District Profile of Srinagar.

Srinagar district, situated in the centre of Kashmir Valley, is surrounded by five districts. In the north it is flanked by Kargil and Ganderbal, in the South by Pulwama and in the north-west by Budgam. The average altitude is about 1600m amsl .The district with a population of around 1325443 lacs, is spread over an area of 1979 Sq. Kms. It comprises of 07 Tehsils/ towns viz; Srinagar North and Srinagar South, Central, Khanyar, Idgah, Chanapora, Natipora and Panthachowk, four blocks (Srinagar), besides 137 Revenue villages.

Geographical area	1979 Sq. km
Number of Tehsils	07
No. of Blocks	04
No. of Panchayat	21
No. of Sub Division	02
No. of Villages	137
Literacy	71.21 %
Male Literacy	78.01 %
Female Literacy	63.47 %
Population	1325443 lacs
Cultivable Area	9750 ha
Irrigated Area	5910 ha
Rainfed Area	750 ha
Area under Paddy	3400 ha
Area under Vegetables	2500 ha
Area under Maize	450 ha
Cattle Population	43166
Sheep Population	57994
Goat Population	6485

Area under Fruit Plants

Fresh Fruits	2613 ha
Dry Fruits	477 ha

Priority thrust areas

S. No	Thrust Area
01	Area expansion under high value vegetable crops.
02	Pollination management and scientific training & pruning in fruit plants.
03	Commercial cultivation of floriculture crops.
04	Soil health maintenance and soil conservation.
05	Integrated disease and pest management in fruits and vegetables.
06	Vocational trainings for income generation.
07	Integrated farming system.
08	To provide quality seeds, Planting material and nursery to farmers.
09	To work in close coordination with LAWDA to protect the Dal Lake from entrophication.

Prioritized Problems

Popularization of High Density Plantation

Pollination Management

Cultivation of Exotic Vegetables

Vertical Expansion of High Value Vegetables

Quality Seed Production

Apiculture and Mushroom as an enterprise

Income generating Activities

Integrated Diseases and Pest Management of Fruits and Vegetables

Soil Health Management

1. Trainings for Farmers/ Farm Women during 2019-2020

Thematic area	Crop / Enterprise	Major problem	Training Course Title	Duration (Days)	Month
1.1 Crop Production					
	Paddy	Nursery failure	Protected Paddy nursery	03	May
	Paddy	Low yield due to improper transplanting	Scientific transplanting of Paddy	03	April/Oct
	Pluses	Low Yield	Scientific cultivation of Pulses	03	April
	Oil seed	Low Yield	Scientific cultivation of Sunflower and Brown Sarson	03	April / October
	Maize	Low yield	Scientific cultivation of maize under rainfed and irrigated conditions	03	April
	Oats	Low yield	Scientific cultivation of oats	03	October
	Maize	Diversification of crop	Production technology of sweet corn, Pop corn and Baby corn to farmers	03	May
	Cereals	Weed infestation	Weed management in cereal crops	03	May
1.2 Plant Protection					
	Field Crops	San jose scale, scab, canker	Importance of spray schedule in apple	03	March
	Vegetables	Cutworm	Integrated pest management of cutworm cultural management in particular	03	April/May
	Vegetables	Chilli wilt	Management of chilli wilt	03	April/may
	Maize	Cutworm and stem borer	Importance of cultural practices and seed treatment in maize	03	May/June
	Apple	European red mite	Integrated pest management of ERM	03	June
	Radish and turnip	Flea beetles	Flea beetle an overview and management in particular	03	June/July
	Cucurbits	Fruit fly and Thrips	Integrated pest management in cucurbits	04	May-July
	Storage and field conditions	Rodents	Rodent management in storage and field conditions	03	August-October
	Apiculture	Dearth of Flora	Bee migration and its significance	03	August-Sept.
	Pesticides	To avoid toxicants	Safe handling of pesticides and equipments	03	Nov
1.3 Horticulture Production					
	Fruit Crops	Lack of quality planting material	Establishment of nursery for production of quality planting material of fruit crops	03	March
	Fruit Crops	Lack of quality planting material	Raising of Quality planting material of walnut	05	Feb - March

