

KRISHI VIGYAN KENDRA, CHATRA
(Birsa Agricultural University, Ranchi
Jharkhand)

ANNUAL ACTION PLAN
(2026-27)

1. GENERAL INFORMATION ABOUT THE KVK

Krishi Vigyan Kendra, Chatra came under existence in 2005 under the administrative control of Birsa Agricultural University, Ranchi with the following mandates and activities :

- On farm trial (OFT) for technology assessment and refinement
- Frontline demonstrations to establish production potential of various crops and enterprises on the farmers' fields
- Training for farmers in modern agricultural technologies and extension personnel to orient them in the frontier areas of technology development
- Extension activities
- Quality seed, planting material, livestock and poultry breed production
- Resource and knowledge center of agricultural technologies

General information about Chatra District

| S.No | Demographic Features | Area (ha) |
|------|------------------------------------|-----------|
| 01 | Geographical Area | 369367.23 |
| 02 | Net sown area | 88700 |
| 03 | Forest | 221117.35 |
| 04 | Fallow land | 33800 |
| 05 | Land not available for cultivation | 25749.88 |
| 06 | Cultivable land | 107568 |
| 07 | Number of Sub-Division | 02 |
| 08 | Number of Blocks | 12 |
| 09 | Number of Panchyats | 154 |
| 10 | Number of Villages | 1474 |
| 11 | Number of Farmers | 1,32,000 |

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

| Name and address of KVK | E-Mail |
|--|--|
| Krishi Vigyan Kendra, Chatra, Seed Multiplication Farm, Kullu, Post- Tapez, Dist- Chatra, State – Jharkhand, Pin Code - 825401 | chatrakvk@gmail.com kvkchatra2012@gmail.com |

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

| | | |
|----------------------------------|---------------------------|--|
| Dr. Rabindra Mohan Mishra | 7260075141; 7903975994 | rmbau@gmail.com chatrakvk@gmail.com kvkchatra2012@gmail.com |
|----------------------------------|---------------------------|--|

1.4. Year of sanction of KVK with council order No. and date:

Year - 2005 (ICAR Sanction order No. F. No. 6 (1) 2000-AE-1 Dated 7th Dec. 2004.

1.5. Year of start of functioning of KVK: 2005

1.5. Staff Position (as on 31st March 2026)

| Sl. No. | Sanctioned post | Name of the Incumbent | Designation | Discipline | Pay Scale with Present Basic | Date of joining | Permanent/probation | Category (SC/ST/OBC/Others) |
|---------|---------------------------|--------------------------|-------------------------------|-------------------------------|------------------------------|-----------------|---------------------|-----------------------------|
| 1. | Senior Scientist& Head | | | | | | | |
| 2. | Subject Matter Specialist | Dr Rabindra Mohan Mishra | I/C Senior Scientist and Head | Animal Husbandry | 15600-39100 1,07,300.00 | 06-10-2025 | Permanent | Gen |
| 3. | Subject Matter Specialist | Dr Sunita Kumari Kamal | Scientist, home science | Home science | 15600-39100 1,07,300.00 | 08-10-2025 | Permanent | SC |
| 8. | Programme Assistant | Upendra Kumar Singh | Programme Assistant | B.Sc. Ag. | 9300-34800 66000.00 | 15.03.2005 | Permanent | Gen |
| 10. | Farm Manager | Shiwendra Kumar Dubey | Farm Manager | M.Sc. Ag. (Horticulture) | 9300-34800 66000.00 | 15.03.2005 | Permanent | Gen |
| 11. | Accountant / Assistant | Amit Anand | Assistant | Btech in Chemical Engineering | 9300-34800 4200 | 19.06.2025 | Permanent | Gen |
| 12. | Skilled Support Staff | Avinash Kuma Singh | Skilled Support Staff | M.Sc Botany | 5200-20200 | 22.08.2025 | Permanent | Gen |

| | | | | | | | | |
|-----|------------------|--|--|--|------|--|--|-----|
| | | | | | 1900 | | | |
| 13. | Driver | | | | | | | obc |
| 14. | Driver | | | | | | | Obc |
| 15. | Supporting staff | | | | | | | ST |
| 16. | Supporting staff | | | | | | | Gen |

1.6. Total land with KVK (in ha) :

| S. No. | Item | Area (ha) |
|--------|---------------------------|-----------|
| 1 | Under Buildings | 0.8 |
| 2. | Under Demonstration Units | 0.8 |
| 3. | Under Crops | 0.8 |
| 4. | Horticulture | 0.5 |
| 5. | Pond | 0.5 |
| 6. | Others if any | 6.6 |
| | Total | 10.0 |

1.7. Infrastructural Development:

A) Buildings

| S. No. | Name of building | Source of funding | | Stage | | | | | |
|--------|------------------------------|-------------------|------|-----------------|--------------------|-------------------|---------------|--------------------|------------------------|
| | | ICAR | RKVY | Complete | | | Incomplete | | |
| | | | | Completion Year | Plinth area (Sq.m) | Expenditure (Rs.) | Starting year | Plinth area (Sq.m) | Status of construction |
| 1. | Administrative Building | ICAR | | 2005 | 550 | 80 lac | - | - | Good |
| 2. | Farmers Hostel | ICAR | | 2005 | 350 | 40 lac | - | - | Good |
| 3. | Staff Quarters (6) | ICAR | | Incomplete | 2500 | - | | | Not in good condition |
| 4. | Demonstration Units (2) | - | - | - | - | - | - | - | - |
| 5 | Fencing | ICAR | - | Incomplete | 600 mtr. | - | - | - | Not in good condition |
| 6 | Rain Water harvesting system | ICAR | - | Incomplete | 1117 | - | - | - | Not in good condition |
| 7 | Threshing floor | ICAR | - | - | 1000 | - | - | - | Good |
| 8 | Farm ware-house | ICAR | - | - | 500 | - | - | - | Good |
| | Other | | | | | | | | |

B) Vehicles

| Type of vehicle | Year of purchase | Source (ICAR/RKVY) | Cost (Rs.) | Total kms. run as on December, 2024 | Present status |
|-----------------|------------------|--------------------|------------|-------------------------------------|----------------|
| Jeep | 2024 | ICAR | 600000 | 17450 | Good |

| | | | | | |
|------------------------------------|------|------|--------|-----------|-----------------------|
| (Bolero) JH-01-FQ-9581 | | | | | Condition |
| Tractor (Massey) JH01 P03368 | 2006 | ICAR | 500000 | 1509 (Hr) | Not in Good Condition |
| Motorcycle JH13 C 8770 | 2017 | ICAR | 59000 | 24078 | Good Condition |
| Motorcycle JH13 C 4944 | 2017 | ICAR | 59000 | 27782 | Good Condition |

C) Equipment's & AV aids

| Name of the equipment | Year of purchase | Cost (Rs.) | Present status |
|--|------------------|------------|----------------|
| Atomic Absorption spectrophotometer (AAS 4141) with all accessories. | 2010 | 552520 | In use |
| Double beam UV-VIS spectrophotometer (5404 SS) with accessories. | 2010 | 230000 | In use |
| Flame Photometer | 2010 | 70000 | In use |
| Conductivity meter | 2010 | 15000 | In use |
| PH meter | 2010 | 15000 | In use |
| Orbital Shaker | 2010 | - | In use |
| Top leading Balance | 2010 | - | In use |
| Electronic Balance | 2010 | 55500 | In use |
| Hot Air Oven (Drying oven) | 2010 | 20000 | In use |
| PC/Data station | 2010 | - | In use |
| Centrifuge | 2010 | | In use |
| Super Salient Generator 10 KVA | 2010 | 231669 | In use |
| Uniline 5.0 (Five) KVA Online UPS with sealed maintenance Free battery (15 Nos. x 12V 65 AH of amount) & Battery Rack. | 2010 | - | In use |
| Hot Air Oven (Drying oven) | 2010 | 552520 | In use |
| Distillation Unit | 2011 | 16500 | In use |

