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# ANNUAL PROGRESS REPORT OF KYK NANA-KANDHASAR (APRIL-10 TO MARCH-11)

### 1. GENERAL INFORMATION ABOUT THE KVK:

### 1.1. Name and address of KVK with phone, fax and e-mail.

| Address                          | Telephone   |              |  |
|----------------------------------|---|--------------|--|
|                                  | Office  | Fax          |  |
| Krishi Vigyan Kendra,            | 02751- 294120   | 02751-280121 |  |
| Junagadh Agricultural University | E-mail  |              |  |
| Nana-Kandhasar-363 520           | adr-chotila-srn@gujarat.gov.in<br>surendranagar.kvk@gmail.com |              |  |
| Dist: Surendranagar              |   |              |  |

### 1.2 . Name and address of host organization with phone, fax and e-mail

| Address                          | Telepho         | E-mail  |        |
|----------------------------------|-----------------|---------|--------|
|                                  | Office          | Fax     |        |
| Junagadh Agricultural University | 0285-2672080-90 | 0285-   | dee@   |
| Junagadh- 362 001                |                 | 2672653 | jau.in |

### 1.3. Name of the Programme Coordinator with phone & mobile No

| Name                  | Telephone / Contact |            |                        |
|-----------------------|---------------------|------------|------------------------|
|                       | Resi.               | Mobile     | E-mail                 |
| Shri. V.B. Gadhia     |                     | 9998815627 |                        |
| Programme Coordinator |                     |            | vbgadhia1951@gmail.com |
| Krishi Vigyan Kendra, |                     |            |                        |
| Junagadh Agricultural |                     |            |                        |
| University            |                     |            |                        |
| Nanakandhasar-363 520 |                     |            |                        |
| Dist: Surendranagar   |                     |            |                        |

### 1.4. Year of sanction: October, 2005

### 1.5. Staff Position (as on 1st April, 2011)

| Sr.<br>No | Sanctioned post                         | Name<br>of the incumbent | Designa-<br>tion         | Discipline          | Pay scale<br>(Rs.)<br>6 <sup>th</sup> Pay | Present<br>Basic+<br>grade pay<br>(Rs.) | Date of joining |
|-----------|---|--------------------------|--------------------------|---------------------|---|---|-----------------|
| 1         | Programme<br>Coordinator                | Shri V. B. Gadhia        | Programme<br>Coordinator | Plant<br>Protection | 37400-<br>67000                           | 43250+<br>9000                          | 19-4 - 2010     |
| 2         |   | Mr. A.M. Bharadiya       | SMS                      | Plant<br>Protection | 15600-<br>39100                           | 17610+<br>6000                          | 21-8-2006       |
| 3         | CMC                                     | Dr. B. C. Bochalya       | SMS                      | Ext Edu.            | 15600-<br>39100                           | 17610+<br>6000                          | 23-8-2006       |
| 4         | SMS 6                                   | Miss B. M. Bhalala•      | SMS                      | Home<br>Science     | 12000                                     | 8000-<br>13500                          | 23-8-2006       |
| 5         |   | Dr. M. M. Tajapara       | SMS                      | Animal<br>Science   | 15600-<br>39100                           | 17610+<br>6000                          | 22-8-2006       |
| 6         |   | Mr. H. M. Bhuva          | SMS                      | Agronom y           | 15600-<br>39100                           | 17610+<br>6000                          | 30-8-2006       |
| 7         |   | Dr. R M Javia            | SMS                      | Plant<br>Breeding   | 15600-<br>39100                           | 17610+<br>6000                          | 22-8-2006       |
| 8         | Training                                | G. K. Sapra              | Tr. Asstt                | PBG                 | 6000 fix                                  | 6000 fix                                | 07-01-2009      |
| 9         | Assistant<br>2                          | VACANT                   | -                        |                     |   |   | -               |
| 10        | Computer<br>Programmer<br>1             | PT Patel **              | Computer<br>Programmer   | B.E. (Compute r)    | 6000 fix                                  | 6000 fix                                | 07-02-2008      |
| 11        | Accountant /<br>Superintender<br>t<br>1 | Mr. V. F. Chaudhari      | O. S. cum<br>Accountant  |                     | 9300-<br>34800                            | 11650+<br>4200                          | 06-6-2007       |
| 12        | Stenographer<br>1                       | VACAN                    | _                        |                     | -   | _                                       | -               |
| 13        | Driver<br>2                             | Mr. P. D. Dave           | Tractor<br>Driver        | -                   | 5200-<br>20200                            | 11840+<br>2400                          | 06-9-2007       |
| 14        |   | Mr. H. R. Gohil          | Jeep Driver              | -                   | 5200-<br>20200                            | 9530+<br>2400                           | 01-8-2006       |
| 15        | Supporting staff                        | Mr. M. H. Solanki        | Peon                     |                     | 4440-7440                                 | 8020+<br>1650                           | 08-3-2006       |
| 16        | 2                                       | VACANT                   |                          |                     |   |   |                 |

<sup>\*</sup> Working at KVK, JAU, Targhadia. \*\* Working at Account office, JAU, Junagadh

## 1.6. Total land with KVK (in ha):

| Sr. No. | Item                      | Area (ha) |  |
|---------|---------------------------|-----------|--|
| 1       | Under Buildings 04.00     |           |  |
| 2.      | Under Demonstration Units |           |  |
| 3.      | Under Crops 16.00         |           |  |
| 4.      | Orchard/Agro-forestry     |           |  |
| 5.      | Others                    | 20.00     |  |

## 1.7. Infrastructural Development:

## A) Buildings

|   | Name of building                | Source  |           | Stage          |                   |
|---|---------------------------------|---------|-----------|----------------|-------------------|
|   |                                 | of      |           | Complete       |                   |
|   |                                 | funding | Completio | Plinth<br>area | Expenditure (Rs.) |
|   | A 1                             | TC 1 D  | Date      | (Sq.m)         | Total             |
| 1 | Administrative Building         | ICAR    | 23/7/09   | 595            | 30,20,600         |
| 2 | Farmers Hostel                  |         |           | 296            | 20,74,700         |
| 3 | Staff Quarters - 6              |         |           |                | 30,55,000         |
| 4 | Demonstration Shed - 2          |         |           | 78             | 6,16,000          |
| 5 | Rat Proof godown                |         |           | 158            | 8,30,750          |
| 6 | Training Hall                   | RKVY    | 1/4/10    | 191            | 13,94,500         |
| 7 | Pilot Scale Processing<br>Plant |         |           | 198            | 15,72,000         |
| 8 | Godown & Processing<br>Shed     |         |           | 71             | 5,00,000          |
| 9 | Implement Shed                  |         |           | 77             | 3,00,000          |

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### B) Vehicles

| Type of vehicle                      | Year of purchase | Cost<br>(Rs.) | Total<br>kms.<br>Run | Present status                              |
|--------------------------------------|------------------|---------------|----------------------|---|
| Jeep Bolero<br>(Purchased by<br>KVK) | 2006-07          | 4,86,500      | 25873                | Transferred to DEE office,<br>JAU, Junagadh |
| Jeep M&M<br>Pizot*                   | 1991             | 2,03,967*     | 53549                | Not in working condition                    |

<sup>\*</sup> Transfer from Department of Soil & Agril. Chemistry, J.A.U., Junagadh

### C) Equipments & AV aids

| Name of the equipment            | Year of purchase | Cost (Rs.) | Present status |
|----------------------------------|------------------|------------|----------------|
| Computer                         | 2006-07          | 49968      | Working Cond.  |
| Copier Machine                   | 2006-07          | 49816      | Working Cond.  |
| Automatic Seed Drill             | 2006-07          | 31500      | Working Cond.  |
| Tractor mounted Sprayer (200ltr) | 2007-08          | 43000      | Working Cond.  |
| Shredder                         | 2007-08          | 43000      | Working Cond.  |
| Dibbler                          | 2007-08          | 900        | Working Cond.  |
| Cotton stock puller              | 2007-08          | 1200       | Working Cond.  |
| Digital copier with network      | 2008-09          | 115300     | Working Cond.  |
| Rain gun                         | 2007-08          | 19800      | Working Cond.  |
| LCD projector                    | 2008-09          | 89985      | Working Cond.  |
| Rotavator                        | 2008-09          | 96000      | Working Cond.  |
| Laptop                           | 2008-09          | 47500      | Working Cond.  |
| Harrow cum cultivator (2)        | 2008-09          | 75000      | Working Cond.  |
| Groundnut Decorticator           | 2008-09          | 96530      | Working Cond.  |
| Mobile seed processing unit      | 2008-09          | 1685000    | Working Cond.  |
| Thresher                         | 2008-09          | 114000     | Working Cond.  |
| Zero till drill                  | 2008-09          | 66700      | Working Cond.  |
| Air assisted blower type sprayer | 2008-09          | 98750      | Working Cond.  |
| Digital Camera                   | 2008-09          | 23600      | Working Cond.  |

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| Plasma TV | 2008-09 | 73750 | Working Cond. |
|-----------|---------|-------|---------------|

### 1.8. A). Details SAC meeting conducted in the 2010-11:

The Sixth scientific Advisory Committee meeting of Krishi Vigyan Kendra, JAU, Nanakandhasar was held at Conference Hall, KVK, Nana kandhasar on 8<sup>th</sup> March, 2011. Following members were present in the meeting.

| SN  | NAME & DESIGNATION   | POSITION            |
|-----|--|---------------------|
| 1.  | Dr. N. C. Patel<br>Hon. Vice Chancellor,<br>Junagadh Agricultural University, Junagadh.  | Chairman            |
| 2.  | Dr. A.M. Parakhia<br>Director of Extension Education<br>Junagadh Agricultural University, Junagadh.  | Member              |
| 3.  | Dr. V. N. Patel<br>Research Scientist (Ento)<br>Representative-A.D.R. and Research Scientist (DF)<br>Main Dry Farming Research Station, JAU, Targhadia | Member              |
| 4.  | Shri R.R. Sondarva<br>District Agriculture Officer, Surendranagar  | Member              |
| 5.  | Shri D. M. Bhagia<br>Deputy Director of Horticulture, Surendranagar  | Member              |
| 6.  | Shri N J Gohel,<br>Deputy Directore of Agri. (Extension), Surendranagar  | Member              |
| 7.  | Shri. V.B. Gadhia<br>Programme Coordinator, KVK, Nanakandhasar   | Member<br>Secretary |
| 8.  | Shri S R Kosambi,<br>Asstt Direcor of Agriculture, Surendranagar   | Invitee             |
| 9.  | Shri S G Gadhiya<br>Asstt Direcor of Agriculture (QC), Surendranagar   | Invitee             |
| 10. | Dr. B. N. Patel, Veterinary Officer<br>Representative-Deputy Director of Animal Husbandry<br>Surendranagar   | Member              |
| 11. | Shri. N. S. Sangani<br>Progressive Farmer, At. Post : Moti Moldi, Chotila  | Member              |
| 12. | Shri Vaskurbhai Punabhai Mehta<br>Progressive farmer, At Post: Vadali, Chotila,  | Member              |
| 13. | Shri. Kishorbhai Harilal Sagani<br>Progressive farmer, At Post : Aanandpur, Chotila  | Invitee             |
| 14. | Shri. Makwana Rameshbhai S   | Invitee             |

Progressive farmer, At Post: Rajawad, Chotila

# COMMITTEE MADE THE FOLLOWING RECOMMENDATIONS AFTER ACTIVE INTERACTION:

- Papad making machine is to be purchased for vocational training.
- Repair Poly House structure within 20 days. And for that expenditure should be incurred under recurring grant / revolving fund and before that try to make a visit of Dr. P. M. Chauhan, Professor & Head, Dept of RERE, College of Agril Engineering, JAU, Junagadh and under his guidance repair the structure.
- Try to increase number of FLDs
- Prepare printed material of vocational training and literature should be given to the farmers & Farm women during training programme & Samples of final product of vocational training should be demonstrated in museum
- Minimum Four training of Agril. Engineering discipline have to conducted.
- Complete PRA of new villages & Impact analysis of old villages within short time.
- Press note should be given regularly on pest & disease forecasting & activities.
- Success story should be documented & presented
- Power point should be prepared in Gujarati & Figures should be in English.
- During presentation target should be mentioned with achievements.
- Inventory should be prepared on Resource person of the district
- Three days On Campus training should be organized
- Eucalyptus should be sown on front side of KVK farm.
- Collaborative training with DRDA should be organized as they have good grant for training.
- In case of Home science OFT, age range of children should be minimized and Control group shown last rather than first.
- Date palm should be grown at KVK farm for trail purpose.

• Report should be reach before 10 days of SAC meeting.

#### 2. DETAILS OF DISTRICT:

### 2.1 Major farming systems/enterprises

(based on the analysis made by the KVK):

#### Farming system/enterprise

The district Surendranagar mainly falls in north Saurashtra agro-climatic zone. The district located in India at 22.0° to 23.45° North latitude and 69.45° to 72.15° East longitude. Surendranagar district is bounded in north by Gulf of Kutch and Mehasana district, in the south by Bhavnagar and part of Ahmedabad district, on the east by part of Ahmedabad and west by Rajkot district. The average annual rainfall is 400 mm. The average temperature of the district ranges with 41°C maximum to 11°C minimum. The soil is mostly medium black, shallow to moderately deep and calcareous in nature, therefore cotton is the major crop of the district. Some patches of saline soil found in Dasada and Lakhtar talukas, calcareous sandy soil found in some part of Chotila, Sayla & Dhangdhra taluka and loamy soil is found in some part of Halvad and Dhangdhra taluka. The pH of the soil is alkaline and underground water is non saline in nature.

The district covers 10.48 lakh ha geographical area out of which 6.90 lakh ha under cultivation, of which only 0.62 lakh ha is irrigated. Major area comes under rainfed farming. The main sources of irrigation are wells, tube wells, ponds and canals. The major crops of this region are cotton, sesame & pearl millet and others are sorghum, wheat, chick pea, groundnut, mustard, cumin, green gram, black gram, onion, garlic and vegetables. The fruit orchard area is very less.

#### 2.2 Description of Agro-climatic Zone & major agro ecological situations

#### Agro-climatic Zone **Characteristics** PROFILE OF THE NORTH SAURASTRA AGRO - CLIMATIC ZONE VI - GUJARAT NORTH SAURASTRA AGRO - CLIMATIC ZONE 1. Total geographical area : 35.02 lakh ha. 2. Area under forest : 1.47 lakh ha. 3. Area under non agricultural use : 2.10 lakh ha. 4. Barren and uncultivated land : 2.52 lakh ha. 5. Permanent pasture : 2.45 lakh ha 6. Current fallows : 1.70 lakh ha 7. Net sown area : 22.17 lakh ha 8. Total cropped area : 25.77 lakh ha 9. Area sown more than one : 3.61 lakh ha 10. Climate : Arid and semi arid 11. Average rainfall : 542.14 mm 12. Soil type : Black to brown & Shallow to moderately deep soil 13. Cropping pattern: 14. Major croped area 15. Crop sequence: Crop Area Crop (lakh ha.) a) Kharif Groundnut - -Kharif cereals 5.58 Groundnut Groundnut - Wheat Khrif pulses 0.23 Cotton 15 Groundnut - Mustard Kharif oil seeds 12.14 Pearmillet 12 Groundnut - Cumin Cash crops 4.00 Sorghum 10 Groundnut - Chickpea Rabi cereals 1.57 Sesamum 3 Pearl millet - Groundnut Rabi pulses 0.56 Others 20 Pearl millet- Green gram Others 1.69 Pearl millet- Cumin b) Rabi Pearl millet- Mustard Wheat 5 Pearl millet - Garlic Chickpea 2 Cotton Cumin Cotton - Groundnut Cotton - Sorghum

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#### Agro ecological situation

#### North Saurashtra agro-climatic zone-VI, Gujarat

Eight agro-climatic zones have been identified in Gujarat. The North Saurashtra Agro climatic Zone-VI falls in Saurashtra region. The influence area of North Saurashtra Agro climatic Zone is spread among five districts of Saurashtra region viz., Amreli (9 talukas out of 11), Bhavnagar (6 talukas out of 13), Jamnagar (all the 10 talukas), Rajkot (11 talukas out of 14) and Surendranagar (7 talukas out of 10) covering 43 talukas in all. It is bounded in the north by the gulf of Kutch and parts of Rajkot as well as Surendranagar district, in the east by the Ahmadabad district and coastal part of Bhavnagar district, on the south by the Junagadh district and parts of Amreli as well as Rajkot district, to the west by Arabian sea. The farming situation of the district Surendranagar is rainfed.

### 2.3 Soil type/s

| Sr. No. | Soil type                     | Area               |
|---------|-------------------------------|--------------------|
| 1       | Medium black                  | Vadhvan & Muli     |
| 2       | Saline & Alkaline soils       | Dasada & Lakhatar  |
| 3       | Shallow calcareous sandy soil | Dhanghdhra         |
| 4       | Red Loamy soil                | Halvad, Dhanghdhra |
| 5       | Low land soils                | Limbadi, Lakhatar  |
| 6       | Calcareous Sandy soil         | Chotila, Sayla     |

# 2.4. Area, Production and Productivity of major crops cultivated in the district Surendranagar:

| Sr.<br>No. | Crop             | Area (ha) | Production (mt) | Productivity<br>(Kg/ha) |
|------------|------------------|-----------|-----------------|-------------------------|
| 1          | Cotton (Irri)    | 197152    | 357734          | 1815                    |
| 2          | Cotton (Rainfed) | 258961    | 212014          | 819                     |
| 3          | Sesame           | 49760     | 22305           | 448                     |
| 4          | Groundnut        | 19710     | 21670           | 1114                    |
| 5          | Wheat            | 31940     | 88538           | 2772                    |
| 6          | Cumin            | 74900     | 49484           | 661                     |
| 7          | Gram             | 9095      | 6873            | 756                     |
| 8          | Green Gram       | 3675      | 1471            | 400                     |
| 9          | Mustard          | 540       | 468             | 866                     |

<sup>\*</sup>in the year of 2009-2010

### 2.5. Weather data

| Month        | Rainfall (mm) | Rainy<br>Days | Temper | Temperature <sup>0</sup> C |      | Humidity |
|--------------|---------------|---------------|--------|----------------------------|------|----------|
|              |               |               | Max.   | Min.                       | Max. | Min.     |
| April -10    |               |               | 42.4   | 20.5                       | 86   | 14       |
| May-10       |               |               | 43.5   | 24.0                       | 86   | 16       |
| June-10      | 55            | 5             | 40.8   | 23.8                       | 89   | 27       |
| July-10      | 394           | 20            | 36.0   | 24.1                       | 93   | 43       |
| August-10    | 272           | 15            | 33.0   | 24.0                       | 86   | 44       |
| September-10 | 118           | 10            | 35.3   | 22.3                       | 59   | 24       |
| October-10   |               |               | 36.8   | 20.4                       | 59   | 24       |
| November-10  | 41            | 6             | 34.7   | 16.4                       | 62   | 24       |
| December-10  |               |               | 28.7   | 11.4                       | 64   | 24       |
| January-11   |               |               | 30.0   | 10.3                       | 63   | 15       |
| February-11  |               |               | 33.4   | 13.6                       | 63   | 17       |
| March-11     |               |               | 39.5   | 17.5                       | 59   | 14       |

# Production and productivity of livestock, Poultry, Fisheries etc. in the district

| Category   | Population | Production  | Productivity |
|------------|------------|-------------|--------------|
| Cattle     | 293758     |             |              |
| Crossbred  | 201        | F4440511    |              |
| Indigenous | 293557     | 5461197 lit |              |
| Buffalo    | 202939     |             |              |
| Sheep      | 100589     |             |              |
| Goats      | 179648     |             |              |
| Pigs       | 22948      |             |              |
| Rabbits    |            |             |              |
| Poultry    |            |             |              |

# 2.6 Details of Operational area / Villages (2010-11)

| Sr. No.       | Taluka  | Name of block | Name of the village                                   | Major crops & enterprises                                 | Major problem identified   | Identified Thrust<br>Areas   |  |
|---------------|---------|---------------|---|---|--|--|--|
| 1             | 2       | 3             | 4   | 5   | 6  | 7  |  |
| 1 Chotila Cho | Chotila | Chotila       | Hirasar   | Bajra, Groundnut,<br>Sesame, pulses Diary<br>Farming,     | Dry farming, Sucking pest in cotton Wild animals Redding in cotton Lower milk production   | Dry farming technology  Awareness for vaccination & artificial insemination of animals   |  |
|               |         | Panchavada    | Bajra, Groundnut,<br>Sesame, pulses Diary<br>Farming, | Dry farming, HS disease                                   | Dry farming technology  Awareness for vaccination & artificial insemination of animals   |  |  |
|               |         |               |   | Lakhanka  | Bajra, Cotton, Cumin,<br>Groundnut, Sesame,<br>pulses, Diary Farming,  | Dry farming, Lower milk production, HS disease   | Dry farming<br>technology,<br>Awareness for<br>vaccination &<br>artificial<br>insemination of<br>animals |
|               |         |               | Kanpar  | Bajra, Cotton, Cumin,<br>Wheat, Sesame, Diary<br>Farming, | Dry farming, Injudicious use of fertilizers & Pesticides, Black quarter disease  | Adoption of organic farming, Bio-fertilizers & Vermi-compost Dry farming technologies Awareness for vaccination & artificial insemination of animals |  |
|               |         |               | Vijadiya  | Groundnut, Cotton, Cumin, Wheat, Sesame, Diary Farming    | Lack of knowledge of<br>modern dry land<br>technologies, lack of<br>Awareness for<br>vaccination & artificial<br>insemination of animals | Awareness for<br>vaccination &<br>artificial<br>insemination of<br>animals   |  |

| 1 | 2     | 3     | 4        | 5  | 6  | 7   |
|---|-------|-------|----------|--|--|---|
| 2 | Sayla | Sayla | Dhedhuki | Cotton, castor,<br>Groundnut, wheat<br>Diary Farming,                  | Lack of knowledge of<br>modern dry land<br>technologies, FMD   | Dry farming technologies,<br>Awareness for vaccination &<br>artificial insemination of<br>animals   |
|   |       |       | Kesarpar | Cotton, Wheat,<br>Cumin, Sesame,<br>Bajra                              | Lack of knowledge of<br>modern dry land<br>technologies, Injudicious<br>use of fertilizers &<br>Pesticides | Dry farming technologies  |
|   |       |       | Doliya   | Cotton, Bajra, Sesame, Wheat, Cumin, Diary Farming, Horticulture       | Lack of knowledge about weed, pest and diseases & nutrient management HS disease, Trypanosomesis disease   | To motivate farmers to grow<br>arid and semi arid<br>horticultural crops.<br>Awareness for vaccination &<br>artificial insemination of<br>animals |
|   |       |       | Aaya     | Cotton, Wheat,<br>Cumin, Sesame,<br>Bajra, Groundnut                   | Lack of knowledge of<br>modern dry land<br>technologies, Injudicious<br>use of fertilizers &<br>Pesticides | Dry farming technologies,   |
|   |       |       | Kanpur   | Horticulture Diary Farming, Cotton, G'nut, Sesame, Wheat, Cumin, Bajra | FMD, Lack of knowledge<br>of modern dry land<br>technologies   | Awareness for vaccination & artificial insemination of animals  |
| 3 | Muli  | Muli  | Umarda   | Diary Farming, Cotton, G'nut, Sesame, Wheat, Cumin, Bajra              | FMD, Lack of knowledge<br>of modern dry land<br>technologies   | Awareness for vaccination & artificial insemination of animals  |
|   |       |       | Palasa   | Diary Farming, Cotton, G'nut, Sesame, Wheat, Cumin, Bajra              | Awareness for vaccination & artificial insemination of animals   | Awareness for vaccination & artificial insemination of animals  |
|   |       |       | Ramparda | Diary Farming, Cotton, G'nut, Sesame, Wheat, Cumin, Bajra              | HS disease, Injudicious use of fertilizers & Pesticides  | Awareness for vaccination & artificial insemination of animals  |
|   |       |       | Gadhad   | Diary Farming, Cotton, G'nut, Sesame, Wheat, Cumin, Bajra              | Awareness for vaccination & artificial insemination of animals   | Awareness for vaccination & artificial insemination of animals  |

### 2.7 Prioritized thrust areas

| Crop/                                | Thrust area   |
|--------------------------------------|---|
| Enterprise                           |   |
| Cotton, Sesamum,<br>Groundnut, Bajra | Dry farming technologies.   |
| Animal<br>Husbandry                  | Awareness for vaccination & artificial insemination of animals      |
| Crop<br>Management                   | Adoption of organic farming, Bio-fertilizers & Vermicompost.        |
| Integrated Crop<br>Management        | Integrated weed, pest and diseases & nutrient management.           |
| Home Science                         | Farm women empowerment.   |
| Lemon, Ber                           | To motivate farmers to grow arid and semi arid horticultural crops. |

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# 3. TECHNICAL ACHIEVEMENTS:

# 3.A Details of target and achievements of mandatory activities by KVK during 10-11

| О   | FT (Techno      | logy Asses | ssment and | Refinem          | nent)    | FLD (Oilseeds, Pulses, Cotton, Other<br>Crops/Enterprises) |     |                    |                 |                  |      |                          |
|-----|-----------------|------------|------------|------------------|----------|--|-----|--------------------|-----------------|------------------|------|--------------------------|
|     |                 |            | 1          |                  |          |  |     |                    | 2               |                  |      |                          |
|     | Number of       | OFTs       | Numbe      | r of Farm        | ers      | Num  | ber | of FLDs            | Number o        | of Farm          | ners | ;                        |
|     | T               | A          | T          | A                | <b>L</b> | Т  |     | A                  | T               |                  | A    |                          |
|     | 2               | 2          | 6          | 6                |          | 47   |     | 47                 | 100             | 1                | .00  |                          |
|     | Other OFT       |            |            |                  |          |  |     | Oth                | er FLD          |                  |      |                          |
|     | 98<br>Imp       |            |            |                  |          |  |     | 98 I<br>Impl       |                 | m                |      |                          |
| (iı | ncluding spon   | arried     |            |                  | Extensio | on Activities  |     |                    |                 |                  |      |                          |
|     |                 | •          | 3          |                  |          | 4  |     |                    |                 |                  |      |                          |
|     | Numbe<br>Course |            |            | mber of icipants |          |  |     | oer of<br>ities    |                 | ber of<br>ipants |      |                          |
|     | T               | A          | T          | A                | _        | Т  |     | A                  | T               |                  | A    |                          |
|     | 92              | 99         | 2300       | 206              | 50       | 87   |     | 198                |                 | 63               | 108  |                          |
|     | ,               |            |            | Seed Pr          | roduct   | tion kg  |     | '                  |                 |                  | ma   | nting<br>terial<br>(os.) |
|     |                 |            |            |                  | 5        |  |     |                    |                 |                  |      | 6                        |
| T   |                 |            |            | Ac               | hieve    | ment   |     |                    |                 |                  | T    | A                        |
| -   | Name of crop    | Varie      |            | pe of<br>oduce   |          | ntity<br>(g)   | S   | Seeds sale<br>(Kg) | Income<br>(Rs.) | e                | -    |                          |
|     | G'nut           | GG-        | 2 Bre      | eder             | 32       | 250  |     |                    |                 |                  | -    |                          |
|     | G'nut           | GG-2       | 20 Ge      | neral            | 14       | 440  |     |                    |                 |                  | -    |                          |
|     | Sesame          | Guj.T      | il-1 Bro   | eeder            | 3        | 12   |     |                    |                 |                  |      |                          |
|     | Wheat           | GW-4       | .96 Ge     | neral            | 24       | 433  |     | 2433               | 45919           | 45919 -          |      |                          |
|     | Cumin           | Guj.       | -4 Ge      | neral            | 1        | 93   |     | 193                | 30880           |                  | -    |                          |

