q/ha.
8	Final recommendation for micro level situation	: HD 2967 and JAUW 672 can be promoted as climate resilient variety
9	Constraints identified and feedback for research	: Unavailability of quality seed during sowing months and unpredictable weather.
10	ProcesProcess of farmer's participation and their reaction	: Laid OFT in their field, monitoring and data collection with their assistance.

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
Urdbean / Mash	Rainfed	Low production due to non Synchronous Maturity	Evaluation of improved varieties of Mash	04	Farmers Practice (Local Mash trailing)	Yield	3.89	Results recorded from the trial at farmers field revealed that the Treatment 4 out yield the Desi Mash in production and productivity	Farmers are satisfied with the results of SML 31 and other improved varieties and would ready to evaluate for next season too
					Uttara		4.29		
					PU -31		5.66		
					SML-31		7.2		

* 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 Mash trailing)	19.45	8035.50	1.42
Uttara	21.45	10315.50	1.53
PU -31	28.3	19837.00	2.02
SML-31	36	30540.00	2.57

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

Trial 7

1	**Title of Technology Assessed**	**Evaluation of improved Wheat varieties under restricted irrigation**
2	Problem Definition	Lack of improved varieties
3	Details of technologies selected for assessment	T1= Farmer Practice (Local variety) T2= HD 3237 T3= HD 2967 T4= JAUW 672
4	Source of technology	: IARI and SKUAST Jammu
5	Production system	: Rainfed system
6	Thematic area	: Varietal Evaluation
7	Performance of the Technology with performance indicators	: Results recorded from the trial at farmer's field revealed that the Treatment T3 HD2967 outperformed the other varieties with an average yield 37.86 q/ha., followed by T4 JAUW 672, 33.9q/ha.
8	Final recommendation for micro level situation	: HD 2967 and JAUW 672 can be promoted as climate resilient variety
9	Constraints identified and feedback for research	: Unavailability of quality seed during sowing months 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	Rainfed	Lack of climate resilient varieties	Evaluation of improved Wheat varieties under restricted irrigation	04	T1= Farmer Practice (Local variety) T2= HD 3237 T3= HD 2967 T4= JAUW 672	Yield per hectare (q/ha)	T1= 25.55 T2=31.65 T3= 37.86 T4= 33.90	Results recorded from the trial at farmers field revealed that the T3 HD 2967 out yield the other varieties	In spite of untimely rains at the average of harvesting HD 2967 outperformed in yield as compare to all other varieties

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
Treatment T1: Farmer Practice (Local seed)	1824.69	36493.75	1.47
Treatment T2: HD 3237	2710.18	54203.75	2.19
Treatment T3: HD 2967	3416.57	68331.5	2.76
Treatment T4: JAUW 672	2966.12	59322.5	2.39

***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**	**Amplify fish feed conversion ratio through liver enhancer**
2	Problem Definition	: Poor feed conversion ratio
3	Details of technologies selected for assessment	: T1= Feed with mustard oil cake, Rice bran, home left etc. without any ratio (Farmer practice) T2= Rice bran & oil cake at the ratio of 1:1 after soaking overnight T3= Recommended practice + liver enhancer @ 2gm/kg of feed
4	Source of technology	: CIFA
5	Production system and thematic Area	: Fish Farming and composite fish culture
6	Thematic area	: Feed conversion ratio
7	Performance of the Technology with performance Indicators	: health, growth and production
8	Final recommendation for micro level situation	: Farmer can use liver enhancer in fish farming for higher production. At smaller level, it will increase their production cost.
9	Constraints identified and feedback for research	: Mixing in feed
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	Poor feed conversion ratio	Amplify fish feed conversion ratio through liver enhancer	3	T1= Farmer Practice T2= Rice bran & oil cake at the ratio of 1:1 T3= Recommended practice + liver enhancer @ 2gm/kg of feed	Production, Growth	Production	Fish Production: TO-I- 41.0/ha. TO-II- 44.0q/ha TO-III- 47.0q/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(1000m2)	BC Ratio
11	12	13	14	15	16
Technology option 1 : T1	-	41.00	q/ha.	42200	3.18:1
Technology option 2 : T2	CIFRI	44.00	q/ha	45692	3.25:1
Technology option 3 : T3		47.00	q/ha.	49265	3.32:1

Trial 9 :

1	**Title of Technology Assessed**	**:**	**Use of O2 tablets to escape fish mortality**
2	Problem Definition	:	High mortality problem due to oxygen deficiency
3	Details of technologies selected for assessment	:	T1= Addition of water through pumping set during O2 depletion (Farmer practice) T2= Exchange of water, aeration through water beating/swimming etc. T3= Application of O2 tablets @1 kg/ha
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	:	O2 tablets helps to increase the dissolve oxygen during the emergency and stop mortality due to O2 depletion
8	Final recommendation for micro level situation	:	Farmer can use O2 tablets in fish ponds to increase the dissolve oxygen during the emergency.
9	Constraints identified and feedback for Research	:	Unavailability in nearby markets.
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

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	High mortality problem due to oxygen deficiency	Use of O2 tablets to escape fish mortality	3	T1= Farmer Practice T2= 15% water exchange weekly T3= Application of O2 tablets @1 kg /ha	Production, Growth	Production	Fish Production : TO-I- 27.0q/ha. TO-II- 44.0q/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)	N (u
11	12	13	14	1
Technology option 1 : T1	-	27.00	q/ha.	3
Technology option 2 : T2	CIFRI	44.00	q/ha	4
Technology option 3 : T3	COF, Pantnagar	46.00	q/ha.	4

Trial 10

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 are

Trial 11

Technology Assessment

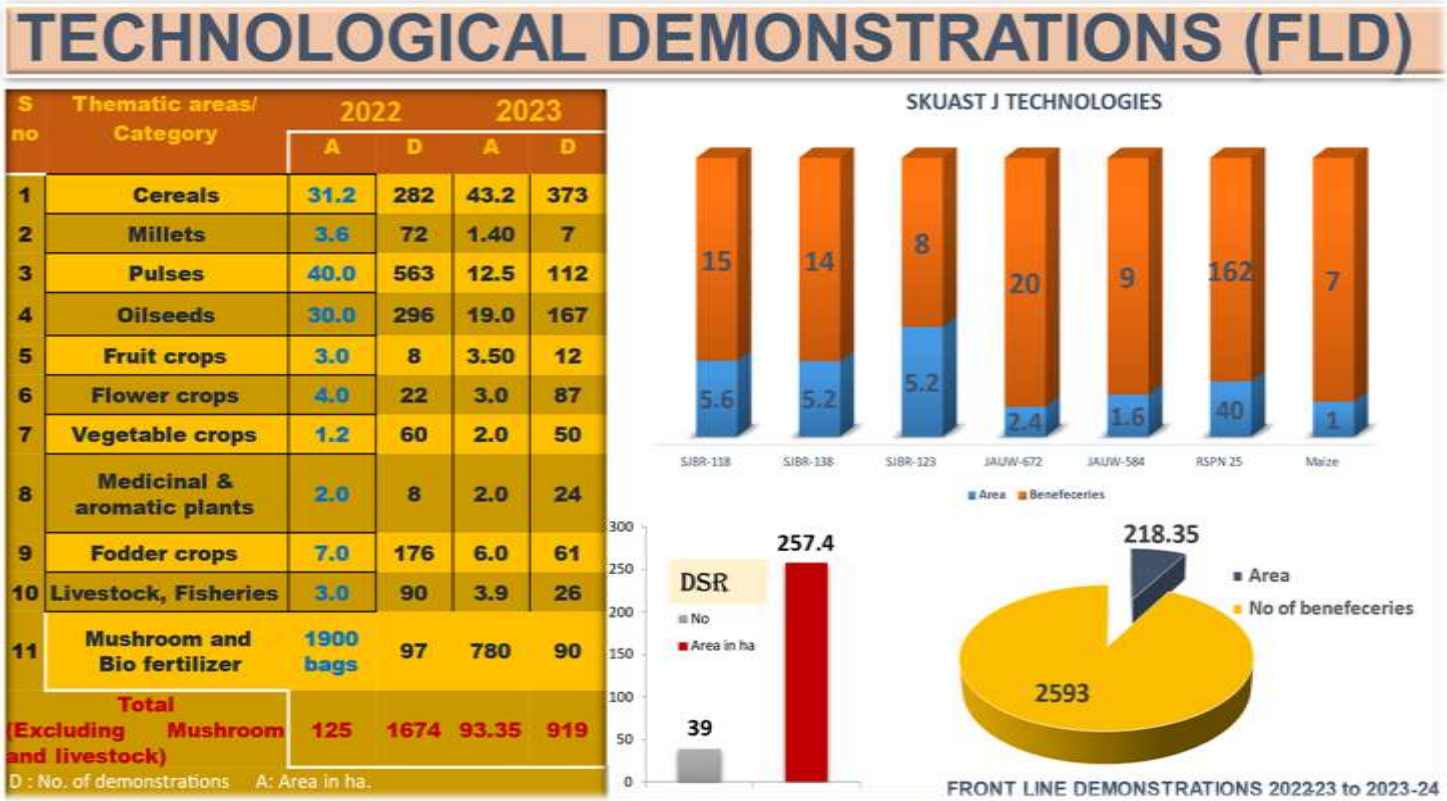
1	**Title of Technology Assessed**	**Influence of Coated urea on Wheat yield under sub tropical conditions of Jammu**
2	**Problem Definition**	**Low production**
3	**Details of technologies selected for assessment**	**T1:Farmers Practice (Broadcasting)** **T2: 100 % of Rec. N through NCU + Rec. P, K & 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*	**Production*	*Net Return*	*BC Ratio*

	tech	*per unit (Kg/Ha.)*	*(Profit) in Rs. / unit*	
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**



S no	Thematic areas/ Category	2022 A	2022 D	2023 A	2023 D
1	Cereals	31.2	282	43.2	373
2	Millets	3.6	72	1.40	7
3	Pulses	40.0	563	12.5	112
4	Oilseeds	30.0	296	19.0	167
5	Fruit crops	3.0	8	3.50	12
6	Flower crops	4.0	22	3.0	87
7	Vegetable crops	1.2	60	2.0	50
8	Medicinal & aromatic plants	2.0	8	2.0	24
9	Fodder crops	7.0	176	6.0	61
10	Livestock, Fisheries	3.0	90	3.9	26
11	Mushroom and Bio fertilizer	1900 bags	97	780	90
	Total (Excluding Mushroom and livestock)	125	1674	93.35	919

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

PART 4 - FRONTLINE DEMONSTRATIONS

4.A. Summary of FLDs implemented during 2023

Sl. No.	Category	Farming Situation	Season and Year	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Area (ha)		No. of farmers/ demonstration				Reasons for shortfall in achievement
									Proposed	Actual	SC/ST	OBC	Others	Total	
1	**OILSEEDS**														
I	**Sesame**	Rainfed	Kharif 2023	Sesame	RT-351	-	Varietal evaluation	Improved Variety	10	10	18	-	12	30	
II	**Toria**	Rainfed		Toria	RSPT-6				03	03	17	-	01	18	
III	**Gobi Sarson**	Irrigated		Gobi Sarson	RSPN- 25				05	05	-	-	44	44	
IV					DGS-1				04	04	02	-	25	27	
V	**Mustard**	Rainfed		Mustard	RH-725				04	04	08	-	13	21	
VI	**Mustard**	Rainfed	Rabi 2022-23	Mustard	GIRIRAJ	-	Varietal evaluation	Improved Variety	10	10	24	11	12	47	
VII	**Gobi Sarson**	Irrigated		Gobi Sarson	RSPN- 25				10	10	59	-	34	93	
2	**CEREALS**														
I	**Paddy**	Irrigated	Kharif 2023	Basmati	JB118	-	Varietal evaluation	Improved Variety	05	7.2	1	0	6	7	
II					JB 123						2	0	2	4	
III					JB 138						0	0	4	4	
IV					BASMATI 370						2	0	8	10	
V	**Wheat**	Irrigated	Rabi 2023-24	Wheat	DBW 222	-	Varietal evaluation	Improved Variety	4.00	04	06	-	25	31	
VI					DBW 173				0.40	0.40	03	-	08	11	
VII		Rainfed			HD 3237				2.00	02	02		09	11	
VIII					JAUW 672				1.40	1.4	06	-	08	14	
IX					WH 1080				1.00	1.00	05	-	08	13	
X		Irrigated	Rabi 2022-23		PB Zn-1				4.00	04	08	-	02	10	
XI					DBW 222				6.20	6.20	16	02	13	31	
XII		Rainfed			WH 1080				3.20	3.20	03	07	18	28	
XIII	**Maize**	Rainfed	Kharif 2023	Maize	DKC 9144	Hybrid	Varietal evaluation	Improved Variety	10.00	10	40	03	21	64	
XIV					DOUBLE DEKALB				10.00	10	26	10	24	70	
XV	**Maize**				EMAMACTIN BENZOATE	-	IPM	Improved Variety	10.00	10	86	13	45	144	
3	**FODDER**														
I	**Oats**	Irrigated	Rabi 2023-24	Oats	KENT	-	Varietal evaluation	Improved Variety	2.00	02	01	-	09	18	
II	**Berseem**			Berseem	BL-10				5.00	05	14	-	39	53	
III	**Oats**		Rabi 2022-23	Oats	KENT				2.00	02	8	-	15	23	
IV	**Berseem**			Berseem	MASCAVI				5.00	05	41	25	12	78	
4	**MILLETS**														
I	**Barnyard Millet**	Rainfed	Kharif 2023	Barnyard Millet	DHMB-93.3	HYV	Varietal evaluation	Improved Variety	0.90	0.9	07	04	02	13	
5	**VEGETABLES**														

Sl. No.	Category	Farming Situation	Season and Year	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Area (ha)		No. of farmers/ demonstration				Reasons for shortfall in achievement
									Proposed	Actual	SC/ST	OBC	Others	Total	
I	**Carrot**	Irrigated	Rabi 2022-23	Carrot	PCP-1	-	Varietal Evaluation	Improved Variety	0.2	0.2	10	-	-	10	
II					PCP-2				0.2	0.2	10	-	-	10	
III	**Cauliflower**			Cauliflower	PUSA ASHWANI				0.4	0.4	07	02	11	20	
IV	**Spinach**			Spinach	ALL GREEN				0.2	0.2	04	01	05	10	
V	**Beet Root**			Beet Root	DDR				0.2	0.2	03	01	06	10	
6	**PULSES**														
I	**Mash**	Rainfed	Kharif 2023	Mash	PU 31	-	Varietal Evaluation	Improved Variety	10	10	23	-	49	72	
II					PU 10				2	2	01	12	07	20	
III	**Chickpea**	Rainfed	Rabi 2022-23	Chickpea	GNG-1581				10.0	10.0	165	10	55	230	
7	**FLORICULTURE**														
I	**Marigold**	Rainfed	Kharif 2023	Marigold	PUSA NARANGI	-	Varietal Evaluation	Improved Variety	2	2	29	01	13	43	
8	**MUSHROOM**														
I	**Dhingri Mushroom**	Irrigated / Rainfed	Rabi 2023-24	Dhingri Mushroom	Florida	-	Varietal Evaluation	Improved Variety	500 bags	780 bags	90	-	-	90	
II	**Button mushroom**	Irrigated / Rainfed	Rabi 2022-23	Button mushroom	U-3				1000 bags	500 bags	26	-	-	26	
III										1400 bags	71	-	-	71	
9	**Vermicompost**	-	-	-	-	-	-	-	-	-	-	-	-	-	
10	**IFS**	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	**Apiculture**	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	**Implements**	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	**Poultry**	Irrigated	Rabi 2022-23	Poultry	CHABRO		Varietal Evaluation	Backyard Poultry	2000	2400	60	-	-	60	
14	**FISHERIES**														
I	**Fisheries**	Irrigation	Kharif 2023	Composite Fish Farming	Fish Seed of Indian major carps	-	Varietal Evaluation	Composite Fish Farming -	10	15	15	-	-	15	
II					Fish Seed of Exotic carps	-			10	12	12	-	-	12	

4.A. 1. Soil fertility status of FLDs plots during 2022-23 and 2023

Sl. No.	Category	Farming Situation	Season and Year	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Status of soil (Kg/Acre)			Previous crop grown
									N	P	K	
1	**OILSEEDS**											
I	**Sesame**	Rainfed	Kharif 2023	Sesame	RT-351	-	Varietal evaluation	Improved variety	253	9.5	110	
II	**Toria**	Rainfed	Rabi 2023-24	Toria	RSPT-6							
III	**Gobi Sarson**	Irrigated		Gobi Sarson	RSPN- 25							
IV					DGS-1							
V	**Mustard**	Rainfed		Mustard	RH-725							
VI	**Mustard**	Rainfed	Rabi 2022-23	Mustard	GIRIRAJ		Varietal evaluation	Improved variety	253	9.5	110	
VII	**Gobi Sarson**	Irrigated		Gobi Sarson	RSPN- 25							
2	**CEREALS**											
I	**Paddy**	Irrigated	Kharif 2023	Basmati	JB118	-	Improved Variety	Improved variety	253	9.5	110	
II					JB 123							
III					JB 138							
IV					BASMATI 370							
V	**Wheat**	Irrigated	Rabi 2023-24	Wheat	DBW-222							
VI					DBW 173							
VII		Rainfed	Rabi 2023-24		HD 3237							
VIII					JAUW 672							
IX					WH 1080							
X		Irrigated	Rabi 2022-23	Wheat	Pb Zn -1							
XI					DBW 222							
XII		Rainfed			WH 1080							
XIII	**Maize**	Rainfed	Kharif 2023	Maize	DKC 9144	Hybrid	Varietal evaluative	HYV	255	9.6	114	
XIV					Double Dekalb							
XV	**Maize**	Rainfed	Kharif 2023	Maize	EMAMACTIN BENZOATE	-	IPM	IPM				
3	**FODDER**											
I	**Oats**	Irrigated	Rabi 2023-24	Oats	KENT	-	Varietal evaluation	Improved variety	255	9.6	114	
II	**Berseem**	Irrigated		Berseem	BL-10							
III	**Oats**	Irrigated	Rabi 2022-23	Oats	KENT							
IV	**Berseem**	Irrigated		Berseem	MASCAVI							
4	**Millets**											
I	**Barnyard Millet**	Rainfed	Kharif 2023	Barnyard Millet	DHMB-93.3	HYV	Varietal evaluation	Improved variety	255	9.6	114	
5	**VEGETABLES**											
I	**Carrot**	Irrigated	Rabi	Carrot	PCP-1	-	Varietal	Improved 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			2022-23		PCP-2		Evaluation					
III	**Cauliflower**			Cauliflower	PUSA ASHWANI							
IV	**Spinach**			Spinach	ALL GREEN							
V	**Beet Root**			Beet Root	DDR							
5	**PULSES**											
I	**Mash**	Rainfed	Kharif 2023	Mash	PU 31	-	Varietal Evaluation	Improved variety	255	9.6	114	
II					PU 10							
III	**Chickpea**	Rainfed	Rabi 2022-23	Chickpea	GNG-1581				255	9.5	110	
6	**FLORICULTURE**											
I	**Marigold**	Rainfed	Kharif 2023	Marigold	PUSA NARANGI			Improved Variety	253	9.5	110	
7	**MUSHROOM**											
I	**Button mushroom**	Irrigated / Rainfed	Rabi 2023-24	Button mushroom	FLORIDA	-	-	HYV	-	-	-	
II	**Button mushroom**	Irrigated / Rainfed	Rabi 2022-23	Button mushroom	U-3	-	-		-	-	-	
									-	-	-	
III	**IFS**	-	-	-	-	-	-	-	-	-	-	
IV	**Apiculture**	-	-	-	-	-	-	-	-	-	-	
V	**Implements**	-	-	-	-	-	-	-	-	-	-	
8	**Poultry**	-	Rabi 2022-23	Poultry	CHABRO	-	Varietal Evaluation	Backyard Poultry				
9	**FISHERIES**											
I	**Fisheries**	Irrigated	Kharif 2023	Fisheries	Fish Seed of Indian major carps	-	Varietal Evaluation	-	-	-	-	
II					Fish Seed of Exotic carps							

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**																		
Sesame	Variety	RT-351	-	Rainfed	30	10.00	5.20	4.80	5.00	4.35	19.54	18550	80000	61450	4.31	18550	69600	51040	3.75
Toria	Variety	RSPT-6	-	Rainfed	18	2.00	10.30	8.70	9.50	6.60	43.93	21800	47500	25700	2.17	21800	33000	11200	1.51
Gobi Sarson	Variety	RSPN-25			44	5.00	24.00	19.00	20.00	16.00	25.00	37500	100000	62500	2.66	37500	80000	42500	2.13
		DGS-1		Irrigated	27	3.00	19.00	15.60	16.00	13.00	23.07	37500	80000	42500	2.13	37500	65000	27500	1.73
Mustard		RH-725			21	7.00	28.00	20.00	24.00	18.00	33.33	37000	120000	88000	3.24	33000	90000	58000	2.43
Mustard	Variety	GIRIRAJ	-	Rainfed	47	10.00	16.00	14.00	15.00	13.00	15.00	32000	96000	64000	3.00	32000	76800	44800	2.40
Gobi Sarson		RSPN-25		Irrigated	93	10.00	22.00	18.00	20.00	13.00	54.00	32000	72000	40000	2.25	32000	62400	40000	1.95
2	CEREALS																		
Paddy	Improved Variety	JB 118	-	Irrigated	07	0.60	29.00	22.30	28.30	21.90	29.22	42400	134030	91630	3.16	42400	98550	56155	2.32
		JB 123			04	1.20	35.06	26.30	33.60	21.90	53.42	42400	155760	113360	3.67	42400	98550	56155	2.32
		JB 138			04	1.20	33.30	27.43	31.93	21.90	45.80	42400	148913	106513	3.51	42400	98550	56155	2.32
		Basmati 370			10	4.20	28.80	20.40	24.14	21.90	10.23	42400	134030	91630	3.16	42400	98550	56155	2.32
Wheat	Improved Variety	DBW 222	-	Irrigated	31	4.00	46.56	40.34	51.70	35.92	75.02	30000	127617.50	102817.50	3.43	30000	91718	61718	2.06
		HD 3237			11	2.00	33.80	29.67	31.65	29.54	14.93	24800	79003.75	54203.75	2.19	24800	69772.5	44972.5	1.81
		DBW 173			11	0.40	42.32	36.78	46.50	35.92	57.41	30000	115787.50	90987.50	3.03	30000	91718	61718	2.06
		JAUW 672		Rainfed	14	1.40	38.48	30.97	35.90	29.54	29.32	24800	88672.50	63872.50	2.58	24800	69772.5	44972.5	1.81
		WH 1080	-	Rainfed	13	1.00	32.48	27.99	28.55	29.54	4.43	24800	71951.25	47151.25	1.90	24800	69772.5	44972.5	1.81
	Improved Variety	PB Zn-1		Irrigated	10	2.00	45.90	39.25	41.20	30.30	35.97	33500	90018	56518	2.69	32000	68054.50	36054.50	2.13
		DBW 222		Irrigated	31	6.20	49.20	40.35	49.60	30.30	63.70	33500	106944	73444	3.19	32000	68054.50	36054.50	2.13
		WH 1080		Rainfed	28	3.20	23.00	17.90	25.77	16.30	58.10	25200	58926.55	33096.55	2.31	24800	39844.50	15044.50	1.61
Maize	Variety	DKC 9144	Hybrid	Rainfed	64	10.00	28.45	23.82	25.67	19.50	32.00	22800	63650.30	40850.30	2.79	22800	38259	15759	1.70
		DOUBLE DEKALB			70	10.00	30.32	24.29	26.49	19.50	36.00	22800	65364.10	42564.10	2.87	22800	38259	15759	1.70
	IPM	EMAMACTIN BENZOATE	-		144	10.00	29.38	24.05	26.08	19.50	34.00	22800	64507.2	41707.2	2.82	22800	38259	15759	1.70
3	**FODDER**																		
Oats	Improved Variety	KENT	-	Irrigated	18	2.00	236	257	249	186.30	33.66	20100	59262	39162	1.95	20100	44339.40	24239.4	1.21
Berseem		BL-10			53	5.00	650	594	623	509.00	22.40	22900	85974	63074	2.75	30000	70242.00	40242	1.34
Oats	Improved Variety	KENT			23	2.00	340	280	288	229.00	25.70	19500	54572	35172	1.80	19500	36640.00	17140	0.87
Berseem		MASCAVI			147	5.00	646	536	594	448.00	32.50	22500	83160	60660	2.70	22500	62720.00	40220	1.79