| | | | |
|---------------------------------------|-----------|-----------|--------|
| Revolving Chair | 2005-2006 | 18000 | In use |
| Revolving Chair (Executives) | 2005-2006 | 4200 | In use |
| Computer Chair | 2005-2006 | 1400 | In use |
| Steel Office Table | 2005-2006 | 19000 | In use |
| Wooden Office Table (Executive) | 2005-2006 | 4500 | In use |
| Computer Chair | 2005-2006 | 1700 | In use |
| Steel Office Almirah | 2005-2006 | 10200 | In use |
| Steel Office Almirah (Locker) | 2005-2006 | 3500 | In use |
| Book Self | 2005-2006 | 9000 | In use |
| Fiber Chair | 2005-2006 | 10000 | In use |
| Fiber Table | 2005-2006 | 1600 | In use |
| Wooden Podium | 2005-2006 | 4500 | In use |
| Info panel Display Board (with Stand) | 2005-2006 | 6132 | In use |
| Notice Board (with ever) | 2005-2006 | 4851 | In use |
| Tractor (Massey) | 2006 | 500000 | In use |
| Jeep (Tata Sumo SE) | 2006 | 500000 | In use |
| LCD Projector | 2007 | 58487.5 | In use |
| Digital Camera (Sony) | 2007 | 14512 | In use |
| Sound system | 2018-19 | 22500.00 | In use |
| Meeting table | 2018-19 | 130000.00 | In use |
| Meeting Chair | 2018-19 | 206000.00 | In use |
| Laptop | 2007 | | |
| Smart Board | 2007 | | |
| Disc Plough | 2007 | 26995 | In use |
| Disc Harrow | 2007 | 18500 | In use |
| Grass Cutter | 2007 | 38500 | In use |
| M.B. Plouth | 2007 | 26993 | In use |
| Seed Cum fertilizer Drill | 2007 | 18200 | In use |
| Rotary Tiller Rotovator | 2006-2007 | 88585 | In use |
| Power Sprayer | 2022-23 | 48500 | In use |
| Cage-wheel Nut Bolt Type | 2007 | 5530 | |

| | | | |
|-------------------------------------|------|---|--------|
| Combined Harvester | 2007 | - | |
| Soil Conservation Department | | | |
| cSV®h pkfyr Lizz;j | 2013 | | In use |
| EkdZj | 2013 | | In use |
| usilsd Lizz;j 16 yhVj | 2013 | | In use |
| DksuksohMj | 2013 | | In use |
| jkSfdax Lizz;j | 2013 | | In use |
| iEi IsV 5 HP | 2013 | | In use |
| iksLV gksyMhxj | 2013 | | In use |
| QVhZykbjtj czkMdkLVj | 2013 | | In use |
| ikoj Lizz;j 11-5 yhVj | 2013 | | In use |
| eSuq,y Lizz;j (Neptune) | 2013 | | In use |
| Fjjj | 2014 | | In use |

1.8. A). Details of SAC meetings to be conducted in the year

| Sl. No. | Date |
|----------------------------------|------------|
| 1. Scientific Advisory Committee | 29.04.2026 |

Suggestions of SAC meeting

19th SCIENTIFIC ADVISORY COMMITTEE MEETING

KRISHI VIGYAN KENDRA CHATRA

BIRSA AGRICULTURAL UNIVERSITY

RANCHI-6, JHARKHAND

Proceedings of the 19th Scientific Advisory Committee (SAC) Meeting

KrishiVigyan Kendra (KVK), Chatra

Date: 29/04/2026

Venue: Meeting Hall, KVK, Chatra

The 19th Scientific Advisory Committee (SAC) meeting of KVK, Chatra was held on 29th April 2026 under the chairmanship of **Dr. B. K. Agarwal**, Chief Scientist-cum-University Professor & Director of Student Welfare, BAU, Ranchi.

(List of participants appended)

The meeting was attended by the Senior Scientist & Head, KVK Chatra, along with KVK scientists and staff members. Heads and representatives of district line departments including District Agriculture Officer-cum-Project Director (ATMA), District Horticulture Officer, District Soil Conservation Officer, District Fisheries Officer, representative of District Animal

Husbandry Department, Lead District Manager (LDM), District Development Manager (NABARD), NGO representatives, progressive farmers, and farm women were also present.

The meeting proceedings were conducted by **Dr. Rabindra Mohan Mishra**, Senior Scientist & Head, KVK Chatra.

Proceedings

The meeting commenced with a welcome address by Dr. R. M. Mishra, who welcomed the Chairman and all dignified members of SAC. After brief introductory remarks, the Chairman, Dr. B. K. Agarwal, directed the house to proceed as per the proposed agenda.

Dr. R. M. Mishra presented the **Action Taken Report (ATR) for the year 2025–26**.

Key Observations and Recommendations by the Chairman after the presentation of action taken report (2025-26)

The Chairman made the following suggestions for improvement and future action:

1. Detailed Action Taken Report

The ATR should be presented in a more comprehensive manner with proper data representation to enable clear quantification of activities.

2. Impact Assessment of KVK Programmes

Regular impact studies should be conducted and presented in terms of **productivity and profitability** based on comparative data (before and after KVK interventions).

3. Soil Testing and Data Documentation

Soil testing data should be presented for different land situation as well as dominant cropping system prevailing the Chatra districts to have better information to the stake holders and officers of line department .

4. Training Programme Impact Study

Impact assessment of training programmes should be systematically carried out to evaluate effectiveness on trainees.

5. Dr Akhilesh Sah, Associate Director ZRS Chiyanki suggest to present rainfall data of the whole year so that the results could be better interpreted.

Thereafter, Dr. Rabindra Mohan Mishra presented the progress report for the year 2025–26. He highlighted the achievements and work carried out under various ongoing programmes such

as CFLD (Oilseeds), Model Pulse Village, ARYA, TSP, SCSP, soil testing, and other extension activities conducted at KVK Chatra.

After obtaining due permission from the Chair, Dr. Mishra also presented the Action Plan for the year 2026–27. The following key points were suggested for overall improvement in extension activities:

1. **On-Farm Trials (OFT)** on composite fish farming should be conducted in consultation and collaboration with line departments.
2. **OFTs** on issues to resolve the problem of anemia in the women and constipation in general should be addressed by the Home Science Scientist.
3. The research outcome from the **OFT** on food supplements should be commercialized. Multi-location studies on shelf-life and keeping quality of different products should be undertaken.
4. Assessed and approved technologies should be taken up under **Front Line Demonstrations (FLDs)** for wider dissemination.
5. **Paddy Seed Production:** Seed production programmes should be implemented based on indent received from different organization both Govt. and Private for cereals, oilseeds, and pulses. Emphasis should be given to seed production at the KVK farm considering farmers' demand and local suitability.
6. **Production and Sale of Saplings:** Vegetable and other crop saplings should be raised and sold to farmers to enhance KVK visibility and generate income. Presentations should include details such as number of saplings produced, and income generated.
7. **Market-Oriented Technologies:** Priority should be given to technologies that enable early production of vegetable and market access for higher profitability.
8. **Low-Cost Farmer-Friendly Technologies:** Emphasis should be placed on practical, low-cost technologies that enhance farmers' income.
9. **Mr. Gautam Kumar**, District Agriculture Officer, Chatra emphasized the urgent need for an Agronomy Scientist at KVK Chatra for holistic improvement in its functioning.
10. **The DDM, NABARD**, expressed interest in collaboration with KVK and requested a package of recommended technologies for wider dissemination among farmers of the district.

The Action Plan for 2026–27 was critically reviewed and approved unanimously by the house.

In his concluding remarks, the Chairman, Prof. Dr. B. K. Agarwal, appreciated the commendable work of KVK Chatra despite the shortage of scientists and resources. He also acknowledged the valuable contributions of all members in making the programme successful. The meeting concluded with a vote of thanks proposed by Dr. Rabindra Mohan Mishra, Senior Scientist & Head, KVK Chatra.