### 3.B. Abstract of interventions undertaken

|            |                |                     |                       |                           |                        | Int  | terventions                                      |                                    |  |
|------------|----------------|---------------------|-----------------------|---------------------------|------------------------|--|--|------------------------------------|--|
| Sr.<br>No. | Thrust<br>area | Crop/<br>Enterprise | Identified<br>Problem | Title of<br>OFT if<br>any | OFT if FLD if          |  | Title of training for extension personnel if any |                                    | Supply of seeds,<br>planting materials<br>etc.                                   |
| 1          | 2              | 3                   | 4                     | 5                         | 6                      | 7  | 8  | 9                                  | 10   |
| 1          |                | Mustard             | Low yield             | _                         | Varietal<br>evaluation | Integrated<br>weed<br>management<br>in major rabi<br>field crops   |  | FLD,<br>Field<br>Days,<br>Training | Seed input:<br>Guj-Mustard-3<br>Insecticide:<br>Quinalphos 25 %<br>Sulphur 80 WP |
|            |                |                     |                       |                           |                        | Efficient water management in major rabi field crops   |  |                                    | Stomp  |
|            |                |                     |                       |                           |                        | Plant<br>protection<br>measures in<br>castor and<br>mustard<br>crops                                     |  |                                    |  |
| 2          | -              | Gram                | Low yield             | _                         | Varietal evaluation    | Importance of IPM  |  | FLD,<br>Field                      | Seed input:<br>Guj.Gram-3  |
|            |                |                     |                       |                           |                        | Integrated<br>weed<br>management<br>in major rabi<br>field crops   |  | Days,<br>Training                  | Insecticide: Phospphamidon 40 EC Endosulphan 35 % EC                             |
| 3          | -              | Cumin               | Low yield             | -                         | Varietal<br>evaluation | Improved cultivation practices in wheat & cumin  Plant protection measures for pest and disease in cumin |  | FLD,<br>Field<br>Days,<br>Training | Seed input: Guj.Cumin-4 Fungicide: Mancozeb 75 WP Hexaconazol 5 %                |

|   |           |           |                        | Integrated weed management in major rabi field crops  Control measures for pest and disease in cumin & wheat  |   |                                    |  |
|---|-----------|-----------|------------------------|---|---|------------------------------------|--|
| 4 | Wheat     | Low yield | Varietal<br>evaluation | Improved cultivation practices in wheat & cumin  Integrated weed management in major rabi field crops  Control measures for pest and disease in cumin & wheat |   | FLD,<br>Field<br>Days,<br>Training | Seed input :<br>GW-366<br>Insecticide :<br>Endosulphan<br>35 %<br>Imidachloprid 17.8 % |
| 5 | Groundnut | Low yield | Varietal<br>evaluation | Integrated<br>nutrient<br>management<br>in major<br>kharif field<br>crops   | 1. Cotton production technology  2. Oil seed and pulse crop production technology under ISOPOM Project  3. Production technology for rabi crops | Filed Day<br>- 28                  | FLD: Bioagent: Trichoderma Culture Fungicide: Mancozeb 75 WP                           |

|   |   |               |           |   |                        | IPM in<br>Groundnut  |     | FLD,<br>Field<br>Days,<br>Training |   |
|---|---|---------------|-----------|---|------------------------|--|-----|------------------------------------|---|
|   |   |               |           |   |                        | Control<br>measures for<br>pest and<br>disease of<br>kharif pulses                               |     |                                    |   |
| 6 | _ | Sesamum       | Low yield |   | Varietal<br>evaluation | Integrated<br>nutrient<br>management<br>in major<br>kharif field<br>crops                        |     | FLD,<br>Field<br>Days,<br>Training | FLD:<br>Seed inputs:<br>Guj.Sesamum-3<br>Insecticide:<br>Endosulphan 35 %<br>EC |
|   |   |               |           |   |                        | Management<br>of pest &<br>disease of<br>sesamum   |     |                                    |   |
|   |   |               |           |   |                        | Importance of thinning and gap filling and maintenance of plant population in kharif field crops |     |                                    |   |
|   |   |               |           |   |                        | Seed<br>production<br>programme<br>in sesame   |     |                                    |   |
|   |   |               |           |   |                        | Seed<br>production<br>technique in<br>sesame   |     |                                    |   |
| 7 | _ | Green<br>Gram | Low yield | _ | Varietal<br>evaluation | Integrated<br>nutrient<br>management<br>in major<br>kharif field<br>crops                        | _"_ | _"_                                | FLD :<br>Seed inputs :<br>Guj.Greengram-4                                       |

|   |   |                    |                   |   |                     | Importance of thinning and gap filling and maintenance of plant population in kharif field crops  Control measures for pest and disease of kharif pulses |                                 |   |
|---|---|--------------------|-------------------|---|---------------------|--|---------------------------------|---|
| 8 |   | Cotton<br>(CMM-II) | Low yield         | Low yield   | INM                 | Integrated<br>nutrient<br>management<br>in major<br>kharif field<br>crops  | FLD, Field<br>Days,<br>Training | FLD: Fertilizer: Posak (Multimicro) Groth (Micronutrient fertilizer) OFT: Insecticides: Methyl Parathionn 2 % dust Methyl parathion 50 % Chlorpyriphos 20 % Bio pesticides: Beaveria spp. |
|   |   |                    |                   |   |                     | Importance of thinning and gap filling and maintenance of plant population in kharif field crops IPM in  |                                 |   |
| 9 | _ | Bio-agent          | Heavy infestation | Application of Tricho derma against stem rot Disease in g'nut | Yield<br>evaluation | Cotton  IPM in Groundnut   | FLD, Field<br>Days,<br>Training | FLD :<br>Bio-agent :<br>Trichoderma harzianum<br>Culture  |

# 3.1. Achievements on technologies assessed and refined

### A.1. Abstract of the number of technologies assessed in respect of crops / enterprises

| Thematic areas                            | Cereals | Oilseeds | Pulses | Commercial<br>Crops | TOTAL |
|---|---------|----------|--------|---------------------|-------|
| Varietals Evaluation                      | -       | -        | -      | -                   | -     |
| Seed / Plant production                   | -       | -        | -      | -                   | -     |
| Weed Management                           | -       | -        | -      | -                   | -     |
| Integrated Crop<br>Management             | -       |          | -      | 1                   | 1     |
| INM                                       | -       | -        | -      | -                   | -     |
| Integrated Farming<br>System              | -       | -        | -      | -                   | -     |
| Mushroom cultivation                      | -       | -        | -      | -                   | -     |
| Drudgery reduction                        | -       | -        | -      | -                   | -     |
| Farm machineries                          | -       | -        | -      | -                   | -     |
| Value addition                            | -       | -        | -      | -                   | -     |
| IPM                                       | -       | -        | -      | 1                   | 1     |
| IDM                                       | -       |          | -      | -                   | -     |
| Resource conservation technology          | -       | -        | -      | -                   | -     |
| Small Scale income generating enterprises | -       | -        | -      | -                   | -     |
| TOTAL                                     | -       | -        | -      | 2                   | 2     |

### A.2 Abstract of the number of technologies refined in respect of crops/enterprises

| Thematic areas                | Cereals | Oilseeds | Pulses | Commercial<br>Crops | TOTAL |
|-------------------------------|---------|----------|--------|---------------------|-------|
| Varietals Evaluation          | -       | -        | -      | -                   | -     |
| Seed / Plant production       | -       | -        | -      | -                   | -     |
| Weed Management               | -       | -        | -      | -                   | -     |
| Integrated Crop<br>Management | -       |          | -      | -                   | -     |
| INM                           | -       | -        | -      | -                   | -     |
| Integrated Farming<br>System  | -       | -        | -      | -                   | -     |

| Mushroom cultivation                      | - | - | - | - | _ |
|---|---|---|---|---|---|
| Drudgery reduction                        | - | - | - | - | - |
| Farm machineries                          | - | - | - | - | - |
| Value addition                            | - | - | - | - | - |
| IPM                                       | - | - | - | - | - |
| IDM                                       | - | 1 | - | - | 1 |
| Resource conservation technology          | - | - | - | - | - |
| Small Scale income generating enterprises | - | - | - | - | - |
| TOTAL                                     | - | 1 | - |   | 1 |

### A.3 Abstract of the number of technologies assessed in respect of livestock/ enterprises

| Thematic areas         | Cattle | Poultry | Sheep | Goat | Other | TOTAL |
|------------------------|--------|---------|-------|------|-------|-------|
| Evaluation of Breeds   | -      | -       | -     | -    | -     | -     |
| Nutrition Management   | -      | -       | -     | -    | -     | -     |
| Disease of Management  | -      | -       | -     | -    | -     | -     |
| Value Addition         | -      | -       | -     | -    | -     | -     |
| Production and         | 1      | -       | -     | -    | -     | 1     |
| Management             |        |         |       |      |       |       |
| Feed and Fodder        | -      | -       | -     | -    | -     | -     |
| Small Scale income     | -      | -       | -     | -    | -     | -     |
| generating enterprises |        |         |       |      |       |       |
| Women & Child care     | -      | -       | -     | -    | 1     | 1     |
| TOTAL                  | 1      | -       | -     | -    | 1     | 2     |

A.4 Abstract of the number of technologies refined in respect of livestock / enterprises: NIL

#### B. Details of each On Farm Trial to be furnished in the following format

#### Trial 1: Low yield of cotton.

- 1. Title of Technology assessed / Refined: Low yield of cotton
- 2. Problem Definition
  - 1. Unbalance fertilization.
  - 2. Problems of sucking pest.
  - 3. Lack of knowledge of fertilizations.
  - 4. Less use of organic manure in soil.
- 3. Details of technologies selected for assessment/refinement
  - 1. Farmers practice
  - 2. Recommended dose of fertilizer (160-0-0 NPK kg/ha) in four split.
  - 3. T-2 + 50 kg P2O5 / ha through DAP + 50 kg K2O/ha through MOP as a basal dose.
  - 4. T-3 + 25 kg MgSo4/ha + 10 kg ZnSo4/ha as a basal dose.
- 4. Source of technology: Junagadh Agricultural University, Junagadh.
- 5. Production system: Balance use of Fertilizer
- 6. Thematic area: Integrated Nutrient management
- 7. Performance of the Technology with performance indicators
  - \*Result is in Table -A
- 8. Final recommendation for micro level situation

Recommended dose of fertilizer (160-0-0 NPK kg/ha) in four Split + 50 kg P2O5 /ha through DAP + 50 kg K2O/ha through MOP + 25 kg MgSo4/ha + 10 kg ZnSo4/ha as a basal dose.

- 9. Constraints identified and feedback for research: NIL
- 10. Process of farmers participation and their reaction: Result is in Table -A
- 11. Result of On Farm Trial

,

Table - A

| Crop/<br>enterpri | Farming<br>situation | Problem<br>Diagnosed        | Title of<br>OFT      | No.<br>of<br>trials | Technology<br>Assessed  | Parameters<br>of<br>assessment | Dataon<br>the<br>parameter   |
|-------------------|----------------------|-----------------------------|----------------------|---------------------|---|--------------------------------|------------------------------|
| 1                 | 2                    | 3                           | 4                    | 5                   | 6   | 7                              | 8                            |
| Cotton            | Irrigated            | Imbalance use of Fertilizer | Low yield of cotton. | 3                   | 1. Farmers practice 2. Recommended dose of fertilizer (160- 0-0 NPK kg/ha) in four split. 3. T-2 + 50 kg P2O5 /ha through DAP + 50 kg K2O/ha through MOP as a basal dose. 4. T-3 + 25 kg MgSo4/ha + 10 kg ZnSo4/ha as a basal dose. | Yield evaluation               | Seed Cotton<br>Yield (qt/ha) |

|       | Resultso  | fassesment | Feedback from the farmer |  |  |  |
|-------|-----------|------------|--------------------------|--|--|--|
|       |           | 9          | 10                       |  |  |  |
|       | Av. Yield | l (qt/ha)  |                          | Application of MgSo4 and Znso4 as well a |  |  |
| T1    | T2        | Т3         | T4                       | Potash give very good response to Cotton |  |  |
| 22.40 | 24.42     | 25.88      | 27.60                    | crops                                    |  |  |

| Technology Assessed/Refined   | Seed Cotton<br>(Qt/ha) | Net Return<br>(Profit) in Rs.<br>/ unit | BC Ratio |
|---|------------------------|---|----------|
| 11  | 12                     | 13                                      | 14       |
| 1.Farmers practice  | 22.40                  | 86725                                   | 1:2.81   |
| 2.Recommended dose of fertilizer (160-0-0 NPK kg/ha) in four split.             | 24.42                  | 98195                                   | 1:3.27   |
| 3.T-2 + 50 kg P2O5 / ha through DAP + 50 kg K2O/ha through MOP as a basal dose. | 25.88                  | 104280                                  | 1:3.30   |
| 4.T-3 + 25 kg MgSo4/ha + 10 kg ZnSo4/ha as a basal dose.                        | 27.60                  | 112690                                  | 1:3.50   |

### Trial 2: Management of Mealy bug infestation in Cotton.

- 1. Title of Technology assessed / Refined:
  - \* Management of Mealy bug infestation in Cotton
- 2. Problem Definition
  - 1. Lack of knowledge about the use of particular pesticides
  - 2. No adoption of recommended practices
  - 3. Farmers follows instruction given by the local pesticides retailer.
- 3. Details of technologies selected for assessment/refinement
  - T-1.Farmers practice (Use of conventional insecticides after infestation)
  - T-2.Recommended practices: pre-sowing application of Methyl parathion 2% Dust, application of insecticides at the time of infestation & Recommended cultural practices.
  - T-3.Dusting of Methyl parathion 2% dust as & when required + application of bio-pesticides (Beaveria spp. or Verticillium spp.)
- 4 Source of technology: Junagadh Agricultural University, Junagadh.
- 5 Production system: Reduce mealy bug infestation
- 6 Thematic area: IPM for suppression of mealy bug
- 7 Performance of the Technology with performance indicators
  - \*Result is in Table -A
- 8 Final recommendation for micro level situation
  - Recommended practices as well as Dusting of Methyl parathion 2% dust as & when required with application of bio-pesticides (Beaveria spp. or Verticillium spp.)
- 9 Constraints identified and feedback for research: NIL
- 10 Process of farmers participation and their reaction: Result is in Table -A
- 11 Result of On Farm Trial

Table - A

| Crop/<br>enterpri | Farming situation | Problem<br>Diagnose | Title of<br>OFT                                   | No.<br>of<br>trials | Technology Assessed   | Parameters<br>of<br>assessment | Dataon<br>the<br>parameter      |
|-------------------|-------------------|---------------------|---|---------------------|---|--------------------------------|---------------------------------|
| 1                 | 2                 | 3                   | 4   | 5                   | 6   | 7                              | 8                               |
| Cotton            | Irrigated         | Mealy bug           | Management of<br>Mealy bug infestati<br>in Cotton | on 3                | 1.Farmers practice(Use of conventional insecticides after infestation) 2. Recommended practices: presowing application of Methyl parathion 2% Dust, application of insecticides at the time of infestation & Recommended cultural practices. 3. Dusting of Methyl parathion 2% dust as & when required, application of biopesticides (Beaveria spp. or Verticillium spp.) | Mealy bug infestation          | % Plant infested with mealy bug |
|                   | I                 | Results of assessm  | ert   |                     | Fædbackf  | iom the farmer                 |                                 |
|                   |                   | 9                   |   |                     | 10  |                                |                                 |
|                   | % Plant inf       | estation witl       | n mealy bug                                       |                     |   |                                |                                 |
|                   | T1                | T2                  | T3  |                     | T-2 as well as T-3 has at par result  |                                |                                 |
|                   | 10                | 6                   | 5   |                     |   |                                |                                 |

### Trial 3: Reduction of Inter-calving period in Buffalo

- 1. Title of Technology assessed / Refined:
  - \* Reduction of Inte-realving period in Buffalo
- 2. Problem Definition: Long Inter-calving period
- 3. Details of technologies selected for assessment/refinement
  - \*T1- Farmer's practice
  - \*T2- Panacure (1.5 gm) + Vetcominforte (1 Kg)
  - \*T3- Bioheat (1 No.) + Vetcominforte (1 Kg)
  - \*T4- Panacure (1.5 gm) + Bioheat (1 No.)
- 4. Source of technology: Anand Agricultural University, Anand.
- 5. Production system
  - \*Package of practices
- 6. Thematic area
  - \*Production and Management
- 7. Performance of the Technology with performance indicators
  - \* Experiment under progress
- 8. Final recommendation for micro level situation: Under progress
- 9. Constraints identified and feedback for research: NIL
- 10. Process of farmers participation and their reaction
  - \* Result is in Table -A
- 11. Result of On Farm Trial

Table - A

| Crop/<br>enterpri | Farming situation | Problem<br>Diagnosed                  |                                 | tle of<br>DFT  | No.<br>of<br>trials | Technology<br>Assessed  | Parameters<br>of<br>assessment |               | Dataon<br>the<br>parameter |
|-------------------|-------------------|---------------------------------------|---------------------------------|----------------|---------------------|---|--------------------------------|---------------|----------------------------|
| 1                 | 2                 | 3                                     | 4                               |                | 5                   | 6   | 7                              | 8             |                            |
| Buffalo           |                   | Long<br>Intercalving<br>period        | Reduction intercally in Buffalo | ing period     | 4                   | T1- Farmer's practice T2- Panacure + Vetcominforte T3- Bioheat + Vetcominforte T4- Panacure + Bioheat | Post<br>partum<br>heat         | No of days (N | Months)                    |
|                   |                   |                                       |                                 | Resul          | lts of              | assessment  |                                |               |                            |
| SaNa              |                   | Parametes                             |                                 | T-1<br>(Contro | ol)                 | T-2   |                                | T-3           | T-4                        |
| 1                 | Post ( Mos        | partum hea<br>nth)                    | t                               | 8-10 m         | nonth               | 4-5<br>month  | 2-4 month                      |               | 5-6<br>month               |
| 2                 | Conc              | of services<br>eiving<br>./Natural se |                                 | 3              | 4                   | 2-3   |                                | 1-2           | 2-3                        |
| 3                 | Inter<br>(Mo      | calving per                           | iod                             | 18-            | 22                  | 15-18   |                                | 12-14         | 16-18                      |

**Final Recommendation:** Feeding of mineral mixture and bioheat bolus is more effective in reducing inter-calving period by early postpartum heat & higher conceiving rate.

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# Trial 4: Feeding of protein and energy rich diet to children to cure protein energy malnutrition in rural area (Age group – 1 to 3 years)

- 1. Title of Technology assessed / Refined:
  - \* Feeding of protein and energy rich diet to children to cure protein energy malnutrition in rural area (Age group 1 to 3 years)
- 2. Problem Definition
  - \*Lack of knowledge about balance diet
  - \* Poor economical condition
  - \* Lack of nutritional meal management
- 3. Details of technologies selected for assessment/refinement
  - \*T1- Control without any extra food (Control)
  - \*T2- Use a mixture of cereals (30 gm)+pulses (10 gm)+ghee (5 gm) for second group of children (Age group- 1 to 3 years)
  - \*T3- Use a mixture of cereals (30 gm)+sprouted pulses (10 gm)+ghee (5 gm) for first group of children (Age group- 1 to 3 years)
- 4. Source of technology: Junagadh Agricultural University, Junagadh.
- 5. Production system and thematic area: Women and child care
- 6. Thematic area: Women and child care
- 7. Performance of the Technology with performance indicators
  - \* Result is in Table -E
- 8. Final recommendation for micro level situation: NIL
- Constraints identified and feedback for research: Some people are not giving mixture regularly
- 10. Process of farmers participation and their reaction
  - \* Children are ready to eat the mixture and mothers are also getting conscious about protein and energy rich diet

### 11. Result of On Farm Trial

Table – E

| Crop/<br>enterpris | Farming<br>situation | Problem<br>Diagnose  | Title of<br>OFT   | No.<br>of<br>trials | Technology<br>Assessed  | Parameters<br>of<br>assessment  | Dataon<br>the<br>parameter |
|--------------------|----------------------|--|---|---------------------|---|---|----------------------------|
| 1                  | 2                    | 3  | 4   | 5                   | 6   | 7   | 8                          |
| 5.Home<br>Science  | _                    | Deficiency<br>of protein,<br>energy<br>and other<br>nutrient | Feeding of protein and energy rich diet to children in rural to cure malnutrition (Age group - 1 to 3 years). | 3                   | Feeding of protein and energy rich diet to children in rural for remove malnutrition deficiency (Age group – 1 to 3 yrs). | - Height of<br>children<br>- Weight of<br>children<br>- Chest<br>circumference<br>Waist |                            |

| No | Name of the<br>Children         | Name of the Village |      | Data on the performance indicators of the technology<br>Assessed/refined |     |                     |     |     |                     |     |     |  |
|----|---------------------------------|---------------------|------|--|-----|---------------------|-----|-----|---------------------|-----|-----|--|
|    |                                 |                     |      | Technology<br>option 1   |     | Technology option 2 |     |     | Technology option 3 |     |     |  |
|    |                                 |                     | I-1  | I-2  | I-3 | I-1                 | I-2 | I-3 | I-1                 | I-2 | I-3 |  |
| 1  | Ganapat V<br>Maobat             | Doliya              | -    | -  | -   | -                   | -   | -   | 1.5                 | 0.3 | 2   |  |
| 2  | Ravi Rajabhai<br>Sanosara       | Doliya              | -    | -  | -   | -                   | -   | -   | 1.0                 | 0.3 | 2   |  |
| 3  | Deepak<br>Bhanubhai<br>Vaju     | Doliya              | -    | -  | -   | -                   | -   | -   | 1.5                 | 0.2 | 3   |  |
| 4  | Bhotabhai B<br>Panchal          | Dhedhuki            | -    | -  | -   | 1.0                 | 0.4 | 1   | -                   | -   | -   |  |
| 5  | Yuvraj V<br>Chauhan             | Dhedhuki            | -    | -  | -   | 2.0                 | 0.2 | 1   | -                   | -   | -   |  |
| 6  | Darshan B<br>Khamaniya          | Dhedhuki            | -    | -  | -   | 0.5                 | 0.1 | 3   | -                   | -   | -   |  |
| 7  | Shilpa M.<br>Kudecha            | Aaya                | 0.5  | 0.2  | 1   | -                   | -   | -   | -                   | -   | -   |  |
| 8  | Sunita S.<br>Kudecha            | Aaya                | 0.75 | 0.1  | 1   | -                   | -   | -   | -                   | -   | -   |  |
| 9  | Divyaraj<br>Lalsangbhai<br>Zala | Aaya                | 1.0  | 0.3  | 2   | -                   | -   | -   | -                   | -   | -   |  |
|    | Total                           |                     | 2.25 | 0.6  | 4   | 3.5                 | 0.7 | 5   | 4                   | 0.8 | 7   |  |

I-1 Difference in Weight, I-2 Difference in Height, I-3 Chest & waist difference

#### C. Technology Refinement (2007-2010):

#### Trial 1

- 1 Title of Technology assessed / Refined:
  - \* Application of Trichoderma against stem rot disease in groundnut
- 2. Problem Definition : Heavy attack of stem rot
- 3. Details of technologies selected for assessment/refinement
  - \*T1- Farmer's practice (Control)
  - \*T2- Mixing Trichoderma @ 2.5 Kg with castor cake @ 500 Kg at the time of sowing
  - \*T3- Soil drenching of Trichoderma @ 50 gm/10 lit. of water with spray pump without nozzle
- 12. Source of technology: Junagadh Agricultural University, Junagadh.
- 13. Production system and thematic area: Package of practices
- 14. Thematic area: Integrated disease management
- 15. Performance of the Technology with performance indicators
  - \*Result is in Table -A
- 16. Final recommendation for micro level situation
  - \* Mixing Trichoderma @ 2.5 Kg/ha with castor cake @ 500 Kg/ha at the time of sowing.
- 17. Constraints identified and feedback for research: NIL
- 18. Process of farmers participation and their reaction
  - \* Result is in Table -A
- 19. Result of On Farm Trial

Table - A

| Crop/<br>enterpri | Farming situation | Problem<br>Diagnosed | Title of<br>OFT   | No.<br>of<br>trials | Technology<br>Assessed   | Parameters<br>of<br>assessment | Dataon<br>the<br>parameter |
|-------------------|-------------------|----------------------|---|---------------------|--|--------------------------------|----------------------------|
| 1                 | 2                 | 3                    | 4   | 5                   | 6  | 7                              | 8                          |
| G'nut             | Irrigated         | Stem rot             | Application of Tricho derma against stem rot Disease in g'nut | 3                   | T1-Farmer's practice (Control) T2-Mixing Trichoderma @ 2.5 Kg with castor cake @ 500 Kg at the time of sowing T3-Soil drenching of Trichoderma @ 50 gm/10 lit. of water with spray pump without nozzle | Yield<br>evaluation            | Yield (qt/ha)              |

|       | Results of assessment |       | Feedback from the farmer   |  |  |  |
|-------|-----------------------|-------|--|--|--|--|
|       | 9                     |       | 10   |  |  |  |
| I I   | Av. Yield (qt/ha)     |       | Treatment-2 shows good control against the   |  |  |  |
| T-1   | T-2                   | T-3   | stem rot of G'nut but unavailability of castor cake will be not sured at the time of |  |  |  |
| 10.30 | 12.20                 | 10.95 | application  |  |  |  |

| Technology Assessed/<br>Refined | *Production per<br>unit | Net Return (Profit) in Rs. / unit | BC Ratio |
|---------------------------------|-------------------------|-----------------------------------|----------|
| 11                              | 12                      | 13                                | 14       |
| Farmer's practice (T-1)         | 10.30                   | 17520                             | 1:1.42   |
| Recommended (T-2)               | 12.20                   | 20230                             | 1:1.34   |
| Modified (T-3)                  | 10.95                   | 18955                             | 1:1.48   |
| Pooled data for three years res | ult                     |                                   |          |
| Farmer's practice (T-1)         | 11.23                   | 17936                             | 1:1.40   |
| Recommended (T-2)               | 13.18                   | 20652                             | 1:1.34   |
| Modified (T-3)                  | 12.38                   | 20611                             | 1:1.56   |

**Final Recommendation from micro level situation :** Mixing Trichoderma @ 2.5 Kg /ha with castor cake @ 500 Kg/ha at the time of sowing.