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										
4	MILLETS																		
Barnyard Millet	Improved Variety	DHMB-93.3	-	Rainfed	13	0.90	13.20	10.80	12.00	8.80	36.00	18500.0	22144.5	3644.5	1.20	18500	16280.00	2220.0	0.90
5	VEGETABLES																		
Carrot	Improved Variety	PCP 1	-	Irrigated	10	0.20	440	390	400	368	8.69	130000	430000	300000	3.30	130000	40000	270000	3.07
		PCP 2			10	0.20	440	390	400	368	8.69	130000	432000	320000	3.32	130000	40000	270000	3.07
Cauliflower	Improved Variety	PUSA ASHWANI			20	0.40	340	210	250	220	13.60	90000	250000	16000	2.77	90000	130000	22000	2.44
Spinach	Improved Variety	ALL GREEN			10	0.20	345	200	260.9	230	13.43	90000	260000	170000	2.88	90000	230000	140000	2.55
Beetroot	Improved Variety	DDR			10	0.20	469	448	464	420	10.47	132000	460000	328000	3.48	132000	420000	288000	3.18
6	PULSES																		
Mash	Improved Variety	PU 31	-	Rainfed	72	10.00	5.98	5.20	5.66	4.29	45.50	19500.00	39337.00	19837.00	2.02	19500	29815.50	10315.50	1.53
		PU 10			20	2.00	7.40	6.92	7.20	4.29	85.09	19500.00	50040.00	30540.00	2.57	19500	29815.50	10315.50	1.53
		GNG 1581			230	20.00	18.80	16.8	17.8	14.5	22.70	40200	97900	57700	2.43	40200	79750	39550	1.98
7	FLORICULTURE																		
Marigold	Improved Variety	PUSA NARANGI	-	-	87	2.00	262	226	244	198	23.23	180000	4888000	308000	2.71	180000	396000	216000	2.20
8	MUSHROOM																		
Mushroom	Dhingri Mushroom	FLORIDA	-	Rainfed/ Irrigated	90	780 bags	1.40	1.10	1.25	1.00	25.00	60 / bag	150 / bag	90/bag	2.50	60/bag	120 /bag	60/bag	2.00
Button mushroom	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
			-		71	1400 bags	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
Vermicompost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IFS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Apiculture	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Implements	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Poultry	Backyard Poultry	CHABRO	-	Irrigated	60	2400	-	-	-	-	100	6600	33000	26400	4.04	-	-	-	-
Fisheries	Composite Fish farming	Fish Seed of Indian major carps	-	Irrigated	15	1.5	53.00	40.00	46.50	35.00	32.85	275500	697500	422000	2.53	189000	525000	336000	2.77
		Fish Seed of Exotic carps			12	1.2	61.00	54.00	57.50	35.00	64.00	405580	862500	456920	2.12	189000	525000	336000	2.78

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

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

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

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

4.B.2. Livestock and related enterprises

Type of livestock	*Name of the technology demonstrated*	*Breed*	*No. of Demo*	*No. of Units*	*Yield (q/ha)*				*% Increase*	**Economics of demonstration Rs./unit)*				**Economics of check (Rs./unit)*			
					Demo			*Check if any*		*Gross Cost*	*Gross Return*	*Net Return*	*** BCR*	*Gross Cost*	*Gross Return*	*Net Return*	*** BCR*
					H	L	A										
Dairy																	
Poultry	Backyard Poultry	CHABRO	60	2400	-	-	-	-	-	100	6600	33000	26400	4.04	-	-	-
Rabbitry																	
Pigerry																	
Sheep and goat																	
Duckery																	
Others (pl.specify)																	

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

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

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

4. B.3. Fisheries

Type of Breed	*Name of the technology demonstrated*	*Breed*	*No. of Demo*	*Units/ Area (m^2)*	*Yield (q/ha)*				*% Increase*	**Economics of demonstration Rs./unit) or (Rs./m2)*				**Economics of check Rs./unit) or (Rs./m2)*			
					Demo			*Check if any*		*Gross Cost*	*Gross Return*	*Net Return*	*** BCR*	*Gross Cost*	*Gross Return*	*Net Return*	*** BCR*
					H	L	A										
IMC & Exotic	Composite Fish farming	Fish Seed of Indian major carps	15	1.5	53.00	40.00	46.50	35.00	32.85	275500	697500	422000	2.53	189000	525000	336000	2.77
		Fish Seed of Exotic carps	12	1.2	61.00	54.00	57.50	35.00	64.00	405580	862500	456920	2.12	189000	525000	336000	2.78

					Trees planted near bunds. Economic return will start after few years.

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

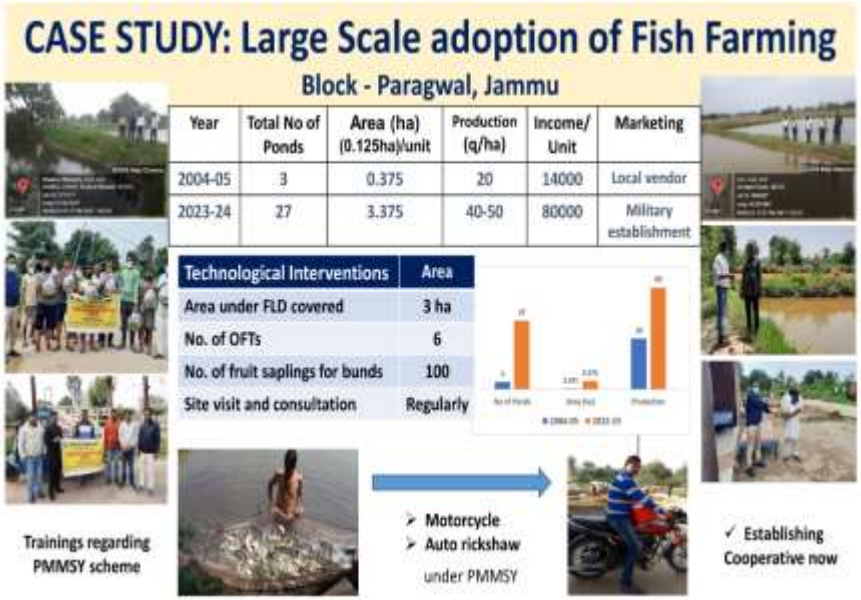
Data on additional parameters other than yield (viz., reduction of percentage diseases, effective use of land etc.)

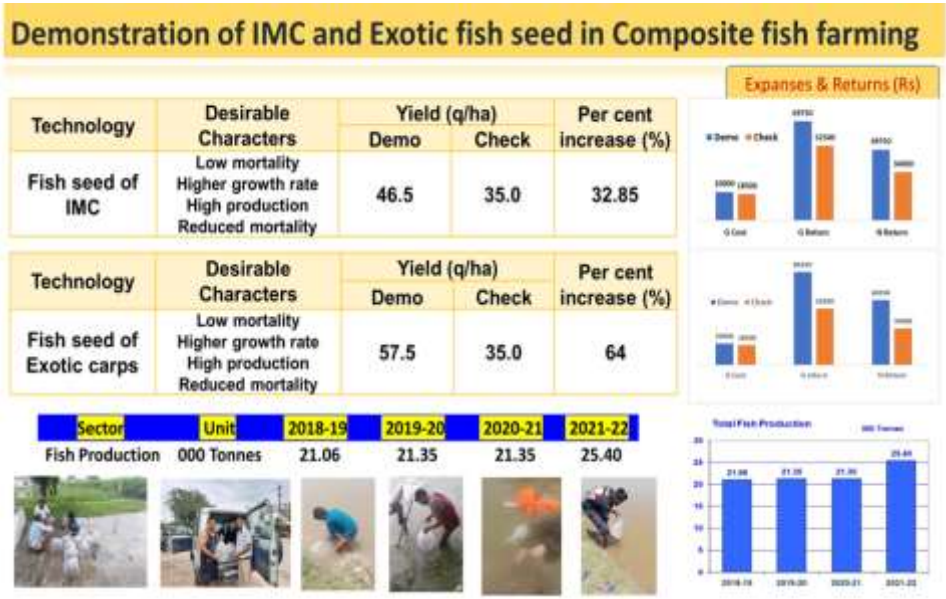
Data on other parameters in relation to technology demonstrated		
Parameter with unit	***Demo***	***Check if any***

4.B.4. Other enterprises

Enterprise	*Name of the technology demonstrated*	*Variety/ species*	*No. of Demo*	*Units/ Area {m²}*	*Yield (q/ha)*				*% Increase*	**Economics of demonstration (Rs./unit) or (Rs./m2)*				**Economics of check (Rs./unit) or (Rs./m2)*			
					Demo			*Check if any*		*Gross Cost*	*Gross Return*	*Net Return*	*** BCR*	*Gross Cost*	*Gross Return*	*Net Return*	*** BCR*
					H	L	A										
Mushroom	Dhingri Mushroom	FLORIDA	90	Rainfed /Irrigated	90	780 bags	1.40	1.10	1.25	1.00	25	60/bag	150 /bag	90/bag	2.50	60/bag	120 /bag
Button mushroom	New strain	U-3	26	500 bags	26	500	3.15	1.65	2.11	1.38	52.90	110/bag	316.50/bag	206.50/bag	2.88	110/bag	207/bag
			71	1400 bags	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
Vermicompost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Apiculture	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Others (pl.specify)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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





H-High L-Low, A-Average

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

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

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

Sl.No.	*Activity*	*No. of activities organised*	*Number of participants*	*Remarks*
1	Field days	6	140	-
2	Farmers Training	15	273	-
3	Media coverage	36		-
4	Training for extension functionaries	01	20	-
5	Others (Please specify)			-

5. ACHIEVEMENTS ON TRAINING (INCLUDING THE SPONSORED, VOCATIONAL, FLD AND TRAININGS UNDER RAINWATER HARVESTING UNIT):

A) **ON Campus**

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	1	21	17	38	0	0	0	21	17	38
Weed Management	-	-	-	-	-	-	-	-	-	-
Resource Conservation Technologies	-	-	-	-	-	-	-	-	-	-
Cropping Systems	1	12	0	12	2	1	3	14	1	15
Crop Diversification	-	-	-	-	-	-	-	-	-	-
Integrated Farming	-	-	-	-	-	-	-	-	-	-
Micro irrigation/irrigation	-	-	-	-	-	-	-	-	-	-
Seed production	-	-	-	-	-	-	-	-	-	-
Nursery management	-	-	-	-	-	-	-	-	-	-
Integrated Crop Management	-	-	-	-	-	-	-	-	-	-
Soil & water conservation	-	-	-	-	-	-	-	-	-	-
Integrated nutrient Management	-	-	-	-	-	-	-	-	-	-
Production of organic inputs	1	13	2	15	16	3	19	29	5	34
Others	-	-	-	-	-	-	-	-	-	-
Total										
Horticulture	-	-	-	-	-	-	-	-	-	-
a) Vegetable Crops	-	-	-	-	-	-	-	-	-	-
Production of low volume and high value crops	-	-	-	-	-	-	-	-	-	-
Off0season vegetables	-	-	-	-	-	-	-	-	-	-
Nursery raising	-	-	-	-	-	-	-	-	-	-
Exotic vegetables	-	-	-	-	-	-	-	-	-	-

Area of training	No. of courses	No. of Participants								
		General			SC/ST			Grand Total		
Export potential vegetables	-	-	-	-	-	-	-	-	-	-
Grading and standardization	-	-	-	-	-	-	-	-	-	-
Protective cultivation	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total (a)										
b) Fruits	-	-	-	-	-	-	-	-	-	-
Training and Pruning	-	-	-	-	-	-	-	-	-	-
Layout and Management of Orchards	-	-	-	-	-	-	-	-	-	-
Cultivation of Fruit	-	-	-	-	-	-	-	-	-	-
Management of young plants/orchards	1	1	0	1	6	8	14	7	8	15
Rejuvenation of old orchards	-	-	-	-	-	-	-	-	-	-
Export potential fruits	-	-	-	-	-	-	-	-	-	-
Micro irrigation systems of orchards	-	-	-	-	-	-	-	-	-	-
Plant propagation techniques	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total (b)	1	1	0	1	6	8	14	7	8	15
c) Ornamental Plants	-	-	-	-	-	-	-	-	-	-
Nursery Management	-	-	-	-	-	-	-	-	-	-
Management of potted plants	-	-	-	-	-	-	-	-	-	-
Export potential of ornamental plants	-	-	-	-	-	-	-	-	-	-
Propagation techniques of Ornamental Plants	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total (c)	-	-	-	-	-	-	-	-	-	-
d) Plantation crops	-	-	-	-	-	-	-	-	-	-
Production and Management technology	-	-	-	-	-	-	-	-	-	-
Processing and value addition	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-

Area of training	No. of courses	No. of Participants								
		General			SC/ST			Grand Total		
Total (d)	-	-	-	-	-	-	-	-	-	-
e) Tuber crops	-	-	-	-	-	-	-	-	-	-
Production and Management technology	-	-	-	-	-	-	-	-	-	-
Processing and value addition	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total (e)	-	-	-	-	-	-	-	-	-	-
f) Spices	-	-	-	-	-	-	-	-	-	-
Production and Management technology	-	-	-	-	-	-	-	-	-	-
Processing and value addition	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total (f)	-	-	-	-	-	-	-	-	-	-
g) Medicinal and Aromatic Plants	-	-	-	-	-	-	-	-	-	-
Nursery management	-	-	-	-	-	-	-	-	-	-
Production and management technology	-	-	-	-	-	-	-	-	-	-
Post harvest technology and value addition	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total (g)	-	-	-	-	-	-	-	-	-	-
Total(a-g)	1	1	0	1	6	8	14	7	8	15
Soil Health and Fertility Management	-	-	-	-	-	-	-	-	-	-
Soil fertility management	-	-	-	-	-	-	-	-	-	-
Integrated water management	-	-	-	-	-	-	-	-	-	-
Integrated Nutrient Management	-	-	-	-	-	-	-	-	-	-
Production and use of organic inputs	1	3	0	3	27	0	27	30	0	30
Management of Problematic soils	-	-	-	-	-	-	-	-	-	-
Micro nutrient deficiency in crops	-	-	-	-	-	-	-	-	-	-
Nutrient Use Efficiency	-	-	-	-	-	-	-	-	-	-
Balance Use of fertilizer	-	-	-	-	-	-	-	-	-	-

Area of training	No. of courses	No. of Participants								
		General			SC/ST			Grand Total		
Soil & water testing	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total	1	3	0	3	27	0	27	30	0	30
Livestock Production and Management	-	-	-	-	-	-	-	-	-	-
Dairy Management	1	6	0	6	7	0	7	13	0	13
Poultry Management	-	-	-	-	-	-	-	-	-	-
Piggery Management	-	-	-	-	-	-	-	-	-	-
Rabbit Management	-	-	-	-	-	-	-	-	-	-
Animal Nutrition Management	-	-	-	-	-	-	-	-	-	-
Disease Management	-	-	-	-	-	-	-	-	-	-
Feed & fodder technologies	-	-	-	-	-	-	-	-	-	-
Production of quality animal products	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total	1	6	0	6	7	0	7	13	0	13
Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	-	-	-	-	-	-	-	-	-	-
Design and development of low/minimum cost diet	-	-	-	-	-	-	-	-	-	-
Designing and development for high nutrient efficiency diet	1	0	5	5	0	25	25	0	30	30
Minimization of nutrient loss in processing	-	-	-	-	-	-	-	-	-	-
Processing & cooking	-	-	-	-	-	-	-	-	-	-
Gender mainstreaming through SHGs	-	-	-	-	-	-	-	-	-	-
Storage loss minimization techniques	-	-	-	-	-	-	-	-	-	-
Value addition	-	-	-	-	-	-	-	-	-	-
Women empowerment	-	-	-	-	-	-	-	-	-	-
Location specific drudgery reduction technologies	-	-	-	-	-	-	-	-	-	-

Area of training	No. of courses	No. of Participants								
		General			SC/ST			Grand Total		
Rural Crafts	-	-	-	-	-	-	-	-	-	-
Women and child care	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total	1	0	5	5	0	25	25	0	30	30
Agril. Engineering	-	-	-	-	-	-	-	-	-	-
Farm machinery & its maintenance	-	-	-	-	-	-	-	-	-	-
Installation and maintenance of micro irrigation systems	-	-	-	-	-	-	-	-	-	-
Use of Plastics in farming practices	-	-	-	-	-	-	-	-	-	-
Production of small tools and implements	-	-	-	-	-	-	-	-	-	-
Repair and maintenance of farm machinery and implements	-	-	-	-	-	-	-	-	-	-
Small scale processing and value addition	-	-	-	-	-	-	-	-	-	-
Post Harvest Technology	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
Plant Protection	-	-	-	-	-	-	-	-	-	-
Integrated Pest Management	1	11	0	11	14	0	14	25	0	25
Integrated Disease Management	1	0	0	0	26	14	40	26	14	40
Bio-control of pests and diseases	-	-	-	-	-	-	-	-	-	-
Production of bio control agents and bio pesticides	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total	2	11	0	11	40	14	54	51	14	65
Fisheries										
Integrated fish farming	2	1	6	7	9	38	47	10	44	54
Carp breeding and hatchery management	1	13	0	13	2	0	2	15	0	15
Carp fry and fingerling rearing	-	-	-	-	-	-	-	-	-	-

Area of training	No. of courses	No. of Participants								
		General			SC/ST			Grand Total		
Composite fish culture	-	-	-	-	-	-	-	-	-	-
Hatchery management and culture of freshwater prawn	-	-	-	-	-	-	-	-	-	-
Breeding and culture of ornamental fishes	-	-	-	-	-	-	-	-	-	-
Portable plastic carp hatchery	-	-	-	-	-	-	-	-	-	-
Pen culture of fish and prawn	-	-	-	-	-	-	-	-	-	-
Shrimp farming	-	-	-	-	-	-	-	-	-	-
Edible oyster farming	-	-	-	-	-	-	-	-	-	-
Pearl culture	-	-	-	-	-	-	-	-	-	-
Fish processing and value addition	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total	3	14	6	20	11	38	49	25	44	69
Production of Input at site	-	-	-	-	-	-	-	-	-	-
Seed Production	-	-	-	-	-	-	-	-	-	-
Planting material production	-	-	-	-	-	-	-	-	-	-
Bio0agents production	-	-	-	-	-	-	-	-	-	-
Bio0pesticides production	-	-	-	-	-	-	-	-	-	-
Bio0fertilizer production	-	-	-	-	-	-	-	-	-	-
Vermi0compost production	-	-	-	-	-	-	-	-	-	-
Organic manures production	-	-	-	-	-	-	-	-	-	-
Production of fry and fingerlings	-	-	-	-	-	-	-	-	-	-
Production of Bee0colonies and wax sheets	-	-	-	-	-	-	-	-	-	-
Small tools and implements	-	-	-	-	-	-	-	-	-	-
Production of livestock feed and fodder	-	-	-	-	-	-	-	-	-	-
Production of Fish feed	-	-	-	-	-	-	-	-	-	-
Mushroom production	-	-	-	-	-	-	-	-	-	-
Apiculture	-	-	-	-	-	-	-	-	-	-

Area of training	No. of courses	No. of Participants								
		General			SC/ST			Grand Total		
Others	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
Capacity Building and Group Dynamics	-	-	-	-	-	-	-	-	-	-
Leadership development	-	-	-	-	-	-	-	-	-	-
Group dynamics	-	-	-	-	-	-	-	-	-	-
Formation and Management of SHGs	1	3	0	3	2	0	2	5	0	5
Mobilization of social capital	-	-	-	-	-	-	-	-	-	-
Entrepreneurial development of farmers/youths	2	75	15	90	13	11	24	88	26	114
WTO and IPR issues	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total	3	78	15	93	15	11	26	93	26	119
Agro forestry	-	-	-	-	-	-	-	-	-	-
Production technologies	-	-	-	-	-	-	-	-	-	-
Nursery management	-	-	-	-	-	-	-	-	-	-
Integrated Farming Systems	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
Grand Total	15	159	45	204	124	100	224	283	145	428

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
Nursery Management of Horticulture crops	1	0	0	0	17	0	17	17	0	17
Training and pruning of orchards	-	-	-	-	-	-	-	-	-	-
Protected cultivation of vegetable crops	-	-	-	-	-	-	-	-	-	-
Commercial fruit production	-	-	-	-	-	-	-	-	-	-
Integrated farming	3	95	16	111	20	4	24	115	20	135
Seed production	-	-	-	-	-	-	-	-	-	-
Production of organic inputs	-	-	-	-	-	-	-	-	-	-
Planting material production	1	26	0	26	0	0	0	26	0	26
Vermiculture	-	-	-	-	-	-	-	-	-	-
Mushroom Production	1	9	5	14	12	38	50	21	43	64
Bee keeping	-	-	-	-	-	-	-	-	-	-
Sericulture	-	-	-	-	-	-	-	-	-	-
Repair and maintenance of farm machinery and implements	-	-	-	-	-	-	-	-	-	-
Value addition	-	-	-	-	-	-	-	-	-	-
Small scale processing	-	-	-	-	-	-	-	-	-	-
Post Harvest Technology	-	-	-	-	-	-	-	-	-	-
Tailoring and Stitching	-	-	-	-	-	-	-	-	-	-
Rural Crafts	-	-	-	-	-	-	-	-	-	-
Production of quality animal products	1	0	30	30	0	5	5	0	35	35
Dairying	-	-	-	-	-	-	-	-	-	-
Sheep and goat rearing	-	-	-	-	-	-	-	-	-	-

Area of training	No. of Courses	No. of Participants								
Quail farming	-	-	-	-	-	-	-	-	-	-
Piggery	-	-	-	-	-	-	-	-	-	-
Rabbit farming	-	-	-	-	-	-	-	-	-	-
Poultry production	-	-	-	-	-	-	-	-	-	-
Ornamental fisheries	1	11	0	11	27	3	30	38	3	41
Composite fish culture	-	-	-	-	-	-	-	-	-	-
Freshwater prawn culture	-	-	-	-	-	-	-	-	-	-
Shrimp farming	-	-	-	-	-	-	-	-	-	-
Pearl culture	-	-	-	-	-	-	-	-	-	-
Cold water fisheries	-	-	-	-	-	-	-	-	-	-
Fish harvest and processing technology	-	-	-	-	-	-	-	-	-	-
Fry and fingerling rearing	-	-	-	-	-	-	-	-	-	-
Other (Leadership among youth)	1	8	0	8	25	17	42	33	17	50
Total	9	149	51	200	101	67	168	250	118	368

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	9	1298	76	1374	57	4	61	1355	80	1435
Integrated Pest Management	2	443	23	466	12	4	16	455	29	484
Integrated Nutrient management	1	2	0	2	244	15	259	246	15	261
Rejuvenation of old orchards	3	377	23	400	18	2	20	395	25	420
Protected cultivation technology	3	692	45	737	37	4	41	729	49	778
Formation and Management of SHGs	2	465	33	498	18	3	21	483	36	519

Area of training	No. of	No. of Participants								
Grading and marketing of produce	3	348	18	366	12	2	14	360	20	380
Group Dynamics and farmers organization	1	159	3	162	6	0	6	165	3	168
Information networking among farmers	2	271	5	276	8	0	8	279	5	284
Capacity building for ICT application	1	37	4	41	0	0	0	37	4	41
Care and maintenance of farm machinery and implements	3	524	21	545	10	1	11	534	22	556
WTO and IPR issues	-	-	-	-	-	-	-	-	-	-
Management in farm animals	2	121	25	146	0	0	0	121	25	146
Livestock feed and fodder production	6	562	38	600	49	3	52	611	41	652
Household food security	-	-	-	-	-	-	-	-	-	-
Seed production	3	383	25	408	36	2	38	419	27	446
Women and Child care	-	-	-	-	-	-	-	-	-	-
Low cost and nutrient efficient diet designing	3	332	31	363	8	10	18	340	41	381
Production and use of organic inputs	-	-	-	-	-	-	-	-	-	-
Gender mainstreaming through SHGs	5	491	44	535	363	12	375	854	56	910
Others (Bee Keeping)	2	311	18	329	7	0	7	318	18	336
TOTAL	**51**	**6816**	**432**	**7248**	**885**	**62**	**947**	**7701**	**496**	**8196**

d) Sponsored training programmes

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	-	-	-	-	-	-	-	-	-	-
Increasing production and productivity of crops	-	-	-	-	-	-	-	-	-	-
Commercial production of vegetables	-	-	-	-	-	-	-	-	-	-
Production and value addition	-	-	-	-	-	-	-	-	-	-
Fruit Plants	-	-	-	-	-	-	-	-	-	-
Ornamental plants	-	-	-	-	-	-	-	-	-	-