2. DETAILS OF MICRO-FARMING SITUATIONS OF THE DISTRICT

2.1 Micro-farming situations

a) Characteristics

| S.No. | Agro-Ecological situations (AES) | Existing Farming System (Crop+livestock+others) | Major soil types |
|-------|----------------------------------|---|------------------------|
| 1 | AES 1 (Name) | Forest Covered upland undulated Gravelly soil type Rainfed, orchard, social forestry, livestock production, vegetables. | Gravelly soil type |
| 2 | AES 2 (Name) | Rainfed- Gravelly Soil type | Gravelly Soil type |
| 3 | AES 3 (Name) | Canal irrigated Calcareous soil-plains Crop, vegetable and fruit trees | Calcareous soil-plains |
| 4 | AES 4 (Name) | Rainfed-sandy loam (No Canal, Tube well) Plains- paddy, crops and vegetables, orchard | Sandy loam |

b) Land Characteristics

| S.No | Agro-Ecological Situation (AES) | Topography | Agro-Ecological Situation features | Drainage |
|------|---------------------------------|--|---|---------------|
| 1. | AES-1 (Name) | Forest Covered upland undulated Gravelly soil type Rainfed | Rain-fed, forest area in upland undulated gravelly, sandy loam soil, very poor water holding, acidic soil, un-irrigated, well drained, aerobic soil, subsistence farming, prone to drought stress and water erosion | Good drainage |
| 2. | AES-2 (Name) | Rainfed- Gravelly Soil type | Rain-fed gravelly sandy loam soil, porous soil, poor water holding capacity, susceptible to erosion and drought, low soil pH, deficient nutrient like P, N and K. | Good drainage |
| 3. | AES-3 C | Cannel irrigated Calcarious soil-plains | Canal/ Tub well, pond, well irrigated calcareous soil, low organic matter in soil, pH above 6.5 | Poor drainage |
| 4 | AES-4 V | Rainfed-sandy loam | Rain-fed, sandy loam, well drained | Good drainage |

| | | | |
|--|--------------------------------|--|--|
| | (No Cannel, Tube well) Plains | soil, poor water holding capacity, poor organic matter content | |
|--|--------------------------------|--|--|

c) AES-wise major problems

| S.No | Agro-Ecological Situation (AES) | Major problems | Rank |
|------|---------------------------------|--|-----------|
| 1. | AES-1 (Name) | <p><u>Chatra</u></p> <ul style="list-style-type: none"> ➤ Poor Productivity of rice, wheat and oilseed. ➤ No crops diversification ➤ Indigenous breed of animals ➤ More infestation of diseases and pest ➤ Use of local farm implements | 8 |
| 2. | AES-2 (Name) | <p><u>Hunterganj</u></p> <ul style="list-style-type: none"> ➤ Poor Productivity of rice, wheat and oilseed. ➤ No crops diversification ➤ Indigenous breed of animals ➤ More infestation of diseases and pest ➤ Use of local farm implements | 9 |
| 3. | AES-3 (Name) | <p><u>Gidhour</u></p> <ul style="list-style-type: none"> ➤ Traditional package practices of serial and pulses ➤ Poor Productivity of vegetables ➤ Poor productivity of serial and pulses ➤ Low milk yield of cow and buffaloes ➤ Poor profitability of small animals like goat, pig and poultries. | 10 |
| 4 | AES-4 (Name) | <p><u>Tundwa</u></p> <ul style="list-style-type: none"> ➤ Farmers are not aware of improved variety ➤ Use of traditional varieties ➤ Low productivity of serial and pulses | 10 |

2.2. Area, Production and Productivity of major crops cultivated in the district (2025)

| S. No | Crop | Area (ha) | Production (MT.) | Productivity (Qt./ha) | Yield gap (q/ha) with respect to demo of last year | Yield gap (q/ha) with respect to potential yield |
|-------|------|-----------|------------------|-----------------------|--|--|
| 1 | Rice | 36053 | 12448 | 23.50 | 10 | 45 |

| | | | | | | |
|----|---------------------|--------|-------|-------|-----|-----|
| 2 | Maize | 4816 | 15604 | 22.00 | 15 | 30 |
| 3 | Pigeon Pea | 3713 | 4902 | 11.20 | 7.5 | 25 |
| 4 | Groundnut | 292 | 288 | 9.75 | 8 | 20 |
| 5 | Sesame | 73 | 44 | 6.00 | | |
| 5 | Wheat | 8900 | 1602 | 18.50 | 14 | 26 |
| 6 | Rapseed and Mustard | 14566 | 990 | 6.80 | 7 | 20 |
| 7 | Linseed | 1543 | 78 | 5.00 | 8 | 16 |
| 8 | Summer Moong | 174 | 152 | 8.75 | 6.5 | 15 |
| 9 | Cauliflower | 329 | 4967 | 151 | 65 | 250 |
| 10 | Brinjal | 130 | 1239 | 195 | 85 | 300 |
| 11 | Cabbage | 381 | 7626 | 142 | 275 | 600 |
| 12 | Ladies finger | 210 | 2688 | 128 | 30 | 150 |
| 13 | Tomato | 303 | 3939 | 130 | 35 | 250 |
| 14 | Green chilli | 331.25 | 1607 | 48.50 | | |
| 15 | Onion | 401 | 7017 | 175 | | |
| 16 | Green pea | 324 | 4526 | 140 | | |
| 17 | Green chilli | 331.25 | 1607 | 48.50 | | |
| 18 | Onion | 401 | 7017 | 175 | | |
| 19 | Green pea | 324 | 4526 | 140 | | |
| 20 | Potato | 1607 | 24105 | 150 | | |
| 21 | Radish | 155 | 1798 | 116 | | |
| 22 | Tomato | 3036 | 48272 | 159 | | |
| 23 | Cauliflower | 1280 | 25578 | 210 | | |

Source: District agriculture department. 2025-26

2.3. Weather data (2024-25)

| Year | Month | Rainfall (mm) | Temperature °C | | Relative Humidity (%) | |
|------|-----------|---------------|----------------|---------|-----------------------|---------|
| | | | Maximum | Minimum | Maximum | Minimum |
| 2024 | | | NA | NA | NA | NA |
| | January | 2.8 | NA | NA | NA | NA |
| | February | 13.8 | NA | NA | NA | NA |
| | March | 3.5 | NA | NA | NA | NA |
| | April | 0.9 | NA | NA | NA | NA |
| | May | 1.1 | NA | NA | NA | NA |
| | June | 18.9 | NA | NA | NA | NA |
| | July | 69.1 | NA | NA | NA | NA |
| | August | 302.4 | NA | NA | NA | NA |
| | September | 266.1 | NA | NA | NA | NA |
| | October | 3.1 | NA | NA | NA | NA |
| | November | 0.0 | NA | NA | NA | NA |
| | December | 0.0 | NA | NA | NA | NA |
| 2025 | | 681.7 | NA | NA | NA | NA |
| | January | 0 | NA | NA | NA | NA |
| | February | 0 | NA | NA | NA | NA |
| | March | 8.2 | NA | NA | NA | NA |
| | April | 25.3 | NA | NA | NA | NA |
| | May | 55.4 | NA | NA | NA | NA |
| | June | 498.6 | NA | NA | NA | NA |
| | July | 341.23 | NA | NA | NA | NA |
| | August | 259.06 | NA | NA | NA | NA |

| | | | | | | |
|--------------|-----------|-----------------|----|----|----|----|
| | September | 141.9 | NA | NA | NA | NA |
| | October | 86.5 | NA | NA | NA | NA |
| | November | 15.91 | NA | NA | NA | NA |
| | December | 0 | NA | NA | NA | NA |
| Total | | 1432.1mm | | | | |