Now it is recommendation for farmer community

#### 3.2 Achievements of Frontline Demonstrations

**a**. Follow-up for results of FLDs implemented during previous years List of technologies demonstrated during previous year and popularized during 2010-11 and recommended for large scale adoption in the district

| Sr. No. | natic            | Technology<br>demonstrated         | Details of popularization                    | Horizontal spread of technology |                |               |  |  |
|---------|------------------|------------------------------------|--|---------------------------------|----------------|---------------|--|--|
| S       | Thematic<br>area |                                    | methods suggested to<br>the Extension system | No. of villages                 | No. of farmers | Area in<br>ha |  |  |
| 1       |                  | Guj.Musrard-3<br>(Mustard)         | FLD,<br>Field Day &                          | 14                              | 1500           | _             |  |  |
| 2       |                  | Guj. Gram-3 (Gram)                 | Training                                     |                                 |                |               |  |  |
| 3       | <b>b</b> 0       | Guj.Cumin-4 (Cumin)                |  |                                 |                |               |  |  |
| 4       | Jing             | GW - 366 (Wheat)                   |  |                                 |                |               |  |  |
| 5       | Ory farming      | GG-20 (G'nut)                      |  |                                 |                |               |  |  |
| 6       | ry f             | Guj.Til-3 (Sesame)                 |  |                                 |                |               |  |  |
| 7       | Ω                | Guj. Green Gram-4<br>(Green gram)  |  |                                 |                |               |  |  |
| 8       |                  | Bt Cotton varieties (CMM-II)       |  |                                 |                |               |  |  |
| 9       |                  | Trichoderma culture<br>(Bio-agent) |  |                                 |                |               |  |  |

### b. Details of FLDs implemented during 2010-11

| Sr<br>No | Crop      | Thematic<br>area | Technology<br>Demon-      | Season<br>and | Area (   | Area (ha) |           |       | No. of farmers/<br>demonstration |           |  |  |
|----------|-----------|------------------|---------------------------|---------------|----------|-----------|-----------|-------|----------------------------------|-----------|--|--|
|          |           | The              | strated                   | year          | Proposed | Actual    | SC<br>/ST | Other | Total                            | shortfall |  |  |
| 1        | Mustard   |                  | Varietal                  | Rabi, 2010    | 10.0     | 10.0      | 3/0       | 17    | 20                               | _         |  |  |
| 2        | Gram      | Package          | evaluation,               | Rabi, 2010    | 10.0     | 10.0      | 4/0       | 16    | 20                               | _         |  |  |
| 3        | Cumin     | of practices     | recommended<br>package of | Rabi, 2010    | 5.0      | 5.0       | 1/0       | 9     | 10                               | _         |  |  |
| 4        | Wheat     | practices        | practices                 | Rabi, 2010    | 10.0     | 10.0      | 4/0       | 16    | 20                               | _         |  |  |
| 5        | G'nut     |                  | 1                         | Kharif 10-11  | 4.0      | 4.0       | 1/0       | 9     | 10                               | _         |  |  |
| 6        | Sesame    |                  |                           | Kharif 10-11  | 4.0      | 4.0       | 2/0       | 8     | 10                               | _         |  |  |
| 7        | Moong     |                  |                           | Kharif 10-11  | 4.0      | 4.0       | 3/0       | 7     | 10                               | _         |  |  |
| 8        | Cotton    |                  |                           | Kharif 10-11  | 10.0     | 10.0      | 0         | 25    | 25                               | _         |  |  |
| 9        | Bio-agent |                  |                           | Kharif 10-11  | 2.0      | 2.0       | 1/0       | 4     | 5                                | _         |  |  |

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# **Details of farming situation**

|        |               | lation<br>ed)                       | a               | St | atus<br>soil |   | rop           | ate         | ate          | infall                 | y days            |
|--------|---------------|-------------------------------------|-----------------|----|--------------|---|---------------|-------------|--------------|------------------------|-------------------|
| Crop   | Season        | Farming situation<br>(RF/Irrigated) | Soil type       | N  | P            | K | Previous crop | Sowing date | Harvest date | Seasonal rainfall (mm) | No. of rainy days |
| Mustar | Rabi<br>09-10 | Irrigated                           | Medium<br>black | L  | M            | Н | Green gram    | 23/10/09    | 13/2/10      | 212                    |                   |
|        |               | Irrigated                           | "               | L  | M            | Н | Green<br>gram | 25/10/09    | 15/2/10      | 212                    |                   |
|        |               | Irrigated                           | _"_             | L  | M            | Н | Sesame        | 26/10/09    | 14/2/10      | 212                    |                   |
|        |               | Irrigated                           | _"_             | L  | M            | Н | Black gram    | 24/10/09    | 17/2/10      | 212                    |                   |
|        |               | Irrigated                           | "               | L  | M            | Н | Sorghum       | 24/10/09    | 13/2/10      | 212                    |                   |
|        |               | Irrigated                           | "               | L  | M            | Н | Groundnut     | 28/10/09    | 18/2/10      | 212                    |                   |
|        |               | Irrigated                           | "               | L  | M            | Н | Sesame        | 29/10/09    | 17/2/10      | 212                    |                   |
|        |               | Irrigated                           | _"_             | L  | M            | Н | Green<br>gram | 30/10/09    | 20/2/10      | 212                    |                   |
|        |               | Irrigated                           | "_              | L  | M            | Н | Black gram    | 23/10/09    | 13/2/10      | 212                    |                   |
|        |               | Irrigated                           | _"_             | L  | M            | Н | Sorghum       | 24/10/09    | 12/2/10      | 212                    |                   |
|        |               | Irrigated                           | _"_             | L  | M            | Н | Bajara        | 27/10/09    | 15/2/10      | 212                    |                   |
|        |               | Irrigated                           | _"_             | L  | M            | Н | Sesame        | 30/10/09    | 20/2/10      | 212                    |                   |
|        |               | Irrigated                           | _"_             | L  | M            | Н | Sesame        | 25/10/09    | 14/2/10      | 212                    |                   |
|        |               | Irrigated                           | "_              | L  | M            | Н | Bajara        | 24/10/09    | 11/2/10      | 212                    |                   |
|        |               | Irrigated                           | "               | L  | M            | Н | Sorghum       | 23/10/09    | 11/2/10      | 212                    |                   |
|        |               | Irrigated                           | "               | L  | M            | Н | Vegetables    | 28/10/09    | 16/2/10      | 212                    |                   |
|        |               | Irrigated                           | "               | L  | M            | Н | G;nut         | 27/10/09    | 15/2/10      | 212                    |                   |
|        |               | Irrigated                           | "_              | L  | M            | Н | Green gram    | 29/10/09    | 18/2/10      | 212                    |                   |
|        |               | Irrigated                           | "               | L  | M            | Н | Groundnut     | 25/10/09    | 14/2/10      | 212                    |                   |
|        |               | Irrigated                           | -"              | L  | M            | Н | Sesame        | 24/10/09    | 11/2/10      | 212                    |                   |
| Gram   | Rabi          |                                     | -"              | L  | M            | Н | Groundnut     | 25/10/09    | 20/2/10      | 212                    |                   |
|        | 09-10         | Irrigated                           | -"              | L  | M            | Н | Groundnut     | 30/10/09    | 22/2/10      | 212                    |                   |
|        |               | Irrigated                           | -"              | L  | M            | Н | Green gram    | 24/10/09    | 17/2/10      | 212                    |                   |
|        |               | Irrigated                           | "               | L  | M            | Н | Sorghum       | 25/10/09    | 23/2/10      | 212                    |                   |
|        |               | Irrigated                           | "               | L  | M            | Н | Groundnut     | 30/10/09    | 25/2/10      | 212                    |                   |

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|       |       | Irrigated |        | L | M | Н | Sesame     | 1/11/09  | 26/2/10 | 212 |  |
|-------|-------|-----------|--------|---|---|---|------------|----------|---------|-----|--|
|       |       | Irrigated | "      | L | M | Н | Bajra      | 4/11/09  | 1/3/10  | 212 |  |
|       |       | Irrigated | _"_    | L | M | Н | Sesame     | 29/10/09 | 25/2/10 | 212 |  |
|       |       | Irrigated | _"_    | L | M | Н | Greengram  | 29/10/09 | 26/2/10 | 212 |  |
|       |       | Irrigated | _"_    | L | M | Н | Blackgram  | 5/11/09  | 1/3/10  | 212 |  |
|       |       | Irrigated |        | L | M | Н | Groundnut  | 3/11/09  | 28/2/10 | 212 |  |
|       |       | Irrigated |        | L | M | Н | Bajara     | 28/10/09 | 24/2/10 | 212 |  |
|       |       | Irrigated | "      | L | M | Н | Sorghum    | 30/10/09 | 25/2/10 | 212 |  |
|       |       | Irrigated | "      | L | M | Н | Sesame     | 6/11/09  | 2/3/10  | 212 |  |
|       |       | Irrigated | "      | L | M | Н | Groundnut  | 24/11/09 | 18/2/10 | 212 |  |
|       |       | Irrigated | "      | L | M | Н | Bajara     | 26/10/09 | 21/2/10 | 212 |  |
|       |       | Irrigated |        | L | M | Н | Vegetables | 8/11/09  | 3/3/10  | 212 |  |
|       |       | Irrigated |        | L | M | Н | Groundnut  | 4/11/09  | 1/3/10  | 212 |  |
|       |       | Irrigated |        | L | M | Н | Sesame     | 29/11/09 | 24/2/10 | 212 |  |
|       |       | Irrigated |        | L | M | Н | Sesame     | 27/11/09 | 21/2/10 | 212 |  |
| Cumin | Rabi  | Irrigated |        | L | M | Н | Sorghum    | 8/11/09  | 23/2/10 | 212 |  |
|       | 09-10 | Irrigated | "      | L | M | Н | Bajara     | 1/11/09  | 17/2/10 | 212 |  |
|       |       | Irrigated | "      | L | M | Н | Groundnut  | 3/11/09  | 18/2/10 | 212 |  |
|       |       | Irrigated | "      | L | M | Н | Greengram  | 4/11/09  | 20/2/10 | 212 |  |
|       |       | Irrigated | "      | L | M | Н | Sorghum    | 9/11/09  | 24/2/10 | 212 |  |
|       |       | Irrigated | -"-    | L | M | Н | Groundnut  | 8/11/09  | 22/2/10 | 212 |  |
|       |       | Irrigated | "      | L | M | Н | Brinjal    | 6/11/09  | 22/2/10 | 212 |  |
|       |       | Irrigated | "      | L | M | Н | Bajara     | 5/11/09  | 23/2/10 | 212 |  |
|       |       | Irrigated | "      | L | M | Н | Sesame     | 7/11/09  | 22/2/10 | 212 |  |
|       |       | Irrigated | "      | L | M | Н | Groundnut  | 6/11/09  | 21/2/10 | 212 |  |
| Wheat | Rabi  | Irrigated | Medium | L | M | Н | Cotton     | 15/11/09 | 10/3/10 | 212 |  |
|       | 09-10 | Irrigated | black  | L | M | Н | G' nut     | 11/11/09 | 6/3/10  | 212 |  |
|       |       | Irrigated | "      | L | M | Н | Sesame     | 17/11/09 | 11/3/10 | 212 |  |
|       |       | Irrigated | "      | L | M | Н | Cotton     | 10/11/09 | 5/3/10  | 212 |  |
|       |       | Irrigated | "      | L | M | Н | G' nut     | 10/11/09 | 6/3/10  | 212 |  |
|       |       | Irrigated | "      | L | M | Н | Bajara     | 19/11/09 | 12/3/10 | 212 |  |
|       |       | Irrigated | "      | L | M | Н | Sesame     | 11/11/09 | 7/3/10  | 212 |  |
|       |       | Irrigated | "      | L | M | Н | Sorghum    | 14/11/09 | 10/3/10 | 212 |  |
|       |       | Irrigated | "      | L | M | Н | G' nut     | 15/11/09 | 10/3/10 | 212 |  |
|       |       | Irrigated | -"     | L | M | Н | Sesame     | 12/11/09 | 7/3/10  | 212 |  |

|        |        | F 1       |            | - | 3 - |   |         | 21/11/00 | 1= /0 /10 | 212 |  |
|--------|--------|-----------|------------|---|-----|---|---------|----------|-----------|-----|--|
|        |        | Irrigated | "          | L | M   | Н | Sesame  | 24/11/09 | 15/3/10   | 212 |  |
|        |        | Irrigated |            | L | M   | Н | G' nut  | 20/11/09 | 13/3/10   | 212 |  |
|        |        | Irrigated | -"-        | L | M   | Н | Cotton  | 22/11/09 | 15/3/10   | 212 |  |
|        |        | Irrigated | "          | L | M   | Н | Cotton  | 25/11/09 | 17/3/10   | 212 |  |
|        |        | Irrigated | -"         | L | M   | Н | G' nut  | 20/11/09 | 15/3/10   | 212 |  |
|        |        | Irrigated | _"         | L | M   | Н | Cotton  | 15/11/09 | 10/3/10   | 212 |  |
|        |        | Irrigated |            | L | M   | Н | Cotton  | 13/11/09 | 8/3/10    | 212 |  |
|        |        | Irrigated | _"_        | L | M   | Н | Sesame  | 17/11/09 | 13/3/10   | 212 |  |
|        |        | Irrigated | _"_        | L | M   | Н | Cotton  | 20/11/09 | 14/3/10   | 212 |  |
|        |        | Irrigated | _"_        | L | M   | Н | Bajara  | 16/11/09 | 11/3/10   | 212 |  |
| G'nut  | Kharif | Irrigated | Mediu      | L | M   | Н | Wheat   | 23/6/10  | 4/11/10   |     |  |
|        | 10-11  | Irrigated | m<br>black | L | M   | Н | G'nut   | 23/6/10  | 3/11/10   |     |  |
|        |        | Irrigated | "          | L | M   | Н | Sorghum | 10/7/10  | 6/11/10   |     |  |
|        |        | Irrigated | "          | L | M   | Н | Castor  | 9/7/10   | 5/11/10   |     |  |
|        |        | Irrigated | "          | L | M   | Н | Sorghum | 20/6/10  | 4/11/10   |     |  |
|        |        | Irrigated |            | L | M   | Н | Cotton  | 10/7/10  | 5/11/10   |     |  |
|        |        | Irrigated | "          | L | M   | Н | Wheat   | 9/7/10   | 4/11/10   |     |  |
|        |        | Irrigated |            | L | M   | Н | G'nut   | 9/7/10   | 6/11/10   |     |  |
|        |        | Irrigated |            | L | M   | Н | G'nut   | 10/7/10  | 5/11/10   |     |  |
|        |        | Irrigated |            | L | M   | Н | Sorghum | 23/6/10  | 3/11/10   |     |  |
| Sesame | Kharij | Irrigated |            | L | M   | Н | Castor  | 10/7/10  | 6/10/10   |     |  |
|        | 10-11  | Irrigated |            | L | M   | Н | Cotton  | 10/7/10  | 5/10/10   |     |  |
|        |        | Irrigated |            | L | M   | Н | Cotton  | 11/7/10  | 3/10/10   |     |  |
|        |        | Irrigated |            | L | M   | Н | Cotton  | 9/7/10   | 10/10/10  |     |  |
|        |        | Irrigated |            | L | M   | Н | Cotton  | 12/7/10  | 1/10/10   |     |  |
|        |        | Irrigated |            | L | M   | Н | Wheat   | 9/7/10   | 9/10/10   |     |  |
|        |        | Irrigated |            | L | M   | Н | Sorghum | 10/7/10  | 4/10/10   |     |  |
|        |        | Irrigated |            | L | M   | Н | G'nut   | 11/7/10  | 5/10/10   |     |  |
|        |        | Irrigated |            | L | M   | Н | Cotton  | 11/7/10  | 7/10/10   |     |  |
|        |        | Irrigated |            | L | M   | Н | G'nut   | 10/7/10  | 6/10/10   |     |  |
| Green  | Kharit |           |            | L | M   | Н | Wheat   | 9/7/10   | 6/10/10   |     |  |
| Gram   | 10-11  | Irrigated | _"_        | L | M   | Н | Cotton  | 11/7/10  | 3/10/10   |     |  |
|        |        | Irrigated | _"_        | L | M   | Н | Castor  | 13/7/10  | 29/9/10   |     |  |
|        |        | Irrigated | _"_        | L | M   | Н | Cotton  | 9/7/10   | 3/10/10   |     |  |

|         |        | Irrigated | -"     | L | M | Н | Cotton    | 10/7/10 | 5/10/10 |          |
|---------|--------|-----------|--------|---|---|---|-----------|---------|---------|----------|
|         |        | Irrigated | "-     | L | M | Н | Wheat     | 9/7/10  | 1/10/10 |          |
|         |        | Irrigated | "      | L | M | Н | Cotton    | 10/7/10 | 2/10/10 |          |
|         |        | Irrigated | "      | L | M | Н | Cotton    | 11/7/10 | 5/10/10 |          |
|         |        | Irrigated | "      | L | M | Н | Wheat     | 9/7/10  | 6/10/10 |          |
|         |        | Irrigated | "      | L | M | Н | Cotton    | 10/7/10 | 4/10/10 |          |
| Bio-    | Kharij | Irrigated | Medium | L | M | Н | Wheat     | 9/7/10  | 7/11/10 |          |
| agent   | 09-10  | Irrigated | black  | L | M | Н | G'nut     | 22/6/10 | 3/11/10 |          |
|         |        | Irrigated |        | L | M | Н | Vegetable | 23/6/10 | 5/11/10 |          |
|         |        | Irrigated |        | L | M | Н | Wheat     | 10/7/10 | 6/11/10 |          |
|         |        | Irrigated |        | L | M | Н | G'nut     | 9/7/10  | 7/11/10 |          |
| Cotton  | Kharij | Irrigated | Medium | L | M | Н | Vegetable | 18/6/10 | Multi-  |          |
| (CMM-   | 10-11  | Irrigated | black  | L | M | Н | Bajra     | 23/6/10 | Picking |          |
| $\Pi$ ) |        | Irrigated |        | L | M | Н | Cotton    | 18/6/10 |         |          |
|         |        | Irrigated |        | L | M | Н | Bajra     | 20/6/10 |         |          |
|         |        | Irrigated | _"_    | L | M | Н | Wheat     | 9/7/10  |         |          |
|         |        | Irrigated | _"     | L | M | Н | Wheat     | 24/6/10 |         |          |
|         |        | Irrigated | -"     | L | M | Н | Wheat     | 23/6/10 |         |          |
|         |        | Irrigated | -"     | L | M | Н | Cumin     | 22/6/10 |         |          |
|         |        | Irrigated | "      | L | M | Н | Wheat     | 24/6/10 |         |          |
|         |        | Irrigated | _"     | L | M | Н | Cotton    | 10/7/10 |         |          |
|         |        | Irrigated |        | L | M | Н | Wheat     | 24/6/10 |         | _        |
|         |        | Irrigated |        | L | M | Н | Wheat     | 20/6/10 |         | _        |
|         |        | Irrigated | _"     | L | M | Н | Wheat     | 22/6/10 |         |          |
|         |        | Irrigated | _"_    | L | M | Н | Cumin     | 23/6/10 |         |          |
|         |        | Irrigated | _"     | L | M | Н | Cotton    | 9/7/10  |         |          |
|         |        | Irrigated | _"_    | L | M | Н | Cotton    | 24/6/10 |         |          |
|         |        | Irrigated | _"_    | L | M | Н | Bajra     | 24/6/10 |         |          |
|         |        | Irrigated |        | L | M | Н | Bajra     | 20/6/10 |         |          |
|         |        | Irrigated |        | L | M | Н | Cotton    | 22/6/10 |         | _        |
|         |        | Irrigated |        | L | M | Н | G'nut     | 23/6/10 |         |          |
|         |        | Irrigated |        | L | M | Н | Cotton    | 20/6/10 |         | _        |
|         |        | Irrigated |        | L | M | Н | Wheat     | 9/7/10  |         | <u> </u> |
|         |        | Irrigated | "      | L | M | Н | Wheat     | 20/6/10 |         |          |
|         |        | Irrigated | "      | L | M | Н | Cotton    | 10/7/10 |         | <u> </u> |

| Irrigated | _"_ | L | $ \mathbf{M} $ | Η | Sorghum | 9/7/10 |  | - |
|-----------|-----|---|----------------|---|---------|--------|--|---|

### Performance of FLD

| Sr.<br>No | Crop               | Tedunology<br>Demonstrated                               | Variety                  | NaofFarmers | Area<br>(ha) |       | Demo.Yield<br>Qt/ha | 1     | Yieldof<br>local<br>Check<br>Qtl/ha | local inyield<br>Check (%) |     | Dataon<br>parameterin<br>relationto<br>technology<br>demonstrated |  |
|-----------|--------------------|--|--------------------------|-------------|--------------|-------|---------------------|-------|-------------------------------------|----------------------------|-----|---|--|
|           |                    |  |                          |             |              | Н     | H L A               |       |                                     |                            | Dem | Local   |  |
| 1         | 2                  | 3  | 4                        | 5           | 6            | 7     | 8                   | 9     | 10                                  | 11                         | 12  | 13  |  |
| 1         | Mustard            |  | Guj.<br>Mustard-3        | 20          | 10           | 25.75 | 15.50               | 21.25 | 18.40                               | 15.50                      | -   | -   |  |
| 2         | Gram               | ctices   | Guj.<br>Gram-3           | 20          | 10           | 25.25 | 13.10               | 19.20 | 16.75                               | 14.63                      | -   | -   |  |
| 3         | Cumin              | ر<br>f pra   | Guj.Cumin-4              | 10          | 5            | 10.20 | 4.60                | 7.80  | 6.55                                | 19.08                      | -   | -   |  |
| 4         | Wheat              | iation<br>ge of  | GW-366                   | 20          | 10           | 50.40 | 30.10               | 39.70 | 35.10                               | 13.11                      | -   | -   |  |
| 5         | G'nut              | evalu<br>acka  | GG-20                    | 10          | 4            | 22.20 | 14/80               | 19.10 | 16.80                               | 13.69                      | -   | -   |  |
| 6         | Sesame             | Varietal evaluation,<br>nended package of p              | Guj.Til-3                | 10          | 4            | 6.80  | 4.40                | 6.05  | 5.35                                | 13.08                      | -   | -   |  |
| 7         | Green<br>Gram      | Varietal evaluation,<br>recommended package of practices | Guj.Green<br>Gram-4      | 10          | 4            | 11.80 | 5.20                | 9.20  | 7.90                                | 16.46                      | -   | -   |  |
| 8         | Cotton<br>(CMM-II) | reco   | Bt Irrigated             | 25          | 10           | 30.00 | 24.00               | 26.75 | 22.89                               | 16.86                      | -   | -   |  |
| 9         | Bio-agent          |  | Trichoderma<br>harzianum | 5           | 2            | 20.30 | 16.20               | 18.80 | 16.70                               | 12.57                      | -   | -   |  |

# **Economic Impact (Continuation of previous table)**

| Average Cost of (Rs/h |                | Average Gro<br>(Rs/h |                | Average Net Re<br>(Rs/h | Benefit-<br>Cost Ratio |                                  |  |
|-----------------------|----------------|----------------------|----------------|-------------------------|------------------------|----------------------------------|--|
| Demonstration         | Local<br>Check | Demonstration        | Local<br>Check | Demonstration           | Local<br>Check         | (Gross<br>Return/<br>Gross Cost) |  |
| 14                    | 15             | 16                   | 17             | 18                      | 19                     | 20                               |  |
| 12750                 | 13900          | 54188                | 50600          | 41438                   | 36700                  | 1:4.25                           |  |
| 11700                 | 13200          | 43200                | 37688          | 31500                   | 24488                  | 1:3.69                           |  |
| 14500                 | 15750          | 77610                | 65173          | 63110                   | 49423                  | 1:5.35                           |  |
| 13600                 | 14500          | 55580                | 49140          | 41980                   | 34640                  | 1:4.09                           |  |
| 17200                 | 16950          | 61598                | 54180          | 44398                   | 37230                  | 1:3.58                           |  |
| 11500                 | 11150          | 34031                | 30093          | 22531                   | 18943                  | 1:2.96                           |  |
| 8000                  | 7800           | 37260                | 31995          | 29260                   | 24195                  | 1:4.66                           |  |
| 24900                 | 25300          | 119037               | 101860         | 94137                   | 76560                  | 1:4.78                           |  |

| 18500 | 17000 | 60630 | 53857 | 42130 | 36857 | 1:3.28 |
|-------|-------|-------|-------|-------|-------|--------|

**Analytical Review of component demonstrations** (details of each component for rainfed / irrigated situations to be given separately for each season).

| Crop               | Season          | Component                | Farming   | Average         | Local           | Percentage   |
|--------------------|-----------------|--------------------------|-----------|-----------------|-----------------|--|
|                    |                 | 1. Seed/Variety          | situation | yield<br>(q/ha) | check<br>(q/ha) | increase in<br>Productivity<br>over local<br>check |
| Mustard            | Rabi<br>09-10   | Guj. Mustard-3           | Irrigated | 21.25           | 18.40           | 15.50  |
| Gram               | Rabi<br>09-10   | Guj. Gram-3              | Irrigated | 19.20           | 16.75           | 14.63  |
| Cumin              | Rabi<br>09-10   | Guj. Cumin-4 Irrigated 7 |           | 7.80            | 6.55            | 19.08  |
| Wheat              | Rabi<br>09-10   | GW-366                   | Irrigated | 39.70           | 35.10           | 13.11  |
| G'nut              | Kharif<br>10-11 | GG-20                    | Irrigated | 19.10           | 16.80           | 13.69  |
| Sesame             | Kharif<br>10-11 | Guj.Til-3                | Irrigated | 6.05            | 5.35            | 13.08  |
| Green<br>Gram      | Kharif<br>10-11 | Guj.<br>Green Gram-4     | Irrigated | 9.20            | 7.90            | 16.46  |
| Cotton<br>(CMM-II) | Kharif<br>10-11 | Bt                       | Irrigated | 26.75           | 22.89           | 16.86  |
| Bio-agent          | Kharif<br>10-11 | Trichoderma<br>harzianum | Irrigated | 18.80           | 16.70           | 12.57  |

## Technical Feedback on the demonstrated technologies

| Sr. No | Feed Back  |
|--------|--|
| 1      | In mustard, aphid & White rust resistant variety highly required   |
| 2      | The wheat variety GW-366 is superior but requires research variety for short duration and late sowing so fit in cotton based cropping pattern. |
| 3      | Gram wilt resistance & early maturity variety required.  |
| 4      | In Groundnut a short duration and disease resistance variety required for kharif season so suitable for dry farming                            |
| 5      | In sesamum there is need for short duration & water logged resistant variety because of heavy rainfall   |

6 In cotton there is further need for tolerant variety against the sucking pest

## Farmers' reactions on specific technologies

| Sr. No | Feed Back   |
|--------|---|
| 1      | Gram:  - It is good variety over local varieties, but at maturity stage, wilt and pod borer infestation occur   |
| 2      | Cumin: - High yielder and wilt resistance but late germination observed   |
| 3      | <ul> <li>Wheat: 366 <ol> <li>Warmer temp. during crop season shorten the growth duration resulting in poor yield</li> <li>The variety yield better than Lok-1 and GW-496</li> <li>The baking quality also fine</li> </ol> </li> </ul> |
| 4      | Mustard:  - The variety GM-3 is higher yielder but aphid attack reduces the yield   |
| 5      | Sesamum: - Guj. Til-3 is higher yielder over local  |
| 6      | Groundnut:  - GG-20 is good but, it is require short duration variety erratic rainfall affect the yield of groundnut  |
| 7      | Green gram: - Guj. Green gram-4 is superior over K-851, it mature once a time so more picking not required  |
| 8      | Cotton:  - Like Bt variety resistance over larvae, it is require the sucking pest resistance variety  |

