ICAR-ATARI – Zone-I, Ludhiana

PROFORMA FOR ACTION PLAN OF KVKs IN ZONE I FOR 2023

1. General information about the Krishi Vigyan Kendra

1.1	Name and address of KVK with Phone, Fax and e-mail	:	Krishi Vigyan Kendra, Ganderbal, Shuhama, Alusteng-190 006 0194-2262490 - +919419007400 - +919419095742 kvkganderbal@gmail.com
1.2	Name and address of host organization	:	Sher-e-Kashmir University of Agricultural Sciences and Technology of Kashmir, Shalimar, Srinagar-190 025 Off:-0194-2462758, Fax:- 0194-2462160, vc@skuastkashmir.ac.in
1.3	Year of sanction	:	2002
1.4	Website address of KVK and date of last update		http://www.kvkganderbal.org 09-05-2023

2. Details of staff as on date

Sl. No.	Sanctioned post	Name of the incumbent	Discipline	Existing Pay Scale	Date of joining	Permanent / Temporary
2.1	Programme Coordinator/ Sr. Scientist & Head	Dr. Ishfaq Abidi	Plant Genetics and Breeding	(Level-13A (131400-217100)	June, 2022	Permanent
2.2	Subject Matter Specialist	Dr. Rafiya Munshi	Home Science	(Level-13A (131400-217100)	May, 2022	-do-
2.3	Subject Matter Specialist	Dr. Shafat A. Banday	Horticulture	(Level-13A (131400-217100)	May, 2018	-do-
2.4	Subject Matter Specialist	Dr. Farooq A. Ahanger	Plant Protection	(Level-11 (68900-205500)	Sept. 2017	-do-
2.5	Subject Matter Specialist	Dr. Shaheen Farooq	Animal Science	(Level-11 (68900-205500)	February, 2023	-do-
2.6	Subject Matter Specialist	Dr. Eajaz Ahmad Dar	Agronomy	(Level-10 57700-211500)	Aug. 2020	-do-
2.7	Subject Matter Specialist	**Vacant**	Soil Science	-	-	-
2.8	Programme Assistant	Vacant				
2.9	Computer Programmer	Mr. M. Iqbal Koul	Information Technology	(Level-7 (44900-142400)	December, 2017	-do-
2.10	Farm Manager	Mrs. Faiqa Syed	Fisheries	(Level-10 57700-211500)	Feb, 2022	-do-
2.11	Accountant/Superintendent	Ms. Rubeeya Ashraf	Accounts	(Level-6 (35400-112400)	Sep, 2021	-do-
2.12	Stenographer	Mr. Nisar Ahmad Wani	-	(Level-4(25500-81100)	Sep, 2021	-do-

2.13	Driver 1	**Vacant**	Driver	(Level-2(19900-63200)	-	-do-
2.14	Driver 2	Mr. Javaid Ahmad Gujri	Driver (LV) (Deployed to Directorate of Extension, SKUAST-K)	(Level-2(19900-63200)	January, 2017	-do-
2.15	Supporting staff 1	Mr. Manzoor Ah. Bhat	Supporting staff	(Level-SL3(16900-53500)	July, 2015	-do-
2.16	Supporting staff 2	**Vacant**	-	(Level-SL3(16900-53500)		-

3. Details of SAC meeting conducted during 2022

Sl. No	Date	Major recommendations	Status of action taken in brief	Tentative date of SAC meeting proposed during 2023-24
	25-08-2022	**Hon'ble Vice Chancellor, SKUAST-K, in his valedictory address stressed upon following:**		10-05-2023
1		Dissemination of newly released varieties of cereals and fodder crops to the farmers of the District by KVK in collaboration with the Line Departments and identification of high yielding & high market value crops which can be cultivated for increasing income of the farmers.	KVK is in continuous process of demonstrating and disseminating newly released varieties of cereals viz; (Rice-SR2, SR4, SR5, Maize-SMC-4, SMC-7) and Fodder crops (Oats-SFO-2, Maize- SFM-1), Rajmash (SR-1, Moong (SM-1, Brown Sarson (SBS-1, Field Pea (SFP-1) under FLD, CFLD and other schemes in different blocks of the district in collaboration with the line departments.	
2		Extension of Horti-Poultry Model across the District by incorporating more breeds of Poultry birds having higher market value. Alternate source of feed to be identified for poultry to reduce input cost.	In order to extend the outreach and benefits of Horti-Poultry model pioneered by this KVK. The Horti-Poultry model has been replicated at three locations Watlar, Repora & Yarmuqam in district Ganderbal and new breeds viz. Kroiler, Keystone, Austerlop and WLH having higher market values were introduced & incorporated in the model. Inputs for animal nutrition from other research stations are being received before recommending any alternate source of feed. Apple pomace and saffron	

			petals have been identified as alternate source of feed for poultry.	
3		To look for ways for increasing shelf life of winter chocolate in collaboration with FVSc and AH as a refinement of OFT.	OFT's has been laid at Watlar, Khalmulla, Repora and Lar for increasing shelf life of winter chocolate in collaboration with F.V.Sc & A.H and result once obtained shall be shared with the line departments, farmers and other stake holders.	
4		Diversification and value addition of Horticulture crops with focus on quality packaging and marketing of different enterprises in collaboration with relevant departments.	1. This year KVK has expanded the orchard area with establishment of 05 new blocks of fruit crops viz; Walnut, Kiwi, Grape, Plum, and Cherry to establish the mother blocks and subsequent large-scale multiplication of plants for diversification in horticulture crops. 2. Further, special focus has been given to develop new and improved value-added products, prominently Aloo Bukhara, Walnut cookies, Chocolate dipped walnut, walnut chikkies, plum jam, plum jelly, different pickles (mixed pickle, chilli pickle, fish pickle, beetroot), Behi products, herbal tea's, herbal masala tikki's, dried products viz; chilli powder, dried methi and dried spinach, Milk products – Cheese, Ghee, Desi butter, in addition to other products. 3. A mega programme with Line Departments, Divisions and institutes were organised to explore the market channels of different enterprises and inculcate entrepreneurship among unemployed youth, rural girls and farm women under Nation Rural Livelihood Mission. Efforts are on to identify assured market chains for different products with major players.	
5		Registering of more farmers on Kissan Sarthi portal under the KVK for wider outreach of activities.	7062 farmers have been registered under Kisan Sarthi through this Kendra and further registration in going on for wider outreach.	

6		Home Science activities for income generation, value addition, women empowerment should be carried out in the District and their horizontal expansion should be noted.	Ten training programmes were conducted under different themes covering 280 participants of 8 blocks in collaboration with NRLM for the benefit of educated rural youth Krishi Sakhi and Pashu Sakhi's were also invited for income generation and skill orientation programmes along with unemployed tribal girls who were skilled in different aspects to encourage women empowerment and reduce drudgery.	
7		The IFS Model propagated by the KVK to be further strengthened and the missing components to be addressed and added to the existing model for better returns.	The IFS model was strengthened with the addition of Apiculture, Mushroom and new breeds of Poultry and Rabbitry. Efforts are on its way to add fisheries, sheep and bio-compost units to the existing model for better returns.	
8		Identification and promotion of areas for organic cultivation of potatoes, buckwheat, vegetables, pulses and other high value cash crops like Saffron and Kala Zeera across the District.	KVK Ganderbal has already taken an initiative for propagation and promotion of speciality crops in district Ganderbal and during the year 2022 evaluation trails for Saffron, Kalazeera, Organic potato and exotic vegetable were laid at KVK Farm. Different clusters of districts Ganderbal have been identified for promotion of organic cultivation like • Sarbal- Potato and Buck Wheat • Pati-shallabug- Exotic vegetables Haknar- Kulan- Pulse crop, White maize, Saffron and Kala Zeera.	
9		Fodder scarcity being a major problem faced by the farmers of the District, demonstration units/programmes regarding quality fodder production to be executed. Awareness programmes about perennial grasses at high altitudes to be carried out to combat fodder scarcity.	KVK Ganderbal took an initiative and was able to establish fodder cafeteria of annual/perennial fodder crops in which single and multicut oats, maize, fodder cowpea, berseem, alfalfa, fodder turnip and rye are being cultivated. The crops were selected to ensure round the year availability of fodders. Three awareness programmes regarding year-round and quality production of fodder were conducted in Surfraw, Mamar and Ganiwan areas of the district.	
10		Skill oriented training programmes and demonstrations regarding value addition of fruits and vegetables, cutting and tailoring, mushroom and apiculture may be organised in collaboration with different Faculties, Departments and SHGs of the District.	Seven days Skill-Oriented training programmes were conducted under Skill Training of Rural Youth in collaboration with Directorate of Extension, SKUAST-K a) Stitching & Tailoring b) Garment Construction c) Mushroom cultivation	

