

**ICAR-ATARI – ZONE I, Ludhiana**  
**PTOFORMA FOR ACTION PLAN OF KVKs IN ZONE 1 FOR 2018-19**

**1. General information about the Krishi Vigyan Kendra, Kulgam (SKUAST-Kashmir)**

1.1	Name and address of KVK with Phone, Fax and e-mail	:	Krishi Vigyan Kendra, Kulgam (Pombay), P.O. Gopalpora Kulgam-192 233 Tele Phone No : 01931213492, 09797138441 Fax: 01931213492 e-mail: <a href="mailto:kvkkulgam@gmail.com">kvkkulgam@gmail.com</a>
1.2	Name and address of host organization	:	SKUAST-Kashmir, Shalimar campus, Srinagar 191121 (J&K) Tele Phone No : 0194-2462159 Fax: 0194-2462159 e-mail: <a href="mailto:vcskuastk@gmail.com">vcskuastk@gmail.com</a> Website address: <a href="http://www.skuastkashmir.ac.in">www.skuastkashmir.ac.in</a>
1.3	Year of sanction		2005 vide no. : 2-42-2003-AE11; Dated: 09-05-2005
1.3	Website address of KVK		<a href="http://www.kvkkulgam.org">www.kvkkulgam.org</a>

**2. Details of staff as on 15-4-2018**

S.No	Sanctioned post	Name of the incumbent	Discipline	Existing Pay Band	Grade pay	Date of joining KVK	Permanent /Temporary
2.1	Programme Coordinator	Dr. Tasneem Mubarak	Agronomy	37400-67000	9000	10-7-2007	Permanent
2.2	Subject Matter Specialist	Mrs. Saima Paul	Home Science	15600-39100	7000	Attached to KVK Srinagar	Permanent
2.3	Subject Matter Specialist	Dr. Ab Shakoar Khanday	Soil Science	15600-39100	7000	21-06-2017	Permanent
2.4	Subject Matter Specialist	Dr Shahid Ahmad Shergogri	Animal Sci.	15600-39100	6000	25-8-2017	Permanent
2.5	Subject Matter Specialist	Dr Parvez Ahmad Sheikh	Plant Pathology	15600-39100	6000	11-4-2018	Permanent
2.6	Subject Matter Specialist	Vacant	Horticulture	15600-39100	6000	-	-
2.7	Subject	Vacant	Floriculture/fis	15600-	6000	-	-

S.No	Sanctioned post	Name of the incumbent	Discipline	Existing Pay Band	Grade pay	Date of joining KVK	Permanent /Temporary
	Matter Specialist		hery/vegetable Science	39100			
2.8	Programme Assistant	Syed Shakir Nazir	Aqua-life medicin	15600-39100	6000	Pursuing Ph. D and Shifted to KVK on 10/7/2017	Permanent
2.9	Computer Programmer	Mr. Shabir Ahmad Mir	Computer Science	15600-39100	6000	17-07-2009 Attached to HQ	Permanent
2.10	Farm Manager	Vacant	-	9300-34800	4600	-	-
2.11	Accountant/ Superintendent	Mrs. Zahida Parveen	-	9300-34800	4600	22-05-2017	Permanent
2.12	Stenographer	Vacant	-				-
2.13	Driver 1	Mr. Ab. Rashid Ganie	-	9300-34800	5400	9-04-2007	Permanent
2.14	Driver 2	Mr. M.Shafi	-	5200-20200	2400	Deployed to Pool office	Permanent
2.15	Supporting staff 1	Gh. Hassan Mir	-	5200-20200	2400	12-12-2005	Permanent
2.16	Supporting staff 2	Basharat Ahmad Lone	-	4440-7440	1650	2-2-2015	Permanent

### 3. Details of Scientific Advisory Committee Meeting (Dated: 22-05-2017)

Sr. No.	Silent Recommendation	Action Taken
3.1	A programme should be organized in which farmers associated with demonstration, OFTs and other KVK activities may be invited, especially those trained in training and pruning and nursery management during the year 2016.	<ul style="list-style-type: none"> <li>➤ 5 interactions programmes in the operational villages and 1 at KVK Kulgam</li> <li>➤ 1 Kisan Mela and Exposure visit to the University during March 2018</li> <li>➤ Feed back and compilation of Impact assessment of different activities during the interaction</li> </ul>
3.2	Checking the performance of varieties of maize in comparison to C-15 in maize demonstrations.	<ul style="list-style-type: none"> <li>➤ 70 demonstration laid at farmers field with C-15 as check with yield almost at par with the New Variety SMC-3</li> </ul>
3.3	High density apple orchard established at KVK may be intercropped with legumes for demonstration to the visiting farmers.	<ul style="list-style-type: none"> <li>➤ High density apple orchard has been intercropped with Pea for demonstration to the visiting farmers.</li> </ul>
3.4	Renovation of administrative block and guest house must be taken on priority so that the resource persons and official visiting the Kendra can stay at Kendra.	<ul style="list-style-type: none"> <li>➤ Repairs are under process and fencing has been completed from road side ( 1/3 rd)</li> </ul>
3.5	Carry out awareness and FLD and other extension activities in coordination with line departments.	<ul style="list-style-type: none"> <li>➤ Line department is being involved in the programmes KVK Conducted <b>19 training/interaction programmes</b> in collaboration with department of Agriculture and Horticulture.</li> <li>➤ <b>5 days</b> Training programme in collaboration with Deptt. Of Floriculture for 65 farmers and extension functionaries.</li> </ul>
3.6	Arrange seed of African tall variety of fodder maize from DARS Budgam for demonstration at KVK/farmers' field	<ul style="list-style-type: none"> <li>➤ Requisition has been forwarded to DARS, SKUAST-Kashmir</li> </ul>
3.8	Establish a Demo unit on floriculture at the Kendra instructional farm.	<ul style="list-style-type: none"> <li>➤ The Kendra has established the same in coordination with Division of Floriculture under the project sanction to the concerned Division.</li> </ul>