Area of training	No. of Courses	No. of Participants								
Spices crops	-	-	-	-	-	-	-	-	-	-
Soil health and fertility management (Nano Fertilizer)	1	28	14	42	8	0	8	36	14	50
Production of Inputs at site	-	-	-	-	-	-	-	-	-	-
Methods of protective cultivation	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Total	1	28	14	42	8	0	8	36	14	50
Post harvest technology and value addition	-	-	-	-	-	-	-	-	-	-
Processing and value addition	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
Farm machinery	-	-	-	-	-	-	-	-	-	-
Farm machinery, tools and implements	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
Livestock and fisheries	-	-	-	-	-	-	-	-	-	-
Livestock production and management	-	-	-	-	-	-	-	-	-	-
Animal Nutrition Management	-	-	-	-	-	-	-	-	-	-
Animal Disease Management	-	-	-	-	-	-	-	-	-	-
Fisheries Nutrition	-	-	-	-	-	-	-	-	-	-
Fisheries Management	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
Home Science	-	-	-	-	-	-	-	-	-	-
Household nutritional security	-	-	-	-	-	-	-	-	-	-
Economic empowerment of women	-	-	-	-	-	-	-	-	-	-
Drudgery reduction of women	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-

Area of training	No. of Courses	No. of Participants								
Total	-	-	-	-	-	-	-	-	-	-
Agricultural Extension	-	-	-	-	-	-	-	-	-	-
Capacity Building and Group Dynamics	-	-	-	-	-	-	-	-	-	-
Other (Awaremess Prog on Schemes of NHB	1	13	0	13	75	2	77	88	2	91
Total	1	13	0	13	75	2	77	88	2	91

B) **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	4	45	8	53	20	8	28	65	16	81
Weed Management	-	-	-	-	-	-	-	-	-	-
Resource Conservation Technologies	-	-	-	-	-	-	-	-	-	-
Cropping Systems	3	37	16	53	31	6	37	68	22	90
Crop Diversification	2	23	2	25	15	8	23	38	10	48
Integrated Farming	3	71	6	77	20	0	20	91	6	97
Water management	-	-	-	-	-	-	-	-	-	-
Micro irrigation/irrigation	-	-	-	-	-	-	-	-	-	-
Seed production	1	11	0	11	7	0	7	18	0	18
Nursery management	1	27	26	53	0	11	11	27	37	64
Integrated Crop Management	-	-	-	-	-	-	-	-	-	-
Soil & water conservation	-	-	-	-	-	-	-	-	-	-
Fodder production	2	11	0	11	0	33	33	11	33	44
Integrated nutrient Management	-	-	-	-	-	-	-	-	-	-
Production of organic inputs	1	2	15	17	3	5	8	5	20	25
Others	-	-	-	-	-	-	-	-	-	-
Total	17	227	73	300	96	71	167	323	144	467
Horticulture	-	-	-	-	-	-	-	-	-	-
a) Vegetable Crops	-	-	-	-	-	-	-	-	-	-
Production of low volume and high value crops	-	-	-	-	-	-	-	-	-	-
Off0season vegetables	-	-	-	-	-	-	-	-	-	-
Nursery raising	2	1	12	13	2	19	21	3	31	34
Exotic vegetables	-	-	-	-	-	-	-	-	-	-

Export potential vegetables	-	-	-	-	-	-	-	-	-	-
Grading and standardization	-	-	-	-	-	-	-	-	-	-
Protective cultivation	1	6	15	21	1	3	4	7	18	25
Others	-	-	-	-	-	-	-	-	-	-
Total (a)	3	7	27	34	3	22	25	10	49	59
b) Fruits	-	-	-	-	-	-	-	-	-	-
Training and Pruning	-	-	-	-	-	-	-	-	-	-
Layout and Management of Orchards	-	-	-	-	-	-	-	-	-	-
Cultivation of Fruit	-	-	-	-	-	-	-	-	-	-
Management of young plants/orchards	-	-	-	-	-	-	-	-	-	-
Rejuvenation of old orchards	-	-	-	-	-	-	-	-	-	-
Export potential fruits	-	-	-	-	-	-	-	-	-	-
Micro irrigation systems of orchards	-	-	-	-	-	-	-	-	-	-
Plant propagation techniques	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total (b)	-	-	-	-	-	-	-	-	-	-
c) Ornamental Plants	-	-	-	-	-	-	-	-	-	-
Nursery Management	-	-	-	-	-	-	-	-	-	-
Management of potted plants	-	-	-	-	-	-	-	-	-	-
Export potential of ornamental plants	-	-	-	-	-	-	-	-	-	-
Propagation techniques of Ornamental Plants	2	11	19	30	12	23	35	33	42	65
Others	-	-	-	-	-	-	-	-	-	-
Total (c)	2	11	19	30	12	23	35	33	42	65
d) Plantation crops	-	-	-	-	-	-	-	-	-	-
Production and Management technology	-	-	-	-	-	-	-	-	-	-
Processing and value addition	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total (d)	-	-	-	-	-	-	-	-	-	-
e) Tuber crops	-	-	-	-	-	-	-	-	-	-

Production and Management technology	1	14	3	17	1	1	2	15	4	19
Processing and value addition	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total (e)	1	14	3	17	1	1	2	15	4	19
f) Spices	-	-	-	-	-	-	-	-	-	-
Production and Management technology	-	-	-	-	-	-	-	-	-	-
Processing and value addition	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total (f)	-	-	-	-	-	-	-	-	-	-
g) Medicinal and Aromatic Plants	-	-	-	-	-	-	-	-	-	-
Nursery management	-	-	-	-	-	-	-	-	-	-
Production and management technology	-	-	-	-	-	-	-	-	-	-
Post harvest technology and value addition	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total (g)	-	-	-	-	-	-	-	-	-	-
Total(a-g)										
Soil Health and Fertility Management	-	-	-	-	-	-	-	-	-	-
Soil fertility management	1	7	0	7	14	0	14	21	0	21
Integrated water management	-	-	-	-	-	-	-	-	-	-
Integrated Nutrient Management	-	-	-	-	-	-	-	-	-	-
Production and use of organic inputs	-	-	-	-	-	-	-	-	-	-
Management of Problematic soils	-	-	-	-	-	-	-	-	-	-
Micro nutrient deficiency in crops	-	-	-	-	-	-	-	-	-	-
Nutrient Use Efficiency	1	17	0	17	2	0	2	19	0	19
Balance Use of fertilizer	-	-	-	-	-	-	-	-	-	-
Soil & water testing	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total	2	24	0	24	16	0	16	40	0	40
Livestock Production and Management	-	-	-	-	-	-	-	-	-	-

Dairy Management	-	-	-	-	-	-	-	-	-	-
Poultry Management	-	-	-	-	-	-	-	-	-	-
Piggery Management	-	-	-	-	-	-	-	-	-	-
Rabbit Management	-	-	-	-	-	-	-	-	-	-
Animal Nutrition Management	-	-	-	-	-	-	-	-	-	-
Disease Management	-	-	-	-	-	-	-	-	-	-
Feed & fodder technologies	-	-	-	-	-	-	-	-	-	-
Production of quality animal products	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
Home Science/Women empowerment	-	-	-	-	-	-	-	-	-	-
Household food security by kitchen gardening and nutrition gardening	2	7	18	25	3	15	18	10	33	43
Design and development of low/minimum cost diet	2	0	26	26	0	40	40	0	66	66
Designing and development for high nutrient efficiency diet	2	0	14	14	0	41	41	0	55	55
Minimization of nutrient loss in processing	-	-	-	-	-	-	-	-	-	-
Processing & cooking	-	-	-	-	-	-	-	-	-	-
Gender mainstreaming through SHGs	-	-	-	-	-	-	-	-	-	-
Storage loss minimization techniques	-	-	-	-	-	-	-	-	-	-
Value addition	-	-	-	-	-	-	-	-	-	-
Women empowerment	-	-	-	-	-	-	-	-	-	-
Location specific drudgery reduction technologies	-	-	-	-	-	-	-	-	-	-
Rural Crafts	-	-	-	-	-	-	-	-	-	-
Women and child care	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total	**6**	**7**	**58**	**65**	**3**	**96**	**99**	**10**	**154**	**164**
Agril. Engineering	-	-	-	-	-	-	-	-	-	-
Farm machinery & its maintenance	-	-	-	-	-	-	-	-	-	-
Installation and maintenance of micro irrigation systems	-	-	-	-	-	-	-	-	-	-
Use of Plastics in farming practices	-	-	-	-	-	-	-	-	-	-

Production of small tools and implements	-	-	-	-	-	-	-	-	-	-
Repair and maintenance of farm machinery and implements	-	-	-	-	-	-	-	-	-	-
Small scale processing and value addition	-	-	-	-	-	-	-	-	-	-
Post Harvest Technology	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
Plant Protection	-	-	-	-	-	-	-	-	-	-
Integrated Pest Management	2	24	1	25	7	5	12	31	6	37
Integrated Disease Management	3	45	1	46	17	4	21	62	5	67
Bio0control of pests and diseases	1	3	0	3	27	0	27	30	0	30
Production of bio control agents and bio pesticides	1	28	2	30	0	0	0	28	2	30
Others	-	-	-	-	-	-	-	-	-	-
Total	**7**	**100**	**4**	**104**	**51**	**9**	**60**	**151**	**13**	**164**
Fisheries	-	-	-	-	-	-	-	-	-	-
Integrated fish farming	-	-	-	-	-	-	-	-	-	-
Carp breeding and hatchery management	-	-	-	-	-	-	-	-	-	-
Carp fry and fingerling rearing	1	10	2	12	1	0	1	11	2	13
Composite fish culture	1	11	1	12	8	5	13	19	6	25
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes	1	16	2	18	1	0	1	17	2	19
Portable plastic carp hatchery	-	-	-	-	-	-	-	-	-	-
Pen culture of fish and prawn	-	-	-	-	-	-	-	-	-	-
Shrimp farming	-	-	-	-	-	-	-	-	-	-
Edible oyster farming	-	-	-	-	-	-	-	-	-	-
Pearl culture	-	-	-	-	-	-	-	-	-	-
Fish processing and value addition	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total	**3**	**37**	**5**	**42**	**10**	**5**	**15**	**47**	**10**	**57**
Production of Input at site	-	-	-	-	-	-	-	-	-	-

Seed Production	1	4	0	4	19	5	24	23	5	28
Planting material production	-	-	-	-	-	-	-	-	-	-
Bio-agents production	-	-	-	-	-	-	-	-	-	-
Bio-pesticides production	-	-	-	-	-	-	-	-	-	-
Bio0fertilizer production	-	-	-	-	-	-	-	-	-	-
Vermi-compost production	-	-	-	-	-	-	-	-	-	-
Organic manures production	-	-	-	-	-	-	-	-	-	-
Production of fry and fingerlings	-	-	-	-	-	-	-	-	-	-
Production of Bee-colonies and wax sheets	-	-	-	-	-	-	-	-	-	-
Small tools and implements	-	-	-	-	-	-	-	-	-	-
Production of livestock feed and fodder	-	-	-	-	-	-	-	-	-	-
Production of Fish feed	-	-	-	-	-	-	-	-	-	-
Mushroom production	-	-	-	-	-	-	-	-	-	-
Apiculture	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total		4	0	4	19	5	24	23	5	28
Capacity Building and Group Dynamics	-	-	-	-	-	-	-	-	-	-
Leadership development	-	-	-	-	-	-	-	-	-	-
Group dynamics	-	-	-	-	-	-	-	-	-	-
Formation and Management of SHGs	1	9	0	9	0	0	0	9	0	9
Mobilization of social capital	-	-	-	-	-	-	-	-	-	-
Entrepreneurial development of farmers/youths	-	-	-	-	-	-	-	-	-	-
WTO and IPR issues	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total	1	9	0	9	0	0	0	9	0	9
Agro forestry	-	-	-	-	-	-	-	-	-	-
Production technologies	-	-	-	-	-	-	-	-	-	-
Nursery management	-	-	-	-	-	-	-	-	-	-
Integrated Farming Systems	-	-	-	-	-	-	-	-	-	-

Others	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
Grand Total	48	440	243	683	213	303	516	653	546	1199

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	-	-	-	-	-	-	-	-	-	-
Training and pruning of orchards	-	-	-	-	-	-	-	-	-	-
Protected cultivation of vegetable crops	-	-	-	-	-	-	-	-	-	-
Commercial fruit production	-	-	-	-	-	-	-	-	-	-
Integrated farming	-	-	-	-	-	-	-	-	-	-
Seed production	-	-	-	-	-	-	-	-	-	-
Production of organic inputs	-	-	-	-	-	-	-	-	-	-
Planting material production	-	-	-	-	-	-	-	-	-	-
Vermiculture	-	-	-	-	-	-	-	-	-	-
Mushroom Production	3	0	0	0	73	17	90	73	17	90
Bee0keeping	-	-	-	-	-	-	-	-	-	-
Sericulture	-	-	-	-	-	-	-	-	-	-
Repair and maintenance of farm machinery and implements	-	-	-	-	-	-	-	-	-	-
Value addition	1	7	1	8	16	1	17	23	2	25
Small scale processing	-	-	-	-	-	-	-	-	-	-
Post Harvest Technology	-	-	-	-	-	-	-	-	-	-
Tailoring and Stitching	-	-	-	-	-	-	-	-	-	-
Rural Crafts	-	-	-	-	-	-	-	-	-	-
Production of quality animal products	-	-	-	-	-	-	-	-	-	-

Dairying	-	-	-	-	-	-	-	-	-	-
Sheep and goat rearing	-	-	-	-	-	-	-	-	-	-
Quail farming	-	-	-	-	-	-	-	-	-	-
Piggery	-	-	-	-	-	-	-	-	-	-
Rabbit farming	-	-	-	-	-	-	-	-	-	-
Poultry production	-	-	-	-	-	-	-	-	-	-
Ornamental fisheries	2	0	0	0	38	12	50	38	12	50
Composite fish culture	-	-	-	-	-	-	-	-	-	-
Freshwater prawn culture	-	-	-	-	-	-	-	-	-	-
Shrimp farming	-	-	-	-	-	-	-	-	-	-
Pearl culture	-	-	-	-	-	-	-	-	-	-
Cold water fisheries	-	-	-	-	-	-	-	-	-	-
Fish harvest and processing technology	-	-	-	-	-	-	-	-	-	-
Fry and fingerling rearing	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Total	6	7	1	8	127	30	157	134	31	165

c) Training programmes for Extension Personnel including sponsored training programmes (OFF 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	-	-	-	-	-	-	-	-	-	-
Integrated Pest Management	-	-	-	-	-	-	-	-	-	-
Integrated Nutrient management	-	-	-	-	-	-	-	-	-	-
Rejuvenation of old orchards	-	-	-	-	-	-	-	-	-	-
Protected cultivation technology	-	-	-	-	-	-	-	-	-	-
Formation and Management of SHGs	-	-	-	-	-	-	-	-	-	-
Grading and marketing of produce	-	-	-	-	-	-	-	-	-	-
Group Dynamics and farmers organization	-	-	-	-	-	-	-	-	-	-
Information networking among farmers	-	-	-	-	-	-	-	-	-	-
Capacity building for ICT application	-	-	-	-	-	-	-	-	-	-
Care and maintenance of farm machinery and implements	-	-	-	-	-	-	-	-	-	-
WTO and IPR issues	-	-	-	-	-	-	-	-	-	-
Management in farm animals	-	-	-	-	-	-	-	-	-	-
Livestock feed and fodder production	-	-	-	-	-	-	-	-	-	-
Household food security	-	-	-	-	-	-	-	-	-	-
Seed production	-	-	-	-	-	-	-	-	-	-
Women and Child care	-	-	-	-	-	-	-	-	-	-
Low cost and nutrient efficient diet designing	-	-	-	-	-	-	-	-	-	-
Production and use of organic inputs	-	-	-	-	-	-	-	-	-	-
Gender mainstreaming through SHGs	-	-	-	-	-	-	-	-	-	-
Others (Bee Keeping)	-	-	-	-	-	-	-	-	-	-
TOTAL	-	-	-	-	-	-	-	-	-	-

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	5	66	25	91	20	8	28	86	33	119
Weed Management	-	-	-	-	-	-	-	-	-	-
Resource Conservation Technologies	-	-	-	-	-	-	-	-	-	-
Cropping Systems	4	49	16	65	33	7	40	82	23	105
Crop Diversification	2	23	2	25	15	8	23	38	10	48
Integrated Farming	3	71	6	77	20	0	20	91	6	97
Micro irrigation/irrigation	-	-	-	-	-	-	-	-	-	-
Seed production	1	11	0	11	7	0	7	18	0	18
Nursery management	1	27	26	53	0	11	11	27	37	64
Integrated Crop Management	-	-	-	-	-	-	-	-	-	-
Fodder production	2	11	0	11	0	33	33	11	33	33
Soil & water conservation	-	-	-	-	-	-	-	-	-	-
Integrated nutrient Management	-	-	-	-	-	-	-	-	-	-
Production of organic inputs	2	15	17	32	19	8	27	34	25	59
Others	-	-	-	-	-	-	-	-	-	-
Total	**20**	**273**	**92**	**365**	**114**	**75**	**189**	**387**	**167**	**543**
Horticulture	-	-	-	-	-	-	-	-	-	-
a) Vegetable Crops	-	-	-	-	-	-	-	-	-	-
Production of low volume and high value crops	-	-	-	-	-	-	-	-	-	-

Off-season vegetables	-	-	-	-	-	-	-	-	-	-
Nursery raising	2	1	12	13	2	19	21	3	31	34
Exotic vegetables	-	-	-	-	-	-	-	-	-	-
Export potential vegetables	-	-	-	-	-	-	-	-	-	-
Grading and standardization	-	-	-	-	-	-	-	-	-	-
Protective cultivation	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total (a)	2	1	12	13	2	19	21	3	31	34
b) Fruits	-	-	-	-	-	-	-	-	-	-
Training and Pruning	-	-	-	-	-	-	-	-	-	-
Layout and Management of Orchards	-	-	-	-	-	-	-	-	-	-
Cultivation of Fruit	-	-	-	-	-	-	-	-	-	-
Management of young plants/orchards	1	1	0	1	16	8	14	7	8	15
Rejuvenation of old orchards	-	-	-	-	-	-	-	-	-	-
Export potential fruits	-	-	-	-	-	-	-	-	-	-
Micro irrigation systems of orchards	-	-	-	-	-	-	-	-	-	-
Plant propagation techniques	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total (b)	1	1	0	1	16	8	14	7	8	15
c) Ornamental Plants	-	-	-	-	-	-	-	-	-	-
Nursery Management	-	-	-	-	-	-	-	-	-	-
Management of potted plants	-	-	-	-	-	-	-	-	-	-
Export potential of ornamental plants	-	-	-	-	-	-	-	-	-	-
Propagation techniques of Ornamental Plants	2	11	19	30	12	23	35	23	42	65
Others	-	-	-	-	-	-	-	-	-	-
Total (c)	2	11	19	30	12	23	35	23	42	65
d) Plantation crops	-	-	-	-	-	-	-	-	-	-
Production and Management technology	-	-	-	-	-	-	-	-	-	-
Processing and value addition	-	-	-	-	-	-	-	-	-	-

Others	-	-	-	-	-	-	-	-	-	-
Total (d)	-	-	-	-	-	-	-	-	-	-
e) Tuber crops	-	-	-	-	-	-	-	-	-	-
Production and Management technology	1	14	3	17	1	1	2	15	4	19
Processing and value addition	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total (e)	1	14	3	17	1	1	2	15	4	19
f) Spices	-	-	-	-	-	-	-	-	-	-
Production and Management technology	-	-	-	-	-	-	-	-	-	-
Processing and value addition	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total (f)	-	-	-	-	-	-	-	-	-	-
g) Medicinal and Aromatic Plants	-	-	-	-	-	-	-	-	-	-
Nursery management	-	-	-	-	-	-	-	-	-	-
Production and management technology	-	-	-	-	-	-	-	-	-	-
Post harvest technology and value addition	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total (g)	-	-	-	-	-	-	-	-	-	-
Total(a-g)	**6**	**27**	**34**	**61**	**31**	**51**	**72**	**48**	**85**	**133**
Soil Health and Fertility Management	-	-	-	-	-	-	-	-	-	-
Soil fertility management	1	7	0	7	14	0	14	21	0	21
Integrated water management	-	-	-	-	-	-	-	-	-	-
Integrated Nutrient Management	-	-	-	-	-	-	-	-	-	-
Production and use of organic inputs	1	3	0	3	27	0	27	30	0	30
Management of Problematic soils	-	-	-	-	-	-	-	-	-	-
Micro nutrient deficiency in crops	-	-	-	-	-	-	-	-	-	-
Nutrient Use Efficiency	1	17	0	17	2	0	2	19	0	19
Balance Use of fertilizer	-	-	-	-	-	-	-	-	-	-
Soil & water testing	-	-	-	-	-	-	-	-	-	-

Others	-	-	-	-	-	-	-	-	-	-
Total	**3**	**27**	**0**	**27**	**43**	**0**	**43**	**70**	**0**	**70**
Livestock Production and Management	-	-	-	-	-	-	-	-	-	-
Dairy Management	1	6	0	6	7	0	7	13	0	13
Poultry Management	-	-	-	-	-	-	-	-	-	-
Piggery Management	-	-	-	-	-	-	-	-	-	-
Rabbit Management	-	-	-	-	-	-	-	-	-	-
Animal Nutrition Management	-	-	-	-	-	-	-	-	-	-
Disease Management	-	-	-	-	-	-	-	-	-	-
Feed & fodder technologies	-	-	-	-	-	-	-	-	-	-
Production of quality animal products	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total	1	6	0	6	7	0	7	13	0	13
Home Science/Women empowerment	-	-	-	-	-	-	-	-	-	-
Household food security by kitchen gardening and nutrition gardening	2	7	18	25	3	15	18	10	33	43
Design and development of low/minimum cost diet	2	0	26	26	0	40	40	0	66	66
Designing and development for high nutrient efficiency diet	3	0	19	19	0	66	66	0	85	85
Minimization of nutrient loss in processing	1	0	0	0	0	29	29	0	29	29
Processing & cooking	-	-	-	-	-	-	-	-	-	-
Gender mainstreaming through SHGs	-	-	-	-	-	-	-	-	-	-
Storage loss minimization techniques	-	-	-	-	-	-	-	-	-	-
Value addition	2	0	25	25	0	19	19	0	44	44
Income generation activities for empowerment of rural women	1	0	4	4	2	21	23	2	25	27
Location specific drudgery reduction technologies	1	0	25	25	0	2	2	0	27	27
Rural Crafts	-	-	-	-	-	-	-	-	-	-
Women and child care	-	-	-	-	-	-	-	-	-	-

Others	-	-	-	-	-	-	-	-	-	-
Total	**12**	**7**	**117**	**124**	**5**	**192**	**197**	**12**	**12**	**7**
Agril. Engineering	-	-	-	-	-	-	-	-	-	-
Farm machinery & its maintenance	-	-	-	-	-	-	-	-	-	-
Installation and maintenance of micro irrigation systems	-	-	-	-	-	-	-	-	-	-
Use of Plastics in farming practices	-	-	-	-	-	-	-	-	-	-
Production of small tools and implements	-	-	-	-	-	-	-	-	-	-
Repair and maintenance of farm machinery and implements	-	-	-	-	-	-	-	-	-	-
Small scale processing and value addition	-	-	-	-	-	-	-	-	-	-
Post Harvest Technology	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
Plant Protection	-	-	-	-	-	-	-	-	-	-
Integrated Pest Management	3	35	1	36	21	5	26	56	6	62
Integrated Disease Management	4	45	1	46	43	18	61	88	19	107
Bio-control of pests and diseases	1	3	0	3	27	0	27	30	0	30
Production of bio control agents and bio pesticides	1	28	2	30	0	0	0	28	2	30
Others	-	-	-	-	-	-	-	-	-	-
Total	**9**	**111**	**4**	**115**	**91**	**23**	**114**	**202**	**27**	**229**
Fisheries										
Integrated fish farming	2	1	6	7	9	38	47	10	44	54
Carp breeding and hatchery management	1	13	0	13	2	0	2	15	0	15
Carp fry and fingerling rearing	1	10	2	12	1	0	1	11	2	13
Composite fish culture	1	11	1	12	8	5	13	19	6	25
Hatchery management and culture of freshwater prawn	-	-	-	-	-	-	-	-	-	-
Breeding and culture of ornamental fishes	1	16	2	18	1	0	1	17	2	19
Portable plastic carp hatchery	-	-	-	-	-	-	-	-	-	-