			One day training programmes and workshops were conducted on a) Value addition of Tomato, Plum, Milk, Vegetables. b) Workshop on processing and value addition of Walnut Division of Food Science & Technology Hands on Training on value addition of Maize was conducted in collaboration with DARS Srinagar.	
11		Emphasis should be on formation of FPOs/OFPOs for branding and tagging of crops like Walnut, Apple, Cherry, Grapes, Fish, Milk etc.	One OFPO on wool and pellet in collaboration with Department of Sheep Husbandry was registered and FPOs for walnut, fish, and Fruits are under process.	
12		Advanced and low-cost structures for Grapes, Cherry, Plum should be established at KVK for wider dissemination and adoption by farmers in collaboration with Faculty of Agriculture Engineering.	The matter has been discussed and taken up with faculty of Agri-Engineering (They will come up with a practically suitable and cost-effective solution).	
13		Production and development of Trichoderma and analyzing its effect in farmers field for control of diseases in Horticulture and other crops.	KVK has already initiated the process of production & development of Trichoderma at KVK but due to paucity of laboratory space, large-scale production has not been undertaken. Progressive farmers have been involved in this programme. At present two farmers of village Yangoora have been trained in production and process. They have now scientifically developed two batches of *Trichoderma* and utilized it for disease management in their orchards. Data is being analyzed and results shall be shared soon. Based on the results and success at field level the activity shall be extended to other villages and potential entrepreneurs will be identified for the successful transfer of technology.	
		Director Extension, SKUAST-K, in his valedictory address stressed upon following:		
14		Deliberations on low-cost housing model provided to Sheep Husbandry Department with respective field functionaries was made and it was stressed to popularize the low-cost housing model developed by the University across the District for control of foot rot in animals. A comprehensive programme on low-cost housing model to be framed with	The matter has been discussed and a request submitted to the Dean, FVSc&AH, Shuhama for framing a comprehensive programme with the concerned Department.	

		the concerned Department for replication of this model in different areas of the District.		
15		Dean FVSc & AH was asked to depute a team of doctors to visit the villages of the District every fortnight for catering Lumpy Skin Disease and vaccination of different animals to be undertaken at FVSc and AH, Shuhama.	Awareness/ trainings programm's on prevention of Lumpy Skin Disease in livestock were organized both on/ off-campus. Frequent field visits were carried-out by KVK team for on-spot assessment and subsequent management of LSD at block level based on the standard procedures. Further, a taskforce team was formulated by Dean FVSc to cater the contagious LSD. In this regard, field functionaries from Animal Husbandry Department were updated about the treatment regime/control measures like fumigation and vaccination on fortnightly basis. A survey was also conducted to report the incidence of the prevalence of LSD in District Ganderbal.	
16		Regarding availability of Carp Hatchery, Dean Faculty of Fisheries was asked to undertake basic survey with KVK scientists and depute a team for technical supervision for establishing a Hatchery Unit in collaboration with Fisheries Department. Mr. Ashfaq Ahmad, young fish farmer emphasized on the timely availability of quality seed of carp in the area of Khanpora which has 25 carp rearing units. He requested for clubbing of farmers under FPO and described the need of a carp hatchery in the area.	The matter has been discussed with Dean, Fisheries vide letter No.:AU/KVK/Gbl/2022-23/1259 as per the recommendations of the 18th SAC. A team of scientists has been nominated by Dean Fisheries to take a joint survey for establishment of the Carp Hatchery will be undertaken and the feasibility report shall be submitted for the purpose.	
17		Land which is uncultivated and under Wild Acacia to be developed and financial resources to be explored in consultation with Director Strategic Planning & Monitoring.	The land area of about 04 kanals behind the administrative building which was earlier wild Acacia and developed through Estates Department during the year 2021-22 but left mid-way was again refined and developed by KVK during the year 2022-23. Five fruit blocks of different crops have been established in the area and further diversity and expansion shall be carried-out in the coming season. In addition to the above a mega Land development programme has been	

			undertaken on the instructions of the competent authority and an area of 100 kanals has been retrieved back without any financial implications on University	
18		Awareness cum training programmes for Scientific Bee-keeping and Cultivation Technology of Mushrooms for rural women may be organized (**Chief Agriculture/ Horticulture Officer)**	Two Skill development training programme of 07 days each on Mushroom cultivation were organized at KVK Ganderbal benefiting 48 Farmers and Farm women. Besides, three training cum awareness programmes were conducted at KVK for Beekeeping and Mushroom cultivation respectively.	
19		Awareness programmes on High Density Apple cultivation having better market acceptability may be organized in the District and stressed on making FPOs on Grapes in potential grape areas (**Chief Agriculture/ Horticulture Officer).**	Three training programmes on HDP were conducted in different areas of the district. Exposure visit of farmers to HDP block at SKUAST-K, Shalimar was also undertaken. FPO on grapes has already been established by the district Administration. KVK is furnishing all the technical assistance to the farmers of the organization for developing a prospective business plan. We are also acting as a member of DMC on FPO's.	
20		More programmes regarding animal health and diagnostic visits/animal camps should be conducted in collaboration with respective department (**Veterinary Surgeons of Sheep Husbandry Dept.)**.	KVK has organized 26 diagnostic visits both need based and as routine to cater diseases like LSD, Mastitis, Repeat breeding, Infertility, Endo and Ectoparasitic infestations, Low milk yield etc. During the year KVK also organized 04 Animal clinical camps at Khanpora, Kachnambal, Babanagri and Baltal Sonmarg in collaboration with FVSc&AH and Line Departments of the district.	
21		Awareness camps regarding fish culture may be organized (**Assistant Director Fisheries)**.	One off-campus training programme was conducted at Khanpora on common carp rearing and management. A workshop on Centrally Sponsored Schemes available for development of fisheries in Ganderbal was conducted at KVK in collaboration with Department of Fisheries.	
22		Training programmes on production of fingerlings, low-cost feed and quality seed production of fishes may be conducted in collaboration (**Assistant Director Fisheries)**.	In-service training programme for promotion of Fish seed and Trout in Ganderbal was conducted at KVK campus. Further programmes shall be carried-out in current year to cater the increased demand of low cost fish feeds among farmers in collaboration with	

