ACTION PLAN

2009

KRISHI VIGYAN KENDRA LAHAUL AND SPITI AT KUKUMSERI – 175 142





DIRECTORATE OF EXTENSION EDUCATION CSK HIMACHAL PRADESH KRISHI VISHVAVIDYALAYA

ANNUAL ACTION PLAN - 2009

1. ON - FARM TRIALS

| S. No. | Title / Treatments | No. of |
|--------|--|-----------|
| | | locations |
| 1 | Comparative performance of different Rajmash varieties for testing their suitability under Lahaul conditions Treatments: | 3 |
| | T ₁ : Kailash | |
| | T ₂ : Kanchan | |
| | T ₃ : Canadian Red/Jawala | |
| | T ₄ : Him - 1 (Farmers' practice) | |
| | | |
| 2 | Comparative performance of different herbicides for controlling | 3 |
| | weeds in pea | |
| | Treatments: | |
| | T ₁ : Pendimethalin @ 1.00 kg a.i./ ha as Pre - emergence | |
| | T ₂ : Alachlor @ 1.50 kg a.i./ ha as Pre - emergence | |
| | T ₃ : Fluchloralin @ 1.00 kg a.i / ha as Pre Plant incorporation | |
| | T ₄ : Hand Weeding (Farmers' practice) | |
| 3 | Comparative performance of different herbicides for controlling weeds in potato Treatments: | 3 |
| | | |
| | T ₁ : Atrazine @ 1.00 kg a.i./ ha as Pre - emergence | |
| | T ₂ : Isoproturon @ 1.00 kg a.i./ ha as Pre - emergence | |
| | T ₃ : Fluchloralin @ 1.00 kg a.i./ ha as PPI / Pre - emergence T ₄ : Hand Weeding (Farmers' practice) | |
| | 14. Hand Weeding (Farmers practice) | |
| 4 | Management of pea root rot wilt complex | 2 |
| | Treatments: | |
| | T ₁ : Seed treatment with Carbendazim (Bavistin) @ 0.25% | |
| | (Dry treatment) T ₂ : Seed treatment with Carbendazim (Bavistin) @ 0.05% | |
| | (Wet treatment) | |
| | T ₃ : Seed treatment with Bioagent (<i>Trichoderma viride</i>) @ 0.1% | |
| | T ₄ : Control (Farmers' practice) | |
| 5 | Management of powdery mildew in pea | 2 |
| | Treatments: | |
| | T₁: Hexaconazole (Contaf) @ 0.05% | |
| | T ₂ : HMO @ 1% | |
| | T ₃ : Fenarimol (Rubigon) @ 0.04% | |
| | T ₄ : Carbendazim (Bavistin) @ 0.05% (Farmers' practice) | |
| | <u>, , , , , , , , , , , , , , , , , , , </u> | |

| S. No. | Title / Treatments | No. of locations |
|--------|---|------------------|
| 6 | Standardization of spacing and harvesting time in Kuth (Saussuria | 1 |
| | costus) | |
| | Treatments: | |
| | T ₁ : Spacing of 30 cm x 30 cm and harvest after 2 years | |
| | T ₂ : Spacing of 45 cm x 45 cm and harvest after 2 years | |
| | T ₃ : Spacing of 45 cm x 45 cm and harvest after 3 years T ₄ : Spacing of 30 cm x 30 cm and harvest after 3 years | |
| | (Farmers' Practice) | |
| 7 | Standardization of planting time and planting method in Manu | 1 |
| | (Inula racemosa) | |
| | Treatments: | |
| | T ₁ : Planting in July-August in ridge/furrows | |
| | T ₂ : Planting in July-August in flat beds | |
| | T ₃ : Planting in SeptOct. in ridge/furrows T ₄ : Planting in SeptOct. in flat beds (Farmers' Practice) | |
| 8 | Effect of micronutrient application in apple orchards | 5 |
| | Treatments: | |
| | T ₁ : Soil application of ZnSO ₄ @ 25 g & Borax @ 20 g | |
| | per year age of plant | |
| | T ₂ : Foliar application of ZnSO ₄ (0.5%) & Boric Acid (0.1 %) | |
| | - 2 sprays | |
| | T ₃ : Foliar application of Multiplex @ 250 ml / 200 litre water-2 sprays | |
| | T ₄ : No use of micronutrients (Farmers' Practice) | |
| 9 | Effect of time of fertilizer application in apple | 2 |
| | Treatments: | |
| | T ₁ : Full dose of P & K in March + ½ N in last week of April | |
| | + ½ N in May | |
| | T ₂ : Full dose of P & K in March + ½ N in last week of April | |
| | + ½ N in June T ₃ : Full dose of P & K in April + ½ N in last week of May | |
| | + ½ N in June | |
| | T ₄ : 50% recommended NPK in November (Farmer's Practice) | |
| 10 | Comparative efficacy of Deltamethrin and Artemisia extract on ecto | 2 |
| | - parasites in dairy cattle | |
| | Treatments: | |
| | T ₁ : Deltamethrin | |
| | T ₂ : Artemisia extract | |
| 11 | T ₃ : Control Comparative officery of different proparation of anthelmontics | 2 |
| '' | Comparative efficacy of different preparation of anthelmentics against ecto and endo parasites in dairy animals | |
| | Treatments: | |
| | T ₁ : Closantel (Zydox) | |
| | T ₁ : Closariter (Zydox) T ₂ : Ivermectin (trumectin) | |
| | T ₃ : Control | |

