Priority Thrust Areas

- > Area expansion under high value vegetable crops.
- > Pollination management and scientific training & pruning in fruit plants.
- > Commercial cultivation of floriculture crops.
- > Soil health maintenance.
- > Integrated disease and pest management in fruits and vegetables.
- > Popularization of high density apple plantation.
- > Cultivation of male poplars under protected conditions.
- > Vocational trainings for income generation.

1. Trainings for Farmers/ Farm Women during 2016-17

| Thematic area | Crop / Enterprise | Major problem | Training Course Title | Duration (Days) | Month |
|----------------|----------------------|---|---|-----------------|-----------|
| 1.1 Crop Prod | luction | , | | • | |
| | Paddy | Nursery failure | Protected Paddy Nursery | 03 | March |
| | Paddy | Low yield due to improper transplanting | Scientific transplanting of Paddy | 03 | April |
| | Maize | Diversification of crop | Production technology of sweet corn | 03 | April/May |
| | Maize | Low yield | Scientific cultivation of maize | 03 | April |
| | Oats | Low yield | Scientific cultivation of oats | 03 | November |
| | Paddy | | Demonstration on System of Rice Intensification (SR-1) | 03 | April |
| 1.2 Plant Prot | ection | | | | |
| | Apple | San Jose Scale/European Red Mite | Importance of HMO's for management of San Jose scale and European red mite. | 01 | March |
| | Apple | Pests | Importance of apple spray schedule 2016 | 01 | April |
| | Vegetables | Pests | Management of cutworm | 03 | April |
| | Brinjal Tomato | Diseases | Management of brinjal and tomato fruit borer | 03 | June |
| | Chilli | Soil born diseases | Management of chilli wilt and root rot | 03 | April |
| | | | 1 | 1 | 1 |

| | Apple | | Rodent management in orchards | 03 | May |
|------------|---------------------|-----------------------------------|---|----|-----------------------|
| | Bee keeping | Seasonal migration | Scientific management of honey be colonies | 03 | May |
| | Mushroom production | Lack of awareness | Cultivation of Dhingri mushroom | 03 | June |
| 1.3 Hortic | ulture Production | | , | | 1 |
| | Apple | Low yield | Role of pollinizers and pollinators in fruit plants | 03 | March |
| | Apple | Maturity standards | Maturity standards and harvesting techniques | 03 | August |
| | Apple | Marketing standards | Grading and packing of fruits | 03 | September |
| | Apple | Poor quality fruits | Scientific training and pruning | 05 | November/ December |
| | Flowers | Lack of awareness | Cultivation of cut flowers under green house conditions | 03 | May |
| | Fruit Plants | Unawareness of propagation | Budding and grafting techniques in fruit plants | 03 | February |
| | Floriculture | Unawareness | Entrepreneurship development in floriculture crops | 03 | April |
| 1.4 Vegeta | ble Sciences | | | | 1 |
| | Cucurbits | Pollination problem | Pollination Management in Cucurbits | 03 | June |
| | All Vegetables | Nursery failure | Early nursery raising under protected structures | 03 | February |
| | Beans | Package of practices not followed | Scientific Cultivation of Beans | 03 | May |
| | Vegetables | Lack of Knowledge | Preparation of Kitchen Gardens | 03 | March |