			Fisheries department for which the request has already been submitted. (Letter to Assistant Director Fisheries has been forwarded).	
23		Suggested to conduct awareness programmes regarding formation of FPOs and registration under various laws under one umbrella in collaboration with the KVK for benefit of the farming community (**Deputy Registrar Cooperatives)**.	Three on campus and 02 off-campus awareness cum training programmes were conducted at Kangan and Batwina for formulation of FPO/FPC/OFPO among the farmers, FIG's, Cooperative, CIG's and Line Departments to make them aware about the structures and functioning of these organizations.	
		Farmers feed-back: -		
24		Zaitoona Begum, Sarpanch Chunt Waliwar thanked the KVK & Directorate of Extension for reaching out to Waliwar and providing Quality Seed and chicks to farmers of the area. She hoped for more training and awareness programmes for the farmers of Chunt Waliwar and ensured full cooperation to the KVK.	Two skill training programmes of 7 days duration on Stitching and Tailoring and Garment Construction were exclusively conducted for the participants form Chunt Waliwar. Further, input distribution cum awareness programmes for quality seed production of maize, potato, fodder, oilseed, vegetable were conducted to handhold tribal farmers and rural women of the area.	
25		Mr. Sanaullah, progressive farmer appreciated the efforts of KVK in disseminating knowledge to the farmers of the District. He requested that for the year 2022-23, Shalimar Brown Sarson-2 and Shalimar Brown Sarson-3 may be provided to the farmers of the adjoining areas of the village.	KVK is continuously working for the farming community and making best possible varieties, expertise, timely interventions and monitoring available to the farming community of the district. During the year Shalimar Brown Sarson-2 was provided to 20 farmers of Kurhama for laying frontline demonstrations on an area of 5 hectares.	
26		Mrs. Zamrooda, champion farmer of the District described the need of maintaining regular contact with the KVK for timely redressal of issues of the farming community. She requested for more awareness and training programmes on Lumpy Skin Disease and other diseases faced by dairy farmers.	The continuous technical support and handholding of Ms. Zamrooda, a progressive Champion farmer by KVK Ganderbal helped and engaged her to expand her venture and prently from 02 cows in 2016, she has now established dairy unit with 25 cows with an average daily milk production of 200 liters/day. It has not only let to increase in milk production and made her venture profitable but boosted her economy as well. Fortnightly training cum awareness programmes were conducted in different villages of Ganderbal (Repora, Nuner, Ganderbal, Watlar) to cater and control the LSD faced by the dairy farmers in collaboration with Faculty of Veterinary Sciences.	

4. Capacity Building of KVK Staff

4.1. Plan of Human Resource Development of KVK personnel

S. No	New Areas of Training	Institution proposed to attend	Justification
4.1.1	Applications of Artificial Intelligence and Machine learning in Agriculture	CSIR Fourth Paradigm Institute, Bengaluru	Understanding Artificial Intelligence for the new generation farming
4.1.2	Mapping of soil resources	ICAR-Indian Institute of Soil Science, Bhopal	To prepare the soil resource base of the district
4.1.3	Development of designer plants for promotion of high-density planting material	ICAR Institutions/SAUs	Demand for early maturing, and high yielding planting system
4.1.4	Protected/hydroponic cultivation of vegetables	ICAR Institutions/SAUs	Need for vertical expansion of vegetable cultivation
4.1.5	Automation in Mushroom production	ICAR Institutions/SAUs	Demand for drudgery reduction in Mushroom cultivation
4.1.6	Millets: Production and processing	ICAR Institutions/SAUs	Demand for the nutri-cereal products

4.2. Cross-learning across KVKs

S. No	Name of the KVK proposed	Specific learning areas
4.2.1	Within ring – KVK Bandipora-II (Gurez), KVK Budgam, KVK Pulwama	Kalazeera cultivation, Saffron cultivation, Mushroom cultivation
4.2.2	Within the zone – KVK Jalandhar, KVK Solan, KVK Hisar	Farm Machinery, Mushroom, High density apple, Beetal Goat
4.2.3	Outside zone –KVK Bengaluru	Promotion of Millets, Biocontrol

5. Proposed cluster of KVKs (3 to 5 neighboring KVKs) to be formed for sharing knowledge/expertise, resources and activities

S.No.	Name of the KVKs included in the cluster	What do you intend to share with Cluster KVKs	What do you expect from Cluster KVKs
5.1	Shopian	High density Apple and Walnut	Improved planting material Awareness regarding the cultivation
5.2	Bandipora	Mushroom Production, Nadru and Kalazeera	Promotion and revival of Nadru and Kalazeera
5.3	Kargil	Millet production technology, Bee keeping	Promotion of millets and honey production
5.4	Pulwama	Milk and saffron production	Technology for higher milk and saffron production

6. Operational areas details proposed

S. No.	Major crops & enterprises being practiced in cluster villages	Prioritized problems in these crops/ enterprise	Extent of area (Ha/No.) affected by the problem in the district	Names of Cluster Villages identified for intervention	Proposed Intervention (OFT, FLD, Training, extension activity etc.)*
6.1	Rice/Maize/ Pulses/ apple/walnut/ cherry/ Plum/ Pear and Livestock (Sheep, Poultry, Cattle).	➢ Low production of fruits, cereals and pulse crops. ➢ Low production of meat in sheep and milk in cattle. ➢ Unscientific management of field crops and fruit orchards in general and fruit cracking, fruit fly and rodent problem of cherry in particular. ➢ Lack of quality seed of cereal crops and planting material of fruit crops. ➢ Non-diversification of fruit crops ➢ Malnutrition in women and children. ➢ Un-employment among rural youth. ➢ Poor Socio-economic status of women. ➢ Lack of knowledge regarding natural resource management Rodent problems in fruit orchards.		Gotlibagh/ Bela-Wusan/ Nuner/ Shuhama/ Bakura/ Khalmulla/ Warpoh/ Buserbugh	❖ Introduction of high yielding varieties of cereals, pulses and quality planting material of fruit crops. ❖ Management of orchards scientifically. ❖ Integrated Farming System for doubling farmers income. ❖ Improved propagation techniques in cherry crop. ❖ Management of dairy animals (health and nutrition). ❖ Women empowerment through skill and entrepreneurship development. ❖ Demonstration regarding SRI system of rice cultivation and vermicomposting technology for resource management. ❖ Demonstration on management of rodents. ❖ Demonstration of walnut dehuller and its availability during the season on cooperative basis. Backyard Poultry Rearing among rural women.
6.2	Rice/Oats/ Oilseed/ vegetables/ Agro-forestry/ Willow Wicker and Livestock (Sheep/Poultry/Cattle).	➢ Low production of Ceraels, Pulses, Oats and Oilseed. ➢ Powdery mildew, brown spot, sheath blight, Rice blast and Mustard Aphid.		Rabitar/ Sendbal/ Shalbugh/ Sehpora/ Patti-shallabugh/ Harran	❖ Integrated Diseases Management. ❖ Introduction of high yielding varieties of Rice, Pulses, Oats and Oilseed.

		➢ Malnutrition in women and children. ➢ Unawareness about soil testing. ➢ Soil borne diseases in crops. ➢ Low production of meat in sheep and milk in cattle. ➢ Non-availability of quality seed of crops. ➢ Unemployment among youth.			❖ Women and child care through introduction of low/ minimum and high nutrient diets in children. ❖ Soil testing for nutrient recommendation. ❖ Awareness of IDM of soil borne diseases. ❖ Willow wickering on modern basis. ❖ Women empowerment through skill and entrepreneurship development. Management of dairy animals (health and nutrition). ❖ Strategies for organic vegetable production. ❖ Soil test based nutrient management for better vegetable production ❖ Seed production of vegetables.
6.3	Apple/Walnut/Cherry/ Maize/Pulses/ Oilseed/ Livestock (Sheep/Poultry/Cattle).	➢ Low production in cereals due to in-adequate nutrient management. ➢ Low production in apple due to faulty training and pruning. ➢ Mono-cropping system in crops. ➢ Diseases like rice blast and turcicum blight in maize. ➢ Lack of quality seed of cereal crops and planting material of fruit crops. ➢ Shortage of fodder during winter. ➢ Malnutrition in women and children. ➢ Unemployment among youth. ➢ Poor Socio-economic status of women.		Yarmuqam/ Satrina/ Haknar/ Kachnambal/ Anderwan/ Wangath/ Surfraw/ Ganiwan	❖ Introduction of high yielding varieties of Ceraels particularly Maize. ❖ Strategies for enhancement of fruit production with proper package of practices. ❖ Introduction of high yielding Pulse varieties and Oilseed. ❖ Women empowerment through Backyard Poultry rearing. ❖ Management of shot hole disease in cherry. ❖ Management of dairy animals (health and nutrition). ❖ Introduction of Oats and fodder maize as source of fodder.

