ACTION PLANT (APRIL 2025 TO MARCH, 2026)

A. AGRONOMY

OFT-1: Performance of Maize (SMC-8 / SMC 3/ Shalimar maize hybrid -1, etc.)

Crop	Prioritized Problem	Details of Technology
Maize	Lack of HYVs in white maize	T1 = Farmers practice (local)
		T2 = SMC-8 / Shalimar maize hybrid -1/ SMC 3 etc

OFT-2: Intercropping legumes during summer and winter in high density apple orchard

Crop/Enterprise	Prioritized Problem	Details of Technology
Intercropping in HDP	Under utilization of space	T_1: Farmers practice (Vacant space with natural grass) T_2: Intercropping with pulses (Pea in rabi and Moong in kharif)

2. FRONTLINE DEMONSTRATION FOR 2025-26

S. No.	Category	Crop/ enterprise	Prioritized problem	Technology to be demonstrated	Specify Hybrid or Variety	No. of Demos. Each KVK
2.1	Cereals	Paddy	Use of old traditional varieties	Horizontal expansion of paddy varieties	SR-4 (Plains of Valley) SR-5 (High altitudes of valley)*	10 05*
		Maize	Low yield	Popularization of high yielding varieties (as per altitude)	**SMC-3/SMC8 KG-2*	10 20*
2.2	Oilseeds	Brown Sarson	Use of old traditional varieties	Demonstration of HYVs	SS-2/SS-3	50

2.3	Fodder	Oats	Low fodder yield of local varieties	Use of SKUAST-K high yielding varieties	SFO-1 / SFO-3	05

3. Trainings for Farmers/ Farm Women during 2025-26

S.No.	Thematic area	Crop / Enterprise	Major problem	Training Course Title	No. of participants
3.1	Crop Production	Cereals	Low yield Climate Change	Scientific cultivation of Rajmash (pole type) as intercrop with maize	25
				System of rice intensification in paddy	25
			Low Yield	Scientific seed production technology of Paddy	25
3.2	Organic Farming	Field crops	Environmental and Soil health degradation	Agronomic Practices of Organic farming	25
3.3	Farm mechanization	Farm machinery	Lack of awareness about farm machinery	Farm mechanization for increasing production and profitability of farmers	25
3.4	Doubling Farm Income	Multiple Enterprises	Low farm income	Integrated Farming System: An approach to boost farm income	40
3.5	Natural Farming	Multiple Enterprises	Environmental and Soil health degradation	Natural farming interventions for sustainable yield enhancement & soil health improvement	50

4. Trainings for Rural Youth (2025-26)

Thematic area	Crop / Enterprise	Training Course Title	No. of Days	No. of Courses	Expected No. of participants
Crop production	Paddy	Farm mechanization for drudgery reduction in paddy	03	01	25
	Maize	Integrated nutrient Management in maize	03	01	25
	Pulses	Importance of bio fertilizers in pulses	03	01	25
Organic crop production	Vermi-technology	Biowaste conversion as a source of livelihood	02	01	50
Crop diversification	Multiple crops	Crop diversification to increase famers income	02	01	50

5. Trainings for Extension Personnel during 2025-26

S. No.	Thematic area	Training Course Title	No. of trainings	Expected No. of participants
4.1	Resource Conservation Technology	Resource Conservation technology in rice –wheat cropping system	01	25
4.2	Sustainable Agriculture	Precision farming techniques in field crops for enhancing yield with minimum inputs	01	25
4.3	Sustainable Agriculture	Natural Farming and its impact on Sustainability, Profitability and Food Security	01	25
4.4	Millets Production	Millets Production Technology and their value addition	01	25
4.5	Efficient resource utilization technology	AI intervention for precision crop management	02	50

5. Other Extension Activities (2025-26)

- Need based awareness / training Programmes area specific
- Routine Farmers mobile/media/advisory services,
- Diagnostic visits, exposure visits, Field days etc

B. HORTICULTURE

OFT 1: Assessment of Different Thinning Practices for Optimizing Crop Load Management in High-Density Apple Orchards.

Base Line Survey:

- Poor fruit size, alternate bearing, and reduced fruit quality.
- Three (03) sites/locations were selected for the trial to evaluate the efficacy of different thinning methods.

Significance: With increasing adoption of high-density apple orcharding in the region, crop load management plays a pivotal role in achieving consistent yield, better fruit size, and marketable quality, while also maintaining tree health and longevity.