| | Spices | Package of practices not followed | Cultivation of spices i.e. Methi and Coriander etc. | 03 | September |
|--------------|-------------------------------|--|---|----|-----------|
| | Vegetable Cops | Hybrid seed production not done | Hybrid seed production in vegetables | 03 | July |
| | Solanaceous Vegetables | Package of practices not followed | Scientific cultivation of Solanaceous Vegetables | 03 | April |
| | Exotic Vegetables | Poor Cultivation | Scientific Cultivation of Exotic Vegetables | 03 | October |
| | Root crops | Package of practices not followed | Scientific Cultivation of Root Crops | 03 | August |
| 1.5 Soil Hea | alth and Fertility | | | | 1 |
| | Pome fruits | Soil sampling | Soil sampling techniques | 03 | December |
| | Paddy | Inadequate fertilizer application | Importance of soil test based fertilizer application | 03 | April |
| | Maize | Decline in soil organic matter | Soil quality enhancement of intensively cultivated maize fields | 03 | May |
| | Maize | Imbalanced fertilizer use and their low use efficiency | Maturing and fertilizer management of improved maize varieties | 03 | April |
| | Field crops-oil seeds, paddy | Blanket fertilizer application | Importance of soil testing and demonstration of soil sampling | 03 | September |
| | Fruit Crops | Unawareness about symptoms about nutrient deficiency | Nutrient deficiency symptoms in fruit crops | 03 | July |
| | Maize | Increasing dependence on mineral fertilizer | INM in rainfed maize on high altitudes. | 03 | April |
| | Vegetables | Improper farm waste disposal | Composting of waste on home scale on vegetable farms. | 03 | August |
| | Vegetable, maize and Apple | Lack of soil erosion control on hills | On-field measures to mitigate soil erosion | 03 | May |
| | | Decline in soil health | Practices for improvement of soil health in orchards | 03 | June |

| 1.6 Livestock | Production/ Fis | sheries | | | |
|---------------|-----------------|---------------------------------------|---|----|----------|
| | Cattle | Unawareness about care and management | Care and management of new born calf and lactating cows | 03 | December |
| | Poultry | Unawareness about vaccination | Vaccination and medication against different diseases | 03 | June |
| | Fisheries | Lack of awareness | Latest rearing techniques of aquaculture | 03 | October |
| 1.7 Home Scie | ence | | | | |
| | Eatables | Wastage of Leftovers | Programme on leftover foods | 03 | April |
| | Vegetables | Unawareness about value addition | Preservation of vegetables | 05 | May |
| | Fruits | Unawareness about value addition | Preservation of seasonal fruits | 03 | June |

2. Trainings for Rural Youth during 2016-17

| Thematic area | Crop / Enterprise | Major problem | Training Course Title | Duration (Days) | Month |
|-----------------|-------------------|-----------------|---|--------------------|-------|
| 2.1 Crop Produ | ıction | | | | |
| | Paddy | Nursery Failure | Raising of paddy nursery under protected conditions | 03 | April |
| 2.2 Plant Prote | ction | | , | I | |
| | Cereal crops | Pests | Integrated pest management in rice and maize | 03 | May |
| | Bee keeping | Unawareness | Apiculture as an enterprise | 03 | June |

| | Mushroom production | Lack of awareness | Methods of mushroom production | 03 | June |
|--------------|------------------------|--|---|----|-----------|
| 2.3 Product | tion of Inputs at Site | | | | |
| | Composting | Lack of knowledge and skill on low cost composting practices | Training programme on commercial vermicompost production | 03 | August |
| | Composting | Lack of knowledge and skill on low cost composting practices | Improved methods of on-farm composting | 03 | September |
| 2.4 Horticu | lture Production | | | | 1 |
| | Fruit Crops | Low Yield | Importance of pollinators and pollinizers in fruit plants | 03 | March |
| | Fruit Crops | Faulty layout | Scientific layout of orchards | 03 | November |
| | Floriculture | Lack of awareness | Commercial cultivation of pot flowers. | 03 | April |
| 2.5 Vegetab | ole Sciences | 1 | | | |
| | Spices | Package of practices not followed | Cultivation of spices i.e. Methi and Coriander etc. | 03 | September |
| | Vegetable Cops | Hybrid seed production not done | Hybrid seed production in vegetables | 03 | June |
| | Exotic Vegetables | Poor Cultivation | Scientific Cultivation of Exotic Vegetables | 03 | October |
| 2.6 Agro for | restry | | | | |
| | Poplars | Non-availability of plants | Raising of male poplars under protected conditions | 03 | March |
| 2.7 Livestoo | ck Production | | | | |
| | Poultry | Poor knowledge about broiler farming | Awareness programme on rearing of poultry units | 03 | August |
| 2.8 PHT an | d Value addition | 1 | | | 1 |

| | Vegetables | Lack of knowledge about | Demonstration on making of | 03 | September |
|---------------|------------|-----------------------------|---|----|-----------|
| | | making of pickle | mixed vegetable pickle. | | |
| 2.9 Home Scie | nce | <u> </u> | • | • | • |
| | | | | | |
| | Flower | Lack of Knowledge | Dehydration of flowers | 07 | July |
| | | | | | |
| | Strawberry | Low shelflife of Strawberry | Value addition of Strawberry | 05 | June |
| | | | | | |
| | Craft | Lack of Expertise | Demonstration of handmade crafts/Decorative Items | 10 | March |