		➢ Improper housing system caused reduce body growth rate and increased mortality due to heat (high temp &RH) & cold stress (hailstorm& frost)			❖ Enhancing the nutritional value of fodder through Urea molasses treatment.
6.4	Apple/ Vegetables/ Rice/ Pulses/ Floriculture/ Oilseed/ Sheep	➢ Low production of Ceraels, Pulses, Oats and Oilseed due to non-availability of quality seed. ➢ Excessive use of fertilizers. ➢ Lack of knowhow about IDM in vegetable crops. ➢ Poor orchard management with respect to training and pruning and Nutrient management. ➢ Non-diversification of fruit crops. ➢ Unawareness about soil testing and nutrient recommendation. ➢ Non-availability of quality seed of high yielding improved varieties of vegetable crops and pulses. ➢ Non-adoption of package of practice for HYV. ➢ Downy mildew, calyx end rot and root rot of cucurbitaceous crops. ➢ Many juvenile orchards established with fallow interplant and interrow spaces ➢ Lack of awareness regarding intercropping in apple orchards ➢ Less availability of vegetable crops ➢ No other sources of income till plants bear fruits		Ahan/ Wakura/ Zazuna/ Batwina/ Yangoora/ Kurhama/ Safapora/ Gozihama	❖ Introduction of high yielding varieties of Cereals, Pulses, Oilseed. ❖ Pre and Post-harvest Management of orchards. ❖ Integrated Farming System for doubling farmers income. ❖ Soil testing and sampling for nutrient recommendation. ❖ Scientific Training and Pruning of fruit crops particularly apple. ❖ Awareness and demonstrations regarding canker, root rot and other diseases in fruit and vegetable crops. ❖ Feed and fodder management for sheep and cattle for better renumeration. ❖ Management of sheep and dairy animals (health and nutrition). ❖ Introduction of Oats and fodder maize as source of fodder. ❖ Intercropping of vegetables with vegetables. ❖ Introduction of SKUAST-K released vegetable varieties. ❖ Awareness regarding SKUAST-K recommended package of practices of vegetable crops.

6.5	Grapes/ Apple/ Vegetables/ Rice/ Maize/ Pulses/ Oilseed/ Oats/ Livestock (Sheep/Poultry/Cattle).	➢ Anthracnose and powdery mildew of grapes. ➢ Hen and chicken disorder and berry cracking in grapes. ➢ Faulty Training and pruning in Grapes & Apple. ➢ Lack of knowledge about protected cultivation of off-season vegetables. ➢ Lack of knowledge on kitchen gardening and processing of fruits and vegetables ➢ Unawareness of adverse climate adaptive technologies. ➢ Non-availability of quality seed of cereals, Pulses and vegetables. ➢ Unemployment among rural youth. ➢ Foot rot and other problems related to sheep.		Repora/ QasbaLar/ Waliwar/ Larsun/ Wandhama/ Manigam/ Watalbagh/	❖ Production and management technology for production high quality grapes. ❖ Foliar nutrient application to overcome micronutrient deficiencies. ❖ Scientific Training and Pruning in Grapes and Apple. ❖ Popularization of new SKUAST-K released varieties in Rice, Oilseed, Pulses & vegetables. ❖ Introduction of IDM & IPM strategies to manage grape diseases and insect pests. ❖ Women empowerment through skill development trainings. ❖ Introduction of floriculture and cultivation of medicinal plants as income generation.

* Support with problem-cause and interventions diagram

7. Technology Assessment during 2023

S. No.	Crop/ enterprise	Prioritized problem	Title of intervention	Technology options	Source of Technology	Name of critical input	Qty per trial	Cost per trial	No. of trials	Total cost for the intervention (Rs.)	Parameters to be studied	Team members
7.1	Rice	Low yield, high labour cost and continued dependence on the same herbicide	Alternative herbicides for weed control in rice	T1: Butachlor fb hand weeding T2: Eros fb hand weeding T3: Eros fb Bispyribac sodium	SKUAST-K and PAU, Ludhiana	Herbicides	Butachlor/ Eros 3 kg+Bispyribac 50 ml	4000	3	12000	Weed density, Weed control efficiency and Yield	KVK Team
7.2	Millet	Lack of awareness	Assessment of performance of millet crops in Ganderbal	T1: Proso Millet T2: Finger Millet T3: Foxtail millet	SKUAST-K and PJTSAU, Telangana	Seed	40 kg	8000	3	24000	Suitability and yield	Dr. Eajaz Ahmad Dar and Team KVK
7.3	Chilli	Drooping and wilting	Integrated disease management of chilli wilt	T0: Farmer' practice (No treatment) T1=Controlled irrigation+ridge sowing+Seed treatment+Seedling dip+Soil drenching with biocontrol agent (Trichoderma spp.@2x108 cfu ml-1) T2:Seed treatment +soil drenching with carbendazim+mancozeb 75wp@0.3%	Farmers Practice SKUAST-K	Seed,bio agent, Fungicide,labour	300g seed,bioagent 5 ltr. fungicide 300gm	300+1000+100+600	05	10000/=	%Disease control over check and yield	Dr. F.A. Ahanger and team KVK

7.4	Dhingri Mushroom	Lack of knowledge about production technology		T0:Farmer do not know how to cultivate oyester mushroom T1: Use of paddy straw as substrate for cultivation of oyester mushroom T2:Use of fallen tree leaves as substrate for cultivation of oyester mushroom	Farmers Practice SKUAST-K	Polybags, spawn,paddy straw	50n0.+50 bottles of 200 g capacity+ 10 bundle	300+1800+700=2800	06 (60bags/unit)	16800/=	Production/bag	Dr. F.A. Ahanger and team KVK
7.5	Nutrition garden Kit	Lack of nutrition knowledge/ childhood malnutrition	Introduction & evaluation of school Nutrition garden as a promising yet cost-effective 15ntervention to improve children's knowledge, attitudes and practices (KAP) on healthy eating.	T0= Schools practice T1= Introducing Nutrition gardens and related demonstrations involving children. T2= Introducing Nutrition gardens and related demonstrations involving children along with parents.	Literature	Seeds/ seedlings / seed kits + Labour + organic fertilizers	200 grams/ 50 plants of each selected variety	3000 /trial	06	18000	Assessment of children's nutritional knowledge, attitudes and acceptability towards healthy foods.	Dr. Rafiya Munshi +Team KVK
7.6	Cattle	Subclinical mastitis	Assessing the impact of post milking teat dip on prevention of sub-clinical mastitis	1T0:Farmer practice 2T1: post milking teat dip with povidone iodine based germicidal dip (PI & Glycerin)	GADVASU	Povidone iodine & Glycerin	2 bottles Povidone iodine 1 bottle glycerin	1000	20	20.000	CMT score Udder health	Dr. Shaheen Farooq and team KVK

7.7	Apple	Poor colour	Soil and foliar application of potassium for colour development	T1: Farmers Practice T2: Foliar spray of potassium sulphate @0.5% at fruit development stage IV	SKUAST-Kashmir	Potassium Sulphate		2000	06	18000	Colour development	Dr. Shafat A Banday and KVK Team
7.8	Apple	Low fruit set	Effect of foliar application of Boron on fruit set and productivity of apple.	T1: No spray (Farmers practice) T2: Three sprays of Boric acid @1.5g/ltr at bud swell stage, after petal fall and 21 days after second spray	SKUAST-Kashmir	Boric Acid		2000	06	18000	Fruit set and yield	Dr. Shafat A Banday and KVK Team

8. Technology Refinement during 2023

S. No.	Crop/ enterprise	Prioritized problem	Title of intervention	Technology options	Source of Technology	Name of critical input	Qty per trial	Cost per trial	No. of trials	Total cost for the intervention (Rs.)	Parameters to be studied	Team members
8.1	Brown Sarson	Poor oil yield	Application of Sulphur and Boron	T1: NPK T2: NPK+Sulphur T3: T2+Boron	SKUAST-K	Sulphur and Boron	15 kg	2500	3	7500	Oil content and yield	Dr. Eajaz Ahmad Dar and Team KVK
8.2	Grapes	Chicken and Hen Short berry, low marketable yield	Assessment of foliar nutrient sprays for management of hen and chicken	T1: Farmers practice T2: Three sprays of boric acid @1.5g/ltr at	SKUAST-Kashmir	Boric acid GA3		2500	6	15000	Yield	Dr. Shafat A Banday and KVK Team

			disorder of grapes	bud swell stage, after petal fall and 21 days after second spray T3: Three sprays of GA3 @40 ppm at a) pre bloom, b) after petal fall and © 21 days after second spray								
8.3	Cattle	Low milk production during winter	Effect of feeding winter chocolate on production performance of dairy cattle	T0:Farmer practice T1: Feeding winter chocolate daily for 2 months	SKUAST-K	winter chocolate	200 No.	6000	6	36000/	Milk Yield Milk composition	Dr. Shaheen Farooq and team KVK
8.4	Poultry	Low production of layers during short day period	Effect of additional light hours on the production performance of layer chickens	T0: Natural light hours T1: 2-3 additional light hours morning and evening for 3 months	SKUAST-K	Birds	5	500	30	15,000	Egg production •Egg size	Dr. Shaheen Farooq and team KVK

