# ICAR-ATARI, Pune

## DETAILS OF ANNUAL PROGRESS REPORT OF KVKs DURING 2023

**(January 2023 to December 2023)**

## 1. GENERAL INFORMATION ABOUT THE KVK

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

| Address with PIN code | Telephone | | E mail | Website address & No. of visitors (hits) |
|---|---|---|---|---|
| | Office | FAX | | |
| Krishi Vigyan Kendra,Navsari Agricultural University, Ahwa road, Waghai, Ta: Waghai, District: Dangs, Gujarat-394 730 | 02631-296645 | - | kvkwaghai@nau.in | http://waghai.kvk8.in |

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

| Address | Telephone | | E mail | Website address |
|---|---|---|---|---|
| | Office | FAX | | |
| Navsari Agricultural University, Eru Char Rasta, Dandi Road, Navsari, Gujarat, 396 450 | 02637-282823<br>02637-282026 | - | dee@nau.in | www.nau.in |

### 1.3. Name of the Senior Scientist and Head with phone & mobile No.

| Name | Telephone / Contact | | |
|---|---|---|---|
| | Office | Mobile | Email |
| Dr. J. B. Dobariya | 02631-296645 | 9724761097 | kvkwaghai@nau.in |

### 1.4. Date and Year of sanction: ICAR 1984-85

**1.5. Staff Position (as on December, 2023)**

| | | | | | If Permanent, Please indicate | | | If Temporary, pl. indicate the consolidated amount paid (Rs./month) |
|---|---|---|---|---|---|---|---|---|
| **Sl. No.** | **Sanctioned post** | **Name of the incumbent** | **Mobile No.** | **Discipline** | **Current Pay Band** | **Current Grade Pay** | **Date of joining** | |
| 1. | Senior Scientist and Head | Vacant | - | - | - | - | - | - |
| 2. | Scientist | Dr. J. B. Dobariya | 9724761097 | Extension Agrucultural | 57700-182400 | - | 20.08.2015 | - |
| 3. | Scientist | Dr. P. P. Javiya | 9925689822 | Crop Production | 57700-182400 | - | 27-08-2019 | - |
| 4. | Scientist | Mr. H. A. Prajapati | 9429430999 | Horticulture | 57700-182400 | - | 13.02.2017 | - |
| 5. | Scientist | Dr. S. A. Patel | 9913439987 | Animal Science | 57700-182400 | - | 27-08-2019 | - |
| 6. | Scientist | Mr. B. M. Vahunia | 8141802632 | Plant Protection | 57700-182400 | | 28-08-2019 | - |
| 7. | Scientist | Vacant (Home Science) | - | - | - | - | - | - |
| 8. | Programme Assistant | Mr. K. V. Patel | 9687788642 | - | 39900-126600 | - | 24-09-2015 | - |
| 9. | Computer Programmer | Vacant | - | - | - | - | - | - |
| 10. | Farm Manager | Mr. R. S. Patel | 9904410078 | - | 39900-126600 | - | 08-03-2019 | - |
| 11. | Accountant/Superintendent | Mr. J. R. Padhiyar | 9924748023 | - | 39900-126600 | - | 01-04-2022 | - |
| 12. | Stenographer | Vacant | - | - | 5200-20200 | - | - | - |
| 13. | Driver 1 | Vacant | - | - | 5200-20200 | - | - | - |
| 14. | Driver 2 | Vacant | - | - | 5200-20200 | - | - | - |
| 15. | Supporting staff 1 | Mr. D. N. Parmar | 6356862156 | | 14800-47100 | - | 01.08.2011 | - |
| 16. | Supporting staff 2 | Vacant | - | - | 4440-7440 | - | - | - |

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

| S. No. | Item | Area (ha) |
|---|---|---|
| 1 | Under Buildings | 0.50 |
| 2. | Under Demonstration Units | -- |
| 3. | Under Crops | 2.60 |
| 4. | Horticulture | 0.83 |
| 5. | Pond | -- |
| 6. | Others if any (Specify) | 1.00 |
| | **Total** | **4.93** |

**1.7. Infrastructural Development:**

**A) Buildings**

| Sr. No. | Name of building | Source of funding | Stage | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | Complete | | | Incomplete | | |
| | | | Completion Year | Plinth area (Sq.m) | Expenditure (Rs.) | Starting year | Plinth area (Sq.m) | Status of construction |
| 1. | Administrative Building | ICAR | 1990 | 200.73 | 0.93 | -- | -- | -- |
| 2. | Farmers Hostel | ICAR | 2005 | 278.00 | 12.00 | -- | -- | -- |
| 3. | Staff Quarters (6) | -- | -- | -- | -- | -- | -- | -- |
| | B-Type(2) | ICAR | 1994 | | | -- | -- | -- |
| | C-Type(1) | ICAR | | 197.04 | 343696 | -- | -- | -- |
| | A-Type(1) | ICAR | | | | -- | -- | -- |
| | E-Type(1) | ICAR | | | | -- | -- | -- |
| | Total | | | 197.04 | 343696 | -- | -- | -- |
| 4. | RCC approach road | | 2005 | 82.00 | 2.21 | -- | -- | -- |
| 5. | RCC Sump | | 2005 | 40000 lit cap | 0.76 | -- | -- | -- |
| 7. | Demonstration Units | ---- | -- | -- | -- | -- | -- | -- |
| 8. | Fencing | ---- | -- | -- | -- | -- | -- | -- |
| 9. | Rain Water harvesting system | ---- | -- | -- | -- | -- | -- | -- |
| 10. | Threshing floor | ICAR | 2012 | 84 | 2.00 | -- | -- | -- |
| 11. | Farm godown | ICAR | 2011 | 12 | 3.00 | -- | -- | -- |
| 12. | ICT lab | -- | -- | -- | -- | -- | -- | -- |
| 13. | other | -- | -- | -- | -- | -- | -- | -- |

## B) Vehicles

| Type of vehicle | Year of purchase | Cost (Rs.) | Total kms. Running | Present status |
|---|---|---|---|---|
| Motorcycle Hero Honda Splendor | 2011 | 50755 | 39501 (31-12-2023) | Working |
| Mahindra Bolero | 2019 | 686240 | 86642 (31-12-2023) | Working |
| Soil testing van | 2009 | 2630000 | 13285 | Not working |

## C) Equipment& AV aids

| Name of the equipment/ Implements | Year of purchase | Cost (Rs.) | Present status |
|---|---|---|---|
| Camera (Sony-Digital ) | 05.01.2001 | 27100/- | Working |
| Digital camera | 03.01.2009 | 19038/- | Working |
| Generator set (Honda) | 26.03.2010 | 49600/- | Working |
| EPBAX system | 24.02.2011 | 49868/- | Working |
| Plough (Heavy duty) | 18.02.2011 | 19000/- | Working |
| Rotavator | 14.03.2011 | 63400/- | Working |
| Vivitek Multimedia DLP projector | 14.03.2011 | 99990/- | Working |
| Winnowing fan | 27.02.2011 | 6900/- | Working |
| Power sprayer | 04.02.2011 | 24150/- | Working |
| Power tiller | 24.03.2011 | 148785/- | Working |
| Cultivator | 03.03.2011 | 20700/- | Working |
| Two-way-leveler | 03.03.2011 | 12600/- | Working |
| Thresher | 17.02.2011 | 18000/- | Working |
| Seed cum fertilizer drill | 17.02.2011 | 36100/- | Working |
| Scale (Weighing) | 18.02.2011 | 6000/- | Working |
| PROTON Impact | 28.03.2011 | 35600/- | Working |
| Trailer (For Power tiller) | 28.03.2011 | 26500/- | Working |
| Submersible pump ISIV-6 | 07.03.2014 | 18,750/- | Working |
| Digital mini lab | 23.11.2015 | 75000/- | Working |
| Tractor | 04.12.2015 | 581228/- | Working |
| Paddy winnowing fane | 29-02-2016 | 42200/- | Working |
| Rotary power tiller | 18-03-2016 | 98500/- | Working |
| Desk top computer (Lenova) | 21-03-2016 | 38775/- | Working |
| HP printer | 28-03-2016 | 10999/- | Working |
| Tractor Trailer | 29-03-2016 | 117000/- | Working |

| | | | |
|---|---|---|---|
| M.B.Plough | 20-02-2017 | 30500/- | Working |
| Roklith cooler | 23-02-2017 | 79000/- | Working |
| Lenovo computer (All in one) | 07-03-2017 | 46199/- | Working |
| Laser printer | 07-03-2017 | 25800/- | Working |
| Voltas AC | 08-03-2017 | 72000/- | Working |
| Photocopier machine | 10-03-2017 | 150000/- | Working |
| Mridaparishak soil testing kit | 15-03-2017 | 90300/- | Working |
| Multicrop thresher | 16-03-2017 | 210000/- | Working |
| Kiosk thin client based free standing type model | 23-03-2017 | 90250/- | Working |
| Stabilizer | 27-09-2017 | 8260/- | Working |
| V-ditcher, Ridzer, Burd former | 19-02-2018 | 60000/- | Working |
| Lawn mover | 17-03-2018 | 31500/- | Working |
| Paddy threshing table (2 peace) | 29-09-2018 | 14000/- | Working |
| H P Laptop | 11-03-2019 | 44715/- | Working |
| H P Printer | 15-03-2019 | 14450/- | Working |
| Reaper | 27-03-2019 | 97211/- | Working |
| Brush Cutter | 27-03-2019 | 17813/- | Working |
| Submersible pump 7.5 HP | 27-03-2019 | 29488/- | Working |
| Projector | 27-03-2019 | 48500/- | Working |
| U P S inventor | 29-03-2019 | 48000/- | Working |
| Disc harrow | 27-03-2019 | 101115/- | Working |
| Air conditional | 26-03-2019 | 116670/- | Working |
| Mini tractor (VST-Mitsubishi- Shakti) | 28-03-2019 | 335699/- | Working |
| All in one printer (HP -1005 Laser jet pro MFP) | 28-03-2019 | 17480/- | Working |
| All in one printer (HP - Laser jet pro MFP) | 28-03-2019 | 28700/- | Working |
| All in one Computer (No. 4) | 28-03-2019 | 227534/- | Working |
| Revolving Chair (No. 2) | 29-03-2019 | 9000/- | Working |
| Bolero (7 Seater) | 11-07-2019 | 4,63,612/- | Working |
| Canon Camera | 28-09-2022 | 67,500/- | Working |
| Canon camera lens | 28-09-2022 | 22,475/- | Working |
| Portable sound system | 28-09-2022 | 24,990/- | Working |
| **TSP Utility center equpment** | | | |

| | | | |
|---|---|---|---|
| Mini tractor VST Shakti 135DI (BHP 13) | 17-03-2023 | 1,95,624/- | Working |
| Weight scale | 23-03-2023 | 15,000/- | Working |
| Gravity seed grader | 24-03-2023 | 11,000/- | Working |
| Jasoda Paddy Thresher | 24-03-2023 | 2,50,000/- | Working |

**1.8. Details of SAC meeting conducted in the year:**

| Date | Name and Designation of Participants | Salient Recommendations | Action taken |
|---|---|---|---|
| 07-01-2023 | Dr. Z. P. Patel Hon'ble, Vice Chancellor, NAU, Navsari | **1.** Create awareness regarding grading in vegetable crop. | **1.** Carried out 7 training programmes with 241 farmers in attendance. |
| | Dr. N. M. Chauhan, Director of Extension Education, NAU, Navsari | | |
| | Dr. H. E. Patil, Associate Research Scientist, (HMRS), NAU, Waghai, Dangs | | |
| | Dr .J. B. Dobariya, Senior Scientist & Head, KVK, NAU, Waghai, Dangs | | |
| | Dr. C. J. Itwala, Representative of Professor & Head, Department of vegetable Science, ACHF, NAU, Navsari | **2.** Popularization of single eye bud technique in sugarcane. | **2.** Conducted two training programmes with ninety farmers in attendance. |
| | Dr. R. R. Pisal, Representative of Associate Professor (Agronomy), College of Agriculture, NAU, Waghai, Dangs | | |
| | Dr. Mahaveer Choudhary, Principal of Agri. Polytechnic, NAU, Waghai, Dangs | | |
| | Mr. H. M. Patel, District Agriculture Officer, Ahwa, Dangs | **3.** Create awareness on reduction of cost of cultivation in the dang district. | **3.** A total of 3577 farmers benefited from our 09 training and 08 awareness programs, which included farmers meetings, Kisan Melas, exhibitions and other events. 25 farmers received Napier grass sets as FLD and other farmers received hand weeders as FLD. |
| | Mr. S. N. Bhagariya, Project Director, ATMA, Ahwa, Dangs | | |
| | Mr. R. K. Mahajan, Area manager, AKRSPI, Ahwa, Dangs | | |
| | Mr. Kashiram Birari, Agri Enterpreneur, Jamlapada, Ta. Waghai, Dangs | | |
| | Mr. Bendubhai M. Gaikwad, Progressive Farmer, Nadagkhadi, Ta. Waghai, Dangs | | |
| | Dr. Amol P. Gonge, Assistant Director of Horticulture, Ahwa, Dangs | | |
| | Dr. Divya G. Chaudhary, Representative of DAHO, Ahwa, Dangs | | |
| | Dr. J. J. Pastagiya, Principal, CoA, NAU, Waghai, Dangs | | |
| | Dr. S. A. Aklade, Representative of Agri. Polytechnic, NAU, Waghai, Dangs | | |
| | Mr. M. D. Lad, Assistants Extension Education, DEE, Office, NAU, Navsari | | |
| | Mr. Bhushan Bhamare, Agribusiness specialist, Agakhan, Ahwa, Dangs | | |
| | Smt. Nitaben B. Patel, Chair person of Mahalaxmi sakhimandal, Waghai, Dangs | | |
| | Mr. Maganbhai K. Gaykawad, Progressive Farmer, Chichond, Ta. Waghai, Dangs | | |
| | Mr. Govindbhai B.Macchi, Progressive Farmer, Uga-Chichpada, Ta. Waghai, Dangs | | |
| | Mr. Shravanbhai S. Gain, Chair person of Lotus Mandali, Nanapada, Ta. Waghai, Dangs | | |
| | Mr. Narendrbhai R. Rahedhar, Project Director, Ambedkar sevadham trust, Ahwa, Dangs | | |
| | Mr. Manoj A. Patel, Branch manager, SBI, Waghai | | |

## 2. DETAILS OF DISTRICT / JURISDICTION AREA OF KVK

### 2.1. Major farming systems/enterprises (based on the analysis made by the KVK)

| S. No | Farming system/enterprise |
|---|---|
| 1 | Agriculture farming system |
| 2 | Agri - Horti farming system |
| 3 | Agri – Horti -Dairy farming system |
| 4 | Agroforestry system |

### 2.2. Description of Agro-climatic Zone& major agro ecological situations (based on soil and topography)

| S. No. | Agro-climatic Zone(Planning Commission) | Characteristics |
|---|---|---|
| 1 | South Gujarat Heavy Rainfall Zone–I Agro Ecological Situation-I | Dangs district comes under South Gujarat Heavy Rainfall Zone–I Agro Ecological Situation-I having total 172366 ha land. Out of that, 53.74% is occupied with forest and only 33.80% of land comes under cultivation and cultivable fallow. The district is remote forest area and characterized mainly by tribal. The cropping pattern of the district is single rainfed crops. The major crops in kharif are Paddy, Finger millet, Little millet, Sorghum, Black gram etc. Some more information regarding the district is given below. |

### a)Topography

| S. No. | Agro ecological situation | Characteristics |
|---|---|---|
| 1 | Location | 73'.29' to 73'.51' longitude and 20'.39' to 21'.50' latitude. An elevation 105 to 1317 mtrs. MSL |
| 2 | Agro climatic zone | South Gujarat Heavy Rainfall Zone–I Agro Ecological Situation-I |
| 3 | Soil | Laterite, hilly, undulating with slopes of 20 to 40 percent, shallow to medium in depth |
| 4 | Rainfall | 1800-2000 mm with average rainy days of 85-95 |
| 5 | Irrigation | 18 percent |
| 6 | Rivers | Ambica, Khapri, Purna, Gira |

### 2.3 Soil Types

| S. No | Soil type | Characteristics | Area in ha |
|---|---|---|---|
| 1 | Lateritic, hilly, undulating with the slopes of 20 to 40 per cent, light to medium texture soil and others | Shallow to medium in depth, low to moderately fertile, medium to high in slope, normal to slightly acidic pH, moderate temperature because of thick forest cover, area under irrigation (10500 ha) | 56,300 |

**2.4. Area, Production and Productivity of major crops cultivated in the area of jurisdiction of KVK (2023)**

| S. No | Crop | Area (ha) | Production (MT.) | Productivity (qt./ha) |
|---|---|---|---|---|
| 1 | Paddy | 28370 | 78017 | 27.50 |
| 2 | Nagli | 8287 | 53865 | 6.50 |
| 3 | Pigeon Pea | 3472 | 2777 | 8.00 |
| 4 | Black Gram | 9123 | 68422 | 7.50 |
| 5 | Vegetables | 4812 | 6977 | 14.50 |
| 6 | Fodder | 90 | 140 | 15.60 |
| | ***Kharif* Total** | **54154** | **-** | **-** |
| 7 | Wheat | 35 | 647 | 18.50 |
| 8 | Gram | 15780 | 11835 | 7.50 |
| 9 | Sugarcane | 549 | 37332 | 680.00 |
| 10 | Sorghum | 62 | 34 | 5.50 |
| 11 | Maize | 408 | 265 | 6.50 |
| | ***Rabi*-Total** | **16834** | **-** | **-** |

Source: District agriculture department.

**2.5. Weather data (2023)**

| Month | Normal RF (mm) | Normal Rainy days (number) | Temperature ($^0$ C) | | Relative Humidity (%) | |
|---|---|---|---|---|---|---|
| | | | Maximum | Minimum | Maximum | Minimum |
| January | 0.0 | 0 | 30.0 | 11.5 | 95 | 52 |
| February | 0.0 | 0 | 35.5 | 12.6 | 66 | 23 |
| March | 14.5 | 2 | 35.4 | 17.6 | 68 | 32 |
| April | 0.0 | 0 | 38.0 | 20.6 | 57 | 27 |
| May | 10.5 | 1 | 38.3 | 25.0 | 69 | 39 |
| June | 282.5 | 7 | 35.6 | 27.1 | 77 | 59 |
| July | 842.5 | 28 | 29.3 | 25.3 | 97 | 92 |
| August | 168.5 | 18 | 30.0 | 25.0 | 96 | 81 |
| September | 486.0 | 17 | 31.2 | 24.4 | 96 | 87 |
| October | 9.5 | 1 | 34.8 | 20.9 | 96 | 77 |
| November | 34.5 | 2 | 33.7 | 18.1 | 98 | 65 |
| December | 0.0 | 0 | 32.0 | 17.1 | 99 | 61 |
| **Total** | **1848.5** | **76** | | | | |

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

| Category | Population (No.) | Production (Per unit) | Productivity (Per unit) |
|---|---|---|---|
| **Cattle** | | | |
| *Crossbred* | 15482 | - | 2000-2200 lit/cow |
| *Indigenous* | 58900 | - | 800 lit/cow |
| **Buffalo** | 22125 | - | 1200 lit/buffalo |

| | | | |
|---|---|---|---|
| **Sheep** | - | - | - |
| **Goats** | 45658 | - | 300 lit |
| **Pigs** | - | - | - |
| *Crossbred* | - | - | - |
| *Indigenous* | - | - | - |
| **Rabbits** | 109 | - | - |
| Hens | 32350 | - | 185 egg/year |
| *Desi* | 166970 | | 58 egg/year |
| **Category** | | Production (q.) | Productivity (Per Unit) |
| Fish (Reservoir) | -- | -- | -- |
| Fish (Farm ponds) | -- | -- | -- |

**2.7. Details of Operational area / Villages**

| Name of Taluka | Name of the village | Major crops & enterprises | Major problem identified | Identified Thrust Areas |
|---|---|---|---|---|
| Ahawa | Lahandabash<br>Gundiya<br>Sati | **Cereals:**<br>Paddy, Finger millet, little millet<br>**Pulses:**<br>Gram, Black gram, Pigeon pea<br>**Oilseeds:** Groundnut, Niger<br>**Vegetables:** Okra **Fruit crops:**<br>Mango, Custard apple **Floriculture:**<br>Rose and Marigold<br>**Others:**<br>Tuber crops<br>**Animal Husbandry** | -Use of traditional varieties<br>- Poor quality of seed<br>-Improper use of fertilizers<br>- Lack of awareness about plant protection measures<br>-Scarcity of fodder<br>- Repeat Breeding and Anoestrus<br>Less interest in dairy business | -Promoting Animal husbandry./ horticultural crops<br>- Use of recommended varieties<br>- Promotion of scientific package of practices<br>- Create awareness about plant protection measures<br>- Scientific feeding management<br>- Artificial Insemination<br>- Awareness about dairy enterprise |
| Subir | Sajupada<br>Bardipada<br>Dhuldha | | | |
| Waghai | Zavada<br>Vankan<br>Chichond<br>Bhadarpada | | | |

**2.8. Priority thrust areas:**

## 3. TECHNICAL ACHIEVEMENTS

### 3.1. A. Details of target and achievements of mandatory activities

| OFT | | | | FLD | | | |
|---|---|---|---|---|---|---|---|
| 1 | | | | 2 | | | |
| Number of OFTs | | Number of farmers | | Number of FLDs | | Number of farmers | |
| Targets | Achievement | Targets | Achievement | Targets | Achievement | Targets | Achievement |
| 07 | 06 | 75 | 68 | 16 | 22 | 420 | 891 |

| Training | | | | Extension Programmes | | | |
|---|---|---|---|---|---|---|---|
| 3 | | | | 4 | | | |
| Number of Courses | | Number of Participants | | Number of Programmes | | Number of participants | |
| Targets | Achievement | Targets | Achievement | Targets | Achievement | Targets | Achievement |
| 78 | 121 | 1935 | 4719 | 285 | 685 | 11700 | 91742 |

| Seed Production (Qtl.) | | Planting materials (Nos.) | |
|---|---|---|---|
| 5 | | 6 | |
| Target | Achievement | Target | Achievement |
| 112 | 62.68 | 4000 | 4350 |

| Livestock, poultry strains and fingerlings (No.) | | Bio-products (Kg) | |
|---|---|---|---|
| 7 | | 8 | |
| Target | Achievement | Target | Achievement |
| 0 | 0 | 0 | 0 |

### 3.1. B. Operational areas details during 2023

| Sr.No. | Major crops & enterprises being practiced in cluster villages | Prioritized problems in these crops/ enterprise | Extent of area (Ha/No.) affected by the problem in the district | | Names of Cluster Villages identified for intervention | Intervention (OFT, FLD, Training, extension activity *etc.*)* |
|---|---|---|---|---|---|---|
| | | | **Crop** | **Area (ha)** | | |
| 1. | **Cereals:** | -Use of traditional varieties | Paddy | 148 | Lahandabash | On campus training, Off campus training, Sponsored training, Vocational training, In-service training, Lecture delivered, Field visit, FLD visit, OFT visit, Scientist visit to farmer field, Farmer visit to KVK, Diagnostic visit, Exposure visit, KisanGosthi, Animal camps, Field day, Farmer fair, Farmer scientist interaction, Farmers meeting, TV-Film show, Exhibition, Farm School, Soil health campaign, Celebration of importance day, SwachataJagruti, Soil sample analyzed, Plant health clinic diagnostic services, SMS portal, Telephone helpline |
| 2. | Paddy, Finger millet, little millet | - Poor quality of seed | Finger millet | 85 | Gundiya | |
| 3. | **Pulses:** | -Lack of awareness related with organic crop package & practices | Vari | 76 | Sati | |
| 4. | Gram, Black gram, Tur | - Lack of awareness about plant protection measures | Sorghum | 17 | Sajupada | |
| 5. | **Oilseeds:** Groundnut, Niger | -Scarcity of fodder | Maize | 11 | Bardipada | |
| 6. | **Vegetables:** Okra, Brinjal | - Repeat Breeding &Anoestrus | Black Gram | 16 | Dhuldha | |
| 7. | **Fruit crops:** Mango, Cashew nut, Custard apple | - Less interest in dairy business | Pigeon Pea | 22 | Zavada | |
| 8. | **Floriculture:** Rose and Marigold | | Soybean | 16 | Vankan | |
| 9. | **Others:** | | Ground nut | 6 | Chichond | |
| 10 | Tuber crops | | ***Kharif Total*** | **397** | Bhadarpada | |
| 11. | **Animal Husbandry** | | Gram | 41 | | |
| 12. | | | Wheat | 11 | | |
| 13. | | | Okra | 13 | | |
| 14. | | | Brinjal | 11 | | |
| 15. | | | Mango | 22 | | |
| 16. | | | Cashew nut | 7 | | |
| | | | ***Rabi-Total*** | **105** | | |

* Support with problem-cause and interventions diagram

### 3.2. Technology Assessment (Kharif 2023, Rabi 2023-24, Summer 2023)

**A1. Abstract on the number of technologies assessed in respect of crops**

| Thematic areas | Cereals | Oilseeds | Pulses | Commercial Crops | Vegetables | Fruits | Flower | Plantation crops | Tuber Crops | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| Integrated Nutrient Management | | | | | | | | | | |
| Varietal Evaluation | 1 | | 1 | | 2 | | | | | 4 |
| Integrated Pest Management | | | | | 2 | | | | | 2 |
| Integrated Crop Management | | | | | | | | | | |
| Integrated Disease Management | | | | | | | | | | |
| Small Scale Income Generation Enterprises | | | | | | | | | | |
| Weed Management | | | | | | | | | | |
| Resource Conservation Technology | | | | | | | | | | |
| Farm Machineries | | | | | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Integrated Farming System | | | | | | | | | | |
| Seed / Plant production | | | | | | | | | | |
| Value addition | | | | | | | | | | |
| Drudgery Reduction | | | | | | | | | | |
| Storage Technique | | | | | | | | | | |
| Mushroom cultivation | | | | | | | | | | |
| Total | 1 | | 1 | | 4 | | | | | **6** |

## A2. Abstract on the number of technologies assessed in respect of livestock enterprises

| Thematic areas | Cattle | Poultry | Piggery | Rabbitry | Fisheries | TOTAL |
|---|---|---|---|---|---|---|
| Evaluation of Breeds | | | | | | |
| Nutrition Management | 1 | | | | | 1 |
| Disease of Management | | | | | | |
| Value Addition | | | | | | |
| Production and Management | | | | | | |
| Feed and Fodder | | | | | | |
| Small Scale income generating enterprises | | | | | | |
| **TOTAL** | 1 | | | | | **1** |

## B. Achievements on technologies Assessed

### B.1. Technologies Assessed under various Crops

| Thematic areas | Crop | Name of the technology assessed | No. of trials | Number of farmers | Area in ha (Per trial covering all the Technological Options) |
|---|---|---|---|---|---|
| Integrated Nutrient Management | | | | | |
| | | | | | |
| Varietal Evaluation | Finger millet | Varietal assessment of finger millet | 10 | 10 | 3.0 |
| | Chickpea | Varietal assessment of chickpea | 10 | 10 | 3.0 |
| | Potato | Varietal assessment of Potato in the dangs district | 10 | 10 | 0.6 |
| | Indian bean | Varietal assessment of Indian bean in the Dangs district | 06 | 06 | 1.8 |
| Integrated Pest Management | Okra | Management of Fruit & Shoot borer of Okra | 06 | 06 | 3.6 |
| | Brinjal | Assessment of pheromone trap technology for the management of leucinodes orbonails in Brinjal | 06 | 06 | 3.6 |
| Integrated Crop Management | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| Integrated Disease Management | | | | | |
| | | | | | |
| Small Scale Income Generation Enterprises | | | | | |
| | | | | | |
| Weed Management | | | | | |
| | | | | | |
| Resource Conservation Technology | | | | | |
| | | | | | |
| Farm Machineries | | | | | |
| Integrated Farming System | | | | | |
| Seed / Plant production | | | | | |
| Value addition | | | | | |
| Drudgery Reduction | | | | | |
| Storage Technique | | | | | |
| Mushroom cultivation | | | | | |
| **Total** | | | | | |

**B.2. Technologies assessed under Livestock & fishery assessment**

| Thematic areas | Name of the livestock enterprise | Name of the technology assessed | No. of trials | No. of farmers |
|---|---|---|---|---|
| Evaluation of breeds | | | | |
| Health Management | | | | |
| Dairy Management | | | | |
| Nutrition management | Crossbred cattle | Use of Chelated minerals in the diet of crossbred HF cows | 30 | 30 |
| Disease management | | | | |
| Feed and fodder management | | | | |
| Processing &Value addition | | | | |
| Production and management | | | | |
| Composting fish culture | | | | |
| Small scale income generating enterprises | | | | |
| Fish production | | | | |
| Other | | | | |
| **Total** | | | | |

**B.3 Technologies assessed under other enterprises**

| Name of Enterprises | Name of the technology assessed | No. of trials | No. of farmers |
|---|---|---|---|
| **Mushroom** | - | - | - |
| **Apiary** | - | - | - |
| **Vermicompost** | - | - | - |
| **Tailoring** | - | - | - |
| **Nutrition Garden** | - | - | - |
| **Nursery Management** | - | - | - |
| **Production and Management** | - | - | - |
| **Eentrepreneurship development** | - | - | - |
| **Engegy consrvation** | - | - | - |
| **storage techniques** | - | - | - |
| **House hold food security** | - | - | - |
| **organic farming** | - | - | - |
| **mechanization** | - | - | - |
| **Bee keeping** | - | - | - |
| **Seed production** | - | - | - |
| **post-harvest management** | - | - | - |
| **other** | - | - | - |

**B 4.Technologies assessed under Women empowerment assessment**

| Name of Enterprises | Name of the technology assessed | No. of trials | No. of farmers |
|---|---|---|---|
| Drudgery Reduction | - | - | - |
| Entrepreneurship development | - | - | - |
| Health and Nutrition | - | - | - |
| value addition | - | - | - |
| Kitchen gardening | - | - | - |
| nutrition security | - | - | - |
| other | - | - | - |