	Fruit Crops	Unawareness	Grafting techniques in fruit plants	03	Feb - March
	Fruit Crops	Lack of awareness	Scientific layout of orchards	02	March
	Fruit Crops	Lack of awareness	Latest know-how on High density plantation in Apple	01	March
	Fruit Crops	Low fruit set/yield	Importance of pollination in fruit plants	01	April
	Fruit Crops	Unawareness	Importance of Leaf analysis technique for collection of leaf samples	01	June- July
	Fruit Crops	Lack of awareness	Awareness programme on management of cherry cracking	01	May-June
	Fruit Crops	Marketing standards	Training programme on grading, packing and handling of fruits in collaboration with Division of Food Technology SKUAST-K	01	August-Sep
	Fruit Crops	Lack of awareness	Scientific cultivation of strawberry	01	Nov

1.4 Vegetable Sciences

	Vegetables	Nursery failure due to low temperature	Early nursery raising under protected structures (Polyhouses, poly tunnels, clutches, hot beds)	03	February
	Vegetable	Transplanting shock	Precautions during transplanting of vegetable seedlings (Hardening)	03	March
	Vegetables	Lack of Knowledge for domestic raising of vegetables.	Architect and designing of Kitchen Gardens (Cropping Sequence)	03	April
	Solanaceous Vegetables	Package of practices not followed	Training, pruning and staking of Tomato and Capsicum	03	April
	Beans	Package of practices not followed	Crop geometry in Peas and Beans	03	May
	Vegetable Crops	Lack of Knowledge for integrated cultivation	Field Day on "Integrated Nutrition Garden"	03	June
	Cucurbits	Pollination problem	Pollination Management in Cucurbits	03	June
	Vegetable Crops	Farmers not producing their own seed	Seed production of vegetable crops (Kharif and Rabi)	03	July & Nov.
	Vegetable Crops	Hybrid seed production not done	Hybrid seed production in vegetables	03	July
	Root crops	Package of practices not followed	Seed production techniques for Root Crops	03	August
	Spices	Package of practices not followed	Popularization & demonstration of spice crops (Methi, Coriander, Fennel)	03	Sep.
	Exotic Vegetables	Poor Cultivation	Popularization & Cultivation of Exotic Vegetables	03	October

	Vegetable Crops	Lack of knowledge	Hydroponics, Aeroponics and soil-less cultivation of vegetables	03	June

1.5 Soil Health and Fertility					
	Field Crops	Low yield due to Imbalance fertilizer application	List of essential nutrients and their role in plant nutrition. Importance and use of soil test based fertilizer application to preserve fertility	03	April
	Field Crops	Insufficient manure/fertilizer use and their low use efficiency	Manuring and fertilizer management of field crop (Kharif/Rabi)	03	April/Oct
	Field /vegetable Crops	Unawareness about Organic Farming	Importance of FYM, Green Manures, Enriched compost, Vermicompost	03	April/Oct
	Field/ Vegetable/ Fruit crops	Unawareness about bio-fertilizers	Importance of bio-fertilizers in maintaining soil health	03	May/Oct
	Maize	Poor soil quality at high altitudes	Soil quality enhancement of maize fields	03	May
	Fruit Crops	Improper application of nutrients	Importance of Leaf Analysis and techniques for the collection of Leaf samples	03	June/July
	Fruit Crops	Unawareness about symptoms of nutrient deficiencies	Diagnosis of nutrient deficiencies in fruit crops especially apple/cherry and their remedies	03	May/July
	Vegetables	Improper farm waste disposal	Farm Waste Management	03	March/ May/Aug
	Field/Fruit Crops	Soil sampling	Soil Sampling Techniques for field and Plantation crops and importance of Soil Analysis	03	August/ Sep
	Fruit/ Vegetables	Secondary and Micro nutrient deficiencies in vegetable crops	Macro and Micronutrient fertilizers and their applications and preparation of fertilizer solution for foliar spray in production of quality fruit and vegetables crops	03	April /Sep
1.6 Livestock Production/ Fisheries					
	Cattle	Poor production , growth and reproduction	Balanced feeding of high yielding dairy cattle	01	April
	Livestock	Efficient transfer of technology from lab to land	Technologies developed by FVSC & AH, SKUAST-K with respect to medicine, surgeries, feeding, management etc and its applicability under field conditions	01	July
	Livestock	Low farm income	Integrated farming for maximum returns	01	Oct.
	Duck	Lack of knowledge	Scientific duck faming	01	July
	Fish/Duck/ Poultry	Poor resource utilization	Fish cum Duck and poultry Farming	01	August
	Livestock	Indiscriminate use of antibiotics	Antibiotic misuse in food animals	01	Sep.
	Dairy	Un hygienic milking	Clean and hygienic milk production	01	April

	Poultry	Litter related diseases	Litter for healthy backyard poultry farming under field conditions	01	July
	Poultry	Improper housing designs	Shed designing for commercial broiler farming	01	August
	Sheep	Poorly designed housed for sheep	Designing and lay out of Sheep Shed	01	August
1.7 Home Science					
	Balanced Food	Lack of Knowledge	Awareness regarding Balance diet and its importance	03	June
	Kitchen Garden	Unawareness	Nutritional kitchen garden practices	03	Sept.
	Eatables		Enhancing nutritive value of food	03	Nov.