9. **Frontline Demonstrations during 2023**

S. No.	Category	Crop/ enterprise	Prioritized problem	Technology to be demonstrated	Specify Hybrid or Variety	Name of the Hybrid or Variety	Source of Technology	Name of critical input	Qty per Demo	Cost per Demo	No. of Demo	Total cost for the Demo (Rs.)	Parameters to be studied	Team members
9.1	Cereals	Rice	Low yield	High yielding variety	SR-4	-	SKUAST-K	Seed	12	500	50	25000	yield	Dr. Eajaz Ahmad Dar and KVK Team

		Rice	Low yield and late maturity	High yielding variety	SR-5	-	SKUAST-K	Seed	15	500	20	12000	Maturity and yield	Dr. Eajaz Ahmad Dar and KVK Team
		Maize	Low yield	High yielding variety	SMC-4	-	SKUAST-K	Seed	8	500	25	12500	Yield	Dr. Eajaz Ahmad Dar and KVK Team
		Maize	Low yield	High yielding variety	SMC-7	-	SKUAST-K	Seed	8	500	25	12500	Yield	Dr. Eajaz Ahmad Dar and KVK Team
9.2	Millets													
9.3	Oilseeds	Brown Sarson	Frost injury and Low yield	Frost tolerant and high yielding variety	SS-2/SS-3	-	SKUAST-K	Seed	4	500	100	50000	Yield	Dr. Eajaz Ahmad Dar and KVK Team
9.4	Pulses													
9.5	Commercial crops	Saffron	New introduction	New crops	Saffron		SKUAST-K	Seed	100	20000	2	40000	Yield	Dr. Eajaz Ahmad Dar and KVK Team
		Kalazeera	New introduction	New crop	Kalazeera		SKUAST-K	Seed	100	20000	2	40000	Yield	Dr. Eajaz Ahmad Dar and KVK Team
9.6	Horticultural crops	Apple	Canker	Demonstration on anagement of canker disease in apple	Variety	Red Delicious	SKUAST-K	Fungicide paste (Carbendazim 50 WP (1part) + Copper oxychloride 50	Carbendazim50 WP 1Kg+ Copper Oxychloride	1000+350+1620=2950x5 demo= 14850	05	17325/=	Per cent wound healing	Dr. Farooq & Team KVK

								WP (2 parts) + Linseed oil(8 parts)	50WP 2Kg+ Linseed Oil 5kg					
		Grape	Foliar diseases	Integrated management of common foliar fungal diseases in grapes			SKUAST-Kashmir	Demonstration of Need based recommended sprays + Dormant pruning + proper disposal of disease material	-	-	06	-	Disease status	Dr. F.A. Ahanger & Team KVK
		Apple	Insect pest and disease problem	Demonstration Management of Insect pests and diseases in apple	Variety	Red Delicious	SKUAST-K	Demonstration of spray schedule as recommended by SKUAST-K	-	-	10	-	Disease status	Dr. Farooq Team KVK
9.7	Livestock	Poultry	Low egg and meat production	Demonstration of elite varieties of poultry	Keystone, Vanraja, Kruoiler	Keystone, Vanraja, Kruoiler	SKUAST-K	birds	10	1500	40	60,000	Egg production Body weight gain	Dr. Shaheen Farooq /team kvk
		Cattle	Fodder scarcity	Popularization of KDFM1 as livestock fodder	KDFM 1 seed	KDFM 1 seed	SKUAST-K	seed	2 kg	800	12	15000	Adoption rate Production performance	Dr. Shaheen Farooq /team kvk

9.8	Fisheries													
9.9	Others	Fodder Oats	Low yield	High yielding variety	SS-3	-	SKUAST-K	Seed	20	1500	25	37500	Yield	KVK Team
		Vegetable +pulse	Lack of diversity in Kitchen Gardens	Kitchen garden layout and selection of seeds /seedling for diversity and nutritional Security	SKUAST-K released Varie-ties	SKUAST-K varieties	SKUAST-K	Seeds/ seedling	10 Packs /Demo	1000/demo	20	20000	Functionality & Adoption rate	Dr. Rafiya Munshi & Team KVK

10 Training for Farmers/ Farm Women during 2023

S.No.	Thematic area	Crop / Enterprise	Major problem	Linked field intervention (Assessment/ Refinement/ FLD)*	Training Course Title**	No. of Courses	Expected No of participants	Names of the team members involved
10.1	Crop Production	Millets	Lack of awareness	-	Importance and promotion of millets as nutri-cereals	2	40	Dr. Eajaz Ahmad Dar and KVK Team
		Medicinal and Aromatic plants	Lack of awareness	-	Production technology of important medicinal and aromatic plants	1	25	Dr. Eajaz Ahmad Dar and KVK Team
		Oilseeds	Low application of K and S	FLD	Balanced fertilization in oilseeds	1	25	Dr. Eajaz Ahmad Dar and KVK Team
		IFS	Low profitability	-	Integrated Farming systems for efficient resource use and sustainability	1	25	Dr. Eajaz Ahmad Dar and KVK Team
		Niche Crops	Poor diversification of crops	-	Importance and promotion of saffron and Kalazeera cultivation in Ganderbal	1	25	Dr. Eajaz Ahmad Dar and KVK Team
		Cereals	Lack of awareness	FLD	Production of certified seed	1	25	Dr. Eajaz Ahmad Dar and KVK Team
		Cereals and Oil Seeds	Lack of awareness	FLD	Entrepreneurship for quality seed production	1	25	Dr Ishfaq Abidi and KVK Team
		Millets and Nutri-cereals	Rare production and no value addition	Training/FLD	Introduction to processing and value addition of millets and is health benefits	02	30	Dr Rafiya Munshi and KVK Team
10.2	Horticulture Production							
		Apple	Lack of awareness	-	Layout of orchards both traditional and HDP	1	25	Dr. Shafat Ahmad Banday and KVK Team
		Temperate fruit crops	Poor pollination	-	Pollination management in temperate fruit crops	1	25	Dr. Shafat Ahmad Banday and KVK Team
		Apple	Poor fruit colour	OFT	Various methods to improve colour in apple fruits	1	25	Dr. Shafat Ahmad Banday and KVK Team

		Walnut	Low success in grafting		Propagation techniques in walnut	1	25	Dr. Shafat Ahmad Banday and KVK Team
		Apple	Lack of awareness		Grading & packaging of fruits	1	25	Dr. Shafat Ahmad Banday and KVK Team
		Apple/Walnut	Traditional systems of planting		Promotion of High-density plantation of major fruit crops.	1	25	Dr. Shafat Ahmad Banday and KVK Team
		Apple	Deficiency of calcium and Boron	OFT	Importance of Boron and Calcium in quality fruit production	1	25	Dr. Shafat Ahmad Banday and KVK Team
		Floriculture	Lack of entrepreneurs hip in floriculture sector		Promotion of commercial floriculture to enhance sectoral growth.	1	25	Dr. Shafat Ahmad Banday and KVK Team
		Vegetables	Low yield and limited diversification		Promotion of exotic vegetables under open and Hi-tech protected cultivation	1	25	Dr. Shafat Ahmad Banday and KVK Team
		Apple	Low yield of traditional orchards		Rejuvenation of orchards	1	25	Dr. Shafat Ahmad Banday and KVK Team
10.3	Livestock Production	Cattle	Lack of knowledge	OFT	Control and Management of Mastitis in Dairy Cows	1	50	Dr. Shaheen Farooq /team kvk
		Sheep/Cattle	Low production performance	-	Control measures for ecto - and endo-parasitic infestation in Sheep/Cattle	1	50	Dr. Shaheen Farooq /team kvk
		Poultry/Duckery	High mortality and low production	FLD	Scientific Management of Backyard Poultry/ Duckery	1	100	Dr. Shaheen Farooq /team kvk
		Cattle	Lack of awareness	OFT	Clean Milk Production	1	50	Dr. Shaheen Farooq /team kvk
		Cattle/Sheep	Lack of knowledge	FLD	Silage and Hay making for Winter feeding	2	100	Dr. Shaheen