OFT-2: Assessment of Different Thinning Practices for Optimizing Crop Load Management in High-Density Apple Orchards

Crop	Prioritized Problem	Details of technology	Source
Apple	• Poor Quality • Biennial Bearing • Low returns	T_0: No Thinning - (FP) T_1 : α-NAA @ 10-15 ppm applied at 7-35 days from full bloom followed by hand thinning 4-6 Fruits per cm^2 TCSA) – (RP) T_2: 6-BA @ 50-150 ppm applied at 5-30 days from full bloom followed by hand thinning 4-6 Fruits per cm^2 TCSA) – (RP)	SKUAST-K

OBSERVATIONS

- (Flower clusters/tree)
- total no of fruits harvested /tree
- Quality (% A Grade apples /Kanal)
- Economic Returns (BC ratio)

OFT 3: Evaluation of different pruning times for optimizing Apple Production under changing climatic Conditions

Base Line Survey:

- A baseline survey was conducted across various apple-growing pockets of the district to understand farmers' current pruning practices and their associated outcomes under changing climate conditions.

- ❑ Based on the findings, three (3) representative locations were identified for executing the trial.

Significance: Optimizing pruning schedules can help synchronize growth with changing weather conditions, thereby enhancing productivity and resilience.

OFT-4: Management of Hen and chicken disorder of grapes

Crop	Prioritized Problem	Details of technology	Source
Apple	Early bud break & bloom Poor fruit set and yield	T_0: Pruning in the 3rd Week of November through December (FP) T_1 : Pruning in the 3rd Week to last week of February (RP) T_2: Pruning in the 1st week of March to 2nd of week of March (RP)	SKUAST-K & Y.S Parmar Solan

OBSERVATIONS

- Time of bloom
- Yield (kg/tree)
- Returns (BC Ratio)

OFT3: Assessing the Performance of different chemicals for the Management of Necrotic Leaf blotch (NLB) in Apple.

Base Line Survey:

- ❖ Low-lying apple-growing areas of the district were surveyed that were predominantly affected by NLB.
- ❖ Humid and Fluctuating climate accelerate the disorder leading to premature leaf fall and poor quality.
- ❖ Based on the severity and frequency of NLB occurrence, three suitable locations were identified for trial execution.

Significance: This OFT aims to evaluate the efficacy of various chemical treatments to manage the disease/disorder effectively under field conditions. The outcome will help develop a location-specific management strategy to minimize yield losses and maintain foliage health.

OFT-5: Different dates of transplanting Bracoli for popularization of exotic vegetables in District Ganderbal

Crop	Prioritized Problem	Details of technology	Source
Bracoli		T_1: 15 July T_2 : 30N JULY (RP) T_3 : 05 Aug.	SKUAST-K & Y.S Parmar Solan

Scientists /SMS Involved

- Vegetable scientist

- Horticulture scientist
- SDO Ganderbal

OBSERVATIONS

- NO OF days of maturity
- Yield (Kg/Tree)
- Economics (BC ratio)

2. Front Line Demonstrations (FLDs)

FLD-1: Demonstration of Boron Sprays and Bouquet Pollination for Improved Fruit set in Apple

Baseline Survey

- Consistently low fruit set, primarily due to an imbalanced pollinizer-to-main cultivar ratio.
- Based on the survey, 5–8 sites with a history of poor fruit set were identified for demonstration, collectively covering over 1 hectare.

Significance of the FLD: The demonstration seeks to create awareness and showcase the effectiveness of low-cost, scalable technologies in improving productivity and profitability in apple cultivation, especially in orchards with inadequate pollinizer management

FLD-2: Demonstration on Foliar application of Potassium Sulphate for improved colour development in Apple

Crop	Prioritized Problem	Technologies	Source
Apple	Poor colour development Quality, Low returns	Two foliar applications of Potassium Sulphate @ 0.3-0.5 % at fruit development stage IV and second spray after 15 days.	SKUAST-K

Trees	(1.5 ha.)
Demos	8
Cost per demo	-
Total Cost	-

Proposed Trainings

- ❑ Farmers
- ❑ Rural Youth
- ❑ Entrepreneurs
- ❑ In-Service Extension Personnel-