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# Extension and Training activities under FLD

| Sr.<br>No | Activity   | No. of activities organized | Date     | Number of participants |
|-----------|------------|-----------------------------|----------|------------------------|
| 1         | Field days | 1                           | 15/01/10 | 20                     |
|           |            | 1                           | 01/02/10 | 25                     |
|           |            | 1                           | 06/02/10 | 24                     |
|           |            | 1                           | 11/02/10 | 21                     |
|           |            | 1                           | 16/02/10 | 20                     |
|           |            | 1                           | 25/02/10 | 22                     |
|           |            | 1                           | 02/10/10 | 17                     |
|           |            | 1                           | 02/10/10 | 20                     |
|           |            | 1                           | 03/10/10 | 15                     |
|           |            | 1                           | 03/10/10 | 14                     |
|           |            | 1                           | 04/10/10 | 14                     |
|           |            | 1                           | 04/10/10 | 19                     |
|           |            | 1                           | 05/10/10 | 16                     |
|           |            | 1                           | 05/10/10 | 15                     |
|           |            | 1                           | 06/10/10 | 14                     |
|           |            | 1                           | 06/10/10 | 14                     |
|           |            | 1                           | 07/10/10 | 13                     |
|           |            | 1                           | 07/10/10 | 12                     |
|           |            | 1                           | 08/10/10 | 18                     |
|           |            | 1                           | 08/10/10 | 13                     |
|           |            | 1                           | 09/10/10 | 11                     |
|           |            | 1                           | 09/10/10 | 10                     |
|           |            | 1                           | 10/10/10 | 13                     |
|           |            | 1                           | 10/10/10 | 12                     |
|           |            | 1                           | 11/10/10 | 16                     |
|           |            | 1                           | 12/10/10 | 11                     |
|           |            | 1                           | 13/10/10 | 16                     |
|           |            | 1                           | 14/10/10 | 12                     |

|   | Total                                | 28 |          | 447 |
|---|--------------------------------------|----|----------|-----|
| 2 | Farmers Training                     | 1  | 13/10/09 | 12  |
|   |                                      | 1  | 23/10/09 | 23  |
|   |                                      | 1  | 18/11/09 | 12  |
|   |                                      | 1  | 20/11/09 | 15  |
|   |                                      | 1  | 26/11/09 | 30  |
|   |                                      | 1  | 03/12/09 | 16  |
|   |                                      | 1  | 13/10/09 | 12  |
|   |                                      | 1  | 23/10/09 | 23  |
|   |                                      | 1  | 16/01/10 | 16  |
|   |                                      | 1  | 09/03/10 | 15  |
|   |                                      | 1  | 20/03/10 | 17  |
|   |                                      | 1  | 22/04/10 | 18  |
|   |                                      | 1  | 19/05/10 | 18  |
|   |                                      | 1  | 01/06/10 | 16  |
|   |                                      | 1  | 21/07/10 | 16  |
|   |                                      | 1  | 23/07/10 | 13  |
|   |                                      | 1  | 29/07/10 | 21  |
|   |                                      | 1  | 25/08/10 | 20  |
|   |                                      | 1  | 20/09/10 | 14  |
|   |                                      | 1  | 24/09/10 | 17  |
|   | Total                                | 20 |          | 344 |
| 3 | Media coverage                       | 3  |          |     |
| 4 | Training for extension functionaries | 1  | 02/07/10 | 25  |
|   |                                      | 1  | 23/07/10 | 25  |
|   |                                      | 1  | 08/10/10 | 30  |
|   |                                      | 3  |          | 80  |

#### C. Details of FLD on Enterprises

#### (i) Farm Implements:

| Sr. No. | Physical achievement   | Demonstration                        |                         |  |  |  |  |  |
|---------|------------------------|--------------------------------------|-------------------------|--|--|--|--|--|
|         |                        | No. of<br>Demonstration<br>(hectare) | No. of<br>beneficiaries |  |  |  |  |  |
| 1       | Seed drill             | 17 ha                                | 15                      |  |  |  |  |  |
| 2       | Rotavator              | 97 ha                                | 28                      |  |  |  |  |  |
| 3       | Shredder               | 4                                    | 4                       |  |  |  |  |  |
| 4       | Seed dressing drum     | 10                                   | 10                      |  |  |  |  |  |
| 5       | Cotton stalk Pooler    | 1                                    | 1                       |  |  |  |  |  |
| 6       | Solar cooker           | 4                                    | 4                       |  |  |  |  |  |
| 7       | Solar lantern          | 4                                    | 4                       |  |  |  |  |  |
| 8       | Chaff cutter           | 27                                   | 27                      |  |  |  |  |  |
| 9       | Groundnut decorticator | 5                                    | 5                       |  |  |  |  |  |

#### (ii) Livestock Enterprises: De-worming in animal (Buffalo)

| Enterprise | Breed                     | Year   | Treatment                        | No. of farmers | No. of animals,             | Performance<br>parameters/<br>indicators |                           |        | yield<br>day) |  |
|------------|---------------------------|--------|----------------------------------|----------------|-----------------------------|--|---------------------------|--------|---------------|--|
|            |                           |        |                                  |                |                             | indic                                    | ators                     | Demo   | L check       |  |
| 1          | 2                         | 3      | 4                                | 5              | 6                           | 7  |                           | 8      | 9             |  |
| Livestock  | Buffalo<br>(Non Descript) | 09-10  | Panacure<br>Tablets              | 10             | 20                          |  | Milk<br>Production        |        | 10            |  |
| Cost of Ir | Cost of Input (Rs.)       |        | Cost of Milk<br>Production (Rs.) |                | Gross Return<br>(Rs./Month) |  | Net Return<br>(Rs./Month) |        | BCR           |  |
| Demo       | Local                     | Demo   | Local                            | Demo           | Local                       | Demo                                     | Local                     | Demo   | Local         |  |
| 10         | 11                        | 12     | 13                               | 14             | 15                          | 16                                       | 17                        | 18     | 19            |  |
| 43/-       | 00                        | 3163/- | 2820/-                           | 7200/-         | 6000/-                      | 4037/-                                   | 3180/-                    | 1:1.27 | 1:1.12        |  |

#### (iii) Other Enterprises: NIL

#### 3.3 Achievements on Training

# (Including the sponsored, vocational, FLD and trainings under Rainwater Harvesting Unit):

#### A) ON Campus

| Thematic area                                 | No. of  |          |        |        | Pa   | rticipa | nts |     |        |      |
|---|---------|----------|--------|--------|------|---------|-----|-----|--------|------|
|   | courses |          | Others | 6      |      | SC/ST   | '   | Gr  | and To | otal |
|   |         | M        | F      | T      | M    | F       | T   | M   | F      | T    |
|   |         | (A) Farı | ners & | Farm V | Nome | n       |     |     |        |      |
| I Crop Production                             | 12      | 199      | 0      | 199    | 42   | 0       | 42  | 241 | -      | 241  |
| Weed Management                               | 1       | 13       | 0      | 13     | 1    | 0       | 1   | 14  | 0      | 14   |
| Resource<br>Conservation<br>Technologies      | 2       | 26       | 0      | 26     | 8    | 0       | 8   | 34  | 0      | 34   |
| Cropping Systems                              | -       | -        | -      | -      | -    | -       | -   | -   | -      | -    |
| Crop<br>Diversification                       | -       | -        | -      | -      | -    | -       | -   | -   | -      | -    |
| Integrated Farming                            | -       | -        | -      | -      | -    | -       | -   | -   | -      | -    |
| Water management                              | -       | -        | -      | -      | -    | -       | -   | -   | -      | -    |
| Seed production                               | 7       | 126      | 0      | 126    | 28   | 0       | 28  | 154 | 0      | 154  |
| Nursery<br>management                         | -       | -        | -      | -      | -    | -       | -   | -   | -      | -    |
| Integrated Crop<br>Management                 | 2       | 34       | 0      | 34     | 5    | 0       | 5   | 39  | 0      | 39   |
| Fodder production                             | -       | -        | -      | -      | -    | -       | -   | -   | -      | -    |
| Production of organic inputs                  | -       | -        | -      | -      | -    | -       | -   | -   | -      | -    |
| II Horticulture                               | 1       | 41       | 0      | 41     | 14   | 0       | 14  | 55  | 0      | 55   |
| a) Vegetable Crops                            | -       | -        | -      | -      | -    | -       | -   | -   | -      | -    |
| Production of low volume and high value crops | -       | -        | -      | -      | -    | -       | -   | -   | -      | -    |
| Off-season vegetables                         | -       | -        | -      | -      | -    | -       | -   | -   | -      | -    |
| Nursery raising                               | -       | -        | -      | -      | -    | -       | -   | -   | -      | -    |
| Exotic vegetables like Broccoli               | -       | -        | -      | -      | -    | -       | -   | -   | -      | -    |

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| Export potential vegetables                           | - | -  | - | -  | -  | - | -  | -  | - | -  |
|---|---|----|---|----|----|---|----|----|---|----|
| Grading and standardization                           | - | -  | - | -  | -  | - | -  | -  | - | -  |
| Protective cultivation (Green Houses, Shade Net etc.) | 1 | 41 | 0 | 41 | 14 | 0 | 14 | 55 | 0 | 55 |
| b) Fruits   | - | -  | - | -  | -  | - | -  | -  | - | -  |
| Training and Pruning                                  | - | -  | - | -  | -  | - | -  | -  | - | -  |
| Layout and<br>Management of<br>Orchards               | - | -  | - | -  | -  | - | -  | -  | - | -  |
| Cultivation of Fruit                                  | - | -  | - | -  | -  | - | -  | -  | - | -  |
| Management of young plants/orchards                   | - | -  | - | -  | -  | - | -  | -  | - | -  |
| Rejuvenation of old orchards                          | - | -  | - | -  | -  | - | -  | -  | - | -  |
| Export potential fruits                               | - | -  | - | -  | -  | - | -  | -  | - | -  |
| Micro irrigation systems of orchards                  | - | -  | - | -  | -  | - | -  | -  | - | -  |
| Plant propagation techniques                          | - | -  | - | -  | -  | - | -  | -  | - | -  |
| c) Ornamental<br>Plants                               | - | -  | - | -  | -  | - | -  | -  | - | -  |
| Nursery<br>Management                                 | - | -  | - | -  | -  | - | -  | -  | - | -  |
| Management of potted plants                           | - | -  | - | -  | -  | - | -  | -  | - | -  |
| Export potential of ornamental plants                 | - | -  | - | -  | -  | - | -  | -  | - | -  |
| Propagation<br>techniques of<br>Ornamental Plants     | - | -  | - | -  | -  | - | -  | -  | - | -  |
| d) Plantation crops                                   | - | -  | - | -  | -  | - | -  | -  | - | -  |
| Production and<br>Management<br>technology            | - | -  | - | -  | -  | - | -  | -  | - | -  |
| Processing and  | - | -  | - | -  | -  | - | -  | -  | - | -  |

| value addition                                   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|
| e) Tuber crops                                   | - | - | - | - | - | - | - | - | - | - |
| Production and<br>Management<br>technology       | - | - | - | - | - | - | - | - | - | - |
| Processing and value addition                    | - | - | - | - | - | - | - | - | - | - |
| f) Spices  | - | - | - | - | - | - | - | - | - | - |
| Production and<br>Management<br>technology       | - | - | - | - | - | - | - | - | - | - |
| Processing and value addition                    | - | - | - | - | - | - | - | - | - | - |
| g) Medicinal and<br>Aromatic Plants              | - | - | - | - | - | - | - | - | - | - |
| Nursery<br>management                            | - | - | - | - | - | - | - | - | - | - |
| Production and management technology             | - | - | - | - | - | - | - | - | - | - |
| Post harvest<br>technology and<br>value addition | - | - | - | - | - | - | - | - | - | - |
| III Soil Health and<br>Fertility<br>Management   | - | - | - | - | - | - | - | - | - | - |
| Soil fertility<br>management                     | - | - | - | - | - | - | - | - | - | - |
| Soil and Water<br>Conservation                   | - | - | - | - | - | - | - | - | - | - |
| Integrated Nutrient<br>Management                | - | - | - | - | - | - | - | - | - | - |
| Production and use of organic inputs             | - | - | - | - | - | - | - | - | - | - |
| Management of Problematic soils                  | - | - | - | - | - | - | - | - | - | - |
| Micro nutrient deficiency in crops               | - | - | - | - | - | - | - | - | - | - |
| Nutrient Use<br>Efficiency                       | - | - | - | - | - | - | - | - | - | - |
| Soil and Water<br>Testing                        | - | - | - | - | - | - | - | - | - | - |

IV Livestock Production and Management Dairy Management Poultry Management Piggery Management Rabbit Management Disease Management Feed management Production of quality animal products V Home Science/Women empowerment Household food security by kitchen gardening and nutrition gardening Design and deve. of low/minimum cost diet Designing and development for high nutrient efficiency diet Minimization of nutrient loss in processing Gender mainstreaming through SHGs Storage loss minimization techniques Value addition Income generation activities for

| empowerment of rural Women                                       |   |    |   |    |    |   |    |    |   |    |
|--|---|----|---|----|----|---|----|----|---|----|
| Location specific drudgery reduction technologies                | - | -  | - | -  | -  | - | -  | -  | - | -  |
| Rural Crafts   | _ | -  | - | -  | -  | - | _  | -  | - | -  |
| Women and child care   | - | -  | - | -  | -  | - | -  | -  | - | -  |
| VI Agril.<br>Engineering   | 3 | 39 | 0 | 39 | 6  | 0 | 6  | 45 | 0 | 45 |
| Installation and maintenance of micro irrigation systems         | 2 | 23 | 0 | 23 | 3  | 0 | 3  | 26 | 0 | 26 |
| Use of Plastics in farming practices                             | - | -  | - | -  | -  | - | -  | -  | - | -  |
| Production of small tools and implements                         | - | -  | - | -  | -  | - | -  | -  | - | -  |
| Repair and<br>maintenance of<br>farm machinery<br>and implements | 1 | 16 | 0 | 16 | 3  | 0 | 3  | 19 | 0 | 19 |
| Small scale processing and value addition                        | - | -  | - | -  | -  | - | -  | -  | - | -  |
| Post Harvest<br>Technology                                       | - | -  | - | -  | -  | - | -  | -  | - | -  |
| VII Plant<br>Protection  | 4 | 52 | 0 | 52 | 12 | 0 | 12 | 64 | 0 | 64 |
| Integrated Pest<br>Management                                    | 4 | 52 | 0 | 52 | 12 | 0 | 12 | 64 | 0 | 64 |
| Integrated Disease<br>Management                                 | - | -  | - | -  | -  | - | -  | -  | - | -  |
| Bio-control of pests and diseases                                | - | -  | - | -  | -  | - | -  | -  | - | -  |
| Production of bio control agents and bio pesticides              | - | -  | - | -  | -  | - | -  | -  | - | -  |
| VIII Fisheries   | _ | -  | - | -  | -  | - | -  | -  | - | -  |
| Integrated fish farming  | - | -  | - | -  | -  | - | -  | -  | - | -  |

| Corn broading and  |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|
| Carp breeding and hatchery management                        | - | - | - | - | - | - | - | - | - | - |
| Carp fry and fingerling rearing                              | - | - | - | - | - | - | - | - | - | - |
| Composite fish culture                                       | - | - | - | - | - | - | - | - | - | - |
| Hatchery<br>management and<br>culture of<br>freshwater prawn | - | - | - | - | - | - | - | - | - | - |
| Breeding and culture of ornamental fishes                    | - | - | - | - | - | - | - | - | - | - |
| Portable plastic carp hatchery                               | - | - | - | - | - | - | - | - | - | - |
| Pen culture of fish and prawn                                | - | - | - | - | - | - | - | - | - | - |
| Shrimp farming   | - | - | - | - | - | - | - | - | - | - |
| Edible oyster farming  | - | - | - | - | - | - | - | - | - | - |
| Pearl culture  | - | - | - | - | - | - | - | - | - | - |
| Fish processing and value addition                           | - | - | - | - | - | - | - | - | - | - |
| IX Production of Inputs at site                              | - | _ | - | - | _ | - | - | - | - | - |
| Seed Production  | - | - | - | - | - | - | - | - | - | - |
| Planting material production                                 | - | - | - | - | - | - | - | - | - | - |
| Bio-agents production  | - | - | - | - | - | - | - | - | - | - |
| Bio-pesticides production                                    | - | - | - | - | - | - | - | - | - | - |
| Bio-fertilizer production                                    | - | - | - | - | - | - | - | - | - | - |
| Vermi-compost production                                     | - | - | - | - | - | - | - | - | - | - |
| Organic manures production                                   | - | - | - | - | - | - | - | - | - | - |
| Production of fry and fingerlings                            | - | - | - | - | - | - | - | - | - | - |

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| Systems  | 33 | 476 | 58 | 534 | 95 | 0 | 95 | 571 | 58 | 629 |
|--|----|-----|----|-----|----|---|----|-----|----|-----|
| Nursery<br>management<br>Integrated Farming      | -  | -   | -  | -   | -  | - | -  | -   | -  | -   |
| Production technologies                          | -  | -   | -  | -   | -  | - | -  | -   | -  | -   |
| XI Agro-forestry                                 | -  | -   | -  | -   | -  | - | -  | -   | -  | -   |
| WTO and IPR issues                               | -  | -   | -  | -   | -  | - | -  | -   | -  | -   |
| Entrepreneurial development of farmers/youths    | -  | -   | -  | -   | -  | - | -  | -   | -  | -   |
| Mobilization of social capital                   | -  | -   | -  | _   | -  | - | -  | -   | -  | -   |
| Formation and<br>Management of<br>SHGs           | -  | -   | -  | -   | -  | - | -  | -   | -  | -   |
| Group dynamics                                   | -  | -   | -  | -   | -  | - | -  | -   | -  | -   |
| Global warming & climate change                  | 4  | 45  | 0  | 45  | 9  | 0 | 9  | 54  | 0  | 54  |
| X Capacity<br>Building and<br>Group Dynamics     | 4  | 45  | 0  | 45  | 9  | 0 | 9  | 54  | 0  | 54  |
| Production of Fish feed                          | -  | -   | -  | -   | -  | - | -  | -   | -  | -   |
| Production of livestock feed and fodder          | -  | -   | -  | -   | -  | - | -  | -   | -  | -   |
| Small tools and implements                       | -  | -   | -  | -   | -  | - | -  | -   | -  | -   |
| Production of Bee-<br>colonies and wax<br>sheets | -  | -   | -  | -   | -  | - | -  | -   | -  | -   |

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|  |   | (B) | RURA | L YOU | ТН |   |   |    |   |    |
|--|---|-----|------|-------|----|---|---|----|---|----|
| Global warming & climate change                                  | 2 | 26  | 0    | 26    | 4  | 0 | 4 | 30 | 0 | 30 |
| Bee-keeping  | _ | -   | -    | -     | -  | - | - | -  | - | -  |
| Integrated farming   | - | -   | -    | -     | -  | - | - | -  | - | -  |
| Seed production  | - | -   | -    | -     | -  | - | - | -  | - | -  |
| Production of organic inputs                                     | - | _   | _    | -     | -  | - | - | -  | - | _  |
| Integrated Farming   | - | -   | -    | -     | -  | - | - | -  | - | -  |
| Planting material production                                     | - | -   | -    | -     | -  | - | - | -  | - | -  |
| Vermi-culture  | - | -   | -    | -     | -  | - | - | -  | - | -  |
| Sericulture  | _ | -   | -    | -     | -  | - | - | -  | - | -  |
| Protected cultivation of vegetable crops                         | - | -   | -    | -     | -  | - | - | -  | - | -  |
| Commercial fruit production                                      | - | _   | -    | -     | -  | - | - | -  | - | -  |
| Repair and<br>maintenance of<br>farm machinery<br>and implements | - | -   | -    | -     | -  | - | - | -  | - | -  |
| Nursery<br>Management of<br>Horticulture crops                   | - | -   | -    | -     | -  | - | - | -  | - | -  |
| Training and pruning of orchards                                 | - | -   | -    | -     | -  | - | - | -  | - | -  |
| Value addition   | - | -   | -    | -     | -  | - | - | -  | - | -  |
| Production of quality animal products                            | - | -   | -    | -     | -  | - | - | -  | - | -  |
| Dairying   | - | -   | -    | -     | -  | - | - | -  | - | -  |
| Sheep and goat rearing   | - | -   | -    | -     | -  | - | - | -  | - | -  |
| Quail farming  | - | -   | -    | -     | -  | - | - | -  | - | -  |
| Piggery  | - | -   | -    | -     | -  | - | - | -  | - | -  |
| Rabbit farming   | _ | -   | -    | -     | -  | - | - | -  | - | -  |
| Poultry production   | - | -   | -    | -     | -  | - | - | -  | - | -  |
| Ornamental fisheries   | - | _   | -    | -     | -  | - | - | -  | - | _  |

| Para vets                            | _ |          |    |    |   |    |    |    |    |    |
|--------------------------------------|---|----------|----|----|---|----|----|----|----|----|
|                                      | - | <u>-</u> | _  | _  | _ |    |    | _  | _  |    |
| Para extension workers               | - | -        | -  | -  | - | -  | -  | -  | -  | -  |
| Composite fish culture               | - | -        | -  | -  | - | -  | -  | -  | -  | -  |
| Freshwater prawn culture             | - | -        | -  | -  | - | -  | -  | -  | -  | -  |
| Shrimp farming                       | - | -        | -  | -  | - | -  | -  | -  | -  | -  |
| Pearl culture                        | - | -        | -  | -  | - | -  | -  | -  | -  | -  |
| Cold water fisheries                 | - | -        | -  | -  | - | -  | -  | -  | -  | -  |
| Fish harvest and                     |   |          |    |    |   |    |    |    |    |    |
| processing technology                | - | -        | -  | -  | - | -  | -  | -  | -  | -  |
| Fry and fingerling rearing           | - | -        | -  | -  | - | -  | -  | -  | -  | -  |
| Small scale processing               | - | -        | -  | -  | - | -  | -  | -  | -  | -  |
| Post Harvest<br>Technology           | - | -        | -  | -  | - | -  | -  | -  | -  | -  |
| Tailoring and<br>Stitching           | - | -        | -  | -  | - | -  | -  | -  | -  | -  |
| Rural Crafts                         | - | -        | -  | -  | - | -  | -  | -  | -  | -  |
| Making different house hold products | 1 | 0        | 11 | 11 | 0 | 14 | 14 | 0  | 25 | 25 |
| Water harvesting technology          | 1 | 14       | 0  | 14 | 3 | 0  | 3  | 17 | 0  | 17 |
| TOTAL                                | 4 | 40       | 11 | 51 | 7 | 14 | 21 | 47 | 25 | 72 |

|   |   | (C) Ex | tensio | n Perso | nnel |   |    |     |   |     |
|---|---|--------|--------|---------|------|---|----|-----|---|-----|
| Productivity enhancement in field crops | 3 | 65     | 0      | 65      | 15   | 0 | 15 | 80  | 0 | 80  |
| Integrated Pest<br>Management           | - | -      | -      | -       | -    | - | -  | -   | - | -   |
| Integrated Nutrient management          | - | -      | -      | -       | -    | - | -  | -   | - | -   |
| Rejuvenation of old orchards            | - | -      | -      | -       | -    | - | -  | -   | - | -   |
| Protected cultivation                   | 1 | 103    | 0      | 103     | 18   | 0 | 18 | 121 | 0 | 121 |

| technology  |    |     |    |     |     |    |     |     |    |     |
|---|----|-----|----|-----|-----|----|-----|-----|----|-----|
| Formation and<br>Management of<br>SHGs                | -  | -   | -  | -   | -   | -  | -   | -   | -  | _   |
| Group Dynamics<br>and farmers<br>organization         | -  | -   | -  | -   | -   | -  | -   | -   | -  | -   |
| Information networking among farmers                  | -  | -   | -  | -   | -   | -  | -   | -   | -  | -   |
| Capacity building for ICT application                 | -  | -   | -  | -   | -   | -  | -   | -   | -  | -   |
| Care and maintenance of farm machinery and implements | -  | -   | -  | -   | -   | -  | -   | -   | -  | -   |
| WTO and IPR issues                                    | -  | -   | -  | _   | -   | -  | -   | -   | -  | -   |
| Management in farm animals                            | -  | -   | -  | -   | -   | -  | -   | -   | -  | -   |
| Livestock feed and fodder production                  | -  | -   | -  | -   | -   | -  | -   | -   | -  | -   |
| Household food security                               | -  | -   | -  | -   | -   | -  | -   | -   | -  | -   |
| Women and Child care                                  |    |     |    |     |     |    |     |     |    |     |
| Low cost and<br>nutrient efficient<br>diet designing  | -  | -   | -  | -   | -   | -  | -   | -   | -  | -   |
| Production and use of organic inputs                  | -  | -   | -  | -   | -   | -  | -   | -   | -  | -   |
| Gender<br>mainstreaming<br>through SHGs               | -  | -   | -  | -   | -   | -  | -   | -   | -  | -   |
| TOTAL   | 4  | 168 | 0  | 168 | 33  | 0  | 33  | 201 | 0  | 201 |
| GRAND TOTAL   | 41 | 684 | 69 | 753 | 135 | 14 | 149 | 819 | 83 | 902 |