3.9	Plant pathology scientist of the Kendra should establish a mushroom unit at the Kendra as a component of Integrated farming system.	➤ The scientist had taken a meeting with the HOD plant pathology SKUAST-Kashmir for the same but was transferred to Division of Plant Pathology with no alternate provided to KVK till 11 April, 2018
3.10	Arrangement of a Training on post-harvest management of cut flowers for the extension functionaries/ interested farmers.	➤ <b>5 days</b> Training programme in collaboration with Deptt. Of Floriculture for 65 farmers and extension functionaries
3.11	Create Demo plots on major field crops at KVK including rice, maize, brown sarsoon, oats and important pulses encouraging line sowing. One demonstration plot especially on SRI at KVK.	➤ All the plots have been created at the Kendra and highly appreciated by the University Authorities.
3.12	Arrange an farmer scientist interaction programme at village Gudder,	➤ 3 programme have been conducted so far and more will be conducted in future
3.13	Root stock of HDP to be multiplied at KVK on scientific lines both for demonstration as well distribution to the farmers of the district	➤ 1000 number of root stock has been purchased from FOA Wadura SKUAST-Kashmir for the purpose.

#### 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	Financial and Administration Management	ATARI, Ludhiana	Orientation programmes for Programme Coordinator & Office Superintendent cum Accountant on administrative & financial management procedures
4.1.2	Agriculture Market strategies	National Institute of Agricultural Marketing Jaipur	For developing abilities to assist farmers in market aspects
4.1.3	Orientation programme for scientists of the KVK	ATARI, Ludhiana	To acquaint KVK scientists with various challenges and state of art KVK interventions
4.1.4	Extension related skill development	MANAGE Hyderabad	Development of efficient communication skills for better adoption of agricultural technology by farmers
4.1.5	Capacity building of Soil Scientist	IARI- New Delhi	Knowledge and skill up gradation in high precision soil analysis
4.1.6	Integrated farming system	Farming System Research Modipuram Meerut	To develop IFS modules for input recycling within the system

#### 4.2. Cross-learning across KVKs

S. No	Name of the KVK proposed	Specific learning areas
4.2.1	<b>Within ring</b> –KVK-Leh, KVK-Kargil	Processing and value addition of apricot
4.2.2	<b>Within the zone</b> – KVK Hoshiarpura, KVK Karnal	Entrepreneurship development in agriculture and allied sectors.
4.2.3	<b>Outside zone</b> – KVK Kannur & KVK Baramati	Advanced technologies for mass production and marketing of planting material

#### 5. Proposed Cluster 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	<b>KVK-Anantnag</b>	Plant propagation techniques in fruit crops Establishment of profitable dairy units Cultivation of traditional varieties of paddy	Organic input production, bio enrichment of vermicompost
5.2	<b>KVK-Pulwama</b>	Safety procedures in pesticide use Establishment of profitable dairy units	Entrepreneurship development technology
5.3	<b>KVK-Shopian</b>	Pulse production technology for soil health enhancement Seed production in fodder oats	Revival technology of local Ambri(Apple) and Potato

## 6. Operational area details

Sector	Major Crop/ Enterprise/natural Resource	Thrust area	Identified Problem
Horticulture	Apple/walnut	Improvement in yield and quality of apple and walnut.	a) Poor fruit set, yield and quality of apple b) Lack of quality planting material c) Nutrient deficiency, poor canopy management and heavy disease incidence
Agriculture	Paddy, maize, Brown sarson, fodder oat and Pulses	Enhance seed replacement rate in major cereals, Pulses, oilseeds and fodder crops.	a) Low seed replacement rate b) Faulty nutrient application c) Disease incidence in rice. d) Lack of suitable rice variety for mid altitudes e) Shortage of fodder f) Low yield of brown sarson
Vegetables	Chilli, Knolkhol, Kale, cucurbits etc.	Increasing vegetable production and revival of niche crops	a) Chilli Wilt b) Downy mildew of cucurbits c) Lack of vegetables in winter
Live stock	dairy , Sheep husbandry and poultry	Up gradation of existing breeds Commercial dairy and poultry farming	a) Low yield due to local breeds, b) Skin infestation (with ticks, lice and fungi) in cattle c) Unawareness about disease and nutrient management
Apiculture	Bee-Keeping	Popularization of Apiculture for income generation and role in fruit industry	Lack of awareness and management
Pisciculture	Fish farming	Rearing and breeding management with respect to carp culture	Unawareness about improved methods of fish farming

Entrepreneurship Development	Agribusiness	Introduction of income generation programmes for Self-employment of youths in mushroom, cultivation and processing, fish farming, value addition of fruits and vegetables and rearing of honey bees and vermicomposting, nursery raising and training and pruning	Unawareness about self employment and income generation programmes in agriculture and allied areas
	Rural craft	Women empowerment through income generating skill oriented programmes in Cutting and tailoring, knitting, value addition of fruits and vegetables.	Social backwardness in women
Natural Resource Conservation	Soil and Water	Soil and water conservation.	Soil erosion and moisture deficit.

