

# RESEARCH PROJECTS/SCHEME DETAILS

## Non-plan Scheme

|   |  |               |               |                         |                  |
|---|--|---------------|---------------|-------------------------|------------------|
| <b>Name of the Scheme</b>   | <b>Project for Research in Fruit Crops</b> |               |               |                         |                  |
| <b>Budget Head</b>  | <b>5014</b>                                |               |               |                         |                  |
| <b>Objectives/Mandate of the scheme:</b>  |  |               |               |                         |                  |
| 1. To evolve alternate and economically viable crops and cropping systems for grassland of this region. |  |               |               |                         |                  |
| 2. To develop agro techniques for mango fruit Crop.   |  |               |               |                         |                  |
| <b>Ongoing Experiments:</b>   |  |               |               |                         |                  |
| 1. Ultra high density plantation in mango.  |  |               |               |                         |                  |
| 2. Effect of pruning on sapota cv. Kalipatti planted at normal distance.                                |  |               |               |                         |                  |
| 3. Evaluation of growth, yield and quality of promising half-sib selections from Alphonso.              |  |               |               |                         |                  |
| 4. Survey and selection of plus trees for regular bearing character in mango var. Langra.               |  |               |               |                         |                  |
| 5. Canopy management in mango cv. Kesar under high density planting.                                    |  |               |               |                         |                  |
| 6. Canopy management in mango cv. Totapuri under high density planting.                                 |  |               |               |                         |                  |
| 7. Canopy management in mango cv. Alphonso under high density planting.                                 |  |               |               |                         |                  |
| 8. Effect of rootstocks on growth and yield of mango cv. Kesar.   |  |               |               |                         |                  |
| <b>Staff Position:</b>  |  |               |               |                         |                  |
| <b>Name of the post</b>   | <b>Sanctioned</b>                          | <b>Filled</b> | <b>Vacant</b> | <b>Name of employee</b> | <b>E-mail ID</b> |
| Research Scientist (Horti.)   | 1  | 1             | -             | Dr. D. K. Sharma        | dksharma@nau.in  |
| Assistant Research Scientist<br>(Horti.)  | 1  | 1             | -             | Dr. J. P. Makati        | jp_makati@nau.in |
| Agriculture Officer   | 1  | -             | 1             | Vacant                  | -                |
| Agri. Supervisor  | 2  | -             | 2             | Vacant                  | -                |
| Agri. Assistant   | 6  | 5             | 1             | Shri N. B. Chhaya       | -                |
| Agri. Assistant   |  |               |               | Shri G. S. Kurkutia     | -                |
| Agri. Assistant   |  |               |               | Shri K. P. Patel        | -                |
| Agri. Assistant   |  |               |               | Shri K. P. Chauhan      | -                |
| Agri. Assistant   |  |               |               | Shri P. B. Patel        | -                |
| Agri. Assistant   |  |               |               | Vacant                  | -                |
| Sr. Clerk   | 1  | 1             | -             | Shri P. M. Patel        | -                |
| Jr. Clerk   | 1  | 1             | 0             | Shri. V. P. Chudasma    | vir@nau.in       |
| Tractor Driver  | 1  | 0             | 1             | Vacant                  | -                |

|   |   |               |               |                         |                    |
|---|---|---------------|---------------|-------------------------|--------------------|
| <b>Name of the Scheme</b>   | <b>Establishment of Water Management Scheme</b> |               |               |                         |                    |
| <b>Budget Head</b>  | <b>7027</b>                                     |               |               |                         |                    |
| <b>Objectives/Mandate of the scheme:</b>  |   |               |               |                         |                    |
| 1. To determine the water requirements of different fruit crops grown under command area of Daman Ganga project                 |   |               |               |                         |                    |
| 2. To determine the fertilizer requirement and cropping pattern of the traditional crops  |   |               |               |                         |                    |
| 3. To find out the proper method of irrigation in different soils for higher crop production and to maintain the soil fertility |   |               |               |                         |                    |
| <b>Ongoing Experiments:</b>   |   |               |               |                         |                    |
| 1. Efficacy of organic mulches on soil properties, growth and yield of mango cv. Kesar in rainfed eco-system.                   |   |               |               |                         |                    |
| 2. Effect of time of irrigation on flowering and yield of cashew.   |   |               |               |                         |                    |
| 3. Effect of different sowing methods and nutrient management on Indian bean var. GNIB-21 sown after rice.                      |   |               |               |                         |                    |
| 4. Effect of soil and foliar application of multi-micronutrients on yield and quality of mango cv. Kesar.                       |   |               |               |                         |                    |
| 5. Effect of N, P and K fertilizer on yield and quality of mango cv. Kesar.   |   |               |               |                         |                    |
| <b>Staff Position:</b>  |   |               |               |                         |                    |
| <b>Name of the post</b>   | <b>Sanctioned</b>                               | <b>Filled</b> | <b>Vacant</b> | <b>Name of employee</b> | <b>E-mail ID</b>   |
| Assistant Research Scientist<br>(Agronomy)  | 1   | 1             | -             | Dr. N. K. Gajre         | niravgajre@nau.in  |
| Assistant Research Scientist<br>(Soil Science)  | 1   | 1             | -             | Dr. N. B. Gohil         | nareshgohil@nau.in |
| Agri. Assistant   | 1   | 1             | -             | Shri H. M. Patel        | -                  |
| Lab boy   | 1   | 1             | -             | Shri G. D. Khalifa      | -                  |