## B) OFF Campus

| Thematic area                                 | No. of  |     |        |           | Pa    | rticipa | ants |    |        |     |
|---|---------|-----|--------|-----------|-------|---------|------|----|--------|-----|
|   | courses |     | Others | S         |       | SC/ST   | 1    | Gr | and To | tal |
|   |         | M   | F      | T         | M     | F       | T    | M  | F      | T   |
|   |         | (A) | Farme  | rs & Fari | m Won | nen     |      |    |        |     |
| I Crop<br>Production                          | 5       | 80  | 0      | 80        | 5     | 0       | 5    | 85 | 0      | 85  |
| Weed<br>Management                            | 1       | 14  | 0      | 14        | 1     | 0       | 1    | 15 | 0      | 15  |
| Resource<br>Conservation<br>Technologies      | -       | -   | -      | -         | -     | -       | -    | -  | -      | -   |
| Cropping Systems                              | -       | -   | -      | -         | -     | -       | -    | -  | -      | -   |
| Crop Diversification                          | -       | -   | -      | -         | -     | -       | -    | -  | -      | -   |
| <b>Integrated Farming</b>                     | 1       | 20  | 0      | 20        | 1     | 0       | 1    | 21 | 0      | 21  |
| Water<br>management                           | 1       | 13  | 0      | 13        | 1     | 0       | 1    | 14 | 0      | 14  |
| Seed production                               | -       | -   | -      | -         | -     | -       | _    | -  | -      | -   |
| Nursery<br>management                         | -       | -   | -      | -         | -     | -       | -    | -  | -      | -   |
| Integrated Crop<br>Management                 | 2       | 33  | 0      | 33        | 2     | 0       | 2    | 35 | 0      | 35  |
| Fodder production                             | -       | -   | -      | -         | -     | -       | -    | -  | -      | -   |
| Production of organic inputs                  | -       | -   | -      | -         | -     | -       | -    | -  | -      | -   |
| II Horticulture                               | -       | -   | -      | -         | -     | -       | -    | -  | -      | _   |
| a) Vegetable<br>Crops                         | -       | -   | -      | -         | -     | -       | -    | -  | -      | -   |
| Production of low volume and high value crops | -       | -   | -      | -         | -     | -       | -    | -  | -      | -   |
| Off-season vegetables                         | -       | -   | -      | -         | -     | -       | -    | -  | -      | -   |
| Nursery raising                               | -       | -   | -      | -         | -     | -       | -    | -  | -      | -   |
| Exotic vegetables like Broccoli               | -       | -   | -      | -         | -     | -       | -    | -  | -      | -   |
| Export potential vegetables                   | -       | -   | -      | -         | -     | -       | -    | -  | -      | -   |

| Grading and standardization                           | - | - | - | - | - | - | - | - | - | - |
|---|---|---|---|---|---|---|---|---|---|---|
| Protective cultivation (Green Houses, Shade Net etc.) | - | - | - | - | - | - | - | - | - | - |
| b) Fruits   | - | - | - | - | - | - | - | - | - | - |
| Training and Pruning                                  | - | - | - | - | - | - | - | - | - | - |
| Layout and<br>Management of<br>Orchards               | - | - | - | - | - | - | - | - | - | - |
| Cultivation of Fruit                                  | - | - | - | - | - | - | - | - | - | - |
| Management of young plants/orchards                   | - | - | - | - | - | - | - | - | - | - |
| Rejuvenation of old orchards                          | - | - | - | - | - | - | _ | - | - | - |
| Export potential fruits                               | - | - | - | - | - | - | - | - | - | - |
| Micro irrigation<br>systems of<br>orchards            | - | - | - | - | - | - | - | - | - | - |
| Plant propagation techniques                          | - | - | - | - | - | - | - | - | - | - |
| c) Ornamental<br>Plants                               | - | - | - | - | - | - | - | - | - | - |
| Nursery<br>Management                                 | - | - | - | - | - | - | - | - | - | - |
| Management of potted plants                           | - | - | - | - | - | - | - | - | - | - |
| Export potential of ornamental plants                 | - | - | - | - | - | - | - | - | - | - |
| Propagation<br>techniques of<br>Ornamental<br>Plants  | - | - | - | - | - | - | - | - | - | - |
| d) Plantation crops                                   | - | - | - | - | - | - | - | - | - | - |

| Production and<br>Management<br>technology       | - | -  | - | -  | - | - | - | -  | - | -  |
|--|---|----|---|----|---|---|---|----|---|----|
| Processing and value addition                    | - | -  | - | -  | - | - | - | -  | - | -  |
| e) Tuber crops                                   | - | -  | - | -  | - | - | - | -  | - | -  |
| Production and<br>Management<br>technology       | - | -  | - | -  | - | - | - | -  | - | -  |
| Processing and value addition                    | - | -  | - | -  | - | - | - | -  | - | -  |
| f) Spices  | - | -  | - | -  | - | - | - | -  | - | -  |
| Production and<br>Management<br>technology       | - | -  | - | -  | - | - | - | -  | - | -  |
| Processing and value addition                    | - | -  | - | -  | - | - | - | -  | - | -  |
| g) Medicinal and<br>Aromatic Plants              | - | -  | - | -  | - | - | - | -  | - | -  |
| Nursery<br>management                            | - | -  | - | -  | - | - | - | -  | - | -  |
| Production and management technology             | - | -  | - | -  | - | - | - | -  | - | -  |
| Post harvest<br>technology and<br>value addition | - | -  | - | -  | - | - | - | -  | - | -  |
| III Soil Health<br>and Fertility<br>Management   | 3 | 52 | 0 | 52 | 6 | 0 | 6 | 58 | 0 | 58 |
| Soil fertility management                        | 1 | 19 | 0 | 19 | 2 | 0 | 2 | 21 | 0 | 21 |
| Soil and Water<br>Conservation                   | - | -  | - | -  | - | - | - | -  | - | -  |
| Integrated<br>Nutrient<br>Management             | 1 | 17 | 0 | 17 | 1 | 0 | 1 | 18 | 0 | 18 |
| Production and use of organic inputs             | - | -  | - | -  | - | - | - | -  | - | -  |
| Management of Problematic soils                  | - | -  | - | -  | - | - | - | -  | _ | -  |

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| Micro nutrient deficiency in crops  | -  | -  | -   | -   | -  | -  | -  | -   | -   | -   |
|---|----|----|-----|-----|----|----|----|-----|-----|-----|
| Nutrient Use<br>Efficiency  | -  | -  | -   | -   | -  | -  | -  | -   | -   | -   |
| Soil and Water<br>Testing   | 1  | 16 | 0   | 16  | 3  | 0  | 3  | 19  | 0   | 19  |
| IV Livestock<br>Production and<br>Management  | 7  | 95 | 0   | 95  | 14 | 0  | 14 | 109 | 0   | 109 |
| Dairy<br>Management   | 3  | 42 | 0   | 42  | 6  | 0  | 6  | 48  | 0   | 48  |
| Poultry<br>Management   | -  | -  | -   | -   | -  | -  | -  | -   | -   | -   |
| Piggery<br>Management   | -  | -  | -   | -   | -  | -  | -  | -   | -   | -   |
| Rabbit<br>Management  | -  | -  | -   | -   | -  | -  | -  | -   | -   | -   |
| Disease<br>Management   | 2  | 27 | 0   | 27  | 4  | 0  | 4  | 31  | 0   | 31  |
| Feed management   | 2  | 26 | 0   | 26  | 4  | 0  | 4  | 30  | 0   | 30  |
| Production of quality animal products   | -  | -  | -   | -   | -  | -  | -  | -   | -   | -   |
| V Home<br>Science/Women<br>empowerment  | 10 | 0  | 156 | 156 | 0  | 50 | 50 | 0   | 206 | 206 |
| Household food<br>security by<br>kitchen<br>gardening and<br>nutrition<br>gardening | -  | -  | -   | -   | -  | -  | -  | -   | -   | -   |
| Design and development of low/minimum cost diet                                     | 1  | 0  | 17  | 17  | 0  | 0  | 0  | 0   | 17  | 17  |
| Designing and development for high nutrient efficiency diet                         | 1  | 0  | 15  | 15  | 0  | 3  | 3  | 0   | 18  | 18  |
| Minimization of   | 1  | 0  | 20  | 20  | 0  | 1  | 1  | 0   | 21  | 21  |

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| nutrient loss in  |   |    |    |    |   |    |    |    |    |    |
|---|---|----|----|----|---|----|----|----|----|----|
| processing  |   |    |    |    |   |    |    |    |    |    |
| Gender<br>mainstreaming<br>through SHGs                                 | - | -  | -  | -  | - | -  | -  | -  | -  | -  |
| Storage loss<br>minimization<br>techniques                              | 1 | 0  | 15 | 15 | 0 | 0  | 0  | 0  | 15 | 15 |
| Value addition  | 3 | 0  | 33 | 33 | 0 | 22 | 22 | 0  | 55 | 55 |
| Income<br>generation<br>activities for<br>empowerment of<br>rural Women | 1 | 0  | 23 | 23 | 0 | 10 | 10 | 0  | 33 | 33 |
| Location specific drudgery reduction technologies                       | 2 | 0  | 33 | 33 | 0 | 14 | 14 | 0  | 47 | 47 |
| Rural Crafts  | - | -  | -  | -  | - | -  | -  | -  | -  | -  |
| Women and child care  | - | -  | -  | -  | - | -  | -  | -  | -  | -  |
| VI Agril.<br>Engineering  | 4 | 57 | 0  | 57 | 3 | 0  | 3  | 60 | 0  | 60 |
| Installation and maintenance of micro irrigation systems                | - | -  | -  | -  | - | -  | -  | -  | -  | -  |
| Use of Plastics in farming practices                                    | - | -  | -  | -  | - | -  | -  | -  | -  | -  |
| Production of small tools and implements                                | 3 | 43 | 0  | 43 | 2 | 0  | 2  | 45 | 0  | 45 |
| Repair and<br>maintenance of<br>farm machinery<br>and implements        | 1 | 14 | 0  | 14 | 1 | 0  | 1  | 15 | 0  | 15 |
| Small scale   | _ | _  | -  | -  | _ | -  | -  | -  | -  | -  |
| processing and value addition   |   |    |    |    |   |    |    |    |    |    |
|   | - | -  | -  | -  | - | -  | -  | -  | -  | -  |

| Integrated Pest   | 4 | 58 | 0 | 58 | 7 | 0 | 7 | 65 | 0 | 65 |
|---|---|----|---|----|---|---|---|----|---|----|
| Management  | 4 | 36 | 0 | 56 |   | U | / | 65 | U | 03 |
| Integrated Disease<br>Management                                | 2 | 26 | 0 | 26 | 7 | 0 | 7 | 33 | 0 | 33 |
| Bio-control of pests and diseases                               | 2 | 31 | 0 | 31 | 3 | 0 | 3 | 34 | 0 | 34 |
| Production of bio control agents and bio pesticides             | - | -  | - | -  | - | - | - | -  | - | -  |
| VIII Fisheries  | - | -  | - | -  | - | - | - | -  | - | -  |
| Integrated fish farming   | - | -  | - | -  | - | - | - | -  | - | -  |
| Carp breeding and hatchery management                           | - | -  | - | -  | - | - | - | -  | - | -  |
| Carp fry and fingerling rearing                                 | - | -  | - | -  | - | - | - | -  | - | -  |
| Composite fish culture  | - | -  | - | -  | - | - | - | -  | - | -  |
| Hatchery<br>management and<br>culture of<br>freshwater<br>prawn | - | -  | - | -  | - | - | - | -  | - | -  |
| Breeding and culture of ornamental fishes                       | - | -  | - | -  | - | - | - | -  | - | -  |
| Portable plastic carp hatchery                                  | - | -  | - | -  | - | - | - | -  | - | -  |
| Pen culture of fish and prawn                                   | - | -  | - | -  | - | - | - | -  | - | -  |
| Shrimp farming  | - | -  | - | -  | - | - | - | -  | - | -  |
| Edible oyster farming   | - | -  | - | -  | - | - | - | -  | - | -  |
| Pearl culture   | - | -  | - | -  | - | - | - | -  | - | _  |
| Fish processing and value addition                              | - | -  | - | -  | - | - | _ | -  | - | -  |
| IX Production of Inputs at site                                 | 2 | 33 | 0 | 33 | 9 | 0 | 9 | 42 | 0 | 42 |
| Seed Production   | 2 | 33 | 0 | 33 | 9 | 0 | 9 | 42 | 0 | 42 |
| Planting material   | - | _  | _ | _  | - | _ | _ | _  | _ | _  |

| production                                      |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|
| Bio-agents production                           | - | - | - | - | - | - | - | - | - | - |
| Bio-pesticides production                       | - | - | - | - | - | - | - | - | - | - |
| Bio-fertilizer production                       | - | - | - | - | - | - | _ | - | - | _ |
| Vermi-compost production                        | - | - | - | - | - | - | - | - | - | - |
| Organic manures production                      | - | - | - | - | - | - | - | - | - | - |
| Production of fry and fingerlings               | - | - | - | - | - | - | - | - | - | - |
| Production of<br>Bee-colonies and<br>wax sheets | - | - | - | - | - | - | - | - | - | - |
| Small tools and implements                      | - | - | - | - | - | - | - | - | - | - |
| Production of livestock feed and fodder         | - | - | - | - | - | - | - | - | - | - |
| Production of<br>Fish feed                      | - | - | - | - | - | - | - | - | - | - |
| X Capacity<br>Building and<br>Group Dynamics    | - | - | - | - | - | - | - | - | - | - |
| Leadership<br>development                       | - | - | - | - | - | - | - | - | - | - |
| Group dynamics                                  | - | - | - | - | - | - | - | - | - | _ |
| Formation and<br>Management of<br>SHGs          | - | - | - | - | - | - | - | - | - | - |
| Mobilization of social capital                  | - | - | - | - | - | - | - | - | - | - |
| Entrepreneurial development of farmers/youths   | - | - | - | - | - | - | - | - | - | - |
| WTO and IPR issues                              | - | - | - | - | - | - | - | - | - | - |
| XI Agro-forestry                                | - | - | - | - | - | - | - | - | - | - |
| Production                                      | - | - | - | - | - | - | - | - | - | - |

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| technologies                  |    |     |     |     |    |    |     |     |     |     |
|-------------------------------|----|-----|-----|-----|----|----|-----|-----|-----|-----|
| Nursery<br>management         | -  | -   | -   | -   | -  | -  | -   | -   | -   | -   |
| Integrated<br>Farming Systems | -  | -   | -   | -   | -  | -  | -   | -   | -   | -   |
| XII Extension<br>Education    | 3  | 35  | 0   | 35  | 8  | 0  | 8   | 43  | 0   | 43  |
| TOTAL                         | 42 | 467 | 156 | 623 | 62 | 50 | 112 | 529 | 206 | 735 |

|  |   |   | (B) RU | JRAL YO | OUTH |   |   |   |   |   |
|--|---|---|--------|---------|------|---|---|---|---|---|
| Mushroom<br>Production   | - | - | -      | -       | -    | - | - | - | - | - |
| Bee-keeping  | - | - | -      | -       | -    | - | - | - | - | - |
| Integrated farming   |   |   |        |         |      |   |   |   |   |   |
| Seed production  | - | - | -      | -       | -    | - | - | - | - | - |
| Production of organic inputs                                     | - | - | -      | -       | -    | - | - | - | - | - |
| Planting material production                                     | - | - | -      | -       | -    | - | - | - | - | - |
| Vermi-culture  | - | - | -      | -       | -    | - | - | - | - | - |
| Sericulture  | - | - | -      | -       | -    | - | - | - | - | - |
| Protected cultivation of vegetable crops                         | - | - | -      | -       | -    | - | - | - | - | - |
| Commercial fruit production                                      | - | - | -      | -       | -    | - | - | - | - | - |
| Repair and<br>maintenance of<br>farm machinery<br>and implements | - | - | -      | -       | -    | - | - | - | - | - |
| Nursery<br>Management of<br>Horticulture crops                   | - | - | -      | -       | -    | - | - | - | - | - |
| Training and pruning of orchards                                 | - | - | -      | -       | -    | - | - | - | - | - |
| Value addition   | - | - | -      | -       | -    | - | - | - | - | - |
| Production of quality animal                                     | - | - | -      | -       | -    | - | - | - | - | - |

| products                               |   |    |   |    |   |   |   |    |   |    |
|--|---|----|---|----|---|---|---|----|---|----|
| Dairying                               | - | -  | - | -  | - | - | - | -  | - | -  |
| Sheep and goat rearing                 | - | -  | - | -  | - | - | - | -  | - | -  |
| Quail farming                          | - | -  | - | -  | - | - | - | -  | - | -  |
| Piggery                                | - | -  | - | -  | - | - | - | -  | - | -  |
| Rabbit farming                         | - | -  | - | -  | - | - | - | -  | - | -  |
| Poultry production                     | - | -  | - | -  | - | - | - | -  | - | -  |
| Ornamental fisheries                   | - | -  | - | -  | - | - | - | -  | - | -  |
| Para vets                              | - | -  | - | -  | - | - | - | -  | - | -  |
| Para extension workers                 | - | -  | - | -  | - | - | - | -  | - | -  |
| Composite fish culture                 | - | -  | - | -  | - | - | - | -  | - | -  |
| Freshwater prawn culture               | - | -  | - | -  | - | - | - | -  | - | -  |
| Shrimp farming                         | - | -  | - | -  | - | - | - | -  | - | -  |
| Pearl culture                          | - | -  | - | -  | - | - | - | -  | - | -  |
| Cold water fisheries                   | - | -  | - | -  | - | - | - | -  | - | -  |
| Fish harvest and processing technology | - | -  | - | -  | - | - | - | -  | - | -  |
| Fry and fingerling rearing             | - | -  | - | -  | - | - | - | -  | - | -  |
| Small scale processing                 | - | -  | - | -  | - | - | - | -  | - | -  |
| Post Harvest<br>Technology             | - | -  | - | -  | - | - | - | -  | - | -  |
| Tailoring and<br>Stitching             | - | -  | - | -  | - | - | - | -  | - | -  |
| Rural Crafts                           | - | -  | - | -  | - | - | - | -  | - | -  |
| Micro irrigation                       | 1 | 13 | 0 | 13 | 2 | 0 | 2 | 15 | 0 | 15 |
| Kisan club                             | 1 | 11 | 0 | 11 | 3 | 0 | 3 | 14 | 0 | 14 |
| AI                                     | 1 | 11 | 0 | 11 | 4 | 0 | 4 | 15 | 0 | 15 |
| TOTAL                                  | 3 | 35 | 0 | 35 | 9 | 0 | 9 | 44 | 0 | 44 |

.....

|   |   | (( | C) Exte | nsion Pe | rsonne | 1 |   |   |    |    |
|---|---|----|---------|----------|--------|---|---|---|----|----|
| Productivity enhancement in field crops               | - | -  | -       | -        | -      | - | - | - | -  | -  |
| Integrated Pest<br>Management                         | - | -  | -       | -        | -      | - | - | - | -  | -  |
| Integrated<br>Nutrient<br>management                  | - | -  | -       | -        | -      | - | - | - | -  | -  |
| Rejuvenation of old orchards                          | - | -  | -       | -        | -      | - | - | - | -  | -  |
| Protected cultivation technology                      | - | -  | -       | -        | -      | - | - | - | -  | -  |
| Formation and<br>Management of<br>SHGs                | - | -  | -       | -        | -      | - | - | - | -  | -  |
| Group Dynamics<br>and farmers<br>organization         | - | -  | -       | -        | -      | - | - | - | -  | -  |
| Information networking among farmers                  | - | -  | -       | -        | -      | - | - | - | -  | -  |
| Capacity<br>building for ICT<br>application           | - | -  | -       | -        | -      | - | - | - | -  | -  |
| Care and maintenance of farm machinery and implements | - | -  | -       | -        | -      | - | - | - | -  | -  |
| WTO and IPR issues                                    | - | -  | -       | -        | -      | - | - | - | -  | -  |
| Management in farm animals                            | - | -  | -       | -        | -      | - | - | - | -  | -  |
| Livestock feed<br>and fodder<br>production            | - | -  | -       | -        | -      | - | - | - | -  | -  |
| Household food security                               | - | -  | -       | -        | -      | - | - | - | -  | _  |
| Women and<br>Child care                               | 1 | 0  | 32      | 32       | 0      | 6 | 6 | 0 | 38 | 38 |
| Low cost and  | - | -  | -       | -        | -      | - | - | - | -  | -  |

| nutrient efficient diet designing       |    |     |     |     |    |    |     |     |     |     |
|---|----|-----|-----|-----|----|----|-----|-----|-----|-----|
| Production and use of organic inputs    | -  | -   | -   | -   | -  | -  | -   | -   | -   | -   |
| Gender<br>mainstreaming<br>through SHGs | -  | -   | -   | -   | -  | -  | -   | -   | -   | -   |
| TOTAL                                   | 1  | 0   | 32  | 32  | 0  | 6  | 6   | 0   | 38  | 38  |
| GRAND TOTAL                             | 46 | 502 | 188 | 690 | 71 | 56 | 127 | 573 | 244 | 817 |

## C) Consolidated table (ON and OFF Campus)

| Thematic area                            | No. of  |     |        |          | Par   | ticipa | nts |     |        |     |
|--|---------|-----|--------|----------|-------|--------|-----|-----|--------|-----|
|  | courses |     | Others |          |       | SC/ST  | Γ   | Gr  | and To | tal |
|  |         | M   | F      | T        | M     | F      | T   | M   | F      | T   |
|  |         | (A) | Farmer | s & Farı | n Wor | ien    |     |     |        |     |
| I Crop<br>Production                     | 17      | 279 | 0      | 279      | 47    | 0      | 47  | 326 | 0      | 326 |
| Weed<br>Management                       | 2       | 27  | 0      | 27       | 2     | 0      | 2   | 29  | 0      | 29  |
| Resource<br>Conservation<br>Technologies | 2       | 26  | 0      | 26       | 8     | 0      | 8   | 34  | 0      | 34  |
| Cropping<br>Systems                      | -       | -   | -      | -        | _     | -      | -   | -   | -      | -   |
| Crop<br>Diversification                  | -       | -   | -      | -        | _     | -      | -   | -   | -      | _   |
| Integrated<br>Farming                    | 1       | 20  | 0      | 20       | 1     | 0      | 1   | 21  | 0      | 21  |
| Water<br>management                      | 1       | 13  | 0      | 13       | 1     | 0      | 1   | 14  | 0      | 14  |
| Seed production                          | 7       | 126 | 0      | 126      | 28    | 0      | 28  | 154 | 0      | 154 |
| Nursery<br>management                    | -       | -   | -      | -        | -     | -      | -   | -   | -      | -   |
| Integrated Crop<br>Management            | 4       | 67  | 0      | 67       | 7     | 0      | 7   | 74  | 0      | 74  |
| Fodder production                        | -       | -   | -      | -        | -     | -      | -   | -   | -      | -   |
| Production of organic inputs             | -       | -   | -      | -        | -     | -      | -   | -   | -      | -   |

| II Horticulture                                       | 1 | 41 | 0 | 41 | 14 | 0 | 14 | 55 | 0 | 55 |
|---|---|----|---|----|----|---|----|----|---|----|
| a) Vegetable<br>Crops                                 | - | -  | - | -  | -  | - | -  | -  | - | -  |
| Production of low volume and high value crops         | - | -  | - | -  | -  | - | -  | -  | - | -  |
| Off-season vegetables                                 | - | -  | - | -  | -  | - | -  | -  | - | -  |
| Nursery raising                                       | - | -  | - | -  | -  | - | -  | -  | - | -  |
| Exotic vegetables like Broccoli                       | - | -  | - | -  | -  | - | -  | -  | - | -  |
| Export potential vegetables                           | - | -  | - | -  | -  | - | -  | -  | - | -  |
| Grading and standardization                           | - | -  | - | -  | -  | - | -  | -  | - | -  |
| Protective cultivation (Green Houses, Shade Net etc.) | 1 | 41 | 0 | 41 | 14 | 0 | 14 | 55 | 0 | 55 |
| b) Fruits   | - | -  | - | -  | -  | - | -  | -  | - | -  |
| Training and Pruning                                  | - | -  | - | -  | -  | - | -  | -  | - | -  |
| Layout and<br>Management of<br>Orchards               | - | -  | - | -  | -  | - | -  | -  | - | -  |
| Cultivation of Fruit                                  | - | -  | - | -  | -  | - | -  | -  | - | -  |
| Management of young plants/orchards                   | - | -  | - | -  | -  | - | -  | -  | - | -  |
| Rejuvenation of old orchards                          | - | -  | - | -  | -  | - | -  | -  | - | -  |
| Export potential fruits                               | - | -  | - | -  | -  | - | -  | -  | - | -  |
| Micro irrigation<br>systems of<br>orchards            | - | -  | - | -  | -  | - | -  | -  | - | -  |
| Plant propagation techniques                          | - | -  | - | -  | -  | - | -  | -  | - | -  |
| c) Ornamental<br>Plants                               | - | -  | - | -  | -  | - | -  | -  | - | -  |

| NT   |   |    |   |    |   |   |   |    |   |    |
|--|---|----|---|----|---|---|---|----|---|----|
| Nursery<br>Management                                | - | -  | - | _  | - | _ | - | -  | _ | -  |
| Management of potted plants                          | - | -  | - | -  | - | - | - | -  | - | -  |
| Export potential of ornamental plants                | - | -  | - | -  | - | - | - | -  | - | -  |
| Propagation<br>techniques of<br>Ornamental<br>Plants | - | -  | - | -  | - | - | - | -  | - | -  |
| d) Plantation<br>crops                               | - | -  | - | -  | - | - | - | -  | - | -  |
| Production and<br>Management<br>technology           | - | -  | - | -  | - | - | - | -  | - | -  |
| Processing and value addition                        | - | -  | - | -  | - | - | - | -  | - | -  |
| e) Tuber crops                                       | - | -  | - | -  | - | - | - | -  | - | -  |
| Production and<br>Management<br>technology           | - | -  | - | -  | - | - | - | -  | - | -  |
| Processing and value addition                        | - | -  | - | -  | - | - | - | -  | - | -  |
| f) Spices  | - | -  | - | -  | - | - | - | -  | - | -  |
| Production and<br>Management<br>technology           | - | -  | - | -  | - | - | - | -  | - | -  |
| Processing and value addition                        | - | -  | - | -  | - | - | - | -  | - | -  |
| g) Medicinal<br>and Aromatic<br>Plants               | - | -  | - | -  | - | - | - | -  | - | -  |
| Nursery<br>management                                | - | -  | - | -  | - | - | - | -  | - | -  |
| Production and management technology                 | - | -  | - | -  | - | - | - | -  | - | -  |
| Post harvest<br>technology and<br>value addition     | - | -  | - | -  | - | - | - | -  | - | -  |
| III Soil Health                                      | 3 | 52 | 0 | 52 | 6 | 0 | 6 | 58 | 0 | 58 |

| and Fertility<br>Management                             |    |          |   |     |    |   |    |     |   |     |
|---|----|----------|---|-----|----|---|----|-----|---|-----|
| Soil fertility<br>management                            | 1  | 19       | 0 | 19  | 2  | 0 | 2  | 21  | 0 | 21  |
| Soil and Water<br>Conservation                          | -  | -        | - | -   | -  | - | -  | -   | - | -   |
| Integrated<br>Nutrient<br>Management                    | 1  | 17       | 0 | 17  | 1  | 0 | 1  | 18  | 0 | 18  |
| Production and use of organic inputs                    | -  | -        | - | -   | -  | - | -  | -   | - | -   |
| Management of Problematic soils                         | -  | -        | - | -   | -  | - | -  | -   | - | -   |
| Micro nutrient<br>deficiency in<br>crops                | -  | -        | - | -   | -  | - | -  | -   | - | -   |
| Nutrient Use<br>Efficiency                              | -  | -        | - | -   | -  | - | -  | -   | - | -   |
| Soil and Water<br>Testing                               | 1  | 16       | 0 | 16  | 3  | 0 | 3  | 19  | 0 | 19  |
| IV Livestock<br>Production and<br>Management            | 13 | 195      | 0 | 195 | 26 | 0 | 26 | 221 | 0 | 221 |
| Dairy<br>Management                                     | 6  | 99       | 0 | 99  | 11 | 0 | 11 | 110 | 0 | 110 |
| Poultry<br>Management                                   | -  | -        | - | -   | -  | - | -  | -   | - | _   |
| Piggery<br>Management                                   | -  | -        | - | -   | -  | - | -  | -   | - | -   |
| Rabbit<br>Management                                    | -  | -        | - | -   | -  | - | -  | -   | - | -   |
|   |    | • •      | 0 | 39  | 5  | 0 | 5  | 44  | 0 | 44  |
| Disease<br>Management                                   | 3  | 39       | 0 | 39  | 3  |   |    |     |   |     |
|   | 3  | 39<br>57 | 0 | 57  | 10 | 0 | 10 | 67  | 0 | 67  |
| Management  |    |          |   |     |    |   |    |     |   |     |
| Management Feed management Production of quality animal |    |          |   |     |    | 0 |    |     |   |     |

| security by   |   |    |    |    |   |    |    |     |    |     |
|---|---|----|----|----|---|----|----|-----|----|-----|
| kitchen gardening   |   |    |    |    |   |    |    |     |    |     |
| Design and development of low/minimum cost diet                         | 1 | 0  | 17 | 17 | 0 | 0  | 0  | 0   | 17 | 17  |
| Designing and development for high nutrient efficiency diet             | 2 | 0  | 36 | 36 | 0 | 3  | 3  | 0   | 39 | 39  |
| Minimization of nutrient loss in processing                             | 1 | 0  | 20 | 20 | 0 | 1  | 1  | 0   | 21 | 21  |
| Gender<br>mainstreaming<br>through SHGs                                 | - | -  | -  | -  | - | -  | -  | -   | -  | -   |
| Storage loss<br>minimization<br>techniques                              | 1 | 0  | 15 | 15 | 0 | 0  | 0  | 0   | 15 | 15  |
| Value addition  | 4 | 0  | 54 | 54 | 0 | 22 | 22 | 0   | 76 | 76  |
| Income<br>generation<br>activities for<br>empowerment of<br>rural Women | 1 | 0  | 23 | 23 | 0 | 10 | 10 | 0   | 33 | 33  |
| Location specific drudgery reductio technologies                        | 2 | 0  | 33 | 33 | 0 | 14 | 14 | 0   | 47 | 47  |
| Rural Crafts  | - | -  | -  | -  | - | -  | -  | -   | -  | -   |
| Women and child care  | - | -  | -  | -  | - | -  | -  | -   | -  | -   |
| VI Agril.<br>Engineering  | 7 | 96 | 0  | 96 | 9 | 0  | 9  | 105 | 0  | 105 |
| Installation and<br>maintenance of<br>MI systems                        | 2 | 23 | 0  | 23 | 3 | 0  | 3  | 26  | 0  | 26  |
| Use of Plastics in farming practices                                    | - | -  | -  | -  | - | -  | -  | -   | -  | -   |
| Production of small tools and implements                                | 3 | 43 | 0  | 43 | 2 | 0  | 2  | 45  | 0  | 45  |
| Repair and maintenance of   | 2 | 30 | 0  | 30 | 4 | 0  | 4  | 34  | 0  | 34  |