								Farooq /team kvk
		Cattle/Sheep	Lack of knowledge	-	Importance of Vaccination and Deworming in Dairy Cattle/Sheep	2	100	Dr. Shaheen Farooq /team kvk
		Sheep and Goat	Lack of knowledge	-	Scientific rearing of sheep and goats	1	25	Dr. Shaheen Farooq /team kvk
		Sheep	Lack of awareness	-	Quality wool production	1	25	Dr. Shaheen Farooq /team kvk
		Milk	No value addition of milk and Milk Products	Training	Value addition techniques in preparation of milk products	02	30	Dr Rafiya Munshi and Team KVK
		Meat /poultry	No value addition	Training	Value addition of meat and poultry	02	30	Dr Rafiya Munshi and Team KVK
		Fisheries	Lack of knowledge	-	Scientific culture of rainbow trout	1	25	Dr. Shaheen Farooq /team kvk
		Fisheries	Lack of knowledge	-	Formulation and manufacture of quality feed	1	25	Dr. Shaheen Farooq /team kvk
10.4	Home Science	House Keeping	Micronutrient deficiency High market price	Training/ FLD/OFT	Including nutrient rich vegetables in kitchen gardens to promote Nutri- Garden concept.	03	45	Dr Rafiya Munshi and Team KVK
		Women and Child Care	Low health status	Trainings	Demonstration on Development of fortified food products for school going children	01	30	Dr Rafiya Munshi and Team KVK
		Women and Child Care	Low health status	Training/Awareness	Awareness cum training on nutritional needs of women at risk and pre-school children	02	30	Dr Rafiya Munshi and Team KVK
10.5	Plant Protection	Apple	Lack of knowledge	FLD	Important diseases of apple and their management	03	75	Dr. F.A. Ahanger & Team KVK
		Apple	Root rot and collar rot of apple	-	IDM of root rot and collar rot of apple	02	40	Dr. F.A. Ahanger & Team KVK

		Apple	Sanjose scale	FLD	IPM of sanjose scale & wholly aphid infestation in apple	01	20	Dr. F.A. Ahanger & Team KVK
		Stone fruits	Gummosis & leaf spot of cherry, peach and apricot	-	IDM of foliar disease of stone fruits	01	20	Dr. F.A. Ahanger & Team KVK
		Paddy	Lack of knowledge about disease management	FLD	IDM of paddy diseases	01	20	Dr. F.A. Ahanger & Team KVK
		Maize	Lack of knowledge about insect pest and disease management	FLD	IPM & IDM of insect pest and disease of maize	01	20	Dr. F.A. Ahanger & Team KVK
		Vegetable	Lack of knowledge about disease management in vegetable	Assessment	Integrated disease management of vegetable crops	01	20	Dr. F.A. Ahanger & Team KVK
		Chilli wilt complex	Lack of knowledge about disease management	Assessment	IDM of chilli wilt complex	01	20	Dr. F.A. Ahanger & Team KVK
		Floriculture	Lack of knowledge about insect pests and disease management	-	IDM of important insect pests and disease of floricultural crops	01	20	Dr. F.A. Ahanger & Team KVK
		Natural Farming	Lack of knowledge about the use of bio-pesticides	-	Biological control: A sustainable & practical approach for disease management in natural farming	01	20	Dr. F.A. Ahanger & Team KVK
10.6	Production of Inputs at Site	Poor soil fertility	Low use of organics		Production of vermicompost and vermiwash	01	25	Dr. Eajaz Ahmad Dar and KVK Team
10.7	Soil Health and Fertility		Degrading soil health		Soil test based nutrient application	01	25	Dr. Eajaz Ahmad Dar and KVK Team
10.8	PHT and value addition	Grapes/ walnut	Lack of processing and value addition	Hand on Training	Training on value addition of grapes and walnuts	02	30	Dr Rafiya Munshi and Team KVK
		Vegetables and Fruits	Post-harvest loss	Hands on Training	Training on Processing of fruits and vegetables	02	30	Dr Rafiya Munshi and Team KVK

10.9	Capacity Building Group Dynamics							
10.10	Farm Mechanization	Field crops	Drudgery		Farm mechanization for drudgery reduction	01	25	Dr. Eajaz Ahmad Dar and KVK Team
10.11	Fisheries Production Technologies							
10.12	Mushroom production	Mushrooms	Lack of processing and value addition	Training	Training on value addition of Mushrooms	02	30	Dr Rafiya Munshi and Team KVK
			Lack of knowledge	Assessment	Production technology of mushroom cultivation	01	20	Dr. F.A. Ahanger & Team KVK
10.13	Agro forestry							
10.14	Bee Keeping	Honey	Lack of processing and value addition	Training	Training on value addition of honey and its by products	02	30	Dr Rafiya Munshi and Team KVK
			Lack of knowledge	-	Scientific Beekeeping	01	20	Dr. F.A. Ahanger & Team KVK
10.15	Sericulture		Lack of knowledge	-	Scientific rearing Techniques of silkworm	01	20	Dr. F.A. Ahanger & Team KVK
	Others, pl. specify							

* Title of intervention/title of technology, ** Training title should specify the major technology/skill to be transferred.

11. Training for Rural Youth during 2023

S. No.	Thematic area	Crop / Enterprise	Major problem	Linked field intervention (Assessment/ Refinement/ FLD)*	Training Course Title**	No. of Courses	Expected No. of participants	Names of the team members involved
11.1	Crop Production	Farm Mechanization	Poor resource use	-	Farm mechanization for resource use efficiency	1	25	Dr. Eajaz Ahmad Dar and KVK Team
		Cereals	Lack of awareness	FLD	Seed production and certification	1	25	Dr. Eajaz Ahmad Dar and KVK Team
		IFS	Low profitability	-	Importance and development of Integrated Farming Systems	1	25	Dr. Eajaz Ahmad Dar and KVK Team

11.2	Horticulture Production	Apple/Walnut	Lack of quality planting material	-	Nursery raising techniques for development of quality planting material/clonal rootstocks	1	25	Dr. Shafat Ahmad Banday and KVK Team
		Apple	Poor canopy managemen t	-	Canopy management in temperate fruits	1	25	Dr. Shafat Ahmad Banday and KVK Team
		Apple	Un-scientific method of training and pruning	-	Training & Pruning of Orchards	3	75	Dr. Shafat Ahmad Banday and KVK Team
11.3	Livestock Production	Sheep	Lack of knowledge and skill for dairy farming enterprise for Self-employmen t	-	Entrepreneurship development in commercial Sheep Farming	1	20	Dr. Shaheen Farooq /team kvk
		Poultry	Lack of knowledge and skill for commercial poultry farming	-	Skill development training in commercial poultry production	1	20	Dr. Shaheen Farooq /team kvk
		Cattle	Scarcity of fodder during winter	FLD	Silage making and fortification of straw	1	20	Dr. Shaheen Farooq /team kvk
11.4	Home Science							
11.5	Plant Protection	Natural Farming	Lack of skill	-	Skill development in mass multiplication of Biological control (Trichoderma) for disease management A	01	20	Division of Plant Pathology, SKUAST-K
11.6	Production of Inputs at Site	Oilseed	Lack of quality seed	FLD	Seed production of Brown Sarson	01	20	Dr. Eajaz Ahmad Dar and KVK Team
11.7	Soil Health and Fertility	Soil	Poor soil health		Soil sampling and testing	01	20	KVK Team
11.8	PHT and value addition	Value addition of fruits and vegetables	No remunerativ e price of surplus produce	Trainings	Empowering youth through skill up gradation- fruit and vegetable preservation	02	28	Dr Rafiya Munshi + KVk Team
11.9	Capacity Building							

