

Annual Action Plan : 2013 – 2014
KVK-Khapat, Porbandar

1. Training Programmes:
Quarter wise Summary of Trainings

| Discipline | On Campus | | | | Total | Off campus | | | | Total | Grand Total |
|-------------------------------------|-----------|----------|-----------|----------|-----------|------------|-----------|-----------|-----------|-----------|-------------|
| | I | II | III | IV | | I | II | III | IV | | |
| Crop production | 1 | 1 | 2 | 1 | 5 | 3 | 1 | 2 | 2 | 8 | 13 |
| Horticulture | 1 | 2 | 1 | 1 | 5 | 2 | 2 | 2 | 2 | 8 | 13 |
| Plant protection | 1 | 1 | 1 | 2 | 5 | 2 | 2 | 2 | 2 | 8 | 13 |
| Ag. Eng. | 2 | 1 | 2 | 1 | 6 | 2 | 2 | 2 | 2 | 8 | 14 |
| Home Sci. | 1 | 2 | 2 | 1 | 6 | 3 | 2 | 2 | 3 | 10 | 16 |
| Fisheries | 1 | 1 | 1 | 2 | 5 | 2 | 2 | 3 | 3 | 10 | 15 |
| Animal Husbandry | - | - | 1 | - | 1 | 1 | - | 1 | - | 2 | 3 |
| All Disciplines (For Ext. Func.) | 1 | - | 1 | - | 2 | - | - | - | - | - | 2 |
| Total | 8 | 8 | 11 | 8 | 35 | 15 | 11 | 14 | 14 | 54 | 89 |

**A. On Campus Training Programs
For Farmers, Farm women and Rural youth**

| Quarter-I (April to June-13) | | | | |
|---|--|--------------------|----------------------|-----------------------|
| Subject | Title of Training | No. of Days | No. of Parti. | Type of Parti. |
| Crop Production | • Production Technologies major kharif crops | 3 | 25 | Farmers |
| Horticulture | • Protected cultivation (Green Houses, Shade Net etc.) | 3 | 25 | Farmers |
| Plan Protection | • Biological controls of pest and disease | 3 | 25 | Farmers |
| Agril. Engineering | • Water harvesting & ground water recharge techniques | 3 | 25 | Farmers |
| Home Science | • Value addition in mango | 3 | 25 | Farm Women |
| Fisheries | • Carp breeding, hatchery management and grow out rearing. | 3 | 25 | Fisherman |
| Quarter-II (July to September-13) | | | | |
| Crop Production | • Integrated Nutrient management | 3 | 25 | Farmers |
| Horticulture | • Nursery management for vegetable crops | 3 | 25 | Farmers |
| Plant Protection | • IPDM in major Kharif crops | 3 | 25 | Farmers |
| Agril. Engineering | • Micro irrigation system; use and maintenance | 3 | 25 | Farmers |
| Home Science | • Preparation of bakery products | 3 | 25 | Farm women |
| Fisheries | • Hatchery management & Cultivation of fresh water Prawn | 3 | 25 | Fisherman |
| Quarter-III (October to December-13) | | | | |
| Crop Production | • Advances in production technology of Rabi crops | 3 | 25 | Farmers |
| Horticulture | • Cultivation of spices and vegetables | 3 | 25 | Farmers |
| Plant Protection | • Identification of pest and diseases and its control | 3 | 25 | Farmers |
| Agril. Engineering | • Post harvest Technology and value addition | 3 | 25 | Farmers |
| Home Science | • Income generation by culinary preparations from groundnut | 3 | 25 | Farm women |
| Fisheries | • Fisheries Status, Conservation and Orientation towards Aquaculture Practices | 3 | 25 | Fisherman |

| | | | | |
|---|---|---|----|-------------|
| Animal Husbandry | • Hygienic milk production | 1 | 25 | Farmers |
| Quarter-IV (January to March-14) | | | | |
| Crop Production | • Composting techniques and residue recycling. | 3 | 25 | Farmers |
| Horticulture | • Promising technologies for fruit & vegetable crops | 3 | 25 | Farmers |
| Plant Protection | • IPDM in crops under protected cultivation | 3 | 25 | Farmers |
| Agril. Engineering | • Improved implements and machinery in agriculture. | 3 | 25 | Rural youth |
| Home Science | • Income generation activities for empowerment of rural Women | 3 | 25 | Farm women |
| Fisheries | • Sea Weed Cultivation & Preparation of LSF | 3 | 25 | Fisherman |