${\bf 3.\ Trainings\ for\ Extension\ Personnel\ during\ 2016-17}$

| Thematic area | Training Course Titles | Duration (Days) | Month |
|----------------------|--|-----------------|-----------|
| 3.1 Crop Production | | | |
| | Recent advances in laying of paddy nursery | 01 | April |
| | Importance of fertilizer application at critical | 01 | April |
| | stages in Paddy, Maize etc. Saffron production technology | 01 | September |
| | Scientific cultivation of fodder crops | 01 | October |
| | Strategy to produce farmers own seed in paddy | 01 | August |
| 3.2 Plant Protection | | | |
| | Apple spray schedule 2016 and its importance & bio safety. | 01 | March |

| 3.3 Horticulture | | | |
|-------------------------------|---|----|-----------|
| | Orchard Sanitation | 01 | November |
| | Practical demonstration on pruning and training | 03 | December |
| | Awareness programme on drip irrigation of high density plantation | 01 | June |
| 3.4 Vegetables | | | |
| | Practical demonstration on Hybrid seed production | 01 | July |
| 3.5 Soil Health and Fertility | 7 | | |
| | Importance of soil health in sustainable crop production | 01 | June |
| | Soil erosion and its control | 01 | August |
| 3.6 PHT and value addition | | | |
| | Processing and preservation of fruits and vegetables | 01 | September |
| 3.7 Sericulture | | | 1 |
| | Scientific cocoon production | 01 | May |
| 3.8 Home Science | | | |
| | Fabric Painting | 05 | November |
| | 1 abite 1 ameng | 05 | Novemi |

| Need based programme with RSETI | 05 | September |
|---------------------------------|----|-----------|
| | | |

4. Vocational trainings during 2016-17

| Thematic area | Training title | No. of programmes and Duration (days) | Type of Clientele (SHGs, NYKs, School students, Women, Youth etc.) | Month |
|----------------------------|---|--|---|----------|
| 4.1 Home Science | | | | |
| | Skill development programme on Jute bags | 01 (15 days) | Women/girls | August |
| | Skill development programme on Willow Wicker | 01 (01 Month) | -do- | December |
| | Skill development programme for decoration on formal occasions (Marriages/Parties/Official Functions) | 01 (15 days) | Women/girls | January |
| 4.2 Horticulture | | | | |
| | Scientific training and pruning | 03 (03 days) | youth- (boys) | October |
| | Hybrid seed production in vegetables | 01 (05 days) | -do- | July |
| | Latest techniques and early raising of vegetable seedlings under protected conditions | 01 (05 days) | -do- | December |
| 4.3 PHT and Value addition | | | | |

| | Value addition of vegetables | 01 (03 days) | Students/youth- | August |
|-------------------------------|--|---------------|-----------------|-----------|
| | Value addition of fruits | 02 (03 days) | -do- | September |
| | Scientific handling of walnuts for export trade. | 01 (02 days) | -do- | October |
| 4.4 Soil Health and Fertility | | | | |
| | Production of vermicompost on commercial scale. | 01 (03 days) | youth- | September |
| | On-farming composting for efficient nutrient cycling in Orchards | 01 (03 days) | -do- | July |