Pen culture of fish and prawn	-	-	-	-	-	-	-	-	-	-
Shrimp farming	-	-	-	-	-	-	-	-	-	-
Edible oyster farming	-	-	-	-	-	-	-	-	-	-
Pearl culture	-	-	-	-	-	-	-	-	-	-
Fish processing and value addition	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total	**6**	**51**	**11**	**62**	**21**	**43**	**64**	**72**	**54**	**126**
Production of Input at site	-	-	-	-	-	-	-	-	-	-
Seed Production	1	4	0	4	19	5	24	23	5	28
Planting material production	-	-	-	-	-	-	-	-	-	-
Bio0agents production	-	-	-	-	-	-	-	-	-	-
Bio0pesticides production	-	-	-	-	-	-	-	-	-	-
Bio0fertilizer production	-	-	-	-	-	-	-	-	-	-
Vermi0compost production	-	-	-	-	-	-	-	-	-	-
Organic manures production	-	-	-	-	-	-	-	-	-	-
Production of fry and fingerlings	-	-	-	-	-	-	-	-	-	-
Production of Bee0colonies and wax sheets	-	-	-	-	-	-	-	-	-	-
Small tools and implements	-	-	-	-	-	-	-	-	-	-
Production of livestock feed and fodder	-	-	-	-	-	-	-	-	-	-
Production of Fish feed	-	-	-	-	-	-	-	-	-	-
Mushroom production	-	-	-	-	-	-	-	-	-	-
Apiculture	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total	1	4	0	4	19	5	24	23	5	28
Capacity Building and Group Dynamics	-	-	-	-	-	-	-	-	-	-
Leadership development	-	-	-	-	-	-	-	-	-	-
Group dynamics	-	-	-	-	-	-	-	-	-	-
Formation and Management of SHGs	2	12	0	12	2	0	2	14	0	14
Mobilization of social capital	-	-	-	-	-	-	-	-	-	-

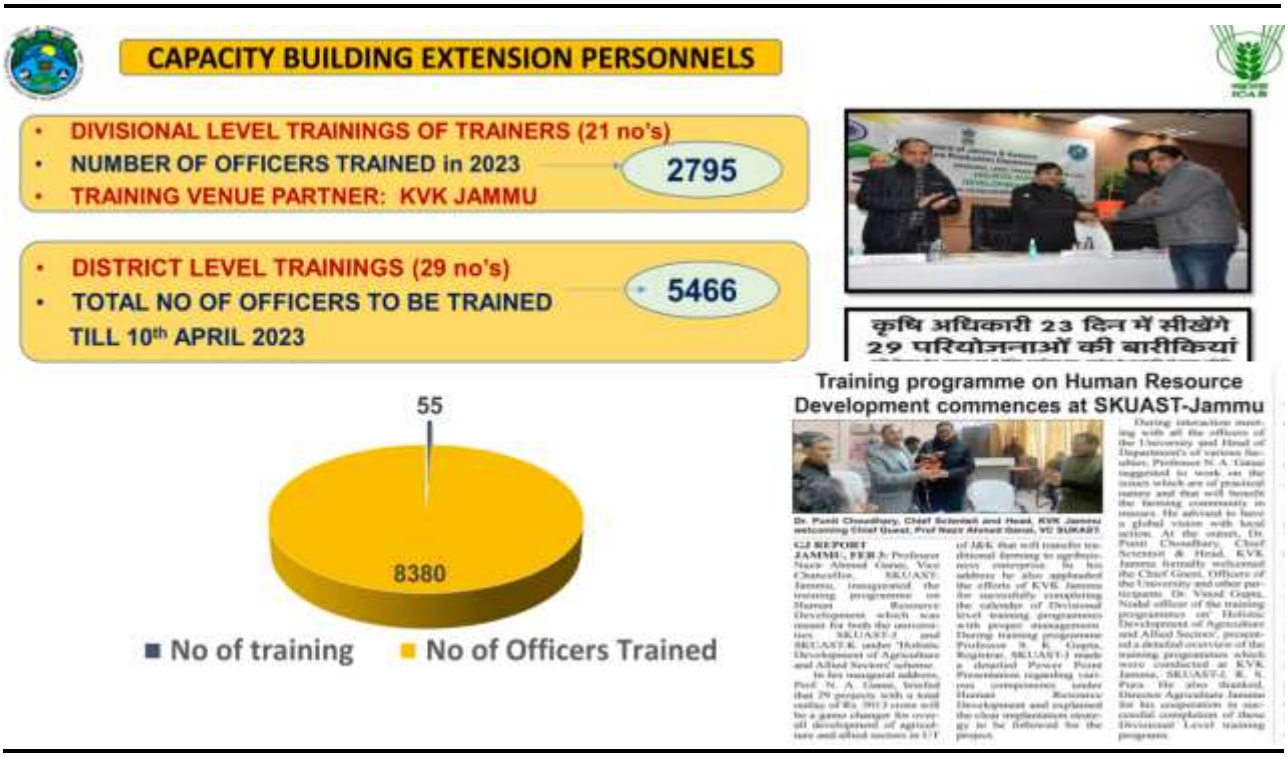
Entrepreneurial development of farmers/youths	2	75	15	90	13	11	24	88	26	114
WTO and IPR issues	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total	**4**	**87**	**15**	**102**	**15**	**11**	**26**	**102**	**4**	**87**
Agro forestry	-	-	-	-	-	-	-	-	-	-
Production technologies	-	-	-	-	-	-	-	-	-	-
Nursery management	-	-	-	-	-	-	-	-	-	-
Integrated Farming Systems	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
Grand Total	62	593	273	866	336	400	736	929	673	1602
b) Training for Rural Youths including sponsored training programmes										
Area of training	**No. of Courses**	**No. of Participants**								
		General			**SC/ST**			**Grand Total**		
		Male	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
Nursery Management of Horticulture crops	1	0	0	0	17	0	17	17	0	17
Training and pruning of orchards	-	-	-	-	-	-	-	-	-	-
Protected cultivation of vegetable crops	-	-	-	-	-	-	-	-	-	-
Commercial fruit production	-	-	-	-	-	-	-	-	-	-
Integrated farming	3	95	16	111	20	4	24	115	20	135
Seed production	-	-	-	-	-	-	-	-	-	-
Production of organic inputs	-	-	-	-	-	-	-	-	-	-
Planting material production	1	26	0	26	0	0	0	26	0	26
Vermi0culture	-	-	-	-	-	-	-	-	-	-

Mushroom Production	4	9	5	14	85	55	140	94	60	154
Bee0keeping	-	-	-	-	-	-	-	-	-	-
Sericulture	-	-	-	-	-	-	-	-	-	-
Repair and maintenance of farm machinery and implements	-	-	-	-	-	-	-	-	-	-
Value addition	1	7	1	8	16	1	17	23	2	25
Small scale processing	-	-	-	-	-	-	-	-	-	-
Post Harvest Technology	-	-	-	-	-	-	-	-	-	-
Tailoring and Stitching	-	-	-	-	-	-	-	-	-	-
Rural Crafts	-	-	-	-	-	-	-	-	-	-
Production of quality animal products	1	0	30	30	0	5	5	0	35	35
Dairying	-	-	-	-	-	-	-	-	-	-
Sheep and goat rearing	-	-	-	-	-	-	-	-	-	-
Quail farming	-	-	-	-	-	-	-	-	-	-
Piggery	-	-	-	-	-	-	-	-	-	-
Rabbit farming	-	-	-	-	-	-	-	-	-	-
Poultry production	-	-	-	-	-	-	-	-	-	-
Ornamental fisheries	3	11	0	11	65	15	80	76	15	91
Composite fish culture	-	-	-	-	-	-	-	-	-	-
Freshwater prawn culture	-	-	-	-	-	-	-	-	-	-
Shrimp farming	-	-	-	-	-	-	-	-	-	-
Pearl culture	-	-	-	-	-	-	-	-	-	-
Cold water fisheries	-	-	-	-	-	-	-	-	-	-
Fish harvest and processing technology	-	-	-	-	-	-	-	-	-	-
Fry and fingerling rearing	-	-	-	-	-	-	-	-	-	-
Other	1	8	0	8	25	17	42	33	17	50
Total	15	156	52	208	228	97	325	384	149	533

c) Training programmes for Extension Personnel including sponsored training programmes

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	9	1298	76	1374	57	4	61	1355	80	1435
Integrated Pest Management	2	443	23	466	12	4	16	455	29	484
Integrated Nutrient management	1	2	0	2	244	15	259	246	15	261
Rejuvenation of old orchards	3	377	23	400	18	2	20	395	25	420
Protected cultivation technology	3	692	45	737	37	4	41	729	49	778
Formation and Management of SHGs	2	465	33	498	18	3	21	483	36	519
Grading and marketing of produce	3	348	18	366	12	2	14	360	20	380
Group Dynamics and farmers organization	1	159	3	162	6	0	6	165	3	168
Information networking among farmers	2	271	5	276	8	0	8	279	5	284
Capacity building for ICT application	1	37	4	41	0	0	0	37	4	41
Care and maintenance of farm machinery and implements	3	524	21	545	10	1	11	534	22	556
WTO and IPR issues	-	-	-	-	-	-	-	-	-	-
Management in farm animals	2	121	25	146	0	0	0	121	25	146
Livestock feed and fodder production	6	562	38	600	49	3	52	611	41	652
Household food security	-	-	-	-	-	-	-	-	-	-

Seed production	3	383	25	408	36	2	38	419	27	446
Women and Child care	-	-	-	-	-	-	-	-	-	-
Low cost and nutrient efficient diet designing	3	332	31	363	8	10	18	340	41	381
Production and use of organic inputs	-	-	-	-	-	-	-	-	-	-
Gender mainstreaming through SHGs	5	491	44	535	363	12	375	854	56	910
Others (Bee Keeping)	2	311	18	329	7	0	7	318	18	336
Total	**51**	**6816**	**432**	**7248**	**885**	**62**	**947**	**7701**	**496**	**8196**



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	4	154	27
Nursery management	Nursery raising as an enterprise	1	17	2
Integrated Nutrient Management	INM for Input Dealers	3	135	18
Agroforestry	Medicinal and aromatic plants	1	26	5
Home Science	Milk by products and post-harvest management	1	37	7
Value addition	Processing and value addition of fruits, vegetables and milk	1	25	5
Fisheries	Fabrication of aquarium and its maintenance	1	42	3

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.

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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 Mission 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 handson 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.

(E) Sponsored Training Programmes conducted by KVK

Sl. No	Date	Title	Discipline	Thematic area	Duration (days)	Client (PF/RY/EF)	No. of courses	No. of Participants									Sponsoring Agency	Amount of fund received (Rs.)
								Others			SC/ST			Total				
								Male	Female	Total	Male	Female	Total	Male	Female	Total		
1	26-04 23	Awareness programme on Nano Fertilizer	Soil health and fertility	Soil health	1 day	Farmers	1	8	0	8	28	14	42	36	14	50	IFFCO	-
2	18-05-23	Awareness programme on Schemes of NHB	Horticulture development	Horticulture	1	Farmers	1	75	2	77	13	0	13	88	2	90	NHB	
3	19-07-23	Workshop on Schemes of HADP	Promotion of Agriculture in J& K	Productivity enhancement	1	Farmers	1	0	3	3	1	17	18	1	20	21	Department of Agriculture	-

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

Sl. No	Date	Title	Discipline	Thematic area	Duration (days)	Client (PF/RY/EF)	No. of courses	No. of Participants								
								Others			SC/ST			Total		
								Male	Female	Total	Male	Female	Total	Male	Female	Total
1																
Total																

6.EXTENSION ACTIVITIES (INCLUDING ACTIVITIES OF FLD PROGRAMMES) JAN-DEC 2023

Nature of Activity	No. of Activities	SC/ST (Farmers)			OBC/Other (Farmers)			Extension Officials			Grand Total		
		(I)			(II)			(III)			(I+II+III)		
		Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Field Day	**5**	**32**	**27**	**59**	**8**	**22**	**30**	**13**	**5**	**18**	**53**	**54**	**107**
Kisan Mela	5	997	239	1236	0	0	0	65	11	76	1054	258	1312
Kisan Mela (Virtual)	0	0	0	0	0	0	0	0	0	0	0	0	0
Kisan Ghosthi	11	99	70	169	181	52	233	20	22	44	300	144	444
Exhibition	9	411	110	508	9315	3377	12692	547	149	696	10273	3636	13909
Film Show	8	232	298	517	381	29	410	226	59	285	839	386	1225
Method Demonstrations	22	322	446	768	296	217	511	11	9	20	664	636	1300
Farmers Seminar	4	226	43	269	40	10	50	28	6	29	294	59	353
Workshop	2	89	4	80	322	7	329	67	7	74	478	18	496
Group meetings	5	12	0	12	13	0	12	114	24	138	139	24	163
Lectures delivered as resource persons	252	61	60	121	35173	6048	41221	1016	818	1836	36250	6926	43176
Newspaper coverage	59												
Radio talks	2												
TV talks	0												
Popular articles	5												
Extension Literature	4				35000	6000	41000	1000	799	1799	36000	6799	42799
Advisory Services													
Scientific visit to farmers field	37	300	196	496							300	196	496
Farmers visit to KVK	3488	1133	1121	2234	775	208	981	214	35	249	2125	1363	3488
Diagnostic visits	10	45	20	65	33	19	52	26	4	30	104	43	147
Exposure visits	9	32	41	73	65	16	81	18	2	20	115	59	174
Ex trainees Sammelan	4	45	40	85	89	54	143	34	11	45	168	105	273

Soil health Camp	3	594	158	752	0	0	0	46	7	53	640	165	805
Animal Health Camp	2	403	81	484	0	0	0	19	4	23	414	93	507
Agri mobile clinic													
Soil test campaigns													
Farm Science Club Conveners meet													
Self Help Group Conveners meetings	3	82	230	312	13	0	12	48	39	87	143	269	412
Mahila Mandals Conveners meetings													
Viksat Bharat Sankalp Yatra	**33**	**0**	**0**	**0**	**35000**	**6000**	**41000**	**1000**	**799**	**1799**	**36000**	**6799**	**42799**
Kisan Sampark Abhiyan	9	61	60	121	173	48	221	16	19	37	250	127	377
World Ayush day	1	0	4	4	0	8	8	14	4	18	14	16	30
World envionment day	1	0	0	0	50	19	69	5	4	9	55	23	78
World Soil day	2	45	36	81	39	27	66	15	3	18	99	66	165

VIKSIT BHARAT SANKALP YATRA
DRONE DEMONSTRATIONS
Total Programmes
No of Panchayat Cover
Total Farmers registered
No of lectures delivered
206
215
231
42799
KISAN SAMPARK ABHIYAN (HADP)
FARMERS TRAINING (HADP)
PARTHENIUM AWARENESS
SWACHHTA PROGRAMMES

पी एम किसान सम्मान सम्मेलन
कृषि विज्ञान केंद्र: जम्मू

KRISHI VIGYAN KENDRA
WELCOMES YOU

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	10000	104	-	-	48	-	48	6	-

6.C. DETAILS OF TECHNOLOGY WEEK CELEBRATIONS during 2023 (January-December)

No. of Technology week celebrated	Types of Activities	No. of Activities	Number of Participants		
			M	F	Total
1.	Gosthies	9	364	101	465
2.	Lectures organized	36	-	-	-
3.	Exhibition	1	86	33	119
4.	Film show	1	86	33	119
5.	Fair	1	86	33	119
6.	Farm Visit				
7.	Diagnostic Practical				
8.	Distribution of Literature (No.)	12	364	101	465
9.	Distribution of Seed (q)	2	86	33	119
	Total number of farmers visited the		364	101	465

	technology week				

Extension Activities:

- **CAPACITY BUILDING OF LINE DEPARTMENTS (April 2023)**

Topic	Participants
District Level Trg – Food processing & development of clusters for specific products of J&K	168
District Level Trg - Innovative Extension Approaches for promoting Agriculture	168
District Level Trg – Poultry Development	95

Farmers Training Programs 01/04/2023 to 30/06/2023

Farmer Training Programs	Date	Participants
Nursery management in vegetable crops & Basmati	11-05-2023	44
Management of stored grain	26-05-2023	22
Scientific cultivation of Maize	25-05-2023	23
Ornamental fish breeding & Culture	25-04-2023	19
Management of seed & soil borne diseases of cereals & Millets	04-05-2023	28
Nursery Management in vegetable crops	24-05-2023	28
Prevention of malnutrition in women & adults through dietary modification	03-05-2023	34
Carp Breeding Techniques	13-06-2023	15
Empowering Farm Women through Agro Based Entrepreneurial activities	27-04-2023	27
Schemes for Farmer Producer Organisation	25-04-2023	9

- **Celebrating International year of Millets**

Activity	Date	No of participants	Venue
Awareness prog for youth on promotion of Millets	13-04-23	70	KVK, Jammu
Awareness cum promotion of Millets for FPO members	25-04-23	11	Sungal, Akhnoor
Awareness program on promotion and production of Millets.	26-04-23	50	KVK, Jammu
Farmer training prog on Prevention of Malnutrition through Introduction of Millets in daily diet	03-05-23	34	Koulan R.S.Pura
Seed and Soil borne diseases of Cereals and Millets	04-05-23	31	Bhalwal
Demonstration on little millet, proso millet, Ragi,Sourgham millet (4 millets)	10-05-23	15	KVK Farm
Demonstration on Farmers Field	15-06-23	4	Akhnoor
Exposure Visits	06-06-23	30	KVK,Jammu
Exposure Visits	13-06-23	30	KVK,Jammu

FLDs distribution of Maize (10 ha area in Kharif 2023)

- **Training programme on Nano Fertilizers (Nano DAP AND Nano Urea) sponsored by IFFCO Jammu 26th April 2023**

KVK Jammu in collaboration with IFFCO Jammu organised one day training programme on Nano Fertilizers (Nano DAP AND Nano Urea) which more than 60 farmers/farmwomen participated. Nano Urea was also distributed among the farmers for promotion of nano fertilizer among the farming community.

- **Awareness Programme on NHB Schemes 18th May 2023**

National Horticulture Board, Ministry of Agriculture and Farmers Welfare, Govt. of India and Krishi Vigyan Kendra, Jammu working organized a "One day Training / Awareness Programme on NHB Schemes." at conference hall of KVK, R.S. Pura in which more than 108 number of Progressive farmers, Panch, Sarpanches of District Jammu participated. Prof. S. K. Gupta, Director Extension, SKUAST-Jammu, was Chief Guest at this occasion. The programme was also attended by Dr. Desh Bir Singh, Former Director ICAR- CITH & NHB Nursery Expert, Sh. Sansar Ahmed, Deputy Director, National Horticulture Board, Jammu, Sh. Romesh Kumar, Lead District Manager, Jammu, Dr. J.L Sharma, Former Director Horticulture, NHB Consultant & Hon'ble Member of Kisan Advisory Board Jammu, Sd. Tajinder Singh, Hon'ble Member of Kisan Advisory Board, Jammu, Sh. Kulbhushan Khajuria, Hon'ble Member of Kisan Advisory Board, Jammu. Officers from Department of Horticulture, Department of Agriculture, Department of Horticulture Planning & Marketing, JKHPMC, Members of J&K Kisan Advisory Board, Lead Bank Manager, Horticulture Grower Associations, Progressive Horticulture Growers and Nurserymen.

- **World Environment Day on 5th June 2023**

KVK Jammu organized World Environment Day on 5th June 2023 under Plan of Action for Mission Life activities. During the celebration Ex-MLA Prof. Gharu Ram Bhagat inaugurated the plantation drive. The programme was celebrated in collaboration with Faculty of Veterinary Sciences and Animal Husbandry. In the programme total 69 participants participated including Dean Faculty of Veterinary Sciences Prof. M S Bhadwal and Dean Dairy Technology Prof. Jasvinder Singh Sudan. At the end all the participants took the pledge by reading it in Hindi. Some of the participants also had taken online pledge to make this event great success.

- **Certificate Course for Input Dealers 1-15th June 2023**

Krishi Vigyan Kendra, Jammu successfully conducted 15 days' certificate course on "Integrated Nutrient Management (INM)" for Input dealers. In this certificate course Sixty number of participant's rural youth, progressive farmers, members of co-operative societies and FPO's from the Jammu, Samba, Kathua, Udhampur, Poonch, Rajouri, Kishtwar, Doda and Ramban districts of Jammu Division participated overwhelmingly.

Topic	Participants
Batch A- 15 Days Certificate Course on "Integrated Nutrient Management" 2023-24	29
Batch B- 15 Days Certificate Course on "Integrated Nutrient Management" 2023-24	30

- **KVK Jammu of SKUAST- Jammu awarded best KVK award among North Zone. (26-28th June 2023)**

KVK Jammu awarded BEST KVK among 72 KVKs of North states and Union Territories viz., Himachal Pradesh, Panjab, Uttarakhand, Jammu and Kashmir and UT of Ladakh for their functioning and service to the farming community. The award was confirmed by Indian Council of Agricultural Research (ICAR), Agriculture Technology Application Research Institute (ATARI Zone 1PAU Ludhiana) for its initiative viz., farmers outreach, administrative capabilities, linkages with line departments, handholding of FPO's, Farmer's lounge, processing and branding of farmers produce along with large scale recommendations through OFT's, Frontline demonstrations and capacity buildings of rural youths and progressive farmers. During the workshop Dr. Vishal Mahajan of KVK Kathua was awarded for best presentation among KVK'S of UT of Jammu and Kashmir during the zonal workshop.

Glimpses of Zonal Workshop of KVKs 2023

- **Millets 2023**

In India, millets were traditionally consumed, but due to the push given to food security through Green Revolution, millets were rendered as ‘orphan crops’ – less consumed and almost forgotten. Not only has the consumption of millets declined, but the area under production has been replaced with commercial crops, oilseeds, pulses and maize. These commercial crops are profitable, and their production is supported by several policies through subsidised inputs, incentivised procurement and inclusion in the Public Distribution System. Against this backdrop, the Government of India realized the importance of millets in building nutritional security in the country and made several efforts such as gazetting millets as Nutri-Cereals, the celebration of the National Year of Millets in 2018, several small-scale policies on millets and with the aim to create awareness and increase production and

consumption of Millets, UN, at behest of the Govt. of India declared 2023- The International year of Millets.

In addition to a plethora of health benefits, Millets are also good for environment with low water and input requirement and may provide income and livelihood for farmers. To commemorate this our KVK hosted various interactive activities around Millets to raise awareness about the the importance of millets and to promote production, consumption and value addition of millet based products. The objective of KVK Jammu for the year 2023 was to conduct Millet centric activities including training of farmers in production and cultivation practices, awareness campaigns, workshops, distribution of promotional materials, exposure visits, Recipe Demonstrations on value added products from locally available Millets for all age groups etc.

KVK initiated popularization of Millet crops by laying demonstrations at KVK Farm on different Millet varieties such as-

1.	Barnyard Millet	DHMB-93.3
2.	Little Millet	CGK-1
3.	Bajra	448.BIO
4.	Kodo Millet	RK-390-25

In addition to this Four large scale programs on Processing and Value Addition were organised On and Off-Campus. Three Recipe contests were organised with Rural Women in Millet Growing areas of Akhnoor tehsil namely Sungal, Ambaran and Kalith. During the Pre-Event sessions, women were made aware about need and importance of reviving and including millets in their diet. In this process, in all three villages, farm families were motivated enough to recall their traditional and healthy food recipes in consultation with the village elders, social and religious groups, anganwadi workers, SHG members etc. These Pre-Event sessions motivated a large number of women and girls to activate participate in recipe competitions as a result of which a large number of Value-Added products recopies from Pearl Millet (Bajra) Sorghum (Jowar), Barnyard Millet (Sawa), Finger Millet (Ragi) etc. were showcased. In addition to these few nutritive recipies on processing and value addition of Millets were also demonstrated by experts from KVK in order to create awareness on health benefits, increase acceptability of millets and also to understand services rendered through local recipes in terms of conserving millet Bio-diversity.

In view of spreading further knowledge, promotion and inclusion and acceptance of these Millet products by younger population, KVK also featured traditional, innovative and contemporary Millet recipies in ready to consult MILLET RECIPE BOOKLET in Hindi language highlighting the

incredible versatility of these ancient grains ranging from Starters to main course, desserts and snacks and offering culinary inspiration for the endless possibilities that millets can offer.