### Plan Scheme

|  |   |        |        |                  |           |
|--|---|--------|--------|------------------|-----------|
| Name of the Scheme   | Strengthening of Water Management Project |        |        |                  |           |
| Budget Head  | 12027                                     |        |        |                  |           |
| Objectives/Mandate of the scheme:  |   |        |        |                  |           |
| 1. To determine the water fertilizer requirement of different fruit crops grown under command area of Daman Ganga project                    |   |        |        |                  |           |
| 2. To develop the system of conservation for rain water.   |   |        |        |                  |           |
| 3. To determine the cropping pattern of the command area of Daman Ganga project.   |   |        |        |                  |           |
| Ongoing Experiments:   |   |        |        |                  |           |
| 1. Effect of time of irrigation on flowering and yield of mango var. Kesar.  |   |        |        |                  |           |
| 2. Effect of foliar application of fertilizers on flowering, yield and quality of cashew ( <i>Anacardium occidentale</i> L.) cv. Vengurla-4. |   |        |        |                  |           |
| Staff Position:  |   |        |        |                  |           |
| Name of the post   | Sanctioned                                | Filled | Vacant | Name of employee | E-mail ID |
| Agriculture Officer  | 1   | -      | 1      | Vacant           | -         |
| Agri. Assistant  | 1   | 1      | -      | Miss A. A. Patel | -         |

|  |   |            |        |        |                  |           |
|--|---|------------|--------|--------|------------------|-----------|
| Name of the Scheme   | National Agricultural Research Project Phase-II |            |        |        |                  |           |
| Budget Head  | 12091-2   |            |        |        |                  |           |
| Objectives/Mandate of the scheme:  |   |            |        |        |                  |           |
| 1. Strengthening of research work on fruit and vegetable crops of this region, including mango.                            |   |            |        |        |                  |           |
| 2. To conduct demonstrations of release technologies in vegetable and fruit crops and training program for tribal farmers. |   |            |        |        |                  |           |
| Ongoing Experiments:   |   |            |        |        |                  |           |
| 1. Determination of different decline syndromes in mango orchard.  |   |            |        |        |                  |           |
| 2. Survey and incidence of disease in cashew.  |   |            |        |        |                  |           |
| 3. Comparative assessment of some Jamun genotype under south Gujarat agro climatic condition.                              |   |            |        |        |                  |           |
| Staff Position:  |   |            |        |        |                  |           |
| Name of the post   |   | Sanctioned | Filled | Vacant | Name of employee | E-mail ID |
| Associate Research Scientist (Horti.)  |   | 1          | 1      | -      | Dr. S. Y. Patel  | -         |
| Lab Attendant  |   | 1          | 1      | -      | Shri L. K. Bhoje | -         |