## 7. Technology Assessment during 2018-19

Crop	Prioritized problem	Title of OFT	Technology options	Source of Technology/ Collaboration	Name of critical input	Qty per trial (kg)	Cost per trial (Rs)	No. of trials	Total cost for the intervention (Rs.)	Parameters to be studied	Team members
Paddy	Poor income from rice	Popularization of local scented rice in high altitude belts of district Kulgam	T1=Farmers practice (Mixtures) T2= Kamad T3= Mushkebuji	SKUAST-Kashmir	Seed	08	720	10	7200	Yield and economics	Dr. T. Mubarak Dr. Parveez Dr. Ab. Shakoor
	Poor Nitrogen Management	Nitrogen management in paddy through LCC	T1: Farmers Practice T2: Blanket Recommendation	SKUAST-K	Leaf Colour Chart and urea	-	150-200	5	750-1000	Yield Parameters & Yield Economics	Dr. Ab. Shakoor Dr. T. Mubarak

			T3: Soil Test Based Nitrogen Management  T4: LCC based Nitrogen Management								
Oats	Poor availability of fodder	Varietal Assessment of oats varieties released by SKUAST-K	T1: Farmer Practice(Sabzar) T2: SKO-96 T3: SKO-90	DARS Budgam	Seed	15	1000	05	5000	Green fodder Yield	Dr. T. Mubarak Dr. Parveez Dr. Ab. Shakoor
Apple	Poor quality	Management of russetting in apple	T1- Fungicidal spray (Propiconazole) T2- application of Wetablesulphur 3g/lit + boric acid 1 g/lit +kaoline 2.5 g/lit T3- application of Gibberellic acid (GA <sub>4</sub> +7)	Division of fruit Science SKUAST-Kashmir	Boric Acid	0.25	100	03	13800	Incidence of russetting	SMS Horti
					Kaolin Clay	0.45	900				
					Gibberellic acid (GA <sub>4</sub> +7)	0.25	3600				
	Fruit Drop	Control of pre-harvest fruit drop in apple Cv- Red delicious	T1: Spray of calcium chloride (3g/lit) (FP) T2: Spray of NAA (10 ppm) 21 days before harvesting. T3: Spray AVG (Aminoethoxy vinyl glecine) 125 mg/lit 4 weeks before harvesting.	Division of fruit Science SKUAST-Kashmir	NAA Calcium Chloride and AVG	-	2500	05	10000	Per cent fruit drop	Dr. Ab. Shakoor Dr. Tasneem Mubarak

APPLE	Collar rot	Management of Collar rot through Bio-control agents	<b>T1:</b> Removal of Soil (FP) <b>T2:</b> Scraping of affected area and pasting of bio-agents + Soil Application of bio-agent (Pre-inoculated on FYM) near the affected areas.	SKUAST-Kashmir	Bio-agent	2.0	500	03	3000	Recovery percentage	Dr. Parvez Ahd SMS Horti.
Chilli	Death of plants due to chilli wilt	Integrated Management of Chilli wilt	<b>T1:</b> Drenching with any available fungicide (FP) <b>T2:</b> Seed and seedling treatment with carbendazim 50 wp @ 0.1% + Transplanting on ridges + need based irrigation + drenching with carbendazim 50 WP @ 0.1% <b>T3:</b> Transplanting on ridges + need based irrigation + Seed and seedling treatment with carbendazim 50 wp @ 0.1% + soil application of bio-agent (Pre-inoculated on FYM)	SKUAST-Kashmir	Seed	10 g	50	03 ( 2 Marla Each)	1950	Disease incidence (%) and Yield (q/ha)	Dr. Parvez Ahmad Dr. T. Mubarak
					Carbendazim 50WP	300 g	100				
					Bioagent ( <i>Trichoderma viridi</i> )	1 lit.	500				

FYM	Poor soil health	Bio mediated composting	<p><b>T1:</b> Farmers Practice</p> <p><b>T2:</b> Mixture of agricultural waste, Kitchen waste and litter waste + Preparation of Pit ( 4' x 6' x 8') + Use of effective microbes @ 200 ml m-2</p>	Division of fruit Science SKUAST-Kashmir	FYM / bioagent	3.0 L	1500	03	4500	Rate of decomposition and percentage of decomposition	Dr. Ab. Shakoor Dr. T.Mubarak
Cattle	low milk yield Poor body condition score Anestrous Infertility problem	Assessment of nutritional management practices for improvement of productive and reproductive performance in dairy cow	<p>T1= feeding of onion, Methi, and Guar (FP)</p> <p>T1= Deworming +mineral mixture 50g/cow /day</p> <p>T3= Deworming with recommended dose of fenbendazole before one month of calving. Mineral mixture will be fed after 15 days of calving for 2 months</p>	NDRI	Feed and medicine		1550	3	4650	Number of cows comes in heat No of cows conceived Estimation of service period and Post-partum estrus interval (Days) Average milk yield (liters)/ cow/ day	Dr. Shahid
	Subclinical Mastitis in dairy cows	Assessing the performance of Potassium Permanganate as preventive measures for subclinical Mastitis in	<p>T1= washing with water (FP)</p> <p>T2=washing of udder and teats with 3% Potassium Permanganate (premilking and postmilking teat dipping</p>	NDRI	Potassium Permanganate	3% Potassium Permanganate solution	350	3	1050	Detection of incidence of subclinical mastitis Based on MASTRIP/CMT Estimation of economic	Dr. Shahid

		milking cows	with 3% Potassium Permanganate solution)								benefit. Mastitis screening & udder health package development	
Sheep	Foot rot in sheep	Management of Foot rot in Sheep	T1= Farmers Practice (Applying turmeric and washing with water) T2= Foot bath ZnSO4 or CuSO4 as 10% solution and Treating with (Enrofloxacin 10 mg/Kg Bd Wt	SKUAST Kashmir	Medicine	10% soluti on	300	3	900		Disappeara nce of symptoms Based on clinical parameter s like swelling and lameness	Dr. Shahid