2.4 Production and productivity of livestock, Poultry, Fisheries etc. in the district (2024)

| Category | Population | Production | Productivity | Productivity gap |
|------------------|------------|-----------------------|---------------------|------------------|
| Cattle | | | | |
| Cow | 499847 | NA | NA | NA |
| Cross bred cow | 10790 | | | |
| Buffalo | 102000 | NA | NA | NA |
| Sheep | 300965 | NA | NA | NA |
| Goats | 457 | NA | NA | NA |
| Cattle | | | | |
| Crossbred | 10790 | NA | NA | NA |
| Indigenous | 499847 | NA | NA | NA |
| Pigs | 73570 | NA | NA | NA |
| Poultry | | | | |
| Hens | 691061 | NA | NA | NA |
| Category | | Production (q) | Productivity | |
| Fish (Reservoir) | 440 | NA | NA | NA |
| Perennial pond | 130 | NA | NA | NA |
| Farmers' pond | 50 | NA | NA | NA |

*Statistical report

2.5 Details of Operational area / Villages

| Taluka | Name of the block | Name of the village | Major crops & enterprises | Existing yield (q/ha, number/year) | Major problem identified | Identified Thrust Areas |
|--------|-------------------|---------------------|---------------------------|-------------------------------------|--------------------------|-------------------------|
|--------|-------------------|---------------------|---------------------------|-------------------------------------|--------------------------|-------------------------|

| | | | | | |
|--------|------------|--|---|---|--------------------------|
| Chatra | Chatra | | Rice, Maize, Wheat, Mustard, Gram, Linseed Pig, Goat | <ul style="list-style-type: none"> ➤ Poor Productivity of rice, wheat and oilseed. ➤ No crops diversification ➤ Indigenous breed of animals ➤ More infestation of diseases and pest ➤ Use of local farm implements | ICM IDM INM IPM |
| | Hunterganj | | Rice, Maize, Wheat, Mustard, Gram, Linseed Pig, Goat | <ul style="list-style-type: none"> ➤ Poor Productivity of rice, wheat and oilseed. ➤ No crops diversification ➤ Indigenous breed of animals ➤ More infestation of diseases and pest ➤ Use of local farm implements | ICM IDM INM IPM |
| | Giddhour | | Rice, Maize, Wheat, Poultry, Goatry, Piggery, Pigeon Pea, Moong, Mustard, Niger, Groundnut | <ul style="list-style-type: none"> ➤ Traditional package practices of serial and pulses ➤ Poor Productivity of vegetable ➤ Poor productivity of serial and pulses ➤ Poor productivity of cow and buffalo ➤ Poor profitability of pig rearing | ICM IDM INM IPM |

| | | | |
|------------|--|---|--------------------------|
| Giddhour | Redgram, Linseed, Ladyfinger, Cauliflower, Cabbage, Capsicum, Pig, Goat, Rice Cauliflower | <ul style="list-style-type: none"> ➤ Traditional package practices of serial and pulses ➤ Poor Productivity of vegetables ➤ Poor productivity of serial and pulses ➤ Low milk yield of cow and buffaloes ➤ Poor profitability of small animals like goat, pig and poultries. | ICM IDM INM IPM |
| Prataappur | Rice, Maize, Wheat, Poultry, Goatry, Piggery, Pigeon Pea, Moong, Mustard, Niger, Groundnut | <ul style="list-style-type: none"> ➤ Traditional package practices of serial and pulses ➤ Poor Productivity of vegetable ➤ Poor productivity of serial and pulses ➤ Poor productivity of cow and buffalo ➤ Poor profitability of pig rearing | ICM IDM INM IPM |
| Simaria | Rice, Onion, Gram, Linseed, Ladyfinger, Goat, Cow | <ul style="list-style-type: none"> ➤ Traditional package practices of serial and pulses ➤ Poor Productivity of vegetable ➤ Poor productivity of serial and pulses ➤ Poor productivity of cow and buffalo ➤ Poor profitability of pig rearing | ICM IDM INM IPM |

2.6 Top five major priority thrust areas:

- Knowledge gap in farming community regarding proven technological options
- Economic constraints as 31.8% farmers are under BPL population
- Poor linkages with financial agencies and market
- Erratic rainfall, poor water-holding capacity of soil, high evaporation loss and unproductive soil texture
- Critical rainfed diversified conditions (only 10% of the area under assured irrigation).sectors due to poor

3. TECHNICAL PROGRAMME

3 A. Details of targeted mandatory activities by KVK

| OFT | | FLD | | |
|----------------|-------------------|-----------|-------------------|-------------------|
| (1) | | (2) | | |
| Number of OFTs | Number of Farmers | Area (ha) | No of enterprises | Number of Farmers |
| 4 | 40 | - | 6 | 190 |

| Training | | Extension Activities | |
|-------------------|------------------------|----------------------|------------------------|
| (3) | | (4) | |
| Number of Courses | Number of Participants | Number of activities | Number of participants |
| 52 | 1120 | 138 | 1400 |

| Seed Production (Qtl.) | Planting material (Nos.) | Fish seed prod. (Nos) | Soil Samples |
|------------------------|--------------------------|-----------------------|--------------|
| (5) | (6) | (7) | (8) |
| 80 | 10000 | Nil | 7000 |

3 B. Abstract of interventions to be undertaken

| S. No | Thrust area | Crop/ Enterprise | Identified Problem | Interventions | | | | | | |
|-------|---------------------------|------------------|--|--|---------------------|--------------------------|--|----------------------|--|--|
| | | | | Title of OFT if any | Title of FLD if any | Title of Training if any | Title of training for extension personnel if any | Extension activities | Supply of seeds, planting materials etc. | |
| 1 | Health management in goat | Goat farming | Poor growth and high morbidity due to diarrhea | Assessment of probiotics in goats kids (2-3 months) to solve the issues like poor body weight gain | | | | | | |
| 2 | Health management in pig | Pig farming | Poor growth and high morbidity due to diarrhea | Assessment of probiotic in piglets to prevent piglet diarrhoea | | | | | | |

| | | | | | | | | | |
|---|--|--------------------|---|--|--|-----------------------------------|--|--|--|
| 3 | Enhancing fish productivity by intensification | Fish farming | Low productivity in IMC fish culture | Assessment of profitability in composite fish culture by integrating IMC with Rupchanda fish | | | | | |
| 4 | Value addition | Finger millet | Poor acceptability of sole ragi product | Assessment of value added ragi laddoo | | | | | |
| 5 | Nutrition and income generation | Oyster Mushroom | Poor yield | | Cultivation of Oyster mushroom | Mushroom production techniques | | Extension literature | |
| 6 | Breed improvement | Pig, breed-Jharsuk | Low productivity and profitability | | Demonstration of jharsuk pig for commercial farming | Pig farm management | | Extension literature | |
| 7 | Feed management for health improvement | Goat | Deficiency of feed and fodder | | Demonstration of dried mahua flower | Goat farm management | | Extension literature / newspaper popular article | |
| 8 | Preventive health care in backyard poultry | Backyard poultry | Capacity building | | Demonstration of preventive health package in backyard chicken | Backyard chicken and duck farming | | Do | |

| | | | | | | | | | |
|----|---------------------------------|---------------------------------|--------------------|--|----------------------|--|--|--|--|
| 9 | Value addition of finger millet | Value addition of finger millet | Capacity building | | Malted finger millet | | | | |
| 10 | Animal health management | | Capacity building | | | Major poultry diseases and their management | | | |
| | Post Harvest | Fruit and vegetable | Lack of knowhow | | | Preservation of seasonal fruit & vegetables | | | |
| | Livestock farm management | Dairy farming | Knowledge building | | | Dairy farm management-feeding, housing and disease management | | | |
| | Livestock farm management | Goat farming | Capacity building | | | Goat farm management-breeding, nutrition, shelter and disease management | | | |

| | | | | | | | | | |
|--------------|--|--|--|--|--|--|--|--|--|
| TOTAL | | | | | | | | | |
|--------------|--|--|--|--|--|--|--|--|--|