## C. 1. Results of Technologies Assessed
## Results of On Farm Trial

| Crop/ enterprise | Farming situation | Problem definition | Title of OFT | No. of trials | Technology Assessed | Parameters of assessment | Data on the parameter | Results of assessment | Feedback from the farmer | Any refinement needed | Justification for refinement |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| **Finger millet** | Rain fed | Low yield of finger millet Low yield of finger | Varietal assessment of finger millet | 10 | $T_1$ : Farmers Practices (Local varieties) $T_2$ : GNN 8 $T_3$ : CFMV 2 (Gira) | Yield (q/ha) | **1st year :** $T_1$:10.50 qt $T_2$:11.95 qt $T_3$ : 13.66 qt **2nd year :** $T_1$:9.26 qt $T_2$:11.39 qt $T_3$ : 13.68 qt | Treatment $T_3$ CFMV 2 (Gira)was better than $T_1$ (Local varieties) | More number of finger and higher yield than local variety | No | NA |
| **Chickpea** | Irrigated | Low yield of Local variety | Varietal assessment of chickpea | 10 | $T_1$: Farmer variety (Local Varieties) $T_2$: GJG 6 | Yield (q/ha) | Result awaited | - | - | No | NA |
| **Potato** | Irrigated | Varietal assessment of Potato in the dangs district | Varietal assessment of Potato in the dangs district | 06 | T1: Farmers practices (Gram) T2: Potato crop ( Kufri Badshah) | Yield (q/ha) | **1st year :** $T_1$ :10.83 qt $T_2$:139.50 qt **2nd year:** Not conducted due to lack of grant **3rd year:** Result awaited | T2: Potato crop( Kufri Badshah) better than T1: Farmers practices (Gram) | Kufri badshah variety gave higers yield than local variety. | No | NA |
| **Indian bean** | Irrigated | Popularize new variety of Indian bean | Varietal assessment of Indian bean in the Dangs district | 06 | $T_1$: Farmers practices (Katargam) $T_2$: GNIB 21 (2014) $T_3$: GNIB 22 (2017) | Yield (q/ha) | Result awaited | - | - | No | NA |
| **Okra** | Irrigated | Low yield of Okra & High mortality due to Pest damage | Assessment of management of Fruit & Shoot borer in Okra | 06 | T1: Farmers practice T2: Installation of Pheromone trap T3 : Spray Azadirachtin (Neem oil based) 1500 ppm | Yield (q/ha) | **1st year :** $T_1$ :81.16 qt $T_2$:99.5 qt $T_3$: 107.00 qt **2nd year:** Not conducted due to lack of grant **3rd year:** Result awaited | $T_3$ treatment is best among $T_1$ and $T_2$ | Installation of pheromones trap in okra showing good result again Fruit and shoot borer | No | NA |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Brinjal** | Irrigated | Low yield of Bringle & High mortalit | Assessment of pheromone trap for the management of fruit & shoot borer in Brinjal | 06 | $T_1$ : Farmers Practices<br>$T_2$ : Installation of pheromone traps @ 40 traps/ha (AAU,Anand)<br>$T_3$ : Remove the infected shoot and fruit + Installed pheromone traps @ 12/ha (TNAU,TN) | Yield (q/ha) | Result awaited | - | - | No | NA |
| **Cross bred cattle** | NA | Low milk production due to mineral imbalance & parasitic infestation | Use of Chelated minerals in the diet of crossbred HF cows | 10 | T 1- Farmer's practice – feeding of locally available feeds and fodders<br>T 2- T1 + Chelated minerals @ 30 gm/cow/day for 120 days<br>T3- T1 + Chelated minerals @ 30 gm/cow/day for 120 days + Bol. Fenbendazol @ 5-7.5 / kg body weight | Lit/day | **1st year :**<br>$T_1$ :3.69<br>$T_2$:4.53<br>$T_3$: 5.43<br>**2nd year:**<br>Not conducted due to lack of grant<br>**3rd year:**<br>Result awaited | $T_3$best amonga $T_1$ and $T_2$ | Feeding of Mineral mixture along with deworming resulted in Increse milk production.<br>$T_3$best amonga $T_1$ and $T_2$ | No | NA |

**Contd…**

| **Technology Assessed** | **Source of Technology** | **Production** | **Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)** | **Net Return (Profit) in Rs. / unit** | **B:C Ratio** |
|---|---|---|---|---|---|
| 13 | 14 | 15 | 16 | 17 | 18 |
| $T_1$ : Farmers Practices (Local varieties)<br>$T_2$ : GNN 8<br>$T_3$ : CFMV 2 (Gira) | Hill Millet Research Station, NAU, Waghai | **1st year :**<br>$T_1$:10.50 qt<br>$T_2$:11.95 qt<br>$T_3$ : 13.66 qt<br>**2nd year :**<br>$T_1$:9.26 qt | qt /ha | **1st year :**<br>$T_1$:19400<br>$T_2$:21460<br>$T_3$ : 26248 | **1st year :**<br>$T_1$:2.94<br>$T_2$:2.79<br>$T_3$ : 3.19 |

| Technology Assessed | Source of Technology | Production | Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year) | Net Return (Profit) in Rs. / unit | B:C Ratio |
|---|---|---|---|---|---|
| | | $T_2$:11.39 qt<br>$T_3$ : 13.68 qt | | | |
| $T_1$: Farmer variety (Local Varieties)<br>$T_2$: GJG 6 | Pulse Research Station, JAU, Junagadh | Result awaited | qt /ha | Result awaited | Result awaited |
| T1: Farmers practices (Gram)<br>T2: Potato crop ( Kufri Badshah) | Central Potato Research station , Kufrim Himachal Pradesh (1980) | **1st year :**<br>$T_1$ :10.83 qt<br>$T_2$:139.50 qt<br>**2nd year:**<br>Not conducted due to lack of grant<br>**3rd year:**<br>Result awaited | qt /ha | **1st year :**<br>$T_1$ :49833.33<br>$T_2$:116416.67<br>**2nd year:**<br>Not conducted due to lack of grant<br>**3rd year:**<br>Result awaited | **1st year :**<br>$T_1$ :2.91<br>$T_2$:2.55<br>**2nd year:**<br>Not conducted due to lack of grant<br>**3rd year:**<br>Result awaited |
| $T_1$: Farmers practices (Katargam)<br>$T_2$: GNIB 21 (2014)<br>$T_3$: GNIB 22 (2017) | Navsari Agricultural University, Navsari (2016-17) | Result awaited | qt /ha | Result awaited | Result awaited |
| T1: Farmers practice<br>T2: Installation of Pheromone trap<br>T3 : Spray Azadirachtin (Neem oil based) 300ppm/1500 ppm | Navsari Agricultural University, Navsari (2011-12) | **1st year :**<br>$T_1$ :81.16 qt<br>$T_2$:99.5 qt<br>$T_3$: 107.00 qt<br>**2nd year:**<br>Not conducted due to lack of grant<br>**3rd year:**<br>Result awaited | qt /ha | **1st year :**<br>$T_1$ :85366.7<br>$T_2$:114200<br>$T_3$: 126200<br>**2nd year:**<br>Not conducted due to lack of grant<br>**3rd year:**<br>Result awaited | **1st year :**<br>$T_1$ :2.91<br>$T_2$:3.5<br>$T_3$: 3.8<br>**2nd year:**<br>Not conducted due to lack of grant<br>**3rd year:**<br>Result awaited |
| $T_1$ : Farmers Practices<br>$T_2$ : Installation of pheromone traps @ 40 traps/ha (AAU,Anand)<br>$T_3$ : Remove the infected shoot and fruit + Installed pheromone traps @ 12/ha (TNAU,TN) | AAU, Anand & TNAU,TN | Result awaited | qt /ha | Result awaited | Result awaited |
| T 1- Farmer's practice – feeding of locally available feeds and fodders<br>T 2- T1 + Chelated minerals @ 30 gm/cow/day for 120 days<br>T3- T1 + Chelated minerals @ 30 gm/cow/day for 120 days + Bol. Fenbendazol @ 5-7.5 / kg body weight | NDRI, karnal | **1st year :**<br>$T_1$ :3.69<br>$T_2$:4.53<br>$T_3$: 5.43<br>**2nd year:**<br>Not conducted due to lack of grant<br>**3rd year:**<br>Result awaited | lit/day | **1st year :**<br>$T_1$ :1000<br>$T_2$:1700<br>$T_3$: 2000<br>**2nd year:**<br>Not conducted due to lack of grant<br>**3rd year:**<br>Result awaited | **1st year :**<br>$T_1$ :1.5<br>$T_2$:1.7<br>$T_3$: 1.8<br>**2nd year:**<br>Not conducted due to lack of grant<br>**3rd year:**<br>Result awaited |

## C. 2. Details of each On Farm Trial for assessment to be furnished in the following format separately as per the following details:

## OFT: 1

**Title: Varietal assessment of finger millet**

**Problem Definition:** Finger millet is a main staple food for tribal farmers of Dang district and also it emerging as a important nutritive cereal crop due to its high nutrient content. In Dang district, finger millet is normally grown on poor and marginal soils with local varieties. Finger millet requires healthy seedlings of high yielding varieties. Most of the farmers use local varieties of finger millet which reduce the number of productive tillers, small seeded less finger and susceptible to pest and diseases, so ultimately its reduce the crop yield.

**Details of technologies selected for assessment:**

**Treatment:**

$T_1$ : Farmers Practices (Local varieties)

$T_2$ : GNN 8

$T_3$ : CFMV 2 (Gira)

**Input:** Seed, Novel organic fertilizer, PSB and *Azotobacter*

**Source of technology:** Hill Millet Research Station, NAU, Waghai

**Production system and thematic area:** Rainfed & ICM

**Performance of the technology with performance indicators:**

| Sr. No. | Year | No of trial | Area (ha) | Yield(q/ha) | | |
|---|---|---|---|---|---|---|
| | | | | Farmers Practices (Local varieties) | GNN 8 | CFMV 2 (Gira) |
| 1. | 2021-22 | 10 | 1 | 10.50 | 11.95 | 13.66 |
| 2. | 2022-23 | 10 | 1 | 9.26 | 11.39 | 13.68 |

**Farmers Feedback, matrix scoring of various technology parameters done through farmer's participation/ other scoring techniques:**

**Farmers Feedback**

**Final recommendation for micro level situation:** Treatment $T_3$ CFMV 2 (Gira)was better than $T_1$ (Local varieties)

**Constraints identified and feedback for research:** Nil

**Process of farmer's participation and their reaction:**

1. Field day, Method demonstration, OFT visit *etc.*
2. Farmers are ready to adopt this technology

## OFT: 2

**Title: Varietal assessment of chickpea**

**Problem Definition:** In dang district, productivity of chickpea is low because of improper cultivation of land and use of local varieties by farmers. Due to this severe wilt problem in local varieties which ultimately affect the growth and yield of chickpea. Chickpea required wilt resistance and high yielding variety for its better growth and development. Improper cultivation with local varieties reduce the plant population and ultimately it's reduce the crop yield.

**Details of technologies selected for assessment:**
**Treatment:**
$T_1$: Farmer variety (Local Varieties)
$T_2$: GJG 6
: **Input:** Seed, Novel organic fertilizer, *Rhizobium* and PSB
**Source of technology:** Pulse Research Station, JAU, Junagadh
**Production system and thematic area:** Irrigation & ICM

**Performance of the technology with performance indicators:**

| Sr. No. | Year | No of trial | Area (ha) | Yield(q/ha) | | |
|---|---|---|---|---|---|---|
| | | | | Farmers Practices (Local varieties) | GG 5 | GJG 6 |
| 1. | 2021-22 | 10 | 1 | **Not conducted due to lack of grant.** | | |
| 2. | 2022-23 | 10 | 1 | **Result awaited** | | |

**Farmers Feedback, matrix scoring of various technology parameters done through farmer's participation/ other scoring techniques:**

**Farmers Feedback**

**Final recommendation for micro level situation:**

**Constraints identified and feedback for research:** Nil

**Process of farmer's participation and their reaction:**

1. Field day, Method demonstration, OFT visit *etc.*
2. Farmers are ready to adopt this technology

## OFT: 3

**Title: Varietal assessment of Potato in the dangs district**

**Problem definition**: Possibilities of Potato cultivation in The Dangs district

**Details of Technologies selected for assessment:** In Dang district, chickpea is commonly grown in winter crops. Considering the soil of Dang district and as per the suggestion of Scientific Advisory Committee, it is possible to cultivate potato in Dangs district. This on-farm trial is designed to test potato cultivation in the Dangs district. According to the agriculture department of Dangs district, the chickpea crop in Dangs district yields about 2.5 quintals. The estimated production of potato(Var. Kufri badshah) is 50 tons per hectare

**Treatment:** $T_1$: Farmers practices (Gram)

$T_2$: Potato crop (Kufri Badshah)

**Source of Technology**: Central Potato Research station , Kufrim Himachal Pradesh (1980)

**Production system and thematic area**: irrigated & varietal Assessment

**Performance of the Technology with performance indicators**:

| Sr. No. | Year | No of trial | Area (ha) | Yield (q/ha) | |
|---|---|---|---|---|---|
| | | | | T1: Farmers practices (Gram) | T2: Potato crop( Kufri Badshah) |
| 1. | 2021 | 06 | 0.2 | 10.83 | 139.50 |
| 2. | 2022 | 06 | 0.2 | **Input not given due to the lack of grant.** | |
| 3. | 2023 | 06 | 0.2 | **OFT is droped due to not available of transport facility as per SAC meeting 2023** | |

**Feedback, matrix scoring of various technology parameters done through farmer's participation/ other scoring Technique:**
**Final recommendation for micro level situation**:

## OFT: 4

**Title: Varietal assessment of Indian bean in the Dangs district**

**Problem definition**: Popularize new variety of Indian bean

**Details of Technologies selected for assessment:** In the Dangs district, mostly Desi (Katargam) and other indeterminate variety of Indian bean is grown with low yield potential due to lack of knowledge about proper scientific cultivation and lack of knowledge about new released variety of State Agricultural Universities and Government Institutions.

GNIB 22 (>30.00 Q/ha) performed well under South Gujarat regions. This variety is Extra early, determinate,erect and dwarf plant type suitable as intercrop inSugarcane, pigeon pea.

GNIB 22 (>40.00 Q/ha) performed well under South Gujarat regions. This variety is The variety is early, determinate and erect type with good market & cooking quality and yield, hence it is highly acceptable to the farmers and consumers. Its green pod fetches similar price to that of surti papadi.

OFT has been framed for comparing farmer adopted Desi (Katargam)variety to "GNIB-21" and "GNIB 22" variety.

**Treatment:** $T_1$: Farmers practices (Katargam)
$T_2$: GNIB 21 (2014)
$T_3$: GNIB 22 (2017)

**Source of Technology**: Navsari Agricultural University, Navsari (2016-17)

**Production system and thematic area**: irrigated & varietal Assessment

**Performance of the Technology with performance indicators**:

| Sr. No. | Year | No of trial | Area (ha) | Yield (q/ha) | | |
|---|---|---|---|---|---|---|
| | | | | $T_1$: Farmers practices (Katargam) | $T_2$: GNIB 21 (2014) | $T_3$: GNIB 22 (2017) |
| 2. | 2022 | 06 | 0.2 | **Input not given due to the lack of grant.** | | |
| 3. | 2023 | 06 | 0.2 | **Result awaited** | | |

**Feedback, matrix scoring of various technology parameters done through farmer's participation/ other scoring Technique:**
**Final recommendation for micro level situation**:

## OFT: 5

**Title**: **Assessment of management of Fruit & Shoot borer in Okra**

**Problem definition**: Low yield of Okra & High mortality due to Pest damage

**Details of Technologies selected for assessment:** Okra (*Abelmoschus esculentus*) is a vegetable crop widely grown during *Kharif / Rabi* season in Dangs district. Day by day increasing the area of Okra in this district gives comaparatively lower yield. Large number of hybrid available in the market but cost of seeds as well as higher incidence of pest affect yield. Assessment of such crop in Dangs district for best performance for growth and yield for avoid these problem OFT is taken.

**Treatment:** $T_1$: Farmers practice

$T_2$: Installation of Pheromone trap

$T_3$ : Spray Azadirachtin (Neem oil based) 1500 ppm

**Source of Technology**: NAU, Navsari (2001)

**Production system and thematic area**: Integrated pest management

**Performance of the Technology with performance indicators**:

| Sr. No. | Year | No of trial | Area (ha) | Yield (q/ha) | | |
|---|---|---|---|---|---|---|
| | | | | $T_1$: Farmers practice | $T_2$: Installation of heromone trap | $T_3$ : Spray Azadirachtin (Neem oil based) 1500 ppm |
| 1. | 2021 | 06 | 3.6 | 81.16 | 99.5 | 107.00 |
| 2. | 2022 | 06 | 3.6 | **Input not given due to the lack of grant.** | | |
| 3. | 2023 | 06 | 3.6 | **Result awaited** | | |

**Feedback, matrix scoring of various technology parameters done through farmer's participation/ other scoring Technique:**
**Final recommendation for micro level situation**:

## OFT: 6

**Title**: **Assessment of pheromone trap for the management of fruit & shoot borer in Brinjal**

**Problem definition**: Low yield of Brinjal & High mortality

**Details of Technologies selected for assessment:** Bringal is one of the most common vegetables grown in dang district. Immature fruits are used in curries and a variety of dishes are prepared out of bringal fruits are moderate source of vitamins and minerals like phosphorus, calcium and iron and nutrition value. Bringal is infected by fruit & shoot borer. Occasional out brack of this disease causing losses to farmer.

**Treatment:** $T_1$ : Farmers Practices

$T_2$ : Installation of pheromone traps @ 40 traps/ha (AAU,Anand)

$T_3$ : Remove the infected shoot and fruit + Installed pheromone traps @ 12/ha (TNAU,TN)

**Source of Technology**: AAU, Anand & TNAU, TN

**Production system and thematic area**: Integrated pest management

**Performance of the Technology with performance indicators**:

| Sr. No. | Year | No of trial | Area (ha) | Yield (q/ha) | | |
|---|---|---|---|---|---|---|
| | | | | $T_1$: Farmers practice | $T_2$: Installation of heromone trap | $T_3$ : Spray Azadirachtin (Neem oil based) 300ppm/1500 ppm |
| 1. | 2022 | 06 | 3.6 | **Not conducted due to lack of grant.** | | |
| 2. | 2023 | 06 | 3.6 | **Result awaited** | | |

**Feedback, matrix scoring of various technology parameters done through farmer's participation/ other scoring Technique:**

**Final recommendation for micro level situation**:

## OFT: 7

**Title**: **Use of Chelated minerals in the diet of crossbred HF cows**

**Problem definition**: Low milk production due to mineral imbalance & parasitic infestation

**Details of Technologies selected for assessment:** Parasitic load and mineral imbalance are known to directly affect the milk production to cattle. The Dangs district is a hilly area with heavy rainfall. Animal lining in such area became prone to parasitic infection due to ingestion of infected grasses around stagnant water while grazing. A few years ago, people were using local breeds & traditional husbandry practices, but now a days they are rearing crossbred cows. These valuable animals are highly productive but due to particular geographical location such animals become infected with parasites which directly affects the milk production.

Moreover, in spite of high rain, there is water 25carcity during summer season due to particular geographical condition. So, green fodder is not available during summer, hence these animals undergo mineral imbalance & improper feeding. The socio- economic status of frames is not very good so, they could not feed their animals with mineral supplements. Such animals undergo negative energy balance due to malnutrition & high milk yield whatever the green grass these animals are grazing is surrounded by stagnant water & hence become infected by parasites. So, to overcome these problems of parasitic infestation & mineral imbalance we have identified following problems in proposed on farm testing programme.

**Treatment:** $T_1$- Farmer's practice – feeding of locally available feeds and fodders

$T_2$- $T_1$ + Chelated minerals @ 30 gm/cow/day for 120 days

$T_3$- $T_1$ + Chelated minerals @ 30 gm/cow/day for 120 days + Bol. Fenbendazol @ 5-7.5 / kg body weight

**Source of Technology**: NDRI, karnal

**Production system and thematic area**: Feeding management

**Performance of the Technology with performance indicators**:

| Sr. No. | Year | No of trial | Area (ha) | Yield (lit/day) | | |
|---|---|---|---|---|---|---|
| | | | | $T_1$- Farmer's practice – feeding of locally available feeds and fodders | $T_2$- T1 + Chelated minerals @ 30 gm/cow/day for 120 days | $T_3$- $T_1$ + Chelated minerals @ 30 gm/cow/day for 120 days + Bol. Fenbendazol @ 5-7.5 / kg body weight |
| 1. | 2021 | 30 | - | 3.69 | 4.53 | 5.43 |
| 2. | 2022 | 30 | - | **Not conducted due to lack of grant.** | | |
| 3. | 2023 | 30 | - | **Result awaited** | | |

**Feedback, matrix scoring of various technology parameters done through farmer's participation/ other scoring Technique:**

**Final recommendation for micro level situation**:

## 3.3. FRONTLINE DEMONSTRATION

### A. Follow-up for results of FLDs implemented during previous years

List of technologies demonstrated during previous year and popularized during 2023 and recommended for large scale adoption in the district

| S. No | Crop/ Enterprise | Thematic Area* | Technology demonstrated | Details of popularization methods suggested to the Extension system | Horizontal spread of technology | | |
|---|---|---|---|---|---|---|---|
| | | | | | No. of villages | No. of farmers | Area in ha |
| 1 | Pigeon pea | ICM | GT 105 | FLD, Training, Field Days, Farmers meeting, Exposure visit to KVK farm, Mass media | 1 | 25 | 5 |
| 2 | Gram | ICM | GG 5 | | 5 | 25 | 5 |
| 3 | Paddy | ICM | GR 17 | | 3 | 25 | 5 |
| 4 | Finger millet | ICM | GNN 6 | | 3 | 25 | 5 |
| 5 | Little millet | ICM | GV 3 | | 7 | 25 | 5 |
| 6 | Nutri cereal crop (Little millet) | INM | NOVEL | | 1 | 10 | 1 |
| 7 | Indian bean | ICM | GNIB | | 2 | 25 | 2.5 |
| 8 | Aloevera | ICM | INGR 13043 | | 1 | 10 | 0.1 |
| 9 | Mango | ICM | Kesar | | 1 | 20 | 1.0 |
| 10 | Gram | IDM | Trichoderma | | 3 | 25 | 5 |
| 11 | Cucurbitacious | IPM | Cue Lure trap | | 4 | 20 | 2 |
| 12 | Okara | IPM | Pheromone trap & Yellow sticky trap | | 2 | 25 | 5 |
| 13 | Paddy | IPM | Pheromone trap | | 1 | 25 | 5 |

### B. Details of FLDs implemented during 2023(Kharif 2023, Rabi 2022-23, Summer 2023) (Information is to be furnished in the following three tables for each category i.e. cereals, horticultural crops, oilseeds, pulses, cotton and commercial crops.)

| Sl. No. | Crop | Thematic area | Technology Demonstrated | Season and year | Area (ha) | | No. of farmers/ demonstration | | | Reasons for shortfall in achievement |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Proposed | Actual | SC/ST | Others | Total | |
| **Pulse crops** | | | | | | | | | | |
| **1.** | Pigeon pea | ICM | New variety | Rabi 2022-23 | 5 | 5 | 26 | 0 | 26 | - |
| **Other crops** | | | | | | | | | | |
| 2. | Finger millet | ICM | New variety | *Kharif* 2023 | 5 | 5 | 25 | 0 | 25 | - |
| 3. | Little millet | ICM | New variety | *Kharif* 2023 | 5 | 5 | 25 | 0 | 25 | - |
| 4. | Paddy | ICM | New variety | *Kharif* 2023 | 5 | 5 | 25 | 0 | 25 | - |
| **Horticultural other crops** | | | | | | | | | | |

| Sl. No. | Crop | Thematic area | Technology Demonstrated | Season and year | Area (ha) | | No. of farmers/ demonstration | | | Reasons for shortfall in achievement |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Proposed | Actual | SC/ST | Others | Total | |
| 5. | Mango | ICM | New variety | *Kharif* 2023 | 3 | 3 | 30 | 0 | 30 | - |
| **Plant Protection** | | | | | | | | | | |
| 6. | Mango | IPM | Fruit fly trap | *Kharif* 2023 | 5 | 5 | 25 | 0 | 25 | - |
| 7. | Finger millet | IDM | *Pseudomonas* | Rabi 2023 | 5 | 5 | 25 | 0 | 25 | - |
| 8. | Paddy | IPM | *Beauveria bassiana* | *Kharif* 2023 | 5 | 5 | 25 | 0 | 25 | - |
| **Livestock** | | | | | | | | | | |
| 9. | Poultry farming | Poultry farming | Introduction of new improved birds- Rhode Island Red | Rabi 2023 | 20 No. of Unit | 20 No. of Unit | 20 | 0 | 20 | - |
| 10. | Poultry farming | Poultry farming | Introduction of new improved birds- Rhode Island Red | Rabi 2023 | 20 No. of Unit | 20 No. of Unit | 20 | 0 | 20 | - |
| 11. | Sorghum | Fodder management | Sorghum GFS-6/CSV-21F | Rabi 2023 | - | - | 136 | 0 | 136 | - |
| **FLD on Other Enterprise** | | | | | | | | | | |
| 12. | Horticulture | Natural farming | FLD on natural farming under the Out scaling of Natural Farming through KVKs | Rabi 2023 | 16 No. of Unit | 16 No. of Unit | 16 | 0 | 16 | - |
| 13. | Extension education | Kitchen garden kit | Kitchen garden kit (Okra GAO 5, Cowpea AVCP 1, Bottalgaurd GABH 1, Pegeon pea GT 105) | Rabi 2023 | 150 No. of Unit | 150 No. of Unit | 150 | 0 | 150 | - |
| **FLDs under other schemes (Other than KVK-ICAR Budget-TSP, Adaptive trial, (Rabi, Summer-2023)** | | | | | | | | | | |
| **Pulse crops** | | | | | | | | | | |
| 14. | Gram (TSP) | ICM | New variety | *Kharif* 2023 | 6.66 | 6.66 | 50 | 0 | 50 | - |
| 15. | Green gram (TSP) | ICM | New variety | *Kharif* 2023 | 7.50 | 7.50 | 50 | 0 | 50 | - |
| **Other crops** | | | | | | | | | | |
| 16. | Paddy (Adaptive trial) | ICM | New variety | *Kharif* 2023 | 15 | 15 | 30 | 0 | 30 | - |
| **Horticultural crops** | | | | | | | | | | |
| 17. | Mango | ICM | New variety | Rabi 2023 | 1.1 | 1.1 | 11 | 0 | 11 | - |
| 18. | Okra | ICM | New variety | *Kharif* 2023 | 0.05 | 0.05 | 20 | 0 | 20 | - |
| 19. | Indian bean | ICM | New variety | *Kharif* 2023 | 2.0 | 2.0 | 20 | 0 | 20 | - |
| **Plant Protection** | | | | | | | | | | |

| Sl. No. | Crop | Thematic area | Technology Demonstrated | Season and year | Area (ha) | | No. of farmers/ demonstration | | | Reasons for shortfall in achievement |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Proposed | Actual | SC/ST | Others | Total | |
| 20. | Pigeon pea | IPM | New variety | Rabi 2023 | 20 | 20 | 100 | 0 | 100 | - |
| 21. | Bitterguard | IPM | New variety | *Kharif* 2023 | 41 | 41 | 100 | 0 | 100 | - |
| **FLD on Farm Implements and Machinery** | | | | | | | | | | |
| 22. | Hand weeder (KVK regular) | Kitchen garden, pulses | Drudgery reduction technology | Rabi 2023 | 28 | 28 | 28 | 0 | 28 | - |

**Details of farming situation**

| Crop | Season | Farming situation (RF/Irrigated) | Soil type | Status of soil | | | Previous crop | Sowing date | Harvest date | Seasonal rainfall (mm) | No. of rainy days |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | N | P | K | | | | | |
| **Pulse crops** | | | | | | | | | | | |
| Pigeon pea | Rabi 2022-23 | Rainfed | Lateritic black Hilly | H | M | H | Gram | 20-06-2022 | 01-02-2023 | 2704.0 | 73 |
| **Other crops** | | | | | | | | | | | |
| Finger millet | *Kharif* 2023 | Rainfed | Lateritic black Hilly | H | M | H | Gram | 16-06-2023 | 28-11-2023 | 1823.5 | 73 |
| Little millet | *Kharif* 2023 | Rainfed | Lateritic black Hilly | H | M | H | Paddy | 16-06-2023 | 28-11-2023 | 1823.5 | 73 |
| Paddy | *Kharif* 2023 | Rainfed | Lateritic black Hilly | H | M | H | Green gram | 01-06-2023 | 31-10-2023 | 1789 | 71 |
| **Horticultural other crops** | | | | | | | | | | | |
| Mango | *Kharif* 2023 | Irrigated | Lateritic black Hilly | H | M | H | - | - | - | - | - |
| **Plant Protection** | | | | | | | | | | | |
| Mango | *Kharif* 2023 | Irrigated | Lateritic black Hilly | H | M | H | Mango | - | - | - | - |
| Finger millet | Rabi 2023 | Rain fed | Lateritic | H | M | H | Pigeon pea | 22-08-2023 | 01-11-2023 | 698.5 | 38 |

| Crop | Season | Farming situation (RF/Irrigated) | Soil type | Status of soil | | | Previous crop | Sowing date | Harvest date | Seasonal rainfall (mm) | No. of rainy days |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | N | P | K | | | | | |
| | | | black Hilly | | | | | | | | |
| Paddy | *Kharif* 2023 | Rain fed | Lateritic black Hilly | H | M | H | Paddy | 01-06-2023 | 31-10-2023 | 530 | 20 |
| **Livestock** | | | | | | | | | | | |
| Sorghum | Rabi 2023 | Rainfed | Lateritic black Hilly | H | M | H | - | - | - | - | - |
| **FLD on Other Enterprise** | | | | | | | | | | | |
| Natural farming | *Kharif* 2022 | Irrigated | Lateritic black Hilly | H | M | H | - | 14-02-2022 | 01-06-2023 | 307.5 | 10 |
| Kitchen garden kit | Rabi 2022 | Rainfed | Lateritic black Hilly | H | M | H | - | - | - | - | - |
| **FLDs under other schemes (Other than KVK-ICAR Budget-TSP, Adaptive trial, (Rabi, Summer-2022)** | | | | | | | | | | | |
| **Pulse crops** | | | | | | | | | | | |
| Gram (TSP) | *Kharif* 2023 | Irrigated | Lateritic black Hilly | H | M | H | Paddy | 15-11-2022 | 01-03-2023 | 00 | 00 |
| Green gram (TSP) | *Kharif* 2023 | Irrigated | Lateritic black Hilly | H | M | H | Pigeon pea | 07-02-2023 | 31-05-2023 | 25 | 03 |
| **Other crops** | | | | | | | | | | | |
| Paddy (Adaptive trial) | *Kharif* 2023 | Irrigated | Lateritic black Hilly | H | M | H | Gram | 21-06-2023 | 31-10-2023 | 1789 | 71 |
| **Horticultural crops** | | | | | | | | | | | |
| Mango | Rabi 2023 | Rainfed | Lateritic black Hilly | H | M | H | - | - | - | - | - |
| Okra | *Kharif* 2023 | Irrigated | Lateritic black Hilly | H | M | H | Pigeon pea | 11-11-2022 | 01-03-2023 | 00 | 00 |
| Indian bean | *Kharif* 2023 | Irrigated | Lateritic black Hilly | H | M | H | Gram | 10-11-2022 | 01-03-2023 | 00 | 00 |
| **Plant Protection** | | | | | | | | | | | |
| Pigeon pea | Rabi 2023 | Rainfed | Lateritic | H | M | H | Gram | 12-09-2022 | 01-02-2023 | 652 | 22 |

| Crop | Season | Farming situation (RF/Irrigated) | Soil type | Status of soil | | | Previous crop | Sowing date | Harvest date | Seasonal rainfall (mm) | No. of rainy days |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | N | P | K | | | | | |
| | | | black Hilly | | | | | | | | |
| Bitterguard | *Kharif* 2023 | Irrigated | Lateritic black Hilly | H | M | H | - | 01-01-2023 | 01-04-2023 | 14.5 | 02 |