B. Off Campus Training Programs

For Farmers, Farm women and Rural youth

| Quarter-I (April to June-13) | | | | |
|-------------------------------------|---|-----------------------|----------------------|-----------------------|
| Subject | Title of Training | No of Training | No. of Parti. | Type of Parti. |
| Crop Production | • Advances in groundnut production technology | 1 | 25 | Farmers |
| | • Integrated Nutrient Management in kharif crops | 1 | 25 | Farmers |
| | • Crop Diversification | 1 | 25 | Farmers |
| Horticulture | • Layout and Management of mango orchards | 1 | 25 | Farmers |
| | • Cultivation of flower crops | 1 | 25 | Farmers |
| Plant Protection | • Stem/collar rot management in groundnut | 1 | 25 | Farmers |
| | • Seed treatment in major kharif crops | 1 | 25 | Farmers |
| Agril. Engineering | • Renewable energy sources for agriculture | 1 | 25 | Farmers |
| | • Ground water recharge techniques | 1 | 25 | Farmers |
| Home Science | • Nutritional requirements for pregnant and lactating women | 1 | 25 | FW |
| | • Preparation of traditional Indian embroidery & Fancy patch work | 1 | 25 | RY |
| | • Value addition in Agriculture product | 1 | 25 | FW |

| | | | | |
|---|---|---|----|-----------|
| Fisheries | • Shrimp farming | 1 | 25 | Fisherman |
| | • Culture of fresh water prawn- Scampi | 1 | 25 | Fisherman |
| Animal Husbandry | • Balanced nutrition and animal health care | 1 | 25 | Farmers |
| Quarter-II (July to Sept.-13) | | | | |
| Crop Production | • Castor Production Technology | 1 | 25 | Farmers |
| Horticulture | • Cultivation of fruit crops | 1 | 25 | Farmers |
| | • INM in crops under protected cultivation | 1 | 25 | RY |
| Plant Protection | • Integrated pest & disease management in kharif crops | 2 | 50 | Farmers |
| Agril. Engineering | • Farm mechanization | 1 | 25 | Farmers |
| | • Micro irrigation system; use and maintenance | 1 | 25 | Farmers |
| Home Science | • Drudgery reducing technologies for farm women in agriculture | 1 | 25 | FW |
| | • Nutritional recipes for child | 1 | 25 | FW |
| Fisheries | • Ornamental Fish Culture | 1 | 25 | Fisherman |
| | • Fresh Water Fish Culture | 1 | 25 | Fisherman |
| Quarter-III (October to December-13) | | | | |
| Crop Production | • Promising production technologies of wheat & gram | 1 | 25 | Farmers |
| | • INM in major rabi crops | 1 | 25 | Farmers |
| Horticulture | • Cultivation of onion & garlic | 1 | 25 | RY |
| | • Production technologies for cumin & coriander | 1 | 25 | Farmers |
| Plant Protection | • IPDM in major rabi crops | 1 | 25 | Farmers |
| | • <i>Aflatoxin</i> & Storage pest management in groundnut | 1 | 25 | Farmers |
| Agril. Engineering | • Use of plastic in Agriculture | 1 | 25 | Farmers |
| | • Post Harvest Technology | 1 | 25 | RY |
| Home Science | • Preparation of jam, squash, catch up from fruit and preservation of vegetable | 1 | 25 | FW |
| | • Value addition in aonla | 1 | 25 | RY |
| Fisheries | • Shrimp farming-tiger shrimp | 1 | 25 | Fisherman |
| | • Seaweed cultivation | 1 | 25 | RY |
| | • Cage Culture | 1 | 25 | Fisherman |
| Animal Husbandry | • Balanced nutrition in milch animals | 1 | 25 | Farmers |

