

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 eutrophication.

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 2020-2021

Thematic area	Crop / Enterprise	Major problem	Training Course Title	Duration (Days)	Month
1.1 Crop Production					
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					
IPM	Fruit Crops	San Jose Scale, scab, canker	Importance of spray schedule in apple	03	February
IPM	Vegetables	Cutworm	Integrated pest management of cutworm cultural management in particular	03	May
IDM	Vegetables	Chilli wilt	Management of chilli wilt	03	June
IPM	Maize	Cutworm and stem borer	Importance of cultural practices and seed treatment in maize	03	April
IPM	Apple	European red mite	Integrated pest management of ERM	03	June
IPM	Radish and turnip	Flea beetles	Flea beetle an overview and management in particular	03	July
IPM	Cucurbits	Fruit fly and Thrips	Integrated pest management in cucurbits	04	July
IPM	Plum	Flea beetles	Management of flea beetles in plum	03	June
Vertebrate Pest Management.	Storage and field conditions	Rodents	Rodent management in storage and field conditions	03	October
Beekeeping	Apiculture	Dearth of Flora	Bee migration and its significance	03	November
Applied Entomology	Pesticides	Adverse effects of toxicants	Safe handling of pesticides and equipments	03	March
1.3 Horticulture Production					
Fruit Production	Fruit Crops	Lack of quality planting material	Establishment of nursery for production of quality planting material of pome fruit crops	10	March

	Fruit Crops	Lack of quality planting material	Raising of Quality planting material of walnut	05	Feb - March
	Fruit Crops	Lack of quality planting material	Raising of Quality planting material of stone fruit crops	03	Feb - March
	Fruit Crops	Lack of skill	Grafting techniques in temperate fruit plants	03	Feb – March
	Fruit Crops	Dissemination of scientific know how	Scientific layout of fruit orchards	02	March
	Fruit Crops	Unawareness	Latest know-how on High density plantation in Apple	01	March
	Fruit Crops	Low fruit set	Importance of pollination in fruit plants	01	April
	Fruit Crops	Lack of latest scientific technicians	Importance of Leaf analysis technique for collection of leaf samples	01	June- July
	Fruit Crops	Unawareness	Awareness programme on management of cherry cracking	01	May-June
	Fruit Crops	Capacity Building	Training programme on grading, packing and handling of fruits in collaboration with Division of Food Technology SKUAST-K	01	August-September
	Fruit Crops	Dissemination of scientific know how	Scientific cultivation of strawberry	01	November

1.4 Vegetable Sciences					
Vegetable Production	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
	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	Sept.
	Exotic Vegetables	Poor Cultivation	Popularization & Cultivation of Exotic Vegetables	03	October

1.5 Soil Health and Fertility

Soil Health and Fertility	Field Crops	Low yield due to Imbalance fertilizer application	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/October
	Field /vegetable Crops	Unawareness about Organic Farming	Importance of FYM, Green Manures, Enriched compost, Vermicompost	03	April/October
	Field/ Vegetable/ Fruit crops	Unawareness about bio-fertilizers	Importance of bio-fertilizers in maintaining soil health	03	May/October
	Maize	Poor soil quality at high altitudes	Soil quality enhancement of intensively cultivated 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/August
	Field/Fruit Crops	Soil sampling	Soil Sampling Techniques for field and Plantation crops and importance of Soil Analysis	03	August/ September
	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 /September

1.6 Livestock Production/ Fisheries

Livestock Production	Dairy	Low production in winter	Feeding and shelter management of dairy cattle in winter	01	Dec-Jan
	Sheep/Goat	Improper housing sheds for small ruminants	Scientific housing for sheep and goat	01	Jan-Feb
	Livestock	High incidence of bloat with pasture grazing	Awareness programme on Preparing livestock for introduction to grazing	01	Feb-Mar

	Livestock	Poor grazing management	Prevention and management of ruminants from grazing related disorders	01	Mar-Apr
	Silage Making	Scarcity of quality fodder in winter	Demonstration on Scientific preservation of green fodders (silage making)	01	Apr-May
	Livestock/ Poultry	Reluctance of farmers for vaccination of livestock	Control and prevention of infectious diseases in animals	01	May-Jun
	Poultry	Improper designing for poultry shed	Designing and layout of poultry sheds	01	Jun-Jul
	Livestock	Heavy mortality in highland pasture	Management of small ruminants at highland pastures	01	Jul-Aug
	Dairy	High calf mortality	Care and management of newborn calf	01	Aug-Sep
	Dairy/ Livestock	Low quality fodder	Demonstration on Fortification of poor quality feed resources (straws)	01	Sep-Oct
	Dairy	Unhygienic milk production	Demonstration on Clean and hygienic milk production	01	Oct-Nov
	Dairy/ Livestock	Production loss due to metabolic diseases	Awareness programme on Commonly occurring metabolic diseases: their prevention and control	01	Nov-Dec