ACTION PLAN UNDER MILLETS- 2023

Farmers Trainings

S.No	Title of Activity	Date	No. of Partic.	Venue
1.	Processing and value addition of Millets	17-02-23	33	KVK Jammu
2.	Farmer training prog on Prevention of Malnutrition through Introduction Of Millets in daily diet	03-05-23	34	Koulan, R.S.Pura
3.	Seed and Soil borne diseases of Cereals and Millets	04-05-23	31	Kangar, Bhalwal
4.	Promotion of Millets and their value added products for infants and vulnerable groups.(ICDS)	30-10-23	22	Ambaran, Akhnoor
5.	Awareness program on Nutritional and Nutraceutical Potential of Millets Krishi sakhis/UMEED SHG	25-07-23	18	Sungal, Akhnoor
6.	Insect ,Pest and diseases of Millet crops	12-07-23	26	Sohal,Akhnoor/ Mairan Mandra
7.	Enhancing nutritive value of Cereals, pulses and Millets	18-07-23	30	KVK, Jammu
8.	Role and Introduction of Millets in Diet for Dietary supplementation especially micronutrients	05-09-23	27	Akalpur, Marh
9.	Nutritional use of millets for feeding vulnerable groups	06-09-23	39	Karwanda

Extension Activities

S.No	Title of Activity	Date	No. of Partic.	Venue
	Awareness programs			
1.	Awareness prog cum Recipe competition on Millets	06-03-23	300	KVK Jammu
2.	Awareness prog for youth on promotion of Millets	13-04-23	70	KVK Jammu
3.	Awareness cum promotion of Millets for FPO members	25-04-23	11	Sungal,Akhnoor
4.	Awareness program on promotion and production of Millets. (IFFCO)	26-04-23	50	KVK,Jammu
5.	Recipe Contest on Millets	24-07-23	27	Sungal , Akhnoor
6.	Recipe Competition cum Demonstration on culinary	30-10-23	90	Khour/Akhnoor/

	preparations from Millets			
7.	Millets Recipe contest cum awareness program for Farm women, Anganwadi staff and UMEED SHGs	09-11-23	64	Kalith, Khour
Exposure Visits				
1.	Exposure Visits	06-06-23	30	KVK, Jammu
2.	Exposure Visits	13-06-23	30	KVK, Jammu
Radio Talk				
1.	Radio Talk in Dogri, "Swasth ahar da Adhar Millets"	04-09-23	-	Prasar Bharti, AIR Ghar Sansar
Demonstrations				
1.	Demonstration on little millet, kodo millet, barnyard, bajra millet (4 millets)	10-05-23	15	KVK Farm
2.	Demonstration on Farmers Field	15-06-23	4 (Demonst.)	Akhnoor

Glimpses of training programme under Millets 2023

- **Swacchtta Report 2023**

Swacch Bharat mission was started in India in, 2014 as a tribute to Mahatma Gandhi and is a massive Mass Movement with encouragement from PM to fulfil Mahatma Gandhi's vision of Clean India. KVK, Jammu is closely engaged in activities related to General Cleaning of Campus, Swacchta workshops, Digitalization of Records, curbing single use plastics, conducting awareness programs on swacchta and best use of Agri- waste for sustainable development. However in 2023 also swacchta awareness programs, lectures, campaigns etc. were conducted and entire team of KVK, voluntarily participated in Swacchta Pakhwaras observed all over country along with administration of swacchta pledge to remain commited towards cleanliness and devote time for maintaining cleanliness both at office, farm and entire District to its fullest capacity.

- **KVK Jammu organized series of programme under SWACCHTA PAKHWARA (2023) Jan 2023 to Dec 2023**

Glimpses of programmes conducted during Swachhta Pakhwaram 2023

S.No	Activity	Title	Date	No. of Partic.	Venue
1.	Lecture	Role of Cleanliness in Poultry farming	09-01-23	30	KVK, Jammu
2.	Awareness program	Vermicomposting and agri-waste	30-01-23	32	KVK, Jammu
3.	Lecture	Discouraging use of plastic for preservation, storage and processing	02-02-23	15	KVK, Jammu
4.	Awareness program	Agriculture waste management	15-02-23	21	KVK, Jammu
5.	Method Demonstratio n	Vermicomposting for organic cultivation and sustainability	17-02-23	23	KVK, Jammu
6.	Awareness program	Agriculture waste management	19-02-23	80	Jind Lohar
7.	Awareness program	Discouraging single use plastic in Home and farm	28-02-23	315	Laswara
8.	Awareness program	Livelihood opportunities and organic waste management through Vermicomposting	03-03-23	300	Harsha Dabbar
9.	Swacctta Campaign	Swacchta maintenance at Panchyat ghar and Govt. School	09-03-23	200	Chak Avtara
10.	Awareness program	For dairy managers to reduce disease and infections	15-03-23	13	KVK, Jammu
11.	Swacchhta Campaign	Cleanliness drive	20-03-23	25	Assarwan
12.	Awareness program	Composting and Bio-Gas production for clean Environment	05-06-23	23	KVK, Jammu
13.	Swacchhta Campaign	Cleanliness drive at KVK, Farm and Lawns	17-10-23	12	KVK, Jammu
14.	Swacchta Abhiyan	Cleanliness drive at KVK, Office.	25-10-23	9	KVK, Jammu
15	Lecture Delivered	Role of cleanliness and sanitation in Home and farm for prevention of diseases and infections for women farmers	30-10-23	75	Ambaran Akhnoor
16.	Lecture Delivered	Promotion of personal, Domestic, environmental and food hygiene and sanitation to prevent diseases and infections	09-11-23	74	**Kalith**

➢ World Ayurveda Day 2023

Sher-e-Kashmir University of Agricultural Sciences and Technology of Jammu (SKUAST-Jammu) working under the dynamic leadership of Prof. B. N. Tripathi, Hon'ble Vice Chancellor celebrated National Ayurveda Day -2023 at Krishi Vigyan Kendera, Jammu on 10th November, 2023. The focal theme for Ayurveda day is 'Ayurveda for One Health' with Tag line 'Ayurveda for everyone on every day' i.e., 'Har din har Kisi ke liye Ayurveda' focusing on human-animal-plant-environment interface." Students from Woman College Parade, Jammu, farmers from districts of Jammu, Kathua, Samba and Udhampur, scientific and non-scientific staff of KVK participated in the celebration. A total of 90 farmers and students were participated during the Ayurveda day.

SKUAST-J celebrates "Ayurveda Day-2023"

GJ REPORT

JAMMU, NOV 10: Sher-e-Kashmir University of Agricultural Sciences and Technology of Jammu (SKUAST-Jammu) working under the dynamic leadership of Prof. B. N. Tripathi, Vice Chancellor celebrated National Ayurveda Day - 2023 at Krishi Vigyan Kendera, Jammu.

The focal theme for Ayurveda Day is 'Ayurveda for One Health' with Tag line 'Ayurveda for everyone on every day' i.e., 'Har din har kisi ke liye Ayurveda' focusing on human-animal-plant-environment interface."

Students from Woman College Parade, Jammu, farmers from districts of Jammu, Kathua, Samba and Udhampur, scientific and non-scientific staff of KVK participated in the celebration keeping in view the three main focal points of Ayurveda Day- 'ayurveda for students', 'ayurveda for farmers' and 'ayurveda for public health'. Dr. Punit Choudhary, Chief Scientist and Head, KVK, Jammu welcome the participants and given a detailed talk on use of botanicals and manures for enhancing production of food crops. He also highlighted the negative effects of chemical fertilizers and pesticides on plant and soil health. Dr. Lalit Mohan Gupta, Prof. & Head, Division of Forest Products & Utilization discussed the importance of this day and role of medicinal plants for human and animal health. He encouraged the students to take the medicinal plants as a skill course and to go for medicinal plants based start-ups so that they can provide employment to others too. Students and farmers were also given practical demonstration about the process of vermicompost preparation. Dr Sheetal Badyal presented the vote of thanks. Dr. Ravneet Kour, Dr. Prem, Dr Raju, Prof. Usha (Woman College, Parade, Jammu) and Prof. Bindu (Woman College Parade, Jammu) were also spoke during the occasion.

➢ World Soil Day (5th Dec. 2023)

Krishi Vigyan Kendra, Jammu, organised World Soil Day in Collaboration with IFFCO Jammu at KVK Jammu on 5th Dec, 2023 to sensitize the stakeholders and being observed across the country.

The programme was attended by Progressive farmers, including sarpanches, and panches. The program was organized in continuation to the various activities being undertaken by KVK Jammu for mass sensitization towards importance of Soil health Ecosystem.

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. सतवीर और साहिल शामिल थे। कार्यक्रम का समापन डॉ. रवनीत कौर मुख्य वैज्ञानिक केवीके जम्मू द्वारा धन्यवाद प्रस्ताव के साथ हुआ।

➢ KISAN DIVAS CELEBRATED ON 23RD DEC, 2023

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.

कृषि विज्ञान केंद्र आर एस पुरा की तरफ से मनाया गया राष्ट्रीय किसान दिवस

कटुआ केसरी ब्यूरो

आरएस पुरा। राष्ट्रीय किसान दिवस के उपलक्ष पर कृषि विज्ञान केंद्र आरएस पुरा जम्मू की तरफ से कृषि विज्ञान केंद्र आरएस पुरा के सभागार में एक दिवसीय किसान सम्मेलन का आयोजन किया गया। इस मौके पर जेरे कश्मीर कृषि विज्ञान एवं प्रौद्योगिकी विश्वविद्यालय स्कास्ट जम्मू के निदेशक अनुसंधान डॉ एस के गुप्ता मुख्य अतिथि के रूप में उपस्थित रहे इसके अलावा निदेशक विस्तार स्कास्ट जम्मू डॉक्टर अमरीश वेद तथा इफको के मैनपुलिकरिंग प्रबंधक तुषपाल सिंह सहित क्षेत्र के उन्नत किसानों ने भी इस कार्यक्रम में हिस्सा लिया। इससे पहले मुख्य अतिथि द्वारा जम्मू संभाग के अलग-अलग क्षेत्र से आए हुए किसानों की तरफ से अपनी फसलों के लगाए गए स्टॉल का निरीक्षण किया। इसके अलावा कृषि के क्षेत्र में अपना बेहतर योगदान देने वाले उन्नत किसानों को किसान दिवस के उपलक्ष पर सम्मानित भी किया गया। कार्यक्रम में विशेष तौर पर पहुंची सरपंच बलबीर कौर ने कहा कि कृषि विज्ञान केंद्र जम्मू की तरफ से लगातार किसानों को आधुनिक तकनीक

चलते किसान अब अपनी फसल की पैदावार बढ़ाने के साथ-साथ आमदनी बढ़ाने की तरफ भी आगे बढ़ रहे हैं। इसके अलावा किसान सलाहकार समिति ने कहा कि राष्ट्रीय किसान दिवस के मौके पर कृषि विज्ञान केंद्र की तरफ से जो कार्यक्रम आयोजित किया गया है उसके माध्यम से किसानों को आधुनिक कृषि तकनीक के बारे में जानकारी प्राप्त हुई है। उन्होंने कहा कि कृषि विज्ञान केंद्र तथा कृषि विभाग के प्रयासों के कारण आज छोटा किसान भी कृषि के साथ-साथ अन्य क्षेत्रों की तरफ भी आगे बढ़ रहा है और उन्हें बेहतर जानकारियां मिल रही हैं। इस मौके पर एडवोकेट केसर सरपंच सर्वश्री सरपंच

ग्राम गोरखा, सरपंच कैप्टन हंसराज, सरपंच बलकार सिंह सहित अन्य किसानों ने भी अपने-अपने विचार रखते हुए राष्ट्रीय किसान दिवस के मौके पर देश के सभी किसानों को मुबारकबाद दी और किसानों की बेहतरी के लिए सरकार की तरफ से चलाई जा रही योजनाओं पर चर्चा की। मुख्य अतिथि के रूप में मौजूद जेरे कश्मीर कृषि विज्ञान एवं प्रौद्योगिकी विश्वविद्यालय स्कास्ट जम्मू के निदेशक अनुसंधान डॉ एस के गुप्ता ने आए हुए सभी किसानों को राष्ट्रीय किसान दिवस की मुबारकबाद देते हुए कहा कि जम्मू संभाग के किसान लगातार कृषि के क्षेत्र में आगे बढ़ रहे हैं लेकिन आज भी हमारे सामने ऐसी कई चुनौतियां हैं और इन चुनौतियों का सामना हम तब ही कर सकते हैं जब हम सब मिलकर काम करेंगे। उन्होंने कहा कि जेरे कश्मीर कृषि विज्ञान एवं प्रौद्योगिकी विश्वविद्यालय स्कास्ट जम्मू के वैज्ञानिकों की तरफ से लगातार कृषि को बढ़ावा देने के लिए काम किया जा रहा है और कार्य संस्था में किसान उनके साथ जुड़े भी हैं। उन्होंने कहा कि खेती करने के साथ-साथ किसानों को मुर्गी पालन, मशरूम, मछली पालन,डेरी फार्म सहित अन्य क्षेत्रों की तरफ भी आगे आने की जरूरत है। उन्होंने कहा कि आज तो महिला किसान भी आगे आकर काम कर रही हैं। इस मौके पर कृषि विज्ञान केंद्र के प्रमुख वैज्ञानिक पुनीत चौधरी ने आए हुए सभी किसानों को राष्ट्रीय किसान दिवस की मुबारकबाद देते हुए कहा कि राष्ट्रीय किसान दिवस के उपलक्ष पर आज कार्यक्रम का आयोजन किया गया है जिसमें किसानों को सरकारी योजनाओं के बारे में जागरूक करने के साथ-साथ उन्हें सम्मानित किया गया है। इस मौके पर कृषि विभाग के अधिकारी के अलावा जम्मू कश्मीर तथा अन्य कृषि क्षेत्र से जुड़े हुए विभागों के अधिकारी भी इस कार्यक्रम में उपस्थित हुए।

राष्ट्रीय किसान दिवस पर किसानों को किया सम्मानित

आरएसपुरा।

राष्ट्रीय किसान दिवस के उपलक्ष पर कृषि विज्ञान केंद्र ने किसान सम्मेलन पर आयोजन किया। इस मौके पर जेरे कश्मीर कृषि विज्ञान एवं प्रौद्योगिकी विश्वविद्यालय स्कास्ट जम्मू के निदेशक अनुसंधान डॉ एस के गुप्ता मुख्य अतिथि के रूप में उपस्थित रहे इसके अलावा निदेशक विस्तार स्कास्ट जम्मू डॉक्टर अमरीश वेद तथा इफको के मैनपुलिकरिंग प्रबंधक तुषपाल सिंह सहित क्षेत्र के उन्नत किसानों ने भी इस कार्यक्रम में हिस्सा लिया। मुख्य अतिथि द्वारा जम्मू संभाग के अलग-अलग क्षेत्र से आए हुए किसानों की तरफ से अपनी फसलों के लगाए गए स्टॉल का निरीक्षण किया। इसके अलावा कृषि के क्षेत्र में अपना बेहतर योगदान देने वाले उन्नत किसानों को किसान दिवस के उपलक्ष पर सम्मानित भी किया गया। सरपंच बलबीर कौर ने कहा कि कृषि विज्ञान केंद्र जम्मू की तरफ से लगातार किसानों को आधुनिक तकनीक के साथ

साथ-साथ ही किसानों को आधुनिक कृषि तकनीक के बारे में जानकारी प्राप्त हुई है। उन्होंने कहा कि कृषि विज्ञान केंद्र तथा कृषि विभाग के प्रयासों के कारण आज छोटा किसान भी कृषि के साथ-साथ अन्य क्षेत्रों की तरफ भी आगे बढ़ रहा है और उन्हें बेहतर जानकारियां मिल रही हैं। इस मौके पर एडवोकेट केसर सरपंच सर्वश्री सरपंच ग्राम गोरखा, सरपंच कैप्टन हंसराज, सरपंच बलकार सिंह सहित अन्य किसानों ने भी अपने-अपने विचार रखे। मुख्य अतिथि जेरे कश्मीर कृषि विज्ञान एवं प्रौद्योगिकी विश्वविद्यालय स्कास्ट जम्मू के निदेशक अनुसंधान डॉ एस के गुप्ता ने कहा कि जम्मू संभाग के किसान लगातार कृषि के क्षेत्र में आगे बढ़ रहे हैं लेकिन आज भी हमारे सामने ऐसी कई चुनौतियां हैं और इन चुनौतियों का सामना हम तब ही कर सकते हैं जब हम सब मिलकर काम करेंगे। उन्होंने कहा कि जेरे कश्मीर कृषि विज्ञान एवं प्रौद्योगिकी विश्वविद्यालय स्कास्ट जम्मू के वैज्ञानिकों की तरफ से लगातार कृषि को बढ़ावा देने के लिए काम किया जा रहा है और कार्य संस्था में किसान उनके साथ जुड़े भी हैं। उन्होंने कहा कि खेती करने के साथ-साथ किसानों को मुर्गी पालन, मशरूम, मछली पालन,डेरी फार्म सहित अन्य क्षेत्रों की तरफ भी आगे आने की जरूरत है। उन्होंने कहा कि आज तो महिला किसान भी आगे आकर काम कर रही हैं। इस मौके पर कृषि विज्ञान केंद्र के प्रमुख वैज्ञानिक पुनीत चौधरी ने आए हुए सभी किसानों को राष्ट्रीय किसान दिवस की मुबारकबाद देते हुए कहा कि राष्ट्रीय किसान दिवस के उपलक्ष पर आज कार्यक्रम का आयोजन किया गया है जिसमें किसानों को सरकारी योजनाओं के बारे में जागरूक करने के साथ-साथ उन्हें सम्मानित किया गया है। इस मौके पर कृषि विभाग के अधिकारियों के अलावा जम्मू कश्मीर बैंक तथा अन्य कृषि क्षेत्र से जुड़े हुए विभागों के अधिकारी भी इस कार्यक्रम में उपस्थित हुए।

Scheduled Caste Sub Plan (SC-SP) of Agricultural Education Division, ICAR, New Delhi entitled, "Augmenting livelihood opportunities for Scheduled Caste Community of Bishnah Block of Jammu District through Agro-technological interventions" in the year 2023.

KVK Jammu started a project under Scheduled Caste Sub Plan (SC-SP) of Agricultural Education Division, ICAR, New Delhi entitled, "Augmenting livelihood opportunities for Scheduled Caste Community of Bishnah Block of Jammu District through Agro-technological interventions" . The Bishnah block of Jammu district was selected for the proposed project which has predominant population of schedule caste communities as per population census 2011. The population of block is 1,10,746, out of which 47,772 (43.14%) are scheduled caste. There are 116 villages and 2 towns in Bishnah Tehsil. As per the Census India 2011, Bishnah Tehsil has 22,632 households, population of 1,11,438 of which 58307 are males and 53131 are females. There are 40.33% Scheduled Caste (SC) and 1.57% Scheduled Tribe (ST) of total population in Bishnah Tehsil. Objectives of the project are to involve the educated and unemployed youth, students as well as progressive farmers in agriculture, horticulture, animal husbandry, fisheries, Mushroom cultivation and allied activities; and motivate them to adopt this enterprises/ income generating units for their livelihood.

Various programmes were conducted under this project for the upliftment and increasing the entrepreneurship skills of SC farmers in Bishnah Block including demonstrations on scientific cultivation practices of cereals, mushroom production, backyard poultry and improved animal production practices were given as a support for establishing new units, that in turn increased their livelihood opportunities and they have started earning more. The project also helps in empowering rural women by creation of more productive work hours for them.

KVK Jammu organized Five Kisan melas on the theme "Multi-Stake Holders Agriculture cum Animal Clinical Camps" at five different SC dominant Panchayats of Bishnah block in which more than 1500 farmers participated and benefitted by getting inputs given as a support to them for the establishing entrepreneurship and technological knowledge by various expert lectures delivered by scientists of KVK Jammu, teaching faculty of the SKUAST-Jammu and officials of allied departments on the adoption of GAPs.

KISAN MELAS CONDUCTED BY KVK Jammu UNDER SCSP PROJECT

Krishi Vigyan Kendra, Jammu working under the able leadership of Prof. Bhupendra Nath Tripathi, Hon'ble Vice Chancellor, SKUAST-Jammu and guidance of Prof. S.K. Gupta, Director

Extension, SKUAST-Jammu organised five Kisan Melas on theme, “Multi-Stake Holders Agriculture cum Animal Clinical Camp” under SCSP Project entitled “Augmenting Livelihood Opportunities for SC community of Bishnah Block”

1. **KISAN MELA- LASWARA**

First Kisan Mela was conducted at Panchayat Laswara on 28.02.2023. The programme was organised with objective to create mass awareness about different schemes of Agriculture and allied sectors along with providing on spot solution to various field problems and treatment of various diseases of milk animals. Sh. Bharat Bhushan, DDC Chairman, Jammu was the chief guest and Sh. Dharminder Kumar, DDC Bishnah was the guest of Honor during the programme. Speaking on the occasion, Sh. Bharat Bhushan, DDC Chairman Jammu appreciated the efforts of KVK Jammu for conducting such type of clinical camp in different Panchayat of Bishnah block. He further elaborated that farmer should get maximum benefits from the various agriculture and allied sector schemes being run by the UT government for their socio-economic upliftment. Sh. Dharminder Kumar, DDC Member Bishnah briefed about the various activities being carried out by KVK Jammu for the last 02 years that are helpful in attaining expertise in various disciplines of farming including backyard poultry, Mushroom, Seed Production, Information Technology, Stitching and Tailoring, Dairy Farming, Vermicomposting etc. Total 315 progressive farmers of Panchayat and officers of the line departments participated in this programme. During the programme, expert lectures were delivered by Dr. Muneeshwar Sharma, Dr. Kamlesh Bali, Sh. Arun Jaral, Ms. Navdeep Kour, Dr. A.K. Pandey and Sh. Dheeraj Gupta. An exhibition depicting various technologies by KVK, Department of Agriculture IFFCO Department of Fisheries, Department of Horticulture and Private companies were also organised on the occasion. More than, 100 animal cases were treated with the help of a team of qualified veterinary surgeons and PG students from Faculty of Veterinary Sciences and Animal Husbandary SKUAST-Jammu, free of cost medicines and small farm tools & implements were also distributed among the farmers as need based interventions.

2. **<u>KISAN MELA - HARSA DABBAR</u>**

Kisan mela was conducted at Panchayat Harsa Dabbar on 03.03.2023. The programme was organised with objective to create mass awareness about different schemes of Agriculture and allied sectors along with providing on spot solution to various field problems and treatment of various diseases of milch animals. Sh. Dharminder Kumar, DDC Bishnah was the Chief Guest and Smt. Darshana Devi was the guest of Honor. In this programme 270 number of progressive from different villages of Panchayat Harsa Dabbar participated.

Speaking on the occasion, Sh. Dharminder Kumar, DDC Bishnah appreciated the efforts of KVK Jammu for conducting such type of clinical camp in different Panchayats of Bishnah block. He further elaborated that farmer should get maximum benefits from the various agriculture and allied sector schemes being run by the UT government for their socio-economic upliftment.

Speaking on the occasion Dr. Punit Choudhary, Chief Scientist & Head, KVK Jammu briefed that KVK Jammu is working for the last 02 years for providing expertise to the farming community in these villages in various disciplines of farming including backyard poultry, Mushroom, Seed Production, Information Technology, Stitching and Tailoring, Value addition and Processing, Dairy Farming, Vermicomposting etc. particularly to the SC population of Bishnah Block.

During the program, expert lectures were delivered by Dr. Sheetal Badyal, Dr. Sachin Gupta, Ms. Navdeep Kour, Dr. Ajay Gupta and Dr. Neelesh, Dr. Muneeshwar Sharma and Dr. Amitesh Sharma from SKUAST-J. An exhibition depicting various technologies by KVK, Department of Agriculture, IFFCO, Department of Fisheries, Moorki 8000 and other private players were also organised on the occasion. More than, 100 animal cases were treated with the help of a team of qualified veterinary surgeons and PG students from Faculty of Veterinary Sciences and Animal Husbandry SKUAST-Jammu, free of cost medicines and small farm tools & implements were also distributed among the farmers as need based interventions.

3. <u>KISAN MELA – CHAK AVTARA</u>

Third Kisan Mela was conducted at Panchayat Chak Avtara on 09.03.2023. The programme was organised with objective to create mass awareness about different schemes of Agriculture and alied sectors along with providing on spot solutions to various field problems and treatment of various diseases of milch animals. Sh. Dharminder Kumar, DDC Bishnah was the Chief Guest, Sh. Ashok Gupta Retd. Dy. Director ATMA was the guest of Honor and Sh. Surjeet Singh ex Sarpanch was the special guest. The programme was attended by about 250 progressive farmers from all the villages of Panchayat participated.

Speaking on the occasion, Sh. Dharminder Kumar, DDC Bishnah appreciated the efforts of KVK Jammu for conducting such type of clinical camp in different Panchayats of Bishnah block. He further elaborated that farmer should get maximum benefits from the various agriculture and allied sector schemes being run by the UT government for their socio-economic upliftment.