${\bf 5.\ Extension\ programmes\ during\ 2016-17}$

| Extension programme* | No. of programmes or activities | Expected No. of participants |
|---------------------------------------|---------------------------------|------------------------------|
| Advisory Services | As per demand | |
| Diagnostic visits | As per demand | |
| Field Day | 05 | 150 |
| Kissan Ghosthi | 02 | 50 |
| Film Show | 8 | 250 |
| Kisan Mela | 01 | 300 |
| Exhibition | 02 | 150 |
| Scientists' visit to farmers field | As per demand | |
| Plant/Soil health/Animal health camps | 04 | 350 |
| Ex-trainees Sammelain | 02 | 60 |

| Method Demonstrations | 20 | 300 |
|-------------------------------|----|-----|
| Celebration of important days | 05 | 250 |
| Exposure visits | 05 | 100 |
| Technology week | 01 | 50 |
| Plantation Day | 01 | 70 |
| Awareness programme | 10 | 30 |

6. Details of FLD's proposed/to be implemented during Kharif 2016 & Rabi 2016-17

| Crop | Season &Year | Farming Situation | Area/ha | Thematic Area | |
|----------------------------------|--------------|-------------------|------------|-----------------|--|
| 6.1 Oil Seeds | | | | | |
| Mustard (Brown Sarson) | Rabi 2016-17 | Irrigated | 03 | Crop Production | |
| 6.2 Pulses | | | | | |
| Garden Pea | Rabi 2016-17 | Irrigated | 01 | Crop Production | |
| 6.3 Other than Oilseeds & Pulses | | | | | |
| Paddy (Jehlum /SR-2) | Kharif 2016 | Irrigated | 09 | Crop Production | |
| Oats | Rabi 2016-17 | Irrigated/rainfed | 08 | Crop Production | |
| Poultry (Krioler) | | | 1000 Birds | Livestock | |
| Poplars | | | 100 Plants | Forestry | |

7. On Farm Trials to be implemented (2016-17)

| Title of the OFT | No. of Trials/Locations | Problem Diagnosed | Technology Assessment | Thematic Area |
|--|-------------------------|---|---|---------------------------------------|
| A study on farmers' practices and recommended nutrient management practices in Maize | 02 | Low adoption of recommended practices by farmers in hilly areas | T1- Farmers practice (higher Urea, Low P and no K, no/erratic-split application of urea). T2-Recommended NPK application (blanket doses) T3-Soil test based NPK with other recommended practices. | Nutrient use efficiency |
| Effect of ZnSO ₄ application on paddy in lower belts | 02 | Zn deficiency in paddy. | T1-Farmers practice (No ZnSO ₄) T2-Farmer practice + ZnSO ₄ T3-Recommended rate (NPK) without ZnSO ₄ T4-Recommended rate (of NPK) with ZnSO ₄ | Micro-nutrient deficiency in crops |
| Effect of bees on yield of apple | 02 | Poor fruit set | T1- Farmers Practice T2- Bee hives @ 2/ha T3- Bee hives @ 4/ha | Fruit Production |
| Effect of correct doses of fertilizer on quality of apple | 02 | Low doses of fertilizer used in orchards | T1- Farmers Practice T2- Urea (2 doses), DAP (Single dose), MOP (2 doses) T3- Urea (3 doses), DAP (Single dose), MOP (3 doses) | Fruit Production |
| Effect of Boron and Calcium on Cherry Cracking | 03 | Rain Cracking and Fruit drop in Cherries | T1-Farmers Practice T2- 1 st Spray of Boric acid @ 1.5 g/lit of water (Bud | |

| Yield Assessment of different | 02 | Low Yield | Spell) T3- 2 nd Spray of Boric acid @ 2.0 g/lit of water,15 to 20 days after petal fall, T4- 3 rd Spray of Boric acid @ 2.5 g/lit of water, 15 to 20 days after 2 nd Spray T5- 4 th Spray of calcium chloride @ 3.0 g/lit of water (peanut stage) T6- 5 th Spray of calcium chloride @ 3.5 g/lit of water 15 to 20 days after 4 th Spray T7- 6 th spray of calcium chloride @ 3.5 g/lit of water 15 to 20 days after 5 th Spray | Crop Production |
|--|----|-----------|---|-----------------|
| varieties of Okra | 02 | Low Held | T2- SKBS-11 | Crop Froduction |
| Yield performance of different varieties of Coriander and Methi | 02 | Low Yield | T1- Local T2- SHDH-1 | Crop Production |