**8. Technology Refinement during 2018-19      NIL**

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				1								

## 9. Frontline Demonstrations during 2018-19

### 9.1 Agronomy

Crop/enterprise	Prioritized problem	Technology to be demonstrated	Source of Technology/ Collaboration	Name of critical input	Cost per trial / Demo (Rs.)	No. of Demo	Total cost on Intervention (Rs.)	Parameters to be studied	Team members
Paddy	Poor seed quality/ seed replacement rate	Farmer Own Seed Production	Division of PGB, SKUAST-K	Seed and technique	600	10	6000	Yield and Economics	T. Mubarak Ab. Shakoor
Paddy	Poor seed quality and Zn deficiency	Quality Seed and Zinc nutrition	SKUAST-K	Seed and ZnSO <sub>4</sub> fertilizer@20 kg/ha	792	50	49600	Yield and Economics	T. Mubarak Ab. Shakoor
Maize	Old variety (C-15)	New variety ( Shalimar maize Composite-3)	DARS SKUAST-Kashmir	Seed	225	50	11250	Yield	T. Mubarak Ab. Shakoor
Legumes	Faulty intercropping in apple	Intercropping in newly established apple orchards with legumes/pulses	DARS SKUAST-Kashmir	Seed	425	20	8500	Yield And economics	T. Mubarak Ab. Shakoor
Brown sarson	Old varieties	Shalimar Brown sarson-1	SKUAST-Kashmir	Seed	120	30	3600	Yield and economics.	T. Mubarak Ab. Shakoor
Oats	Old varieties	SKO-96/108	SKUAST-Kashmir	Seed	1200	50	60000	Fodder yield	T. Mubarak Ab. Shakoor

## 9.2 Soil Science

Crop/ enterprise	Prioritized problem	Technology to be demonstrated	Source of Technology/ Collaboration	Name of critical input	Cost per trial (Rs.)	No. of Demo	Total cost on Intervention (Rs.)	Parameters to be studied	Team members
Apple	Nutrient deficiency	Foliar application of Ca and B	SKUAST – Kashmir	Fertilizer	575	10	5750	Yield and economics	Ab. Shakoor T.Mubarak
	Nutrient Imbalance and higher cost of Cultivation	Soil test based nutrient management.	SKUAST- Kashmir	Fertilizer	Yield and economics	05	15000	Yield and economics	Dr. Ab. Shakoor Khanday Dr. Tasneem. Mubarak

## 9.3 Horticulture

Crop/ enterprise	Prioritized problem	Technology to be demonstrated	Source of Technology/ Collaboration	Name of critical input	Cost per trial (Rs.)	No. of Demo	Total cost on Intervention (Rs.)	Parameters to be studied	Team members
Apple	Poor fruit color	Effect of potassium sulphate (15g/lit) on color improvement in apple Cv. Red Delicious	Division of Fruit Science SKUAST – Kashmir	Technique	1200	5	6000	Yield, size, colour	Ab. Shakoor T.Mubarak
	Poor fruit set	Post harvest foliar application of urea (5%) for improved fruit set in next year	Division of Fruit Science SKUAST – Kashmir	Urea (5%)	500	5	2500	Per cent Fruit set	Ab. Shakoor T.Mubarak Parvez Ahmad

#### 9.4 Plant Protection

Crop/enterprise	Prioritized problem	Technology to be demonstrated	Source of Technology/ Collaboration	Name of critical input	Cost per trial (Rs.)	No. of Demo	Total cost on Intervention (Rs.)	Parameters to be studied	Team members
Apple	Cankers	Demonstration on Canker Management	SKUAST-Kashmir	Fungicide paste 1:2:9 (Carbendazim 50 WP+ Copper oxychloride 50 WP+ Linseed oil)	1221	5	6105	Per cent wound healing	Parvez Ahmad T. Mubarak
Apple	Insect pest and disease problem	Demonstration of spray schedule	SKUAST-Kashmir	Technology	1500	10	15000	Disease status	Parvez Ahmad T. Mubarak

#### 9.5 Animal Science

Species	Prioritized problem	Technology to be demonstrated	Source of Technology/ Collaboration	Name of critical input	Cost per trial (Rs.)	No. of Demo	Total cost on Intervention (Rs.)	Parameters to be studied	Team members
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Poultry	Low income to farmers  Low body weight, poor egg production poor hatchability and increase mortality	Vanraja / Kroiler poultry birds as backyard poultry	SKUAST-Kashmir	Poultry birds	1000	10	1000	No. of Egg laying , age and body wt at first egg laying hatchability and mortality BCR	Dr Shahid  Dr. T. Mubarak
Sheep/g oat	Parasitic infestations  Poor body weight  High mortality in kinds.  Poor body condition score.	Oral administration of recommend dose of (Albendazole75 0mg+ivermectin 25mg/30ml)  Prevention and control of parasitic diseases of small ruminants by de-worming (50 animals )	SKUAST-K	Medicine	500	5	2500	Body weight in kg/month  mortality rate of kids, birth wt of kid  General body condition /lamb Survival %  Percentage control of Ectoparasites	Dr. Shahid

**10 Training for Farmers/ Farm Women during 2018-19**

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	Paddy	1.Poor seed quality, 2.Cold injury to paddy nursery, 3.Nutrient imbalance	Assessment and FLD programme	1. Improved Practices for quality seed production/Farmers own seed production 2. Modified Protected nursery in rice 3.Nutrient and water Management in rice	03	60	<ul style="list-style-type: none"> <li>• Dr. Tasneem Mubarak</li> <li>• Dr. Ab. Shakoor</li> </ul>
		Maize	1.Poor seed replacement rate 2.Poor seed quality 3. Water stress, 4.Potassium Deficiency	Assessment and FLD programme	1. Practices for increasing maize yield under irrigated conditions 2. Moisture conservation practices and agronomic practices for maize under rain fed conditions. 3.Symptoms and correction of plant nutrient deficiency	03	60	<ul style="list-style-type: none"> <li>• Dr. Tasneem</li> <li>• Dr. Ab.Shakoor</li> <li>• Dr. Parvez Ahmad</li> </ul>
		Oilseeds	1.Old varieties 2.Sulphur deficiency 3.Poor drainage	FLD programme	1.Non monitory inputs for improving yield of oilseed 2.Importance of S nutrition in oilseeds	02	40	<ul style="list-style-type: none"> <li>• Dr. Tasneem</li> <li>• Dr. Ab.Shakoor</li> </ul>
		Oilseeds, pulses, fodder crops	Mono-cropping	FLD programme	1.Productivity and profitability of different cropping systems under Kulgam conditions 2.Importance of legumes in sustainable Agriculture 3. Package of practice for pulses and fodder crops. 4.Seed production in oats	03	60	<ul style="list-style-type: none"> <li>• Dr. Tasneem</li> <li>• Dr. Ab.Shakoor</li> </ul>