At the outset, Dr. Punit Choudhary, Chief Scientist & Head, KVK Jammu, briefed about the objective of conducting such type of plant health and Animal Clinical Camp which are essential for the farming community. Dr. Amitesh Sharma, Scientist KVK Jammu, briefed to the stakeholders that KVK Jammu working for the last 02 years for providing expertise to the farming community in these villages in various disciplines of farming including backyard poultry, Mushroom, Seed Production, Information Technology, Stitching and Tailoring, Value addition and Processing Dairy Farming, Vermicomposting etc. particularly to the SC population of Bishnah Block.

During the programme, expert lectures were delivered by Sh. Ashok Gupta, Dr. Kamlesh Bali, Dr. Paramjeet Kour, Ms. Navdeep Kour, Dr. Ashok Kumar and Dr. Sheeetal Badyal, Dr. Muneeshwar Sharma and Dr. Amitesh Sharma from SKUAST-J. An exhibition displaying various exhibits by farmers and depicting various technologies by KVK, Department of Agriculture, IFFCO, Department of Fisheries, Moorki 8000 and other private players was also arranged on the occasion

by KVK Jammu. More than, 100 animal cases were treated with the help of a team of qualified veterinary surgeons and PG students from Faculty of Veterinary Sciences and Animal Husbandary SKUAST-Jammu, free of cost medicines and small farm tools & implements were also distributed among the farmers as need based interventions. Nukkad Natak by Sargam group was also Staged motivating the farmers and farm women to adopt new technologies in agriculture and allied sectors.

4. <u>KISAN MELA – DEOLI</u>

Fourth Kisan mela was conducted at Panchayat, Deoli on 14.03.2023. In this programme 251 number of progressive farmers participated and on spot solution to various field problems and treatment of various diseases of milch animals were addressed by scientists. Sh. Surjit Kumar, BDC Chairman, Bishnah was Chief Guest and Sh. Dharminder Kumar, DDC Member, Bishnah and S. Joginder Singh, Sarpanch Deoli were guest of Honor on the occasion.

Dr. Punit Choudhary, Chief Scientist & Head, KVK Jammu, briefed that the main objective of conducting this Multi-stakeholders agriculture and Animal clinic camps is to reach out the farmers and provide them solution of their problems at one place with the involvement of all the allied departments. In his address Sh. Surjit Kumar, BDC Chairman, Bishnah appreciated the efforts of KVK Jammu for organizing such mega awareness camps at Bishnah Block. He also praised the displaying new technologies in the form of exhibits by allied departments and private companies. Sh. Dharminder Kumar, DDC Member, Bishnah, lauded the KVK Jammu for conducting back-to-

back fourth awareness camp in Bishnah and providing a helping hand to marginal farmers by distributing seeds and medicines to them. S. Joginder Singh, Sarpanch Deoli, thanked KVK Jammu for organizing programme in his Panchayat for the farmers.

During the programme expert lectures were delivered by experts from KVK Jammu and allied departments.

5. KISAN MELA – PRITHVIPUR

Out of five Kisan melas KVK Jammu last one was organized at Panchayat, Prithvipur on 17.03.2023. In this programme 281 number of progressive farmers participated. A team of doctors from Faculty of Veterinary Sciences, SKUAST-Jammu conducted surgeries on diseased animals. Various Plant disease samples were examined and on spot management of the identified disease was provided by the KVK scientists. Sh. Dharminder Kumar, DDC Member, Bishnah was Chief Guest and Smt. Sudesh Kumari, Sarpanch Deoli was guest of Honor.

Dr. Punit Choudhary, Chief Scientist & Head, KVK Jammu, briefed that the main objective of conducting, “Multi-stakeholder agriculture and Animal clinic camp” is to create awareness among the farmers regarding new technologies introduced by KVK Scientists in the field and also to disseminate more information regarding various centrally and state sponsored schemes. In his

address Sh. Dharminder Kumar, DDC member, Bishnah lauded the role of KVK Jammu and appreciated that KVK has given benefit and knowledge to the farmers at their doorstep. Smt. Sudhesh Kumari, sarpanch, Prithvipur in his address praised the efforts and initiatives of the KVK Jammu for her Panchayat for the marginal and poor farmers. She also said that number of farmers have been trained in different skill courses by KVK Jammu and some of them have already started their own Mushroom cultivation Units and particularly rural women trained in Stitching and Tailoring have established their own boutique collectively in the village

During the programme expert lectures were delivered by Scientist of KVK Jammu and officers of allied departments.

Vocational Trainings under SC-SP Project

1. **Mushroom Cultivation Techniques**

Three vocational training programmes on Mushroom Cultivation Techniques were conducted at KVK Jammu in which 92 SC farmers and farm women from the five Panchayats (Laswara, HarsaDabbar, Deoli, ChakAvatara and Prithvipur) of Bishnah Block participated. Two training programmes on Button Mushroom were of seven days duration and one training programme on Dhingri Mushroom was of three days. After the successful completion of the vocational training 2000 ready to fruit Mushroom bags and 100 water cans were distributed among the trainee farmers as a initial support for establishing small scale mushroom production units. 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. After the distribution of Ready to fruit (RFT) Mushroom bags, a team of expert scientists from KVK Jammu also inspected the units established by the trainee farmers and farm women, they also provided on spot solution of their queries to remove the difficulties faced by them during mushroom production.

KRISHI VIGYAN KENDRA, JAMMU

2. **Horticultural operations**

A three days vocational training programme entitled “Horticultural operations" was organised for the farmers of village Deoli under Panchayat Bishnah w.e.f 27th to 29th of March 2023 under SCSP Project. The training programme aimed to make farmers aware about various horticultural crops suitable for the region, their propagation techniques and other cultural operations required for the same. The programme was attended by more than 40 number of farmers. Dr Rakesh Sharma (Associate Professor) from division of Fruit science SKUAST –J delivered the lectures and demonstrated technical skills regarding propagation of horticultural crops. Dr Ravneet Kour chief scientist KVK Jammu apprised the farmers about scope of fruit cultivation and fruit crops for their area. She also deliberated the entrepreneurial opportunities in the field of horticulture. Horticultural plants were also distributed among the farmers. The programme ended with vote of thanks by a progressive farmer of village Deoli , S. Ajit singh.

TRAINING PROGARMME CONDUCTED UNDER SCSP PROJECT SPONSORED BY AGRICULTURE EDUCATION DIVISION, ICAR

1. **Scientific Poultry farming**

Three days vocational training programme on Scientific poultry farming was conducted at KVK Jammu w.e.f. 9-01-2023 to 11/01/2023 in which 30 schedule cast farmers participated from

adopted villages of Bishnah. The training was a great success in establishing backyard poultry farming as an enterprise among the rural household. The lectures were delivered by experts in most simplest and motivational way which encouraged the participants to start backyard poultry farming. KVK Jammu took this opportunity to go one step ahead and provided 40 birds to each participant to have them practical experience. The training followed by distribution of 40 days old chicks showed the profitability of backyard poultry among the farmers. 21 participants among the 30 have adopted backyard poultry farming as Household activity and rural women are supporting and taking care of birds at home. Due to their trainings, they did very well and almost 1% mortality occurred only except one case where mongoose entered in backyard poultry room and killed the birds. All of them earned a good amount after selling the birds and eggs. KVK Jammu is receiving queries from other farmers regarding next training programme.

2. **Scientific Poultry farming training Programme**

On demand of farmers, three days vocational training programme on Scientific poultry farming was again conducted at KVK Jammu w.e.f. 29/01/2023 to 31/01/2023 in which 30 schedule cast farmers participated from adopted villages of Bishnah. The training was a great success in establishing backyard poultry farming as an enterprise among the rural household. The lectures were delivered by experts in most simplest and motivational way which encouraged the participants to start backyard poultry farming. 40 birds were distributed to each participant to have them practical experience. The training followed by distribution of 40 days old chicks showed the profitability of backyard poultry among the farmers. 15 participants among the 30 have adopted backyard poultry farming as Household activity and rural women are supporting and taking care of birds at home. Due to their trainings, they did very well and almost 1% mortality occurred. All of them earned a good amount after selling the birds and eggs.

3. Scientific fish Farming

Three days vocational training programme on Scientific Fish Farming was conducted at KVK Jammu w.e.f. 08-03-2023 to 10/03/2023 in which 30 schedule cast farmers participated from adopted villages of Bishnah. The village is not having any fish pond therefore farmers were having not much information on scientific fish framing but they were very well aware about the profits from fish farming due to the videos in social media like YouTube. This training programme was conducted to aware and trained them about different type of fish farming which included knowledge and practical on Composite fish farming, ornamental fish farming and Bio-floc fish farming etc. Everyone was interested to know more about the ornamental fish farming/business and Bio-floc due to the small land holding on their names. Farmers were demonstrated by the Scientists and session on hands in practical were also conducted to prepare the glass aquarium by the farmers themselves. They were trained for maintenance of fish pond and aquariums both and they were motivated to start its business and become entrepreneurs. They were also educated for the govt. schemes to start their fisheries venture under Pradhan Mantri Matsya SampadaYojna (PMMSY) in which they can receive 60% subsidy on any enterprise. Farmers demanded for more training programme. It was promised to conduct more training programme to include all.

4. Scientific fish Farming

Three days vocational training programme on Scientific Fish Farming was conducted at KVK Jammu w.e.f. 27-03-2023 to 29/03/2023 in which 45 schedule cast farmers participated from adopted villages of Bishnah. Farmers were happy to join this training programme due to the schemes available in fisheries due to PMMSY. Five Schedule cast farmers who had constructed fish pond under Govt. Schemes also joined the programme and shared their experience. The fish seed of Indian major carps and ornamental fishes were distributed among the owners of fish pond to motivate other participants. This training programme was conducted to aware and trained new and old fish farmers about different type of scientific fish farming which included knowledge and practical on Composite fish farming, ornamental fish farming and bio-floc fish farming etc. Everyone was interested to know more about the ornamental fish farming/business and bio-floc due to the small land holding on their names. Farmers were demonstrated by the Scientists and sessions on hands in practical were also conducted to prepare the glass aquarium by the farmers themselves. They were trained for maintenance of fish pond and aquariums both and they were motivated to start its business and become entrepreneurs. They were also educated for the govt. schemes to start their fisheries venture under Pradhan Mantri Matasya Sampada Yojna (PMMSY) in which they can receive 60% subsidy on any enterprise.

5. Basic stitching and tailoring techniques'

One week Vocational training program on 'Basic stitching and Tailoring techniques' was organized at KVK Jammu w.e.f 24th Feb 2023 to 2nd March 2023 under SCSP Project entitled 'Augmenting Livelihood opportunities for SC community of Bishnah Block". The 5 days program aimed at capacity building of farm women and rural youth. During the training participants were imparted skills, theoretical and technical know-how in drafting, paper pattern cutting, cutting and stitching of basic garments etc. The participants were also provided stitching kits and other raw materials by KVK Jammu as incentive for further promotion and motivation for financial and social empowerment.

MULTI STAKEHOLDERS WORKSHOP ON MILLETS

One day Multi stakeholder Workshop on Millets was organized under SCSP Project entitled 'Augmenting Livelihood opportunities for SC community of Bishnah Block", at Krishi Vigyan Kendra Jammu on 6th March, 2023.The workshop was organized with the objective to create mass awareness among women on production and processing of millets in Jammu district, particularly in view of celebration of International year of millets 2023. The program was attended by 350 farmers, Anganwadi workers, SHG members, PRI's and students. Director Extension Dr. S. K. Gupta and Smt. Vidya Moton, DDC Miran Sahib were Chief Guests and Smt. Ateeksha Sethi, CDPO, R. S. Pura and Smt. Madhulika Sharma, Project Manager CSS were Guest of Honour on the occasion. During the program Head KVK, Jammu Dr. Punit Choudhary briefed the participants about governmental initiatives for promotion and production of millets under HADP and other general scheme, Dr. Sheetal Badyal, coordinator of the program deliberated on local millets, their production, promotion and processing initiatives towards improving health and diet of society on the whole, Dr. Meenakshi Gupta, Nodal officer, millets spoke on Prospects and potential of millets etc. The major highlight of the program was an Exhibition cum Recipe competition on millet preparation which was judged by Dr. Julie Dogra, Division of PHM.

- **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 Poshan Vatika and Tree plantation on the occasion of Prof S K Gupta Director Extension SKUAST JAMMU, Smt. Vidya Mottan, 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 Dr. Punit Choudhary, Sr Scientist & Head, Dr Ravneet Kour, Scientist and Dr Prem Kumar, Scientist, KVK Jammu respectively.

- **DBT project "Ornamental fish breeding and culture for livelihood development in the Jammu region"**

Activities conducted under entitled "Ornamental fish breeding and culture for livelihood development in the Jammu region" funded by DBT, Gov of India, India (BT/NER/95/SP45252/2022 dated 10/01/2023)

The project was implemented under Himalayan Bio resource Mission for a period of three years with the objectives of

- To document the locally available native ornamental fish species of Jammu region
- To standardize and establishment of breeding unit for ornamental fishes at KVK Jammu.
- Transfer of technology and promotion of ornamental fish farming at field level.

Keeping the objectives of the project in mind various activities were performed during the first four quarters of the year starting from the recruitment of the staff followed by allocation of the

budget to Estate Division to start construction of cistern tanks, survey for the site selection for taking fish fauna and water sample for monthly sample collection, identification and preservation, procurement of aerators, procurement of water storage tank (2000 lit. capacity), procurement of digital water analyser and Sun cool Geo Membrane Pond Liner (HDPE Sheet)

- **Construction of Cemented cistern tanks**.

  A total of 56 cement cistern tanks are constructed as part of this project and will be distributed to the farmers. Each selected farmer will receive five tanks to raise ornamental fish and entrepreneurships will be developed under the DBT initiative.

- **Procurement of ornamental fish for breeding:** A small number of ornamental fish were procured to for first-hand experience in handling ornamental fish, setting up and maintaining an aquarium and its water parameters, breeding and preserving the fry, and potential illnesses that may arise over time.

- **Construction of shade with green net and iron structure.**

- **Survey for the site selection for taking fish Fauna samples and Monthly sample collection, identification, preservation.**

A total of 105 species were detected during our monthly survey and sample collection; many of these were ornamental grade fish, which can be tamed and kept as home pets in aquariums. Here are a few of the images that are shown.

- **No. of trainings - 6**

S. No.	Training Date	SC	ST	OBC	General	Total No. of Participants
1	25/04/2023	1	-	-	18	19
2	1/09/2023	1	-	-	14	15
3	2/09/2023	7	-	2	6	15
4	7-9/11/2023	23	10	1	10	44
5	20/03/2023	18	03	-	-	21
6	21/03/2023	09	01	03	08	21

A total of six trainings were conducted during the period of one year w.e.f 01/04/23 to 31/03/2024 exclusively related to the project objectives in which the farmers were given information related to the ornamental fishes and their breeding, importance and benefits of owning a small scale business related to the rearing , breeding and selling of the ornamental fishes and the farmers were given training for making glass aquariums.

- **Dignitaries visited at ornamental fish unit**

Dr U C Gautam, DDG (Ag. Ext.), ICAR along with Dr B K Das, Ex DDG (Ag. Ext.), ICAR, Dr Amrish Vaid, Director Extension, SKUAST-Jammu visited KVK Jammu and observed the activities of ornamental fish unit and praised the efforts.

Dr Parvinder Sheoran, Director, ICAR-ATARI zone-I visited KVK Jammu and observed the activities of ornamental fish unit.

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**
OILSEEDS	-	-	-	-	-
PULSES	-	-	-	-	-
VEGETABLES	-	-	-	-	-
FLOWER CROPS	-	-	-	-	-
OTHERS (Specify)	-	-	-	-	-

B) PLANTING MATERIALS

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

C) BIO PRODUCTS

Major group/class	Product Name	Species	Quantity		Value (Rs.)	Provided to No. of Farmers
			No	(kg)		
BIOAGENTS	-	-	-	-	-	-
1	-	-	-	-	-	-
2	-	-	-	-	-	-
3	-	-	-	-	-	-
4	-	-	-	-	-	-
BIOFERTILIZERS						
1	Vermi-compost	-	-	**46.86**	**46860**	-
2	-	-	-	-	-	-
3	-	-	-	-	-	-
4	-	-	-	-	-	-
BIO PESTICIDES	-	-	-	-	-	-
1	-	-	-	-	-	-
2	-	-	-	-	-	-
3	-	-	-	-	-	-
4	-	-	-	-	-	-

D) LIVESTOCK: NA

Sl. No.	Type	Breed	Quantity		Value (Rs.)	Provided to No. of Farmers
			(Nos	Kgs		
Cattle	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
SHEEP AND GOAT	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
POULTRY	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
FISHERIES						
	-	-	-	-	-	-
Others (Specify)	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-

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

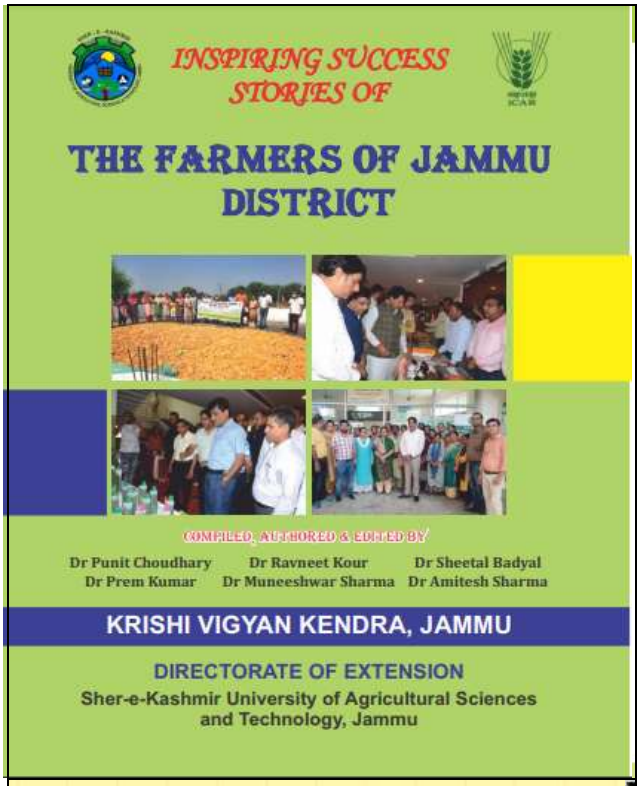
8. A) Literature Developed/Published (with full title, author & reference)

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

Item	*Title*	*Authors name*	*Number of copies*
Research papers	1. Synergistic Effect of Prebiotic with Gut Isolated Probiotic Bacteria on Survival, Growth and Carcass Composition of Labeo rohita Indian Journal of Ecology (2023) 50(4): 1163-1169 NAAS 5.79 2. Health Status of Golden Mahseer, Tor putitora in Anji Hatchery of District Reasi of Jammu Region Journal of Community Mobilization and Sustainable Development Vol. 18(4), 1294-1297 NAAS 5.67 3. Assessment of Farmers' Knowledge and Practices Adopted for the Safe use of Pesticides in Jammu Journal of Community Mobilization and Sustainable Development Vol. 18(4), October-December 2023, 5.67	Prem Kumar, Vaneet I. Kaur, Anuj Tyagi and Sachin Khairnar. 2023 Samni Langeh, Prem Kumar, Punit Choudhary and Devendra Singh Rawat Poonam Abrol, Punit Choudhary, Prem Kumar and Raju Gupta	-
Book	1. INTEGRATED NUTRIENT MANAGEMENT		-
Book Chapters	IMPORTANCE OF BIO-FERTILIZERS IN SOIL & PLANT HEALTH MANAGEMENT PRODUCTION AND HANDLING OF BIO-FERTILIZER SPECIFICATION AND NUTRIENT CONTENT OF COMMON FERTILIZERS	P. K. Rai and **Puneet Choudhary** Pp1 P.K. Rai , Balbir Dhotra and **Muneeshwar Sharma** Pp13 Ajay Gupta, **Dr Puneet Chaudhary,** Dr Arvind Ishar and Dr **Muneeshwar Sharma Pp 25**	

Item	*Title*	*Authors name*	*Number of copies*
	SIMPLE QUALITATIVE TEST FOR ASSESSING PURITY OF FERTILIZERS.	Balbir Dhotra, **Muneeshwar Sharma**, P.K. Rai and **Amitesh Sharma Pp 39**	
	BRIEF DESCRIPTION OF INDIAN SOILS	Balbir Dhotra, **Puneet choudhary, Amitesh Sharma and Muneeshwar Sharma** Pp 45	
	IMPORTANCE OF FYM, GREEN MANURES, ENRICHED COMPOST AND VERMI-COMPOST	Jai Kumar, A.P. Singh, Narinder Panotra, **Puneet Choudhary and Muneeshwar Sharma** Pp 51	
	NANO UREA : NEW REVOLUTION IN AGRICULTURE	**Punit Chaudhary** and P.K. Rai, Prem Kumar and Poonam Abrol 61	
	SOIL RECLAMATION AND IMPORTANT AMENDMENTS	P.K. Rai and **Satbir Singh 77**	
	IMPORTANCE AND UTILITY OF SOIL TEST FERTILIZER	P.K Rai and **Raju Gupta Pp 87**	
	FERTILIZERS: CLASSIFICATION, THEIR ADULTERANTS AND DETECTION	**Amitesh Sharma, Puneet Choudhary, Ravneet Kour, Sheetal Badyal, Prem Kumar, Muneeshwar Sharma,** Balbir dohtra and **Raju Gupta** Pp95	
	ORGANIC FARMING AND ITS COMPONENTS		
	SOIL SAMPLING TECHNIQUES FOR FIELD		

Item	*Title*	*Authors name*	*Number of copies*
	AND PLANTATION CROPS ESSENTIAL PLANT NUTRIENT DEFICIENCY IMPACT AND SYMPYOMS	**Ravneet Kour, Punit Choudhary and Muneeshwar Sharma Pp 109** Sanjay Koushal, **Muneeshwar Sharma and Prem Kumar Pp127** **Muneeshwar Sharma, Puneet Choudhary, Ravneet Kour, Prem Kumar** and **Amitesh Sharma** Pp 161	
Lead Lecture			
Technical bulletins	1.		
Training Manual	1.		
Folders /leaflets	1.		
	2.		
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

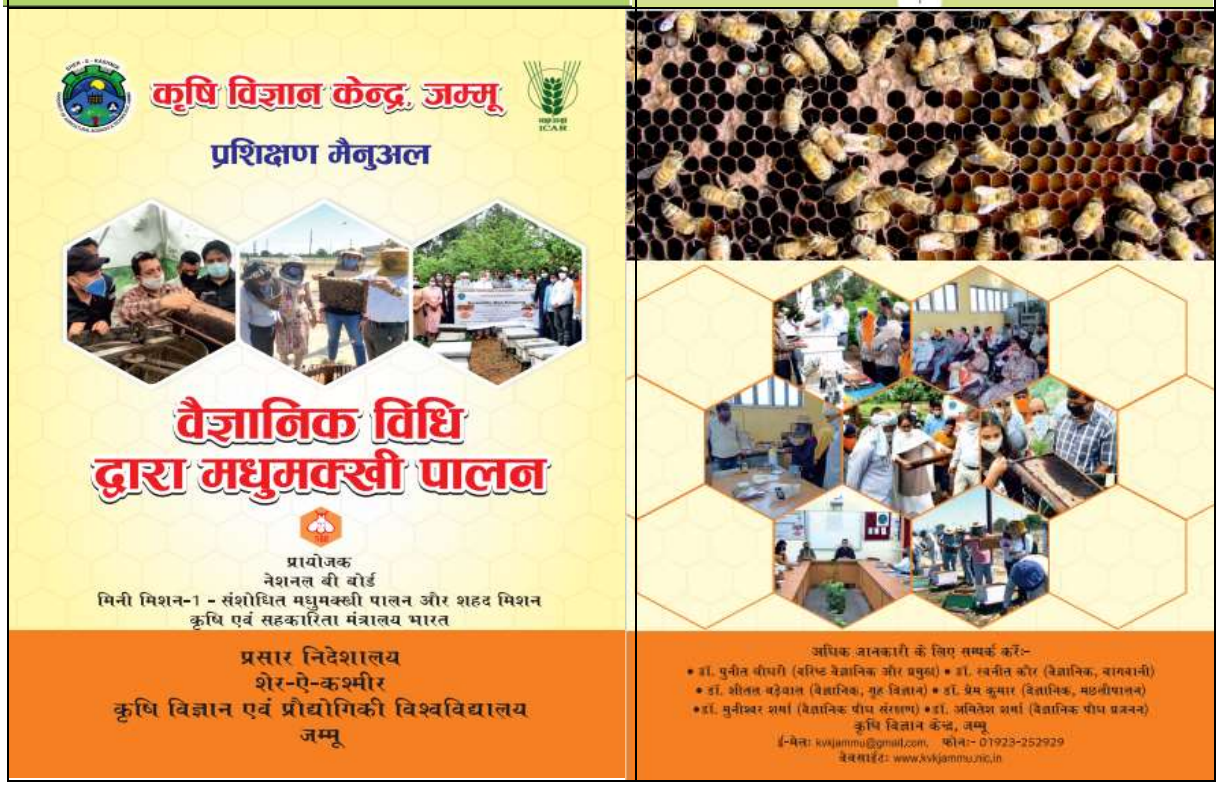
Component Description		Benchmark (Baseline period 2016-17)			
Components	Names	Area (Acre)/Number	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)
Field Crop 1	Paddy	3	12	104000	78400
Field Crop 2	Wheat	3	11	66800	36800
Livestock 1	Cows/buffalo	15	100	900000	600000
Other enterprise (Specify)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



(B) 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, Floriculture
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	Broccoli
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

Videos of Successful farmers

C) KVK JAMMU IN NEWS (2023)

(D) Mobile App developed by KVK

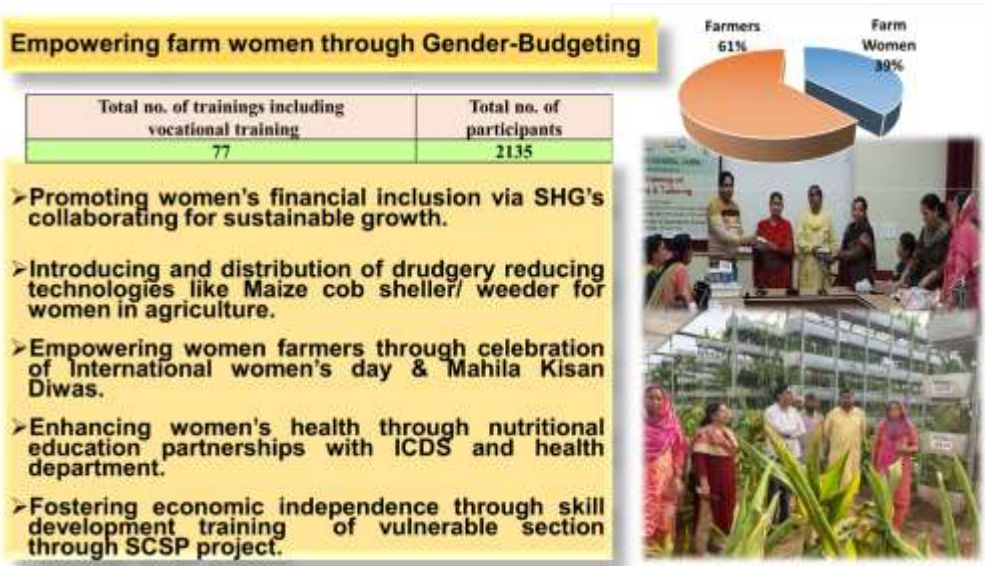
S.No.	Name of KVK	Name of Mobile App Developed	Year in which App is Developed	No. of Users downloaded the App	Type of information offered by the App(seeds, fertilizers, market prices, weather etc.)
-	-	-	-	-	-

9. SUCCESS STORIES/ CASE STUDIES

A. 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. Realizing 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, Kisan melas , Rural Exhibitions Celebration of Women day, Mahila Kisan 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 personnel, Krishi sakhi's and pashu sakhi's visiting, participating and seeking capacity building at KVK Jammu.