A.2. Abstract on the number of technologies to be assessed in respect of livestock / enterprises

| Thematic areas | Cattle | Poultry | Sheep | Goat | Piggery | Vermiculture | Fisheries | TOTAL |
|---|--------|---------|-------|----------|----------|--------------|-----------|----------|
| Evaluation of Breeds | - | - | - | - | - | - | 1 | - |
| Nutrition Management | - | - | - | 1 | 1 | - | - | - |
| Disease of Management | - | - | - | - | - | - | - | - |
| Value Addition | - | - | - | - | - | - | - | - |
| Production and Management | - | - | - | - | - | - | - | - |
| Feed and Fodder | - | - | - | - | - | - | - | - |
| Small Scale income generating enterprises | - | - | - | - | - | - | - | - |
| TOTAL | | | | 1 | 1 | - | 1 | 3 |

B. Details of all On Farm Trial in the given format

| | |
|---|--|
| Crop | Goat |
| Season | Kharif/rabi |
| Main problem | High morbidity and poor body weight gain in kids |
| Main cause | Due to gastro-intestinal complications |
| Title of OFT | Assessment of probiotics in goats kids (2-3 months) to solve the issues like poor body weight gain |
| Farming situation | Semi intensive farming |
| Thematic area | Management of low productivity in goat farming |
| Farmer practice | T1- Basal diet only |
| Technology option selected for assessment | T2- Basal diet + home-made Probiotic @ 25 g/animal for 60 days T3- Basal diet + home-made Probiotic @ 50 g/animal for 60 days |
| Source of technology | IVRI, Bareilly |
| No of trial | 20 kids (2-3 months of age) |
| Detail of critical input | Probiotics |
| Cost of individual critical input | 50.00 |
| Total cost of critical input | 1000.0000 |
| Performance indicator to be recorded | i) Technical indicator (Initial and final body weight, Fortnightly body weight measurement , total weight gain, average daily gain (ADG), incidence of diarrhoea, faecal score, coat condition ii) Economic indicator (Cost of supplements, Gross return, Net return, B:C |

| | |
|--|----------------------------------|
| | ratio) iii) Farmer perception |
|--|----------------------------------|

2 OFT.

| | |
|---|--|
| Crop | Pig |
| Season | Kharif/ rabi |
| Main problem | High morbidity and poor body weight gain in piglets due to diarrhoea at creeper and weaner stages (15 days to 70 days) |
| Main cause | Diarrhoea, poor digestibility and sub-optimum body condition |
| Title of OFT | Assessment of probiotic in piglets to control piglet diarrhoea |
| Farming situation | Intensive system of pig farming |
| Thematic area | Management of low productivity in pig |
| Farmer practice | T1 Basal diet only Day-28 to day 70 of farrowing |
| Technology option selected for assessment | T2 Basal diet + home-made Probiotic @ 25 g/animal- -28 to day 70 T3 Basal diet + home-made Probiotic @ 25 g/animal- -28 to day 70 |
| Source of technology | IVRI, Bareilly |
| No of trial | 20 (piglets) |
| Detail of critical input | Lactoacillus and vitamin AD3E |
| Cost of individual critical input | Rs. 100 per piglet |
| Total cost of critical input | Rs. 2000 |
| Performance indicator to be recorded | <ol style="list-style-type: none"> 1. Technical indicator (Initial and final body weight, Fortnightly body weight , Total weight gain and Average daily gain (ADG), Daily feed consumption, Incidence of diarrhoea, Faecal score and coat condition 2. Economic indicator (Cost of supplements, Gross return, Net return, B:C ratio) 3. Farmer perception |

3 OFT

| | |
|-------------------|--|
| Crop | Fish farming |
| Season | Kharif/ rabi |
| Main problem | Low profitability |
| Main cause | Inappropriate fish culture technique |
| Title of OFT | Assessment of profitability in composite fish culture by integrating IMC with Rupchanda fish |
| Farming situation | Integrated fish farming |
| Thematic area | Management of low profitability in IMC fish culture |
| Farmer practice | T1- IMC + feed supplement |

| | |
|---|---|
| Technology option selected for assessment | T2- IMC + Rupchanda (1000 per acre) + feed supplement |
| Source of technology | College of Fisheries, Gumla, BAU, Ranchi |
| No of trial | 3 trials/treatment |
| Detail of critical input | Rupchand fish (1000 per acre) |
| Cost of individual critical input | Rs 2500 |
| Total cost of critical input | Rs. 7500 |
| Performance indicator to be recorded | (i) Technical indicator (production and productivity per unit area) (ii) Economic indicator (Cost of inputs, Gross return, Net return, B:C ratio) (iii) Farmer perception |
| Crop | Ragi (value addition) |
| Season | Rabi |
| Main problem | Poor consumption of ragi (finger millet) due to lack of value added products |
| Main cause | Formulation of value addition with most nutritious combination using available food ingredients |
| Title of OFT | Assessment & development of value added products of Ragi.(Finger Millets). |
| Farming situation | Rainfed farming |
| Thematic area | Value addition of local cereals |
| Farmer practice | T1 - Consumption of unprocessed Ragi flour. |
| Technology option selected for assessment | T2- Madua Laddu (Ragi flour 50g, Bengal gram powder 50g,Groundnut 25g,Ghee 90g, Sugar70g) T3- Madua cacke – (Ragi flour 50g, Refine flour 50g, Ghee 100g, Sugar 100g, Egg – 1Pcs,Baking Powder 1tsp, Cheery according to, Vanilla essence 25 ml) |
| Source of technology | Birsa Agricultural University Kanke, Ranchi. |
| No of trial | 10 |
| Detail of critical input | All food items related to OFT. |
| Cost of individual critical input | Rs. 1000/- |
| Total cost of critical input | Rs. 10000/- |
| Performance indicator to be recorded | (i) Technical indicator- A) General Acceptability test according to 5 point hedonic scale,(Taste, Texture, Flavour, Colour). B) Storage period (Days). (ii) Economic indicator- A) cost of cultivation. B) gross return. C) net return |

3.2 Frontline Demonstrations

A. Details of FLDs to be organized -

| Sl. No. | Crop | Thematic area | Technology for demonstration | Critical inputs | Season and year | Area (ha) | No. of farmers/ demonstration. | Parameters identified (Yield related attributes, yield economics and farmers' perception) |
|---------|-------------------|-----------------------|--|--|-----------------|-------------|--------------------------------|--|
| 1 | Nutria-garden | Intensification | Organic vegetable cultivation | Seeds, vermicompost | Rabi | 1 | 50 | (l) Cauliflower, cabbage, |
| 2. | Goat | Nutrition | Dried Mahua flower feeding rainy and winter season | Dried Mahua flower | Kharif/rabi | 50 goats | 5 | (l) Body condition, weight |
| 3 | Poultry (chicken) | Disease management | Preventive health package for backyard chicken | Ranikhet vaccine, dewormer, mineral supplement | Kharif/rabi | 200 chicken | 10 | 1. Mortality, weight gain, morbidity, etc |
| 4 | Piggery | Breed improvement | Jharsuk pig for higher profitability | Jharsuk piglet | Kharif/rabi | 30piglets | 10 | i. Productivity, profitability |
| 5 | Mushroom | Employment generation | Oyster mushroom production | Spawn, chemicals for sterilization | Kharif/rabi | 200 bags | 10 | (l) Productivity, profitability |
| 6 | Ragi | Value addition | Ragi malting for value addition | - | - | - | 10 | Technical indicator- Production (kg/unit), Infestation, Storage Period, Acceptability Economic indicator- B:C ratio Farmer Feedback- |
| | | | | Total | | | 95 | |

Sponsored Demonstration

| Crop | Area (ha) | No. of farmers |
|------|-----------|----------------|
| | | |