**Technical Feedback on the demonstrated technologies**

| Sr. No. | Feed Back |
|---|---|
| 1. | Paddy variety GR 17 gives more trilling than other. |
| 2. | Standardized the preparation method of Jeevamrut, Ghanjeevamrut etc. |
| 3. | Provide Marketing Facility for Product of Natural farming. |
| 4. | Need variety which is resistance to sucking pest in okra (Okra highly effected by sucking pest) |
| 5. | Need good variety from university in okra (farmers mostly grow private hybrid) |
| 6. | To develop nutritional feed for milch animals. |
| 7. | Provide marketing facility particular in Ahwa and Subir block of Dang district. |

**Farmers' reactions on specific technologies**

| Sr. No. | Feed Back |
|---|---|
| 1. | Green gram variety GM 6 gave very good yield as compare to local varieties. |
| 2. | Farmers want seeds of indigenous varieties of paddy from university or *Bijnigam*. |
| 3. | Need some basic recommendation of Natural farming from the university. |

| Sr. No. | Feed Back |
|---|---|
| 4. | Required Govt. sector hybrid variety of Okra and bitter gourd for dang district. |
| 5. | Variety of tomato Arka rakshak gave higher yield than GT 7 variety. |
| 6. | Standardized method of preparation of Agniastra, Neemastra and Dashparni arka. |
| 7. | Sorghum variety can be grow throughout the year as multi cut variety under irrigated conditions which is very useful for manage of green fodder requirement of livestock throughout year. |

**Extension and Training activities under FLD**

| Sl.No. | Activity | No. of activities organized | Date | Number of participants | Remarks |
|---|---|---|---|---|---|
| 1 | Field days | 01 | 28-07-2023 | 32 | Nil |
| 2 | Farmers Training | 07 | 03-11-2023, 04-11-2023, 22-12,2023, 02-12-2023, 04-11-2023, 19-06-2023, 30-11-2023 | 175 | Nil |
| 3 | Media coverage | 143 | - | - | Nil |
| 4 | Training for extension functionaries | - | - | - | - |

## C. Performance of Frontline demonstrations

**Performance of Frontline demonstrations (*Rabi, Kharif*-2022, Summer-2023)**

**Frontline demonstration on pulse crops:**

| Crop | Thematic Area | technology demonstrated | Variety | No. of Farmers | Area (ha) | Yield (q/ha) | | | | % Increase in yield | Economics of demonstration* (Rs./ha) | | | | Economics of check (Rs./ha) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Demo | | | Check | | Gross Cost | Gross Return | Net Return | BCR** (R/C) | Gross Cost | Gross Return | Net Return | BCR (R/C) |
| | | | | | | High | Low | Average | | | | | | | | | | |
| **Crop Production** | | | | | | | | | | | | | | | | | | |
| Pigeon pea | ICM | New variety | GT 105 | 26 | 5 | 15.25 | 12.50 | 13.80 | 10.62 | 29.94 | 20000 | 62100 | 42100 | 3.11 | 18000 | 47790 | 29790 | 2.66 |

* Economics to be worked out based on total cost of production per unit area and not on critical inputs alone. ** BCR= GROSS RETURN/GROSS COST

**FLDs on Other crops (*Kharif* 2023):**

| Category & Crop | Thematic Area | Name of the technology | Variety/ Input | No. of Farmers | Area (ha) | Yield (q/ha) | | | | % Change in Yield | Economics of demonstration* (Rs./ha) | | | | Economics of check (Rs./ha) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Demo | | | Check | | Gross Cost | Gross Return | Net Return | BCR** (R/C) | Gross Cost | Gross Return | Net Return | BCR (R/C) |
| | | | | | | H | L | Av. | | | | | | | | | | |
| **Crop Production** | | | | | | | | | | | | | | | | | | |
| Finger millet | ICM | New variety | CFMV 2(Gira) | 25 | 5 | 16.35 | 13.40 | 14.57 | 9.95 | 46.43 | 12000 | 58280 | 46280 | 4.86 | 10000 | 39800 | 29800 | 3.98 |
| Little millet | ICM | New variety | GNV 3 | 25 | 5 | 14.30 | 11.70 | 13.11 | 9.75 | 34.46 | 10000 | 45885 | 35885 | 4.59 | 8000 | 34125 | 26125 | 4.27 |
| Paddy | ICM | New variety | GR 17 | 25 | 5 | 28.20 | 25.05 | 27.48 | 22.10 | 24.34 | 20000 | 49464 | 29464 | 2.47 | 25000 | 39780 | 14780 | 1.59 |
| **Horticultural other crops (2023)** | | | | | | | | | | | | | | | | | | |
| Mango | ICM | New variety | Kesar | 30 | 3 | 80% Survival rate | | | | | | | | | | | | |
| **Plant Protection (2023)** | | | | | | | | | | | | | | | | | | |
| Mango | IPM | Fruit fly trap | Local varieties | 25 | 5 | 65 | 61.5 | 63.06 | 52.9 | 19.44 | 50000 | 239658.4 | 189658.4 | 4.79 | 49500 | 201020 | 151520 | 4.06 |
| Fingermillet | IDM | *Pseudomonas* | Local varieties | 25 | 5 | 13.5 | 12 | 12.96 | 9.9 | 29.86 | 12000 | 51856 | 39856 | 4.32 | 10000 | 39984 | 29984 | 3.99 |

| Category & Crop | Thematic Area | Name of the technology | Variety/ Input | No. of Farmers | Area (ha) | Yield (q/ha) | | | | % Change in Yield | Economics of demonstration* (Rs./ha) | | | | Economics of check (Rs./ha) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Demo | | | Check | | Gross Cost | Gross Return | Net Return | BCR** (R/C) | Gross Cost | Gross Return | Net Return | BCR (R/C) |
| | | | | | | H | L | Av. | | | | | | | | | | |
| Paddy | IPM | *Beauveria bassiana* | Hybrid | 25 | 5 | 26 | 24.5 | 25.28 | 21.59 | 17.14 | 25000 | 48039.6 | 23039.6 | 1.92 | 24500 | 40943.6 | 16443.6 | 1.67 |

* Economics to be worked out based on total cost of production per unit area and not on critical inputs alone. ** BCR= GROSS RETURN/GROSS COST

**FLD on Livestock (Rabi, Summer-2023):**

| Category | Thematic area | Name of the technology demonstrated | No. of Farmer | No. of Units (Animal/ Poultry/ Birds, etc) | Major parameters lit/cow/day | | % change in major parameter | Other parameter | | Economics of demonstration* (Rs.) | | | | Economics of check (Rs.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Demo | Check | | Demo | Check | Gross Cost | Gross Return | Net Return | BCR** (R/C) | Gross Cost | Gross Return | Net Return | BCR (R/C) |
| **Dairy cow (KVK regular)** | | | | | | | | | | | | | | | | | |
| 1. | Poultry farming | Introduction of new improved birds- Rhode Island Red | 20 | 10 Poultry | 142 eggs/year | 89 eggs/year | 59.5 | - | - | 2000 | 5200 | 3200 | 2.6 | 1400 | 3100 | 1700 | 2.21 |
| **Dairy cow (Adaptive trial)** | | | | | | | | | | | | | | | | | |
| 1. | Poultry farming | Introduction of new improved birds- Rhode Island Red | 20 | 10 Poultry | 135 eggs/year | 85 eggs/year | 58.8 | - | - | 2000 | 4900 | 2900 | 2.45 | 1400 | 2900 | 1500 | 2.07 |
| 2. | Fodder management | Sorghum GFS 6 | 108 | 13.5 ha | 322 | 265 | 21.51 | - | - | 26000 | 80500 | 54500 | 3.09 | 27000 | 66250 | 39250 | 2.45 |
| 3. | Fodder management | Sorghum CSV 21F | 28 | 3.5 ha | 310 | 257 | 20.62 | - | - | 26000 | 77500 | 51500 | 2.98 | 27000 | 64250 | 37250 | 2.37 |

* Economics to be worked out based on total cost of production per unit area and not on critical inputs alone. ** BCR= GROSS RETURN/GROSS COST

**FLD on Other Enterprise: (Kharif, Rabi, Summer-2023):**

| Category and Crop | Thematic area | Name of the technology demonstrated | No. of Farmer | No. of Units/ha | Yield (Kg) | | % change in yield | Economics of demonstration (Rs./ha) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Demo | Check | | Gross Cost | Gross Return | Net Return | BCR (R/C) |
| Horticulture | Natural farming | FLD on natural farming under the Out scaling of Natural Farming through KVKs | 16 | 2.24 ha | 5.23 | 6.08 | -13.71 | 14643.75 | 34043.75 | 19400 | 2.33 |
| Extension education | Kitchen garden kit | Kitchen garden kit (Okra GAO 5, Cowpea AVCP 1, Bottalgaurd GABH 1, Pegeon pea GT 105) | 150 | 150 | 85.5 | 45 | 90 | 900 | 2700 | 1800 | 3.0 |

**FLD on Farm Implements and Machinery**

| Name of the implement | Crop | Technology demonstrated | No. of Farmer | Area (ha) | Major parameters | Filed observation (output/man hour) | | % change in major parameter | Labor reduction (man days) | | | | Cost reduction (Rs./ha or Rs./Unit etc.) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Demo | Check | | Land preparation | Sowing | Weeding | Total | Land preparation | Labour | Irrigation | Total |
| Hand weeder (KVK regular) | Kitchen garden, pulses | Drudgery reduction technology | 28 | 28 | Labour requirement man hour/ha | 78 | 122 | 5.5 | -- | -- | 5.5 | 5.5 | -- | 2046 | -- | 2046 |

**FLDs under other schemes (Other than KVK-ICAR Budget-TSP, Adaptive trial, (Rabi, Summer-2023):**

| Category & Crop | Thematic Area | Name of the technology | Variety | No. of Farmers | Area (ha) | Yield (q/ha) | | | | % Change in Yield | Economics of demonstration* (Rs./ha) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Demo | | | Check | | Gross Cost | Gross Return | Net Return | BCR** (R/C) |
| | | | | | | High | Low | Ave. | | | | | | |
| **Crop Production** | | | | | | | | | | | | | | |
| **Oilseed** | | | | | | | | | | | | | | |
| -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| **Pulse crops** | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Gram (TSP) | ICM | New variety | GJG 3 | 50 | 6.66 | 16.00 | 12.84 | 14.64 | 10.75 | 36.19 | 16500 | 73200 | 56700 | 4.44 |
| Green gram (TSP) | ICM | New variety | GM 6 | 50 | 7.50 | 10.19 | 8.52 | 9.41 | 6.16 | 52.76 | 20000 | 67752 | 47752 | 3.39 |
| **Other crops** | | | | | | | | | | | | | | |
| Paddy (Adaptive trial) | ICM | New variety | GR 17 | 30 | 15 | 31.38 | 22.18 | 27.72 | 21.98 | 26.11 | 20000 | 49896 | 29896 | 2.49 |
| **Horticultural crops** | | | | | | | | | | | | | | |
| Mango | ICM | New variety | Kesar | 11 | 1.1 | 80% Survival rate | | | | | | | | |
| Okra | ICM | New variety | Purna rakshak | 20 | 0.05 | 76 | 62 | 70.25 | 96.2 | -26.76 | 80000 | 210750 | 130750 | 2.63 |
| Indian bean | ICM | New variety | GNIB 22 | 20 | 2.0 | 41 | 29 | 35.35 | 26.25 | 35.31 | 41627.5 | 88375 | 46747.5 | 2.12 |
| **Plant Protection** | | | | | | | | | | | | | | |
| Pigeon pea | IPM | Pheromone trap | Local varieties | 100 | 20 | 14.5 | 13.1 | 13.55 | 10.18 | 33.17 | 20000 | 53905 | 33905 | 2.69 |
| Bitterguard | IPM | Cue lure trap | Local varieties | 100 | 41 | 98 | 92 | 96.06 | 81.57 | 17.89 | 60000 | 240150 | 180150 | 4.00 |

* Economics to be worked out based on total cost of production per unit area and not on critical inputs alone. ** BCR= GROSS RETURN/GROSS COST

**Ongoing FLDs of KVK Regular (2023-24)**

| Sr. No. | Discipline | Season | Crop/ Enterprise | Variety/ Technology Input | Area (ha) | No. of Demo. |
|---|---|---|---|---|---|---|
| 1. | Crop Production | *Kharif*, 2023-24 | Chickpea | GJG 3 | 5 | 25 |
| 2. | Horticulture | *Kharif*, 2023-24 | Mango | Kesar | 5 | 50 |
| 3. | | *Kharif*, 2023-24 | Okra | NOVEL & Bio fartilizer | 2.5 | 25 |
| 4. | | *Kharif*, 2023-24 | Indian been | GNIB 22 | 0.50 | 5 |
| 5. | Plant Protection | *Kharif*, 2023-24 | Bittergourd | Cue lure trap | 5 | 25 |
| 6. | | *Kharif*, 2023-24 | Cashewnut | Beauveria | 5 | 25 |
| 7. | Animal Science | *Rabi* 2021-22 | Sorghum | CSV 21F | - | 20 |
| **Total** | | | | | **23 ha** | **175** |

**IX. Demonstrations given under other schemes (*kharif/Rabi/Summer*,2023-24):**

| Sr. No. | Scheme/ Particulars of the FLD | Season | Crop | Variety/ Component/ Technology | Area/Unit | No. of Demo. |
|---|---|---|---|---|---|---|
| **I** | **Adaptive trial (Phase-2)** | | | | | |
| 1. | Crop production | Rabi, 2023-24 | Pigeon pea | GT 105 | 5 | 25 |
| 2. | | Rabi, 2023-24 | Pigeon pea (CFLD) | GT 104 | 20 | 50 |
| 3. | Horticulture | Rabi, 2023-24 | Brinjal | GNRB 1 | 0.4 | 40 |
| 4. | | Rabi, 2023-24 | Indian been | GNIB 22 | 1.4 | 14 |
| 5. | Plant Protection | Rabi, 2023-24 | Mushroom | Mushroom | 60 Unit | 60 |
| 6. | Extension education | Rabi, 2023-24 | Tween wheel hoe | Tween wheel hoe | 31 unit | 31 |
| **Total** | | | | | **26.8 ha & 91 unit** | **220** |

## 3.4. Training Programmes (Online programmes if any should be included under On Campus category)

**Farmers' Training including sponsored training programmes (on campus)**

| Thematic area | No. of courses | Participants | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Others | | | SC/ST | | | Grand Total | | |
| | | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| **I Crop Production** | | | | | | | | | | |
| Weed Management | 1 | | | | 36 | 15 | 51 | 36 | 15 | 51 |
| Resource Conservation Technologies | | | | | | | | | | |
| Cropping Systems | | | | | | | | | | |
| Crop Diversification | | | | | | | | | | |
| Integrated Farming | | | | | | | | | | |
| Micro Irrigation/irrigation | | | | | | | | | | |
| Seed production | | | | | | | | | | |
| Nursery management | | | | | | | | | | |
| Integrated Crop Management | 10 | | | | 257 | 136 | 393 | 257 | 136 | 393 |
| Soil & water conservation | | | | | | | | | | |
| Integrated nutrient management | | | | | | | | | | |
| Production of organic inputs | 1 | | | | 11 | 0 | 11 | 11 | 0 | 11 |
| Others (pl. specify) (Natural farming) | 5 | | | | 112 | 91 | 203 | 112 | 91 | 203 |
| **Total** | **17** | | | | **416** | **242** | **658** | **416** | **242** | **658** |
| **II Horticulture** | | | | | | | | | | |
| **a) Vegetable Crops** | | | | | | | | | | |
| Production of low value and high value crops | 1 | | | | 26 | 9 | 35 | 26 | 9 | 35 |
| Off-season vegetables | 1 | | | | 0 | 32 | 32 | 0 | 32 | 32 |
| Nursery raising | 2 | | | | 4 | 82 | 86 | 4 | 82 | 86 |
| Exotic vegetables | | | | | | | | | | |
| Export potential vegetables | 2 | | | | 22 | 37 | 59 | 22 | 37 | 59 |
| Grading and standardization | | | | | | | | | | |
| Protective cultivation | | | | | | | | | | |
| Others (pl specify) | 4 | | | | 99 | 55 | 154 | 99 | 55 | 154 |
| **Total (a)** | **10** | | | | **151** | **215** | **366** | **151** | **215** | **366** |
| **b) Fruits** | | | | | | | | | | |
| Training and Pruning | | | | | | | | | | |
| Layout and Management of Orchards | | | | | | | | | | |
| Cultivation of Fruit | 2 | | | | 111 | 27 | 138 | 111 | 27 | 138 |
| Management of young plants/orchards | | | | | | | | | | |
| Rejuvenation of old orchards | | | | | | | | | | |
| Export potential fruits | | | | | | | | | | |
| Micro irrigation systems of orchards | | | | | | | | | | |
| Plant propagation techniques | | | | | | | | | | |
| Others (pl specify) | 5 | | | | 127 | 126 | 253 | 127 | 126 | 253 |
| **Total (b)** | **7** | | | | **238** | **153** | **391** | **238** | **153** | **391** |
| **c) Ornamental Plants** | | | | | | | | | | |
| Nursery Management | | | | | | | | | | |
| Management of potted plants | | | | | | | | | | |
| Export potential of ornamental plants | | | | | | | | | | |
| Propagation techniques of Ornamental Plants | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total ( c)** | | | | | | | | | | |
| **d) Plantation crops** | | | | | | | | | | |
| Production and Management technology | 1 | | | | 24 | 5 | 29 | 24 | 5 | 29 |
| Processing and value addition | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total (d)** | **1** | | | | **24** | **5** | **29** | **24** | **5** | **29** |
| **e) Tuber crops** | | | | | | | | | | |
| Production and Management technology | | | | | | | | | | |
| Processing and value addition | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total (e)** | | | | | | | | | | |
| **f) Spices** | | | | | | | | | | |
| Production and Management technology | | | | | | | | | | |
| Processing and value addition | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total (f)** | | | | | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **g) Medicinal and Aromatic Plants** | | | | | | | | | | |
| Nursery management | | | | | | | | | | |
| Production and management technology | | | | | | | | | | |
| Post harvest technology and value addition | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total (g)** | | | | | | | | | | |
| **Grand Total (a to g)** | **18** | | | | **413** | **373** | **786** | **413** | **373** | **786** |
| **III Soil Health and Fertility Management** | | | | | | | | | | |
| Soil fertility management | | | | | | | | | | |
| Integrated water management | 1 | | | | 17 | 24 | 41 | 17 | 24 | 41 |
| Integrated Nutrient Management | | | | | | | | | | |
| Production and use of organic inputs | | | | | | | | | | |
| Management of Problematic soils | | | | | | | | | | |
| Micro nutrient deficiency in crops | | | | | | | | | | |
| Nutrient Use Efficiency | | | | | | | | | | |
| Balance use of fertilizers | | | | | | | | | | |
| Soil and Water Testing | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total** | **1** | | | | **17** | **24** | **41** | **17** | **24** | **41** |
| **IV Livestock Production and Management** | | | | | | | | | | |
| Dairy Management | 6 | | | | 15 | 171 | 186 | 15 | 171 | 186 |
| Poultry Management | | | | | | | | | | |
| Piggery Management | | | | | | | | | | |
| Rabbit Management | | | | | | | | | | |
| Animal Nutrition Management | 4 | | | | 28 | 114 | 142 | 28 | 114 | 142 |
| Disease Management | 2 | | | | 2 | 88 | 90 | 2 | 88 | 90 |
| Feed & fodder technology | 2 | | | | 0 | 72 | 72 | 0 | 72 | 72 |
| Production of quality animal products | | | | | | | | | | |
| Others (pl specify) | 2 | | | | 8 | 49 | 57 | 8 | 49 | 57 |
| **Total** | **16** | | | | **53** | **494** | **547** | **53** | **494** | **547** |
| **V Home Science/Women empowerment** | | | | | | | | | | |
| Household food security by kitchen gardening and nutrition gardening | | | | | | | | | | |
| Design and development of low/minimum cost diet | | | | | | | | | | |
| Designing and development for high nutrient efficiency diet | | | | | | | | | | |
| Minimization of nutrient loss in processing | 1 | | | | 36 | 11 | 47 | 36 | 11 | 47 |
| Processing and cooking | | | | | | | | | | |
| Gender mainstreaming through SHGs | | | | | | | | | | |
| Storage loss minimization techniques | | | | | | | | | | |
| Value addition | | | | | | | | | | |
| Women empowerment | | | | | | | | | | |
| Location specific drudgery reduction technologies | | | | | | | | | | |
| Rural Crafts | | | | | | | | | | |
| Women and child care | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total** | **1** | | | | **36** | **11** | **47** | **36** | **11** | **47** |
| **VI Agril. Engineering** | | | | | | | | | | |
| Farm Machinery and its maintenance | 1 | | | | 34 | 19 | 53 | 34 | 19 | 53 |
| Installation and maintenance of micro irrigation systems | | | | | | | | | | |
| Use of Plastics in farming practices | | | | | | | | | | |
| Production of small tools and implements | 1 | | | | 6 | 43 | 49 | 6 | 43 | 49 |
| Repair and maintenance of farm machinery and implements | | | | | | | | | | |
| Small scale processing and value addition | | | | | | | | | | |
| Post Harvest Technology | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total** | **2** | | | | **40** | **62** | **102** | **40** | **62** | **102** |
| **VII Plant Protection** | | | | | | | | | | |
| Integrated Pest Management | 7 | | | | 103 | 198 | 301 | 103 | 198 | 301 |
| Integrated Disease Management | 8 | | | | 84 | 284 | 368 | 84 | 284 | 368 |
| Bio-control of pests and diseases | | | | | | | | | | |
| Production of bio control agents and bio pesticides | | | | | | | | | | |
| Others (pl specify) | 3 | | | | 80 | 62 | 142 | 80 | 62 | 142 |
| **Total** | **18** | | | | **267** | **544** | **811** | **267** | **544** | **811** |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **VIII Fisheries** | | | | | | | | | | |
| Integrated fish farming | | | | | | | | | | |
| Carp breeding and hatchery management | | | | | | | | | | |
| Carp fry and fingerling rearing | | | | | | | | | | |
| Composite fish culture | | | | | | | | | | |
| Hatchery management and culture of 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 | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total** | | | | | | | | | | |
| **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 | | | | | | | | | | |
| Production of Bee-colonies and wax sheets | | | | | | | | | | |
| Small tools and implements | | | | | | | | | | |
| Production of livestock feed and fodder | | | | | | | | | | |
| Production of Fish feed | | | | | | | | | | |
| Mushroom Production | | | | | | | | | | |
| Apiculture | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total** | | | | | | | | | | |
| **X CapacityBuilding and Group Dynamics** | | | | | | | | | | |
| Leadership development | 1 | | | | 20 | 30 | 50 | 20 | 30 | 50 |
| Group dynamics | 1 | | | | 1 | 32 | 33 | 1 | 32 | 33 |
| Formation and Management of SHGs | 1 | | | | 23 | 24 | 47 | 23 | 24 | 47 |
| Mobilization of social capital | 1 | | | | 2 | 28 | 30 | 2 | 28 | 30 |
| Entrepreneurial development of farmers/youths | 1 | | | | 27 | 1 | 28 | 27 | 1 | 28 |
| WTO and IPR issues | | | | | | | | | | |
| Others (pl specify) | 8 | | | | 197 | 91 | 288 | 197 | 91 | 288 |
| **Total** | **13** | | | | **270** | **206** | **476** | **270** | **206** | **476** |
| **XI Agro-forestry** | | | | | | | | | | |
| Production technologies | | | | | | | | | | |
| Nursery management | | | | | | | | | | |
| Integrated Farming Systems | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total** | | | | | | | | | | |
| **GRAND TOTAL** | **86** | | | | **1512** | **1956** | **3468** | **1512** | **1956** | **3468** |

**Farmers' Training including sponsored training programmes (off campus)**

| Thematic area | No. of courses | Participants | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Others | | | SC/ST | | | Grand Total | | |
| | | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| **I Crop Production** | | | | | | | | | | |
| Weed Management | | | | | | | | | | |
| Resource Conservation Technologies | | | | | | | | | | |
| Cropping Systems | | | | | | | | | | |
| Crop Diversification | | | | | | | | | | |
| Integrated Farming | | | | | | | | | | |
| Micro Irrigation/irrigation | | | | | | | | | | |
| Seed production | | | | | | | | | | |
| Nursery management | | | | | | | | | | |
| Integrated Crop Management | 3 | | | | 109 | 35 | 144 | 109 | 35 | 144 |
| Soil & water conservation | 1 | | | | 33 | 0 | 33 | 33 | 0 | 33 |
| Integrated nutrient management | | | | | | | | | | |
| Production of organic inputs | 2 | | | | 36 | 27 | 63 | 36 | 27 | 63 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Others (pl specify) | 2 | | | | 46 | 21 | 67 | 46 | 21 | 67 |
| **Total** | **8** | | | | **224** | **83** | **307** | **224** | **83** | **307** |
| **II Horticulture** | | | | | | | | | | |
| **a) Vegetable Crops** | | | | | | | | | | |
| Production of low value and high value crops | | | | | | | | | | |
| Off-season vegetables | | | | | | | | | | |
| Nursery raising | | | | | | | | | | |
| Exotic vegetables | | | | | | | | | | |
| Export potential vegetables | | | | | | | | | | |
| Grading and standardization | | | | | | | | | | |
| Protective cultivation | | | | | | | | | | |
| Others (pl specify) | 2 | | | | 73 | 29 | 102 | 73 | 29 | 102 |
| **Total (a)** | **2** | | | | **73** | **29** | **102** | **73** | **29** | **102** |
| **b) Fruits** | | | | | | | | | | |
| Training and Pruning | | | | | | | | | | |
| Layout and Management of Orchards | | | | | | | | | | |
| Cultivation of Fruit | 1 | | | | 22 | 6 | 28 | 22 | 6 | 28 |
| Management of young plants/orchards | 1 | | | | 10 | 20 | 30 | 10 | 20 | 30 |
| Rejuvenation of old orchards | | | | | | | | | | |
| Export potential fruits | | | | | | | | | | |
| Micro irrigation systems of orchards | | | | | | | | | | |
| Plant propagation techniques | | | | | | | | | | |
| Others (pl specify) | 1 | | | | 12 | 14 | 26 | 12 | 14 | 26 |
| **Total (b)** | **3** | | | | **44** | **40** | **84** | **44** | **40** | **84** |
| **c) Ornamental Plants** | | | | | | | | | | |
| Nursery Management | | | | | | | | | | |
| Management of potted plants | | | | | | | | | | |
| Export potential of ornamental plants | | | | | | | | | | |
| Propagation techniques of Ornamental Plants | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total ( c)** | | | | | | | | | | |
| **d) Plantation crops** | | | | | | | | | | |
| Production and Management technology | | | | | | | | | | |
| Processing and value addition | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total (d)** | | | | | | | | | | |
| **e) Tuber crops** | | | | | | | | | | |
| Production and Management technology | | | | | | | | | | |
| Processing and value addition | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total (e)** | | | | | | | | | | |
| **f) Spices** | | | | | | | | | | |
| Production and Management technology | | | | | | | | | | |
| Processing and value addition | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total (f)** | | | | | | | | | | |
| **g) Medicinal and Aromatic Plants** | | | | | | | | | | |
| Nursery management | | | | | | | | | | |
| Production and management technology | | | | | | | | | | |
| Post harvest technology and value addition | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total (g)** | | | | | | | | | | |
| **Grand Total (a to g)** | **5** | | | | **117** | **69** | **186** | **117** | **69** | **186** |
| **III Soil Health and Fertility Management** | | | | | | | | | | |
| Soil fertility management | | | | | | | | | | |
| Integrated water management | | | | | | | | | | |
| Integrated Nutrient Management | | | | | | | | | | |
| Production and use of organic inputs | | | | | | | | | | |
| Management of Problematic soils | | | | | | | | | | |
| Micro nutrient deficiency in crops | | | | | | | | | | |
| Nutrient Use Efficiency | | | | | | | | | | |
| Balance use of fertilizers | | | | | | | | | | |
| Soil and Water Testing | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total** | | | | | | | | | | |
| **IV Livestock Production and Management** | | | | | | | | | | |
| Dairy Management | 2 | | | | 16 | 29 | 45 | 16 | 29 | 45 |
| Poultry Management | | | | | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Piggery Management | | | | | | | | | | |
| Rabbit Management | | | | | | | | | | |
| Animal Nutrition Management | 1 | | | | 26 | 6 | 32 | 26 | 6 | 32 |
| Disease Management | | | | | | | | | | |
| Feed & fodder technology | 1 | | | | 40 | 18 | 58 | 40 | 18 | 58 |
| Production of quality animal products | | | | | | | | | | |
| Others (pl specify) | 1 | | | | 8 | 13 | 21 | 8 | 13 | 21 |
| **Total** | **5** | | | | **90** | **66** | **156** | **90** | **66** | **156** |
| **V Home Science/Women empowerment** | | | | | | | | | | |
| Household food security by kitchen gardening and nutrition gardening | | | | | | | | | | |
| Design and development of low/minimum cost diet | | | | | | | | | | |
| Designing and development for high nutrient efficiency diet | | | | | | | | | | |
| Minimization of nutrient loss in processing | | | | | | | | | | |
| Processing and cooking | | | | | | | | | | |
| Gender mainstreaming through SHGs | | | | | | | | | | |
| Storage loss minimization techniques | | | | | | | | | | |
| Value addition | | | | | | | | | | |
| Women empowerment | | | | | | | | | | |
| Location specific drudgery reduction technologies | | | | | | | | | | |
| Rural Crafts | | | | | | | | | | |
| Women and child care | 1 | | | | 13 | 25 | 38 | 13 | 25 | 38 |
| Others (pl specify) | | | | | | | | | | |
| **Total** | **1** | | | | **13** | **25** | **38** | **13** | **25** | **38** |
| **VI Agril. Engineering** | | | | | | | | | | |
| Farm Machinery and its maintenance | | | | | | | | | | |
| Installation and maintenance of micro irrigation systems | | | | | | | | | | |
| Use of Plastics in farming practices | | | | | | | | | | |
| Production of small tools and implements | | | | | | | | | | |
| Repair and maintenance of farm machinery and implements | | | | | | | | | | |
| Small scale processing and value addition | | | | | | | | | | |
| Post Harvest Technology | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total** | | | | | | | | | | |
| **VII Plant Protection** | | | | | | | | | | |
| Integrated Pest Management | 3 | | | | 39 | 62 | 101 | 39 | 62 | 101 |
| Integrated Disease Management | 3 | | | | 44 | 79 | 123 | 44 | 79 | 123 |
| Bio-control of pests and diseases | 1 | | | | 12 | 15 | 27 | 12 | 15 | 27 |
| Production of bio control agents and bio pesticides | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total** | **7** | | | | **95** | **156** | **251** | **95** | **156** | **251** |
| **VIII Fisheries** | | | | | | | | | | |
| Integrated fish farming | | | | | | | | | | |
| Carp breeding and hatchery management | | | | | | | | | | |
| Carp fry and fingerling rearing | | | | | | | | | | |
| Composite fish culture | | | | | | | | | | |
| Hatchery management and culture of 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 | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total** | | | | | | | | | | |
| **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 | | | | | | | | | | |
| Production of Bee-colonies and wax sheets | | | | | | | | | | |
| Small tools and implements | | | | | | | | | | |
| Production of livestock feed and fodder | | | | | | | | | | |
| Production of Fish feed | | | | | | | | | | |
| Mushroom Production | | | | | | | | | | |
| Apiculture | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total** | | | | | | | | | | |
| **X Capacity Building and Group Dynamics** | | | | | | | | | | |
| Leadership development | | | | | | | | | | |
| Group dynamics | | | | | | | | | | |
| Formation and Management of SHGs | | | | | | | | | | |
| Mobilization of social capital | 1 | | | | 27 | 5 | 32 | 27 | 5 | 32 |
| Entrepreneurial development of farmers/youths | | | | | | | | | | |
| WTO and IPR issues | | | | | | | | | | |
| Others (pl specify) | 1 | | | | 15 | 25 | 40 | 15 | 25 | 40 |
| **Total** | **2** | | | | **42** | **30** | **72** | **42** | **30** | **72** |
| **XI Agro-forestry** | | | | | | | | | | |
| Production technologies | | | | | | | | | | |
| Nursery management | | | | | | | | | | |
| Integrated Farming Systems | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total** | | | | | | | | | | |
| **GRAND TOTAL** | **28** | | | | **581** | **429** | **1010** | **581** | **429** | **1010** |