<b>10.2</b>	<b>Horticulture</b>	Temperate Fruits	Lack of quality planting material & Un-employment	Demonstration	Nursery raising techniques for raising quality planting material	1	20	SMS Horticulture
		Temperate Fruits	Poor productivity and quality	Demonstration	Canopy Management in temperate fruits	1	10	SMS Horticulture
		Apple	Lack of Knowledge about orchard layout	Demonstration	Planning and layout for establishment of apple orchards for both traditional and HDP	05	05	SMS Horticulture
		Apple	Poor fruit set	Demonstration	Pollination management in temperate fruit crops	1	50	SMS Horticulture
		Apple	Climate Change	Demonstration	Management of apple under extreme weather conditions.	2	60	SMS Horticulture
<b>10.3</b>	<b>Livestock production and management</b>	Cattle	Poor yield and unhygienic milk	Demonstration	Milking methods in dairy cattle	01	100	Dr. Shahid
		Cattle	Poor yield and unhygienic milk	Demonstration	Clean and hygienic milk production	01	50	Dr. Shahid
			Poor animal health	Demonstration	Diagnosis of mastitis with CMT Test under field conditions	01	50	Dr. Shahid
			Poor health and milk yield	Demonstration	Area specific Least cost balanced feed formulation for dairy cattle.	01	20	Dr. Shahid Dr. T.Mubarak
			Poor health and milk yield	Demonstration	Urea molasses mineral block preparation	02	50	Dr. Shahid
			Malpractices in Marketing	-	Estimation of age in livestock with specific reference to sheep, goat and cattle	01	25	Dr. Shahid
			Cost of treatment	-	Body measurements in	01	25	Dr. Shahid

					large animals for determine the right dosage of medicines			
	Breeding management	Cattle	Repeat Breeding	Demonstration	Heat detection methods and Best time for insemination in dairy animal	01	20	Dr. Shahid
		Sheep & Goat	Poor detection Breeding period	Demonstration	Understanding of Goat and Sheep breeding cycle for optimization of their performance	01	20	Dr. Shahid
		Cattle & Sheep	Animal diseases	OFT/FLD	Signs, treatment and preventive measures of the Livestock diseases	01	20	Dr. Shahid
			Animal diseases	OFT/FLD	Vaccination, importance, Scope, schedules and cost benefit	01	10	Dr. Shahid
			Poor health and yield		parasites and their impact on animal health and production/ Deworming schedule, Deworming Techniques	01	25	
			Shortage of feed and fodder	Demonstration	Balanced feeding in livestock during winter	01	20	Dr. Shahid
		Poultry and duck rearing	Poor return from Mono culture	01	Back yard poultry production and their management for subsidiary income	01	20	Dr. Shahid
			Poor return from Mono culture	01	Duck rearing as an alternative supplement income generating source to rural woman	01	20	Dr. Shahid

<b>10.4</b>	<b>Plant Protection</b>							Dr Parvez
		Apple	Lack of Knowledge about Pesticide spray schedule	FLD programme	Pesticide spray schedule of SKUAST-Kashmir for apple disease management	01	400	
			Lack of knowledge	Assessment and FLD programme	Important diseases of apple and their management	01	400	
			Climate Change	-	Management of apple diseases under extreme weather conditions	01	100	
		Vegetable	Lack of knowledge about disease management in vegetable	-	Scientific methods of vegetable disease management	01	60	Dr. Parvez
<b>10.5</b>	<b>Soil Health and Fertility</b>							
		Apple	Indiscriminate use of fertilizers.	Assessment and FLD programme	Soil and leaf sampling techniques for fertilizer scheduling.	<b>2</b>	500	Dr. AbShakoor Dr. Tasneem
			Micronutrient nutrient deficiency.	Assessment and FLD programme	Deficiency symptoms and micronutrients management in fruit crops	<b>3</b>	<b>60</b>	Dr. AbShakoor Dr. Tasneem
			Poor soil health	Method demo	Importance, preparation and use of organic inputs	<b>3</b>	<b>60</b>	Dr. AbShakoor Dr. Tasneem
		Oilseeds, pulses and cereals	Nutrient imbalance		Integrated Nutrient management in field crops.	<b>1</b>	<b>100</b>	Dr. AbShakoor Dr. Tasneem
	<b>Others, pl. specify</b>							

### 11. Training for Rural Youth during 2018-19

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	Major Field crops of district	<ul style="list-style-type: none"> <li>Poor availability of quality seed</li> </ul>	<ul style="list-style-type: none"> <li>Method demonstration,</li> </ul>	<ul style="list-style-type: none"> <li>Seed production technology of Major Field crops.</li> </ul>	01	20	<ul style="list-style-type: none"> <li>Dr. Tasneem</li> <li>Dr.Parvez</li> <li>Dr.Ab.Shakoor</li> </ul>
10.2	Horticulture Production	Fruit crops	Lack of quality planting material & Un-employment	Method demonstration	Nursery raising techniques for raising quality planting material	01	20	Dr. Hamid Dr. Parvez Dr. Shakoor
			Poor productivity and quality	FLD programme	Canopy Management in temperate fruits	01	20	SMS Horti.
10.3	Livestock Production	Dairy animals (Cross-Bred cows)	Unemployment in rural youth	Assessment and FLD programme	Promotion of scientific dairy , sheep and poultry farming for income generation	1	15	<ul style="list-style-type: none"> <li>Dr. Shahid</li> </ul>
					Judicious use of therapeutic agents with reference to antibiotics in the treatment of food animals	1	15	<ul style="list-style-type: none"> <li>Dr. Shahid</li> </ul>