B. Extension and Training activities under FLDs

| S. No. | Activity | No. of activities | Month | Number of participants |
|--------|--------------------------------------|-------------------|-------------------|------------------------|
| 1 | Farmers Training | 5 | June-December | 200 |
| 2 | Field days | 5 | December-march 27 | 200 |
| 3 | Media coverage | 4 | July-December | - |
| 4 | Training for extension functionaries | 1 | October | 30 |

C. Details of FLD on Enterprises

(i) Farm Implements- NA

| Name of the implement | Crop | Season and year | No. of farmers | Area (ha) | Critical inputs | Performance parameters / indicators |
|-----------------------|------|-----------------|----------------|-----------|-----------------|-------------------------------------|
| | | | | | | |

(ii) Livestock Enterprises

| Enterprise | Breed | No. of farmers | No. of animals, poultry birds/ha. etc. | Critical inputs | Performance parameters / indicators |
|-------------------|-------------------------------------|----------------|--|---|--|
| Goat | Black Bengal/ local non-descript | 10 | 100 | Mahua dried flower | Weight gain at 15 days interval, B:C ratio |
| Pig | Jharsuk | 10 | 30 | Piglets | Productivity and profitability |
| Chicken (poultry) | Desi birds in backyard | 10 | 200 | Ranikhet vaccine, mineral supplement, deworming | Morbidity and mortality, productivity |
| Nutria-garden | Vegetables of different varieties | 20 | 0.05ha (1 ha) | Seeds of vegetables, vermicompost | Production of vegetables per unit, profitability, money saved in purchase of vegetable from market |
| Ragi malting | Finger millet (ragi) | 10 | 10kg | Finger millet | Storage capacity, Acceptability, B:C ratio |
| Mushroom | Oyster mushroom | 10 | 200 bags | Mushroom spawn, | Productivity, income generation, B:C ratio |

| | | | | | |
|--|--|--|--|-----------------------------|--|
| | | | | chemicals for sterilization | |
|--|--|--|--|-----------------------------|--|

Details of all FLD in the given format

1.

| | | | |
|--|---|----------------|---|
| Title of FLD | Dried Mahua flower (<i>Madhuca longifolia</i>) as feed supplement in winter season as an energy source | | |
| Season & Year | During winter season (December- February) | | |
| Main Problem | Weight loss and poor body condition during winter season | | |
| Main cause of problem | Scarcity of leafy fodder | | |
| Full detail of farmer's Practice | Grazing + diluted rice gruel | | |
| Name of the Technology | Dried mahua flower supplement to overcome feed and fodder scarcity | | |
| Full detail of technology to be demonstrated | Dried mahua feed as supplement @ 50 grams per day per adult for three months (December, January and February), Crude protein 9.4-10.02; Digestible crude protein 0.03; Total digestible nutrients 37.04; Calcium 1.66; Phosphorus 0.1-0.2 The dried flowers will be soaked in water 6 hours before feeding | | |
| Thematic area | Nutrient management | | |
| Source of Technology with year | BAU, Ranchi | | |
| Name of villages | Geri, pratappur | | |
| Farming situation | Rainfed farming/ upland | | |
| Area (ha)/Unit (No.) | 50 | No. of farmers | 5 |
| Performance indicator | (I) Technical indicator- body weight before the initiation of demonstration, , body weight at 15 days interval, productivity and profitability (II) Economic indicator- per kg increase in body weight, B:C ratio (III) Farmer Feedback- | | |

2.

| | | | |
|----------------------------------|--|--|--|
| Title of FLD | Promotion of improved pig farming | | |
| Season & Year | Rabi-2026-27 | | |
| Main Problem | Low productivity and profitability in pig farming | | |
| Main cause of problem | Non descript and poor quality breed unsuitable for commercial pig farming | | |
| Full detail of farmer's Practice | Non descript pig breed with poor productivity reared under extensive farming system | | |
| Name of the Technology | Jharsuk breed for optimum productivity and profitability under semi-intensive farming system | | |

| | | | |
|--|--|----------------|----|
| Full detail of technology to be demonstrated | | | |
| Thematic area | Promotion of improved pig farming | | |
| Source of Technology with year | Birsra Agricultural University | | |
| Name of villages | Simeria | | |
| Farming situation | Rainfed farming/ upland | | |
| Area (ha)/Unit (No.) | 30 piglets | No. of farmers | 10 |
| Performance indicator | (I) Technical indicator- adoptability, productivity, prolificacy and profitability (II) Economic indicator- cost of production, gross return, net return and B:C ratio (III) Farmer Feedback | | |

3.

| | | | |
|--|--|----------------|----|
| Title of FLD | Package demonstration in backyard chicken farming | | |
| Season & Year | All seasons (Perennial) | | |
| Main Problem | High morbidity and mortality in desi backyard chicken | | |
| Main cause of problem | Inappropriate preventive measures taken to the backyard chicken | | |
| Full detail of farmer's Practice | Subsistence feeding and open grazing, no vaccination and supplements | | |
| Name of the Technology | Improved package of practice for profitable backyard chicken | | |
| Full detail of technology to be demonstrated | Vaccination to prevent Ranikhet, fowl pox as per schedule Routine deworming with Piperazine compound and Albendazole Mineral supplements and turmeric powder (w:w :: 1:1) as an immune booster | | |
| Thematic area | Disease management in poultry | | |
| Source of Technology with year | DPD, Hyderabad | | |
| Name of villages | Geri, Chatra, Labalong | | |
| Farming situation | Rainfed farming/ upland | | |
| Area (ha)/Unit (No.) | 200 chicken | No. of farmers | 10 |
| Performance indicator | (I) Technical indicator- body weight before and after supplementation period, morbidity%, mortality%, egg weight, hatching % (II) Economic indicator- cost of production, gross return, net return and B:C ratio (III) Farmer Feedback | | |

4.

| | | | |
|---------------|---------------------|--|--|
| Title of FLD | Nutritional Garden. | | |
| Season & Year | Kharif/ Rabi, 2026 | | |

| | | | |
|--|--|----------------|----|
| Main Problem | Farmers are growing vegetable with inorganic input in unplanned manner | | |
| Main cause of problem | Low productivity and unawareness regarding balanced nutrition | | |
| Full detail of farmer's Practice | Treated seed/ seedling (Vegetable, Leafy vegetable, Tuber and Fruits plant) + line sowing + vermin compost + organic insecticide | | |
| Name of the Technology | Nutri-garden for balanced nutrition | | |
| Full detail of technology to be demonstrated | Birsra Agricultural University Kanke, Ranchi. | | |
| Thematic area | Nutritional Garden. | | |
| Source of Technology with year | BAU, Ranchi | | |
| Name of villages | Mardanpur, Gariyatu | | |
| Farming situation | Upland/ midland | | |
| Area (ha)/Unit (No.) | 0.02ha | No. of farmers | 50 |
| Performance indicator | (I) Technical indicator- Production of vegetable Q/ha, Consumption Q/ha, Sailing Q/ha Self life(Days) (II) Economic indicator- Cost of cultivation, Gross income, Net returns & B:C ratio | | |

5.

| | | | |
|--|---|----------------|----|
| Title of FLD | Promotion of oyster mushroom production for nutritional security. | | |
| Season & Year | Rabi, 2026 | | |
| Main Problem | Low protein ,Fibre and micro-nutrients in daily diets. | | |
| Main cause of problem | Lack of skill on mushroom production using low cost method. | | |
| Full detail of farmer's Practice | Natural methods (Seasonal) | | |
| Name of the Technology | Oyster mushroom production technique | | |
| Full detail of technology to be demonstrated | Paddy/Wheat Straw sterilization by steaming/ chemical treatment +Mushroom spawn+ Bagging + water spraying as per recommendation | | |
| Thematic area | Nutrition management in rural livelihood | | |
| Source of Technology with year | DMR, Solon (HP) 2022 | | |
| Name of villages | Mardanpur, Dariyatu | | |
| Farming situation | Rainfed farming | | |
| Area (ha)/Unit (No.) | 200 | No. of farmers | 10 |
| Performance indicator | (I) Technical indicator- Production (kg/bag), income, profit (II) Economic indicator- B:C ratio (III) Farmer Feedback | | |