# ICAR Scheme

|  |   |  |        |        |                     |                         |
|--|---|--|--------|--------|---------------------|-------------------------|
| Name of the Scheme   |   | All India Coordinated Research Project on Fruits |        |        |                     |                         |
| Budget Head  |   | 2014-5   |        |        |                     |                         |
| Objectives/Mandate of the scheme:  |   |  |        |        |                     |                         |
| 1. Collection, evaluation, documentation and utilization of the genetic resources. |   |  |        |        |                     |                         |
| 2. Improvement through breeding.   |   |  |        |        |                     |                         |
| 3. Standardization of propagation techniques and rootstocks.                       |   |  |        |        |                     |                         |
| 4. Standardization of agro-techniques and use of bio-regulators.                   |   |  |        |        |                     |                         |
| 5. Management of pests, diseases and other disorders.                              |   |  |        |        |                     |                         |
| Ongoing Experiments:   |   |  |        |        |                     |                         |
| A.   | Horticulture:   |  |        |        |                     |                         |
|  | 1. Augmentation and evaluation of germplasm   |  |        |        |                     |                         |
|  | 2. MLT of mango hybrids   |  |        |        |                     |                         |
|  | 3. MLT (II) for mango hybrids   |  |        |        |                     |                         |
|  | 4. Improvement of mango through half-sibs   |  |        |        |                     |                         |
|  | 5. Evaluation of different rootstocks of mango for problematic soils  |  |        |        |                     |                         |
|  | 6. Fertilizer scheduling for High Density Planting in mango   |  |        |        |                     |                         |
|  | 7. Assessing the effect of climatic variability on mango flowering and yield  |  |        |        |                     |                         |
| B.   | Entomology:   |  |        |        |                     |                         |
|  | 1. Survey and surveillance of insect-pests and natural enemies in mango   |  |        |        |                     |                         |
|  | 2. Evaluation of different botanical formulations for management of sucking pest complex in mango                                   |  |        |        |                     |                         |
|  | 3. Module based pest management in mango  |  |        |        |                     |                         |
|  | 4. Management of mango hopppers and thrips on mango by oil based formulation of Metarhizium anisopliae                              |  |        |        |                     |                         |
|  | 5. Management of mango stem borer ( <i>Batocera rufomaculata</i> ) using ‘Arka Borer Control’                                       |  |        |        |                     |                         |
|  | 6. Crop loss assessment by major insect-pests and diseases of mango   |  |        |        |                     |                         |
| C.   | Plant Pathology:  |  |        |        |                     |                         |
|  | 1. New and emerging diseases of mango   |  |        |        |                     |                         |
|  | 2.Integrated management of post-harvest diseases (Anthracnose, Shoulder browning, Stem end rot and Aspergillus rot) of mango fruits |  |        |        |                     |                         |
| Staff Position:  |   |  |        |        |                     |                         |
| Name of the post   |   | Sanctioned                                       | Filled | Vacant | Name of employee    | E-mail ID               |
| Associate Research Scientist (Horti.)  |   | 1  | 1      | -      | Dr. C. R. Patel     | crphort@nau.in          |
| Assistant Research Scientist (Ento.)   |   | 1  | 1      | -      | Dr. S. M. Chavan    | smchavan@nau.in         |
| Assistant Research Scientist (Horti.)  |   | 1  | 1      | -      | Dr. J. H. Gohil     | jigar.gohil78@gmail.com |
| Agriculture Officer  |   | 2  | 1      | 1      | Mrs. Hiral R. Patel | heerpatel918@gmail.com  |
|  |   |  |        |        | Vacant              | -                       |
| Field Assistant  |   | 1  | 1      | -      | Shri V. A. Patel    | -                       |
| Lab Technician   |   | 1  | 1      | -      | Mrs. Neha Patel     | -                       |
| Junior Clerk   |   | 1  | -      | 1      | Vacant              | -                       |
| Mali   |   | 2  | 2      | -      | Shri R. K. Patel    | -                       |
|  |   |  |        |        | Shri A. T. Patel    | -                       |

|   |   |               |               |                         |                  |
|---|---|---------------|---------------|-------------------------|------------------|
| <b>Name of the Scheme</b>   | <b>All India Coordinated Research Project on Cashew</b> |               |               |                         |                  |
| <b>Budget Head</b>  | <b>2048</b>   |               |               |                         |                  |
| <b>Objectives/Mandate of the scheme:</b>  |   |               |               |                         |                  |
| 1. Standardizing agro techniques foe cashew crop under different agro climatic situations of South Gujarat. |   |               |               |                         |                  |
| 2. Evolving cost effective and efficient pest and disease management practices.                             |   |               |               |                         |                  |
| 3. Evolving high yielding varieties with export grade kernels, tolerance/ resistance to pest and diseases.  |   |               |               |                         |                  |
| <b>Ongoing Experiments:</b>   |   |               |               |                         |                  |
| 1. Germplasm collection, conservation, evaluation, characterization and cataloguing.                        |   |               |               |                         |                  |
| 2. Performance of selected released varieties (Special MLT-VI).   |   |               |               |                         |                  |
| 3. Nutrient management for yield maximization in Cashew.  |   |               |               |                         |                  |
| 4. High density planting: Observational trial in Cashew.  |   |               |               |                         |                  |
| 5. Studies for inter cropping in cashew.  |   |               |               |                         |                  |
| 6. Spacing cum fertilizer trial in Cashew   |   |               |               |                         |                  |
| 7. Chemical control of pest complex in Cashew.  |   |               |               |                         |                  |
| 8. Monitoring of insects pests and their natural enemies of Cashew.   |   |               |               |                         |                  |
| 9. Mapping of natural enemy complex of TMB.   |   |               |               |                         |                  |
| <b>Staff Position:</b>  |   |               |               |                         |                  |
| <b>Name of the post</b>   | <b>Sanctioned</b>                                       | <b>Filled</b> | <b>Vacant</b> | <b>Name of employee</b> | <b>E-mail ID</b> |
| Assistant Research Scientist (Ento.)  | 1   | 1             | -             | Dr. S. G. Parmar        | sgparmar@nau.in  |
| Assistant Research Scientist (Horti.)   | 1   | 1             | -             | Dr. S. K. Desai         | skdesai@nau.in   |
| Technical Assistant   | 1   | 1             | -             | Shri V. A. Darbar       | -                |
| Supporting staff  | 1   | -             | 1             | Vacant                  | -                |