1.7 Home Science

	Diet Chart		Balanced diet and prevention of anemia in young girls	03	April
	Vegetables	Lack of knowledge	Value addition in vegetables (Pickle, Puree, Ketchup, etc.)	03	June/July
	Fruits	Lack of knowledge	Value addition in fruits (Jam, Jelly, Marmalades, Murabba)	03	Sept.
	Drudgery reduction		Drudgery reduction technologies in agriculture (weeder, sheller, etc)	03	May/June
	Diet Chart		Daily requirement of nutrients for adolescent girls	03	April
	Demonstration	Lack of knowledge	Demonstration on making of Chicken/mutton/fish pickle	03	April

2. Trainings for Rural Youth during 2020-2021

Thematic area	Crop / Enterprise	Major problem	Training Course Title	Duration (Days)	Month
2.1 Crop Production					
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					
Employment generation	Beekeeping	Pollination, availability of bee products, unemployment	Apiculture an emerging industry for generation of economy	03	March
Integrated pest management	Vegetables and field crops	Lack of Knowledge in management	Integrated pest management in vegetable and field crops	03	April
Integrated pest management	Fruit crops	Lack of knowledge	Integrated pest management in fruit crops	03	April
Judicious use of pesticides	Horticulture and Agronomy Crops	Improper dosage	Pesticides, their dosages and applications (for pesticide dealers)	03	March

2.3 Production of Inputs at Site					
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	Method Demonstration on 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 Production	Fruit Crops	Lack of quality planting material	Raising of quality planting material of pome fruit trees	05	March
	Fruit Crops	Lack of quality planting material	Nursery raising techniques of stone fruit trees	07	March
	Fruit Crops	Unawareness	Importance of Drip irrigation in High density plantations	01	June and July
	Fruit Crops	Lack of skill	Budding techniques in fruit crops	01	July and August
	Fruit Crops	Lack of skill	Scientific training and pruning of fruit crops	01	November-December

2.5 Vegetable Sciences					
Vegetable Production	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 vegetables	07	July
	Exotic Vegetables	Poor Cultivation	Popularization & Cultivation of Exotic Vegetables	03	August

2.6 Livestock Production					
Livestock Production	Poultry	Lack of knowledge	Skill development training programme on Commercial poultry farming	07	Jun-July
	Dairy	Lack of knowledge	Skill development training programme on Economic dairy farming	10	March-April
2.7 PHT and Value addition					
Value Addition	Vegetables	Lack of knowledge	Demonstration on making of mixed vegetable pickle.	03	September
2.8 Home Science					
Skill Development	Crewel Embroidery	Lack of knowledge	Vocational training on Crewel embroidery/Golden thread work	40	September
	Fabric Painting	Lack of knowledge	Training programme on Fabric Painting	10	December

3. Trainings for Extension Personnel during 2020-2021

Thematic area	Training Course Titles	Duration (Days)	Month
3.1 Crop Production			
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			
Pest Management	Integrated pest 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 management in cereal and pulse crops	01	November
	Management of pests of fruit crops	01	Jan
	Scientific silk production	01	April-May

3.3 Horticulture			
Fruit Production	C A storage of Apple	02	September and October
	Successful Apple Marketing in new Millennium in collaboration with Division of Economics SKUAST-K	02	August, September and October
	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	September and October
	Canopy management of temperate fruit crops	02	November
3.4 Vegetables			
Vegetable Production	Management of vegetables under protected conditions	03	February
	Practical demonstration on Hybrid seed production	03	July
3.5 Soil Health and Fertility			
Soil Health and Fertility	Vermicompost Method demonstration on Composting of Dal Weed, 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
	Method Demonstration on 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
	Method demonstration on handling 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			
Value Addition	Processing and preservation of fruits and vegetables	01	September

3.7 Sericulture			
Sericulture Production	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 FPOs 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	Zoonotic disease- their Prevention and control	01	February- March
	Importance of micronutrients in reproductive health of dairy cows	01	August- September