2. Trainings:

A. On – Campus

i) Practicing farmers / farm women

| S. No. | Title | Month | No. of |
|--------|---|-----------|--------------|
| | | | Participants |
| 1 | Scientific weed management in pea and potato | May | 20 |
| 2 | Development of wastelands through different Agro- forestry Systems | June | 20 |
| 3 | Spraying methods of agrochemicals and their storage | June | 20 |
| 4 | Efficient composting techniques | July | 20 |
| 5 | Scientific cultivation of different fodder crops | August | 20 |
| 6 | Home scale preservation of locally available fruits and vegetables | September | 20 |
| 7 | Training and pruning in temperate fruit crops | October | 20 |
| 8 | Various methods of treatment of poor quality fodder to increase its nutritive value | October | 20 |

ii) Vocational training for rural youths / school dropouts

| S. No. | Title | Duration (days) | Month | No. of Participants |
|--------|---|-----------------|-----------|---------------------|
| 1 | Raising of disease free nursery of vegetables / horticultural plants | 2 | May | 20 |
| 2 | Vermicomposting | 2 | June | 20 |
| 3 | Cultivation of medicinal and aromatic plants suitable for Lahaul Valley | 2 | July | 20 |
| 4 | Horticulture as a vocation | 2 | August | 20 |
| 5 | Scientific methods of housing, management and breeding of <i>chigu</i> goat | 2 | September | 20 |

iii) In - service training for extension functionaries

| S. No. | Title | Month | No. of Participants |
|--------|---|-----------|---------------------|
| 1 | Ecofriendly methods for disease management of cash crops | May | 15 |
| 2 | Improved weed management technology for controlling obnoxious weeds in orchards, grasslands and cropped areas | June | 15 |
| 3 | Integrated orchard management practices in apple | July | 15 |
| 4 | Methods and precautions in open method of surgery in case of equine castration | August | 15 |
| 5 | Conservation strategies for medicinal and aromatic plants | September | 15 |

B. Off- campus:

i) Practicing farmers / farm women

Soil Science

| S. No. | Title | Month | Sub | No. of |
|--------|---|-----------|----------|--------------|
| | | | Division | Participants |
| 1 | Soil testing and its importance | May | Udaipur | 20 |
| 2 | Efficient composting techniques | June | Keylong | 20 |
| 3 | Balanced use of fertilizers in different commercial | July | Kaza | 20 |
| | crops | | | |
| 4 | Soil and water conservation techniques | August | Udaipur | 20 |
| 5 | Efficient use of irrigation water | September | Keylong | 20 |

Agronomy

| S. No. | Title | Month | Sub Division | No. of Participants |
|--------|--|-----------|-----------------|------------------------|
| 1 | Scientific methods of cultivation of pea & potato | May | Udaipur | 20 |
| 2 | Improved Rajmash production technology for high hills | June | Keylong | 20 |
| 3 | Control of obnoxious weeds in orchards and grasslands | July | Keylong | 20 |
| 4 | Cultivation of toria as a second crop after pea | August | Udaipur | 20 |
| 5 | Increasing productivity of grasslands and pastures by including forage legumes | September | Kaza | 20 |
| 6 | Scientific cultivation of different fodder crops for higher productivity | October | Udaipur | 20 |

Plant Pathology

| S. No. | Title | Month | Sub Division | No. of participants |
|--------|--|-----------|-----------------|---------------------|
| 1 | Role of seed treatment in crop disease management | May | Udaipur | 20 |
| 2 | Precautions during purchase of agrochemicals | June | Kaza | 20 |
| 3 | Raising of disease free nursery under protected conditions | July | Kaza | 20 |
| 4 | Crop rotation: A component of disease management | August | Keylong | 20 |
| 5 | Integrated disease management in pulse crop | September | Keylong | 20 |
| 6 | Integrated disease management in oilseed crop | October | Udaipur | 20 |

Horticulture

| S. No. | Title | Month | Sub Division | No. of participant |
|--------|---|-----------|-----------------|--------------------|
| | | | | S |
| 1 | Importance of pollinizers and pollinators in apple orchards | May | Udaipur | 20 |
| 2 | Orchard management practices in temperate | June | Kaza | 20 |
| | fruit crops | | | |
| 3 | Integrated orchard management in apple | July | Kaza | 20 |
| 4 | Integrated orchard management in apple | August | Keylong | 20 |
| 5 | Harvesting, grading and packaging of apple | September | Udaipur | 20 |
| 6 | Training and pruning of apple trees | October | Keylong | 20 |