| Quarter-IV (January to March-14) | | | | |
|---|--|---|----|------------------------|
| Crop Production | <ul style="list-style-type: none"> Improved package of practices for summer sesame | 1 | 25 | Farmers |
| | <ul style="list-style-type: none"> Soil sampling techniques and importance of soil analysis | 1 | 25 | Farmers |
| Horticulture | <ul style="list-style-type: none"> Scope of net house for of seasonal cultivation. | 1 | 25 | Farmers Rural Youth |
| | <ul style="list-style-type: none"> Plant propagation techniques | 1 | 25 | |
| Plant Protection | <ul style="list-style-type: none"> Natural enemies of pest | 1 | 25 | Rural youth |
| | <ul style="list-style-type: none"> Integrated pest management in chilly | 1 | 25 | Farmers |
| Agril. Engineering | <ul style="list-style-type: none"> Fertigation technique- for maximizing fertilizer use efficiency. | 1 | 25 | Rural Youth |
| | <ul style="list-style-type: none"> Biomass recycling or its industrial use | 1 | 25 | Farmers |
| Home Science | <ul style="list-style-type: none"> Consumer awareness | 1 | 25 | FW |
| | <ul style="list-style-type: none"> Solar Cooker : Uses & Advantages | 1 | 25 | FW |
| | <ul style="list-style-type: none"> Nutritional Education | 1 | 25 | FW |
| Fisheries | <ul style="list-style-type: none"> Shrimp Farming | 1 | 25 | Fisherman |
| | <ul style="list-style-type: none"> Fish processing & value addition | 1 | 25 | Fisherman |
| | <ul style="list-style-type: none"> Preparation of LSF | 1 | 25 | RY |

C. Vocational Training Programme:

| Sr. No. | Title of Training | Duration Days | No. of Parti. | Type of Parti. | Schedule quarter |
|----------------|---|----------------------|----------------------|-----------------------|-------------------------|
| 1 | Small scale processing and value addition | 3 | 25 | Rural youth | III |
| 2 | Production of organic inputs | 3 | 25 | Rural youth | III |
| 3 | Self preparation of bio products | 3 | 25 | Rural youth | IV |
| 4 | Nursery raising business | 3 | 25 | Rural youth | II |
| 5 | Rice/ urad papad, khakhra and vadi making | 3 | 25 | Rural youth | II |
| 6 | Cutting, tailoring, embroidery and handicraft | 3 | 25 | Rural youth | III |
| 7 | Sea weed Culture and Preparation of LSF | 3 | 25 | Rural youth | IV |
| 8 | Installation and maintenance of MISs | 3 | 25 | Rural youth | I |

D Training Programme Extension Functionaries:

| Sr. No. | Title of Training | Duration Days | No. of Parti. | Schedule quarter |
|---------|--|---------------|---------------|------------------|
| 1 | Integrated crop management- major crops | 3 | 25 | I |
| 2 | Recent advances in agriculture and animal husbandry. | 3 | 25 | III |

1. Front Line Demonstrations:**Physical targets of FLDs (Proposed)**

| Name of the crop/enterprise | Season | Technology to be demonstrated | Variety | Area (ha.)/No. of units | No. of Demo. |
|-----------------------------|--------------|---------------------------------------|------------------|-------------------------|--------------|
| Oilseeds | | | | | |
| Groundnut | Kharif-2013 | INM | - | 10 | 20 |
| Sesame | Summer 2014 | Improved Variety | GT-3 | 4 | 10 |
| Pulses | | | | | |
| Gram | Rabi 2013-14 | Improved Variety | GG-3 | 8 | 20 |
| Green gram | Summer 2014 | Imp. Variety & Bio fertilizer | GM-4 | 4 | 10 |
| Cereals | | | | | |
| Wheat | Rabi 2013-14 | INM | GW-366/496 | 10 | 20 |
| Seed spices | | | | | |
| Cumin | Rabi 2013-14 | IDM | GC-4 | 8 | 20 |
| Coriander | Rabi 2013-14 | Improved Variety | GC-2 | 4 | 10 |
| Commercial crops | | | | | |
| Cotton | Kharif 2012 | INM with full package | Bt. Variety | 10 | 25 |
| Fodder Crop | | | | | |
| Lucern | Rabi 13-14 | Improved variety | Anand-2 | 4 | 10 |
| Bio-agents | | | | | |
| Groundnut | Kharif 13 | <i>Trichoderma</i> | GG-20 | 4 | 10 |
| Other Enterprise | | | | | |
| Fisheries | - | Seaweed cultivation using Bamboo Raft | Seaweed Spp. | 10 | 10 |
| Soil water conservation | - | Cumin | Broad Bed Furrow | 4 | 8 |
| Farm implements | - | - | Shredder | 10 | 2 |
| Home Science | - | - | Solar cooker | 5 | 5 |