	Group Dynamics							
11.10	Farm Mechanization							
11.11	Fisheries Production Technologies							
11.12	Mushroom production	Mushroom	Lack of knowledge regarding mushroom cultivation	Assessment	Production technology of Dhingri and button Mushroom cultivation	01	20	Division of Plant Pathology, MRTC SKUAST-K
11.13	Agro forestry	Agro-forestry	Lack of awareness for choosing agro-forestry systems		Agro-forestry systems for marginal soils	01	20	Team KVK
11.14	Bee Keeping	Apiculture	Lack of knowledge about bee keeping and disease management	-	Scientific beekeeping	01	20	Pollination centre SKUAST-K & Dept. of Agriculture Ganderbal
11.15	Sericulture	Sericulture	Lack of knowledge about rearing and management of silkworms	-	Entrepreneurship development in sericulture April - May	01	20	COTS-SKUAST-K & Dept. of Sericulture Ganderbal
	Others, pl. specify							

* Title of intervention/title of technology, ** Training title should specify the major technology/skill to be transferred.

12 Trainings for Extension Personnel during 2023

S.No.	Thematic area	Training Course Title**	No. of Courses	Expected No. of participants	Names of the team members involved
12.1	Crop Production	Rainfed farming Technologies	1	25	Dr. Eajaz Ahmad Dar and KVK Team
		Alternate Agriculture system	1	25	Dr. Eajaz Ahmad Dar and KVK Team
12.2	Home Science	Importance of Establishing Commodity Interest Groups (CIGs) in area.	1	25	Dr Rafiya Munshi +KVK Team
12.3	Capacity Building and Group Dynamics				
12.4	Horticulture	Systems of planting trees	1	25	Dr. Shafat Ahmad Banday and KVK Team
		Nursery to harvest: improved practices in managing fruit crops	1	25	Dr. Shafat Ahmad Banday and KVK Team
		Production of designer plants for promotion of high-density plantation and rejuvenation of orchards	1	25	Dr. Shafat Ahmad Banday and KVK Team
12.5	Livestock Production & Management	Entrepreneurship in Dairy development	1	25	Dr. Shaheen Farooq /team kvk
		Commercial Poultry development	1	25	Dr. Shaheen Farooq /team kvk
		Initiatives for Self-sufficiency in mutton	1	25	Dr. Shaheen Farooq /team kvk
12.6	Plant Protection	Minimizing pesticide use against insect pest and disease on agricultural and horticultural crops	1	25	Dr. F.A. Ahanger & Team KVK
	Plant Protection	Integrated disease management of cereal crops	1	25	Dr. F.A. Ahanger & Team KVK
	Beekeeping	Promotion of beekeeping in district Ganderbal	3	75	Dr. F.A. Ahanger & Team KVK
	Mushroom	Mushroom Cultivation: An Agribusiness	1	25	Dr. F.A. Ahanger & Team KVK
	Mushroom	Promotion of round the year mushroom cultivation	1	25	Dr. F.A. Ahanger & Team KVK
	Vegetable	Integrated disease management of vegetable crops	1	25	Dr. F.A. Ahanger & Team KVK
	Floriculture	Integrated disease management of floriculture crops	1	25	Dr. F.A. Ahanger & Team KVK
	Medicinal and aromatic plants	Insect pest and disease management of medicinal and aromatic plants	1	25	Dr. F.A. Ahanger & Team KVK
	Sericulture	Technological Interventions to Strengthen Sericulture	1	25	Dr. F.A. Ahanger & Team KVK
12.7	Farm Mechanization	Farm Mechanization for hill agriculture	1	25	Dr. Eajaz Ahmad Dar and KVK Team
12.8	PHT and value addition				
12.9	Production of Inputs at Site	Quality seed Production in cereal and fodder crops	1	25	Dr. Eajaz Ahmad Dar and KVK Team
12.10	Sericulture				
12.11	Fisheries				

* Title of intervention/title of technology, ** Training title should specify the major technology/skill to be transferred.

13 Vocational trainings during 2023

S. No.	Thematic area and the Crop/Enterprise	Training title*	No. of programmes and Duration (days)	Type of Clientele (SHGs, NYKs, School students, Women, Youth etc.)	Expected No. of participants	Sponsoring agency if any	Names of the team members involved
13.1	Crop Production						
13.2	Home Science						
13.3	Capacity Building and Group Dynamics						
13.4	Horticulture						
13.5	Livestock Production & Management						
13.6	Plant Protection						
13.7	Farm Mechanization						
13.8	PHT and value addition						
13.9	Production of Inputs at Site						
13.10	Sericulture						
13.11	Fisheries						

* Training title should specify the major technology/skill to be transferred.

14 Sponsored trainings during 2023

Sl.No.	**Thematic area and the Crop/Enterprise**	**Training title***	**No. of programmes and Duration (days)**	**Type of Clientele (SHGs, NYKs, School students, Women, Youth etc.)**	**Expected No. of participants**	**Sponsoring agency**	**Names of the team members involved**
14.1	Crop Production	Seed production	1	SHGs, NYKs, Women, Youth	25	MANAGE	Dr. Eajaz Ahmad Dar and KVK Team
14.2	Home Science	Value addition in fruits and vegetables	1	SHGs, NYKs, Women, Youth	25	MANAGE	Dr. Rafiya Munshi and team
14.3	Capacity Building and Group Dynamics						
14.4	Horticulture	Profitable fruit farming	1	SHGs, NYKs, Women, Youth	25	MANAGE	Dr. Shafat Ahmad Banday and KVK Team
14.5	Livestock Production & Management	Profitable scientific poultry farming	1	SHGs, NYKs, Women, Youth	25	MANAGE	Dr. Shaheen Farooq and Team KVK

14.6	Plant Protection						
	Natural Farming	Skill development in mass multiplication of Biological control (*Trichoderma*) for disease management A	01	SHGs, NYKs, Women, Youth etc	20-30	MANAGE-Hyderabad	Dr. F.A. Ahanger & Team KVK
	Mushroom	Production technology of Dhingri and button Mushroom cultivation	01	SHGs/Rural Youth	20-30	MANAGE-Hyderabad	Dr. F.A. Ahanger & Team KVK
	Bee Keeping	Scientific beekeeping	01	SHGs/Rural Youth	20-30	MANAGE-Hyderabad	Dr. F.A. Ahanger & Team KVK
	Organic farming	Development of organic inputs and knowledge of latest technologies	01	SHGs/Rural Youth	20-30	MANAGE-Hyderabad	Dr. F.A. Ahanger & Team KVK
14.7	Farm Mechanization						
14.8	PHT and value addition						
14.9	Production of Inputs at Site						
14.10	Sericulture						
14.11	Fisheries						

* Programme title should specify the major technologies/skills to be transferred /refreshed.