| farm machinery and implements                                |    |     |   |     |    |   |    |     |   |     |
|--|----|-----|---|-----|----|---|----|-----|---|-----|
| Small scale processing and value addition                    | -  | -   | - | -   | -  | - | -  | -   | - | -   |
| Post Harvest Tech  | -  | -   | - | -   | _  | _ | -  | -   | - | -   |
| VII Plant<br>Protection                                      | 12 | 167 | 0 | 167 | 29 | 0 | 29 | 196 | 0 | 196 |
| Integrated PM  | 8  | 110 | 0 | 110 | 19 | 0 | 19 | 129 | 0 | 129 |
| Integrated<br>Disease<br>Management                          | 2  | 26  | 0 | 26  | 7  | 0 | 7  | 33  | 0 | 33  |
| Bio-control of pests and diseases                            | 2  | 31  | 0 | 31  | 3  | 0 | 3  | 34  | 0 | 34  |
| Production of<br>bio control<br>agents and bio<br>pesticides | -  | -   | - | -   | -  | - | -  | -   | - | -   |
| VIII Fisheries   | -  | -   | - | -   | -  | - | -  | -   | - | -   |
| Integrated fish farming                                      | -  | -   | - | -   | -  | - | -  | -   | - | -   |
| Carp breeding and hatchery management                        | -  | -   | - | -   | -  | - | -  | -   | - | -   |
| Carp fry and fingerling rearing                              | -  | -   | - | -   | -  | - | -  | -   | - | -   |
| Composite fish culture                                       | -  | -   | - | -   | -  | - | -  | -   | - | -   |
| Hatchery<br>management                                       | -  | -   | - | -   | -  | - | -  | -   | - | -   |
| Breeding and culture of ornamental fishes                    | -  | -   | - | -   | -  | - | -  | -   | - | -   |
| Portable plastic carp hatchery                               | -  | -   | - | -   | -  | - | -  | -   | - | -   |
| Pen culture of fish and prawn                                | -  | -   | - | -   | -  | - | -  | -   | - | -   |
| Shrimp farming   | -  | -   | - | _   | -  | - | -  | _   | - | -   |
| Edible oyster  | -  | -   | - | -   | -  | - | -  | -   | - | -   |

| farming   |   |    |   |    |   |   |   |    |   |    |
|---|---|----|---|----|---|---|---|----|---|----|
| Pearl culture                                   | - | -  | - | -  | - | - | - | -  | _ | -  |
| Fish processing<br>and value<br>addition        | - | -  | - | -  | - | - | - | -  | - | -  |
| IX Production of Inputs at site                 | 2 | 33 | 0 | 33 | 9 | 0 | 9 | 42 | 0 | 42 |
| Seed Production                                 | 2 | 33 | 0 | 33 | 9 | 0 | 9 | 42 | 0 | 42 |
| Planting material production                    | - | -  | - | -  | - | - | - | -  | - | -  |
| Bio-agents production                           | - | -  | - | -  | - | - | - | -  | - | -  |
| Bio-pesticides production                       | - | -  | - | -  | - | - | - | -  | - | -  |
| Bio-fertilizer production                       | - | -  | - | -  | - | - | - | -  | - | -  |
| Vermi-compost production                        | - | -  | - | -  | - | - | - | -  | - | -  |
| Organic manures production                      | - | -  | - | -  | _ | - | - | -  | - | -  |
| Production of fry and fingerlings               | - | -  | - | -  | - | - | - | -  | - | -  |
| Production of<br>Bee-colonies and<br>wax sheets | - | -  | - | -  | - | - | - | -  | - | -  |
| Small tools and implements                      | - | -  | - | -  | - | - | - | -  | - | -  |
| Production of livestock feed and fodder         | - | -  | - | -  | - | - | - | -  | - | -  |
| Production of<br>Fish feed                      | - | -  | - | -  | - | - | - | -  | - | -  |
| X Capacity Building and Group Dynamics          | 4 | 45 | 0 | 45 | 9 | 0 | 9 | 54 | 0 | 54 |
| Global warming & climate change                 | 4 | 45 | 0 | 45 | 9 | 0 | 9 | 54 | 0 | 54 |
| Group dynamics                                  | - | -  | - | -  | - | - | - | -  | - | -  |
| Formation and<br>Management of<br>SHGs          | - | -  | - | -  | - | - | - | -  | - | -  |

| Mobilization of social capital                | -  | -   | -   | -    | -   | -  | -   | -    | -   | -    |
|---|----|-----|-----|------|-----|----|-----|------|-----|------|
| Entrepreneurial development of farmers/youths | -  | -   | -   | -    | -   | -  | -   | -    | -   | -    |
| WTO and IPR issues                            | -  | -   | -   | -    | -   | -  | -   | -    | -   | -    |
| XI Agro-forestry                              | -  | -   | -   | -    | -   | -  | -   | -    | -   | -    |
| Production technologies                       | -  | -   | -   | _    | -   | -  | -   | -    | _   | -    |
| Nursery<br>management                         | -  | -   | -   | -    | -   | -  | -   | -    | -   | -    |
| Integrated<br>Farming Systems                 | -  | -   | -   | -    | -   | -  | -   | -    | -   | -    |
| XII<br>EXTENSION<br>EDUCATION                 | 3  | 35  | 0   | 35   | 8   | 0  | 8   | 43   | 0   | 43   |
| TOTAL   | 75 | 943 | 214 | 1157 | 157 | 50 | 207 | 1100 | 264 | 1364 |

|  |   |    | (B) RU | RAL YC | UTH |   |   |    |   |    |
|--|---|----|--------|--------|-----|---|---|----|---|----|
| Global warming & climate change          | 2 | 26 | 0      | 26     | 4   | 0 | 4 | 30 | 0 | 30 |
| Bee-keeping                              | - | -  | -      | -      | -   | - | - | -  | - | -  |
| Integrated farming                       | - | -  | -      | -      | -   | - | - | -  | - | -  |
| Seed production                          | - | -  | -      | -      | -   | - | - | -  | - | -  |
| Production of organic inputs             | - | -  | -      | -      | -   | - | - | -  | - | -  |
| Integrated<br>Farming                    | - | -  | -      | -      | -   | - | - | -  | - | -  |
| Planting material production             | - | -  | -      | -      | -   | - | - | -  | - | -  |
| Vermi-culture                            | - | -  | -      | -      | -   | - | - | -  | - | -  |
| Sericulture                              | - | -  | -      | -      | -   | - | - | -  | - | -  |
| Protected cultivation of vegetable crops | - | -  | -      | -      | -   | - | - | -  | - | -  |
| Commercial fruit production              | - | -  | -      | -      | -   | - | - | -  | - | -  |
| Repair and                               | - | -  | -      | -      | -   | - | - | -  | - | -  |

| maintenance of<br>farm machinery<br>and implements |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|
| Nursery Management of Horticulture crops           | - | - | - | - | - | - | - | - | - | - |
| Training and pruning of orchards                   | - | - | - | - | - | - | - | - | - | - |
| Value addition                                     | - | - | - | - | - | - | - | - | - | - |
| Production of quality animal products              | - | - | - | - | - | - | - | - | - | - |
| Dairying   | - | - | - | - | - | - | - | - | - | - |
| Sheep and goat rearing                             | - | - | - | - | - | - | - | - | - | - |
| Quail farming                                      | - | - | - | - | - | - | - | - | - | - |
| Piggery  | - | - | - | - | - | - | - | - | - | - |
| Rabbit farming                                     | - | - | - | - | - | - | - | - | - | - |
| Poultry production                                 | - | - | - | - | - | - | - | - | - | - |
| Ornamental fisheries                               | - | - | - | - | - | - | - | - | - | - |
| Para vets  | - | - | - | - | - | - | - | - | - | - |
| Para extension<br>workers                          | - | - | - | - | - | - | - | - | - | - |
| Composite fish culture                             | - | - | - | - | - | - | - | - | - | - |
| Freshwater prawn culture                           | - | - | - | - | - | - | - | - | - | - |
| Shrimp farming                                     | - | - | - | - | - | - | - | - | - | - |
| Pearl culture                                      | - | - | - | - | - | - | - | - | - | - |
| Cold water<br>fisheries                            | - | - | - | - | - | - | - | - | - | - |
| Fish harvest and processing technology             | - | - | - | - | - | - | - | - | - | - |
| Fry and fingerling rearing                         | - | - | - | - | - | - | - | - | - | - |
| Small scale  | - | - | - | - | - | - | - | - | - | _ |

| processing                           |   |    |    |    |    |    |    |    |    |     |
|--------------------------------------|---|----|----|----|----|----|----|----|----|-----|
| Post Harvest<br>Technology           | - | -  | -  | -  | -  | -  | -  | -  | -  | -   |
| Tailoring and<br>Stitching           | - | -  | -  | -  | -  | -  | -  | -  | -  | -   |
| Rural Crafts                         | - | -  | -  | -  | -  | -  | -  | -  | -  | -   |
| Making different house hold products | 1 | 0  | 11 | 11 | 0  | 14 | 14 | 0  | 25 | 25  |
| Water harvesting technology          | 1 | 14 | 0  | 14 | 3  | 0  | 3  | 17 | 0  | 17  |
| Micro irrigation                     | 1 | 13 | 0  | 13 | 2  | 0  | 2  | 15 | 0  | 15  |
| Kisan club                           | 1 | 11 | 0  | 11 | 3  | 0  | 3  | 14 | 0  | 14  |
| AI                                   | 1 | 11 | 0  | 11 | 4  | 0  | 4  | 15 | 0  | 15  |
| TOTAL                                | 7 | 75 | 11 | 86 | 16 | 14 | 30 | 91 | 25 | 116 |

|   |   |     | (C) Ext | ension P | ersonn | el |    |     |   |     |
|---|---|-----|---------|----------|--------|----|----|-----|---|-----|
| Productivity enhancement in field crops | 3 | 65  | 0       | 65       | 15     | 0  | 15 | 80  | 0 | 80  |
| Integrated Pest<br>Management           | - | -   | -       | -        | -      | -  | -  | -   | - | -   |
| Integrated<br>Nutrient<br>management    | - | -   | -       | -        | -      | -  | -  | -   | - | -   |
| Rejuvenation of old orchards            | - | -   | -       | -        | -      | -  | -  | -   | - | -   |
| Protected cultivation technology        | 1 | 103 | 0       | 103      | 18     | 0  | 18 | 121 | 0 | 121 |
| Formation and<br>Management of<br>SHGs  | - | -   | -       | -        | -      | -  | -  | -   | - | -   |
| Group Dynamics and farmers organization | - | -   | -       | -        | -      | -  | -  | -   | - | -   |
| Information networking among farmers    | - | -   | -       | -        | -      | -  | -  | -   | - | -   |
| Capacity                                | - | -   | -       | -        | -      | -  | -  | -   | - | -   |

| building for ICT application                                   |    |      |     |      |     |    |     |      |     |      |
|--|----|------|-----|------|-----|----|-----|------|-----|------|
| Care and<br>maintenance of<br>farm machinery<br>and implements | -  | -    | -   | -    | -   | -  | -   | -    | -   | -    |
| WTO and IPR issues   | -  | -    | -   | -    | -   | -  | -   | -    | -   | -    |
| Management in farm animals                                     | -  | -    | -   | -    | -   | -  | -   | -    | -   | -    |
| Livestock feed<br>and fodder<br>production                     | -  | -    | -   | -    | -   | -  | -   | -    | -   | -    |
| Household food security  | _  | -    | -   | -    | -   | -  | -   | -    | -   | -    |
| Women and<br>Child care  | 1  | 0    | 32  | 32   | 0   | 6  | 6   | 0    | 38  | 38   |
| Low cost and<br>nutrient<br>efficient diet<br>designing        | -  | -    | -   | -    | -   | -  | -   | -    | -   | -    |
| Production and use of organic inputs                           | -  | -    | -   | -    | -   | -  | -   | -    | -   | -    |
| Gender<br>mainstreaming<br>through SHGs                        | -  | -    | -   | -    | -   | -  | -   | -    | -   | -    |
| TOTAL  | 5  | 168  | 32  | 200  | 33  | 6  | 39  | 201  | 38  | 239  |
| GRAND<br>TOTAL   | 87 | 1186 | 257 | 1443 | 206 | 70 | 276 | 1392 | 327 | 1719 |

# Note: Please furnish the details of above training programmes as Annexure in the proforma given below

|           | Title of the training programme   |                        |                  | in days          |                      | oth  | mbei<br>er<br>ticip |       | Nu<br>SC | mber/ST | r of  |      | al<br>nber<br>ticipa |       |
|-----------|---|------------------------|------------------|------------------|----------------------|------|---------------------|-------|----------|---------|-------|------|----------------------|-------|
| Date      |   | Discipline             | Thematic<br>area | Duration in days | (Off / On<br>Campus) | Male | Female              | Total | Male     | Female  | Total | Male | Female               | Total |
| For       | Farmers & Far   | m women                |                  |                  |                      |      |                     |       |          |         |       |      |                      |       |
| 15/4/2010 | Increase<br>nutritive value<br>of low quality<br>roughages for<br>milch animals | Animal<br>Science      |                  | 1                | On                   | 11   | 0                   | 11    | 1        | 0       | 1     | 12   | 0                    | 12    |
| 16/4/2010 | Organic<br>residue and<br>farm waste<br>management                              | Crop<br>Production     |                  | 1                | On                   | 15   | 0                   | 15    | 3        | 0       | 3     | 18   | 0                    | 18    |
| 19/4/2010 | Effect of global warming & climate changes in Agriculture                       | Extension<br>Education |                  | 1                | On                   | 12   | 0                   | 12    | 3        | 0       | 3     | 15   | 0                    | 15    |
| 22/4/2010 | IPM in Cotton   | Plant<br>Protection    |                  | 1                | On                   | 14   | 0                   | 14    | 4        | 0       | 4     | 18   | 0                    | 18    |
| 6/6/2010  | Judicious use of<br>weedicides in<br>field crops                                | Crop<br>Production     |                  | 1                | On                   | 13   | 0                   | 13    | 1        | 0       | 1     | 14   | 0                    | 14    |
| 23/7/10   | Pure Seeds<br>Production<br>Technique<br>in Sesamum                             | Seeds<br>Production    |                  | 1                | On                   | 12   | 0                   | 12    | 1        | 0       | 1     | 13   | 0                    | 13    |
| 7-8-2010  | Castor<br>Production<br>Technology  | Crop<br>Production     |                  | 1                | On                   | 18   | 0                   | 18    | 1        | 0       | 1     | 19   | 0                    | 19    |

|               | D · ·  | A -1                   | 4 |    | 10 |   | 10 |   |   |   | 10 |   | 40 |
|---------------|--|------------------------|---|----|----|---|----|---|---|---|----|---|----|
| 11-8-2010     | Rain water<br>Management<br>Technology                     | Agril.<br>Engineering  | 1 | On | 13 | 0 | 13 | 0 | 0 | 0 | 13 | 0 | 13 |
| 21-9-2010     | Importance & use of green fodder in milk production        | Animal<br>Science      | 1 | On | 20 | 0 | 20 | 5 | 0 | 5 | 25 | 0 | 25 |
| 22-9-2010     | Effect of<br>global<br>warming<br>and climate<br>change    | Extension<br>Education | 1 | On | 11 | 0 | 11 | 3 | 0 | 3 | 14 | 0 | 14 |
| 23-9-<br>2010 | IPM in castor  | Plant<br>Protection    | 1 | On | 12 | 0 | 12 | 2 | 0 | 2 | 14 | 0 | 14 |
| 24-9-2010     | Effect of global warming and climate change                | Extension<br>Education | 1 | On | 11 | 0 | 11 | 1 | 0 | 1 | 12 | 0 | 12 |
| 28-9-<br>2010 | Efficient use<br>of harvested<br>water                     | Agril.<br>Engineering  | 1 | On | 10 | 0 | 10 | 3 | 0 | 3 | 13 | 0 | 13 |
| 26-10-10      | Pure seeds<br>production<br>technique in<br>cumin          | Seeds<br>Production    | 1 | On | 17 | 0 | 17 | 3 | 0 | 3 | 20 | 0 | 20 |
| 28-10-10      | Plant protection measures for pest & diseases in cumin     | Plant<br>Protection    | 1 | On | 16 | 0 | 16 | 3 | 0 | 3 | 19 | 0 | 19 |
| 29-10-10      | Low cost<br>technology<br>for higher<br>milk<br>production | Animal<br>Science      | 1 | On | 28 | 0 | 28 | 5 | 0 | 5 | 33 | 0 | 33 |

| 23-11-10     | Care &<br>Management<br>of animals<br>during<br>winter                               | Animal<br>Science     | 1 | On | 12 | 0  | 12 | 1  | 0 | 1  | 13 | 0  | 13 |
|--------------|--|-----------------------|---|----|----|----|----|----|---|----|----|----|----|
| 26-11-10     | Protected cultivation  | Horticulture          | 1 | On | 41 | 0  | 41 | 14 | 0 | 14 | 55 | 0  | 55 |
| 3-12-10      | Pure seeds<br>production<br>technique in<br>cumin                                    | Seeds<br>Production   | 1 | On | 20 | 0  | 20 | 3  | 0 | 3  | 23 | 0  | 23 |
| 4-12-10      | Preparation<br>of banana &<br>Potato<br>wafers                                       | Home<br>Science       | 1 | On | 0  | 21 | 21 | 0  | 0 | 0  | 0  | 21 | 21 |
| 14-12-10     | Pure seeds production technique in wheat & cumin                                     | Seeds<br>Production   | 1 | On | 18 | 0  | 18 | 7  | 0 | 7  | 25 | 0  | 25 |
| 22-12-10     | Improved cultivation practices for wheat & Cumin                                     | Crop<br>Production    | 1 | On | 16 | 0  | 16 | 4  | 0 | 4  | 20 | 0  | 20 |
| 23/12/1<br>0 | Use of improved agricultural Implements  | Agril.<br>Engineering | 1 | On | 16 | 0  | 16 | 3  | 0 | 3  | 19 | 0  | 19 |
| 21/1/11      | Selection of<br>breed of<br>milch<br>animals for<br>economical<br>milk<br>production | Animal<br>Science     | 1 | On | 15 | 0  | 15 | 0  | 0 | 0  | 15 | 0  | 15 |
| 24/1/11      | Importance of colostrums in calves   | Animal<br>Science     | 1 | On | 14 | 0  | 14 | 0  | 0 | 0  | 14 | 0  | 14 |

|         | agriculture   |                        | Oì | N CAI | MPUS | 476 | 58 | 534 | 95 | 0 | 95 | 571 | 58 | 629 |
|---------|---|------------------------|----|-------|------|-----|----|-----|----|---|----|-----|----|-----|
| 4/3/11  | Effect of global warming & climate change on  | Extension<br>Education |    | 1     | On   | 11  | 0  | 11  | 2  | 0 | 2  | 13  | 0  | 13  |
| 1/3/11  | Importance of IPM   | Plant<br>Protection    |    | 1     | On   | 10  | 0  | 10  | 3  | 0 | 3  | 13  | 0  | 13  |
| 15/2/11 | Soybean – its importance in human diet and different preparations for high nutrient efficiency diet | Home<br>Science        |    | 1     | On   | 0   | 21 | 21  | 0  | 0 | 0  | 0   | 21 | 21  |
| 14/2/11 | Kitchen<br>gardening  | Home<br>Science        |    | 1     | On   | 0   | 16 | 16  | 0  | 0 | 0  | 0   | 16 | 16  |
| 11/2/11 | Organic<br>residue and<br>farm waste<br>management  | Crop<br>Production     |    | 1     | On   | 11  | 0  | 11  | 5  | 0 | 5  | 16  | 0  | 16  |
| 4/2/11  | Pure seed production technique in cumin   | Seeds<br>Production    |    | 1     | On   | 18  | 0  | 18  | 5  | 0 | 5  | 23  | 0  | 23  |
| 3/2/11  | Pure seed<br>production<br>technique in<br>wheat  | Seeds<br>Production    |    | 1     | On   | 14  | 0  | 14  | 4  | 0 | 4  | 18  | 0  | 18  |
| 25/1/11 | Pure seed production technique in cumin & wheat   | Seeds<br>Production    |    | 1     | On   | 27  | 0  | 27  | 5  | 0 | 5  | 32  | 0  | 32  |

| 3/4/2010     | Urea treatment in wheat straw   | Animal<br>Science      | 1 | Off | 14 | 0  | 14 | 2 | 0  | 2  | 16 | 0  | 16 |
|--------------|---|------------------------|---|-----|----|----|----|---|----|----|----|----|----|
| 8/4/2010     | Soil sampling method  | Crop<br>Production     | 1 | Off | 16 | 0  | 16 | 3 | 0  | 3  | 19 | 0  | 19 |
| 9/4/2010     | Awareness<br>about extension<br>activities of<br>KVK                                    | Extension<br>Education | 1 | Off | 10 | 0  | 10 | 3 | 0  | 3  | 13 | 0  | 13 |
| 30/4/2010 to | Preparation of<br>different<br>masala, Gujarat<br>handicraft &<br>different<br>stitches | Home<br>Science        | 2 | Off | 0  | 23 | 23 | 0 | 10 | 10 | 0  | 33 | 33 |
| 15/5/2010    | Drudgery<br>reducing<br>devices for<br>farm women                                       | Home<br>Science        | 1 | Off | 0  | 15 | 15 | 0 | 7  | 7  | 0  | 22 | 22 |
| 19/5/2010    | Integrated<br>nutrient<br>management in<br>major kharif<br>field crops                  | Crop<br>Production     | 1 | Off | 17 | 0  | 17 | 1 | 0  | 1  | 18 | 0  | 18 |
| 24/5/2010    | Scientific<br>method of food<br>grain storage   | Home<br>Science        | 1 | Off | 0  | 15 | 15 | 0 | 0  | 0  | 0  | 15 | 15 |
| 18/6/2010    | Management<br>of pest &<br>diseases of<br>sesame  | Plant<br>Protection    | 1 | Off | 14 | 0  | 14 | 2 | 0  | 2  | 16 | 0  | 16 |
| 21-7-2010    | IPM in<br>Groundnut   | Plant<br>Protection    | 1 | Off | 14 | 0  | 14 | 2 | 0  | 2  | 16 | 0  | 16 |
| 21-7-2010    | Govt<br>subsidiary<br>scheme in<br>Agriculture  | Extension<br>Education | 1 | Off | 13 | 0  | 13 | 2 | 0  | 2  | 15 | 0  | 15 |

| 28-7-2010     | Use of<br>mineral<br>mixture for<br>balance<br>feeding  | Animal<br>Science     | 1 | Off | 12 | 0 | 12 | 2 | 0 | 2 | 14 | 0 | 14 |
|---------------|---|-----------------------|---|-----|----|---|----|---|---|---|----|---|----|
| 29-7-<br>2010 | Importance<br>of thinning<br>and gap<br>filling   | Crop<br>Production    | 1 | Off | 20 | 0 | 20 | 1 | 0 | 1 | 21 | 0 | 21 |
| 2-8-2010      | Introduction<br>and use of<br>chaff cutter  | Agril.<br>Engineering | 1 | Off | 15 | 0 | 15 | 2 | 0 | 2 | 17 | 0 | 17 |
| 20-8-2010     | Health care<br>of live stock<br>during<br>monsoon   | Animal<br>Science     | 1 | Off | 15 | 0 | 15 | 2 | 0 | 2 | 17 | 0 | 17 |
| 21-8-2010     | Preventive<br>measure<br>and first aid<br>treatment of<br>important<br>disease in<br>dairy<br>animals | Animal<br>Science     | 1 | Off | 12 | 0 | 12 | 1 | 0 | 1 | 13 | 0 | 13 |
| 23-8-2010     | IPM in<br>vegetables  | Plant<br>Protection   | 1 | Off | 15 | 0 | 15 | 1 | 0 | 1 | 16 | 0 | 16 |
| 25-8-<br>2010 | Seeds<br>production<br>programme<br>in Sesamum  | Seeds<br>Production   | 1 | Off | 16 | 0 | 16 | 4 | 0 | 4 | 20 | 0 | 20 |
| 6-9-2010      | Farm implements and their use   | Agril.<br>Engineering | 1 | Off | 15 | 0 | 15 | 0 | 0 | 0 | 15 | 0 | 15 |
| 10-9-2010     | Introduction<br>of effective &<br>improved<br>agril<br>equipment                                      | Agril.<br>Engineering | 1 | Off | 13 | 0 | 13 | 0 | 0 | 0 | 13 | 0 | 13 |

| 20-9-2010     | Control measures for pest & diseases of kharif pulses           | Plant<br>Protection    | 1 | Off | 11 | 0  | 11 | 3 | 0 | 3 | 14 | 0  | 14 |
|---------------|---|------------------------|---|-----|----|----|----|---|---|---|----|----|----|
| 20-9-         | Formation of kisan clubs  | Extension<br>Education | 1 | Off | 12 | 0  | 12 | 3 | 0 | 3 | 15 | 0  | 15 |
| 24-9-<br>2010 | Production<br>technology<br>of mustard                          | Crop<br>Production     | 1 | Off | 17 | 0  | 17 | 0 | 0 | 0 | 17 | 0  | 17 |
| 22-11-10      | Care &<br>Management<br>of milch<br>animals                     | Animal<br>Science      | 1 | Off | 14 | 0  | 14 | 2 | 0 | 2 | 16 | 0  | 16 |
| 27-11-10      | Foot and<br>mouth<br>diseases &<br>its control                  | Animal<br>Science      | 1 | Off | 15 | 0  | 15 | 3 | 0 | 3 | 18 | 0  | 18 |
| 6-12-10       | Balance diet<br>for women<br>& child                            | Home<br>Science        | 1 | Off | 0  | 15 | 15 | 0 | 3 | 3 | 0  | 18 | 18 |
| 7-12-10       | Important of pulses in balance diet                             | Home<br>Science        | 1 | Off | 0  | 20 | 20 | 0 | 1 | 1 | 0  | 21 | 21 |
| 8-12-<br>10   | Tomato preservation   | Home<br>Science        | 1 | Off | 0  | 13 | 13 | 0 | 6 | 6 | 0  | 19 | 19 |
| 9-12-10       | Use of sprouted pulses in preparation of low cost nutrient diet | Home<br>Science        | 1 | Off | 0  | 17 | 17 | 0 | 0 | 0 | 0  | 17 | 17 |
| 10-12-10      | Preparation & preservation of fruit & vegetables                | Home<br>Science        | 1 | Off | 0  | 12 | 12 | 0 | 0 | 0 | 0  | 12 | 12 |