SUCCESS STORIES

1. **Title: Large scale adoption of chickpea cultivation in Rain-fed areas of District Jammu**

In India, pulses are playing an important role in regular diet. Apart from the supply of protein, pulses add nitrogen to the soil and improve physical structure of soil, fit into mixed/inter cropping system/crop rotation, provide green pods and used as vegetable. Over the past one decade there was decreasing trend of pulse production in the rainfed areas of Jammu district. In Jammu and Kashmir, rice, wheat and maize are the major crops grown.

Pulse cultivation has assumed special significance owing to Government of India's focus on promotion of pulses under NFSM-Pulses. To increase the acreage and productivity of pulses in the country, the Indian Council of Agricultural Research, New Delhi has given the task to upscale the pulse production technology along with best practices among farmers through KVKs. Henceforth, KVK, Jammu took an initiative in this regard and decided to up-scale the Chickpea cultivation in the district with best practices of integrated crop management technologies in the district through a cluster Frontline demonstration approach especially in rainfed areas. Since cluster frontline demonstrations are novel approaches that provide a direct interface between researchers and farmers for execution and monitoring of technologies developed by them and receiving direct feedback from the farmers about the crop.

Chickpeas are a fundamental source of nutrition in animal feed as they are high energy and protein sources for livestock. Chickpea (*Cicerarietinum* L.) is the most important pulse crop. Chickpea seeds are good sources of protein, minerals (calcium, phosphorus, magnesium, zinc and iron),

unsaturated fatty acids, fibre, and B- carotene. As an important part of Indian cuisine, it is used in salads, soups and stews and curry in chana masala and in other food products that contain chana. The global area of chickpea averages 13.0 million hectare with a total production of 12.4 million tons across 56 countries. India is top producer contributing about 70% of total world yield. India is the largest producer of chickpea with annual production of 10.13 million tonnes from an area of 9.44 million ha (Directorate of Economics and Statistics, 2019). Even though India is the largest global producer, it was importing from other countries to meet its own demand. One of the reasons for this was the low productivity (995 kg/ha) as against world's highest productivity of 3759 kg/ha.

KVK INTERVENTION

The main reasons for low productivity of Chickpea are its rain fed cultivation in marginal and sub marginal lands under poor management and unavailability of high yielding varieties. The improved varieties and scientific cultivation technologies are capable of increasing the productivity levels of Chickpea. In order to increase the area, production and productivity of Chickpea, cluster front line demonstrations were laid in rainfed villages viz. Kattal Battal, Gharkhal, Gharota, Sohal, Dhok Jagir, Kainik Jagir, of district Jammu, UT of Jammu and Kashmir by KVK Scientists. In those farming situations chickpea was promoted with new technologies under CFLD programme initiated in KVK's. New improved varieties of chickpea viz. PBG-5, PBG-7, GNG-1581, GNG-2144 etc. were introduced in the villages.

KVK Jammu continuously provided trainings and conducted frontline demonstrations on recent technologies. The farmers especially women farmers were motivated to grow the pulse crop. Only few farmers were growing the crop now. To bridge the yield gap between the potential and realized yield, some of the technologies were recommended as critical *viz*., seed treatment with Carbendazim application and inoculation with Rhizobium and PSB culture recommended fertiliser application, pest, disease and weed management, two irrigations first at branching and second at pod initiation stage. Keeping in view the need of diversifying the agriculture in the area, increasing pulses production, enhancing the source of income of farmers, chickpea production technology was demonstrated as a whole package under rainfed villages of district Jammu.

OUTPUT:

Table 1. Grain Yield performance of cluster frontline demonstrations on Chickpea (Var. GNG 2144).

Year	Area (ha)	No. of farme	Yield (q/ha)	Per cent increase over farmer's

		rs	Potential	Recommended Practice	Farmer's practice	practices
2020-21	10	50	20	17.2	16	7.50
2021-22	20	100	20	15.2	14	8.57

The results of cluster front line demonstrations conducted during 2020-21 and 2021-22 are tabulated in table no. 1. The results showed that the maximum yield of 17.2 and 15.2 ha were obtained under demonstrated plots during 2020-21 and 2021-22 respectively. The percent increase in yield over farmers practices were 7.50 and 8.57 percent during the respective years. Further, adoption of complete integrated crop management practices (improved variety, seed treatment, fertilizers used, weed control and insect, pest and disease management) reflected the visible impact on enhanced seed yield under demonstration plot which otherwise was lacking under farmer's traditional system of cultivation. Seed inoculation with biofertilizers like Rhizobium and PSB culture was another major success factor of higher seed yields under demonstration plot as yield enhancement in pulses through bio inoculation with microbial cultures (Rhizobium and PSB) Pod Borer is a major pest of this crop especially at pod bearing stage causing huge losses and farmers mostly ignore the pest due to lack of knowledge and awareness and reluctancy to use insecticides in the chickpea crop. In the demonstration plots, not only the farmers were educated about the identification of the pest but also provided with critical inputs for effective management of this pest consequently resulting in higher yields.

OUTCOME:

Table 2. Economic performance of cluster frontline demonstrations on Chickpea

Years	Yield q/ha		Economics of demonstration plot (Rs/ha)				Economics of farmers plot (Rs/ha)			
	Demo	Check	Gross cost	Gross return	Net return	BCR	Gross cost	Gross return	Net return	BCR
2020-21	17.2	16	32000	61920	29920	1.93	32000	57600	25600	1.80
2021-22	15.2	14	36000	76000	40000	2.11	36000	70000	34000	1.94

Benefit to Cost ratio; The data (Table 2) indicated that the gross returns of demonstration plots were Rs. 61920/- and 76000/- in the years 2020-21 and 2021-22 respectively. Similarly overall B:C ratio was recorded as 1.93 and 2.11 for demonstration plots in the respective years. The outcome of demonstrated technology was reflected in the form of higher yield and economic returns. Overall superior performance was proved for the demonstrated technology by exhibiting significant higher values for yield, net profit and B:C ratio. Similarly the farmer's plots recorded gross income of Rs. 57600/- and 70000/- and B:C ratio of 1.80 and 1.94 during the respective years.

IMPACT:

The farmers were introduced to the new improved varieties of chickpea with huge yield potential, the chickpea farming was revived in the areas where the farmers had left its cultivation in lieu of unavailability of improved varieties. The farmers were also unaware of the new scientific way of cultivating the pulse crop. The output of new varieties and new technologies showed huge potential for cultivation of pulses in those Clusters. This had not only enhanced the income of farmers but also helped in maintaining the soil fertility as well as nutritional security of these rainfed areas. The areas was identified for diversification of pulse crops.

One of the most important aspects of these CFLD's that the more number of women farmers were involved. Since vigorous trainings were given on every aspect of crop viz. its nutritional value, role in health of chidren and women, as subsidiary source of income, its role in maintenance of soil health and as a good crop for the rainfed areas where water is a big limitation, more number of women farmers took keen interest. The women got social and economic empowerment. They used the output for their own use as well as for earning some subsidiary income. They were motivated to produce seed for their own use and sell to fellow villagers for seed replacement at large scale. The impact of CFLD's is that they have again started cultivation of chickpea in the villages and spreading it to other areas.

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2. **Title: Mushroom Cultivation: A Successful Venture for Women farmers**

INTRODUCTION

KVK Jammu, since its inception in 1992 has been training farmers in various agri-enterprises recognizing the fact that complete absence of on-farm employment for a considerable time period during the year, lack of resources and knowledge about use of agro-waste in mushroom production keep the farmers dependent on traditional crops for their livelihoods. With all its historical background and nutritive importance, it is of paramount importance that large number of farmers/ rural youth be made aware of successful cultivation and economic benefits of mushroom production. Among different agro enterprises, mushroom cultivation is one which has the potential for bioconversion of agricultural, industrial, forestry and household wastes into nutritious food. Mushroom cultivation can effectively utilize agro residues for production of protein rich foods and play crucial role in management of different agro residues. It consists of different activities such as spawn production, compost making, processing and mushroom cultivation etc. and each of these is an enterprise in itself. Mushroom farming is one of the most profitable agri-business that unemployed youths can start with a low investment and less space. Mushroom cultivation in Jammu region is growing gradually as an alternative source of income for many people. Different Mushroom species yield differently. As far as button mushrooms are concerned, they give a total of 10 to 15 kg mushroom yield per square foot. If we cultivate mushrooms in a 250 square foot area, then the total yield is up to 2,500 – 3,750 kg. While the Oyster (Dhingri) Mushroom which is the other popular mushroom variety yields a total of 12 kg per square foot. The total oyster mushroom yield per 250 square foot is 3,000 kg. While if you see the Cost of mushroom per kilogram, Button sells for Rs. 150 to 175/kg while the Oyster Mushroom is sold @ Rs. 125- 150/kg.

KVK INTERVENTION

KVK Jammu, recognizing the value of mushroom production in uplifting the economy of marginal, small and landless farmers, lays special emphasis on providing/conducting extension activities, skill trainings, and exhibitions for rural youth, farmers and farm women. Exposure visits are also planned for farmers to promote mushroom production units on large scale. Since the past 4-5 years, KVK is providing 200 hour skill trainings sponsored by ASCI. Moreover, it facilitates the mushroom growers not only in providing technical inputs but also assist in procuring good quality spawn and other critical inputs in addition to conducting diagnostic visits to mushroom units at farmer's field. Exhaustive skill training comprising of theoretical as well as practical knowledge, exposure visits regular interactions with like KVK scientists and experts from allied departments like EDI, mushroom development department, NABARD etc.

With the realization of the importance of cultivating mushroom as an additional source of income, Neelam, a woman farmer, decided to undergo skill training in mushroom production. In the year 2022, she enrolled himself for 200 hours skill trainings on "Mushroom growers - Small

entrepreneurs" sponsored by Agriculture Skill Council of India (ASCI) and successfully completed the certificate course. In the efforts to increase her income, Smt. Neelam a resident of Block & Tehsil-R.S.Pura, District Jammu decided to take training on mushroom cultivation and start her enterprise. She is a progressive, hardworking woman having marginal landholding of less than 0.2 hectare (ha). After the intervention of KVK Jammu, she has started cultivating mushrooms, viz. white button.

OUTPUT

She is a regular visitor to KVK Jammu and had participated in many training programmes. During her successive visits to KVK Jammu and getting motivation from KVK scientists, she decided to take training on mushroom cultivation and to try the same at her place. She after getting training from KVK Jammu and getting some free bags from KVK Jammu, she started mushroom cultivation. Next year, she bought 100 number of readymade mushroom bags from the market. Next year, she is planning to increase further.

OUTCOME

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

Economic benefits				
Sno.	**Year**	**Crops grown**	**Unit size**	**Income (rupees)**
1.	2022	Button Mushroom	50 bags	12000
2.	2023	Button Mushroom	100 bags	25000

IMPACT; She is selling his fresh produce in the market. Neelam has started horizontal spread of the technology in different ways by motivating her fellow women farmers and unemployed youth, she has become a role-model for rural youth for taking mushroom cultivation a potential enterprise for agri-preneurship development leading to sustainable livelihood security. The trainee has increased the unit size between 2022 and 2023.

Training 2022

3.Title: Large Scale adoption of Fish farming at Paragwal area of Jammu District

Union Territory of Jammu & Kashmir lying between 32°-17° to 36°-30° N latitude and 73°-26° to 80°-30° E longitude has a unique topography and diverse agro-climatic conditions which divide the Union Territory into three agro-climatic zones like tropical Jammu division, temperate Kashmir valley and cold arid zone of Ladakh. The climate of the state varies markedly due to its rugged topography. The tropical and sub-tropical zone of Jammu division offers good potential for development of warm water

fisheries, viz culture of Indian Major carps and Chinese carps while the temperate zone of Kashmir and areas of Kathua, Udhampur, Doda, Rajouri and Poonch have the potential for producing cold water fisheries (trout, Mahseer and snow trout) also in addition to carps.

Union Territory of J & K is bestowed with natural water resources covering a total water spread area of about 0.40 lack ha existing in the shape of torrential coldwater streams, lakes, rivers, sars, springs and high altitude lakes. River Indus and its tributaries form the main river system in the state. Apart from above, the nature has endowed the state of Jammu and Kashmir with the rich resources of lakes, springs and ponds also. These waters possess great potential for development of varied types of fisheries. Fisheries have been one of the mainstay of the Union Territory economy since Centuries.

Occupation/livelihood of Jammu and Kashmir

Jammu & Kashmir is an agrarian state nearly about 65% of its population directly or indirectly depends upon agriculture and more than 70% people lives in rural areas, being an agrarian state, it cannot provide food grains to whole of its population. Small region falls under irrigated condition while mostly depend upon rainfall. There are various challenges and issues in agriculture production, productivity, climatic conditions, hilly region, lack of rural transport, infrastructure and marketing facilities. J&K agriculture is still narrow, backward and less productive (Mehmood and Anand, 2019).

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.

B. NUTRITION SENSITIVE AGRICULTURE RESOURCE INNOVATION (NARI)

NARI 2023

As we are all aware that Agriculture and Nutrition are intricately linked and outcome of one directly influences the other. In pursuit of achieving National Developmental goals, Nutrition and health status plays an important role. However, among the two, the strongest linkage is the farm women. Women are important drivers of change in stimulating production and consumption diversity in rural population. They tend to value household nutrition more than men and are primary decision makers on consumption diversity. 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 village viz. Kattal-Battal in Nagrota tehsil and village Prema Chak of R. S. Pura tehsil 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. In this endeavor 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), oilseed, crops, pulses (Chickpea, 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.

Summary NARI:

	Area (ha/ no. of Unit/Enterprise)	**No. of farmers/ beneficiaries**
FLD		
Nutritional Garden	**0.25**	**25**
Value addition (in no. of Unit or no. of Enterprise)	**10**	**10**
Other Enterprises (in no. of Unit or no. of Enterprise)-Millets	**0.25**	25
Kitchen Garden Kits	0.2	**20**
	Number of Programme/ activity	**No. of farmers/ beneficiaries**
Training Programmes	**4**	**92**
Extension Activities	**2**	**47**

- **Details of Nutrition Garden**

State	**KVK District**	**Name of Nutri Smart Village**	**Types**	**Jan - Dec 2023**			
				Type of Activity (OFT/FLD)	**Established (Number)**	**Area (Sqm)**	**No. of beneficiaries**
J&K	Jammu	Kattal Battal	**Backyard/Kitchen -garden**	FLD	25	2500	25

- **Value Addition**

Type of Activity	**Name of**	**Name of**	**No. of farmers/**

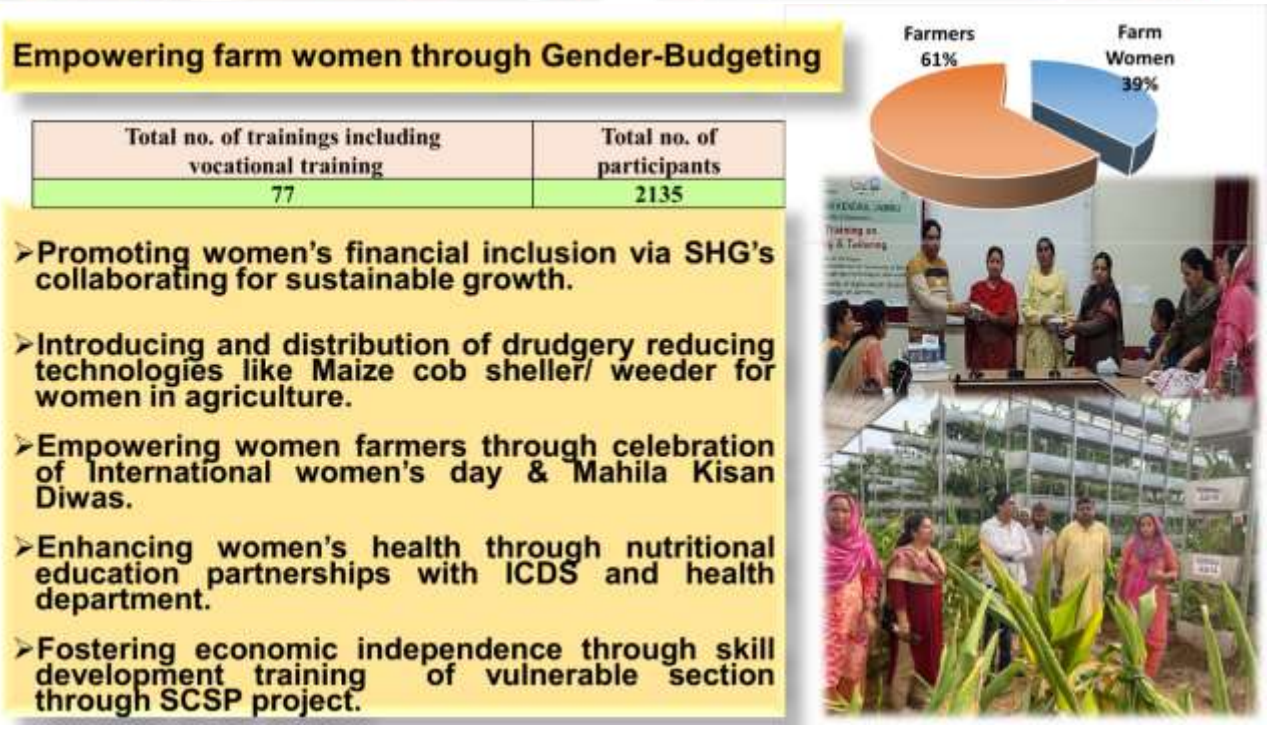
(OFT/FLD)	Crop/vegetables/fruits/other	Value- added product	beneficiaries
Demonstration on enhancing Nutritive Value of millets	Millets	Bajra Dalia	25
Demonstration on processing of Wheat	Wheat	Dalia	25

- **Trainings**

Area of Training	No of courses	No. of beneficiaries
Protected cultivation of Vegetables	1	25
cultivation of wheat	1	10
Improved cultivation of oilseeds	1	30
Nursery management in Veg crops	1	27

- **Extension Activities**

Title of Activity	No of activities	No of beneficiaries
Field Day on maize	1	24
Exposure visit	1	23



6. 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	Jandial Village of Bhalwal Block of Jammu

(village/distt.)

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 :

Sl. No	Name of the Equipment	Qty.	Cost
1	Water distillation unit	1	31667
2	Willy Grinding Mill	1	19406
3	P.H. meter	1	16706
4	Precisa analytical balance	1	52594
5	Kahn Shaking Machine	2	29358
6	Oven	1	12900

7	Spectrophotometer	1	151340
8	Flamephotometer	1	31149
9	EC meter	1	15729
10	Hot plate	1	1153
11	Kjeldhal Distillation and digestion unit	2	37695
	Total	**13**	**399397**

3. **Details of samples analyzed / Soil Health Cards issued during 2022 (January-December) :**

Details	No.	No. of Farmers	No. of Villages	Amount realized
Soil Samples	50	50	5	-
Water Samples	-	-	-	-
Plant Samples	-	-	-	-
Soil Health Cards Issued	-	-	-	-

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

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

Details	No. of Samples	No. of Farmers	No. of Villages	Amount realized
Soil Samples	50	50	5	-
Water Samples	-	-	-	-
Soil Health Cards Issued	-	-	-	-

10. IMPACT

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

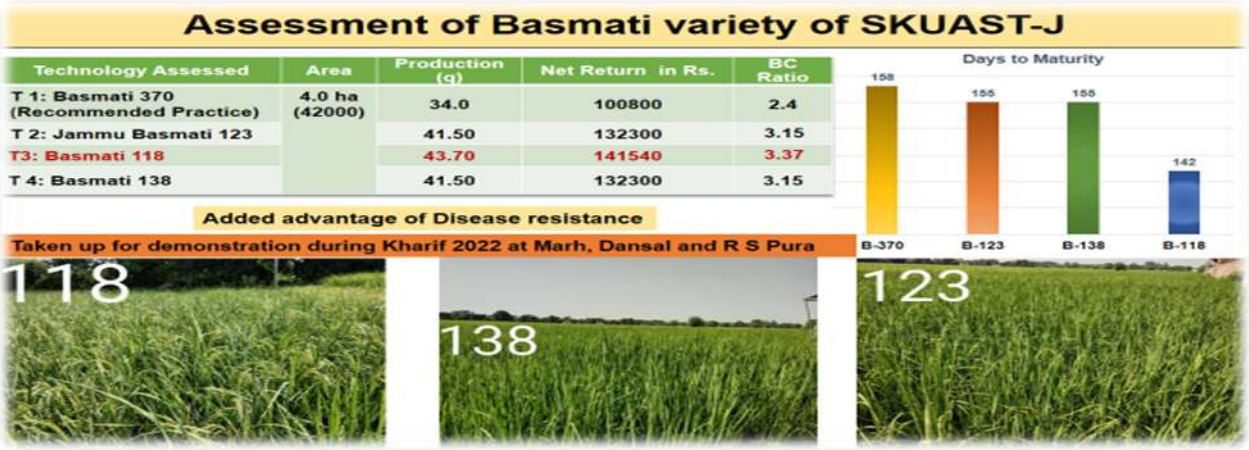
- **Impact of technology assessment of Basmati Varieties on yield and economics of the paddy crop.**

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.