<b>10.4</b>	<b>Mushroom Cultivation</b>	Mushroom	Lack of knowledge about mushroom as an enterprise & Un-employment	Method demonstration	Mushroom production technology	01	10	<ul style="list-style-type: none"> <li>• Dr. Parvez</li> <li>• Experts from Mushroom center SKUAST-K</li> </ul>
<b>10.5</b>	<b>Soil Health and Fertility</b>	Vermi-compost	Deteriorating soil health and Unemployment	Demonstration	Production of organic inputs on scientific lines for livelihood and soil health	01	15	<ul style="list-style-type: none"> <li>• Dr. Ab. Shakoor</li> <li>• Dr. Tasneem</li> </ul>
		Apple	Nutrient and Micronutrient nutrient deficiency.	Assessment and FLD programme	Training rural youth in soil health and water management (National Programme)	02	20	<ul style="list-style-type: none"> <li>• Dr. Ab. Shakoor</li> <li>• Dr. Tasneem</li> <li>• SMS Horti</li> </ul>

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

#### 12 Trainings for Extension Personnel during 2018-19

S.No.	Thematic area	Training Course Title**	No. of Courses	Expected No. of participants	Names of the team members involved
<b>12.1</b>	Crop Production	Technological interventions for improving yield of field crops (Kharief) in district Kulgam.	01	20	<ul style="list-style-type: none"> <li>• Dr. Tasneem Mubarak</li> <li>• Dr. Parvez</li> <li>• Dr. Ab. Shakoor</li> </ul>
		Technological interventions for improving yield of field crops (rabi) in district Kulgam.	01	20	<ul style="list-style-type: none"> <li>• Dr. Tasneem Mubarak</li> <li>• Dr. Parvez</li> <li>• Dr. Ab. Shakoor</li> </ul>
<b>12.4</b>	Horticulture	Improved practice in fruit crops from nursery to harvesting	1	10	<ul style="list-style-type: none"> <li>• SMS Horti.</li> <li>• Dr, Tasneem</li> <li>• Dr, Shakoor</li> <li>• Dr Parvez</li> </ul>

		Scientific training and pruning of apple	1	10	• SMS Horti.
		Package and practices in Hig Density Plantation	1	10	• SMS Horti. • Dr, Tasneem • Dr, Shakoor • Dr Parvez
		Production of vegetable and vegetable seedling during off-season under protected conditions	1	10	• SMS Horti. • Dr, Tasneem • Dr, Shakoor • Dr Parvez
		Employment generation potential of Floriculture in Kulgam and technical issue.	1	10	• Dr. Hamid • Dr, Tasneem • Expert from Division of Floriculture SKUAST-K
		Cultivation of mulberry with special reference to propagation	1	15	• SMS Horti. • Expert from SKUAS-K
<b>12.5</b>	<b>Livestock Production &amp; Management</b>	Importance of Breeding, Common breeding practices, disadvantages and challenges	1	10	• Dr. Shahid
		Judicious use of therapeutic agents with reference to antibiotics in the treatment of food animals	1	10	• Dr. Shahid
<b>12.6</b>	<b>Plant Protection</b>	Diseases of apple and their management	02	10	• Dr. Parvez • Dr. Hamid • Dr. Shakoor
		Integrated disease management of important vegetables	02	10	• Dr. Parvez • Dr. Tasneem • Dr. Shakoor
<b>12.8</b>	<b>Soil Science</b>	4R principle of nutrient management in agricultural crops	03	10	• Dr. Shakoor
		Advances in nutrient management in temperate fruit crops	02	10	• Dr. Shakoor

### 13 Vocational trainings during 2018-19

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
13.1	<b>Crop Production</b>	Major Field crops of district	• Poor availability of quality seed	• Method demonstration,	• Seed production technology of Major Field crops.	01	20	• Dr. Tasneem • Dr.Parvez • Dr.Ab. Shakoor
13.2	<b>Horticulture Production</b>	Fruit crops	Lack of quality planting material & Un-employment	Method demonstration	Nursery raising techniques for raising quality planting material	01	20	SMS Horti Dr. Parvez Dr. Shakoor
			Poor productivity and quality	FLD programme	Canopy Management in temperate fruits	01	20	SMS Horti
13.3	<b>Livestock Production</b>	Dairy animals (Cross-Bred cows)	Unemployment in rural youth	Assessment and FLD programme	Opening of dairy, sheep and poultry units	01	15	• Dr.Shahid
13.4	<b>Mushroom Cultivation</b>	Mushroom	Lack of knowledge about mushroom as an enterprise& Un-employment	Method demonstration	Mushroom production technology	01	10	• Dr. Parvez • Experts from Mushroom center SKUAST-K
13.5	Soil Health and Fertility	Vermi-compost	Deteriorating soil health and Unemployment	Demonstration	Production of organic inputs on scientific lines for livelihood and soil health	01	15	• Dr. Ab. Shakoor • Dr. Tasneem

		Apple	Nutrient and Micronutrient nutrient deficiency.	Assessment and FLD programme	Training rural youth in soil health and water management (National Programme)	02	20	<ul style="list-style-type: none"> <li>• Dr. Ab. Shakoor</li> <li>• Dr. Tasneem</li> <li>• SMS Horti</li> <li>• Dr. Parvez</li> </ul>
<b>13.6</b>	Women empowerment	Rural craft	Unemployment	-	Tilla embroidery	01	15	<ul style="list-style-type: none"> <li>• KVK Master trainer</li> </ul>