| 21-12-10 | Integrated<br>weed<br>management<br>in major rabi<br>field crops | Crop<br>Production  | 1 | Off | 14 | 0  | 14 | 1 | 0  | 1  | 15 | 0  | 15 |
|----------|--|---------------------|---|-----|----|----|----|---|----|----|----|----|----|
| 24-12-10 | Efficient water management in major rabi field crops             | Crop<br>Production  | 1 | Off | 13 | 0  | 13 | 1 | 0  | 1  | 14 | 0  | 14 |
| 10/1/11  | Pure seed production technique in cumin                          | Seeds<br>Production | 1 | Off | 17 | 0  | 17 | 5 | 0  | 5  | 22 | 0  | 22 |
| 19/1/11  | Plant protection measure in castor & mustard crop                | Plant<br>Protection | 1 | Off | 14 | 0  | 14 | 2 | 0  | 2  | 16 | 0  | 16 |
| 20/1/11  | Control measures for pest & diseases in cumin & wheat            | Plant<br>Protection | 1 | Off | 15 | 0  | 15 | 4 | 0  | 4  | 19 | 0  | 19 |
| 4/2/11   | Production<br>technology<br>of summer<br>groundnut               | Crop<br>Production  | 1 | Off | 16 | 0  | 16 | 2 | 0  | 2  | 18 | 0  | 18 |
| 23/2/11  | Drudgery<br>reducing<br>devices for<br>farm women                | Home<br>Science     | 1 | Off | 0  | 18 | 18 | 0 | 7  | 7  | 0  | 25 | 25 |
| 24/2/11  | Preparation & preservation of milk & milk products               | Home<br>Science     | 1 | Off | 0  | 8  | 8  | 0 | 16 | 16 | 0  | 24 | 24 |
| 2/3/11   | Efficient use of chemical pesticides                             | Plant<br>Protection | 1 | Off | 15 | 0  | 15 | 2 | 0  | 2  | 17 | 0  | 17 |

| 3/3/11  | Precautions<br>while<br>handling<br>pesticides                         | Plant<br>Protection   |         | 1     | Off  | 17    | 0           | 17               | 1           | 0      | 1           | 18               | 0           | 18               |
|---------|--|-----------------------|---------|-------|------|-------|-------------|------------------|-------------|--------|-------------|------------------|-------------|------------------|
| 7/3/11  | Preparation<br>of enriched<br>compost                                  | Crop<br>Production    |         | 1     | Off  | 19    | 0           | 19               | 2           | 0      | 2           | 21               | 0           | 21               |
| 14/3/11 | Introduction to<br>new develope<br>farm<br>implements<br>and their use | Agril.<br>Engineering |         | 1     | Off  | 14    | 0           | 14               | 1           | 0      | 1           | 15               | 0           | 15               |
| 30/3/11 | Care & management (calves  | Animal<br>Science     |         | 1     | Off  | 13    | 0           | 13               | 2           | 0      | 2           | 15               | 0           | 15               |
|         |  |                       | OF      | F CAI | MPUS | 467   | 156         | 623              | 62          | 50     | 112         | 529              | 206         | 735              |
|         | ТОТА   | L (For Practic        | ing Fai | rmer) |      | 9 4 3 | 2<br>1<br>4 | 1<br>1<br>5<br>7 | 1<br>5<br>7 | 5<br>0 | 2<br>0<br>7 | 1<br>1<br>0<br>0 | 2<br>6<br>4 | 1<br>3<br>6<br>4 |

| For       | Rural youth   |                        |           |     |        |     |     |        |     |     |    |    |             |
|-----------|---|------------------------|-----------|-----|--------|-----|-----|--------|-----|-----|----|----|-------------|
| 26/4/2010 | Effect of global warming & climate changes in Agriculture                 | Extension<br>Education | 1         | On  | 13     | 0   | 13  | 2      | 0   | 2   | 15 | 0  | 15          |
| 17/5/2010 | Training on making of glycerin & simple bath soap, washing soap & shampoo | Home<br>Science        | 1         | On  | 0      | 11  | 11  | 0      | 14  | 14  | 0  | 25 | 25          |
| 21/3/11   | Efficient use of harvested water  | Agril.<br>Engineering  | 1         | On  | 14     | 0   | 14  | 3      | 0   | 3   | 17 | 0  | 17          |
| 23/3/11   | Effect of global warming & climate change on agriculture                  | Extension<br>Education | 1         | On  | 13     | 0   | 13  | 2      | 0   | 2   | 15 | 0  | 15          |
| 5/3/11    | Trouble shooting of micro irrigation system                               | Agril.<br>Engineering  | 1         | Off | 13     | 0   | 13  | 2      | 0   | 2   | 15 | 0  | 15          |
| 15/3/11   | Formation of kisan clubs  | Extension<br>Education | 1         | Off | 11     | 0   | 11  | 3      | 0   | 3   | 14 | 0  | 14          |
| 28/3/11   | Importance<br>of AI in<br>animals   | Animal<br>Science      | 1         | Off | 11     | 0   | 11  | 4      | 0   | 4   | 15 | 0  | 15          |
|           | ТС  | OTAL (For Rura         | ıl youth) |     | 7<br>5 | 1 1 | 8 6 | 1<br>6 | 1 4 | 3 0 | 9  | 5  | 1<br>1<br>6 |

| For 1      | Extension Fur                                       | actionaries (In-                     | -Service T | rainin | g)          |     |             |     |   |     |             |     |             |
|------------|---|--------------------------------------|------------|--------|-------------|-----|-------------|-----|---|-----|-------------|-----|-------------|
| 2/7/2010   | Cotton<br>Production<br>Technology                  | Crop<br>Production                   | 1          | On     | 22          | 0   | 22          | 3   | 0 | 3   | 25          | 0   | 25          |
| 23/7/2010  | Oilseed &<br>Pulse Crop<br>production<br>Technology | Crop<br>Production                   | 1          | On     | 22          | 0   | 22          | 3   | 0 | 3   | 25          | 0   | 25          |
| 8/10/10    | Production<br>technology<br>for Rabi crops          | Crop<br>Production                   | 1          | On     | 21          | 0   | 21          | 9   | 0 | 9   | 30          | 0   | 30          |
| 27/11/2010 | Green House<br>Technology                           | Horticulture                         | 1          | On     | 103         | 0   | 103         | 18  | 0 | 18  | 121         | 0   | 121         |
| 19/2/2011  | Nutrition<br>education to<br>aanganwadi<br>worker   | Home<br>Science                      | 1          | Off    | 0           | 32  | 32          | 0   | 6 | 6   | 0           | 38  | 38          |
|            | TOTAL   | For Extension F<br>(In-Service Train |            | s      | 1<br>6<br>8 | 3 2 | 2<br>0<br>0 | 3 3 | 6 | 3 9 | 2<br>0<br>1 | 3 8 | 2<br>3<br>9 |

#### D) Vocational training programmes for Rural Youth:

| o/<br>rrise         | a              | ing<br>*  | Identified               | ion<br>s)          |    | No. of<br>ticipa |    | Sel                 | lf employe<br>training |                                  | Number of persons      |
|---------------------|----------------|---|--------------------------|--------------------|----|------------------|----|---------------------|------------------------|----------------------------------|------------------------|
| Crop/<br>Enterprise | Date           | Training title*                                   | Thrust<br>Area           | Duration<br>(days) | М  | F                | Т  | Type<br>of<br>units | Number<br>of units     | Number<br>of persons<br>employed | employed<br>else where |
| Crop Productio      | 13/8/2010      | Farm<br>waste<br>Composti<br>ng                   | Income<br>generatio<br>n | 1                  | 25 | 0                | 25 |                     |                        |                                  |                        |
| Home Science        | 20-21 / 2/2011 | Rice, Urad<br>Papad,<br>Khakhara &<br>Vadi making | Income<br>generatio<br>n | 02                 | 0  | 26               | 26 |                     |                        |                                  |                        |
|                     | 22/2/2011      | Preparation<br>of different<br>garam<br>masala    | Income<br>generatio<br>n | 01                 | 0  | 26               | 26 |                     |                        |                                  |                        |
|                     |                | Total   |                          | 03                 | 25 | 26               | 51 | -                   | -                      | -                                | -                      |

#### E) Sponsored/ Collabrative Training Programmes

|              |                   |                            | 田            |                  |                    |                      |                   |     |     | No. | of P | arti | cipa | nts         |              |             |  |
|--------------|-------------------|----------------------------|--------------|------------------|--------------------|----------------------|-------------------|-----|-----|-----|------|------|------|-------------|--------------|-------------|--|
| S            | D                 |                            |              | ıtic             | ion<br>s)          | It                   | of                | 0   | the | rs  | S    | C/S  | T    | 1           | <b>`ot</b> a | 1           | Spons  |
| 1.<br>N<br>o | a<br>t<br>e       | Title                      | DISCIPLINE   | Thematic<br>area | Duration<br>(days) | Client<br>(PF/RY/EF) | No. of<br>courses | M   | F   | Т   | M    | F    | Т    | M           | F            | Т           | oring<br>Agency  |
| 1            | 30/7/2010         | Hitech<br>Horticultu<br>re | Horticulture |                  | 1                  | RY                   | 1                 | 69  | 0   | 69  | 32   | 0    | 32   | 101         | 0            | 101         | Deptt.<br>of<br>Horticul<br>ture,<br>Surend<br>ranagar |
| 2            | 14-15/<br>12/2010 | Training on Storage        | General      |                  | 2                  | PF                   | 1                 | 26  | 0   | 26  | 4    | 0    | 4    | 30          | 0            | 30          | Central<br>ware<br>house<br>corpora<br>tion,<br>GOI    |
|              |                   | Total                      |              |                  | 3                  |                      | 2                 | 9 5 | 0   | 9 5 | 3 6  | 0    | 3    | 1<br>3<br>1 | 0            | 1<br>3<br>1 |  |

# F) Training Programmes under seed village programme

| SN | Title                                       | Pa     | articipants | 3     |
|----|---|--------|-------------|-------|
|    |   | Others | SC/ST       | Total |
| 1  | Pure seed Production technique in Cumin     | 21     | 6           | 27    |
| 2  | Pure seed Production technique in Wheat     | 20     | 4           | 24    |
| 3  | Pure seed Production technique in Wheat     | 15     | 6           | 21    |
| 4  | Pure seed Production technique in Cumin     | 16     | 4           | 20    |
| 5  | Pure seed Production technique in Groundnut | 37     | 7           | 44    |
| 6  | Pure seed Production technique in Groundnut | 18     | 5           | 23    |
|    | TOTAL                                       | 127    | 32          | 159   |

# 3.4. Extension Programmes (including activities of FLD programmes)

|                                    | . 0                    |                      |                      |   |    |                            |   | Partio | cipan | ts                       |   |    |                   |    |
|------------------------------------|------------------------|----------------------|----------------------|---|----|----------------------------|---|--------|-------|--------------------------|---|----|-------------------|----|
| Nature of<br>Extension<br>Activity | Purpose/<br>topic Date | No. of<br>activities | Farmers (Others) (I) |   |    | SC/ST<br>(Farmers)<br>(II) |   |        |       | tensi<br>fficia<br>(III) |   | (  | Grand '<br>(I+II+ |    |
| ZÃÃ                                | <del>-</del>           | <i></i>              | M                    | F | T  | M                          | F | T      | M     | F                        | T | M  | F                 | T  |
| Field<br>Day                       | Mustard<br>15/1/10     | 1                    | 19                   | 0 | 19 | 1                          | 0 | 1      | -     | -                        | - | 20 | 0                 | 20 |
|                                    | Wheat 1/2/10           | 1                    | 22                   | 0 | 22 | 3                          | 0 | 3      | -     | -                        | - | 25 | 0                 | 25 |
|                                    | Gram-<br>6/2/10        | 1                    | 21                   | 0 | 21 | 3                          | 0 | 3      | -     | -                        | - | 24 | 0                 | 24 |
|                                    | Gram<br>11/2/10        | 1                    | 18                   | 0 | 18 | 3                          | 0 | 3      | -     | -                        | - | 21 | 0                 | 21 |
|                                    | Cumin                  | 1                    | 18                   | 0 | 18 | 2                          | 0 | 2      | -     | -                        | _ | 20 | 0                 | 20 |
|                                    | Wheat 25/2/10          | 1                    | 19                   | 0 | 19 | 3                          | 0 | 3      | -     | -                        | - | 22 | 0                 | 22 |
|                                    | Moong<br>02/10/10      | 1                    | 15                   | 0 | 15 | 2                          | 0 | 2      | -     | -                        | - | 17 | 0                 | 17 |
|                                    | Cotton<br>02/10/10     | 1                    | 18                   | 0 | 18 | 2                          | 0 | 2      | -     | -                        | - | 20 | 0                 | 20 |
|                                    | Cotton<br>03/10/10     | 1                    | 12                   | 0 | 12 | 3                          | 0 | 3      | -     | -                        | - | 15 | 0                 | 15 |
|                                    | Sesamum 03/10/10       | 1                    | 11                   | 0 | 11 | 3                          | 0 | 3      | -     | -                        | - | 14 | 0                 | 14 |
|                                    | Moong<br>04/10/10      | 1                    | 12                   | 0 | 12 | 2                          | 0 | 2      | -     | -                        | - | 14 | 0                 | 14 |
|                                    | Groundnut 04/10/10     | 1                    | 15                   | 0 | 15 | 4                          | 0 | 4      | -     | -                        | - | 19 | 0                 | 19 |
|                                    | Cotton 05/10/10        | 1                    | 15                   | 0 | 15 | 1                          | 0 | 1      | -     | -                        | - | 16 | 0                 | 16 |
|                                    | Groundnut 05/10/10     | 1                    | 13                   | 0 | 13 | 2                          | 0 | 2      | -     | -                        | - | 15 | 0                 | 15 |
|                                    | Groundnut 06/10/10     | 1                    | 13                   | 0 | 13 | 1                          | 0 | 1      | -     | -                        | - | 14 | 0                 | 14 |
|                                    | Moong 06/10/10         | 1                    | 10                   | 0 | 10 | 4                          | 0 | 4      | -     | -                        | - | 14 | 0                 | 14 |
|                                    | Sesamum 07/10/10       | 1                    | 12                   | 0 | 12 | 1                          | 0 | 1      | -     | -                        | - | 13 | 0                 | 13 |

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|   | Groundnut 07/10/10                    | 1         | 10   | 0   | 10   | 2   | 0  | 2   | -  | - | -  | 12   | 0   | 12   |
|---|---------------------------------------|-----------|------|-----|------|-----|----|-----|----|---|----|------|-----|------|
|   | Cotton 08/10/10                       | 1         | 15   | 0   | 15   | 3   | 0  | 3   | -  | - | -  | 18   | 0   | 18   |
|   | Groundnut 08/10/10                    | 1         | 12   | 0   | 12   | 1   | 0  | 1   | -  | - | -  | 13   | 0   | 13   |
|   | Cotton<br>09/10/10                    | 1         | 10   | 0   | 10   | 1   | 0  | 1   | -  | - | -  | 11   | 0   | 11   |
|   | Sesamum<br>09/10/10                   | 1         | 09   | 0   | 09   | 1   | 0  | 1   | -  | - | -  | 10   | 0   | 10   |
|   | Moong<br>10/10/10                     | 1         | 12   | 0   | 12   | 1   | 0  | 1   | -  | - | -  | 13   | 0   | 13   |
|   | Sesamum<br>10/10/10                   | 1         | 12   | 0   | 12   | 0   | 0  | 0   | -  | - | -  | 12   | 0   | 12   |
|   | Cotton<br>11/10/10                    | 1         | 14   | 0   | 14   | 2   | 0  | 2   | -  | - | -  | 14   | 0   | 14   |
|   | Groundnut 12/10/10                    | 1         | 10   | 0   | 10   | 1   | 0  | 1   | -  | - | -  | 11   | 0   | 11   |
|   | Moong<br>13/10/10                     | 1         | 07   | 0   | 07   | 09  | 0  | 09  | -  | - | -  | 16   | 0   | 16   |
|   | Groundnut<br>14/10/10                 | 1         | 10   | 0   | 10   | 2   | 0  | 2   | -  | - | -  | 14   | 0   | 14   |
|   | Total                                 | 28        | 384  | 0   | 384  | 63  | 0  | 63  | -  | - | -  | 447  | 0   | 447  |
| Kisan (   | Ghosthi                               | 3         | 47   | 0   | 47   | 22  | 0  | 22  |    |   |    | 69   | 0   | 69   |
|   | ion stall<br>31/12/2010<br>/1/2011 at | 5<br>days |      |     |      |     |    |     |    |   |    |      |     |      |
| Film Sł   | now                                   | 12        | 248  | 70  | 318  | 98  | 22 | 120 |    |   |    | 346  | 92  | 438  |
| Farmer  | rs Meeting                            | 4         | 259  | 28  | 287  | 50  | 6  | 56  |    |   |    | 309  | 34  | 343  |
| Khedut  | Shibir                                | 8         | 598  | 77  | 675  | 144 | 22 | 166 |    |   |    | 742  | 99  | 841  |
| Lecture<br>as reso                                  |                                       | 56        | 2981 | 278 | 3259 | 231 | 4  | 235 | 35 | 0 | 35 | 3247 | 282 | 3529 |
| persons   | S                                     |           |      |     |      |     |    |     |    |   |    |      |     |      |
|   |                                       | 2         |      |     |      |     |    |     |    |   |    |      |     |      |
| Radio t   | alks                                  | 2         |      |     |      |     |    |     |    |   |    |      |     |      |
| Radio t<br>IV talk                                  | alks                                  |           |      |     |      |     |    |     |    |   |    |      |     |      |
| Radio t<br>TV talk                                  | alks<br>s<br>r articles<br>ion        | 1         |      |     |      |     |    |     |    |   |    |      |     |      |
| Radio t<br>TV talk<br>Popula<br>Extensi<br>Literatu | alks<br>s<br>r articles<br>ion        | 1         |      |     |      |     |    |     |    |   |    |      |     |      |

| farmers field   |           |     |     |      |     |    |     |  |                  |                |      |
|---|-----------|-----|-----|------|-----|----|-----|--|------------------|----------------|------|
| Farmers visit to KVK  | 56        | 959 | 147 | 1106 | 285 | 36 | 321 |  | 1244             | 183            | 1427 |
| Diagnostic visits   | 9         |     |     |      |     |    |     |  |                  |                |      |
| Soil health Camp  |           |     |     |      |     |    |     |  |                  |                |      |
| Animal Health<br>Camp   | 4         |     |     |      |     |    |     |  | 50 Far<br>(151 a | mers<br>nimals | s)   |
| Celebration of important days Children health competition 8/12/2010 | 1         | 45  | 0   | 45   |     |    |     |  | 45               | 0              | 45   |
| Celebration of<br>Technology<br>week13-9-2010 to<br>18-9-2010       | 1<br>week |     |     |      |     |    |     |  |                  |                |      |
| Celebration of Parthenium awareness week 7-8-2010 to 13-8-2010      | 1         | 81  | 24  | 105  |     |    |     |  | 81               | 24             | 105  |

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# 3.5 Production and supply of Technological products

#### **SEED MATERIALS:**

| Major group/class | Crop      | Variety | Quantity<br>(Kg.) | Value<br>(Rs.) | Provided to<br>No. of<br>Farmers |
|-------------------|-----------|---------|-------------------|----------------|----------------------------------|
| CEREALS           | Wheat     | GW-496  | 2433              | 45919          |                                  |
| OILSEEDS          | Groundnut | GG-2,20 | 4690              |                |                                  |
|                   | Sesamum   | GT-1,3  | 332               |                |                                  |
| PULSES            |           |         |                   |                |                                  |
| OTHERS (Specify)  | Cumin     | GC-4    | 193               | 30880          |                                  |

#### **SUMMARY**

| S1.<br>No. | Major group/class | Quantity<br>(qtl.) | Value (Rs.) | Provided to<br>No. of<br>Farmers |
|------------|-------------------|--------------------|-------------|----------------------------------|
| 1          | CEREALS           |                    |             |                                  |
| 2          | OILSEEDS          |                    |             |                                  |
| 3          | PULSES            |                    |             |                                  |
| 4          | VEGETABLES        |                    |             |                                  |
| 5          | FLOWER CROPS      |                    |             |                                  |
| 6          | OTHERS            |                    |             |                                  |
|            | TOTAL             |                    |             |                                  |

#### PLANTING MATERIALS :NIL

| Major<br>group/class    | Crop | Variety | Quantity<br>(Nos.) | Value<br>(Rs.) | Provided to No. of<br>Farmers |
|-------------------------|------|---------|--------------------|----------------|-------------------------------|
| Fruits                  | -    | -       | -                  | -              | -                             |
| Spices                  | -    | -       | -                  | -              | -                             |
| Vegetables              | -    | -       | -                  | -              | -                             |
| Forest Species          | -    | -       | -                  | -              | -                             |
| Ornamental<br>Crops     | -    | -       | -                  | -              | -                             |
| <b>Plantation Crops</b> | -    | -       | -                  | -              | -                             |
| Others (Specify)        | -    | -       | -                  | -              | -                             |

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#### **BIO-PRODUCT: NIL**

LIVESTOCK: NIL

#### 3.6. Literature Developed/Published (with full title, author & reference)

#### (A) KVK News Letter: nil

# (B) Literature developed / published

| Item                 | Title  | Authors name  | Number<br>of<br>copies |
|----------------------|--|---|------------------------|
| 1                    | 2  | 3   | 4                      |
| papers               | Hetreosis in sesame (Sesame indicum L.)  | Javia R.M., Pandya<br>H.M. and Dhaduk<br>H.L.                                 |                        |
| Research papers      | Response of jatropha curcas grown on wasteland to nitrogen and phosphorus fertilization              | Bhuva H.M.,<br>Chaudhari D.R.,<br>Chikara J., Parmar<br>D.R. and Patolia J.S. |                        |
|                      | Effect of nutrient management in sesame on sulphur and micronutrient availability in sandy loam soil | Suratria G.S., Vora<br>V.D., Javia R.M.,<br>Akbari K.N. and<br>Padmani D.R.   |                        |
|                      | Effect of nutrient management on sesame yield and post harvest soil fertility in sandy loam soils    | Akbari K.N., Sutaria<br>G.S., Javia R.M., Vora<br>V.D. and Padmani<br>D.R.    |                        |
|                      | Identification of technological needs and problems of farmers in Agril. Entomology                   | Bochlya B.C., Javia<br>R.M., Bharadiya A.M.<br>and Bhuva H.M.                 |                        |
| Total                | 05   |   |                        |
| Leaflets/<br>folders | Surendranagar jilanu krushi<br>mandir  | Kabariya B.B. and<br>Javia R.M.   | 1000                   |
| Leaf                 | Suki khetima vadhare pak<br>utpadan kevi rite<br>Medavasho   | Bhuva H.M. and Javia<br>R.M.  | 1000                   |

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| Pashuchikitsama vaparati davao ane pashurahethanma vaparata          | R.M. and Bhuva H.M. Tajpara M.M., Javia R.M. and Bhuva H.M.   | 1000 |
|--|---|------|
| Talma rog – jivat niyantran  Dudh utpadanma ghatado ane              | Bharadiya A.M., Javia R.M. and Bhuva H.M. Tajpara M.M., Javia | 1000 |
| Magafalini jivato ane tenu niyantran                                 | Bharadiya A.M., Javia R.M. and Bhuva H.M.                     | 1000 |
| Ratanjyotni kheti paddhati   | Bhuva H.M., Javia R.M. and Tajpara M.M.                       | 1000 |
| Alasiya apanavo jamin bachavo  | Bhuva H.M., Javia R.M. and Bochliya B.C.                      | 1000 |
| Chaniya khatar no ek matra<br>paryay etle kapasni santhinu<br>khatar | Bhuva H.M., Javia R.M. and Bochliya B.C.                      | 1000 |
| Khedut mahilao ane<br>poshhankhham aahar                             | Bhalala B.M. and Javia R.M.                                   | 1000 |
| Jal sangrah ane teni vividh paddhatio                                | Prajapati G.V. and<br>Javia R.M.                              | 1000 |
| Vadhu dudha utpadan kem<br>midavasho                                 | Tajapar M.M. amd<br>Javia R.M.                                | 1000 |
| Kapasma jivato tatha rogoni<br>niyantran vyavatha                    | Bharadiya A.M. and<br>Javia R.M.                              | 1000 |

# (C) Details of Electronic Media Produced:

| Sr. No. | Type of media (CD/<br>VCD/DVD/Audio-<br>Cassette) | Title of the programme | Number |
|---------|---|------------------------|--------|
|         |   |                        |        |

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#### 3.7. Success stories/Case studies

#### **Success Story-1.**

#### 1. Adoption of INM in Bt cotton

1. Name of farmer : Narshibhai Arjanbhai Lakum

2. Name of village : Doliya (Sayala)3. District : Surendranagar

Cotton is the main cash crop in Surendranagar district of Gujarat, most of the farmers of this area cultivated cotton as a Kharif crop. The average productivity seen in this area for cotton is i.e. 1825 kg/ha of district. Most of the farmer was used bt variety of cotton. These varieties are higher yielder hence more balance and more requirements of nutrients. Most of the farmers used only DAP and Urea. They not aware about the use of micronutrients. So the yield comes low due to defoliation at the time of maturity and less setting of flower due to more use of nitrogenous fertilizers.

Shri Narshibhai Arjanbhai Lakum is a progressive farmer of the Doliya village, Talulka:Sayala. He has about 6 ha land on which he grows mostly cotton in Kharif season. Through Krishi Vigyan Kendra one FLD on INM in cotton was conducted on his field. The treated plots shows vigorous plant growth, more branching and high boll formation than the control plot, hence as a result more yield was obtained against the local check. He told that approximately 15-20% yields were increased due to the adoption of INM in cotton. He said that for the forthcoming year he will definitely use INM due to higher yield and superior quality.

# 3.8. Give details of innovative methodology or innovative technology of Transfer of Technology developed and used during the year

#### 1. Method of sowing (Row sowing of cumin):

Cumin is highly remunerative as compared to other spice crops. In Surendranagar district the area of cumin is increasing due to suitable climatic condition of the district. For successful cultivation of cumin dry and cool climate is most favorable, hence Surendranagar district is suited to its cultivation.

During PRA survey and various field diagnostic visits, it was found that most of the farmers were adopted broad casting method for sowing of cumin. After discussing with all the Subject Matter Specialists of the Krishi Vigyan Kendra under the chairmanship of Programme coordinator, a field experiment on cumin was conducted at the Krishi Vigyan Kendra. The plot is divided into two halves, one for farmer's practice and other for row sowing i.e. for improved practice. All the component of production technologies keeps same. During the initial stage of germination, the germination occurs very well in row sowing as compare to local check. The growth parameters were also good in improved practices than the check. It was found that heavy attack of powdery mildew occur in dense populated farmer's practices plot as compared to improved practices plot. The yield of the crop was also fluctuated. As a result we found that the row sowing method is more suitable for cumin sowing rather than broad casting method.