3. Training for Farmers, Men/Women

S.No	Training Title	No. of Trainings
1.	Layout, Planting and Early care of temperate fruit crops	03
2	Propagation Techniques in Temperate Fruit crops with special reference to walnut	02
3	Methods of Fertilizer Application in Apple Orchards	02
4	Role of Pollinizers/Pollinators in Temperate fruit crops	03
5	Importance of Mulches in different fruit crops	01
6	Importance of Micro-Irrigation techniques for enhanced Water Use Efficiency (WUE) in Agri. & Horti crops.	01
7	Budding Techniques in fruit crops	02
8	Techniques for collection of leaf samples from apple orchards	02
9	Scientific techniques of harvesting, grading/packing and truthful labelling in apple	01
10	Scientific Training and pruning to improve quality and productivity in apple and Grape	10
11	Awareness Programme on the Importance of High Value and Exotic vegetables.	01
12.	Production management technology of cut flowers.	01
13.	KVK-specific/Need based if any	-

4. In-Service Extension Personnel

S.No	Training Title	Duration (Days)	No. of Trainings
01.	Production of designer plants under High Density plantation	02	01
02.	Canopy Management in Apple with special reference to High Density Orchards	02	01

C. Animal Science Group

1. On-Farm Testing

OFT-1: Evaluation of Mineral Mixture Supplementation on production performance of Sheep

Prioritized Problem	Lack of sheep specific mineral mixture
Details of trial	T_0= Farmers Practice T1= Feeding of 25 grams of sheep specific mineral mixture
No. of locations	03
Source of technology	SKUAST-Kashmir
Evaluation parameters	Growth performance, Health parameters (BCS, incidence of diseases), Monthly Weight gain, wool production, reproductive parameters (conception rate, Lambing percentage, birth weight of lambs). economics

OFT-2: Effect of Extended Photoperiod on Growth and Egg Production in Backyard Poultry during Winter

Prioritized Problem	Decrease in egg production during winters
Details of trial	T 0 : No artificial light; birds exposed to natural light during day time (aroud 8 hours) T1: Artificial light to extend photo peroid up to 14 hours.
No. of locations	03
Source of technology	SKUAST-Kashmir
Parameters to be Evaluated	Egg production; Growth rate, Feed consumption, health parameters; development of vices

2. Front Line Demonstrations

FLD-1: Popularization of winter chocolates for enhancing productive performance of dairy cows

Crop/ Enterprise	Cattle
Technology to be demonstrated	Winter chocolate
Source of technology	SKUAST-K
Name of critical input	Winter chocolate

No of demos	05 (60 chocolates/demo)
Parameters to be Evaluated	Milk yield , body condition score, conception rate, incidence of metabolic disorders, economics

FLD-2: Popularization of Keystone golden back yard poultry birds

Crop/ Enterprise	Poultry
Technology to be demonstrated	Demonstration of improved breed/ strain of poultry birds (Keystone golden) under backyard farming system.
Source of technology	SKUAST-K
Name of critical input	Backyard poultry birds
No of demos	20 (10 birds/demo)
Parameters to be Evaluated	Average body weight at 8th week, 20th and 40th week age and body wt at first egg laying , Total eggs up to 40 week of age BCR

Thrust areas in the district Ganderbal

- Animal health and care
  (Vaccination, deworming, Preventive care and Disease outbreak Management)
- Fertility/Breeding management of dairy cattle/ Sheep.
- Balanced/ supplement feeding in livestock.

Major livestock enterprises in the district	**Prioritized problems in the enterprise**
Dairy Cattle	➢ Low milk Yield ➢ Infertility and Repeat Breeding ➢ Lack of awareness regarding Vaccination and Deworming of livestock ➢ Lack of awareness about the management of common disease in dairy cattle
Sheep/Goat	➢ High mortality in newborn ➢ Lack of awareness on the importance of Vaccination and Deworming ➢ Lack of awareness on scientific breeding management

Commercial/Backyard Poultry	➢ Lack of awareness on maintaining biosecurity measures at farms Premises ➢ high mortality and low productivity in backyard poultry

3. Training /Awareness/Method demos for Farmers/ Farm Women

Thematic area	Crop / Enterprise	Prioritized problem	Training Course Title	Month	No. of days for each training	No. of trainings	Nature of training
Disease/feeding/ breeding Management	Cattle	Lack of knowledge	Control and Management of Mastitis in Dairy Cows	April-Oct.	1	1	Off-campus
	Cattle	Lack of awareness	Management of Repeat Breeding/Infertility in High Yielding Cows	April-Sep.	1	1	Off-Campus
	Sheep/Cattle	Low production performance	Control measures for ecto - and endo-parasitic infestation in Sheep/Cattle	April-Oct.	1	2	Off-Campus
	Sheep/Cattle	Production loss due to metabolic diseases	Metabolic diseases of ruminants: their prevention and control	March-Oct	1	2	Off-campus
Disease/feeding/breeding Management	Cattle	Low shelf life due to unhygienic milk production	Clean and hygienic Milk Production	April-Oct.	1	01	Off-campus
	Sheep/Cattle	Low production during winter months	Silage and Hay making for Winter feeding	Sep-Oct.	02	01	Off-Campus