2. Trainings for Rural Youth during 2019-2020

Thematic area	Crop / Enterprise	Major problem	Training Course Title	Duration (Days)	Month
2.1 Crop Production					
	Paddy	Nursery Failure	Raising of Paddy nursery under Protected conditions	03	April
	Weather	Climate Change	Agromet advisory services	03	March, May and Sept, Dec
	Seed Production	Lack of Knowledge	Strategies for farmers to save their own seed	03	August , April
2.2 Plant Protection					
	Beekeeping	Pollination, availability of bee products	Apiculture an emerging industry for generation of economy	05	Feb
	Vegetables and field crops	Lack of Knowledge in management	Integrated pest management in vegetable and field crops	03	May
	Fruit crops	Lack of knowledge	Integrated pest management in fruit crops	03	April
2.3 Production of Inputs at Site					
	Composting	Lack of Knowledge and skill on low cost composting practices	Method demonstration of On farm composting through improved techniques like Dal weed composting and vermicomposting	05	May
	Biofertilizer	Lack of Knowledge	Handling preparation and application of Biofertilizer	05	August

	Fruit/ Vegetables	Secondary and Micro nutrient deficiencies in vegetable crops	Macro and Micronutrient fertilizers and their applications and preparation of fertilizer solution for foliar spray in production of quality fruit/ vegetables crops	03	April /September
2.4 Horticulture Production					
	Fruit Crops	Unawareness of propagation	Nursery raising techniques of fruit crops	02	March
	Fruit Crops	Lack of awareness	Importance of Drip irrigation in High density plantations	01	June and July
	Fruit Crops	Unawareness of propagation	Budding techniques in fruit crops	01	July and August
	Fruit Crops	Lack of awareness	Scientific training and pruning of fruit crops	01	November-December
2.5 Vegetable Sciences					
	Vegetable Crops	Nursery failure due to low temperature	Protected Cultivation of tomato and coloured capsicum in poly house (Natasha & Orobella)	03	February
	Vegetable Crops	Lack of knowledge	Hydroponics, Aeroponics and soil-less cultivation of vegetables	03	June
	Vegetable Cops	Hybrid seed production not done	Hybrid seed production of Solanaceous vegetables	07	July
	Exotic Vegetables	Poor Cultivation	Popularization & Cultivation of Exotic Vegetables	03	August
2.6 Livestock Production					
	Poultry	Lack of knowledge	Skill development programme on commercial poultry farming	35	March/April
	Poultry	Lack of knowledge	Skill development programme on backyard poultry farming	08	May/June
2.7 PHT and Value addition					
	Vegetables	Lack of knowledge about making of pickle	Demonstration on making of mixed vegetable pickle.	03	September
2.8 Home Science					
	Decoration		Dry flower arrangement	03	Nov.
	Drying Practices		Scientific drying Of chillies	03	Dec.

3. Trainings for Extension Personnel during 2019-2020

Thematic area	**Training Course Titles**	**Duration (Days)**	**Month**
3.1 Crop Production			
	Recent advances in laying of Paddy nursery	03	April

	Plant Geometry and water management in Paddy	02	May
	Importance of fertilizer application at critical growth stages in Cereal crops	05	April
	Cultivation techniques for high yielding Mustard crops	01	September
	Saffron Production Technology	01	July
	Strategy to produce farmers own seed in Paddy and Fodder crops	03	June and September
3.2 Plant Protection			
	Integrated pest and disease management in vegetable crops	02	May
	Low cost trap for management of fruit flies.	02	June
	Identification and Conservation of Biological control agents in the field	02	October
	Insect pest and disease management in cereal and pulse crops	02	November
	Management of pests of fruit crops	01	Feb
	Importance of seed treatment in field crops for management of pests and disease	02	May
3.3 Horticulture			
	Scientific training and pruning of fruit crops	02	July
	C A storage of Apple	02	September
	Successful Apple Marketing in new Millennium in collaboration with Division of Economics SKUAST-K	02	August and September
	E- NAM in collaboration with Division of Economics SKUAST-K	02	August and September
	Training programme on grading, packing and handling of fruits in collaboration with Division of Food Technology SKUAST-K	01	August - September
3.4 Vegetables			
	Management of vegetables under protected conditions	03	February
	Practical demonstration on Hybrid seed production	03	July
3.5 Soil Health and Fertility			
	Method demonstration on Composting of Dal Weed, Vermicompost, Vermiculture and Vermiwash its importance	08	April/ June /August