**Farmers' Training including sponsored training programmes – CONSOLIDATED (On + Off campus)**

| Thematic area | No. of courses | Participants | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Others | | | SC/ST | | | Grand Total | | |
| | | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| **I Crop Production** | | | | | | | | | | |
| Weed Management | 1 | | | | 36 | 15 | 51 | 36 | 15 | 51 |
| Resource Conservation Technologies | | | | | | | | | | |
| Cropping Systems | | | | | | | | | | |
| Crop Diversification | | | | | | | | | | |
| Integrated Farming | | | | | | | | | | |
| Micro Irrigation/irrigation | | | | | | | | | | |
| Seed production | | | | | | | | | | |
| Nursery management | | | | | | | | | | |
| Integrated Crop Management | 13 | | | | 366 | 171 | 537 | 366 | 171 | 537 |
| Soil & water conservation | 1 | | | | 33 | 0 | 33 | 33 | 0 | 33 |
| Integrated nutrient management | | | | | | | | | | |
| Production of organic inputs | 3 | | | | 47 | 27 | 74 | 47 | 27 | 74 |
| Others (pl specify) | 7 | | | | 158 | 112 | 270 | 158 | 112 | 270 |
| **Total** | **25** | | | | **640** | **325** | **965** | **640** | **325** | **965** |
| **II Horticulture** | | | | | | | | | | |
| **a) Vegetable Crops** | | | | | | | | | | |
| Production of low value and high value crops | 1 | | | | 26 | 9 | 35 | 26 | 9 | 35 |
| Off-season vegetables | 1 | | | | 0 | 32 | 32 | 0 | 32 | 32 |
| Nursery raising | 2 | | | | 4 | 82 | 86 | 4 | 82 | 86 |
| Exotic vegetables | | | | | | | | | | |
| Export potential vegetables | 2 | | | | 22 | 37 | 59 | 22 | 37 | 59 |
| Grading and standardization | | | | | | | | | | |
| Protective cultivation | | | | | | | | | | |
| Others (pl specify) | 6 | | | | 172 | 84 | 256 | 172 | 84 | 256 |
| **Total (a)** | **12** | | | | **224** | **244** | **468** | **224** | **244** | **468** |
| **b) Fruits** | | | | | | | | | | |
| Training and Pruning | | | | | | | | | | |
| Layout and Management of Orchards | | | | | | | | | | |
| Cultivation of Fruit | 3 | | | | 133 | 33 | 166 | 133 | 33 | 166 |
| Management of young plants/orchards | 1 | | | | 10 | 20 | 30 | 10 | 20 | 30 |
| Rejuvenation of old orchards | | | | | | | | | | |
| Export potential fruits | | | | | | | | | | |
| Micro irrigation systems of orchards | | | | | | | | | | |
| Plant propagation techniques | | | | | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Others (pl specify) | 6 | | | | 139 | 140 | 279 | 139 | 140 | 279 |
| **Total (b)** | **10** | | | | **282** | **193** | **475** | **282** | **193** | **475** |
| **c) Ornamental Plants** | | | | | | | | | | |
| Nursery Management | | | | | | | | | | |
| Management of potted plants | | | | | | | | | | |
| Export potential of ornamental plants | | | | | | | | | | |
| Propagation techniques of Ornamental Plants | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total ( c)** | | | | | | | | | | |
| **d) Plantation crops** | | | | | | | | | | |
| Production and Management technology | 1 | | | | 24 | 5 | 29 | 24 | 5 | 29 |
| Processing and value addition | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total (d)** | **1** | | | | **24** | **5** | **29** | **24** | **5** | **29** |
| **e) Tuber crops** | | | | | | | | | | |
| Production and Management technology | | | | | | | | | | |
| Processing and value addition | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total (e)** | | | | | | | | | | |
| **f) Spices** | | | | | | | | | | |
| Production and Management technology | | | | | | | | | | |
| Processing and value addition | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total (f)** | | | | | | | | | | |
| **g) Medicinal and Aromatic Plants** | | | | | | | | | | |
| Nursery management | | | | | | | | | | |
| Production and management technology | | | | | | | | | | |
| Post harvest technology and value addition | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total (g)** | | | | | | | | | | |
| **Grand Total (a to g)** | **23** | | | | **530** | **442** | **972** | **530** | **442** | **972** |
| **III Soil Health and Fertility Management** | | | | | | | | | | |
| Soil fertility management | | | | | | | | | | |
| Integrated water management | 1 | | | | 17 | 24 | 41 | 17 | 24 | 41 |
| Integrated Nutrient Management | | | | | | | | | | |
| Production and use of organic inputs | | | | | | | | | | |
| Management of Problematic soils | | | | | | | | | | |
| Micro nutrient deficiency in crops | | | | | | | | | | |
| Nutrient Use Efficiency | | | | | | | | | | |
| Balance use of fertilizers | | | | | | | | | | |
| Soil and Water Testing | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total** | **1** | | | | **17** | **24** | **41** | **17** | **24** | **41** |
| **IV Livestock Production and Management** | | | | | | | | | | |
| Dairy Management | 8 | | | | 31 | 200 | 231 | 31 | 200 | 231 |
| Poultry Management | | | | | | | | | | |
| Piggery Management | | | | | | | | | | |
| Rabbit Management | | | | | | | | | | |
| Animal Nutrition Management | 5 | | | | 54 | 120 | 174 | 54 | 120 | 174 |
| Disease Management | 2 | | | | 2 | 88 | 90 | 2 | 88 | 90 |
| Feed & fodder technology | 3 | | | | 40 | 90 | 130 | 40 | 90 | 130 |
| Production of quality animal products | | | | | | | | | | |
| Others (pl specify) | 3 | | | | 16 | 62 | 78 | 16 | 62 | 78 |
| **Total** | **21** | | | | **143** | **560** | **703** | **143** | **560** | **703** |
| **V Home Science/Women empowerment** | | | | | | | | | | |
| Household food security by kitchen gardening and nutrition gardening | | | | | | | | | | |
| Design and development of low/minimum cost diet | | | | | | | | | | |
| Designing and development for high nutrient efficiency diet | | | | | | | | | | |
| Minimization of nutrient loss in processing | 1 | | | | 36 | 11 | 47 | 36 | 11 | 47 |
| Processing and cooking | | | | | | | | | | |
| Gender mainstreaming through SHGs | | | | | | | | | | |
| Storage loss minimization techniques | | | | | | | | | | |
| Value addition | | | | | | | | | | |
| Women empowerment | | | | | | | | | | |
| Location specific drudgery reduction technologies | | | | | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Rural Crafts | | | | | | | | | | |
| Women and child care | 1 | | | | 13 | 25 | 38 | 13 | 25 | 38 |
| Others (pl specify) | | | | | | | | | | |
| **Total** | **2** | | | | **49** | **36** | **85** | **49** | **36** | **85** |
| **VI Agril. Engineering** | | | | | | | | | | |
| Farm Machinery and its maintenance | 1 | | | | 34 | 19 | 53 | 34 | 19 | 53 |
| Installation and maintenance of micro irrigation systems | | | | | | | | | | |
| Use of Plastics in farming practices | | | | | | | | | | |
| Production of small tools and implements | 1 | | | | 6 | 43 | 49 | 6 | 43 | 49 |
| Repair and maintenance of farm machinery and implements | | | | | | | | | | |
| Small scale processing and value addition | | | | | | | | | | |
| Post Harvest Technology | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total** | **2** | | | | **40** | **62** | **102** | **40** | **62** | **102** |
| **VII Plant Protection** | | | | | | | | | | |
| Integrated Pest Management | 10 | | | | 142 | 260 | 402 | 142 | 260 | 402 |
| Integrated Disease Management | 11 | | | | 128 | 363 | 491 | 128 | 363 | 491 |
| Bio-control of pests and diseases | 1 | | | | 12 | 15 | 27 | 12 | 15 | 27 |
| Production of bio control agents and bio pesticides | | | | | | | | | | |
| Others (pl specify) | 3 | | | | 80 | 62 | 142 | 80 | 62 | 142 |
| **Total** | **25** | | | | **362** | **700** | **1062** | **362** | **700** | **1062** |
| **VIII Fisheries** | | | | | | | | | | |
| Integrated fish farming | | | | | | | | | | |
| Carp breeding and hatchery management | | | | | | | | | | |
| Carp fry and fingerling rearing | | | | | | | | | | |
| Composite fish culture | | | | | | | | | | |
| Hatchery management and culture of 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 | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total** | | | | | | | | | | |
| **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 | | | | | | | | | | |
| Production of Bee-colonies and wax sheets | | | | | | | | | | |
| Small tools and implements | | | | | | | | | | |
| Production of livestock feed and fodder | | | | | | | | | | |
| Production of Fish feed | | | | | | | | | | |
| Mushroom Production | | | | | | | | | | |
| Apiculture | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total** | | | | | | | | | | |
| **X CapacityBuilding and Group Dynamics** | | | | | | | | | | |
| Leadership development | 1 | | | | 20 | 30 | 50 | 20 | 30 | 50 |
| Group dynamics | 1 | | | | 1 | 32 | 33 | 1 | 32 | 33 |
| Formation and Management of SHGs | 1 | | | | 23 | 24 | 47 | 23 | 24 | 47 |
| Mobilization of social capital | 2 | | | | 29 | 33 | 62 | 29 | 33 | 62 |
| Entrepreneurial development of farmers/youths | 1 | | | | 27 | 1 | 28 | 27 | 1 | 28 |
| WTO and IPR issues | | | | | | | | | | |
| Others (pl specify) | 9 | | | | 212 | 116 | 328 | 212 | 116 | 328 |
| **Total** | **15** | | | | **312** | **236** | **548** | **312** | **236** | **548** |
| **XI Agro-forestry** | | | | | | | | | | |
| Production technologies | | | | | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nursery management | | | | | | | | | | |
| Integrated Farming Systems | | | | | | | | | | |
| Others (pl specify) | | | | | | | | | | |
| **Total** | | | | | | | | | | |
| **GRAND TOTAL** | **114** | | | | **2093** | **2385** | **4478** | **2093** | **2385** | **4478** |

## Training programmes for Extension Personnel including sponsored training (on campus)

| Area of training | No. of Courses | No. of Participants | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | General/ Others | | | SC/ST | | | Grand Total | | |
| | | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Productivity enhancement in field crops | | | | | | | | | | |
| Integrated Pest Management | | | | | | | | | | |
| Integrated Nutrient management | | | | | | | | | | |
| Rejuvenation of old orchards | | | | | | | | | | |
| Protected cultivation technology | | | | | | | | | | |
| Production and use of organic inputs | | | | | | | | | | |
| Care and maintenance of farm machinery and implements | | | | | | | | | | |
| Gender mainstreaming through SHGs | | | | | | | | | | |
| Formation and Management of SHGs | | | | | | | | | | |
| Women and Child care | | | | | | | | | | |
| Low cost and nutrient efficient diet designing | | | | | | | | | | |
| Group Dynamics and farmers organization | | | | | | | | | | |
| Information networking among farmers | | | | | | | | | | |
| Capacity building for ICT application | | | | | | | | | | |
| Management in farm animals | **1** | | | | **0** | **50** | **50** | | | |
| Livestock feed and fodder production | | | | | | | | | | |
| Household food security | | | | | | | | | | |
| Any other (pl.specify) | **1** | | | | **3** | **55** | **58** | | | |
| **TOTAL** | **2** | | | | **3** | **105** | **108** | | | |

## Training programmes for Extension Personnel including sponsored training (off campus)

| Area of training | No. of Courses | No. of Participants | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | General/ Others | | | SC/ST | | | Grand Total | | |
| | | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Productivity enhancement in field crops | | | | | | | | | | |
| Integrated Pest Management | | | | | | | | | | |
| Integrated Nutrient management | | | | | | | | | | |
| Rejuvenation of old orchards | | | | | | | | | | |
| Protected cultivation technology | | | | | | | | | | |
| Production and use of organic inputs | | | | | | | | | | |
| Care and maintenance of farm machinery and implements | | | | | | | | | | |
| Gender mainstreaming through SHGs | | | | | | | | | | |
| Formation and Management of SHGs | | | | | | | | | | |
| Women and Child care | | | | | | | | | | |
| Low cost and nutrient efficient diet designing | | | | | | | | | | |
| Group Dynamics and farmers organization | | | | | | | | | | |
| Information networking among farmers | | | | | | | | | | |
| Capacity building for ICT application | | | | | | | | | | |
| Management in farm animals | | | | | | | | | | |
| Livestock feed and fodder production | | | | | | | | | | |
| Household food security | | | | | | | | | | |
| Any other (pl.specify) | | | | | | | | | | |
| **TOTAL** | | | | | | | | | | |

## Training programmes for Extension Personnel including sponsored training – CONSOLIDATED (On + Off campus)

| Area of training | No. of Courses | No. of Participants | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | General/ Others | | | SC/ST | | | Grand Total | | |
| | | Male | Female | Total | Male | Female | Total | Male | Female | Total |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Productivity enhancement in field crops | | | | | | | | | | |
| Integrated Pest Management | | | | | | | | | | |
| Integrated Nutrient management | | | | | | | | | | |
| Rejuvenation of old orchards | | | | | | | | | | |
| Protected cultivation technology | | | | | | | | | | |
| Production and use of organic inputs | | | | | | | | | | |
| Care and maintenance of farm machinery and implements | | | | | | | | | | |
| Gender mainstreaming through SHGs | | | | | | | | | | |
| Formation and Management of SHGs | | | | | | | | | | |
| Women and Child care | | | | | | | | | | |
| Low cost and nutrient efficient diet designing | | | | | | | | | | |
| Group Dynamics and farmers organization | | | | | | | | | | |
| Information networking among farmers | | | | | | | | | | |
| Capacity building for ICT application | | | | | | | | | | |
| Management in farm animals | **1** | | | | **0** | **50** | **50** | | | |
| Livestock feed and fodder production | | | | | | | | | | |
| Household food security | | | | | | | | | | |
| Any other (pl.specify) | **1** | | | | **3** | **55** | **58** | | | |
| **TOTAL** | **2** | | | | **3** | **105** | **108** | | | |

## Sponsored training programmes

| Area of training | No. of Courses | No. of Participants | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | General/ Others | | | SC/ST | | | Grand Total | | |
| | | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| | | | | | | | | | | |
| **Crop production and management** | | | | | | | | | | |
| Increasing production and productivity of crops | 11 | | | | 309 | 195 | 504 | 309 | 195 | 504 |
| Commercial production of vegetables | | | | | | | | | | |
| **Production and value addition** | | | | | | | | | | |
| Fruit Plants | | | | | | | | | | |
| Ornamental plants | | | | | | | | | | |
| Spices crops | | | | | | | | | | |
| Soil health and fertility management | | | | | | | | | | |
| Production of Inputs at site | | | | | | | | | | |
| Methods of protective cultivation | | | | | | | | | | |
| Others (pl. specify) (Natural farming) (Horticulture) | 26 | | | | 363 | 864 | 1227 | 363 | 864 | 1227 |
| **Total** | **37** | | | | **672** | **1059** | **1731** | **672** | **1059** | **1731** |
| **Post harvest technology and value addition** | | | | | | | | | | |
| Processing and value addition | | | | | | | | | | |
| Others (pl. specify) | | | | | | | | | | |
| **Total** | | | | | | | | | | |
| **Farm machinery** | | | | | | | | | | |
| Farm machinery, tools and implements | | | | | | | | | | |
| Others (pl. specify) | | | | | | | | | | |
| **Total** | | | | | | | | | | |
| **Livestock and fisheries** | | | | | | | | | | |
| Livestock production and management | | | | | | | | | | |
| Animal Nutrition Management | 9 | | | | 31 | 324 | 355 | 31 | 324 | 355 |
| Animal Disease Management | | | | | | | | | | |
| Fisheries Nutrition | | | | | | | | | | |
| Fisheries Management | | | | | | | | | | |
| Others (pl. specify) | 2 | | | | 40 | 68 | 108 | 40 | 68 | 108 |
| **Total** | **11** | | | | **71** | **392** | **463** | **71** | **392** | **463** |
| **Home Science** | | | | | | | | | | |
| Household nutritional security | | | | | | | | | | |
| Economic empowerment of women | | | | | | | | | | |
| Drudgery reduction of women | | | | | | | | | | |
| Others (pl. specify) | | | | | | | | | | |
| **Total** | | | | | | | | | | |
| **Agricultural Extension** | | | | | | | | | | |
| CapacityBuilding and Group Dynamics | 10 | | | | 211 | 233 | 444 | 211 | 233 | 444 |
| Others (pl. specify) (Ext. Education) (Plant Protection) | 2 | | | | 50 | 0 | 50 | 50 | 0 | 50 |
| **Total** | **12** | | | | **261** | **233** | **494** | **261** | **233** | **494** |
| **GRAND TOTAL** | **60** | | | | **1004** | **1684** | **2688** | **1004** | **1684** | **2688** |

**Details of vocational training programmes carried out by KVKs for rural youth (4 or more days)**

| Area of training | No. of Courses | No. of Participants | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | General/ Others | | | SC/ST | | | Grand Total | | |
| | | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| **Crop production and management** | | | | | | | | | | |
| Commercial floriculture | | | | | | | | | | |
| Commercial fruit production | | | | | | | | | | |
| Commercial vegetable production | | | | | | | | | | |
| Integrated crop management | 1 | | | | 17 | 13 | 30 | 17 | 13 | 30 |
| Organic farming | 2 | | | | 13 | 33 | 46 | 13 | 33 | 46 |
| Others (pl. specify) | 1 | | | | 07 | 25 | 32 | 07 | 25 | 32 |
| **Total** | **4** | | | | **37** | **71** | **108** | **37** | **71** | **108** |
| **Post harvest technology and value addition** | | | | | | | | | | |
| Value addition | | | | | | | | | | |
| Others (pl. specify) | | | | | | | | | | |
| **Total** | | | | | | | | | | |
| **Livestock and fisheries** | | | | | | | | | | |
| Dairy farming | | | | | | | | | | |
| Composite fish culture | | | | | | | | | | |
| Sheep and goat rearing | | | | | | | | | | |
| Piggery | | | | | | | | | | |
| Poultry farming | 1 | | | | 16 | 09 | 25 | 16 | 09 | 25 |
| Others (pl. specify) | | | | | | | | | | |
| **Total** | **1** | | | | **16** | **09** | **25** | **16** | **09** | **25** |
| **Income generation activities** | | | | | | | | | | |
| Vermicomposting | | | | | | | | | | |
| Production of bio-agents, bio-pesticides, | | | | | | | | | | |
| bio-fertilizers etc. | | | | | | | | | | |
| Repair and maintenance of farm machinery | | | | | | | | | | |
| and implements | | | | | | | | | | |
| Rural Crafts | | | | | | | | | | |
| Seed production | | | | | | | | | | |
| Sericulture | | | | | | | | | | |
| Mushroom cultivation | | | | | | | | | | |
| Nursery, grafting etc. | | | | | | | | | | |
| Tailoring, stitching, embroidery, dying etc. | | | | | | | | | | |
| Agril. para-workers, para-vet training | | | | | | | | | | |
| Others (pl. specify) | | | | | | | | | | |
| **Total** | | | | | | | | | | |
| **Agricultural Extension** | | | | | | | | | | |
| Capacity building and group dynamics | | | | | | | | | | |
| Others (pl. specify) | | | | | | | | | | |
| **Total** | | | | | | | | | | |
| **Grand Total** | **5** | | | | **53** | **80** | **133** | **53** | **80** | **133** |

## 3.5. Extension Programmes

| Activities | No. of programmes | No. of farmers | | | TOTAL |
|---|---|---|---|---|---|
| | | Male | Female | Total | |
| Diagnostic visits | 33 | 76 | 14 | 90 | 90 |
| Field Day | 01 | 32 | 0 | 32 | 32 |
| KisanGhosthi | 03 | 134 | 23 | 157 | 157 |
| Film Show | 45 | 639 | 936 | 1575 | 1575 |
| KisanMela | 02 | 574 | 466 | 1040 | 1040 |
| Exhibition | 14 | 2431 | 2786 | 5217 | 5217 |
| Scientists' visit to farmers field | 18 | 191 | 13 | 204 | 204 |
| Farmers' seminar/workshop | 12 | 720 | 634 | 1354 | 1354 |
| Method Demonstrations | 58 | 976 | 794 | 1770 | 1770 |
| Celebration of important days | 21 | 720 | 634 | 1354 | 1354 |
| Exposure visits | 06 | 72 | 24 | 96 | 96 |
| Others (pl.specify) | | | | | |
| Lecture delivered | 182 | 10754 | 9604 | 20358 | 20358 |
| Field visit | 36 | 67 | 28 | 95 | 95 |

| | | | | | |
|---|---|---|---|---|---|
| FLD visit | 31 | 46 | 20 | 66 | 66 |
| Framers visit to KVK | 22 | 1444 | 1407 | 2851 | 2851 |
| Animal camp | 01 | 9 | 7 | 16 | 16 |
| Farmers Scientist interaction | 10 | 60 | 10 | 70 | 70 |
| Farmers meetings | 02 | 39 | 17 | 56 | 56 |
| BRS students placement | 04 | 24 | 08 | 32 | 32 |
| TV, Redio talk | 03 | - | - | - | - |
| Farm school | 08 | 225 | 71 | 296 | 296 |
| Survey work | 25 | 2812 | 448 | 3260 | 3260 |
| Swachh bharat abhiyan | 01 | 05 | 04 | 09 | 09 |
| Video send to Farmers mobile | 63 | 49478 | 00 | 49478 | 49478 |
| Telephone helpline | 84 | 2266 | 00 | 2266 | 2266 |
| **Total** | **685** | **73794** | **17948** | **91742** | **91742** |

Note- Advisory services include social media, website, telephonic calls etc.

**Details of other extension programmes:**

| Particulars | Number |
|---|---|
| Electronic Media (CD./DVD) | 0 |
| Extension Literature | 07 |
| Newspaper coverage | 134 |
| Popular articles | 06 |
| Radio Talks | 00 |
| TV Talks | 03 |
| Animal health camps (Number of animals treated) | 01 |
| Social Media (No. of platforms Used) | 03 |
| Others (pl. specify) | |
| Plant Health Clinic diagnostic services | 76 |
| Success story | 05 |
| Technical report | 346 |
| Kisan SMS/Whatsapp SMS | 92 |
| Telephone helpline | 84 |
| **Total** | **757** |

**3.6 Online activities during year 2023**

| S. No. | Activity Type | Mode of implementation (Video conferencing / Audio Conferencing / Facebook Live / YouTube Live/ Zoom/ Google meet/ Webex etc.) | Title of Program | No. of Programmes | No. of Participants/ Views |
|---|---|---|---|---|---|
| A | Farmers training | | | | |
| 1 | - | - | - | - | - |
| | **Total** | | | | |
| B | Farmers scientist's interaction programme | | | | |
| 1 | - | - | - | - | - |
| | **Total** | | | | |

| | | | | | |
|---|---|---|---|---|---|
| C | Farmers seminars | | | | |
| 1 | - | - | - | - | - |
| | **Total** | | | | |
| D | Expert lectures | | | | |
| 1 | Lectures | - | - | - | - |
| | **Total** | | | | |
| E | Any other (Pl. specify) | | | | |
| 1 | - | - | - | - | - |
| | **Total** | - | - | - | - |
| | **Grand Total (A+B+C+D+E)** | - | - | - | - |

## 3.7. PRODUCTION OF SEED/PLANTING MATERIAL AND BIO-PRODUCTS

**Production of seeds by the KVKs**

| Crop | Name of the crop | Name of the variety | Name of the hybrid | Quantity of seed (q) | Value (Rs) | Number of farmers |
|---|---|---|---|---|---|---|
| Cereals | Paddy | New variety | GR 18 | 12.00 | 29520 | - |
| Cereals | Paddy | New variety | GNR 07 | 15.30 | 45750 | - |
| Cereals | Paddy | New variety | GR 17 | 5.75 | 17940 | - |
| Cereals | Paddy | New variety | GNR 09 | 4.35 | 7020 | - |
| Cereals | Paddy | New variety | GNR 08 | 6.75 | 21060 | - |
| Pulses | Gram | New variety | GJG 06 | 9.80 | 73500 | - |
| Pulses | Green gram | New variety | GM 06 | 6.45 | 83850 | - |
| Pulses | Pigeon pea | New variety | GT 105 | 2.28 | 25080 | - |

**Production of planting materials by the KVK**

| Crop | Name of the crop | Name of the variety | Name of the hybrid | Number | Value (Rs.) | Number of farmers |
|---|---|---|---|---|---|---|
| Vegetable seedlings | Tomato, Brinjal, Chilli, Drumstick | New variety | - | 7755 | 7755 | 120 |
| Fruits | Mango | New variety | Kesar, Totapuri, Desi | - | 71,151/- Auction | - |

**Production of Bio-Products**

| Bio Products | Name of the bio-product | Quantity Kg/Lit | Value (Rs.) | No. of Farmers |
|---|---|---|---|---|
| - | - | - | - | - |

**Production of livestock materials**

| Particulars of Live stock | Name of the animal / bird / aquatics | Name of the breed | Type of Produce | unit (no./ lit/kg) | Quantity | Value (Rs.) | No. of Farmers |
|---|---|---|---|---|---|---|---|
| - | - | - | - | - | - | - | - |

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

**A. KVK News Letter ((Date of start, Periodicity, number of copies distributed etc.):**

**B. Literature developed/published**

| Item | Title | Authors name | Number |
|---|---|---|---|
| **Research papers** | Evaluation of frontline demonstration of new technology on chickpea (*Cicer arietinum* L.) in Dang district of Gujarat. *Journal of Food Legumes, 36(2 & 3): 183-186.* | Javiya, P. P.; Baldaniya, M. J.; Vahunia, B. M. ; Patel, S. A.; Rana, K. N. and Patel, V. M.(2023). | 01 |
| | Oyster mushroom cultivation - Enterprise for self employement of Rural Youth and farm women. Abstract In ''*Conference held at Malla Reddy University, Hyderabad, Just agriculture Edu. Group and ISAHRD, Chandigarh.* | Vahunia, B. M.; Javiya, P. P. and Patel, S. A. (2023). | 01 |
| | Adoption of integrated farming system through proper water harvesting. *Agri gate,* Vol. 3, Issue 06, page 74-77. | Dobariya J.B., Patel S.A., Vahuniya B.M., Prajapati, H.A. and Javiya, P.P. (2023) | 01 |
| | Digital Agriculture:the Future of Indian Agriculture.*International Journal of Environmental Science and Climate Change.* ***Volume 13****,pp:3963-3976* | Kadam,D.M.; Chouhan, D.; Roy, T; Prajapati, H. A.; Tiwari, N.; Nandeha, Mishra, N. R. (2023). | 01 |
| | Application of Robotics, Artificial Intelligence and Deep learning in Modern Agriculture Technology: A Review.*International Journal of Plant and Soil Science*. ***Volume 35****, issue 23 pp:106-116* | Prajapati, H. A.; Kadam, D. M.; Aitwar, S. S.; Jagtap, P.D.; Singh, D.; Nandeha, N and Mukherjee,D. (2023). | 01 |
| | Performance of frontline demonstration of Okra var.PurnaRakshak. *The Pharma Innovation Journal*, **12**(9): 932-934 | Gurjar, R.A.; Salunkhe, S; Shah, K.A.; Prajapati,H. A. and Chauhan, N.M. (2023). | 01 |
| | Demonstrations plot study for yield and economic evaluation of little gourd (GNLG-1) and pointed gourd(GNPG-1) varieties. *The Pharma Innovation Journal*, **12**(9): 246-248 | Gurjar, R.A.; Shah, K.A ,Nayka, P.; Prajapati,H. A. and Chauhan, N.M. (2023). | 01 |
| Abstract | In: *Proceedings of 5$^{th}$ International conference "Climate Change and its Impact (CCI, 2023) on Evaluation of Frontline Demonstration of new technology on Chickpea (Cicer arietinum L.) in Dang district of Gujarat*. Agricultural & Environmental Technology Development Society(AETDS), U.S. Nagar, Uttarakhand, India, and hosted by Sher-e-Kashmir University of Agricultural Sciences and Technology of Kashmir (SKUAST-K) Srinagar, J&K., India. 291 p. | Javiya, P. P.; Baldaniya, M. J.; Vahunia, B. M. ; Patel, S. A.; Rana, K. N. and Patel, V. M.(2023). | 01 |
| | In: *souvenir of National Conference "Transformation of Agra-Technologies for Enhancing production under Diverse Agro-Ecosystem" on Effect of various cow-based bio-enhancers and botanicals on growth, yield and quality of organic wheat (Triticum aestivum L.)*. College of Agriculture, NAU, Waghai and Navsari Chapter - Indian Society of Agronomy, | Javiya, P. P.; Mathukia, R.K.; Kaneria, S.C. and Rupareliya, V.V. (2023). | 01 |