	Cattle/Sheep	Lack of knowledge	Importance of Vaccination and Deworming in Cattle/Sheep	April-Oct.	1	2	Off-Campus
	Sheep/Cattle/poultry	Lack of knowledge	Awareness on Zoonotically important diseases	March-Oct	02	01	Off-campus

4. Trainings for Rural Youth

Thematic area	Crop / Enterprise	Major problem	Training Course Title	Month	Collaboration	No. of Courses	No. of days	Nature of training
Feed and Fodder	Livestock	Scarcity of quality fodder in winter Reluctance of farmers for vaccination of livestock	Demonstration on Scientific preservation of green fodders(silage making)	August-November	MLRI (Manasbal)	01	15	On/off-campus
Disease management	Livestock		Control and prevention of infectious diseases in animals	April-August	Division of VEPM (F.V.Sc & A.H, Shuhama)	01	10	On/off campus
Poultry Farming	Poultry	Lack of knowledge and skill for commercial poultry farming	Horti-Poultry model as a potential income generation unit	April October	Line Departments	01	35	On/off campus
IFS	Livestock/Dairy	Single farming system	Adapting Integrated farming system models for maximizing returns	April - August	Line Departments	01	03	On/off Campus

5. Trainings for Extension Functionaries

Crop / Enterprise	Training Course Title	No. of Courses	No. of days	Month	Nature of programme
Dairy cows/Sheep	Pregnancy Diagnosis	1	3	Mar - July	On- campus
Sheep	Small Ruminant Vaccination	1	1	April - September	On- campus
Cattle/Sheep/Poultry	Vaccine Storage and Handling	1	1	March April	On- campus

Campaign

- Importance of Deworming in livestock
- Vaccination for FMD control
- Zoonotic Disease Prevention

Demonstration:

- Fortification of Paddy straw.
- Preparation of Urea Molasses Mineral Blocks.
- Silage Making

D. SOIL SCIENCE

1. On Farm Testing (OFT)

OFT-1: Effect of natural farming products on soil health and yield of fenugreek

Crop/ Enterprise	Prioritized problem	Technology options	Source of Technology	Name of critical input	Cost per trial	No. of trials	Total cost for the intervention (Rs.)	Parameters to be studied
Soil Health Soil Health	Intensive use of chemicals Deleterious effects of chemical fertilizers on yield and soil health.	T1: Farmers Practice (Chemicals) T2: Application of Beejamrit + Jeevamrit + Ghanjeevamrit	SKUAST-K SKUAST-K	i. Beejamrit ii. Jeevamrit iii. Ghanjeevamrit	6000	03	18000	Yield Soil health

OFT-2: Assessment of Zn solubilizing bacteria as inoculants for Zn nutrition in Rice production

Crop/ Enterprise	Prioritized problem	Technology options	Source of Technology	Name of critical input	Cost per trial	No. of trials	Total cost for the intervention (Rs.)	Parameters to be studied
Soil Health	Deleterious effects of chemical fertilizers on yield and soil health.	T1-: Farmers practice T2-: Recommended fertilizer (RDF) for the crop T3-: Use of Zn solubilizing bacteria as seedling treatment + RDF	SKUAST-K SKUAST-K	i. Beejamrit ii. Jeevamrit iii. Ghanjeevamrit	1000	03	3000	Yield Soil health

2. Front Line Demonstrations

S. No.	Crop/ Enterprise	Prioritized problem	Technology to be demonstrated	Source of Technology	Name of critical input	No of demos	Parameters to be studied
1.	Vermitechnology	Lack of awareness regarding Vermitechnology	Popularization of vermitechnology through low cost structure (woven vermibed)	SKUAST-K	woven vermibed/Worms	05	Quality
2	Composting	Lack of awareness regarding composting	Bioaugmented composting using Shalimar microbes	SKUAST-K	Shalimar microbes	05	Quality of compost / Duration of composting