	Soil test based INM and site specific nutrient management.	03	June
	Method demonstration on Collection of Soil/Plant Sample for field and plantation crops	02	October
	Assessing Soil Fertility status using Mridaparikshak soil testing mini lab , Rating of Soil Nutrient status, Recommended dose of nutrients for important crops and soil test based fertilizer recommendation	05	November
	Soil and Fertility conservation in situ to preserve Fertility	01	July
	Irrigation Management with the help of Soil moisture meter	01	May
	Macro and Micronutrient fertilizers and their applications and preparation of fertilizer solution for foliar spray in production of quality fruit /vegetables crops	03	April/September
3.6 PHT and value addition			
	Processing and preservation of fruits and vegetables	01	September
3.7 Sericulture			
	Scientific cocoon production	01	May
3.8 Home Science			
	Diet planning for pregnant and lactating mothers	05	August
3.9 Extension Education	Formation and management of SHG,s Group Dynamics	01	May
	Strategies for doubling farmers income	01	June
	Information networking among farmers	01	July
	Capacity building for ICT application Development and use of social media in extension	02	August
	Marketing empowerment	01	June
	Concept and formation of farmers associations, commodity associations and farmers producer organization Climate resilient agriculture technologies	02	May
3.10 Livestock	Management of farm animals	01	June

4. Vocational trainings during 2019-2020

Thematic area	Training title	No. of programmes and Duration (days)	Type of Clientele (SHGs, NYKs, School students, Women, Youth	Month
4.1 Home Science				
	Dress Designing	01 month	Rural Youth	August
	Willow Wrecking	15 days	Farmers/ Farm Women	October
	Value addition of Vegetables	05 days	Farmers/ Farm Women	July
	Broom Making	03 days	Farmers/ Farm Women	September
	Making Of Decorations Out Of Waste	05 days	School Dropouts/ Youth	January
4.2 Horticulture				
	Raising of quality planting material of Rose	02 days	Rural youth (25-30)	Feb.-March
	Skill development programme on budding techniques in fruit crops	03 days	Rural youth (25-30)	July/ August
	Skill development programme on Scientific training and Pruning	07 days	Rural youth	November-December
4.3 Vegetable Science				
	Latest techniques and early raising of exotic vegetables	01 (05 days)	Rural youth (25-30)	February
	Hybrid seed production in vegetables	01 (07 days)	Rural youth (25-30)	July
4.4 Soil Health and Fertility				
	Organic Farming in sustaining Rainfed /Irrigated agriculture	02 (03 days)	Students/ Youth	March/ September
	Method Demonstration on Preparation of vermin-compost and dal weed compost for agricultural use as an income generating unit.	02 (5) days	Youth	April/October

	Recycling of Kitchen/farm waste	05 days	Farm Women and Farmers	March/October
	Assessing the soil fertility status using Mridaparikshak soil testing mini lab and computation of fertilizer dose on the basis of soil test	02 (10) days	Youth	November

5. Extension programmes during 2019-2020

Extension programme*	No. of programmes or activities	Expected No. of participants
Advisory Services	As per demand	
Diagnostic visits	As per demand	
Field Day	06	200
Kissan Ghosthi	01	50
Film Show	20	400
Kisan Mela	01	250
Exhibition	02	200
Scientists' visit to farmers field	As per demand	
Plant/Soil health/Animal health camps	04	350
Ex-trainees Sammelain	01	45
Method Demonstrations	15	240
Celebration of important events/day	08	560
Exposure visits	10	500
Technology week	01	50
Plantation Day	01	50
Awareness programme	10	300

6. Details of FLD's proposed/to be implemented during Kharif 2019 & Rabi 2019-2020

Crop	Season &Year	Farming Situation	Area/ha	Thematic Area
6.1 Oil Seeds				
Mustard (Brown Sarson)	Rabi 2019-20	Irrigated/Rainfed	02	Crop Production
6.2 Pulses				
Pulses (Moong and Beans)	Kharief 2019 Rabi 2019-20	Irrigated/Rainfed Irrigated/Rainfed	02	Crop Production