6.

| | | | |
|--|--|----------------|----|
| Title of FLD | Demonstration programme on ragi malting flour for value added products. | | |
| Season & Year | Rabi, 2026 | | |
| Main Problem | Low protein ,Fibre and micro-nutrients in daily balance diets. | | |
| Main cause of problem | Farm women are not aware to processed ragi flour for value addition | | |
| Full detail of farmer's Practice | Cleaning+ sun drying+ milling | | |
| Name of the Technology | Ragi malting flour for value addition | | |
| Full detail of technology to be demonstrated | Cleaning + soaking (overnight)+ sprouting for 72 hours + sun drying + milling + packaging | | |
| Thematic area | Nutrition management in rural livelihood | | |
| Source of Technology with year | D.Y Patil Agricultural and Technical university, Talsande, Kolhapur, Maharashtra, 2024 | | |
| Name of villages | Mardanpur, Dariyatu | | |
| Farming situation | Rainfed farming | | |
| Area (ha)/Unit (No.) | 200 | No. of farmers | 10 |
| Performance indicator | (I) Technical indicator- Storage Period, Acceptability, nutrition value (II) Economic indicator- B:C ratio (III) Farmer Feedback | | |

3.3 Training (Including the sponsored and FLD training programmes):

A) ON Campus

| Thematic Area | Name of Courses | No. of Participants | | | | | | |
|-------------------------------------|-----------------|---------------------|--------|-------|-------|--------|-------|-------------|
| | | Others | | | SC/ST | | | Grand Total |
| | | Male | Female | Total | Male | Female | Total | |
| (A) Farmers & Farm Women | | | | | | | | |
| I Crop Production | | | | | | | | |
| Weed Management | | | | | | | | |
| Resource Conservation Technologies | | | | | | | | |
| Cropping Systems | | | | | | | | |
| Crop Diversification | | | | | | | | |
| Site specific nutrient management | | | | | | | | |
| Integrated Farming | | | | | | | | |
| Water management | | | | | | | | |
| Seed production | | | | | | | | |
| Nursery management | | | | | | | | |

| | | | | | | | | |
|--|--|--|--|--|--|--|--|--|
| Integrated Crop Management | | | | | | | | |
| Fodder production | | | | | | | | |
| Production of organic inputs | | | | | | | | |
| Natural farming | | | | | | | | |
| II Horticulture | | | | | | | | |
| a) Vegetable Crops | | | | | | | | |
| Production of low volume and high value crops | | | | | | | | |
| Off-season vegetables | | | | | | | | |
| Nursery raising | | | | | | | | |
| Exotic vegetables like Broccoli | | | | | | | | |
| Export potential vegetables | | | | | | | | |
| Grading and standardization | | | | | | | | |
| Protective cultivation (Green Houses, Shade Net etc.) | | | | | | | | |
| Natural farming | | | | | | | | |
| b) Fruits | | | | | | | | |
| Training and Pruning | | | | | | | | |
| Layout and Management of Orchards | | | | | | | | |
| Cultivation of Fruit | | | | | | | | |
| Management of young plants/orchards | | | | | | | | |
| Rejuvenation of old orchards | | | | | | | | |
| Export potential fruits | | | | | | | | |
| Micro irrigation systems of orchards | | | | | | | | |
| Plant propagation techniques | | | | | | | | |
| c) Ornamental Plants | | | | | | | | |
| Nursery Management | | | | | | | | |

| | | | | | | | | |
|--|--|--|--|--|--|--|--|--|
| Management of potted plants | | | | | | | | |
| Export potential of ornamental plants | | | | | | | | |
| Propagation techniques of Ornamental Plants | | | | | | | | |
| d) Plantation crops | | | | | | | | |
| Production and Management technology | | | | | | | | |
| Processing and value addition | | | | | | | | |
| e) Tuber crops | | | | | | | | |
| Production and Management technology | | | | | | | | |
| Processing and value addition | | | | | | | | |
| f) Spices | | | | | | | | |
| Production and Management technology | | | | | | | | |
| Processing and value addition | | | | | | | | |
| g) Medicinal and Aromatic Plants | | | | | | | | |
| Nursery management | | | | | | | | |
| Production and management technology | | | | | | | | |
| Post harvest technology and value addition | | | | | | | | |
| III Soil Health and Fertility Management | | | | | | | | |
| Soil fertility management | | | | | | | | |
| Soil and Water Conservation | | | | | | | | |
| Integrated Nutrient Management | | | | | | | | |

| | | | | | | | | |
|--|---|---|----|----|---|----|----|----|
| Value addition | 1 | 0 | 15 | 15 | 0 | 15 | 15 | 30 |
| Income generation activities for empowerment of rural Women | 1 | 0 | 15 | 15 | 0 | 15 | 15 | 30 |
| Location specific drudgery reduction technologies | | | | | | | | |
| Rural Crafts | | | | | | | | |
| Women and child care | | | | | | | | |
| VI Agril. Engineering | | | | | | | | |
| 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 | | | | | | | | |
| VII Plant Protection | | | | | | | | |
| Integrated Pest Management | | | | | | | | |
| Integrated Disease Management | | | | | | | | |
| Bio-control of pests and diseases | | | | | | | | |
| Production of bio control agents and bio pesticides | | | | | | | | |
| VIII Fisheries | | | | | | | | |
| Integrated fish farming | | | | | | | | |
| Carp breeding and hatchery management | | | | | | | | |

| | | | | | | | | |
|--|--|--|--|--|--|--|--|--|
| Carp fry and fingerling rearing | | | | | | | | |
| Composite fish culture | | | | | | | | |
| Hatchery 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 | | | | | | | | |
| 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 | | | | | | | | |
| X Capacity Building and Group Dynamics | | | | | | | | |

| | | | | | | | | |
|---|-----------|-----------|------------|------------|------------|------------|------------|------------|
| Leadership development | | | | | | | | |
| Group dynamics | | | | | | | | |
| Formation and Management of SHGs/FPOs etc | | | | | | | | |
| Mobilization of social capital | | | | | | | | |
| Entrepreneurial development of farmers/youths | | | | | | | | |
| WTO and IPR issues | | | | | | | | |
| XI Agro-forestry | | | | | | | | |
| Production technologies | | | | | | | | |
| Nursery management | | | | | | | | |
| Integrated Farming Systems | | | | | | | | |
| XII Others (Pl. Specify) | | | | | | | | |
| TOTAL | 16 | 65 | 150 | 215 | 105 | 235 | 340 | 555 |
| (B) RURAL YOUTH | | | | | | | | |
| Mushroom Production | 2 | 10 | 20 | 30 | 10 | 20 | 30 | 60 |
| Bee-keeping | | | | | | | | |
| Integrated farming | 2 | 10 | 20 | 30 | 10 | 20 | 30 | 60 |
| Seed production | | | | | | | | |
| Production of organic inputs | | | | | | | | |
| Integrated Farming (Medicinal) | | | | | | | | |
| Planting material production | | | | | | | | |
| Vermi-culture | | | | | | | | |
| Sericulture | | | | | | | | |
| Protected cultivation of vegetable crops | | | | | | | | |
| Commercial fruit production | | | | | | | | |
| Repair and maintenance of farm machinery and implements | | | | | | | | |

| | | | | | | | | |
|---|-----------|------------|------------|------------|------------|------------|------------|------------|
| Integrated Nutrient management | | | | | | | | |
| Rejuvenation of old orchards | | | | | | | | |
| Protected cultivation technology | | | | | | | | |
| Formation and Management of SHGs | | | | | | | | |
| Group Dynamics and farmers organization | | | | | | | | |
| Information networking among farmers | | | | | | | | |
| Capacity building for ICT application | | | | | | | | |
| Care and maintenance of farm machinery and implements | | | | | | | | |
| WTO and IPR issues | | | | | | | | |
| Management in farm animals | | | | | | | | |
| Livestock feed and fodder production | 1 | 10 | 0 | 10 | 10 | 0 | 10 | 20 |
| Household food security | | | | | | | | |
| Women and Child care | | | | | | | | |
| Low cost and nutrient efficient diet designing | | | | | | | | |
| Production and use of organic inputs | | | | | | | | |
| Gender mainstreaming through SHGs | | | | | | | | |
| Any other (Pl. Specify) | | | | | | | | |
| Water Management | | | | | | | | |
| TOTAL | | 10 | 0 | 10 | 10 | 0 | 10 | 20 |
| G. Total | 26 | 120 | 225 | 345 | 175 | 325 | 500 | 845 |