3. Trainings for Farmers/ Farm Women

S. No.	Thematic area	Crop / Enterprise	Major problem	Training Course Title	No. of Courses
1	Soil Health and fertility Management	Nitch crops	Low Yield, Improper application of fertilizer, fertility	Natural farming a way forward for sustainable agriculture	03
				Soil sampling techniques for fruit and field crops	03
				Nutrient management and inputs for soil health enhancement under natural farming	03
2	INM	Fruit crops	Low Yield	Nutrient deficiency symptoms in apple and their remedies	

3	Production of inputs at site	Sustainable Agriculture	Unawareness	Scientific techniques for production of organic inputs.	03
				Preparation and application of beejamrit, jeevamrit and ghanjeevamrit for natural farming	
4.	Soil & water conservation	Water management	Low yield	Management of fruit crops under water stress conditions on sloppy areas.	03

4. Trainings for Rural Youth

S. No.	Thematic area	Crop / Enterprise	Major problem	Training Course Title	No. of Courses
1	Soil Health and Fertility Management	fruit and field crops	Imbalanced application of fertilizers	Importance of soil health	03
				Techniques for collection of leaf and soil samples from fruit and field crops	03
				Sustainable practices of natural farming for soil health management	
2	Production of inputs at site	Vermi-technology	Unawareness	Production of organic inputs on scientific lines for livelihood and soil health	03
3	Micronutrient management	Fruits	Poor quality and physiological disorders	Micronutrient management through foliar application in fruit crops.	03

5. Trainings for Extension Personnel

S. No.	Thematic area	Crop / Enterprise	Major problem	Training Course Title	No. of Courses
1	Soil Health and Fertility Management	Fruit/Field crops	Indiscriminate use of fertilizers	Soil Health in Regenerative Agriculture	01

6. Method Demonstration

S. No.	Thematic area	Demonstration	No. of programmes
1	Production of organic inputs	Low cost vermicompost production	02
2	Soil Health and Fertility Management	Soil sampling techniques for fruit and field crops	04

7. Extension Activities

S. No.	Extension Programme	No. of programmes or activities
1	Scientist farmer interactions	08
2	Kissan Ghosti	02
3	Soil health camps	02
4	Exposure visits	02

8. Events

S. No.	Extension Programme	No. of programmes or activities
1	**World Soil Day**	01

9. Activities of soil testing laboratory

S. No.	Type	No. of samples to be analyzed
1	**Soil**	500

E. PLANT PROTECTION

1. On-Farm Testing

OFT-1: Integrated management of fruit fly in cucurbits (bottle gourd, pumpkin, cucumber*)

Crop	Prioritized Problem	Details of Technology
Vegetables/Cucurbits	Fruit fly in cucurbits	T1 = Farmers practice (local)
		T2 = Insecticide mixture spray as per (POP)

*Area specific Varieties, Each Kendra will include the cucurbit as per their choice

OFT-2: Management of tomato fruit borer

Crop/Enterprise	Prioritized Problem	Details of Technology
Tomato	Fruit borer	$T_{1:}$ Farmers practice T_2: : Installation of pheromone traps @ 12-15 traps/ha and Spray imidacloprid17.8 SL @30 ml/100 lit. of water 35DAT (POP)

2. FRONTLINE DEMONSTRATION FOR 2025-26

S. No.	Category	Crop/ enterprise	Prioritized problem	Technology to be demonstrated	Title of FLD	No. of Demos. Each KVK
2.1	Fruits	Apple	Apple canker	SKUAST-K Demonstration: Fungicide paste (Carbendazim 50 WP (1part)+	Management of Canker in apple	30 (3 demonstration/ KVK) 06*

				Copper oxychloride 50 WP(2 parts)+ Linseed oil (9 parts)		
		Apple	Root rot	Use of recommended fungicide followed by Demonstration: Trichoderma + Vermicompost	Demonstration on Root rot management	30 (3 demonstration/KVK) 06*
2.2	**Optional**	**Area specific/as desired by the scientist**				

3. Training /Awareness/Method demos for Farmers/ Farm Women

Thematic area	**Crop / Enterprise**	**Prioritized problem**	**Training Course Title**	**Month**	**No. of trainings**	**No. of days**	**Nature of training**
Plant Protection	Apple	Lack of awareness about spray schedule	Pesticide spray schedule of SKUAST-Kashmir for apple insect pest and disease management	March -May	01	10	Off/on campus
	Apple	Lack of knowledge	Important diseases of apple and their management	April-Oct.	01	04	Off/on campus
	Apple	Climate Change	Management of untimely snow/hailstorm affected crops	April-Sep.	01	02	Off-Campus