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

#### 15. Extension programmes during 2018-19

Sl.No.	Extension programme*	No. of programmes or activities	Expected No. of participants	Names of the team members involved
15.1	Advisory Services	6000	-	All members of the KVK team.
15.2	Diagnostic visits	80	300	
15.3	Field Day	05	150	
15.4	Group discussions	07	150	
15.5	KisanGhoshi	05	150	
15.6	Film Show	05	110	
15.7	Self -help groups	02	40	
15.8	KisanMela	01	250	
15.9	Exhibition	03	100	

15.10	Scientists' visit to farmers field	300	700
15.11	Plant/Soil health/Animal health camps	05	100
15.12	Farm Science Club	00	
15.13	Ex-trainees Sammelan	00	
15.14	Farmers' seminar/workshop (Climate change, Farm Implements, medicinal plants)		
15.15	Method Demonstrations	10	200
15.16	Celebration of important days	03	100
15.17	Special day celebration	03	100
15.18	Exposure visits	02	60
15.19	Technology week,	01	100
15.20	FFS	00	
15.21	Farm innovators meet	02	15
15.22	Awareness programs	50	1200
	Others, pl. specify		

## 16. Activities proposed as Knowledge and Resource Centre during 2018-19

### 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	<ul style="list-style-type: none"> <li>Improved varieties and associated technology of major crops of District at KVK instructional Farm</li> </ul>	3 ha	All members of KVK team
16.1.2	Demonstration Units	<ul style="list-style-type: none"> <li>High Density Apple orchard</li> <li>Dairy farming</li> <li>Seed production of Paddy</li> <li>Seed Production of Maize</li> </ul>	<ul style="list-style-type: none"> <li>0.25 ha</li> <li>2 animals</li> <li>1ha</li> <li>0.5 ha</li> </ul>	All members of KVK team

		<ul style="list-style-type: none"> <li>• Seed Production of Pulses</li> <li>• Seed Production of Oilseeds</li> <li>• Fruit Nursery</li> </ul>	<ul style="list-style-type: none"> <li>• 1 ha</li> <li>• 0.25 ha</li> <li>• 0.25 ha</li> </ul>	
16.1.3	Lab Analytical services	Soil & leaf testing	1000 samples	Dr. Ab. Shakoor , Dr. Tasneem
16.1.4	Technology Week	<ul style="list-style-type: none"> <li>• Scientific Training and Pruning in Apple</li> <li>• Mechanization</li> <li>• Nutrient Management</li> <li>• IPM</li> <li>• Soil and leaf Sample collection technique</li> </ul>	1 No. each	Whole team

#### 16.2 Technological Products:

Sl.No.	Category	Name of the product	Quantity (Qtl.)/ Number planned to be produced during 2017-18	Names of the team members involved
16.2.1	Seeds	Paddy	15q	Dr. Tasneem Dr. Ab. Shakoor
		Maize	15q	Dr. Tasneem Dr. Ab. Shakoor
		Pulses	10q	Dr. Tasneem Dr. Ab. Shakoor
		Oilseed	10q	Dr. Tasneem Dr. Ab. Shakoor
		fodder	20q	Dr. Tasneem Dr. Ab. Shakoor

16.2.2	Planting materials	Temperate Fruit crops	5000	SMS Horti Dr Parvez
16.2.3	Bio-products	-	-	--
16.2.4	Livestock strains	Cross bred	2	Dr. Shahid

### 16.3 Technological Information

	Category	Technological capsules / Number	Names of the team members involved
16.3.1	Technology backstopping to line departments		
		<ul style="list-style-type: none"> <li>• Soil health management technology</li> <li>• Efficient application of micro-nutrients</li> <li>• Integrated nutrient management</li> <li>• Reclamation of degraded soils</li> </ul>	Dr. Shakoore Dr. Tasneem Dr. SMS Horti Dr. Parvez
		<ul style="list-style-type: none"> <li>• Important pests of temperate fruit crops and concept of IPM</li> <li>• Identification &amp; management of diseases of cereals</li> <li>• Chilli wilt- identification &amp; management</li> <li>• Walnut weevil identification &amp; management</li> <li>• Importance of honey bees in horticulture</li> </ul>	Dr. Parvez SMS Horti.
	Horticulture	<ul style="list-style-type: none"> <li>• Management practices for quality production &amp; marketing opportunities for valuable floricultural crops</li> <li>• Identification &amp; management of physiological disorders</li> <li>• Impact of climate change on fruit crops &amp; future strategies</li> <li>• Fruit production scenario in J &amp; K &amp; concept of high density plantation</li> </ul>	SMS Horti.
	Animal Husbandry	<ul style="list-style-type: none"> <li>• Nutrition &amp; management of cattle, buffalo, sheep &amp; goat during extreme environmental conditions</li> <li>• Management of infectious diseases of livestock &amp; their control</li> <li>• Management of production diseases in dairy animals &amp; their control</li> </ul>	Dr. Shahid