Agroforestry / Forestry

| S. No. | Title | Month | Sub Division | No. of Participants |
|--------|---|-----------|-----------------|---------------------|
| | | | | • |
| 1 | Role of medicinal plants in crop rotation | May | Udaipur | 20 |
| 2 | Scientific cultivation of Kuth & Manu | June | Keylong | 20 |
| 3 | Collection methods of different medicinal and aromatic plants | July | Kaza | 25 |
| 4 | Suitable agroforestry systems for improvement of wastelands | August | Keylong | 20 |
| 5 | Improved grassland management procedures | September | Kaza | 20 |
| 6 | Scintific storage methods for different medicinal and aromatic plants | October | Udaipur | 20 |

Veterinary / Animal Science

| S. No. | Title | Month | Sub Division | No. of participants |
|--------|---|-----------|-----------------|---------------------|
| 1 | Prevention and management of FMD | May | Keylong | 20 |
| 2 | Role of artificial insemination in breed upgradation | June | Kaza | 20 |
| 3 | Balanced feeding of dairy cattle to obtain optimum production | July | Udaipur | 20 |
| 4 | Urea – Molasses treatment of dried willow leaves as upgraded cattle feed | August | Keylong | 20 |
| 5 | Methods to combat <i>endo</i> and <i>ecto</i> – parasites in cattle and sheep | September | Kaza | 20 |
| 6 | Balanced feeding and management practices for sheep husbandry | October | Udaipur | 20 |

Home Science

| S. No. | Title | Month | Sub | No. of |
|--------|---|-----------|----------|--------------|
| | | | Division | Participants |
| 1 | Food adulteration and consumer protection | May | Udaipur | 20 |
| 2 | Reuse of domestic waste | June | Keylong | 20 |
| 3 | Role of budgeting in family life | August | Udaipur | 20 |
| 4 | Behavioral problems in adolescents | September | Keylong | 20 |

3. Front Line Demonstration on Oilseed and Pulse crops:

| S. No. | Crop | Area (ha) |
|--------|---------|-----------|
| 1 | Rajmash | 10 |
| 2 | Toria | 5 |

4. Front Line Demonstration Other than Oilseed and Pulse crops:

| S. No. | Crop | Technology | No. of Demonstrations |
|--------|------------|---|-----------------------|
| 1. | Pea | Seed treatment to control root rot/wilt complex | 5 |
| 2. | Pea | Management of powdery mildew | 3 |
| 3. | Pea | Improved Variety (PB-89) | 3 |
| 4. | Potato | Management of powdery scab | 2 |
| 5. | Potato | Management of early blight | 2 |
| 6. | Oats | Improved variety (Palampur – 1) | 5 |
| 7. | Apple | Integrated orchard management practices in newly planted apple orchard | 2 |
| 8. | Apple | Management of canker in apple orchard | 5 |
| 9. | Frenchbean | Popularization of Frenchbean as a second crop after pea in Udaipur sub - division | 5 |
| 10. | Red clover | Grassland improvement | 2 |
| 11. | Lucerne | Grassland improvement | 2 |
| | Total | | 36 |

5. Field Days, Kisan Mela and Exhibition:

| S. No. | Activity | Month | Venue |
|--------|----------------------------|-----------|----------------|
| 1 | Field day on Pea | June | Off -Campus |
| 2 | Field day on fodder | July | On- Campus |
| 3 | Field day on Rajmash | August | FLD Site |
| 4 | Exhibitions at Tribal Fair | August | Keylong & Kaza |
| 5 | Field day on Potato | September | Off -Campus |
| 6 | Field day on Toria | September | FLD Site |
| 7 | Ex - trainee Sammelan | September | On -Campus |
| 8 | World Food day | October | Off –Campus |

6. Demonstrations -cum - Veterinary Clinical Camps:

| S. No. | Particulars | Sub Division |
|--------|--|--------------|
| 1 | Effect of feeding uromol bricks and mineral mixture on | Udaipur |
| | health and production of dairy cattle | |
| 2 | Veterinary Clinical camp on Surgery | Keylong |
| 3 | Veterinary Clinical camp on Medicine | Kaza |
| 4 | Veterinary Clinical camp on Gynaecology | Udaipur |

7. Other Activities:

- ❖ SAC Meeting in the month of July and October, 2009
- Demonstration on Vermi-composting (5 No.)
- ❖ Diagnostic visits to different villages in the district
- Radio / TV talks
- Kisan Goshtis
- Participation in ATMA project activities
- Activities related to ad-hoc projects on medicinal and aromatic plants and seabuckthorn
- Crop seminar on August 25, 2009
- Collaborative/ sponsored training programmes