	Apple	Root rot and collar rot of apple	IDM of root rot and collar rot of apple	April-Oct.	01	02	Off-Campus
	Paddy	Lack of knowledge about disease management	IDM & IPM of Insect pest and diseases of paddy	April-Agust	01	02	Off-campus
	Maize	Lack of knowledge about insect pest and disease management	IDM & IPM of Insect pest and diseases of maize	April-Agust	01	01	Off-Campus
	Vegetable	Lack of knowledge about disease management in vegetable	IDM & IPM of Insect pest and diseases of vegetable crops	April-July	01	02	On/Off-Campus
	Floriculture	Lack of knowledge about insect pest and disease management in floriculture crops	IDM & IPM of Insect pest and diseases of floriculture crops	April-Agust	01	02	On/Off-Campus
	Chilli wilt complex	Lack of knowledge about disease management	IDM of chilli wilt complex	March -May	01	02	Off-campus
	Apiculture	Lack of knowledge about bee keeping and disease management	Rearing of honey bees for honey production and pollination	April	01	01	On/off Campus

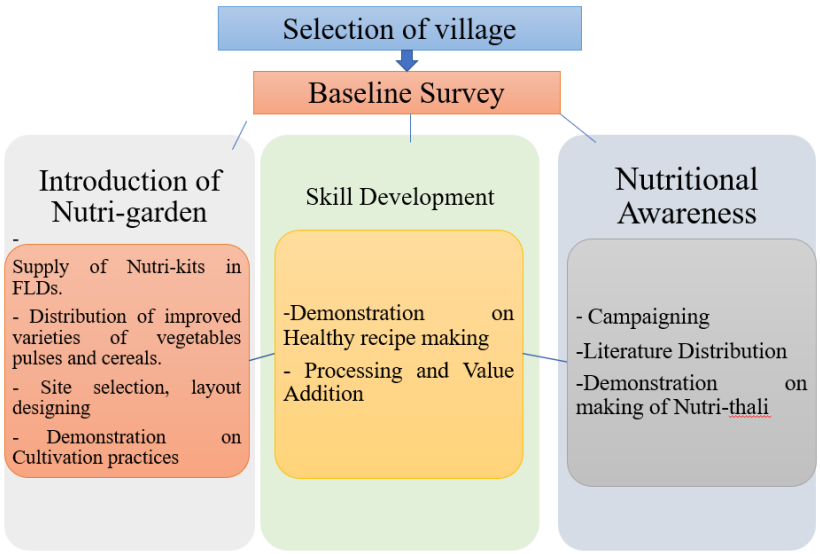
	Sericultur e	Lack of knowledge about rearing and management of silkworms	Exposure visit cum training at TSRI Mirgund	April - May	01	01	off Campus

4. Training for Rural Youth

Thematic area	Crop / Enterprise	Major problem	Training Course Title	Month	Collaboration	No. of Courses	No. of days	Nature of training
Mushroom	Mushroom	Lack of knowledge and skill about mushroom cultivation as an enterprise	Production technology of Dhingri and button Mushroom cultivation	March-August	Division of Plant Pathology (Mushroom centre)	01	07	On/Off-campus

F. HOME SCIENCE

Nutri-smart Programme: *Approaches and Interventions*



Processing and Value Addition: *Development of Product ,Skill and Start-ups*

Avenues	Crop	Products
Ganderbal is rich in Stone Fruits like, Cherry Peace, Plum and Grapes . Scope of processing and value addition of stone fruits is high and Grapes need cold chain and packaging reforms.	Cherry Peace, Plum Grapes	Jam and Dehydrated fruits
Mushroom processing and value addition. Many entrepreneurs have started mushroom units in the district. Since the produce is perishable, value addition and better packaging will prevent PH Losses.	Pickles & Packaging	Packaging
Processing and Value Addition of herbs . Since the area is rich in natural resources and cultivation of herbs is also gaining impetus. Product development from culinary herbs has a great scope and KVK has developed some good herbal food products	Oregano Thyme Basil Garlic etc.	
Skill Courses in processing and value addition of Fruits and Vegetables	Carrots, Radish, kale, Cauliflower etc Apple, Quince Walnut etc