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|---|---|---|---|
| | Navsari Agricultural University, Navsari, Gujarat. 245-246 p. | | |
| | In: *souvenir of National Conference "Transformation of Agra-Technologies for Enhancing production under Diverse Agro-Ecosystem" on* Influence of various cow-based bio-enhancers and botanicals on yield, nutrient uptake of organic wheat (*Triticum aestivum* L.). And soil properties. College of Agriculture, NAU, Waghai and Navsari Chapter - Indian Society of Agronomy, Navsari Agricultural University, Navsari, Gujarat. 76-77 p. | Javiya, P. P.; Rupareliya, V.V.; Hirapara, K. V.; Patel, V. M.; Baldaniya, M. J. and Dholariya, H. P.(2023). | 01 |
| | A Scale to measure Aspiration of Educated youth towards Agricultural enterprises, Abstract book of national seminar on " Evolving Extension Science towards secondary Agriculture for Sustainable Development", University of Agricultural Sciences, Bangalore, 22 to 24 June 2023 | Dobariya J. B.; Patel R. S. and Pandya R. D. (2023). | 01 |
| | Impact of KVK activities in adopted villages of KVK-Dangs, Abstract book of national seminar on "Evolving Extension Science towards secondary Agriculture for Sustainable Development", University of Agricultural Sciences, Bangalore, 22 to 24 June 2023 | Dobariya J. B.; Patel, S.A and Vahuniya B. M.. (2023). | 01 |
| | EFFECT OF FOLIAR APPLICATION OF LIQUID ORGANIC NUTRIENTS ON VEGETATIVE GROWTH AND CORM YIELD OF ELEPHANT FOOT YAM VAR. SWAGATA | Sarkar, M.; Chaudhari, B. N.; Jadav, N. K.; Aklade, S. A.; Prajapati, H. and Patil, H. E. | 01 |
| | EFFECT OF DIFFERENT TRANSPLANTING TIMES ON GROWTH AND YIELD OF LETTUCE VAR. GREAT LAKES | Jadav, N. K.; Prajapati, H. A and Sarkar, M. | 01 |
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| | Out Scaling of Natural farming through KVKs" અંતર્ગત નિદર્શન આપવા બાબત… | DEE, NAU, Navasari | 01 |
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| | Agri Extension Projection for $ 5 Trillion Economy | ATARI Pune, DEE, NAU, Navasari | 01 |
| | आकाशवाणी दमण से प्रसारित किसानवाणी कार्यक्रम के लिए रेडिओ वार्तालाप के रिकार्डिंग हेतु | DEE, NAU, Navasari | 01 |
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| | submission of progress report of regular Demonstration plots-regarding | RFSGujarat, NAU, Navsari | 01 |
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| | Information regarding natural farming | ATARI,Pune | 01 |
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| | Publication of the quarterly NAU spectrum news bulletin for the period of April 2023 to June 2023 of KVK, Waghai | DEE, NAU, Navasari | 01 |
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| | *Sajupada gam khate krushi vigyank kendra, waghai dvara prakruti kheti ange talim* | Public App | 01 |
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| | *Dang jillana pravesh dvara waghai kvk auditoriam khate vishv paryavaran divasni ujavani sansad na adhyaksh sthane yojai* | Public App | 01 |
| | *Waghai kurhi vigyan kendra khate dang jilla kakshano vishv paryavaran dinni ujavani* | Nyaydarshan | 01 |
| | *Waghai khate yojayela dang jillana vishva paryavaran divas ujavani karykaramma mahanubhavoe chintaniy vaktavya aapyu* | Zatpat News | 01 |
| | *Dang jillana mohpada game khate krushi kendra dvara pre-kharf workshop yojayo* | Public App | 01 |
| | *Subir talukana antraiyal game pre-kharif workshop ane talim yojai* | Gujarat Raksha App | 01 |
| | *Nagali ane varina ghatata jata vistarane vadharavani jarur : Dr. N. M. Chauhan* | Nyaydarshan | 01 |
| | *Atma talim bhavan Ahwa khate dharasabhyna vard khate ragi ane tuverna biyaran ni kitnu vitaran karayu* | Public App | 01 |
| | *Ahwa khate khedutone 805 ragi ane 262 tuvar kitnu vitaran karavyu* | Gujarat Samachar | 01 |
| | *waghai krushikendrama ballagan ane balmajurina parinamo ange yojai janajagrtui shibir* | Zatpat news | 01 |
| | *waghai krushikendrama ballagan ane balmajurina parinamo ange yojai janajagrtui shibir* | Sandesh news | 01 |
| | *waghai ma ballagn ange janjagruti sibir* | Divya bhaskar | 01 |
| | *waghai krushikendrama ballagan ane balmajurina parinamo ange yojai janajagrtui shibir* | Janadesh | 01 |
| | *waghai krushikendrama ballagan ane balmajurina parinamo ange yojai janajagrtui shibir* | Vastalya samachar | 01 |
| | *waghai krushikendrama ballagan ane balmajurina parinamo ange yojai janajagrtui shibir* | nyayadarshan | 01 |
| | *Krishi vigyan kendra ane vada J.B.Dobariya ye vavani ropani ange mahiti aapi* | Public App | 01 |
| | *Dang jilla na khedtut jog krushi vigyan kendra waghaina Dr.Pratik javiya e aapi mahiti* | Public App | 01 |
| | *Krishi vigyan kendra NAU, waghai dvara Van mahotvav ni ujavani karavama aavi* | Gujarat Raksha App | 01 |
| | *Dang:Krishi vigyan kendra NAU, waghai* | Vatshalya Samachar | 01 |

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| | *dvara Van mahotvav ni ujavani karavama aavi* | | |
| | *Milet varsh jaher karyu chhe tyare Krishi vigyan kendra ane vada J.B.Dobariya ye milet ange mahiti aapi* | Public App | 01 |
| | *Krishi vigyan kendra waghai khate dangani Dangni mulyvardhit khepedasho ane navintm tantrikta nidrashan uinitanu udhatan karayu* | You Tub Chenal | 01 |
| | *Krushi vighyan kendra Waghai khate Dangni mulyvardhit khepedasho ane navintm tantrikta nidrashan uinitanu udhatan karayu* | Public App | 01 |
| | *Krishi vigyan kendra waghai khate dangani Dangni mulyvardhit khepedasho ane navintm tantrikta nidrashan uinitanu udhatan karayu* | Gujarat Mitra | 01 |
| | *Krishi vigyan kendra waghai khate dangani Dangni mulyvardhit khepedasho ane navintm tantrikta nidrashan uinitanu udhatan karayu* | Jandadesh | 01 |
| | *Waghai Dang me muly vardhit our kheti ki navintam prodhyogiki pradarshan ikai ka udghatan* | You Tub Chenal | 01 |
| | *Krishi vigyan kendra waghai khate dangani Dangni mulyvardhit khepedasho ane khetini navintm tantrikta nidrashan uinita nu udhatan karavama aavy* | Tahelka News | 01 |
| | *Waghai khate PM kihan Samelan antargat lavi prasarannu ayojan* | Nityadarshan | 01 |
| | *Waghai khate PM kihan Samelan antargat 120 jetlakhedutoe laiv peasaran nihalyu* | Vatshalya Samachar | 01 |
| | *KVK waghai khate PM sammelan nu live prasaran nu ayojan karyu* | Public App | 01 |
| | *Waghai khate PM kihan Samelan antargat lavi prasarannu ayojan* | Zatapat news | 01 |
| | *Waghai KVK khate PM kihan Samelan antargat lavi prasarannu ayojan* | Sandesh news | 01 |
| | *Reliance faundetion dvara digital farm school antargat mahit melavine dang jilana sanjaybhai ae magfali pakama kheti kharch ghatadine utpadanma vadharo karyo* | Tiger E Gujarat | 01 |
| | *Jillana pravesh Dvara waghai khate 5 mi august 74 mo van mahotsva yojayo* | Public App | 01 |
| | *Jillana pravesh Dvara waghai khate 5 mi august 74 mo van mahotsva yojayo* | You Tub Chenal | 01 |
| | *Waghai kurshi vigyan kedra khate nari vandan utsva karykaram yojayo* | Public App | 01 |
| | *K.V.K. khate yojayel "MALIKI YOJANA" Antargat Rs.48.74 Lakh na labh aapavama aavya* | Public App | 01 |
| | *Jillana pravesh Dvara waghai khate 5 mi august 74 mo van mahotsva yojayo* | Public App | 01 |
| | *krushi vighyan kendra Waghai khate DronTechnology nu demostration karavama aavyu* | Gujarat Raksha | 01 |
| | *Waghai Khate dron Technology nu demostration karayu* | Nayany Darshan | 01 |
| | *Waghai Khate dron Technology vishe mahiti aapay* | You Tub Chenal | 01 |
| | *krushi vigyan kendra, NC waghai me dron prodhyogik ka pradarshan* | You Tub Chenal | 01 |

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| | *Karakirdi margadrsahn sathe waghai khate yojayo aantrastriy yuva divas* | Yogana Adhana | 01 |
| | *Danga jillana khedutone naliyerini vaigyanik dhabe kheti karava mate talim aapava aavi* | Sandesh News | 01 |
| | *Krushi vigyan kendra waghai khate naliyerini vaigyanik dhabe kheti padhdhti ange talim yojai* | Public App | 01 |
| | *Waghai kurhi vigyan kendra khate naliyerini vaigyanik kheti kheti padhdhti vishay talim yojai* | ZatPat News | 01 |
| | *Dang jillana chhuta-chhavaya vistaroma bhare varasadni aagahi vachhe khedutmitrone salah* | Gujarat Raksha App | 01 |
| | *Waghai kurhi vigyan kendra na demo unit jova khedutonu aagam* | Gujarat Raksha App | 01 |
| | *Waghai kurhi vigyan kendra na demo unit jova khedutonu aagam* | Nyaydarshan | 01 |
| | *Waghai kurhi vigyan kendra na demo unit banaya aakrahannu kedra: Jova aavi rahya chhe anek kheduto* | Janadesh News | 01 |
| | *Waghai kurhi vigyan kendra na demo unit banaya aakrahannu kedra: Jova aavi rahya chhe anek kheduto* | Samana News | 01 |
| | *Waghai kurhi vigyan kendra na demo unit banaya aakrahannu kedra: Jova aavi rahya chhe anek kheduto* | ZatPat News | 01 |
| | *Danga jillana khedutone naliyerini vaigyanik dhabe kheti karava mate talim aapava aavi* | Vatsalayam News | 01 |
| | *Waghai kurhi vigyan kendra na demo unit banaya aakrahannu kedra* | Divyabhaskar News | 01 |
| | *Milletmathii banati vividh banavato temaj halaka dhanya pakona demo Dang jillana Waghai kurhi vigyan kendra na demo unit banaya aakrahannu kedra banaya* | Sandesh News | 01 |
| | *Waghai khate kurhi vigyan kendra, dvara khetdutone talim aapavama aavi* | Youtube Chenal | 01 |
| | *Dang-Waghai kurhi vigyan kendra dvara Madhyapradesh na khedutone talim apayi* | Sandesh News | 01 |
| | *Kurhi vigyan kendra Wahgai, Dang dvara Madhyapradesh na khedutone talim apayi* | Satya Day | 01 |
| | *Kedutone bagayati kheti tarf aagal vadhavani hankal karai* | Nyaydarshan | 01 |
| | *Dang jillana waghai ma miletts krushi melo-2023 antrgat meletts vanagi spardha yojai* | Saputara News | 01 |
| | *Waghai khate pragatishil khedutone award apaya* | Youtube Giranar chenal | 01 |
| | *Halka dhany sansodhan kendr waghai khate pragatishil khedutone award apaya* | Public App | 01 |
| | *Waghai khate pragatishil khedutone award apaya* | Youtube Giranar chenal | 01 |
| | *Aspireshanal block subir khate yojayo "Krushi Melo"* | Yugna Adhan News | 01 |
| | *Waghai khate miletts krushi melo -23 antrgat vanagi sprdha yojai* | Gujaratraksha | 01 |
| | *Waghai KVK oditoriyam na patangan khate miletts stall come pradarshan yojayu* | Public App | 01 |
| | *Subir khate krushi melo yojayo* | Divyabhaskar News | 01 |
| | *Subir na mokhamal game krushi melo yojayo, 230 pasuone sarvar apai* | Sandesh News | 01 |

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| | *KVK waghai khate ogronic khet pedhasona stallni mulakat darmiyan ek mahilae aapi pratikriya* | Public App | 01 |
| | *Navsari krushi univarsity na vistaran shikshan niyamak dangma stroberini kheti karata khedutoni mulakat lidhi* | Dhunt News | 01 |
| | *Navsari krushi univarsity na vistaran shikshan niyamak dangma stroberini kheti karata khedutoni mulakate pahochya* | Saputara News | 01 |
| | *Navsari krushi univarsity na vistaran shikshan niyamak dangma stroberini kheti karata khedutoni mulakat lidhi* | Gujaratraksha | 01 |
| | *Navsari krushi univarsity na vistaran shikshan niyamak dangma stroberini kheti karata khedutoni mulakat lidhi* | Gujarat Mitra | 01 |
| | *Navsari krushi univarsity na vistaran shikshan niyamak dangma stroberini kheti karata khedutoni mulakat lidhi* | Sandesh News | 01 |
| | *Ahwa na sevadham khate taluka kakshano "krushi melo" yojayo* | Public App | 01 |
| | *Waghai krushi vigyan kendra khate milletna marketing vishay upar workshop yojayo* | Nayandarshan | 01 |
| | *Krushi vigyan kendra waghai dang kahte millat na marketing vishay upar 3 divasiy workshopnu aayoujan karayu* | Gujart Raksha App | 01 |
| | *Jillama Mahilaona sashaktikaran mate waghai kahate masharoom cativation karysahala yojai* | Public App | 01 |
| | *Svaraj Ashram khate yojayela jilla kashana Ravi krushi mahotsavma 30 jetala pradarshan stall raju karaya* | Public App | 01 |
| | *Ahwana aangane yohayo jilla kashano "Ravi krushi mahotsav": khedut labharthione karaya laabhvanti* | Zatpat New | 01 |
| | *Dangni bhavi pedhine svasth ane tandurast karavani sauni sahiyari javabdaari : Vijaybhai Patel* | Samachar News | 01 |
| | *Dang jillana Ravi Krushi Mahotsavma khedutane labhanvit karaya* | Gujarat Mitra | 01 |
| | *Waghai:Dnag jillama vishva jamin divasni ujavani karavama aavi* | Tahelka News | 01 |
| | *Dnag jillama vishva jamin divasni ujavani karavama aavi* | Gujarat Raksha App | 01 |
| | *Dnag jillama vishva jamin divasni ujavani karavama aavi* | Public App | 01 |
| | *Dangma sati game khedutone jamin vishayk mahiti apaai* | Sandsh News | 01 |
| | *Waghai khate khedutone vijali bachat ane solar urja vishe margdarshan puru padayu* | Nayandarshan | 01 |
| | *Krushi vigyan kendra, wagha(dang) ane GEDA, Gandhinagarna sayukt upkdrame urja sanrakshan upar karyashala yojai* | Gujarat Raksha App | 01 |
| | *Waghai:Dang jillama waghai khate krushi vigyan kendra, waghai(Dang) ane GEDA, Gandhinagarana sayukt upkrame urja sara* | Tahelka News | 01 |
| | *KVK Waghai dvara rambhas jamalapada gam khate Technology saptahnna pratham divasni ujavanini sharuaat* | Gujarat Raksha App | 01 |
| | *KVK Waghai Technology saptahna bija divase nidarshan padhdhati dvara* | Gujarat Raksha App | 01 |

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| | *khedutone kheti na pak aayoujanni pratyaksh nidarashan dvara talim* | | |
| | *Danga krushi vigyan kdndra, KVK Waghai Technology saptahna bija divase nidarshan padhdhati dvara khedutone kheti na pak aayoujanni pratyaksh nidarashan dvara talim* | Youtub Chanal | 01 |
| | *Dang: Daguniya gam khate Technology saptahana bija divasni ujavani* | Youtub Chanal | 01 |
| Technical bulletins | | | - |
| Popular articles | *Galgotani Vaigyanik kheti padhdhti, Krushi jivan, February, ,NAU, Waghai(Dangs)* | *Prajapati H. A.;Dobariya J. B; Ahir Tejas, Ankit Gadhaiya ,* | 01 |
| | *Cholini Viayanik Kheti Paddhati, Vahunia, Krushi jivan, February, KVK ,NAU, Tanachha* | *Gadhaiya Ankit ; Patel N. B.; Sankhala P. M.; Prajapati H. A.,* | 01 |
| | Know about the impotence of breeding in cow and buffalo, Krishiprabhat, 28 july 2023 | Krishiprabhat, 28 july 2023 | 01 |
| | Gunvattsabharkrushi inputs niagtyataanetenafayda, *Krushijeevan,* Jan 2023 | Vahunia, B. M. (2023). | 01 |
| | *Karela ma rogjeevatniyantran, KrushiPrabhat,* Pp-15. | Parmar, K. A.; Patel, U. T.; Parmar, M.; Vahunia, B. M. (2022). | 01 |
| | *Chananarogo nu jaivikniyantran,KrushiPrabhat,* Pp-22 | Parmar, K. A.; Vahunia, B. M.;Baria, N. R.;Rathava, A. (2022). | 01 |
| | *Pashuona agatyana paropjivi jany rogo ane tene atkavava matena pagla. Krishiprabhat:* 9/5/2023. P:18. | Solanki, J. B., Patel, S.A., Bhinsara, D.B., Kumar, N. and Patel, D.C. (2023). | 01 |
| | *Know about the importance of breeding in cow and buffalo. Krishiprabhat:* 28/7/2023. P:15. | Solanki, J.B.; Patel S.A., Bhinsara, Patel D.B.; D.C. and Kumar, N. (2023). | 01 |
| | *Karela ma rogjeevatniyantran, KrushiPrabhat,* Pp-15. | Parmar, K. A.; Patel, U. T.; Parmar, M.; Vahunia, B. M. (2022). | 01 |
| Extension literature | Prakrutik khetima humash (Jivdravy) nu mahatv ane poshak drvayoni labhyata | (1) Dr. Pratik P. Javia<br>(2) Dr. J. B. Dobriya<br>(3) Shri Harshad A. Prajapati<br>(4) Dr. Sagar A. Patel<br>(5) Shri Bipin M.Vahunia<br>(6) Shri Kashyap A. Patel | 01 |
| | Bijamrut ane Jivamrut - Prakrutik khetina agatyana aayam | (1) Shri Harshad A. Prajapati<br>(2) Dr. Pratik P. Javia<br>(3) Dr. Sagar A. Patel<br>(4) Shri Bipin M.Vahunia<br>(5) Shri Rakesh S. Patel | 01 |
| | Prakrutik krushima Agniashtra ane bramhashtra no upayog | (1) Shri Bipin M.Vahunia<br>(2) Shri Harshad A. Prajapati<br>(3) Dr. Pratik P. Javia<br>(4) Dr. J. B. Dobriya<br>(5) Dr. Sagar A. Patel | 01 |
| | Prakrutik Krushima Dashparniark ane shunthashtra nu mahatv | (1) Shri Bipin M.Vahunia<br>(2) Dr. Sagar A. Patel<br>(3) Shri Rakesh S. Patel<br>(4) Shri Harshad A. Prajapati<br>(5) Dr. J. B. Dobriya | 01 |
| | Gujaratni desi gayani oladonu prakrutik khetima mahatv | (1) Dr. Sagar A. Patel<br>(2) Shri Bipin M.Vahunia<br>(3) Dr. J. B. Dobriya<br>(4) Shri Rakesh S. Patel<br>(5) Dr. Pratik P. Javia | 01 |

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| | mishrapak padhdhtini vividhrito, tena faydao ane tema thayela mahatvana sanshodhano | (1) Dr. J. B. Dobriya<br>(2) Shri Rakesh S. Patel<br>(3) Shri Bipin M.Vahunia<br>(4) Dr. Pratik P. Javia<br>(5) Shri Harshad A. Prajapati | 01 |
| | Prakrutik krushini samajan ane sidhdhanto | (1) Rakesh S. Patel<br>(2) Shri Kashyap V. Patel<br>(3) Shri Bipin M.Vahunia<br>(4) Shri Shreyansh N. Chaudhary<br>(5) Dr. J. B. Dobriya<br>(6) Shri Harshad A. Prajapati | 01 |
| **TOTAL** | | | **310** |

**C. Details of Electronic Media Produced**

| S. No. | Type of media (CD / VCD / DVD/ Audio-Cassette) | Title of the programme | Number |
|---|---|---|---|
| - | - | - | - |

**D. Details of Social Media Platforms Created / Used**

| S. No. | Type of social media platform | No of events (uploaded video/post/story etc. | Title of social media | Number of Followers/ Subscribers |
|---|---|---|---|---|
| **1** | YouTube Channel (no of video uploaded) | **32** | **KVKWaghai youtube** | **2368** |
| **2** | Facebook page/ Account (no of Post) | **01** | **-** | **-** |
| **3** | Mobile Apps | **-** | **-** | **-** |
| **4** | WhatsApp groups | **03** | | **370** |
| **5** | Twitter Account | **01** | **KVK, Waghai, NAU(The Dangs)** | **58** |
| **6** | Any other (Pl. Specify) | **-** | **-** | **-** |

## D. Success Stories/Case studies, if any (two or three pages write-up on each case with suitable action photographs. The Success Stories / Case Studies need not be restricted to the reporting period).

**Success Story-1**

**Line sowing of new variety of finger millet became popular among the farmers of Dang district**

**P. P. Javiya, B. M. Vahunia, S. A. Patel, J. B. Dobariya & H. A. Prajapati**

Fingure millet (*Eleusine coracana* L.) is an underexploited minor millet with several edible and industrial uses. It belongs to the family Poaceae and ranks third in importance after sorghum and pearl millets. Its wide adaptability to diverse environments and cultural conditions makes it a potential food crop. Finger millet contains proteins (5-8%), ether (1- 2%), carbohydrates (65-75%), 2.5 to 3.5 per cent minerals and 15 to 20 per cent dietary fibers. Phytochemicals present in finger millet act as antioxidants and helps to maintain physiological balance and protect against oxidative damage. The fat content in finger millet was relatively low and it was a rich source of essential amino acids. On the whole, finger millet is a crop which has the capacity to address the global concerns about rising temperature, poor soils, and reduction in agricultural productivity, food insecurity and malnutrition. Finger millet is high in Ca, Fe and Mg and contains amino acid methionine, which are deficient in polished rice or maize.

India is the largest producer of Ragi in the world and the maximum further production is in the state of Karnataka. The major finger millet growing states are Karnataka, Uttarakhand, Maharashtra, Tamil Nadu, Odisha, Andhra Pradesh and Gujarat with a total area of 2.5 million per hectare and 2.2 million tons of production in India, millet is cultivated in an area of 12.45 million hectares with a yield of 1247kg/hectare and a production of 15.53 million tons for the years.

**1. Situation analysis/ Problem:**

Finger millet productivity in the dang district is low as a result of farmers' use throwing method for transplanting, improper land management, weed management and usage of indigenous varieties. Finger millet needs line sowing and timely

transplanting of young seedling at recommended spacing. The crop production is ultimately decreased by improper transplanting method with use of indigenous seeds that produce plants with fewer tillering, slower growth and severe weed infestation. The majority of farmers throwing finger millet seedling at the time of transplanting, which required more seedling than recommended, ultimately driving up the price of seed. Because most of the farmers are impoverished and tribal, they lack understanding about proper sowing method, improve finger millet varieties and modern agricultural practices.

**2. Plan, implement and support:**

The KVK team of scientists conducted a survey in the village to determine the socioeconomic position, adoption gap, and technology requirements of farmers. The village's development plan has been created for several TOT activities. The KVK scientists have filled in a number of technological gaps, including those related to farmers' awareness of new, improved varieties, sowing techniques, seed rate, and the use of organic fertilizers in finger millet. A scientist of crop production, who specializes in crop production, decided to intervene on this point and conducted 3 year of on farm Trial of Sowing method in finger millet. The finger millet's package of practices has been taught to the farmers. The KVK science team visited the farmer's field on a regular basis and guided them accordingly for various operations.

Tribal-dominated villages Borpada is located 7 kilometres from Krishi Vigyan Kendra's headquarters in Waghai, Dist. Dangs. These villages' farmers have poor resources and undulating, fragmented land. The majority of farmers are marginal farmers. The farmers used throwing method for transplanting. Then the Krishi Vigyan Kendra intervened and trained the farmers of these villages about the land selection, new variety seed, line sowing at recommended spacing, seed rate, rouging of infected plant, use of organic fertilizer, harvesting and post-harvest handling of seeds and also provides seed of new variety of finger millet, biofertilzer and novel organic liquid nutrient to farmers.

**3. Output:**

**Economics:**

| Details of Technology | Year of trial | No. of Farmers /Demos | Area (ha) | Yield (q/ha) | | |
|---|---|---|---|---|---|---|
| | | | | $T_1$ : (Random throwing) | $T_2$: 30 x 10 cm | $T_3$: 22.5 x 7.5 cm |
| Line sowing of *Kharif* Finger millet (GNN 8) | 1st | 10 | 1 | 10.06 | 12.18 | 14.10 |
| | 2nd | 10 | 1 | 9.45 | 11.94 | 13.20 |
| | 3rd | 10 | 1 | 10.95 | 13.74 | 15.30 |

| Details | Year of trial | Economics (Rs./ha) | | | | | |
|---|---|---|---|---|---|---|---|
| | | Net Return (Rs.) | | | CBR | | |
| | | $T_1$ | $T_2$ | $T_3$ | $T_1$ | $T_2$ | $T_3$ |
| Line sowing of *Kharif* Finger millet (GNN 8) | 1st | 18168 | 24104 | 29480 | 2.82 | 3.41 | 3.95 |
| | 2nd | 16460 | 21432 | 24960 | 2.65 | 2.79 | 3.08 |
| | 3rd | 20660 | 26472 | 30840 | 3.07 | 3.21 | 3.57 |

The farmers' practices (Random throwing) allowed them to harvest 10.06, 9.45 and 10.95 q/ha of finger millet in 1st, 2nd and 3rd year of trial, respectively. In compared of treatment $T_1$(Random throwing), treatment $T_3$ (Sowing at 22.5 x 7.5 cm) was given 14.10, 13.20 and 15.30 q/ha in 1st, 2nd and 3rd year of trial, respectively, which was very higher then treatment $T_1$. Also found higher net return and BC ratio in treatment $T_3$ (Sowing at 22.5 x 7.5 cm).

**Off campus training**

**Treatment $T_1$**

**Treatment $T_2$**

**Treatment $T_3$**

**4. Outcome**

As a result of on farm trail, Farmers now have more tiller and fingers in the method of sowing at 22.5 x 7.5 cm with new variety of finger millet (GNN 8), as well as less weed infection. Additionally, they receive more family income thanks to line sowing, the application of organic fertilizers, weeding and other operations in accordance with scientific cultivation methods, which ultimately increased the farm family's standard of living.

**5. Impact**

Farmers are made aware of the significance, advantages and productivity of recommended sowing method, due to the increased yield of finger millet by the recommended sowing method. In comparison to treatment $T_1$ (Random throwing), which had a net return of Rs. 29480, 29960 & 30840/ha and a cost-benefit ratio of 3.95, 3.08 & 3.57 in 1$^{st}$, 2$^{nd}$ and 3$^{rd}$ year of trial, respectively.

**Success Story-2**

**Mango Grafting: An Emerging business for Triable Farmers of the Dang District**

**H. A. Prajapati, P. P. Javiya, B. M. Vahunia, S. A. Patel & J. B. Dobariya**

| | |
|---|---|
| **Name of farmer** | Shri. Hasmukhbhai Rangubhai Bagul |
| **Village** | Godadiya,<br>Ta: Ahwa,<br>Dist: Dang<br>State: Gujarat |
| **Education qualification** | 9th pass |
| **Land holding** | 1.15 ha (Irrigated) |

**1.Situation Analysis/Problem Statement:**

Hasmukhbhai Rangubhai Bagul is a farmer of village: Godadiya,Taluka:Ahwa,District:Dangs in the Gujarat.He educated up to 9th standard and having 1.15 ha land. He has eight year experience in farming. Somehow, they were earning their livelihood by practicing rainfed agriculture in their land. He was growing local varieties of paddy, variandragiand hybrid varieties in vegetables during the kharif season and gram in rabi season.Use of the local varieties use of expensive hybrid seedling material of various vegetable crops could not give the satisfactory remuneration to Hasmukhbhai. Under such situation Hasmukhbhai was in search of new farming approach which gives a proper remuneration to his family.

Plan, Implement and Support:

By AGAKHAN NGO, he came to know about KrishiVigyan Kendra. Shri.Hasmukhbhai started to visit the KrishiVigyan Kendra in order to get proper guidance about grafting in mango. Horticulture scientist impressed to see his keen interest in mango grafting. The Scientist of KrishiVigyan Kendra guides him properly andtells him about how to prepare a mango graft with a scientific approach. The scientist of KVK started a series of activities i.e.training, demonstration, scientist visit to farmer's field, field day etc. to deal with the existing problems and observed a positive impact.