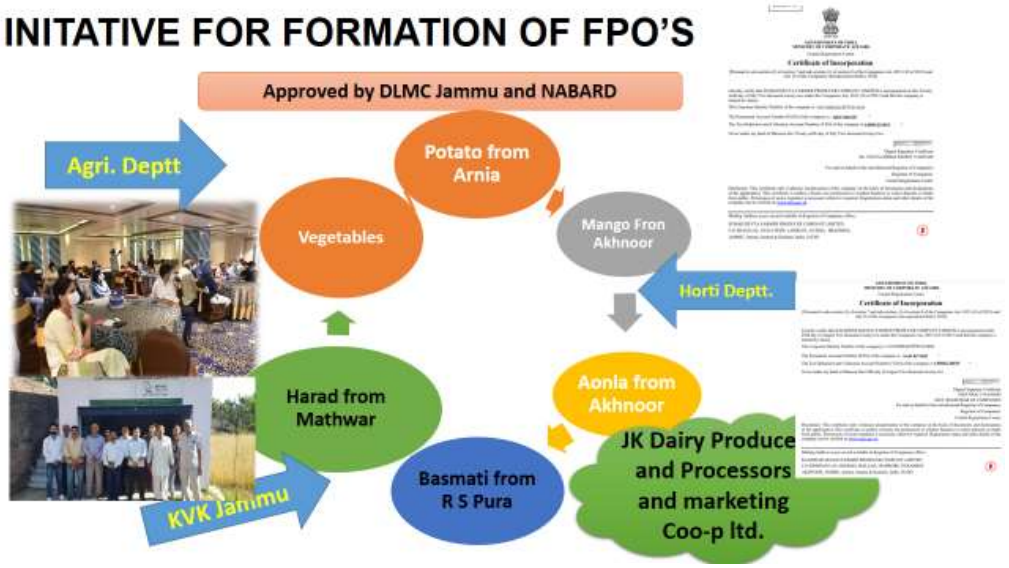


- **FARMERS PRODUCER ORGANISATION DURING 2023**

Six FPO's have been registered in the year 2023 with the collaboration 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 GROWER 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

10.2 Cases of largescale 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 rice 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 pre-seasonal 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 technology 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 Bio-fungicides and Bio-pesticides, 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 analyzed 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 up to 20%. Now many Government Service Providing Agencies, Biofertilizer and biopesticide manufacturing companies, SKUAST-Jammu, Sudhmahadev vegetable producer company limited, YS Sons agro-tech 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 bio-fungicides, having mini Rice Sheller on subsidized rates, organic fertilizer (FYM, Compost Vermi-compost), 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 CFLD'S 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 10 ha. area and 230 number of demonstrations under pulses were conducted in the year 2022-23 in Rabi seasons. The crop demonstrated were chickpea. During the period, 20 ha. area and 140 number of demonstrations under oilseeds were also conducted in Rabi season.

II. In 2023-24 (12 ha. area in 92 Demonstrations) under pulses and (26 ha in 140 demonstrations) under oilseeds was laid in Kharif and Rabi seasons. The crops demonstrated under CFLD pulses were Black gram (Mash). The oilseed crops demonstrated were Sesame (Til), Mustard, oria and Gobi-sarson.

III. More than 20 villages were covered under the programme with major focus on rainfed areas under pulses and mustard. The farmers were facing problems in terms of low productivity, improved variety, 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 and trainings 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 **24-42% increase** in production and subsequently **60-90% increase** in net income of the farmers.

FINAL YIELD REPORT OF CFLD BLACKGRAM KHARIF 2022-23 VARIETY; PU-31 &PU-10

S.no	Crop variety	Average Yield	Gross cost	Gross returns	Net returns	B:C Ratio
1	Blackgram PU-31	5.66 q/ha	19500/-	39337/-	19837/-	2.02
2	PU-10	7.20	19500/-	50040/-	30540/-	2.57
3	Check variety	4.29 q/ha	19500/-	29815.50/-	10315/-	1.53

FINAL YIELD REPORT OF CFLD CHICKPEA -RABI 2022-23 VARIETY; GNG-1581

S.no	Crop variety	Average Yield	Gross cost	Gross returns	Net returns	B:C Ratio
1	Chickpea, GNG1581	17.8 q/ha	40200/-	97900/-	57700/-	2.43
2	Check variety	14.50q/ha	40200/-	79750/-	39500/-	1.98

FINAL YIELD REPORT OF CFLD OILSEED RABI 2022 VARIETY; MUSTARD GIRIRAJ

S.no	Crop variety	Average Yield	Gross cost	Gross returns	Net returns	B:C Ratio
1	Mustard GIRIRAJ	15 q/ha	32000	96000	64000	3.00
2	Check variety	13 q/ha	32000	76800	44800	2.40

FINAL YIELD REPORT OF CFLD OILSEED RABI 2023 VARIETY; MUSTARD RH-725

S.no	Crop variety	Average Yield	Gross cost	Gross returns	Net returns	B:C Ratio
1	Mustard RH-725	24 q/ha	37000	120000	88000	3.24
2	Check variety	18 q/ha	33000	90000	58000	2.43

FINAL YIELD REPORT OF CFLD OILSEED RABI 2022 VARIETY; GOBI SARSON- RSPN-25 (Irrigated)

S.no	Crop variety	Average Yield	Gross cost	Gross returns	Net returns	B:C Ratio
1	Mustard **RSPN-25**	20q/ha	32000	72000	40000	2.25
2	Check variety	13 q/ha	32000	62400	40000	1.95

FINAL YIELD REPORT OF CFLD OILSEED 2023 KHARIF

S.no	Crop variety	Average Yield	Gross cost	Gross returns	Net returns	B:C Ratio
1	Sesame RT-351	5.0q/ha	18000	80000	61500	4.31
2	Check variety	4.35 q/ha	18500	69600	510400	3.75

FINAL YIELD REPORT OF CFLD OILSEED 2022 RABI VARIETY; GOBHI-SARSON RSPN – 25 (RAINFED) , DGS-1

S.no	Crop variety	Average Yield	Gross cost	Gross returns	Net returns	B:C Ratio
1	Gobhi sarson RSPN -25	20 q/ha	37500	100000	62500	2.66
2	Check variety	16 q/ha	37500	80000	42500	2.13
3	DGS-1	16q/ha	37500	80000	42500	2.13
4	Check variety	13q/ha	37500	65000	27500	1.73

FINAL YIELD REPORT OF CFLD OILSEED RABI 2022 VARIETY; TRIA RSPT-6

S.no	Crop variety	Average Yield	Gross cost	Gross returns	Net returns	B:C Ratio
1	Mustard **RSPT-6**	9.50q/ha	21800	47500	25700	2.17
2	Check variety	6.60q/ha	21800	33000	11200	1.51

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

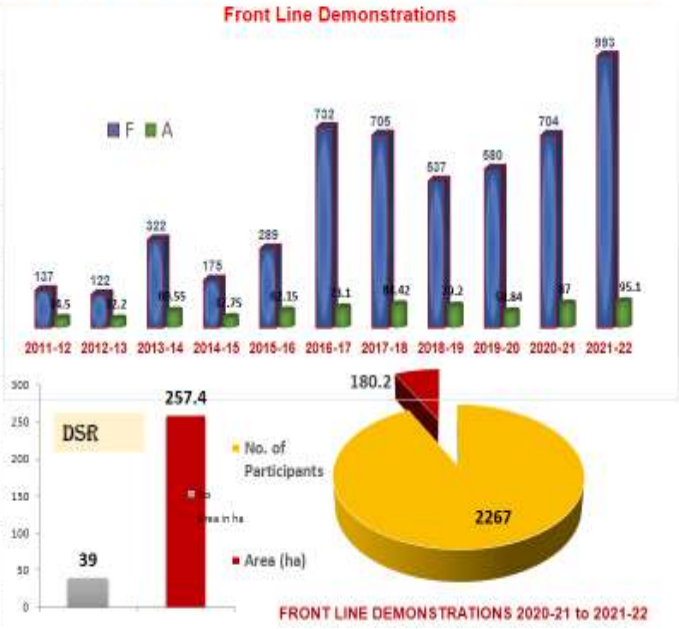
- The focus of KVK activities have been on agri-based enterprises in view of doubling farmer's income by the year 2022 through mushroom cultivation, marigold production, vegetable production, backyard poultry, fisheries, medicinal plants/trees etc.
- Promotion and assessment of newly developed basmati 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 and 2023 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 endeavour 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. However,10-14 % 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 Kisan melas, Awareness camps, Kisan Ghoshthis 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	Organizing 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. Utilizing 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 help 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 kisan melas, 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.)

11.3 Details of linkage with ATMA

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

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

Coordination activities between KVK and ATMA during 2023 (January-December)

S. No.	*Programme*	*Particulars*	*No. of programmes attended by KVK staff*	*No. of programmes Organized by KVK*	*Other remarks (if any)*
01	Meetings	• Farmers Scientist interaction • Action Plan meeting		2	

S. No.	*Programme*	*Particulars*	*No. of programmes attended by KVK staff*	*No. of programmes Organized by KVK*	*Other remarks (if any)*
02	**Research projects**	**Technology park and Crop Cafeteria**		**2**	
03	**Training programmes**				
04	**Demonstrations**				
05	**Extension Programmes**				
	Kisan Mela	Participated	2	-	-
	Technology Week				
	Exposure visit	Venue		2	
	Exhibition				
	Soil health camps	Participated			
	Animal Health Campaigns				
	FFS				
06	**Publications**				
	Video Films				
	Books				
	Extension Literature				
	Pamphlets				
	Others News, coverage				
07	**Other Activities**				

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

S. No.	Programme	Nature of linkage	Constraints if any

11.5 Nature of linkage with National Fisheries Development Board

S. No.	Programme	Nature of linkage	Remarks
1	Pradhan Mantri Matsya Sampda Yojna	Member of District Level Committee	Recourse person
2	CAPEX		

11.6. Details of linkage with RKVY:NA

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

12. PERFORMANCE OF INFRASTRUCTURE IN KVK in the year 2023

12.1 Performance of demonstration units (other than instructional farm)

Sl. No.	Demo Unit (Mention the name of Demo Unit)	Year of estt.	Area	Details of production			Amount (Rs.)		Remarks
				Variety	Produce	Qty.	Cost of inputs	Gross income	
1	Vermicom	20	0.0	-	Man	45.	190	458	Functio

	post	08	4		ure	86	00	60	nal
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	31.07.2023	20.11.2023	4.4	Basmati 370	Seed	75qt.	130000	-	With Mega seed Project SKUAST-Jammu
Wheat	05.12.2023	25.04.2024	5	DBW-173 and DBW 187	Seed	146.93 qt.	105000	-	
Pulses	-	-	-						
Grams	-	-	-	-	-	-	-	-	-
Oilseeds	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
Fibers	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
Floriculture	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
Vegetables	-	-	-	-	-	-	-	-	-
								-	-
Others (specify)									
Fodder	20/05/2023	08/07/2023	1.0	SSG	Fodder	-	6,600	37500	Revolving Fund

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	Mega seed project

12.4 Performance of instructional farm (livestock and fisheries production)

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

12.5 Utilization of hostel facilities: Nil

Accommodation available (No. of beds) =

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

12.6. Database management

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

12.7. Rainwater Harvesting: NA

Training programmes conducted using Rainwater Harvesting Demonstration Unit

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

12.8 Demonstrations conducted using Rainwater Harvesting Demonstration Unit: NA

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

13. FINANCIAL PERFORMANCE

13.1 Details of KVK Bank accounts

Bank account	Name of the bank	Location	Account Number
With Host Institute	J&K Bank, R.S.pura	R.S.pura	0025040100040224
With KVK	J&K Bank	R.S.pura	0025040500026430

13.2 Utilization of KVK funds during the year 2023-24 (Amount in Rupees)

S. No.	Budget Head	Revised Estimate 2023-24				Total Release (incl. O.B)	Expenditure 2023-24				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 (Minor works)			583000	583000	583000	0		583000	583000	0
12	Equipment										
5	Vehicle & Vessels										
6	Farm/Small Implements										
7	Furniture & fixtures										
	Total – CAPITAL	0	0	583000	583000	583000	0	0	583000	583000	0
9	Pay & Allowances	21680000			21680000	21680000	21679144			21679144	856

	Grants in Aid – General										
10	Travelling Allowance (Domestic)	150000			150000	150000	150000			150000	0
11	A. Research Expenses	120000			120000	120000	119316			119316	684
	B. Operational Expenses	128000			128000	128000	128000			128000	0
	C. Infrastructure (Rent,Electricity, Water charges, Veh running exp, insurance)	63000			63000	63000	63000			63000	0
	D. Communication (Postage and telephone)	13000			13000	13000	12584			12584	416
	E. Others (excluding TA) (Printing and stationery consumable, Advertising, Legal Professional charges)	78000			78000	78000	77842			77842	158
	H. Other Miscellaneous	48000			48000	48000	47830			47830	170
	I. Repair & Maintenance										
	(i) Equipment , Vehicle & Others										
	(ii) Office building										
	SCSP			720000	720000	720000			719867	719867	133
	Non-Scheme General				1250000	1250000				1249770	230
12	Revolving Fund										
	Total Recurring Contingency	450000	0	720000	2420000	2420000	448572		719867	2418209	1791
	Grants in Aid-General (RC+TA)	600000	0	720000	2570000	2570000	598572		719867	2568209	1791
	Total (Capital + General)	600000	0	1303000	3153000	3153000	598572		1302867	3151209	1791

13.3 Status of revolving fund (Rs. In lakhs) for the last five years

Year	Opening balance as on 1st April	Receipt 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

12021-22	**884817.77**	**486830.00**	**246663.00**	**1124984.77**
2022-23 (upto ending December)	**1124984.77**	**170162.00**	**334417.90**	**960728.87**
2023 (01-01-2023 to 31-12-2023)	**960728.87**	**869533.00**	**510929.00**	**1319332.87**

***FDR Closure @ 44,35,798/-**
****FDR @ 65,00,000/-**
Net effective balance of FDR @ 71,26,735/- as on 03.03.2023

14. DETAILS OF HRD ACTIVITIES ATTENDED BY KVK STAFF DURING 2023 (January-December)

Name of the staff	Designation	Title of the training programme	Institute where attended	Date
Dr Punit Choudhary	Chief Scientist and Head	UT level training of trainers under HADP	Agriculture production department Jammu	6-8th January 2023
Dr. Muneeshwar Sharma	Scientist	ICAR– Winter School on Integrated Pest Management: A Way Forward for Food Safety, Security & Sustainability from.	ICAR-NCIPM, LBS Building, Pusa, New Delhi	09th- 29th January, 2023 (21 days)
Dr. Muneeshwar Sharma	Scientist	Orientation Training to Master Trainers for Safe and Judicious Use of Glyphosate by PCO's	Online Training (NIPHM, Hyderabad)	16th June, 2023
Dr Punit Choudhary	Chief Scientist and Head	Zonal Workshop of KVK' s of Zone 1	GBPUAT Pantnagar & ICAR ATARI 1 at Uttaranchal University Dehradun	26-28th June 2023
Dr Prem Kumar	Scientist	Zonal Workshop of KVK' s of Zone 1	GBPUAT Pantnagar & ICAR ATARI 1 at Uttaranchal University Dehradun	26-28th June 2023
Dr. Amitesh Sharma	Scientist	Prakritik Kheti: VARTMAN PARIDARISHAY AVM SAMWABNAYAN	YSPUHF Nauni Solan, H.P.	29th August - 11th September, 2023
Dr. Amitesh Sharma	Scientist	Remote Pilot Course (Agricultural Drone)	IGRUA-Drone Destination, Gurugram, Haryana	16th-22nd November, 2023
Dr. Raju Gupta	Farm Manager	Remote Pilot Course (Agricultural Drone)	IGRUDA-Drone Destination, Gurugram, Haryana	16th-22nd November, 2023

Dr. Prem Kumar	Scientist	National Symposium & 4th Annual Convention of Veterinary Internal & Prevention Medicine Society on "Advancing Veterinary Medicine for Holistic Development of Animal Health and Productivity with a One Health Approach"	SKUAST-Jammu	18-19th December 2023

15. DETAILS OF IMPORTANT PROGRAMS/EVENTS CONDUCTED IN KVKS DURING 2023 (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 2023 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).**

17. AWARDS & APPRECIATIONS 2023

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

AWARDS of KVK JAMMU

Participation in Kisan Melas at SKUAST Jammu

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 Education Division, ICAR, New Delhi	Agricultural Education Division, ICAR, New Delhi	2020-23	3 years	294.0	PI-Dr. Punit Choudhary CoPI's Dr. Ravneet Kour Dr. Sheetal Badyal Dr. Prem Kumar 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

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"

Details of Farmers/ Farm women training programme

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	5	66	25	91	20	8	28	86	33	119
Cropping Systems	4	49	16	65	33	7	40	82	23	105
Crop Diversification	2	23	2	25	15	8	23	38	10	48
Integrated Farming	3	71	6	77	20	0	20	91	6	97
Seed production	1	11	0	11	7	0	7	18	0	18
Nursery management	1	27	26	53	0	11	11	27	37	64
Fodder production	2	11	0	11	0	33	33	11	33	33
Production of organic inputs	2	15	17	32	19	8	27	34	25	59
Nursery raising	2	1	12	13	2	19	21	3	31	34
Management of young plants/orchards	1	1	0	1	16	8	14	7	8	15
Propagation techniques of Ornamental Plants	2	11	19	30	12	23	35	23	42	65
Production and Management technology	1	14	3	17	1	1	2	15	4	19
Soil fertility management	1	7	0	7	14	0	14	21	0	21
Production and use of organic inputs	1	3	0	3	27	0	27	30	0	30
Nutrient Use Efficiency	1	17	0	17	2	0	2	19	0	19
Dairy Management	1	6	0	6	7	0	7	13	0	13
Household food security by kitchen gardening and nutrition gardening	2	7	18	25	3	15	18	10	33	43
Design and development of low/minimum cost diet	2	0	26	26	0	40	40	0	66	66
Designing and development for high nutrient efficiency diet	3	0	19	19	0	66	66	0	85	85
Minimization of nutrient loss in processing	1	0	0	0	0	29	29	0	29	29

Value addition	2	0	25	25	0	19	19	0	44	44
Income generation activities for empowerment of rural women	1	0	4	4	2	21	23	2	25	27
Location specific drudgery reduction technologies	1	0	25	25	0	2	2	0	27	27
Integrated Pest Management	3	35	1	36	21	5	26	56	6	62
Integrated Disease Management	4	45	1	46	43	18	61	88	19	107
Bio-control of pests and diseases	1	3	0	3	27	0	27	30	0	30
Production of bio control agents and bio pesticides	1	28	2	30	0	0	0	28	2	30
Integrated fish farming	2	1	6	7	9	38	47	10	44	54
Carp breeding and hatchery management	1	13	0	13	2	0	2	15	0	15
Carp fry and fingerling rearing	1	10	2	12	1	0	1	11	2	13
Composite fish culture	1	11	1	12	8	5	13	19	6	25
Breeding and culture of ornamental fishes	1	16	2	18	1	0	1	17	2	19
Seed Production	1	4	0	4	19	5	24	23	5	28
Total	1	4	0	4	19	5	24	23	5	28
Formation and Management of SHGs	2	12	0	12	2	0	2	14	0	14
Entrepreneurial development of farmers/youths	2	75	15	90	13	11	24	88	26	114
Grand Total	62	593	273	866	336	400	736	929	673	1602

Details of vocational training programme

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops	1	0	0	0	17	0	17	17	0	17
Integrated farming	3	95	16	111	20	4	24	115	20	135
Planting material production	1	26	0	26	0	0	0	26	0	26
Mushroom Production	4	9	5	14	85	55	140	94	60	154
Value addition	1	7	1	8	16	1	17	23	2	25
Production of quality animal products	1	0	30	30	0	5	5	0	35	35
Ornamental fisheries	3	11	0	11	65	15	80	76	15	91
Other	1	8	0	8	25	17	42	33	17	50
Total	15	156	52	208	228	97	325	384	149	533

Training programmes for Extension Personnel including sponsored training programmes

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	9	1298	76	1374	57	4	61	1355	80	1435
Integrated Pest Management	2	443	23	466	12	4	16	455	29	484
Integrated Nutrient management	1	2	0	2	244	15	259	246	15	261
Rejuvenation of old orchards	3	377	23	400	18	2	20	395	25	420
Protected cultivation technology	3	692	45	737	37	4	41	729	49	778
Formation and Management of SHGs	2	465	33	498	18	3	21	483	36	519
Grading and marketing of produce	3	348	18	366	12	2	14	360	20	380

Group Dynamics and farmers organization	1	159	3	162	6	0	6	165	3	168
Information networking among farmers	2	271	5	276	8	0	8	279	5	284
Capacity building for ICT application	1	37	4	41	0	0	0	37	4	41
Care and maintenance of farm machinery and implements	3	524	21	545	10	1	11	534	22	556
WTO and IPR issues	-	-	-	-	-	-	-	-	-	-
Management in farm animals	2	121	25	146	0	0	0	121	25	146
Livestock feed and fodder production	6	562	38	600	49	3	52	611	41	652
Household food security	-	-	-	-	-	-	-	-	-	-
Seed production	3	383	25	408	36	2	38	419	27	446
Women and Child care	-	-	-	-	-	-	-	-	-	-
Low cost and nutrient efficient diet designing	3	332	31	363	8	10	18	340	41	381
Production and use of organic inputs	-	-	-	-	-	-	-	-	-	-
Gender mainstreaming through SHGs	5	491	44	535	363	12	375	854	56	910
Others (Bee Keeping)	2	311	18	329	7	0	7	318	18	336
Total	**51**	**6816**	**432**	**7248**	**885**	**62**	**947**	**7701**	**496**	**8196**

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 (2021-22)**		
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 varieties	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-Nov	Feb-Mar	Mar	Oct-Nov	Feb-Mar	Mar	June-July And Oct-Nov	Oct And Mar	Mar	-	-	-
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 2023

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

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

A: MACRONURIENTS:

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 (>2
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

Includes Technology Inventory and Activity Chart – III

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

2. Inventory of latest technology available

S. No	Technology	Crop/enterprise	Year of release or recommendation of technology	Source of technology	Reference/citation
1.	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	• Mismatching of varieties for Sowi time. • Rain-fed farming • Poor soil moisture conservation. • Imbalanced nutrient management. • Poor weed management. • Seed borne diseases	• Recommendation of • Varieties according to sowing time. • Introduction and use of drought resistant varieties • Integrated nutrient management strategy • Use of basal NPK and	• On farm trails • Demonstrations • Trainings • Diagnostic visits • Field days	S. no 4, 5 & 6 of the Inventory of latest technology available

Wheat			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 • Occurrence of insects/ diseases.	• Use of recommended • Varieties. • 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	• Use of local Germ-plasma for sowing. • Unscientific Sowing. • Improper fertilizer use crop infestation with insects.	• Use of HYV Varieties. • Balanced fertilizer application. • Timely and proper use of Insecticides	• Demonstration • Trainings • Field days	S. no 8,9 and 10 of the Inventory of latest technology available
Fodder crops	Low Productivity	• ack of Knowledge • o availability of high yielding f grasses/ crops	• ntroduction high yielding perennial fodder grasses • ntroduction of HYV of forage crops	• •	S. no 13 & 18 of the Inventory of latest technology available
Maize	Low productivity of Maize under rainfed areas of distt. Jammu	• adoption of hybrids/ Composite • mbalanced fertilizer application • mproper Weed management • nsect pest infestation	• /Composite of Maize • use balanced fertilizer doses • Management Practices. • Management through IP	• ingle component FLD to demonstrate HYV's • raining and FLD programme	S no 14 & 17 of the Inventory of latest technology available

1. 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 rainfed conditions. Av seed yield is 23-25 q/ha and matures in 135-140 days.
6) HD 3237; Released in 2019 with an average yield of 48.1 q/ha
7) PB ZN-1: Released in 2017 possesses higher grain zinc concentration which is good for human health. Its average plant height is 103 cm and is resistant to brown rust and moderately resistant to yellow rust. It matures in about 151 days. Its average grain yield is 22.5 quintals per acre.
8) DBW 173: Released in 2019 having yield potential of 57.0q/ha
9) DKC 9144: is a late maturing maize hybrid, yielding 24.6 quintals per acre
10) 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.
11) RH 725: Released in 2018 for timely sown irrigated conditions. Av seed yield is 25-26 q/ha. Seed contains 41 % oil. AV maturity of this variety is 145-155 days.
12) Giriraj: Released in 2013 for timely sown irrigated conditions. Av seed yield is 23-27 q/ha. Seed contains 38.7-41 % oil. AV maturity of this variety is 145-155 days.
13) 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.
14) 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.
15) GNG 1581: Released in 2007 with production potential of 24 q/ha. It is semi erect with dark green foliage and thick stemmed. It takes 151 days to matures.
16) 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.
17) 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.
18) Pu-10: Released in 2019 is a YMV resistant/tolerant variety. Av yield is 12-13 q/ha and AV maturity of this variety is 85-95 days.