- 2. Use of Tricoderma harzianum against stem rot disease of groundnut.
- 3. Cotton Stalk Shredder
- 4. Cotton Stalk Puller
- 5. Tractor mounted spryer

- 6. Minimizing the Fertilizer and Maximizing organic manure in Cotton crop
- 7. IPM in Cotton
- 3.9 Give details of indigenous technology practiced by the farmers in the KVK operational area which can be considered for technology development (in detail with suitable photographs)

|    | Crop          | ITK Practiced   | Purpose of ITK  |
|----|---------------|---|---|
| 1  | Cotton        | Cow urine + Dhatura + Desi Aakada boiled and their boiled extract sprays on cotton crop to control the sucking pest.                                | To control sucking pest.                                    |
| 2  | Black<br>gram | Uses of Mehandi powdar and Black gram for minimize the repeat breeder (Uthalo)  | To minimize repeat breeder                                  |
| 3  | Cattle        | For the control of H.S. disease (Locally called Humaro), Kalthi pulse used in feeding   | To control H.S. disease                                     |
| 4  | Cotton        | Boiled mixture of neem oil (500 gms), Aelovera (4 kg), tobacco (500 gms)& water (20 lit) used to control the heleothis, pink boll worm, semi looper | To control the<br>heleothis, pink boll<br>worm, semi looper |
| 5  | Wheat         | Use of cactus leaves & fruits to control the termites   | To control termites   |
| 6  | Cumin         | For the control of powdery mildew in cumin, boiled extract of 3 kg leaves of Piludi + 20 lit water spray on cumin                                   | To control powdery mildew                                   |
| 7  | Castor        | Milk of cactus is used for the control of stem rot in castor  | To control stem rot   |
| 8  | Cotton        | Fermented bajra floor (Bajra floor dig in heap of gobber for 10 days) used for the control of different larvae in Cotton                            | To control different larvae                                 |
| 9  | Pulses        | Ash powder is used to preserve the pulses.  | For the storage   |
| 10 | Grain         | Neem leaves are used to store pulses as well as grains.   | For the storage   |
| 11 | Child care    | To cure cough and cold in children, ajwain seed or nagarvel leaf should be used. Those are applying on chest and give hot towel treatment to child. | Child care  |
| 12 | Child care    | To cure dehydration, jaggery water is given to child  | Child care  |

#### Indicate the specific training need analysis tools / methodology followed for

- \* Identification of courses for farmers/farm women:
  - o Training for value addition in wheat, groundnut and pulse
- \* Rural Youth:
  - o Care and maintenance of farm implements.
  - o Safe use of agro chemicals.
  - o Organic farming.
- \* Inservice personnel:
  - Pre seasonal training on kharif and rabi crops management

#### 3.11 Field activities

Number of villages adopted : 14
No. of farm families selected : 140

\* No. of survey/PRA conducted : 1 PRA, 1 Bench Mark Survey

#### 3.12. Activities of Soil and Water Testing Laboratory

Status of establishment of Lab : completed

1. Year of establishment : 2010-11

2. List of equipments purchased with amount : --

| Sr. No. | Name of the Equipment        | Qty. | Cost     |
|---------|------------------------------|------|----------|
| 1       | Specto-photo meter           | 1    | 39,480   |
| 2       | Flame-photo meter            | 1    | 4,4887   |
| 3       | PH meter                     | 2    | 7,600    |
| 4       | Conductivity bridge EC Meter | 1    | 9,450    |
| 5       | Physical balance             | 1    | 6,616    |
| 6       | Chemical balance             | 1    | 45,066   |
| 7       | Water distillation steel     | 1    | 1,57,500 |
| 8       | Shaker                       | 2    | 36,000   |
| 9       | Refrigerator                 | 1    | 19,200   |
| 10      | Oven                         | 1    | 15,215   |
| 11      | Hot plate                    | 2    | 9,450    |

#### 3. Details of samples analyzed so far

| Details       | No. of<br>Samples | No. of<br>Farmers | No. of<br>Villages | Amount realized |
|---------------|-------------------|-------------------|--------------------|-----------------|
| Soil Samples  |                   |                   |                    |                 |
| Water Samples |                   |                   |                    |                 |
| Total         |                   |                   |                    |                 |

,

# 4. IMPACT

#### 4.1 Impact of KVK activities: Details given in Impact analysis

| Name of specific                | No. of       | % <b>of</b> | Change in income (Rs.) |                     |  |
|---------------------------------|--------------|-------------|------------------------|---------------------|--|
| technology/skill<br>transferred | participants | adoption    | Before<br>(Rs./Unit)   | After<br>(Rs./Unit) |  |
|                                 |              |             |                        |                     |  |
|                                 |              |             |                        |                     |  |
|                                 |              |             |                        |                     |  |

# 4.2. Cases of large scale adoption:

| Sr. No |                    | Technology demonstrated        | Details of popularization                          | Horizontal spread of technology |                |               |
|--------|--------------------|--------------------------------|--|---------------------------------|----------------|---------------|
|        |                    |                                | methods<br>suggested to the<br>Extension<br>system | No. of<br>villages              | No. of farmers | Area<br>in ha |
| 1      | Dry                | Latest                         | Field Day,   | 14                              | 1500           |               |
|        | farming            | recommended                    | FLD,   |                                 |                |               |
|        |                    | variety                        | Training   |                                 |                |               |
|        |                    | GG-20<br>(G'nut)               |  |                                 |                |               |
|        |                    | Guj. Til-2<br>(Sesamum)        |  |                                 |                |               |
|        |                    | Guj.<br>Greengram-4            |  |                                 |                |               |
|        |                    | Guj.Musrard-3<br>(Mustard)     |  |                                 |                |               |
|        |                    | Guj.Cumin-4<br>(Cumin)         |  |                                 |                |               |
|        |                    | GW – 366<br>(Wheat)            |  |                                 |                |               |
| 2      | Animal             | Vaccination                    | Training,  | 14                              | 437            |               |
|        | husbandry          | De-worming                     | Animal   | 14                              | 660            |               |
|        | Mineral<br>Mixture | treatment<br>camp,<br>FLD, OFT | 14   | 240                             |                |               |

- Details of impact analysis of KVK activities carried out during the reporting period:

#### Impact Study of KVK Surendranagar

Krishi Vigyan Kendra, Surendranagar is working in 3 cluster of 14 villages of Chotila, Sayala and Muli talukas of Surendranagar district from 2006. Different programmes like FLDs and OFTs were organized for practicing farmers in selected villages since its inception. The need based training programmes are being planned and organized as on-campus and off campus trainings for the adopted villages. The topics selected were mostly crop production technologies, plant protection measures, water managements etc. the front line demonstrations on recently released varieties of major growing crops and cropping system were organized on farmers fields.

An Interview schedule was prepared to measure the impact of KVK activities such as training, FLDs OFT on beneficiaries. An attempt was made to study the profile of the participants trainees, knowledge and adoption of different agricultural technologies and increase in yield in major crops before KVK and after KVK. The interview schedule was prepared in local language and 100 participant trainees were interview by random sampling method. The study was conducted with following objectives:

- 1. To know the profile of trainees
- 2. to identify the agricultural information sources before KVK and after KVK
- 3. to assess the knowledge and adoption of trainees about agricultural technology before and after KVK
- 4. to assess the yield of major growing crops before and after KVK

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#### (1) Profile of the trainees

#### A. Age of participants

| S.NO. | Category           | Percentage |
|-------|--------------------|------------|
| 1     | Up to 35 years     | 30         |
| 2     | 36 to 50 years     | 53         |
| 3     | More than 50 years | 17         |

The data reveals that about 50 per cent of the participants belongs to 36 to 50 year age group and 30 per cent of participants were from young age group. Hence, more emphasis may be given to attract young age farmers due to their education.

#### B. Educational status of the participants

| S. No. Category |                      | Percentage |
|-----------------|----------------------|------------|
| 1               | Illiterate           | 18         |
| 2               | Primary level        | 52         |
| 3               | S.S.C./ H.S.C. level | 23         |
| 4               | Graduate and above   | 7          |

Majority of the of the farmers were having either primary or high school education the data also show that very few 7 per cent of the respondents were graduate and above. It shows that they are not interested in agriculture and allied aspects.

#### C. Area of farmland (ha.)

| S.No. | Category        | Percentage |
|-------|-----------------|------------|
| 1     | Less than 1 ha. | 18         |
| 2     | 1 to 4 ha       | 57         |
| 3     | More than 4 ha. | 25         |

The data indicates that majority of the participants farmers were middle to big farmers category.

| D. Annual | Income ( | (Rs.) | ) |
|-----------|----------|-------|---|
|-----------|----------|-------|---|

| S. N. | Category         | Percentage |            |  |
|-------|------------------|------------|------------|--|
|       |                  | Before KVK | At present |  |
| 1     | 10000 to 50000   | 28         | 22         |  |
| 2     | 50001 to 100000  | 34         | 30         |  |
| 3     | More than 100000 | 38         | 48         |  |

The farmers having annual income of Rs 10,000 to 50,000 were 28 percent, where as 34 per cent farmers had 50,001 to 1,00000 and 38 percent farmers were having annual income more the 100000 before KVK inception. At present 48 percent farmers were having annual income more than Rs.100000, 30 percent were having Rs 50001 to 100000 and 22 percent having 10000 to 50000. It shows that after KVK, the annual income of the farmers has increased to some extent.

#### 2. Sources of Agricultural information before KVK and at present

| S.  | Sources of agril. | Percentage |            |  |
|-----|-------------------|------------|------------|--|
| No. | information       | Before KVK | At present |  |
| 1   | Radio             | 30         | 42         |  |
| 2   | TV.               | 42         | 48         |  |
| 3   | Telephone         | 23         | 35         |  |
| 4   | News Paper        | 20         | 40         |  |
| 5   | Agril Literature  | 28         | 37         |  |
| 6   | KVK Scientist     | -          | 85         |  |
| 7   | NGOs              | 12         | 25         |  |
| 8   | Agro agencies     | 54         | 68         |  |

The data presented in the table reveals that 54 percent of the respondents got agricultural information from agro agencies, 42 per cent from TV, 30 per cent from radio 28 percent from agril literature and remaining from news papers and various NGO activities. Before the KVK started .in this area. But at present 85 percent getting the information from KVK Scientist, 68 per cent from agro

agencies 48 per cent from TV, 42 per cent from Radio and remaining from various

sources.

# 3. Knowledge and Adoption of Agril. Technology before KVK and at present by trainees

# A. Knowledge and adoption of Cotton Production Technology

| S. N | Particulars                              | Before    | Before KVK |           | sent     |
|------|--|-----------|------------|-----------|----------|
|      |  | Knowledge | Adoption   | Knowledge | Adoption |
| 1.   | High Yielding<br>Varieties, Bt<br>cotton | 60        | 30         | 100       | 95       |
| 2    | Sowing Time                              | 85        | 78         | 95        | 90       |
| 3    | Seed Rate                                | 60        | 55         | 100       | 90       |
| 4    | Seed Treatment                           | 30        | 25         | 45        | 35       |
| 5    | Row Spacing                              | 35        | 30         | 75        | 70       |
| 6    | Application of Fertilizer                | 25        | 22         | 85        | 75       |
| 7    | Irrigation                               | 78        | 72         | 85        | 80       |
| 8    | Control<br>measures for<br>Insects       | 25        | 20         | 75        | 70       |
| 9    | Control<br>measures for<br>Diseases      | 22        | 18         | 45        | 40       |

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# B. Knowledge and adoption of Groundnut Production Technology

| S.No | Particulars                        | Before    | KVK      | At pre    | sent     |
|------|------------------------------------|-----------|----------|-----------|----------|
|      |                                    | Knowledge | Adoption | Knowledge | Adoption |
| 1.   | High Yielding<br>Varieties         | 48        | 24       | 95        | 84       |
| 2    | Sowing Time                        | 80        | 75       | 95        | 88       |
| 3    | Seed Rate                          | 65        | 53       | 80        | 75       |
| 4    | Seed Treatment with<br>Trichoderma | 10        | 2        | 55        | 45       |
| 5    | Row Spacing                        | 26        | 14       | 90        | 85       |
| 6    | Application of Fertilizer          | 49        | 45       | 65        | 60       |
| 7    | Irrigation                         | 78        | 70       | 92        | 88       |
| 8    | Control measures for Insects       | 33        | 27       | 85        | 76       |
| 9    | Control measures for Diseases      | 28        | 26       | 84        | 74       |

# C. Knowledge and adoption of wheat Production Technology

| S. N | Particulars                                       | Before    | KVK      | At present |          |  |
|------|---|-----------|----------|------------|----------|--|
|      |   | Knowledge | Adoption | Knowledge  | Adoption |  |
| 1.   | High Yielding<br>Varieties GW-496,<br>GW-366, 273 | 65        | 60       | 85         | 84       |  |
| 2    | Sowing Time                                       | 80        | 75       | 98         | 92       |  |
| 3    | Seed Rate   | 71        | 65       | 85         | 78       |  |
| 4    | Seed Treatment                                    | 38        | 30       | 55         | 45       |  |
| 5    | Row Spacing                                       | 46        | 36       | 70         | 65       |  |
| 6    | Application of<br>Fertilizer                      | 45        | 35       | 75         | 65       |  |
| 7    | Irrigation  | 75        | 65       | 80         | 75       |  |
| 8    | Control measures for Insects                      | 33        | 25       | 65         | 60       |  |
| 9    | Control measures for Diseases                     | 10        | -        | 85         | 45       |  |

#### D. Knowledge and adoption of Cumin Production Technology

| S. N | Particulars                      | Before    | KVK      | At present |          |  |
|------|----------------------------------|-----------|----------|------------|----------|--|
|      |                                  | Knowledge | Adoption | Knowledge  | Adoption |  |
| 1.   | High Yielding Varieties GC-2,3,4 | 40        | 35       | 100        | 100      |  |
| 2    | Sowing Time                      | 90        | 85       | 100        | 100      |  |
| 3    | Seed Rate                        | 56        | 50       | 90         | 80       |  |
| 4    | Seed Treatment                   | 45        | 40       | 88         | 85       |  |
| 5    | Row Spacing                      | 45        | 40       | 85         | 80       |  |
| 6    | Application of Fertilizer        | 38        | 35       | 90         | 80       |  |
| 7    | Irrigation                       | 80        | 73       | 100        | 94       |  |
| 8    | Control measures for Insects     | 35        | 30       | 86         | 80       |  |
| 9    | Control measures for Diseases    | 28        | 21       | 100        | 95       |  |

# E. Knowledge and adoption of Chickpea Production Technology

| S. N | Particulars                                  | Before    | KVK      | At present |          |
|------|--|-----------|----------|------------|----------|
|      |  | Knowledge | Adoption | Knowledge  | Adoption |
| 1.   | High Yielding<br>Varieties Guj Gram<br>1,2,3 | 17        | 5        | 75         | 65       |
| 2    | Seed Rate                                    | 58        | 39       | 90         | 80       |
| 3    | Seed Treatment                               | 15        | -        | 55         | 45       |
| 4    | Row Spacing                                  | 55        | 50       | 75         | 70       |
| 5    | Application of<br>Fertilizer                 | 55        | 50       | 80         | 70       |
| 6    | Irrigation                                   | 86        | 70       | 95         | 90       |
| 7    | Control measures for Insects                 | 33        | 25       | 55         | 50       |
| 8    | Control measures for Diseases                | 22        | 20       | 50         | 45       |

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#### 5. LINKAGES

#### - Functional linkage with different organizations

| Name of organization                      | Nature of linkage                 |
|---|-----------------------------------|
| State department of Agriculture           | The head of all the organizations |
| - Dy. Director of Agriculture (Extension) | are members of Scientific         |
| - Dy. Director of Horticulture            | Advisory Committee of KVK and     |
| - Dy. Director of Animal husbandry        | have linkage with different       |
| - Dy. Director of Soil Conservation       | activities of KVK viz., training  |
| - Dy. Director of Social Forestry         | programmes, farmers day, field    |
| Jilla Udyog Kendra                        | days, etc.                        |
| Milk Co-operative Society                 |                                   |
| State bank of Saurashtra                  |                                   |
| Doordarshan Kendra                        |                                   |
| All India Radio                           |                                   |
| ATMA, Surendranagar                       |                                   |
| AKRSP, Sayala                             |                                   |
| NHRDF                                     |                                   |
| Farmers Training Centre                   |                                   |

# 5.2 List special programmes undertaken by the KVK, which have been financed by State Govt./Other Agencies

| Name of the | Date/ Month   | Funding    | Amount (Rs.) 2010-11 |               |  |
|-------------|---------------|------------|----------------------|---------------|--|
| scheme      | of initiation | agency     | Recurring            | Non-recurring |  |
| RKVY        | October-2008  | State Govt |                      |               |  |

#### 5.3 Details of linkage with ATMA

a) Is ATMA implemented in your district: Yes

| Sr. No. | Programme                  | Nature of linkage    | Remarks |
|---------|----------------------------|----------------------|---------|
| 1       | Training for farmers       | Lecture delivered as |         |
| 2       | Khedut shibir              | resource person      |         |
| 3       | Preparation of Action plan | As a members         |         |

# 5.4 Give details of programmes implemented under National Horticultural Mission:

| Sr. No. | Programme         | Nature of linkage    | Constraints if any |
|---------|-------------------|----------------------|--------------------|
| 1       | Training for Mali | Lecture delivered as |                    |
| 2       | Khedut shibir     | resource person      |                    |

5.5 Nature of linkage with National Fisheries Development Board: NIL

#### 6. PERFORMANCE OF INFRASTRUCTURE IN KVK:

- 6.1 Performance of demonstration units (other than instructional farm) : Demonstration units are under construction
- 6.2 Performance of instructional farm (Crops) including seed production

| Sr.<br>No. | Name of crop | Date of sowing | Date of harvest | Area<br>(ha) | Variety | Type of produce | Quantity<br>(Kg) | Seeds<br>Sale (Kg) | Income<br>(Rs.) |
|------------|--------------|----------------|-----------------|--------------|---------|-----------------|------------------|--------------------|-----------------|
| 1          | Ground Nut   | 9-7-2010       | 1-11-2010       | 7.7          | GG-2    | Breeder         | 3250             | -                  |                 |
| 2          | Ground Nut   | 9-6-2010       | 14-10-2010      | 2.5          | GG-20   | TF              | 1440             |                    |                 |
| 3          | Sesamum      | 9-7-2010       | 6-10-2010       | 1.0          | GT-1    | Breeder         |                  |                    |                 |
| 4          | Cumin        | 1-12-2010      | 6-3-2011        | 2.0          | GC-4    | TF              |                  |                    |                 |
| 5          | Castor       | 30-11-10       |                 | 0.25         | JI-96   | Breeder         |                  |                    |                 |
| 6          | Sesamum      |                |                 |              | GT-3    | TF              |                  | 20                 | 2000            |
| 7          | Wheat        |                |                 |              | GW-496  | TF              | 2433             | 2433               | 45919           |
| 8          | Cumin        |                |                 |              | GC-4    | TF              |                  | 193                | 30880           |
| 9          | Castor       |                |                 |              | Л-96    | Breeder         |                  | 36                 | 2880            |

# 6.3 Performance of production Units (bio-agents / bio pesticides/ bio fertilizers etc.,): NIL

| Sr.     | Name of the | Qty            | Amount (Rs.) |              |         |  |
|---------|-------------|----------------|--------------|--------------|---------|--|
| No<br>· | product     | Cost of inputs |              | Gross income | Remarks |  |
| -       | -           | -              | -            | -            | -       |  |

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#### 6.4 Performance of instructional farm (livestock and fisheries production): NIL

# 6.5 Rainwater Harvesting Training programme conducted by using rainwater harvesting demonstration unit

| Date    | Title of the training                  |          |        | No. of Participants including SC/ST |   |    | No. of SC/ST<br>Participants |   |   |
|---------|--|----------|--------|-------------------------------------|---|----|------------------------------|---|---|
|         | course                                 | ן ט<br>ו | No. of | M                                   | F | Т  | M                            | F | Т |
| 11-8-10 | Rain water<br>Management<br>Technology | PF       | 1      | 13                                  | 0 | 13 | 0                            | 0 | 0 |
| 28-9-10 | Efficient use of harvested water       | PF       | 1      | 13                                  | 0 | 13 | 3                            | 0 | 3 |
| 21-3-11 | Efficient use of harvested water       | RY       | 1      | 17                                  | 0 | 17 | 3                            | 0 | 3 |

#### 6.6 Utilization of hostel facilities:

Accommodation available (No. of beds): 10

#### 7. FINANCIAL PERFORMANCE

#### 7.1 Details of KVK Bank accounts

|                         | Name of the Bank | Location | A/c Number  |
|-------------------------|------------------|----------|-------------|
| a. With Host. Institute | SBI              | Junagadh |             |
| b. With KVK (2704 -18)  | SBS              | Chotila  | 66002464030 |
| c. With KVK (2076- 22)  | SBS              | Chotila  | 66002438769 |

# 7.2 Utilization of KVK funds during the year 2010 -11

| S<br>N | Items/Head   | Sanctioned grant | Grant<br>received | Expenditure |
|--------|--|------------------|-------------------|-------------|
| A R    | ECURRING CONTIGENCY  |                  |                   |             |
| 1      | Pay & Allowances   | 82.82            |                   | 75,67,286   |
| 2      | Traveling Allowances   | 1.00             |                   | 84,215      |
| 3      | Contingencies  | 11.00            |                   | 11,13,239   |
| a.     | Stationary, Telephone, Postage and other expenditure on office running | 1.75             |                   | 171811      |
| b.     | POL, repair of vehicles, tractor and equipments                        | 1.00             |                   | 1,69,970    |
| c.     | Meals/refreshments of trainees   | 0.85             |                   | 46269       |
| d.     | Training materials   | 0.90             |                   | 90210       |
| e.     | Frontline demonstration except oilseeds and pulses                     | 1.05             |                   | 92635       |
| f.     | On farm testing  | 0.70             |                   | 69760       |
| g.     | Training of extension functionaries                                    | 0.50             |                   | 49555       |
| h.     | Maintenance of building  | 0.25             |                   | 24342       |
| i.     | Establishment of soil, plant & water testing laboratory                | 4.00             |                   | 398687      |
|        | TOTAL-A  | 94.82            |                   | 87,64,740   |
| BN     | ON-RECURRING CONTIGENCY  |                  |                   |             |
| 1      | Equipment & Furniture  | 29.10            |                   | 11,21,228   |
| A      | Computer   | 0.50             |                   | 47,936      |
| В      | EPABX  | 0.50             |                   |             |
| С      | PA System  | 0.30             |                   | 29,093      |
| D      | Furniture  | 5.00             |                   | 4,02,135    |
| Е      | Power tiller   | 1.50             |                   | 1,49,100    |
| F      | Multi crop thresher  | 0.50             |                   | 38,000      |
| G      | Seed cum fertilizer drill  | 0.30             |                   | 27,500      |
| Н      | Seed grading packing machine   | 0.50             |                   | 37,000      |
| I      | Plant health diagnostic facility                                       | 10.00            |                   |             |
| J      | Establishment of soil water testing lab                                | 10.00            |                   | 3,90,464    |
| 2      | Works Implement shed   | 3.00             |                   | 3,00,000    |
| 3      | Library  | 0.10             |                   |             |
| 4      | Vehicle motorcycle   | 0.50             |                   | 47,494      |
|        | TOTAL-B  | 32.70            |                   | 14,68,722   |
|        | GRAND TOTAL  | 127.52           | 1,20,97,000       | 1,02,33,462 |

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#### 7.3 Status of revolving fund (Rs.) as on 31st March - 2011

| Year                           | Opening<br>balance as<br>on 1 <sup>st</sup> April | Income<br>during<br>the year | Expenditure<br>during the<br>year | Net balance in<br>hand as on 1st<br>April of each<br>year |
|--------------------------------|---|------------------------------|-----------------------------------|---|
| April 2005<br>to<br>March 2006 | 1,00,000  |                              |                                   | 1,00,000  |
| April 2006<br>to<br>March 2007 | 1,00,000  | 73,778                       | 15,709                            | 1,58,069  |
| April 2007<br>to<br>March 2008 | 1,58,069  | 3,60,622                     | 3,31,160                          | 1,87,531  |
| April 2008<br>to<br>March 2009 | 1,87,531  | 2,87,137                     | 1,87,888                          | 2,86,780  |
| April 2009<br>to<br>March 2010 | 2,86,780  | 6,24,618                     | 1,00,011                          | 8,11,387  |
| April 2010<br>to<br>March 2011 | 8,11,387  | 1,71,380                     | 51                                | 9,82,716  |

# 8.0 Please include information which has not been reflected above (write in detail).

#### 8.1 Constraints

(a) Administrative : Nil

(b) Financial : Nil

(c) Technical : Nil

# <u>Technology Inventory and Activity Chart - III</u>

| S.N | Technology   | Crop/<br>enterprise | Year of<br>release or<br>recommendat<br>ion of<br>technology | Source of technology    | Reference/<br>citation |
|-----|--|---------------------|--|-------------------------|------------------------|
| 1.  | Variety : Guj.<br>Mustard-3  | Mustard             | 2004   | S.K.A.U.,<br>S.K. Nagar |                        |
| 2.  | Variety : Guj.<br>Gram - 3   | Gram                | 2008   | J.A.U.,<br>Junagadh     |                        |
| 3.  | Variety : Guj.<br>Cumin - 4  | Cumin               | 2002   | G.A.U., S.K.<br>Nagar   |                        |
| 5   | Variety : GW-<br>366   | Wheat               | 2006   | J.A.U.,<br>Junagadh     |                        |
| 7   | Variety : GG-20  | Groundnut           | 1991   | G.A.U.,<br>S.K. Nagar   |                        |
| 8   | Application of<br>Trichoderma<br>against stem rot<br>disease in<br>Groundnut |                     |  | J.A.U.,<br>Junagadh     |                        |
| 9   | Variety : Guj.<br>Sesamum-3  | Sesamum             | 2006   | J.A.U.,<br>Junagadh     |                        |
| 10  | Variety : Guj.<br>Greengram - 4  | Green Gram          | 2002   | G.A.U.,<br>S.K. Nagar   |                        |
| 11  | Variety : RCH-2<br>(Bt)  | Cotton              |  | -                       |                        |
| 12  | Management of mealy bug in cotton  |                     |  | J.A.U.,<br>Junagadh     |                        |

# **Activity Chart**

| Crop/<br>Animal/<br>Enterprise | Problem      | Cause                    | Solution                          | Activity                    | Reference<br>of<br>Technology |
|--------------------------------|--------------|--------------------------|-----------------------------------|-----------------------------|-------------------------------|
| Mustard                        | Low<br>yield |                          | Improved variety                  | FLD, Training,<br>Field day | S.K.A.U.,<br>S.K. Nagar       |
| Gram                           | Low<br>yield |                          | Improved variety                  | FLD, Training,<br>Field day | J.A.U.,<br>Junagadh           |
| Cumin                          | Low<br>yield |                          | Improved variety                  | FLD, Training,<br>Field day | G.A.U.,<br>S.K. Nagar         |
| Wheat                          | Low<br>yield |                          | Improved variety                  | FLD, Training,<br>Field day | J.A.U.,<br>Junagadh           |
| Groundnut                      | Low<br>yield | Disease infestation      | IDM                               | FLD, Training,<br>Field day | J.A.U.,<br>Junagadh           |
| Sesamum                        | Low<br>yield |                          | Improved variety                  | FLD, Training,<br>Field day | J.A.U.,<br>Junagadh           |
| Greengram                      | Low<br>yield |                          | Improved variety                  | FLD, Training,<br>Field day | G.A.U.,<br>S.K. Nagar         |
| Cotton                         | Low<br>yield |                          | Improved variety                  | FLD, Training,<br>Field day |                               |
|                                | Low<br>yield | Infestation of Mealy bug | Management of Mealy bug in cotton | OFT, Training,<br>Field day | J.A.U.,<br>Junagadh           |