**2.Output:**

At present Hasmukhbhai has adopted proper scientific approach regarding the preparation of mango graft. He has taken proper care aboutmango graft and first year hasmukhbhai prepared 7000 nos. mango graft and last year he was prepared 10000 nos. grafts. He uses proper scientific approach in graft preparation as per the guidance provide by the scientist of KVK through training, demonstrations and very frequent farm visit.

After getting success, Shri Hasmukhbhai realizes the importance of uses of scientific approach in preparation of mango grafting and he also adopted drip irrigation technology for aftercare of grafts.


**Mango graft Preparation**


**Diagnostic visit**


**Field visit**


**Scientist visit to farmers field**


**Mango graft for selling purpose**

**3.Outcome:**

Due to adoption of scientific practices, his constant effort and hard work and timely support from KVK, other line departments& NGOs he could achieve very impressive growth in preparation of Mango grafts which shown in Table.

| Sr. No. | Crop name | Area (ha) | Yield (Nos.) | Cost of cultivation(Rs.) | Gross return (Rs.) | Net return (Rs.) |
|---|---|---|---|---|---|---|
| **Year : 2020-21** | | | | | | |
| 1 | Mango grafts | 0.60 | 7000 | 40000.00 | 140000.00 | 100000.00 |
| **Year : 2021-22** | | | | | | |
| 2 | Mango grafts | 0.60 | 12000 | 264000.00 | 64000.00 | 200000.00 |
| **Year : 2022-23** | | | | | | |
| 3 | Mango grafts | 0.80 | 10000 | 920000.00 | 200000.00 | 720000.00 |

**4.Impact**

Before coming in contact with Krishi Vigyan Kendra, Hasmukhbhai used to spend his own money and bring mango grafts from other districts and plant them. The surrounding villages also get the inspiration for the preparation of mango grafts and 5-10 farmers start mango grafting business on small scale. After the kvk intervention , Hamukhbhai's net worth per annum is 6.00 to 7.00 lakh (approx.).

For the success of Mango grafting in the tribal areas of Dang district, he believes that it is due to intensive guidance provided by the Scientist Mr. H.A.Prajapati. This impressive result of crop mango grafting turned Shri. Hasmukhbhai from poor farmer to happy progressive farmer. The success of Mango grafting in resource poor areas is a unique example to generate the employment as well as empower the tribal economy in the country.

**Success story-3**

**Title – Popularizing Beauveria bassiana for control of pest in paddy**

**B. M. Vahunia, S. A. Patel, J. B. Dobariya, H. A. Prajapati & P. P. Javiya,**

**Name –** Thakare Somabhai Pandubhai

**Village –** Lahandabas, **Ta. –** Ahwa**, Dist. -** Dang (Gujarat)

**Mo. –**9428494198

**1. Situation Analysis/ Problem Statement:**

| **Profile** | | |
|---|---|---|
| Age | 56 | Before contact with KVK, Waghai, he was not actively use plant protection measure. Economic condition is not strengthening after lot of work. |
| Education | 3rd standard | |
| Land Holding | 1 hactare | |
| Farming Experience | 17 year | |
| Crop grown | Paddy, Bitterguard, Finger millet | |
| Animal own | 00 | |

Thakare Somabhai Pandubhaiis a farmer of village Lahandabas, Taluka- Ahwa, District- Dangs in Gujarat. Somabhai complete his education up to 3Rd standardand having 1 Hactare of land. Somehow, he was earning his livelihood by practicing rain fed farming in her land. He was growing local and old varieties of Paddy, nagli during Kharif season and Strawberry in rabi season. Under such situation, he needed some additional or supplementary income to increase income, food & Nutritional security of her family. Therefore, he was in search of some alternate sources of income.

He gets in touch with KVK via a few individuals, who provide training and expertise on paddy farming and integrated pest management. He learned about the scientific farming of paddy and received paddy materials and a folder written in Gujarati by KVK scientist. He used to be a successful paddy farmer, but in the last few years, he has encountered problems with stem borer in her field. As a result of these attacks, he has seen a decrease in both price and paddy production. He was able to raise his income as a result of using Bauveriabassiana technology for stem borer management, hard effort, and prompt assistance from KVK.

Our district has been designated as an organic/natural farming district these days. Therefore, farmers like somabhai come to KVK to learn more and discuss with us how to switch from chemical to organic pesticides.

**Plan, implementation and Support**

KVK scientific team conducted a survey in the area to determine the adoption gap, the technological requirements of farmers, and their socioeconomic standing. The village's development strategy for several activities has been created. Amidst diverse technological gaps, the KVK Scientists have devised the subsequent activities:

- Training on role of IPM
- Give Extra motivation to use beauveriabassiana
- Providing literature in local language
- Technical Guidance for pest management in paddy
- Given beauveriabassianain FLD
- Advisory service
- Follow-up visit

**2. Output**

After training he got beauveriabassianaand carried out cultivation on her own and with KVK intervention.

**3. Outcome**

Somabhai get high production after uses of beauveriabassiana and KVK waghai also guide to remove stubbles after harvesting. Also suggest removal of infested plants.

**4. Economic Impact**

| Details of Technology/ year | No. of Farmers /Demos | Area (ha) | Yield (q/ha) | | | | % Increase in yield |
|---|---|---|---|---|---|---|---|
| | | | Demo | | | Check | |
| | | | Highest | Lowest | Average | | |
| *Beauveriabassiana(2021)* | 01 | 0.2 | 30.5 | 27 | 28.3 | 26.10 | 8.77 |
| *Beauveriabassiana(2022)* | 01 | 0.2 | 25.1 | 23 | 24.27 | 21.59 | 12.45 |
| *Beauveriabassiana(2023)* | 01 | 0.2 | 26 | 24.5 | 25.28 | 21.59 | 17.14 |

| Details | No. of Farmers /demos | Area (ha) | Economics of demonstration (Rs./ha) | | | | Economics of check (Rs./ha) | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Gross Cost | Gross Return | Net Return | CBR | Gross Cost | Gross Return | Net Return | CBR |
| *Beauveriabassiana(2021)* | 01 | 0.2 | 27476 | 50940 | 23464 | 1.85 | 26364 | 46994 | 20648 | 1.78 |
| *Beauveriabassiana(2022)* | 01 | 0.2 | 27476 | 43689.6 | 16231 | 1.59 | 26346 | 38872 | 12526 | 1.47 |
| *Beauveriabassiana(2023)* | 01 | 0.2 | 25000 | 48039 | 23039 | 1.92 | 24500 | 40943 | 16443 | 1.67 |

**Success Story-4**

**Title: Economic Empowerment through Innovative Dairy Business**

**S. A. Patel, J. B. Dobariya, H. A. Prajapati, P. P. Javiya & B. M. Vahunia**

## 1. Situation Analysis/Problem Statement

Saritaben Yogeshbhai Ganvit is a woman farmer of Village Gorya, Taluka- Ahwa, District Dangs in Gujarat, educated up to 12th standard and having 6.0 Acre of land. Her husband is also a farmer. They have two children a son and a daughter. Somehow, they were earning their livelihood by practicing rain fed agriculture in their land. She was growing local and old varieties of Paddy, Vari, Ragi and some vegetable during Kharif season. She had two bullocks and one cows of local origin. These animals were a burden rather than a source of income due to the meagre productivity; however the bullocks were used for the agricultural operations. Under such situation, it was difficult to sustain house hold food and nutritional security of her family. Therefore, she was in search of some alternate sources of income.



Saritaben Yogeshbhai Ganvit
Village:Gorya, Taluka-Ahwa, District Dangs - (Gujarat)
Age: 33 years , Education: 12th Standard , Size of Land holding: 6.0 Acre

## 2. Plan, Implement and Support

By some sources, she came to know about some welfare schemes for tribal. First of all she visited a co-operative dairy in a nearby village and she also decided to join co-operative dairy in her nearby village. Meanwhile her village, Gorya was care by KVK and ATMA -Dang of the district. A series of animal husbandry activities like meetings, trainings, kisan gosthis, field visits, farm school, and visit to a dairy co-operative has been started by KVK scientists. Saritaben and other interested farmers had purchased HF cross-bred cow.

As cross bred cow was a new enterprise for them, they often faced so many troubles for proper guidance. In the beginning she was not able to maintain the proper health of her animals. she came in contact with Krishi Vigyan Kendra, through ATMA, Dang and was inspired to abandon conventional dairy practices and adopt animal husbandry in a scientific manner as per the guidance of scientists. Animal scientist of KVK was impressed to see her keen interest in dairy farming. It was found that the farmers of this village were rearing the animals with traditional method,

imbalance in use of feeds and fodder as well as facing the chronic problem of anoestrus, repeat breeder and poor growth. The Scientist of KVK started a series of activities i.e. training, demonstration, farmer's scientist interaction etc to deal with the existing problems and observed a positive impact.

**3. Output**

At present, Saritaben has adopted scientific concepts to rear her animals as per the suggestions given by KVK scientists. She has extended her farm and today she owned 6 milking HF crossbred cows, 2 heifers and 2 calves. She has constructed a pakka house with manger and water tank. She uses proper concentrate feed, green and dry fodder, mineral mixture, timely vaccination, de-worming and diagnosis as per the guidance provide by the scientists of KVK through training, demonstrations and very frequent farm visits. She is a purchase chaff cutter for cutting fodder & regularly use this instrument. As result, a strong competition between various farm women to get more and more milk production developed.

**4. Outcome**

Due to adoption of improved practice, her constant efforts and hard work and timely support from KVK, ATMA Dang & other line departments and Vasudhara dairy she could achieve very impressive growth in dairy farming as per the table-1.

**5. Impact of KVK**

| Sr. No. | Particulars/ Items | Before KVK intervention | After KVK intervention |
|---|---|---|---|
| 1 | Animals own | 1-Desi cows<br>2- Desi Bullocks | **2020-21**<br>4- HF cows<br>1-Heifers<br>1 - Calves<br>2- Bullocks<br><br>**2021-22**<br>5- HF cows<br>1-Heifers<br>1 - Calves<br>2- Bullocks<br><br>**2022-23**<br>6- HF cows<br>2-Heifers<br>2 - Calves<br>2- Bullocks |
| 2 | Vaccination & De-worming | Not proper | Regular |
| 3 | Milk production (day) | Initial 1.5 lit/day | Average-18 lit/cow/day<br>highest income up to Rs. 23,721/- per month |
| 4 | Highest milk production per animal per day | 2.0 lit/day | Up to 8 lit/day/animal |
| 5 | Anoestrus and repeat breeder problems | Yes | No |
| 6 | Inter-calving interval | More than 2 yrs | 12-16 months |
| 7 | Service period | Average-170 days | 90-95 days |
| 8 | No. of service per conception rate | 7-8 | 1-2 |
| 9 | Growth of calves and heifers | Poor | Good |
| 10 | Age of first calving | 5-6 yrs | 30-48 months |
| 11 | Economics enhancement<br>Income per month(Net profit)<br><br>Income through selling of self reared HF animals | <br>Not good<br><br>Nil | <br>Rs.12,000-17,000 per month<br><br>Planned in future |
| 12 | Modern assets in the house because of dairy farming | <br><br>Nil | Freeze – 1<br>TV - 1<br>Mobile - 2 |

| | | | |
|---|---|---|---|
| | | | Motorcycle – 1<br>Tractor -1 |
| 13 | Bank loan | ----- | Paying regularly |
| 14 | C.B. Ratio | | 1: 2.1 |

**Milk production Data**

| Sr. No. | Year | Annual Milk production | Annual Profit (Rs) |
|---|---|---|---|
| 1 | 2020-21 | 3972 liter | 141653.81 |
| 2 | 2021-22 | 5935 liter | 209193.93 |
| 3 | 2022-23 | 5083 liter | 193877.45 |

For the success of dairy farming in tribal areas she believes that it is due to intensive guidance provide by the Scientist of KVK and ATMA-Dang. In addition to this, humble support made by Vasudhara dairy as well as state government to provide subsidy for purchasing the cross bred cows and proper marketing facility, respectively.

She feels that having good genetic potential and dairy characters of HF cross bred animals plays an important key role in dairy business. She also emphasized that after starting the dairy farming she need not to go anywhere for earning employment as well as she could make herself away from the money lender's clutch to satisfy her needs. Now she can easily manage her all needs and able to think in advance for the sake of better education to her children due to dairy farming.

This impressive result of dairy farming turned Saritaben Yogeshbhai Ganvit & her husband from poor farmer to a happy progressive dairy farmer. The success of dairy farming in resource poor areas is a unique example to generate the employment as well as empower the tribal economy in the country.

**Success Story-5**

## Adoption of natural farming system as a sustainable farming practice

**J. B. Dobariya, H. A. Prajapati, P. P. Javiya, B. M. Vahunia & S. A. Patel**

### 1. Background/existing problem:

Shri Raut Ishwarbhai Pandubhai's initiative in Mahalapada village of Dang district is truly commendable. His dedication to natural farming despite the challenges of water shortage sets a noble example for sustainable agriculture. By eschewing chemical inputs, he not only preserves the health of the land but also contributes to the well-being of the community and the environment. In regions like Dang district, where water scarcity is a pressing issue, adopting natural farming practices becomes even more critical. Natural farming techniques, such as mulching, intercropping, and water conservation methods like rainwater harvesting and drip irrigation, can help mitigate the impact of water scarcity while maintaining soil fertility and crop productivity. The fact that more than 50 farmers in Mahalapada village have followed Shri Raut Ishwarbhai Pandubhai's lead and embraced natural farming indicates a growing awareness of the importance of sustainable agricultural practices. This shift not only benefits the farmers by reducing input costs and improving the quality of produce but also contributes to the overall resilience of the agricultural ecosystem. Mahalapada village has a significant population engaged in agriculture, the adoption of natural farming on a larger scale could have far-reaching benefits for the entire community. It can lead to increased food security, enhanced biodiversity, and a more resilient agricultural system that is better equipped to withstand challenges such as water scarcity and climate change. Given that Mahalapada village has a significant population engaged in agriculture, the adoption of natural farming on a larger scale could have far-reaching benefits for the entire community. It can lead to increased food security, enhanced biodiversity, and a more resilient agricultural system that is better equipped to withstand challenges such as water scarcity and climate change.

### 2. Process and methods through which interventions by KVKs was made:

The transition from traditional farming methods to modern natural farming techniques, as exemplified by Shri Raut Ishwarbhai Pandubhai, illustrates the positive impact of adopting innovative approaches in agriculture. By embracing new methods facilitated by organizations like KVK Waghai and leveraging knowledge-sharing platforms such as agricultural festivals and motivational tours, Shri Raut Ishwarbhai Pandubhai has been able to significantly improve his agricultural practices and enhance crop yields.

**Key advancements in his approach include:**

**1. Transition to Modern Techniques:** Shri Raut Ishwarbhai Pandubhai shifted from traditional methods of planting and sowing to modern techniques. Instead of manually plowing and sowing crops, he adopted methods like the "Sri Method" of mulching, which helps conserve soil moisture and suppress weed growth.
**2. Utilization of Natural Farming Inputs**: He incorporated natural farming inputs such as cow urine-dung, jivamrut, and ghanjivamrut, which act as organic fertilizers and enhance soil fertility. This move away from chemical inputs not only improves the quality of the produce but also contributes to environmental sustainability.
**3. Diversification and Intercropping:** Shri Raut Ishwarbhai Pandubhai diversified his crop selection and implemented intercropping practices. This not only maximizes land use efficiency but also reduces the risk of crop failure and improves overall productivity.
**4. Water Management:** Recognizing the importance of water availability, he took steps to improve water management on his farm. Constructing a well and implementing water-saving techniques like furrow irrigation contribute to efficient water utilization, particularly crucial in regions facing water scarcity.
**5. Market Orientation and Value Addition:** Shri Raut Ishwarbhai Pandubhai actively engaged with market opportunities and received guidance from agricultural extension services to improve marketing strategies. This enabled him to effectively sell his produce, thereby increasing his income and ensuring economic sustainability.

By integrating these modern techniques and innovations into his farming practices, Shri Raut Ishwarbhai Pandubhai not only improved his own livelihood but also set an inspiring example for other farmers in his community. His success highlights the potential of combining traditional knowledge with contemporary agricultural advancements to achieve sustainable and resilient farming systems.

**3. Types of interventions made by the KVKs to address the problem**

**a) Cultivating with Traditional Tools:**

Cultivating only with the help of bullock/pada in plough, indicating a reliance on traditional methods of cultivation. Farming based on native and old methods, suggesting a lack of modern agricultural techniques. Avoidance of chemical fertilizers, instead relying on organic sources such as solid food burns. Lack of access to modern communication tools like TV and radio, which may hinder access to agricultural information. Marketing of products without proper information or strategy based on natural methods, potentially limiting market opportunities.

**b) Modern Agricultural Techniques:**

Changes in tillage made to level the land, indicating a shift towards more efficient land preparation methods. Implementation of the "Shri Method" of mulching for paddy planting, a modern technique to conserve soil moisture and suppress weed growth. Application of organic manures such as cow dung and cow urine to the beds, promoting soil health and fertility. Encouragement of earthworm activity through mulching, contributing to soil aeration and nutrient cycling. Utilization of natural pest control methods such as *Nimastra, Agniastra, Brahmahastra, and Dashaparniank* for disease control, reducing reliance on synthetic pesticides.

**c) Positive Outcomes and Achievements:**

Great reduction in production costs and increase in production, indicating improved efficiency and profitability.Elimination of labor-related issues, suggesting improved working conditions and productivity. Improved yields of grains and pulses, indicating enhanced crop performance and food security. Diversification of crops with the planting of fruit trees like mango, lemon, saffron, and cashew, contributing to income diversification and agroforestry practices. These interventions demonstrate a transition from traditional farming practices to modern, sustainable techniques facilitated by the KVKs. The adoption of innovative approaches has led to significant improvements in agricultural productivity, economic viability, and environmental sustainability.

The involvement of various agricultural and governmental bodies, including Krishi Vigyan Kendra (KVK), ATMA staff, and horticulture officers, demonstrates a collaborative effort to support and guide farmers like Shri Raut Ishwarbhai Pandubhai in adopting modern farming practices. Here's how these interventions have been beneficial:

1. **Expert Guidance:** Representatives from KVK, Waghai, ATMA staff, and horticulture officers provide valuable expertise and guidance on improving crop diversity and implementing sustainable farming practices. This guidance helps farmers like Shri Raut Ishwarbhai Pandubhai make informed decisions and adopt innovative techniques.

**2. Inauguration Visit:** The visit of dignitaries such as the Mahasammit Governor of Gujarat, along with other government officials, highlights the recognition and support for initiatives promoting sustainable agriculture. This visit not only acknowledges the efforts of farmers but also encourages others to follow suit.

**3. Local Knowledge Exchange:** Farmers in Mahalpada village and neighboring areas share their local knowledge and experiences with natural farming. This exchange of information fosters community learning and strengthens the adoption of sustainable agricultural practices across the region.

**4. Continuous Support and Guidance:** Ongoing support from KVK, Waghai, ATMA project officers, and horticultural officers ensures that farmers receive continuous guidance on various aspects of agriculture, including mango grafting, drumstick planting, and multiple cropping systems. This support helps farmers diversify their crops and enhance their agricultural productivity sustainably.

Overall, these interventions demonstrate a coordinated effort by various stakeholders to promote sustainable agriculture and support farmers in adopting modern farming practices. By leveraging expertise, local knowledge, and

continuous guidance, farmers like Shri Raut Ishwarbhai Pandubhai can enhance their livelihoods while contributing to environmental sustainability and food security in the region.

## 4. Inputs and Outputs process

**a. Details of last three years in agriculture sector**

| Detail | 2021-22 | | | 2022-23 | | | 2023-24 | | |
|---|---|---|---|---|---|---|---|---|---|
| | **Kharif** | ***Rabi*** | **Summer** | **Kharif** | ***Rabi*** | **Summer** | **Kharif** | ***Rabi*** | **Summer** |
| Crop | Paddy | Bitter gourd | Green gram | Paddy | Bitter gourd | Green gram | Paddy | Bitter gourd | Black gram |
| Total area hector) | 1.0 | 0.4 | 0.5 | 1.0 | 0.4 | 0.5 | 1.0 | 0.4 | 0.5 |
| Total production(K.G) | 4700 | 4900 | 210 | 5200 | 5300 | 280 | 6000 | 5600 | 300 |
| Total income (Rs.) | 60,000 | 92000 | 12000 | 68000 | 117000 | 33500 | 90000 | 118000 | 40000 |
| Total cost (Rs.) | 16000 | 18000 | 2000 | 18000 | 21000 | 3000 | 20000 | 18000 | 4000 |
| Gross net profit | 44000 | 74000 | 10000 | 50000 | 96000 | 30500 | 70000 | 100000 | 36000 |
| **Data per hectare area** | | | | | | | | | |
| Production (K.g/h.) | 4700 | 12250 | 420 | 5200 | 13250 | 560 | 6000 | 14000 | 600 |
| Income (Rs. /h.) | 60,000 | 230000 | 24000 | 68000 | 292500 | 67000 | 90000 | 295000 | 80000 |
| Expenses (Rs./h.) | 16000 | 45000 | 4000 | 18000 | 52500 | 6000 | 20000 | 45000 | 8000 |
| Profit (R/h.) | 44000 | 185000 | 20000 | 50000 | 240000 | 61000 | 70000 | 250000 | 72000 |

**B. details of last three years in animal husbandry sector**

| Sr. No. | Year | No of Animal | Milk production | Income | Cost | Net benefit |
|---|---|---|---|---|---|---|
| 1. | 2021-22 | 2 (Dangi Cows) | 2500 liter | Rs. 25 per liter (62500) | 36500/- | 26000/- |
| 2. | 2022-23 | 2 (Dangi Cows) | 2700 liter | Rs. 25 per liter (67500) | 37000/- | 30500/- |
| 3. | 2023-24 | 2(Dangi Cows) | 2900 liter | Rs. 25 per liter (72500) | 40000/- | 32500/- |

In the first year of Bitter gourd cultivation 1 acre and yielded 4900 kg, which in the market got Rs.92000 and he gate net income of Rs.74000 after deducting expenses. In the 2nd year 5300 kg produce from 1 acre, which was sold in the market and fetched Rs.1,17000 of which 96000 net income after deducting expenses. In 3rd years Rs. 5600 kg production in 1 acre was obtained, which was sold in the market and fetched Rs.1.18000 in which 1,00,000 net income received after deducting expenses. Also in the summer season, about Rs.76, 500 were received from crops like Green gram/black gram/onion. Mixed crops like brinjal, tomato, green chilies got a saving of 10-12 thousand for the household as well as increased additional sales. Other income was also got from crops like turmeric, mango.

## 5. Outcomes and Impact of the intervention

Shri Raut Ishwarbhai Pandubhai's commitment to sustainable farming practices is evident in his innovative approaches to seed preservation, soil fertility management, and crop protection. His efforts not only benefit his own farm but also inspire and guide other farmers in the region. Let's break down his methods and their impact:

1. **Seed Bank and Seed Preservation:** Instead of purchasing hybrid paddy seeds, Shri Raut Ishwarbhai Pandubhai creates a seed bank by saving seeds from his own harvest. This practice ensures seed diversity and reduces dependency on external sources.
2. **Soil Fertility Management:** He utilizes natural fertilizers like dhanamrut and jivamrut, made from locally available materials, to enrich the soil and provide essential nutrients to the crops. This approach promotes soil health and enhances crop productivity.
3. **Crop Protection:** Shri Raut Ishwarbhai Pandubhai employs a combination of natural pest control methods such as Nimastra, Brahmastra, Agnistra, Dashparniark, and fungicide applications to protect his crops from pests and diseases. These methods minimize reliance on synthetic pesticides and promote ecological balance.
4. **Promotion of Biodiversity:** By planting flowering plants along the fields, Shri Raut Ishwarbhai Pandubhai attracts bees, which aids in pollination and increases crop production. This practice highlights the importance of biodiversity in agricultural ecosystems.
5. **Community Outreach and Knowledge Sharing:** Shri Raut Ishwarbhai Pandubhai actively shares his knowledge and experiences with fellow farmers in his village and beyond. By guiding others in adopting sustainable farming practices, he contributes to the spread of environmentally friendly agriculture in the region.
6. **Expansion of Sustainable Farming Practices:** His efforts have led to the adoption of sustainable farming practices by other farmers in nearby villages, resulting in a network of farmers practicing natural farming techniques. This expansion demonstrates the scalability and effectiveness of his approach.
7. **Training and Mobile Guidance:**

Shri Raut Ishwarbhai Pandubhai and other farmers receive training and guidance from agricultural extension services, including information delivered via mobile phones. This ensures continuous learning and adaptation to new agricultural methods and technologies.

Overall, Shri Raut Ishwarbhai Pandubhai's holistic approach to farming exemplifies the potential of sustainable agriculture to improve livelihoods, preserve the environment, and foster community resilience in rural areas. His dedication to experimentation, knowledge sharing, and community empowerment sets a powerful example for sustainable agricultural development.

**E. Give details of innovative methodology or innovative technology of Transfer of Technology developed and used during the year: Nil**

**F. 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)**

**ITK Technology 01**

| S.N. | Particular | Details |
|---|---|---|
| 1 | Name of integration of indigenous technical knowledge (ITK) and traditional Practices (TP) | Imali juice for heat stress |
| 2 | Description of ITK/TP | Soak tamarind in water and make a drink with salt and cardamom powder and serve it to relieve heat. |
| 3 | Name of farmer/village from where the information collected | Maganbhai<br>Village: Chichond, waghai |
| 4 | Method of preparation/use of ITK/TP, if any | Soak tamarind in water and add salt and cardamom powder to make a drink. |
| 5 | Dose/rate/amount/time of use of ITK/TP | 1 glass |
| 6 | Benefits/effect of ITK/TP on yield/production /control of disease-pest/saving of inputs etc. | Relieve from heat stress |
| 7 | Whether farmers adopting at present? Yes /No<br>If yes, from how many years? | Yes, since last 20 years |
| 8 | Any other supportive information | Nil |

**ITK Technology 02**

| S.N. | Particular | Details |
|---|---|---|
| 1 | Name of integration of indigenous technical knowledge (ITK) and traditional Practices (TP) | Imali pulp for heat stress |
| 2 | Description of ITK/TP | Imali pulp is applied on the body to relieve heat and cool the body. |
| 3 | Name of farmer/village from where the information collected | Sunil M. Bagul<br>Village: Rajendrapur, waghai |
| 4 | Method of preparation/use of ITK/TP, if any | Apply the pulp of ripe tamarind on the body |
| 5 | Dose/rate/amount/time of use of ITK/TP | 100 gram pulp/per person |
| 6 | Benefits/effect of ITK/TP on yield/production /control of disease-pest/saving of inputs etc. | Relieve from heat stress |
| 7 | Whether farmers adopting at present? Yes /No<br>If yes, from how many years? | Yes, since last 15 years |
| 8 | Any other supportive information | Nil |

**ITK Technology 03**

| S.N. | Particular | Details |
|---|---|---|
| **1** | **Name of integration of indigenous technical knowledge (ITK) and traditional Practices (TP)** | Treatment of Bloat |
| **2** | **Description of ITK/TP** | Bloat is a form of indigestion marked by excessive accumulation of gas in the |

| | | |
|---|---|---|
| | | rumen. Bloat can occur when the animal grazes on lush young pasture, particularly if the pasture is wet. Some plants, e.g. clover, lucerne and alfalfa are especially dangerous in causing bloat but any fast growing plants can cause it. Choking due to foreign objects (esophageal obstruction) will also cause bloat by preventing gas release and causing accumulation of gas in the rumen. Sometimes feeding of leftover food such as dry bread can cause bloat.The left flank balloons out. The animal kicks its belly or stands with its back legs wide apart. It has difficulty in breathing. The traditional treatment is affect from this sick condition.<br>ITK- onion- 2 no., garlic- 10 no., Dry chilies-2 no., cumin-10 gram, turmeric-10 gram, Nagarvel leaf- 10 no., jaggery- 100 gram, black pepper- 10 gram, Ginger-100 gram, salt- as per need. |
| **3** | **Name of farmer/village from where the information collected** | Gulabbhai Rajubhai Vank<br>Village: Dokpatal, waghai |
| **4** | **Method of preparation/use of ITK/TP, if any** | Black pepper and cumins are soak in water for 20-30 minutes,<br>Mix all the ingredients in a mixer and make a paste. Make small ladles of the mixture. |
| **5** | **Dose/rate/amount/time of use of ITK/TP** | Feed ladles with salt 3-4 times a day, Make a fresh mixture daily and feed it for three days |
| **6** | **Benefits/effect of ITK/TP on yield/production /control of disease-pest/saving of inputs etc.** | Relieving gas from stomach |
| 7 | Whether farmers adopting at present?<br>Yes /No<br>If yes, from how many years? | Yes, since last 15 years |
| 8 | Any other supportive information | Nil |

**5.1. Indicate the specific training need analysis tools/methodology followed for**

**A. Practicing Farmers**

a) Organic farming
b) Use of mulching with drip irrigation in mulching
c) Organic protection measure

**B. Rural Youth**

a) Farm mechanization
b) Use of various Agri apps
c) Bee keeping
d) Mushroom production

**C. In-service personnel**

a) Use of bank credit in Agriculture
b) Organic farming
c) Pont for doubling farmer's income

**5.2. Indicate the methodology for identifying OFTs/FLDs**

**For OFT:**

i) PRA (√)
ii) Problem identified from Matrix
iii) Field level observations (√)
iv) Farmer group discussions
v) Others if any

**For FLD:**

i) New variety/technology (√)
ii) Poor yield at farmers level (√)
iii) Existing cropping system (√)
iv) Others if any

**5.3. Field activities**

i. Name of villages identified/adopted with block name (from which year) -
ii. No. of farm families selected per village :
iii. No. of survey/PRA conducted :
iv. No. of technologies taken to the adopted villages
v. Name of the technologies found suitable by the farmers of the adopted villages:
vi. Impact (production, income, employment, area/technological– horizontal/vertical)
vii. Constraints if any in the continued application of these improved technologies

## 6. LINKAGES

### A. Functional linkage with different organizations

| Name of organization | Nature of linkage |
|---|---|
| Navsari Agricultural University | Provides technical experts for various disciplines as well as practical training to the trainees during educational tour. Teaching at Agricultural college & Polytechnic of NAU, Waghai. |
| NAIP, ICAR | Technical support |
| Agricultural department, District Panchayat , Ahwa<br>Dept. of Horticulture, Ahwa | Helps in organizing in service training for VLWs, khedut shibir and conducting sponsored training programme by receiving the grant from DAO Ahwa. |
| ATMA, Dangs | Technical support, joint organization of farmers fair. |
| FTC, Dangs, and Tapi | Technical support |
| Forest dept., South Dangs, Ahwa. | Helps in organizing van mahotsav, farmers training. |
| District Information Department, Ahwa. | Publish the activities in news papers. |
| Veterinary college, NAU, Navsari,<br>Department of Ani. Husb., Ahwa<br>Vasudhara dairy, Waghai | Organization of programme jointly- animal treatment camp, khedut shibir, calf rally etc. |
| Mahila samakhya,Ahwa. | They depute the SHG for training in the KVK. |
| District Watershed Development Agency, Ahwa | Training & technical advice. |
| Lotus foundation, Waghai, World vision, Waghai Rowadan trust, Ahwa, ICDs, AKRS (Agakhan) | Training & field demonstration. |
| Bhimrao Ambedkar Trust | Training & technical advice. |
| Naheru Yuva Kendra, Ahwa, Dangs | Training & technical advice |
| Collectorate and District Development Officer, Dangs | Election related activities, Krishi Mahotsava and other Government programmes. |

NB The nature of linkage should be indicated in terms of joint diagnostic survey, joint implementation, participation in meeting, contribution received for infrastructural development, conducting training programmes and demonstration or any other

**B. List special programmes undertaken by the KVK and operational now, which have been financed by State Govt./Other Agencies**

| Name of the scheme | Date/ Month of initiation | Funding agency(State Govt./Other Agencies) | Amount (Rs.) |
|---|---|---|---|
| - | - | - | - |

**C. Details of linkage with ATMA**

a) Is ATMA implemented in your district Yes/No

If yes, role of KVK in preparation of SREP of the district?