2. On-Farm Testing.

A. On Going

OFT: 1 Integrated Management of sucking pest in Bt. cotton

Treatments:

1. **Farmer's practice** - Higher doses of new chemical pesticides
2. **Recommended practice** - Dimethioate 10ml/10 lit of water or Imidachloprid 7.5 ml/10 lit of water or Profenophos 16 ml/10 lit of water
3. **Intervention** - Alternate spraying of recommended pesticides + *Verticillium lecanii* @ 30 g/10 lit of water + Neem oil (1500 ppm) @ 30 ml/10 lit of water

OFT: 2 Effect of seed treatment on wilt in chickpea

Treatments:

1. **Farmer's practice** - No seed treatment
2. **Recommended practice** Seed treatment with Carbendazime @ 3g/kg seed
3. **Intervention** – Seed treatment with *Trichoderma* @ 8 g/kg seed + vitavax (Carboxin) @ 3g/kg seed

OFT: 3 Effect of Bio fertilizers on wheat yield.

Treatments:

1. **Farmer's practice** - Application of only DAP & Urea in different doses
2. **Recommended practice** - 120-60-0 NPK kg/ha
3. **Intervention** - Seed treatment with Azatobacter & PSB culture (250g/10kg seed) + 75% of RDF

OFT: 4 Effect of mulching in summer sesame

Treatments:

1. **Farmer's practice** - No mulch
Technology to be assessed
2. Black plastic mulch (30 micron)
3. organic mulching (wheat straw/groundnut shell)

OFT: 5 Effect of sulphur on onion production

Treatments:

1. **Farmer's practice** - No use of sulphur
2. **Recommended practice** – RDF + 20 kg sulphur/ha through gypsum at the time of sowing or elemental sulphur 20-25 DATP
3. **Intervention** – RDF + 20kg sulphur/ha (readily available in the market) at the time of sowing

B. New OFT:

OFT: 1

Title: - Comparison of solar Cooker with traditional cooking system

Items:-

1. Mango Murbba
2. Boiled Sweet potato
3. Boiled Masala Sweet corn
4. Salted groundnut
5. Sesame *Mukhvas*

Objective:-

- (1) To improve quality of Prepared items
- (2) To reduce drudgery of farm women
- (3) To reduce time and fuel consumption

Treatment: - Item no. 1

- (1) Preparation by traditional method
- (2) preparation by sunlight heat
- (3) preparation by solar cooker

Treatment: - Item no. 2-4

- (1) Preparation by traditional method
- (2) Preparation by roasting
- (3) Preparation by solar cooker

No. of Replications: - 5

Observations:-

- (1) Time consumption
- (2) Fuel consumption
- (3) Movement
- (4) Cost saving
- (5) Organoleptic test
 - a. Sweetness
 - b. Texture
 - c. Consistency
 - d. Overall acceptance

4. Other Extension Activities:

| Sr. No. | Activity | Proposed Number |
|---------|---|--------------------|
| 1. | Kisan Mela | 1 |
| 2 | Field day | 15 |
| 3. | Kisan Gosthi | 30 |
| 4 | Radio / TV Talks | As & when required |
| 5 | TV Show | As & when required |
| 6 | Film show | 25 |
| 7. | Exhibition | 5 |
| 8 | News Paper Coverage | 12 |
| 9 | Popular Article | 6 |
| 10 | Extension Literature (No.) | |
| | i) Folders / Pamphlets | 6 |
| | ii) Slides | As & when required |
| | iii) Video film show | As & when required |
| 11 | Advisory Service | As & when required |
| 12. | Diagnostic service: | |
| | i) Farmers visit to K.V.K. | As & when required |
| | ii) Scientist visit to farmers Field | As & when required |
| 13. | Communication media | |
| | i) Subscriber of <i>Krushvi govidhya</i> Magazine | 100 |
| 14 | Special Programmes | |
| | Technology week | 1 |
| | <i>Parthenium</i> awareness week | 1 |
| | Celebration of special days | 5 |
| | Night meeting/Farmers' meeting | 10 |
| | Micronutrient awareness campaign | 3 |
| | Soil Sample analysis | 100 |