15. Extension programmes during 2023

Sl.No.	Extension programme*	No. of programmes or activities	Expected No. of participants	Names of the team members involved
15.1	Advisory Services	Need based	-	KVK Team
15.2	Diagnostic visits	175	650	
15.3	Field Day	20	350	
15.4	Group discussions	20	500	
15.5	Kisan Ghosthi	12	350	
15.6	Film Show	20	500	
15.7	Self -help groups	15	300	
15.8	Kisan Mela	03	850	
15.9	Exhibition	10	500	
15.10	Scientists' visit to farmers field	As per demand	-	
15.11	Plant/Soil health/Animal health camps	06	300	
15.12	Farm Science Club	02	100	
15.13	Ex-trainees Sammelan	01	50	
15.14	Farmers' seminar/workshop	02	100	
15.15	Method Demonstrations	30	500	
15.16	Celebration of important days	10	500	
15.17	Special day celebration	04	300	
15.18	Exposure visits	10	500	
15.19	Technology week,	05	250	
15.20	FFS	05	250	
15.21	Farm innovators meet	02	50	
15.22	Awareness programs	30	1200	
	Others, pl. specify			

16. Activities proposed as Knowledge and Resource Centre during 2023

16.1 Technological knowledge

Sl.No.	Category	Details of technologies	Area (ha)/ Number	Names of the team members involved
16.1.1	Technology Park/ Crop cafeteria	Cereal crop/Fodder/Spice crop cafeteria	0.5 ha	KVK Team
16.1.2	Demonstration Units	High density Apple, Rootstock, Dairy, Poultry, Sheep, Mushroom, Vermicompost, Beekeeping, Processing and Value Addition	1 ha	KVK Team
16.1.3	Lab Analytical services	Value addition, Disease diagnosis, Soil analysis	0.05	KVK Team
16.1.4	Technology Week	Crop Production, Horticulture, Plant Protection, Animal Science, Food Science, Niche crops	5 No.	KVK Team

16.2 Technological Products

Sl.No.	Category	Name of the product	Quantity (Qtl.)/ Number planned to be produced during 2023	Names of the team members involved
16.2.1	Seeds	Oats (Shalimar oats-3)	5 qtls	KVK Team
		Maize (SMC-4)	2 qtls	KVK Team
		Brown Sarson (Shalimar Brown Sarson-2)	5 qtls	KVK Team
		Pulses	5 qtls	KVK Team
		Fodder Maize	3 qtls	KVK Team
16.2.2	Planting materials	Vegetable seedlings	4500	KVK Team
		Fruit plants	5000	KVK Team
16.2.3	Bio-products	Honey	200 kgs	KVK Team
		Milk	7000 litres	KVK Team
		Vermicompost	10 qtls	KVK Team
16.2.4	Livestock strains	Poultry	2000	KVK Team
16.2.5	Fish fingerlings			

16.3 Technological Information

	Category	Technological capsules / Number	Names of the team members involved
16.3.1	Technology backstopping to line departments		
	Agriculture	2	KVK Team
	Horticulture	2	
	Animal Husbandry	2	
	Fisheries	1	
	Agricultural Engineering		
	Sericulture		
	Plant Protection	1	
	Others, pl. specify		
16.3.2	Literature/publication	Management of Chilli wilt Production technology of Dhingri Mushroom Low cost cultivation of Button Mushroom Management of late blight of potato Irrigation scheduling in Saffron Irrigation scheduling in rice	

		Importance of millets Seed production and multiplication	
16.3.4	Electronic Media	Krishi darshan, Zaree Khabar, Butraat	
16.3.5	Kisan Mobile Advisory Services	Kisan Sandesh, mkisan, SMS, WhatsApp, Facebook, Instagram,	
16.3.6	Information on centre/state sector schemes and service providers in the district.	ATMA, RKVY, SAMETI, MGNREGA, NABARD, PKVY, PMKSY and allied departments.	

17. Additional Activities Planned during 2023

S.No.	Name of the agency / scheme	Name of activity	Technical programme with quantification	Financial outlay (Rs.)	Names of the team members involved
17.1					

18. Revolving Fund

18.1 Financial status

Opening balance as on 01.04.2022 (Rs.in Lakh)	Expenditure incurred during 2022-23 (Rs.in Lakh)	Receipts during 2022-23 (Rs.in Lakh)	Closing balance as on 31.01.2023 (Rs.in Lakh)
888836.98	**972004.00**	**592080.00**	**477200.00**

18.2 Plan of activities under Revolving Fund

S.No.	Proposed activities	Expected output	Anticipated income (Rs.)	Names of the team members involved
18.2.1	Development of Model horticulture blocks	Planting material	3,00,000.00	KVK Team
18.2.2	Strengthening of Dairy & Poultry units	Milk & Chicks	400000.00	
	Apiculture	Honey (500 kgs)	350000.00	
	Brown Sarson, Oats, Pea, Wheat, Maize, fodder and spice crops demonstration	Seed and fodder	200000.00	

19. Activities of soil, water and plant testing laboratory during 2023

Sl.No.	Type	No. of samples to be analyzed	Names of the team members involved
19.1	Soil	50	KVK Team
19.2	Water	50	
19.3	Plant	200	
19.4	Others		

20. E-linkage during 2023

S. No	Nature of activities	Likely period of completion (please set the time frame)	Remarks if any
20.1	Title of the technology module to be prepared		
	Identified theme areas under Holistic Development of Agriculture in Ganderbal	Nov, 2023	-
20.2	Creation and maintenance of relevant database system for KVK	Dec, 2023	-
20.3	Farmer centric models	Dec, 2023	

21. Activities planned under Rainwater Harvesting Scheme (only to those KVKs which are already having scheme under Rain Water Harvesting)

S. No	Activities planned	Remarks if any
21.1		
21.2		

22. Innovative Farmer's Meet

Sl.No.	Particulars	Details
22.1	Are you planning for conducing Farm Innovators meet in your district?	Yes
22.2	If Yes likely month of the meet	April-Dec
22.3	Brief action plan in this regard	Showcase of Advanced Technologies, Disease diagnosis and management, Efficient marketing channels, Crop diversification, Value chains of crops and commodities, packaging, inputs of organic farming, smart technologies

23. Farmer's Field School planned

S. No	Thematic area	Title of the FFS	Budget proposed in Rs.
23.1	Crop production	Promoting the Cultivation of high value crops viz., Saffron, Kalazeera and Lavender in Ganderbal	50000
23.2	Plant Protection	Promotion of bio control and mushroom production	50000
		Promotion of beekeeping	50000

24. Budget - Details of budget utilization (2022-23) up to 31 March 2023 (Rs.)

S. No.	Particulars	Sanctioned	Released	Expenditure
24.1	**Recurring Contingencies**			
24.1.1	**Pay & Allowances**	19500000	17355000	19500000*
24.1.2	**Traveling allowances**	100000		100000
24.1.3	**Contingencies**			
24.1.4.1	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance			
B	POL, repair of vehicles, tractor and equipments			
C	Meals/refreshment for trainees			
D	Training material			
E	Frontline demonstration except oilseeds and pulses	1250000	1350000	1250000*
F	On farm testing			
G	Training of extension functionaries			
H	Maintenance of buildings			
I	Establishment of Soil, Plant & Water Testing Laboratory			
J	Library			
24.1	**Total Recurring**	**20850000**	**18705000**	**20850000**
24.2	**Non-Recurring Contingencies**			
24.2.1	**Works**	20000	20000	20000
24.2.2	**Equipments including SWTL & Furniture**			
24.2.3	**Vehicle** (Four-wheeler/Two wheeler, please specify)			
24.2.4	**Library**			
24.2	**Total Non-Recurring**	**20000**	**20000**	**20000**
24.3	**REVOLVING FUND**	0	0	0
24.4	**GRAND TOTAL (A+B+C)**	**20870000**	**18725000**	**20870000**

***This includes pending liabilities of the current financial year**

25. Details of Budget Estimate (2023-2024) based on proposed action plan

S. No.	Particulars	BE 2023 proposed (Rs.)
25.1	**Recurring Contingencies**	
25.1.1	**Pay & Allowances**	21500000
25.1.2	**Traveling allowances**	150000
25.1.3	**Contingencies**	1850000
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	
B	POL, repair of vehicles, tractor and equipments	
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	
G	Training of extension functionaries	
H	Maintenance of buildings	
I	Establishment of Soil, Plant & Water Testing Laboratory	
J	Library	
25.1	**TOTAL Recurring Contingencies**	**23500000**
25.2	**Non-Recurring Contingencies**	0
25.2.1	**Works**	11950000
25.2.2	**Equipments including SWTL & Furniture**	500000
25.2.3	**Vehicle** (Four wheeler/Two wheeler, please specify)	800000
25.2.4	**Library** (Purchase of assets like books & journals)	150000
25.2	**TOTAL Non-Recurring Contingencies**	**4500000**
25.3	**REVOLVING FUND**	0
25.4	**GRAND TOTAL**	**38500000**