## Coordination activities between KVK and ATMA

| S. No. | Programme | Particulars | No. of programmes attended by KVK staff | No. of programmes Organized by KVK | Other remarks (if any) |
|---|---|---|---|---|---|
| **01** | **Meetings** | | | | |
| | | AGB AMC Meeting jilla panchayat Ahea-Dangs | 04 | 01 | - |
| | | | | | |
| **02** | **Research projects** | | | | |
| | | | | | |
| **03** | **Training programmes** | | | | |
| | | Prakrutik kheti | 03 | 01 | - |
| | | Prakrutik kheti | 02 | 01 | - |
| | | Prakrutik kheti | 04 | 01 | - |
| | | Prakrutik kheti | 02 | 01 | - |
| | | Prakrutik kheti | 02 | 01 | - |
| | | Prakrutik kheti | 02 | 01 | - |
| | | Prakrutik kheti | 02 | 01 | - |
| | | Prakrutik kheti | 03 | 01 | - |
| | | Prakrutik kheti | 04 | 01 | - |
| | | Prakrutik kheti | 04 | 01 | - |
| | | Prakrutik kheti | 03 | 01 | - |
| | | Prakrutik kheti | 02 | 01 | - |
| **04** | **Demonstrations** | | | | |
| | | Demonstration kharif crops (Agri) | 02 | 01 | - |
| | | Capacity building | 05 | 01 | - |
| **05** | **Extension Programmes** | | | | |
| | KisanMela | | | | |
| | Technology Week | | | | |
| | Exposure visit | | | | |
| | Exhibition | Gadhinagar shree rajypal programme | 04 | 01 | - |
| | Soil health camps | | | | |
| | Animal Health Campaigns | | | | |
| | Others (Pl. specify) | | | | |

| | | | | | |
|---|---|---|---|---|---|
| **06** | **Publications** | | | | |
| | Video Films | | | | |
| | Books | | | | |
| | Extension Literature | | | | |
| | Pamphlets | | | | |
| | Others (Pl. specify) | | | | |
| **07** | **Other Activities** (Pl.specify) | | | | |
| | Watershed approach | | | | |
| | Integrated Farm Development | | | | |
| | Agri-preneurs development | | | | |

**D. Give details of programmes implemented under National Horticultural Mission**

| S. No. | Programme | Nature of linkage | Funds received if any Rs. | Expenditure during the reporting period in Rs. | Constraints if any |
|---|---|---|---|---|---|
| - | - | - | - | - | - |

**E. Nature of linkage with National Fisheries Development Board**

| S. No. | Programme | Nature of linkage | Funds received if any Rs. | Expenditure during the reporting period in Rs. | Remarks |
|---|---|---|---|---|---|
| - | - | - | - | - | - |

**F. Details of linkage with RKVY**

| S. No. | Programme | Nature of linkage | Funds received if any Rs. | Expenditure during the reporting period in Rs. | Remarks |
|---|---|---|---|---|---|
| - | - | - | - | - | - |

**G. Details of linkage with PKVY (Paramparagat Krishi Vikas Yojana)**

| S. No. | Programme | Nature of linkage | Funds received if any Rs. | Expenditure during the reporting period in Rs. | Remarks |
|---|---|---|---|---|---|
| - | - | - | - | - | - |

**H. Details of linkage with NFSM**

| S. No. | Programme | Nature of linkage | Funds received if any Rs. | Expenditure during the reporting period in Rs. | Remarks |
|---|---|---|---|---|---|
| - | - | - | - | - | - |

**I. Details of linkage with SMAF (Sub-mission on Agroforestry)**

| S. No. | Programme | Nature of linkage | Funds received if any Rs. | Expenditure during the reporting period in Rs. | Remarks |
|---|---|---|---|---|---|
| - | - | - | - | - | - |

**7. Convergence with other agencies and departments:**

| KVK Name | Name of scheme | Name of Agency (Central/state) | Funds received (Rs.) | Activities organized | Operational Area | Remarks |
|---|---|---|---|---|---|---|
| KVK-Waghai | ATMA | State | | 25 | Dangs | - |
| | DRDA | State | - | 1 | Dangs | - |
| | Others (Plz. Specify) | Sevadham | - | 2 | - | - |
| | DAO | State | - | 6 | Dangs | - |
| | ADHO | State | - | 8 | Dangs | - |
| | ZEDA | State | 40000 | 1 | Dangs | - |
| | VIYAM | Central | 160000 | 1 | Dangs | - |

**8. Innovative Farmers Meet**

| Sl.No. | Particulars | Details |
|---|---|---|
| | Have you conducted Farm Innovators meet in your district? | Yes/ No |
| | Brief report in this regard | |

**9. Farmers Field School (FFS)**

| S. No | Thematic area | Title of the FFS | Budget proposed in Rs. | Expenditure | Brief report |
|---|---|---|---|---|---|
| - | - | - | - | - | - |

**10.1. Technical Feedback of the farmers about the technologies demonstrated and assessed:**

| Sr. No. | Discipline | Feed Back |
|---|---|---|
| 1. | Crop Production | GT 105 variety of pigeon pea is more preferable than others in dangs. |
| 2. | | CFMV 2 (Gira) variety of finger millet was found more suitable than local in dangs. |
| 3. | Horticulture | The pulses vegetable seed should be included in the kitchen gardening kit. |
| 4. | Plant Protection | Cue lure trap was found good for control of fruit fly. |
| 5. | Animal Science | Improved birds RIR are more economic then local birds with respect to egg production. |
| 6. | | Use of chaff cutter for cutting fodder It resulted into prevents wastage of fodder. |
| 7. | Extension Education | More focus to be given to the FPO |
| 8. | | Twin wheel hoe was found more suitable in dang district area. |

**10.2. Technical Feedback from the KVK Scientists (Subject wise) to the research institutions/universities:**

| Sr. No. | Discipline | Feed Back |
|---|---|---|
| 1. | Crop Production | Farmers demanding for local varieties seeds of paddy from university. |
| 2. | Horticulture | Hemlata variety of greater yam is more susceptible to anthracnose compare to local variety. |
| 3. | | Farmers required round shape based variety of Greater yam. |
| 4. | Plant Protection | Required effective organic control for brinjal mite. |
| 5. | | Farmers required Govt. sector hybrid variety of okra which is suitable for off season. |
| 6. | Animal Science | To develop area specific mineral mixture for dang district. |
| 7. | Extension Education | Need recommendation for management of false smut in paddy in organic/Natural farming in dangs. |

| | | |
|---|---|---|
| 8. | | Need recommendation of natural farming practices of paddy, finger millets, Green gram, Ground nut, Chickpea, Mango, Okra, and Watermelon etc. |

## 11. Technology Week celebration during 2023:Yes/No, If Yes

Period of observing Technology Week: From to 18-12-2023 to 22-12-2023
Online / Offline: Offline
Total number of farmers visited : 241
Total number of agencies involved : 05
Number of demonstrations visited by the farmers within KVK campus: 06

**Other Details**

| Types of Activities | No. of Activities | Number of Farmers | Related crop/livestock technology |
|---|---|---|---|
| Gosthies | 02 | 89 | - |
| Lectures organized | 12 | 241 | - |
| Exhibition | 05 | 241 | - |
| Film show | 10 | 241 | - |
| Fair | 01 | 63 | - |
| Farm Visit | 02 | 102 | - |
| Diagnostic Practical's | 04 | 12 | - |
| Supply of Literature (No.) | 07 | 241 | - |
| Supply of Seed (q) | 0 | 0 | - |
| Supply of Planting materials (No.) | 20 | 20 | - |
| Bio Product supply (Kg) | 0 | 0 | - |
| Bio Fertilizers (q) | 0 | 0 | - |
| Supply of fingerlings | 0 | 0 | - |
| Supply of Livestock specimen (No.) | 0 | 0 | - |
| Total number of farmers visited the technology week | 241 | 241 | - |

## Detail of Technology Week celebration during 2023: 18-12-2023 to 22-12-2023

| Sr. No. | Day/ Date | Thematic area | Topic / Technology covered | No. of participants | | |
|---|---|---|---|---|---|---|
| | | | | M | F | T |
| 1 | First 18/12/2023 Monday | Training, Demonstration, Film Show, Diagnostic Visit, Literature Distribution, Kishan Goshthi, Lecture | ➢ Kitchen garden<br>➢ Animal Husbandry<br>➢ Integrated farming system<br>➢ Employment generation<br>➢ Different schemes of employments generation<br>➢ University agriculture technology<br>➢ Natural farming<br>➢ Importance of weather forecast in Agriculture sector<br>➢ Importance of Jivamrut in Natural Farming | 15 | 25 | 40 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 2. | Second 19/12/2023 Tuesday | Training, Demonstration, Film Show, Diagnostic Visit, Literature Distribution, Kishan Goshthi, Lecture, Farm Visits, Natural Farming Demonstration, Exhibitions | ➢ Basic Principles of Organic Farming<br>➢ Pest Control in Organic Agriculture<br>➢ Significance of International Millet Year 2023<br>➢ Natural Farming in Dang<br>➢ Organic farming<br>➢ Importance of Beejamrut in Organic Farming<br>➢ Method of making Brahmastra<br>➢ Method of making Jivamrut<br>➢ Climate change and its impact on agricultural sector | 27 | 22 | 49 |
| 3. | Third 20/12/2023 Wednesday | Farmers trainings, Farm Visits, Natural Farming Demonstration, Museum Visits, Exhibitions | ➢ Mushroom cultivation<br>➢ Millet crop for human health<br>➢ Importance of Beejamrut in Organic Farming<br>➢ Natural farming<br>➢ Preparation of Agniastra<br>➢ Bee-keeping | 10 | 29 | 39 |
| 4. | Forth Day 21/12/2023 | Training, Film Show, Diagnostic Visit, Literature Distribution, Kishan Goshthi | ➢ Understanding of Nimastra and its application in Organic Agriculture<br>➢ Cultivation of Vegetables in Natural Farming<br>➢ Contribution of cow urine in pest management<br>➢ Climate change and its impact on agricultural sector<br>➢ Natural farming in gram | 34 | 16 | 50 |
| 5. | Fifth Day 22-12-2023 | Training, Demonstration, Film Show, Diagnostic Visit, Literature Distribution, Kishan Goshthi, Farm Visit | ➢ Basic Principles in NaturalFarming<br>➢ Use of Santhastra and Khati chhash in natural agriculture<br>➢ Kalpa tree for natural agriculture – Neem and its use as insecticide<br>➢ Organic Farming: Market Management and Issues | 33 | 30 | 63 |
| **Total** | | | | **119** | **122** | **241** |

## 12. Interventions on drought mitigation (if the KVK included in this special programme)

A. Introduction of alternate crops/varieties

| State | Crops/cultivars | Area (ha) | Number of beneficiaries |
|---|---|---|---|
| - | - | - | - |

**B. Major area coverage under alternate crops/varieties**

| Crops | Area (ha) | Number of beneficiaries |
|---|---|---|
| Oilseeds | NA | NA |
| Pulses | | |
| Cereals | | |
| Vegetable crops | | |
| Tuber crops | | |
| **Total** | | |

**C. Farmers-scientists interaction on livestock management**

| State | Livestock components | Number of interactions | No.of participants |
|---|---|---|---|
| **Gujarat** | Nutrition management in livestock<br>Care & management of calf<br>Fodder management<br>Fodder management<br>lumpy skin disease<br>Lumpy skin disease<br>Lumpy skin disease<br>Green fodder management | **08** | **16** |
| **Total** | | **08** | **16** |

**D. Animal health camps organized**

| State | Number of camps | No.of animals | No.of farmers |
|---|---|---|---|
| **Gujarat** | **01** | **16** | **01** |
| **Total** | | | |

**E. Seed distribution in drought hit states (Seed distribution/sold by KVK)**

| State | Crops | Quantity (qtl) | Coverage of area (ha) | Number of farmers |
|---|---|---|---|---|
| - | - | - | - | - |
| **Total** | | | | |

**F. Large scale adoption of resource conservation technologies**

| State | Crops/cultivars and gist of resource conservation technologies introduced | Area (ha) | Number of farmers |
|---|---|---|---|
| - | - | - | - |
| **Total** | | | |

**G. Awareness campaign**

| State | Meetings | | Gosthies | | Field days | | Farmers fair | | Exhibition | | Film show | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No. | No.of farmers | No. | No.of farmers | No. | No.of farmers | No. | No.of farmers | No. | No.of farmers | No. | No.of farmers |
| - | - | - | - | - | - | - | - | - | - | - | - | - |
| **Total** | | | | | | | | | | | | |

## 13. IMPACT

### A. Impact of KVK activities (Not to be restricted for reporting period).

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

NB: Should be based on actual study, questionnaire/group discussion etc. with ex-participants.

### B. Cases of large scale adoption (Please furnish detailed information for each case):

| Sr.No. | Major crops & enterprises being practiced in cluster villages | Prioritized problems in these crops/ enterprise | Extent of area (Ha/No.) affected by the problem in the district | | Names of Cluster Villages identified for intervention | Intervention (OFT, FLD, Training, extension activity *etc.*)* |
|---|---|---|---|---|---|---|
| | | | Crop | Area (ha) | | |
| 1. | **Cereals:** Paddy, Finger millet, little millet **Pulses:** Gram, Black gram, Tur **Oilseeds:** Groundnut, Niger **Vegetables:** Okra, Brinjal **Fruit crops:** Mango, Cashew nut, Custard apple **Floriculture:** Rose and Marigold **Others:** Tuber crops **Animal Husbandry** | -Use of traditional varieties - Poor quality of seed -Lack of awareness related with organic crop package & practices - Lack of awareness about plant protection measures -Scarcity of fodder - Repeat Breeding &Anoestrus - Less interest in dairy business | Paddy | 148 | Lahandabash Gundiya Sati Sajupada Bardipada Dhuldha Zavada Vankan Chichond Bhadarpada | On campus training, Off campus training, Sponsored training, Vocational training, In-service training, Lecture delivered, Field visit, FLD visit, OFT visit, Scientist visit to farmer field, Farmer visit to KVK, Diagnostic visit, Exposure visit, KisanGosthi, Animal camps, Field day, Farmer fair, Farmer scientist interaction, Farmers meeting, TV-Film show, Exhibition, Farm School, Soil health campaign, Celebration of importance day, SwachataJagruti, Soil sample analyzed, Plant health clinic diagnostic services, SMS portal, Telephone helpline |
| 2. | | | Finger millet | 85 | | |
| 3. | | | Vari | 76 | | |
| 4. | | | Sorghum | 17 | | |
| 5. | | | Maize | 11 | | |
| 6. | | | Black Gram | 16 | | |
| 7. | | | Pigeon Pea | 22 | | |
| 8. | | | Soybean | 16 | | |
| 9. | | | Ground nut | 6 | | |
| 10 | | | ***Kharif Total*** | **397** | | |
| 11. | | | Gram | 41 | | |
| 12. | | | Wheat | 11 | | |
| 13. | | | Okra | 13 | | |
| 14. | | | Brinjal | 11 | | |
| 15. | | | Mango | 22 | | |
| 16. | | | Cashew nut | 7 | | |
| | | | ***Rabi-Total*** | **105** | | |

### C. Details of impact analysis of KVK activities carried out during the reporting period: Nil

## 14. Kisan Mobile Advisory Services

| Month | No. of SMS sent | No. of farmers to which SMS was sent | Whats app No. of SMS sent | Whats app No. of farmers to which SMS was sent | No. of feedback / query on SMS sent |
|---|---|---|---|---|---|
| **Jan 2023** | 00 | 00 | 06 | 5022 | NA |
| **Feb 2023** | 00 | 00 | 12 | 9798 | NA |
| **March 2023** | 00 | 00 | 05 | 3955 | NA |
| **April 2023** | 00 | 00 | 03 | 2349 | NA |
| **May 2023** | 00 | 00 | 09 | 7182 | NA |
| **Jun 2023** | 00 | 00 | 12 | 10632 | NA |
| **Jul 2023** | 07 | 32755 | 11 | 8415 | NA |
| **Aug 2023** | 30 | 156468 | 09 | 6921 | NA |
| **Sept 2023** | 02 | 1348 | 11 | 8305 | NA |
| **Oct 2023** | 00 | 00 | 06 | 12072 | NA |
| **Nov.2023** | 00 | 00 | 05 | 10211 | NA |
| **Dec.2023** | 00 | 00 | 12 | 2118 | NA |

| Name of KVK | Message Type | Type of Messages | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Crop | Livestock | Weather | Marke-ting | Aware-ness | Other enterprise | Total |
| | Text only | 83 | 09 | 04 | 03 | 30 | 00 | **129** |
| | Voice only | 29 | 24 | 09 | 00 | 05 | 00 | **67** |
| | Voice & Text both | 0 | 0 | 0 | 0 | 0 | 0 | **0** |
| | **Total Messages** | **112** | **33** | **13** | **03** | **35** | **00** | **196** |
| | **Total farmers Benefitted** | **305051** | **130485** | **35359** | **7837** | **42813** | **00** | **521545** |

## 15. PERFORMANCE OF INFRASTRUCTURE IN KVK

### A. Performance of demonstration units (other than instructional farm)

| Sl. No. | Demo Unit | Year of establishment | Area (ha) | Details of production | | | Amount (Rs.) | | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Variety | Produce | Qty. | Cost of inputs | Gross income | |
| - | - | - | - | - | - | - | - | - | - |

### B. Performance of instructional farm (Crops) including seed production

| Name of the crop | Date of sowing | Date of harvest | Area (ha) | Details of production | | | Amount (Rs.) | | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Variety | Type of Produce | Qty. (Kg) | Cost of inputs | Gross income | |
| Paddy | 05/06/23 | 20/09/23 | 0.5 | GR 18 | Truthful seed | 1200 | 18000 | 29520 | - |
| Paddy | 08/06/23 | 05/10/23 | 0.6 | GNR 07 | Truthful seed | 1530 | 20000 | 45750 | - |
| Paddy | 12/06/23 | 25/09/23 | 0.20 | GR 17 | Truthful seed | 575 | 6000 | 17940 | - |
| Paddy | 15/06/23 | 27/09/23 | 0.20 | GNR 09 | Truthful seed | 435 | 6000 | 7020 | - |
| Paddy | 15/06/23 | 20/09/23 | 0.30 | GNR 08 | Truthful seed | 675 | 9000 | 21060 | - |
| Gram | 11/11/23 | 25/02/24 | 1.2 | GJG 06 | Certified seed | 980 | 17000 | 73500 | - |
| Green gram | 20/02/23 | 25/05/23 | 0.6 | GM 6 | Foundation seed | 645 | 12000 | 83850 | - |
| Pigeon pea | 03/07/23 | 02/01//24 | 0.4 | GT 105 | Foundation seed | 228 | 5000 | 25080 | - |
| Mango | - | - | - | Kesar | - | Auction 71,151/- | - | 71151 | - |
| | | | | Totapuri | - | | | | |
| | | | | Desi | - | | | | |
| Seedlings (Brinjal) | 20/04/23 | 04/05/2023 | 0.05 | - | Seedling | 7755 Nos | 4500 | 11632 | - |
| Mango grafting | 04/09/23 | - | 0.05 | Sonpari, Kesar | - | 4350 Nos | - | 263000 | - |

**C. Performance of production Units (bio-agents / bio pesticides/ bio fertilizers etc.)**

| Sl. No. | Bio Products | Name of the Product | Qty (kg/lit) | Amount (Rs.) | | Remarks |
|---|---|---|---|---|---|---|
| | | | | Cost of inputs | Gross income | |
| - | - | - | - | - | - | - |

**D. Performance of instructional farm (livestock and fisheries production)**

| Sl. No | Name of the animal / bird / aquatics | Details of production | | | Amount (Rs.) | | Remarks |
|---|---|---|---|---|---|---|---|
| | | Breed | Type of Produce | Qty. | Cost of inputs | Gross income | |
| - | - | - | - | - | - | - | - |

**E. Utilization of hostel facilities**

Accommodation available (No. of beds):

| Months | No. of trainees stayed | Trainee days (days stayed) | Reason for short fall (if any) |
|---|---|---|---|
| - | - | - | Hostel facilities provided to Agriculture college, NAU, Waghai for students hostel purpose. Farmer hostel is also used by hill millet research station, NAU, Waghai, Dang. |

**F. Database management**

| S. No | Database target | Database created |
|---|---|---|
| - | - | - |

**G. Details on Rain Water Harvesting Structure and micro-irrigation system**

| Amount sanction (Rs.) | Expenditure (Rs.) | Details of infrastructure created / micro irrigation system etc. | Activities conducted | | | | | Quantity of water harvested in '000 litres | Area irrigated / utilization pattern |
|---|---|---|---|---|---|---|---|---|---|
| | | | No. of Training programmes | No. of Demonstration s | No. of plant materials produced | Visit by farmers (No.) | Visit by officials (No.) | | |
| - | - | - | - | - | - | - | - | - | - |

**H. Performance of Nutritional Garden at KVK farm**
**If Nutritional Garden developed at KVK farm/Village Level? Yes/No =No**
**If yes,**

**Nutritional Garden developed at KVK farm**

| Area under nutritional garden (ha) | Component of Nutritional Garden | No. of species / plants in nutritional garden | No. of farmers visited |
|---|---|---|---|
| | Vegetable crops | Nil | |
| | Fruit crops | | |
| | Others if any | | |

**Nutritional Garden developed at Village Level (Area under nutritional garden)**

| **No. of Villages covered** | **Component of Nutritional Garden** | **No. of species / plants in nutritional garden** | **No. of farmers covered** |
|---|---|---|---|
| | Vegetable crops | Nil | |
| | Fruit crops | | |
| | Others if any | | |

**H. Details of Skill Development Trainings organized**

| **S.No.** | **Name of KVKs/SAUs/ICAR Institutes** | **Name of QP/Job role** | **Duration (hrs)** | **No. of participants** | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | **SCs/STs** | | **Others** | | **Total** | |
| | | | | **Male** | **Female** | **Male** | **Female** | **Male** | **Female** |
| - | - | - | - | - | - | - | - | - | - |

## 17. FINANCIAL PERFORMANCE

**A. Details of KVK Bank accounts**

| **Bank account** | **Name of the bank** | **Location** | **Branch code** | **Account Name** | **Account Number** | **MICR Number** | **IFSC Number** |
|---|---|---|---|---|---|---|---|
| With KVK | State Bank of India | Waghai, Dangs | SBIN0014992 | Programme coordinator, NAU, Waghai | 10692111061 | 394002508 | SBIN0014992 |
| With KVK | State Bank of India | Waghai, Dangs | SBIN0014992 | Senior scientist & Head | 36984302799 | 394002508 | SBIN0014992 |

**B. Utilization of KVK funds during the year 2023-24 (Rs. in lakh)(Till Dec, 2023)**

| S. No. | Particulars | Sanctioned | Released | Expenditure |
|---|---|---|---|---|
| **A. Recurring Contingencies** | | | | |
| 1 | **Pay & Allowances** | 1,00,81,880 | - | 78,69,080 |
| 2 | **Traveling allowances** | | | |
| 3 | **Contingencies** | | | |
| *A* | Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines) | 14,63,500 | - | 12,42,339 |
| *B* | POL, repair of vehicles, tractor and Equipments | | | |
| *C* | Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained) | | | |
| *D* | Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training) | | | |
| *E* | Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year) | | | |
| *F* | On farm testing (on need based, location specific and newly generated information in the major production systems of the area) | | | |
| *G* | Training of extension functionaries | | | |
| *H* | Maintenance of buildings | | | |
| *I* | Establishment of Soil, Plant & Water Testing Laboratory | | | |
| *J* | Library | | | |
| **TOTAL (A)** | | **1,15,45,380** | **-** | **91,11,419** |
| **B. Non-Recurring Contingencies** | | | | |
| 1 | **Works** | - | - | - |
| 2 | **Equipments including SWTL & Furniture** | - | - | - |
| 3 | **Vehicle** (Four wheeler/Two wheeler, please specify) | - | - | - |
| 4 | **Library** (Purchase of assets like books & journals) | - | - | - |
| **TOTAL (B)** | | - | - | - |
| **C. REVOLVING FUND** | | - | - | - |
| **GRAND TOTAL (A+B+C)** | | **1,15,45,380** | **-** | **91,11,419** |

**C. Status of revolving fund (Rs. in lakh) for the Four years**

| Year | Opening balance as on 1st April | Income during the year | Expenditure during the year | Net balance in hand as on 1st April of each year |
|---|---|---|---|---|
| 2020-21 | 71,68,778.00 | 8,62,872.00 | 67,72,066.00 | 72,59,609.00 |
| 2021-22 | 69,82,397.00 | 2,26,158.00 | 8,97,689.00 | 63,10,866.00 |
| 2022-23 | 60,03,961.00 | 5,33,110.00 | 13,80,397.00 | 46,23,564.00 |
| 2023-24 | 59,93,961.00 | 7,87,517.00 | 18,38,838.00 | 49,42,640.00 |