4. Vocational trainings during 2020-2021

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	Rural youth (25-30)	Feb.-March
	Skill development programme on budding techniques in fruit crops	03	Rural youth (25-30)	July/ August
	Skill development programme on Canopy management of temperate fruit crops	10	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				
Soil Health and Fertility	Method Demonstration on Preparation of vermin-compost and dal weed compost for agricultural use as an income generating unit.	02 (05) 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
4.5 Employment Generation				
Employment generation	Beekeeping and its role in employment generation	10 days	Students/ youth	March/ Sept.
	Mushroom Growing a prime entrepreneurship	10 days	Students/ youth	March/ Sept.
4.6 Animal Science				
	Profitable sheep/goat farming	05 days	Rural youth	April-May
	Integrated fish-duck-poultry and vegetable farming for maximizing returns	02 days	Rural youth	September-October

5. Extension programmes during 2020-2021

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	25	500
Kisan Mela	01	250
Exhibition	03	225
Scientists' visit to farmers field	As per demand	
Plant/Soil health/Animal health camps	04	300
Ex-trainees Sammelain	01	60
Method Demonstrations	20	300
Celebration of important events/day	10	650
Exposure visits	15	575
Technology week	01	50
Plantation Day	01	50
Awareness programme	12	350

6. Details of FLD's proposed/to be implemented during Kharif 2020 & Rabi 2020-2021

Crop	Season & Year	Farming Situation	Area/ha	Thematic Area
6.1 Oil Seeds				
Mustard (Brown Sarson)	Rabi 2020-21	Irrigated/Rainfed	02	Crop Production
6.2 Pulses				
Pulses (Moong and Beans)	Kharief 2020 Rabi 2020-21	Irrigated/Rainfed Irrigated/Rainfed	02	Crop Production
6.3 Other than Oilseeds & Pulses				
Paddy	Kharif 2020	Irrigated	15	Crop Production
Maize	Kharif 2020	Rainfed	05	Crop Production
Oats	Rabi 2020-21	Irrigated/rainfed	10	Crop Production
Vegetables	Kharif 2020	Irrigated	01	Crop Production

Garden Pea	Kharief 2020	Irrigated	01	Crop Production
Strawberry	Rabi 2020-21	Rainfed	0.05	Crop Production
Apple (HDP)	Kharif 2020	-	0.1	Crop Production
Poultry	Year 2020-21	-	1500 birds	Improved breeds

7. On Farm Trials to be implemented (2020-2021)

Title of the OFT	No. of Trials/Locations	Problem Diagnosed	Technology Assessment	Thematic Area
Optimizing rumen function and enhancing production potential of dairy cows through yeast supplementation	10	Low production and reduced activity of rumen microflora	T1- Farmers practice, T2- Yeast supplementation @ 10gm/head /day	Diary Production
Supplementation of UMMB for maximizing production potential in dairy cows	10	Nutrient deficiency, Low quality feed resources, Low production	T1- Farmers practice, T2- UMMB lick	Diary Production
Scientific Drying	03	Color fading contamination	T1- Sun drying T2- Solar Drying T3-use of KMNO ₄ /salt	Post Harvest Technology
Soil and Foliar application of potassium for color development Area = 0.25 ha Replications = 03 per location	03	Poor Fruit Color	T ₁ = Soil application of potassium as basal dose. T ₂ = One foliar spray of Potassium @1.5% at fruit development stage <u>iv</u> .	Fruit Quality
Effect of foliar application of Boron on fruit set and productivity of apple. Area = 0.25 ha Replications = 03 per location	03	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	<ul style="list-style-type: none"> • Water core, Bitter pit • Labour and time expensive 	T ₁ = Farmer's practice (Separate use of fungicides and nutrients) or no use. 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

Varietal assessment of different varieties of Pea	04	Low Yield	T1: Arkel T2: Pb-89	Varietal Assessment
Popularization of different varieties of broccoli	04	Lack of Awareness	T1: Jammu green T2:Palam samridhi	Popularization of HYV
Utilizing Dal weed in compost Preparation	02	Dal weed Menace	T1- Farmers practice T2- Waste Decomposing Bacteria (Shalimar Microbes	Vermicomposting
Integrated Nutrient Management in Kale in Dal catchment areas	05	Eutrophication of fertilizers in Dal lake Excessive weed growth in Dal lake	T1-Farmers practice T2-Inorganic Fertilizers +Vermicompost + Biofertilizres	Integrated Nutrient Management