16.3.2	Literature/publication	<ul style="list-style-type: none"> <li>• Soil sampling procedure</li> <li>• Soil &amp; water conservation measures</li> <li>• Boron deficiency in apple &amp; pear</li> </ul>	SMS Soil Sciences
		<ul style="list-style-type: none"> <li>• Management &amp; disease control guidelines on poultry production</li> <li>• Strategic parasite control for small ruminants</li> <li>• Economic importance of foot &amp; mouth disease</li> </ul>	SMS Animal Sciences
		<ul style="list-style-type: none"> <li>• Honey bees, pollination &amp; livelihood under temperate agro-eco system of Kashmir</li> </ul>	SMS Plant protection
		<ul style="list-style-type: none"> <li>• Vermi-composting &amp; vermin wash</li> <li>• Guidelines for production of farmers own seed in rice</li> </ul>	SMS Organic Agriculture
		<ul style="list-style-type: none"> <li>• Machines &amp; equipments for paddy /Maize cultivation</li> </ul>	Prog. Assistant Agri. Engineering
		<ul style="list-style-type: none"> <li>• Colour development in apple</li> </ul>	SMS Pomology
16.3.4	Electronic Media	<ul style="list-style-type: none"> <li>• Soil health Management</li> <li>• Paddy blast and its management</li> <li>• Soil sampling</li> <li>• Scientific training pruning</li> <li>• Nursery management</li> <li>• Infectious diseases in livestock &amp; their management</li> </ul>	Whole team
16.3.5	Kisan Mobile Advisory Services	Crop/ weather/ programme related	Whole team
16.3.6	Information on centre/state sector schemes and service providers in the district.	Data may be collected from different agencies. Also indicate time of completion.	

#### 17. Additional Activities Planned during 2018-19

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**

<b>Opening balance as on 01-04-2017</b>	<b>Expenditure incurred during 2017-18</b>	<b>Receipts during 2017-18</b>	<b>Closing balance as on 31-03-2018</b>
Rs. 4295445	Rs. 501785	Rs.390979	Rs.409009

**19. Activities of soil, water and plant testing laboratory during 2018-19**

<b>Sl.No.</b>	<b>Type</b>	<b>No. of samples to be analyzed</b>	<b>Names of the team members involved</b>
19.1	Soil	500 samples	Dr. Ab. Shakoor

**20. E-linkage during 2017-18**

<b>S. No</b>	<b>Nature of activities</b>	<b>Likely period of completion (please set the time frame)</b>	<b>Remarks if any</b>
20.1	Title of the technology module to be prepared		
20.2	Creation and maintenance of relevant database system for KVK		
20.3	Any other (Please specify)		

**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 conducting Farm Innovators meet in your district?	Yes
22.2	If Yes likely month of the meet	December, 2018
22.3	Brief action plan in this regard	<ul style="list-style-type: none"> <li>• Innovators of the district shall be identified in coordination with line department</li> <li>• Identified innovators will be invited for discussing their innovation</li> <li>• Best farm innovators will be selected &amp; their innovation will be recorded for further programme</li> </ul>

**23. Farmer's Field School planned**

S. No	Thematic area	Title of the FFS	Budget proposed in Rs.
23.1			

**24. Budget - Details of budget utilization (2017-18) up to 31 March 2018 (Rs.)**

<b>S. No.</b>	<b>Particulars</b>	<b>Sanctioned</b>	<b>Released</b>	<b>Expenditure</b>
<b>24.1</b>	<b>Recurring Contingencies</b>			
24.1.1	<b>Pay &amp; Allowances</b>	8960000	8960000	8960000
24.1.2	<b>Traveling allowances</b>	150000	150000	150000
24.1.3	<b>Contingencies</b>			
24.1.4.1	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance	1270000		
<i>B</i>	POL, repair of vehicles, tractor and equipments			
<i>C</i>	Meals/refreshment for trainees			
<i>D</i>	Training material			
<i>E</i>	Frontline demonstration except oilseeds and pulses			
<i>F</i>	On farm testing			
<i>G</i>	Training of extension functionaries			
<i>H</i>	Maintenance of buildings			
<i>I</i>	Establishment of Soil, Plant & Water Testing Laboratory			
<i>J</i>	Library			
<b>24.1</b>	<b>Total Recurring</b>	<b>1420000</b>		
<b>24.2</b>	<b>Non-Recurring Contingencies</b>			
24.2.1	<b>Works</b>			
24.2.2	<b>Equipments including SWTL &amp; Furniture</b>			
24.2.3	<b>Vehicle</b> (Four wheeler/Two wheeler, please specify)			
24.2.4	<b>Library</b>			
<b>24.2</b>	<b>Total Non Recurring</b>	0.0		
<b>24.3</b>	<b>REVOLVING FUND</b>	0.0		
<b>24.4</b>	<b>GRAND TOTAL (A+B+C)</b>	10380000	10380000 0	10380000

**25. Details of Budget Estimate (2018-19) based on proposed action plan**

<b>S. No.</b>	<b>Particulars</b>	<b>BE 2018-19 proposed (Rs.)</b>
<b>25.1</b>	<b>Recurring Contingencies</b>	
25.1.1	<b>Pay &amp; Allowances</b>	<b>1000000</b>
25.1.2	<b>Traveling allowances</b>	<b>20000</b>
25.1.3	<b>Contingencies</b>	1800000
<i>A</i>	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	
<i>B</i>	POL, repair of vehicles, tractor and equipments	
<i>C</i>	Meals/refreshment for trainees (ceiling upto Rs.150/day/trainee be maintained)	
<i>D</i>	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	
<i>E</i>	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	
<i>F</i>	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	
<i>G</i>	Training of extension functionaries	
<i>H</i>	Maintenance of buildings	
<i>I</i>	Establishment of Soil, Plant & Water Testing Laboratory	
<i>J</i>	Library	30000
<b>25.1</b>	<b>TOTAL Recurring Contingencies</b>	<b>1203000</b>
<b>25.2</b>	<b>Non-Recurring Contingencies</b>	
25.2.1	<b>Works</b>	8000000
25.2.2	<b>Equipment including SWTL &amp; Furniture</b>	50000
25.2.3	<b>Vehicle</b> (Four wheeler/Two wheeler, please specify)	1000000
25.2.4	<b>Library</b> (Purchase of assets like books & journals)	<b>905000</b>
<b>25.2</b>	<b>TOTAL Non-Recurring Contingencies</b>	<b>905000</b>
<b>25.3</b>	<b>REVOLVING FUND</b>	0.00000
<b>25.4</b>	<b>GRAND TOTAL</b>	<b>21080000</b>