**17. Details of HRD activities attended by KVK staff during year**

| Name of the staff | Designation | Title of the training programme | Institute where attended | Mode (online/offline) | Dates |
|---|---|---|---|---|---|
| All staff | Senior Scientist & Head, Scientist | KVK review meeting | KVK Waghai | Meeting | 02-01-2023 |
| All staff | Senior Scientist & Head, Scientist | SAC meeting | KVK Waghai | Meeting | 07-01-2023 |
| All staff | Senior Scientist & Head, Scientist | Workshop on Natural Farming | Online | Workshop | 19-01-2023 |
| All staff | Senior Scientist & Head, Scientist | KVK Review meeting | KVK, Waghai | Meeting | 09-01-2023 |
| Mr. B. M. Vahunia | Scientist | Natural farming | Online (From ATARI pune) | Workshop | 19-01-2023 |
| Mr. S. N. Chaudhri | SMS | CSC meeting | Online | Meeting | 09-01-2023 |
| Dr. J. B. Dobariya | Senior Scientist & Head | Review meeting in presence of Prabhari Mantri | Collector Office, Ahwa | Meeting | 06-01-2023 |
| Dr. J. B. Dobariya | Senior Scientist & Head | Training on " Local Ground Water Related Issues and Participatory Ground Water Managment" | KVK Waghai | Training | 24-01-2023 |
| Dr. J. B. Dobariya | Senior Scientist & Head | ATMA governing Board Meeting | DDO Offfice, Ahwa, Dangs | Meeting | 27-01-2023 |
| Dr. J. B. Dobariya | Senior Scientist & Head | Bimonthly Workshop (T&V) on 30TH Jan., 2023 at ATIC, NAU, Navsari | ATIC. NAU, Navsari | Workshop | 30-01-2023 |
| Dr. J. B. Dobariya | Senior Scientist & Head | Natural Farming | Collector Office, Ahwa | Meeting | 31-01-2023 |
| All staff | Senior Scientist & Head, Scientist | KVK review meeting | KVK Waghai | Meeting | 04-02-2023 |
| Dr. P. P. Javiya | Scientist | Natural Resource Management for Sustainable Livelihood Security (Special emphasize to south Gujarat) | NAU, Navsari | Workshop | 09-02-2023 |
| Dr. P. P. Javiya | Scientist | Review meeting on groundnut seed availability and area expansion in Gujarat | Online | Meeting | 14-02-2023 |
| Mr. H. A. Prajapati | Scientist | Discussion on expenditure under TSP budget | KVK,waghai | Meeting | 21-02-2022 |
| Dr. J. B. Dobariya | Senior Scientist & Head | Audit pera meeting | ABM conference hall, NAU, Navsari | Meeting | 16-02-2022 |
| All staff | Senior Scientist & Head, Scientist | Millet festival | Coa. Waghai, Dangs | Workshop | 25-02-2022 |

| | | | | | |
|---|---|---|---|---|---|
| All staff | Senior Scientist & Head, Scientist | KVK review meeting | KVK Waghai | Meeting | 02-03-2023 |
| Dr. P. P. Javiya, Mr. B. M. Vahuniya & Dr. J. B. Dobariya | Senior Scientist & Head, Scientist | Training on Natural farming | APMC Surat | Training | 10-03-2023 |
| Dr. P. P. Javiya | Scientist | Internationa Conference on Millets | online | Conference | 18-03-2023 |
| Dr. P. P. Javiya | Scientist | NRM AGRESCO sub committee meeting | Virtual class room , NMCA, NAU, Navsari | Meeting | 20,21-03-23 |
| Mr. H. A. Prajapati | Scientist | Horticulture AGRESCO meeting | ACH, navsari | Meeting | 09 & 10-03-2023 |
| Mr. B. M. Vahunia | Scientist | Plant Protection Agresco | Navsari | Meeting | 14,15-03-2023 |
| Dr. S. A. Patel | Scientist | Animal science AGRESCO | NAU,NAVSARI | Agresco | 28-03-2023 |
| Dr. J. B. Dobariya | Senior Scientist & Head | 17th Convocation of NAU, Navsari | NAU, Navsari | Covocation | 03-03-2023 |
| Dr. J. B. Dobariya | Senior Scientist & Head | Natural farming review meeting | Collector office, Ahwa, Dangs | Meeting | 06-03-2023 |
| All staff | Senior Scientist & Head, Scientist | KVK review meeting | KVK Waghai | Meeting | 27-04-2023 |
| All staff | Senior Scientist & Head, Scientist | Technological Backstopping Workshop for Technical staff of KVKs | SSK, NAU, Navasri | Workshop | 06-04-2023 |
| Dr. P. P. Javiya | Scientist | Meeting regarding Crop Planning year 2023-24 | online | Meeting | 20-04-2023 |
| Mr. H. A. Prajapati | Scientist | Samiksha bethak regarding natural farming | Ahwa | Meeting | 18/04/2023 |
| Dr. J. B. Dobariya | Senior Scientist & Head | Inogration ceremony of natural farming celing centerr | Rambhas | Khtmahurat | 19-04-2023 |
| Dr. P. P. Javiya & Dr. J.B. Dobariya | Senior Scientist & Head, Scientist | Pre Action Plan meeting | KVK, Dediyapada | Meeting | 10-05-2023 |
| Dr. P. P. Javiya | Scientist | Good Agricultural and Allied Practices for Doubling the farmers income | EEI, Anand | Trining | 22 to 27-05-2023 |
| Mr. H. A. Prajapati | Scientist | Pre seasonal workshop | navsari | Workshop | 11-05-2023 |
| Mr. H. A. Prajapati | Scientist | Brainstorming workshop | navsari | Workshop | 06-05-2023 |
| Mr. H. A. Prajapati | Scientist | prakrutik khrtini kamgirini samiksha babat | Ahwa | Meeting | 31-05-2023 |
| Mr. H. A. Prajapati | Scientist | Atma governing board ni meeting babat | Ahwa | Meeting | 31-05-2023 |
| Mr. B. M. Vahunia | Scientist | Use of social media skills for Extensionist and Scientist | EEI, Anand | Training | 15-20/05/2023 |
| All staff | Senior Scientist & Head, Scientist | KVK Review meeting | KVK Waghai | Meeting | 24-05-2023 |
| Dr. J. B. Dobariya | Senior Scientist & Head | NAU 1st Foundation | NAU, Navsari | Celebration of foundation day | 01-05-2023 |

| | | | | | |
|---|---|---|---|---|---|
| Dr. J. B. Dobariya | Senior Scientist & Head | Meeting with district magistrate collector & district level officers for One District One Product and International millet Year 2023 | Collector office, Ahwa, Dangs | Meeting | 03-05-2023 |
| Dr. J. B. Dobariya | Senior Scientist & Head | Annual Action plan workshop of KVKs in Gujarat & Goa | Auditorium hall, ICAR-Directorate of medicinal and aromatic plants research and aromatic plants research, Boriavi, Anand-387310 | Workshop | 15 & 16-05-2023 |
| Dr. P. P. Javiya | Scientist | Climate Change and it's Impact | SKUAST(S), Srinagar, J&K | Conference | 09 to 11-06-23 |
| Dr. P. P. Javiya | Scientist | Master Trainers for Safe and Judicious use of Glyphosate by PCOs | Online (NIPHM) | Training | 28-06-2023 |
| Mr. H. A. Prajapati | Scientist | virtual meeting on opeming of new separate account for the project "Out scaling of natural farming" | online | Meeting | 09-06-2023 |
| Mr. H. A. Prajapati | Scientist | Innovation to transfer Agricukture, horticulture and Allied sectors | online | Online conference | 21 to 23/06/2023 |
| Dr. J. B. Dobariya | Senior Scientist & Head | Innovation to tranform Agriculture, Horticulture and allied sectors (ITAHAS-2023) | Online | Conference | 21 to 23-06-2023 |
| Mr. B. M. Vahuniya & Dr. J. B. Dobariya | Senior Scientist & Head, Scientist | KVK Review meeting | KVK, Vyara | Meeting | 28-06-2023 |
| Dr. S. A. Patel | Scientist | Innovation to transform agriculture, Horticulture & Allied sector | Online | Conference | 21 to 23-06-2023 |
| Dr. J. B. Dobariya | Senior Scientist & Head | Video production and Dissemination skills for Agricultural Extension Functionaries | EEI, AAU, Anand, Gujarat | Workshop | 29 May to 03 June 2023 |
| Dr. J. B. Dobariya & Dr. P. P. Javiya | Senior Scientist & Head, Scientist | AGB meeting | ATMA, Ahwa, Dangs | Meeting | 17-06-2023 |
| Dr. J. B. Dobariya | Senior Scientist & Head | Evolving Extension Science towards secondary Agriculture for Sustainable Development | University of Agricultural Sciences, Bangalore | Seminar | 24 to 24-06-2023 |
| Dr. J. B. Dobariya & Mr. B. M. Vahuniya | Senior Scientist & Head, Scientist | Monthly Review Meeting Of KVKs of NAU | KVK, NAU, Tapi | Meeting | 28-06-2023 |
| All staff | Senior Scientist & Head, Scientist | Review meeting | KVK Waghai | Meeting | 03-07-2023 |

| | | | | | |
|---|---|---|---|---|---|
| Mr. H. A. Prajapati | Scientist | Intellectual Property Rights-G. I. Tag & Patenting | Examination hall, NAU,Navsari | Workshop | 19-07-2023 |
| Mr. H. A. Prajapati | Scientist | 4 th international conference on "Innovations to transform Agriculture, horticulture & Allied Sectors" | Online | Conference | 21 to 23-07-2023 |
| Mr. H. A. Prajapati | Scientist | District Mission Committee | online | Meeting | 31-07-2023 |
| Mr. B. M. Vahunia | Scientist | Jal sakti report presentation | Collector office , Ahwa | Meeting | 12-07-2023 |
| Mr. B. M. Vahunia | Scientist | Mushroom cultivation | College of agriculture, Waghai | Training | 20 to 22-07-2023 |
| Dr. J. B. Dobariya | Senior Scientist & Head | 6th Annual zonal workshop of KVKs | KVK, Aurangabad-1, Maharashtra | Worlkshop | 28 to 30 July 2023 |
| Dr. J. B. Dobariya | Senior Scientist & Head | Mushroom cultivation | College of agriculture, NAU, Waghai | Trainig | 20 to 22-07-2023 |
| Mr. H. A. Prajapati | Scientist | CWWG meeting | COA, NAU,Waghai | Meeting | 16/09/2023 |
| Mr. H. A. Prajapati | Scientist | Varsh 2023-24 ma vividh yojanana amlikaran mate nidarshan ghatakna input nakki karva mate | Collector office, Ahwa | Meeting | 16/09/2023 |
| Dr. J. B. Dobariya | Senior Scientist & Head | Farm labour meeting | Rajendrapur farm, Waghai | Meeing | 04-09-2023 |
| Dr. J. B. Dobariya | Senior Scientist & Head | Digital scanner operating meeting | Central examination hall, NAU, Navsari | Meeing | 21-09-2023 |
| Dr. J. B. Dobariya | Senior Scientist & Head | પ્રાકૃતિક ખેતી સમીક્ષા બેઠક | Collector office, Ahwa, Dangs | Meeing | 22-09-2023 |
| Dr. J. B. Dobariya | Senior Scientist & Head | આત્મ નિર્ભય આદિવાસી મહિલા ખેડૂત ઉત્પાદન પ્રોડક્શન કંપની લિમિટેડ ની વાર્ષિક સાધારણ સભા | Community hall, Waghai | Annual general meeting | 26-09-2023 |
| Dr. P. P. Javiya | Scientist | Transformation of Agro-technologies for enhancing Production under diverse Agro-Ecosystem | Sandipani school, Saputara | National conference | 12 to 14/10/2023 |
| All staff | Senior Scientist & Head, Scientist | KVK review meeting | KVK, Waghai | Meeting | 16/10/2023 |
| Dr. P. P. Javiya | Scientist | 34th ZREAC | SSK, NAU, Navsari | Meeting | 17/10/2023 |
| All staff | Senior Scientist & Head, Scientist | KVK review meeting | KVK, Waghai | Meeting | 23/10/2023 |
| Mr. H. A. Prajapati | Scientist | National Conference on Transformation of Agro-technologies for enhancing Production under diverse Agro-Ecosystem | Saputara | National conference | 12/10/2023 to 14/10/2023 |

| | | | | | |
|---|---|---|---|---|---|
| All staff | Senior Scientist & Head, Scientist | Review meeting | KVK,waghai | Meeting | 30/10/2023 |
| All staff | Senior Scientist & Head, Scientist | Millet mela | HMRS,waghai | Seminars | 10-02-2023 |
| Mr. B. M. Vahunia | Scientist | International Conference on transformation of agrotechnologies for enhancing production under diverse agro-ecosystem | Saputara | International conference | 12 to 14-10-2023 |
| Mr. B. M. Vahunia | Scientist | NIPHM training, special campaign3 | Online by ATARI, Pune | Meeting | 17-10-2023 |
| Dr. J. B. Dobariya | Senior Scientist & Head | Natural farming seminar | Rajbhavan, Gandhinagar | Seminar | 06-10-2023 |
| Dr. J. B. Dobariya | Senior Scientist & Head | 34th ZREAC meeting | SSK, NAU, Navsari | Meeing | 17-10-2023 |
| Dr. J. B. Dobariya | Senior Scientist & Head | રવિ કૃષિ મહોત્સવ ૨૦૨૩ | Collector office, Ahwa, Dangs | Meeing | 30-10-2023 |
| Dr. J. B. Dobariya | Senior Scientist & Head | પ્રાકૃતિક ખેતી સમીક્ષા બેઠક | Collector office, Ahwa, Dangs | Meeing | 30-10-2023 |
| Dr. P. P. Javiya & Dr. J. B. Dobariya | Senior Scientist & Head, Scientist | PG-RAG NRM group | NAU Capuse, Navsari | Meeting | 02-11-2023 |
| Dr. P. P. Javiya, Mr. H. A. Prajapati | Scientist | Prakrutik Krushi Prashikshak talim | Anaval | Training | 07 to 08/11/2023 |
| Dr. P. P. Javiya, Mr. H. A. Prajapati, Mr. B. M. Vahuniya & Dr. J. B. Dobariya | Senior Scientist & Head, Scientist | Orientation program for Ravi Krushi Mahotsav 2023 | NAU Capuse, Navsari | Orientation program | 22/11/2023 |
| Mr. H. A. Prajapati | Scientist | Viksit Bharat Sankalp yatra | Koshomda & Kalibel | - | 18/11/2013 |
| Mr. H. A. Prajapati | Scientist | Viksit Bharat Sankalp yatra | Sakarpatal & nanapada | - | 28/11/2013 |
| Mr. H. A. Prajapati | Scientist | ATMA convergence meeting | ATIc, navsari | Meeting | 02-11-2023 |
| Dr. S. A. Patel | Scientist | recent advances in veterinary sciences and animal husbandry | online | 21 dayswinter school | 02-11-2023 |
| Dr. J. B. Dobariya | Senior Scientist & Head | Rabi Krishi Mahotsav planning | ATIC, NAU, Navsari | Meeting | 04-11-2023 |
| All staff | Senior Scientist & Head, Scientist | KVK, review meeting | KVK, Waghai | Meeting | 04-12-2023 |
| Dr. P. P. Javiya | Scientist | Agro-tourism | KVK, Navsari | Training | 11 to 13/12/2023 |
| All staff | Senior Scientist & Head, Scientist | KVK REVIEW MEETING | KVK, WAGHAI | Meeting | 04-12-2023 |
| All staff | Senior Scientist & Head, Scientist | KVK REVIEW MEETING | KVK, WAGHAI | Meeting | 29/12/2023 |
| Mr. B. M. Vahunia | Scientist | Agriculture in future and future in Agriculture | Online | 21 days Training | 20/11/2023 to 10/12/2023 |
| All staff | Senior Scientist & Head, Scientist | KVK Review meeting | KVK Waghai | Meeting | 30-12-2023 |
| Dr. J. B. Dobariya | Senior Scientist & Head | Natural farming meeting in collector officer | Collector office, Ahwa, Dang | Meeting | 21-12-2023 |

| | | | | | |
|---|---|---|---|---|---|
| Dr. J. B. Dobariya | Senior Scientist & Head | Impact of climate changes on global food, livestock, livelihood and environmental securty: Advanced approaches and mitigation strategies | Navsari Agriculture university, Navsari | Meeting | 26-12-2023 |
| Dr. J. B. Dobariya | Senior Scientist & Head | Impact of climate changes on global food, livestock, livelihood and environmental securty: Advanced approaches and mitigation strategies | Navsari Agriculture university, Navsari | Conference | 26-12-2023 |
| Dr. J. B. Dobariya | Senior Scientist & Head | 21 day International training on agriculture in future & future in Agriculture | Rajmata Vijayaraje scindia Krishi Vishwavidyalay, Galior in colloboration with JAU, Gujarat, ICRISAT Hyderabad, ICAR ATARI Jabalpur & AGRI MEEt foundation, UP | Training | 20 Nov to 10 Dec 2023 |

**18. Details of progress in Doubling Farmers Income (DFI) villages adopted by KVKs**

| Name of the village | Total No. of families surveyed | Key interventions implemented | No. of farmers covered in each intervention | Change in income (Rs/unit) | |
|---|---|---|---|---|---|
| | | | | Before (base year) | After (current year) |
| - | - | - | - | - | - |

**19. Details of activities planned under NARI /PKVY / TSP / KKA, etc.**

| S. No. | Name of the programme | No. of villages adopted | Key activities performed | No. of activities carried out | No. of families covered |
|---|---|---|---|---|---|
| - | - | - | - | - | - |

## 20. Details of Progress of ARYA Project

| Name of Enterprise | No of Training Conducted | No of Beneficiaries | No of Extension Activities | No of Beneficiaries | No of Unit established | Change in income | | No. Of Groups Formed |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Before | After | |
| - | - | - | - | - | - | - | - | - |

**ARYA project dos not run in aur KVK.**

**21. Details of SAP**

| S. No. | *Types of major Activity conducted- SwachhtaPakhwada, Cleaning, Awareness Workshop, Microbial based Agricultural Waste Management by Vermicomposting etc.* | No. of Programmes conducted | No. of Participants |
|---|---|---|---|
| - | - | - | - |

**21. Books published 2023-24**

| Title of the Book | Authors | ISBN No (Optional) / Pages No | Description/review of the book (one paragraph/sentence) |
|---|---|---|---|
| Sajiv Kheti Saral Samaj | Vahunia, B. M.; Javiya P. P.; Dobariya J. B; Patel S. A.; Prajapati H. A.;Patel R. S | 978-93-6128456-4 | Sajiv Kheti Saral Samaj, Vahunia, B. M.; Javiya P. P.; Dobariya J. B; Patel S. A.; Prajapati H. A.;Patel R. S.; 31 march 2024, NAU, Navsari Publication NAU/04/07/046/2023, ISBN NO.:978-93-6128456-4 |

**22. Please include any other important and relevant information which has not been reflected above (write in detail).**

**1. Award**

**1. Promotion of natural farming and seed production of cereals Awards**


Dr. P. P. Javiya, Scientist at KVK, NAU, Waghai, Dist: Dangs received award in the presence of Honorable vice chancellor Dr. Z. P. Patel on "Promotion of natural farming and seed production of cereals Awards" given/sponsored by Directorate of Extension Education, NAU, Navsari on 15 July 2022.

**2. Best extension scientist award**


Dr. J. B. Dobariya, Senior scientist & Head at KVK, NAU, Waghai, Dist: Dangs received award on "Best extension scientist award" given/sponsored by 3rd national conference on Natural farming, Organic farming and chemical farming in Indian agriculture-present scenario and way forward on 17 October 2022.

**3. Pre-eminent scientist international award 2022**



Dr. J. B. Dobariya, Senior scientist & Head at KVK, NAU, Waghai, Dist: Dangs received award on "Pre-eminent scientist international award 2022" given/sponsored by Chennai Teacher's council on 21 November 2022.

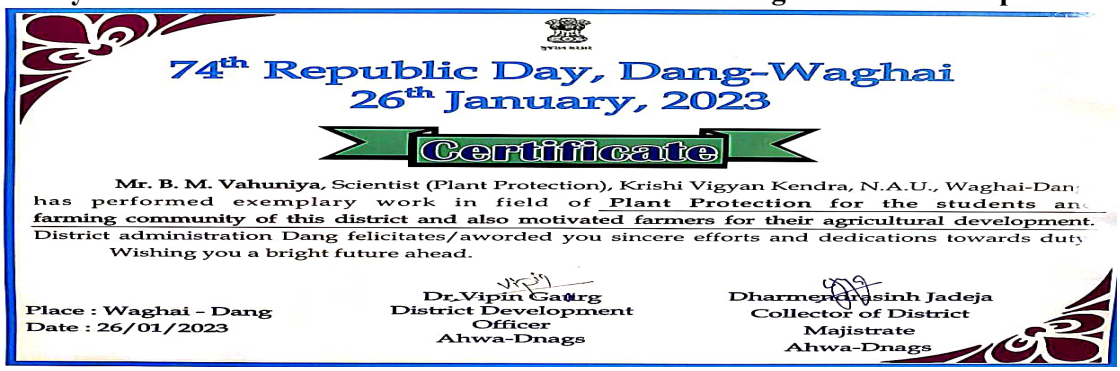
**4. Awards and Recognitions (Institute/College):**


Krishi Vigyan Kendra, NAU, Waghai received "International Year of Millet 2023" in the Millet Festival at KVK, Waghai during February 25, 2023. The award was received by Dr. J. B. Dobariya, Senior scientist & head, KVK, NAU, Waghai.

**5. Paramount achiever Award**


Mr. H. A. Prajapati, Scientist (Horticulture) at KVK, NAU, Waghai, Dist: Dangs received award on "Paramount achiever Award " given/sponsored by International conference on advancement of science and technology for Environments, Society and people (ICASTESP- 2023) on 06-07January 2023.

**6. Awarded for performed exemplary work in field of Plant Protection for the students and farming community of this district and also motivated farmers for their agricultural development**



74th Republic Day, Dang-Waghai
26th January, 2023

Certificate

Mr. B. M. Vahuniya, Scientist (Plant Protection), Krishi Vigyan Kendra, N.A.U., Waghai-Dan
has performed exemplary work in field of Plant Protection for the students an
farming community of this district and also motivated farmers for their agricultural development.
District administration Dang felicitates/awarded you sincere efforts and dedications towards duty
Wishing you a bright future ahead.

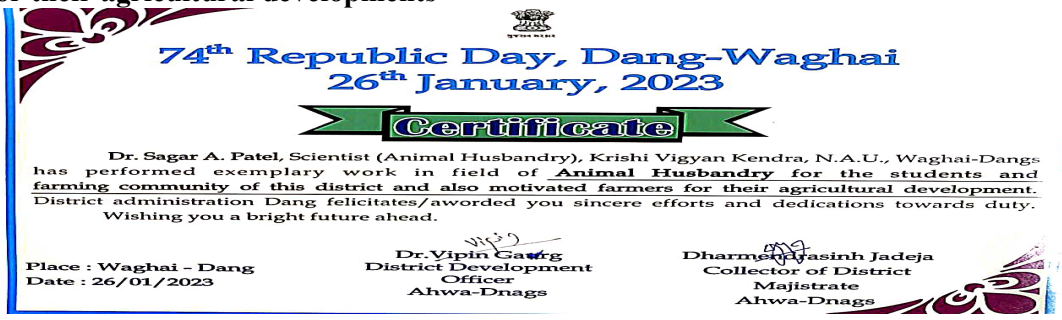
Place : Waghai - Dang
Date : 26/01/2023

Dr.Vipin Garg
District Development Officer
Ahwa-Dnags

Dharmendrasinh Jadeja
Collector of District Majistrate
Ahwa-Dnags

Mr. B. M. Vahuniya, Scientist (Plant protection) at KVK, NAU, Waghai, and Dist: Dangs received award on "Plant Protection for the students and farming community of this district and also motivated farmers for their agricultural development" given/sponsored by District administration Dang on 26 January 2023.

**7. Animal Husbandry for the students and farming community of the this district and also motivated farmers for their agricultural developments**



74th Republic Day, Dang-Waghai
26th January, 2023

Certificate

Dr. Sagar A. Patel, Scientist (Animal Husbandry), Krishi Vigyan Kendra, N.A.U., Waghai-Dangs
has performed exemplary work in field of Animal Husbandry for the students and
farming community of this district and also motivated farmers for their agricultural development.
District administration Dang felicitates/awarded you sincere efforts and dedications towards duty.
Wishing you a bright future ahead.

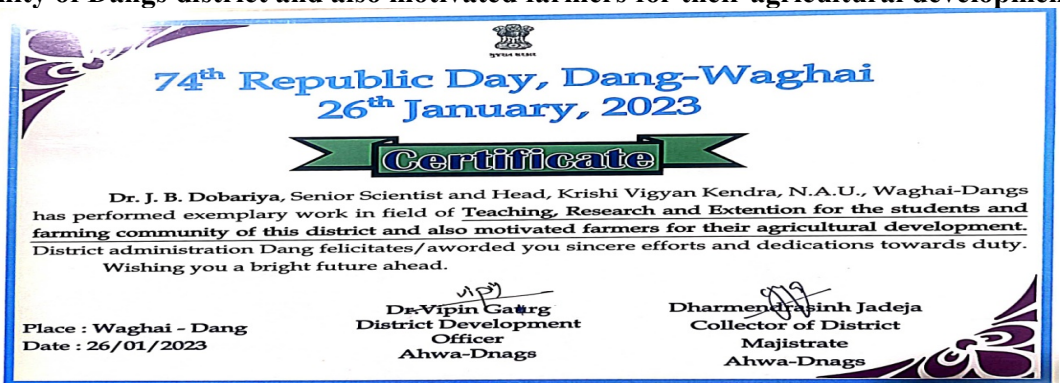
Place : Waghai - Dang
Date : 26/01/2023

Dr.Vipin Garg
District Development Officer
Ahwa-Dnags

Dharmendrasinh Jadeja
Collector of District Majistrate
Ahwa-Dnags

Dr. S. A. Patel, Scientist (Animal husbandry) at KVK, NAU, Waghai, Dist: Dangs received award on "Animal Husbandry for the students and farming community of the this district and also motivated farmers for their agricultural developments" given/sponsored by District administration Dang on 26 January 2023.

**8. Exemplary work in field of Teaching, Research and Extension for the students and farming community of Dangs district and also motivated farmers for their agricultural development**



74th Republic Day, Dang-Waghai
26th January, 2023

Certificate

Dr. J. B. Dobariya, Senior Scientist and Head, Krishi Vigyan Kendra, N.A.U., Waghai-Dangs
has performed exemplary work in field of Teaching, Research and Extention for the students and
farming community of this district and also motivated farmers for their agricultural development.
District administration Dang felicitates/awarded you sincere efforts and dedications towards duty.
Wishing you a bright future ahead.

Place : Waghai - Dang
Date : 26/01/2023

Dr.Vipin Garg
District Development Officer
Ahwa-Dnags

Dharmendrasinh Jadeja
Collector of District Majistrate
Ahwa-Dnags

Dr. J. B. Dobariya, Senior scientist & head, at KVK, NAU, Waghai, Dist: Dangs received award on "Teaching, Research and Extension for the studentsand farming community of Dangs district and also motivated farmers for their agricultural development" given/sponsored by District administration Dang on 26 January 2023.

**9. Exemplary work in Field of Crop Production**


Dr. P. P. Javiya, Scientist (Crop production) at KVK, NAU, Waghai, and Dist: Dangs received award on “Exemplary work in Field of Crop Production" given/sponsored by District administration Dang on 25 February 2023.

**10. Exemplary work in Field of Horticulture**


Mr. H.A. Prajapati, Scientist (Horticulture) at KVK, NAU, Waghai, and Dist: Dangs received award on “Exemplary work in Field of Horticulture" given/sponsored by District administration Dang on 25 February 2023.

**11. Excellent work performance for farmers**


Dr. J. B. Dobariya, Senior scientist & head, at KVK, NAU, Waghai, and Dist: Dangs received award on “exemplary work in field of Agricultural, Children, rural youth and farmers" given/sponsored by District administration Dang on 25 February 2023.

**12. Exemplary work in Field of Agricultural meteorology**


Mr. S. N. Choudhry, Agro metrology, at KVK, NAU, Waghai, and Dist: Dangs received award on "Exemplary work in Field of Agricultural meteorology" given/sponsored by District administration Dang on 25 February 2023.

**13. Best KVK Scientist award**


Mr. H.A. Prajapati, Scientist (Horticulture) at KVK, NAU, Waghai, Dist: Dangs received award on "Best KVK Scientist award" given/sponsored by SAAST, CSJM university, Kanpur & Agri Meet Foundation on March 2023.

**2. Sells of NAU Product by KVK, Waghai (Dang)**

| Sr. No. | Name of the Product | Quantity | Rate | Price |
|---|---|---|---|---|
| 1. | Green gram (GM-6) | 50 | 120 | 6000 |
| 2. | Citrus plant | 98 | 20 | 1960 |
| 3. | Rhizobium | 80 | 100 | 8000 |
| 4. | Azatobactor | 280 | 100 | 28000 |
| 5. | Novel | 2332 | 175 | 408100 |
| 6. | PSB | 530 | 100 | 53000 |
| 7. | Potas | 530 | 100 | 53000 |
| 8. | Azospirilum | 530 | 100 | 53000 |
| 9. | Vegetable trap | 16 | 85 | 1360 |
| 10. | *Syudomonas* | 20 | 60 | 1200 |
| 11. | Fruit trap | 56 | 55 | 3080 |

| | | | | |
|---|---|---|---|---|
| 12. | Vegetable seed | 18 | 10 | 180 |
| 13. | Fruitfly block | 28 | 35 | 980 |
| 14. | Harde | 9 | 80 | 720 |
| 15. | Vegetable block | 46 | 60 | 2760 |
| 16. | Honey (500ml) | 5 | 180 | 900 |
| **Total Rupees** | | | | **622240** |

**3 DISTRICT AGROMET UNIT (DAMU) PROJECT (Jan.-Dec., 2023)**

| Sr. no. | Activity | No. of activity | No. of farmers |
|---|---|---|---|
| 1. | Farmer Awareness Programme for Agromet Advisory | 21 | 1229 |
| 2. | Dissemination of Agromet Advisory | | |
| | Whatsapp groups: | 07 | 1528 |
| 3. | Agromet Advisory Service (Regular basis on every Tuesday & Friday) | 104 District level bulletin 312 Block level bulletin (English & Regional Language) | 1300 |
| 4. | Newspaper coverage | 06 | - |
| 5. | Special advisory issued during Tauktae, Gulab and Unseasonal rainfall. | - | - |

# APR SUMMARY

(Note: While preparing summary, please don't add or delete any row or columns)

**1. Training Programmes**

| Clientele | No. of Courses | Male | Female | Total participants |
|---|---|---|---|---|
| Farmers & farm women | 114 | 2093 | 2385 | 4478 |
| Rural youths | - | - | - | - |
| Extension functionaries | 02 | 03 | 105 | 108 |
| Sponsored Training | 60 | 1004 | 1684 | 2688 |
| Vocational Training | 05 | 53 | 80 | 133 |
| **Total** | **121** | **2149** | **2570** | **4719** |

**2. Frontline demonstrations .**

| Crops/Enterprise | No. of Farmers | Area(ha) | Units/Animals |
|---|---|---|---|
| Oilseeds | - | - | - |
| Pulses | 242 | 39.4 | - |
| Cereals | 155 | 40 | - |
| Vegetables | 290 | 44.55 | - |
| Other crops | - | - | - |
| Hybrid crops | - | - | - |
| **Total** | **687** | **123.95** | |
| Livestock & Fisheries | 176 | 17 | 100 Animal |
| Other enterprises | 28 | - | 28 Unit |
| **Total** | **204** | **17** | **128 Animal/Unit** |
| **Grand Total** | **891** | **140.95** | **128 Animal/Unit** |

**3. Technology Assessment & Refinement**

| Category | No. of Technology Assessed & Refined | No. of Trials | No. of Farmers |
|---|---|---|---|
| **Technology Assessed** | | | |
| Crops | 06 | 48 | 48 |
| Livestock | 01 | 30 | 30 |
| Various enterprises | - | - | - |
| **Total** | **07** | **78** | **78** |
| **Technology Refined** | | | |
| Crops | - | - | - |
| Livestock | - | - | - |
| Various enterprises | - | - | - |
| **Total** | - | - | - |
| **Grand Total** | **07** | **78** | **78** |

**4. Extension Programmes**

| Category | No. of Programmes | Total Participants |
|---|---|---|
| Extension activities | 685 | 91742 |
| Other extension activities | - | - |
| **Total** | **685** | **91742** |

**5. Mobile Advisory Services**

| Name of KVK | Message Type | Type of Messages | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Crop | Livestock | Weather | Marke-ting | Aware-ness | Other enterprise | Total |
| | Text only | 83 | 09 | 04 | 03 | 30 | 00 | **129** |
| | Voice only | 29 | 24 | 09 | 00 | 05 | 00 | **67** |
| | Voice & Text both | 0 | 0 | 0 | 0 | 0 | 0 | **0** |
| | **Total Messages** | **112** | **33** | **13** | **03** | **35** | **00** | **196** |
| | **Total farmers Benefitted** | **305051** | **130485** | **35359** | **7837** | **42813** | **00** | **521545** |

**6. Seed & Planting Material Production**

| | Quintal/Number | Value (Rs.) |
|---|---|---|
| Seed (q) | 62.68 | 303720 |
| Planting material (No.) | 4350 | 4350 |
| Bio-Products (kg) | - | - |
| Livestock Production (No.) | - | - |
| Fishery production (No.) | - | - |

**7. Soil, water & plant Analysis**

| Samples | No. of Beneficiaries | Value (Rs.) |
|---|---|---|
| Soil | - | - |
| Water | - | - |
| Plant | 65 | - |
| **Total** | **65** | **-** |

**8. HRD and Publications**

| Sr. No. | Category | Number |
|---|---|---|
| 1 | Abstract | **06** |
| 2 | Workshops | 12 |
| 3 | Conferences | 06 |
| 4 | Meetings | 53 |
| 5 | Trainings for KVK officials | 12 |
| 6 | Visits of KVK officials | 30 |
| 7 | Book published | 01 |
| 8 | Training Manual | 00 |
| 9 | Book chapters | 04 |
| 10 | Booklet | 00 |
| 11 | Leaflets/ Folder/ Pamphlet | 07 |
| 12 | Research papers | 06 |
| 13 | Technical Bulletin | 137 |
| 14 | Popular article | 09 |
| 15 | Lead papers | 00 |
| 16 | Seminar papers | 00 |
| 17 | Extension folder | 00 |
| 18 | Proceedings | 00 |
| 19 | Award & recognition | 17 |
| 20 | On-going research projects | 00 |
| 21 | Other | 00 |