6.3 Other than Oilseeds & Pulses				
Paddy	Kharif 2019	Irrigated	25	Crop Production
Maize	Kharif 2019	Rainfed	05	
Oats	Rabi 2019-20	Irrigated/rainfed	10	Crop Production
Methi	Kharif 2019	Irrigated	0.025	Crop Production
Coriander	Kharif 2019	Irrigated	0.025	Crop Production
Chinese Cabbage	Rabi 2019-20	Irrigated	0.025	Crop Production
Peas	Rabi 2019-20	Irrigated	01	Crop Production
Strawberry	Rabi 2019-20	Rainfed	0.05	Crop Production
Apple	Kharif 2019		0.1	Crop Production
Duck	Year 2019-20	-	10 dairy farms	Improved breeds
Cattle	Year 2019-20	-	10 dairy farms	Improved breeds
Dalweed	Kharief 2019		25 qtls. Dalweed composting	Composting

7. On Farm Trials to be implemented (2019-2020)

Title of the OFT	No. of Trials/Locations	Problem Diagnosed	Technology Assessment	Thematic Area
Management of Fruit Fly	04	Fruit fly	T1- Farmers practice T2- Deep plouging, Spray of malathion T3- T2+Cue lure	Per cent infestation
Management of Maize Stem Borer and Cutworm through Seed Treatment	04	Maize stem borer	T1- Farmers practice T2- SKUAST recommendation T3- T2 + Imidacloprid seed treatment	Plant Mortality Leaf Infestation Dead hearts
Vertical Expansion in Vegetable Crops with different medium (pot cultivation)	01	Less land holdings	T1: Soil + Sand + Vermicompost (1:1:1) T2: Soil + Sand + Coco peat (1:1:1) T3: Soil	Crop Production
Performance of tomato hybrids on raised /flat beds	02	Low Yield	T1: F Practice T2: I Hybrid S2 on flat beds ii SH1 on flat beds T3: I Hybrid S2 on raised beds ii SH1 on raised beds	Crop Production
Solid Waste Management using waste decomposers	04	1.Soil, water and air pollution 2. Hazardous effects on crops	T1- Farmers practice T2- Waste Decomposing Bacteria (Shalimar Microbes)	Composting
Efficiency of Eisenia fetida earthworm species for vermi-composting	03	Improper method of preparation of compost	T1-Farmers practice T2-Eisenia fetida (cold tolerant university developed vermiculture)	Composting

Soil and Foliar application of potassium for color development	04	Poor Fruit Colour	T_1= Soil application of potassium as basal dose. T_2 = One foliar spray of Potassium @1.5% at fruit development stage iv.	Fruit Quality
Effect of foliar application of Boron on fruit set and productivity of apple.	04	Low fruit set	T_1 = No spray (Farmers practice) T_2 =. Two sprays of Boric acid @1.5g/litre at Bud swell stage and after petal fall	Fruit Production
Nutrient fungicide compatibility in Apple	04	Water core, Bitter pit Labour and time expensive	T_1= Farmer's practice (Separate use of fungicides and nutrients. .T_2 = Calcium Chloride 0.3%+ fungicides (Mancozeb/Captan/ Propanib/Ziram) T_3= Calcium Chloride 0.1% + Chelated Calcium 0.1% + fungicides (Mancozeb/Captan/ Propanib/Ziram)	Fruit Quality
Integrating Fish-Duck-Vegetable and Poultry for maximizing farmers income	15	Overcoming the problem of manuring the pond, vegetables and water body requirement for ducks Efficient utilization of existing land resources	T1: Existing system of integrated farming T2: SKUAST-K recommendations using the present model T3: Returns from the model	Integrated Farming

Socio-economic upliftment of farmwomen through rearing of elite strains of backyard poultry birds	30	• Poor production • Slow growth • Low returns • Space constrains • Improper use of high quality poultry litter	T1: Traditional practice of backyard poultry rearing T_2: Scientific poultry farming and litter utilization methods (SKUAST-K recommendations) T_3: socio-economic upliftment of farmwomen and bottlenecks in scientific farming	Women Empowerment
Scientific Drying	03	Color fading contamination	T1- Sun drying T2- Solar Drying T3-Tunnel Drying	Vegetables