B) OFF Campus

| Thematic Area | No. of Courses | No. of Participants | | | | | | Grand Total |
|-------------------------------------|----------------|---------------------|--------|-------|-------|--------|-------|-------------|
| | | Others | | | SC/ST | | | |
| | | Male | Female | Total | Male | Female | Total | |
| (A) Farmers & Farm Women | | | | | | | | |
| I Crop Production | | | | | | | | |

| | | | | | | | | | | |
|---|------------|-------------|------------|-------------|-----------|-----------|-----------|-------------|-----------|-------------|
| Agri mobile clinic | | | | | | | | | | |
| Soil test campaigns | | | | | | | | | | |
| Farm Science Club | | | | | | | | | | |
| Conveners meet | | | | | | | | | | |
| Self Help Group | | | | | | | | | | |
| Conveners meetings | | | | | | | | | | |
| Mahila Mandals | | | | | | | | | | |
| Conveners meetings | | | | | | | | | | |
| Celebration of important days (specify) | 05 | 200 | 100 | 300 | 5 | 5 | 10 | 205 | 104 | 310 |
| Krishi Mohostva | | | | | | | | | | |
| Krishi Rath | | | | | | | | | | |
| Pre Kharif workshop | | | | | | | | | | |
| Pre Rabi workshop | | | | | | | | | | |
| PPVFRA workshop | | | | | | | | | | |
| Any Other (Specify) | | | | | | | | | | |
| Total | 138 | 1350 | 990 | 2340 | 25 | 25 | 50 | 1375 | 25 | 1400 |

3.5 Target for Production and supply of Technological products

A) SEED MATERIALS

| Sl. No. | Crop | Variety | Quantity (qtl.) |
|----------------|-----------------|-------------|-----------------|
| CEREALS | | | |
| 1 | Rice (FS to CS) | CR Dhan-320 | 60 |

B) PLANTING MATERIALS

| Sl. No. | Crop | Variety | Quantity (Nos.) |
|-------------------------|-----------------|------------|-----------------|
| FRUITS | | | |
| SPICES | | | |
| VEGETABLES | | | |
| 1 | Tomato Seedling | Meghdoot | 2000 |
| 2 | Brinjal | Arka Nidhi | 2000 |
| FOREST SPECIES | | | |
| ORNAMENTAL CROPS | | | |
| Total | | | |

C) BIO-PRODUCT

| Sl. No. | Product Name | Species | Quantity | |
|-----------------------|--------------|---------|----------|------|
| | | | No | (kg) |
| BIO PESTICIDES | | | | |
| 1 | | | | |
| 2 | | | | |

D) LIVESTOCK

| Sl. No. | Type | Breed | Quantity | |
|---------|------|-------|----------|------|
| | | | (Nos) | Unit |

| | | | | |
|-------------|--|--|--|--|
| Cattle | | | | |
| GOAT | | | | |
| SHEEP | | | | |
| POULTRY | | | | |
| Pig farming | | | | |
| FISHERIES | | | | |

3.6 Literature to be Developed/Published

(A) KVK News Letter

Date of start :

Number of copies to be published :

(B) Literature to be developed/published

| S.No. | Topic | Number |
|--------------|--------------------------------|----------|
| 1 | Research paper each scientist | 1 |
| 2 | Technical reports | |
| 3 | News letters | |
| 4 | Training manual all discipline | 1 |
| 5 | Popular article | |
| 6 | Extension literature | 4 |
| Total | | 6 |

(C) Details of Electronic Media to be Produced

| S. No. | Type of media (CD / VCD / DVD / Audio-Cassette, whatsapp group, mobile app, etc. | Title of the product | Number |
|--------|--|----------------------|--------|
| 1 | WhatsApp msgs | | 100 |

3.7. Success stories/Case studies identified for development as a case. -

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

| Sl. No. | Brief details of the tool/ methodology followed | Purpose for which the tool was followed |
|---------|--|--|
| 01 | <ul style="list-style-type: none"> • Pre and post knowledge test • Group discussion • Personal Contact • Meeting • Personal Interview | <ul style="list-style-type: none"> • To understand the present knowledge of the farmers • For knowledge technological gap • Solving technological problem • Fulfill the knowledge gap • Knowing the problem |

3.9 Indicate the methodology for identifying OFTs/FLDs

For OFT:

- i) PRA
- ii) Problem identified from Matrix based ranking & analysis
- 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

3.10 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 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

3.11. Activities of Soil and Water Testing Laboratory

Status of establishment of Lab: Functional

1. Year of establishment : 2011-12

2. List of equipment's purchase with amount

| Name of the equipment | Quantity | Cost (Rs.) |
|--|----------|------------|
| Atomic Absorption spectrophotometer (AAS 4141) with all accessories. | 1 | 552520 |
| Double beam UV-VIS spectrophotometer (5404 SS) with accessories. | 1 | 230000 |
| Flame Photometer | 1 | 70000 |
| Conductivity meter | 1 | 15000 |
| PH meter | 1 | 15000 |
| Orbital Shaker | 3 | - |
| Top leading Balance | 1 | - |
| Electronic Balance | 1 | 55500 |
| Hot Air Oven (Drying oven) | 1 | 20000 |
| PC/Data station | 1 | - |
| Centrifuge | 1 | - |
| Super Salient Generator 10 KVA | 1 | 231669 |
| Uniline 5.0 (Five) KVA Online UPS with sealed maintenance Free battery (15 Nos. x 12V 65 AH of amount) & Battery Rack. | 1 | - |

3. Targets of samples for analysis:

| Details | No. of Samples | No. of Farmers | No. of Villages | Amount to be realized |
|--------------|----------------|----------------|-----------------|-----------------------|
| Soil Samples | 7000 | 7000 | 125 | |
| Water | | | | |
| Plant | | | | |
| Total | | | | |

4.0 LINKAGES

4.1 Functional linkage with different organizations/department

| Sl.No. | Name of organization | Nature of Linkage | Outcome of linkage |
|--------|--------------------------------------|--|--------------------|
| 1. | Birsa Agriculture University, Ranchi | <ul style="list-style-type: none"> ➤ Technological back stopping ➤ Providing breeder and foundation seed ➤ Administration and monitoring. | |
| 2. | ZRS, Palamu | <ul style="list-style-type: none"> ➤ Technological back stopping ➤ Providing breeder and foundation seed ➤ Administration and monitoring. | |

| | | | |
|-----|--|---|--|
| 3. | District Agriculture department | <ul style="list-style-type: none"> ➤ Organizing vocational training ➤ Joint diagnostic survey ➤ Conduction FLD ➤ Member of SAC | |
| 4. | District forest department | <ul style="list-style-type: none"> ➤ Training ➤ Extension Activities | |
| 5. | District animal husbandry | <ul style="list-style-type: none"> ➤ Training ➤ Extension Activities ➤ Joint diagnostic survey ➤ Veterinary health camp | |
| 6. | District industries development centre | <ul style="list-style-type: none"> ➤ Training to rural touts ➤ Meeting work shop | |
| 7. | Upland rice research station Hazaribag | <ul style="list-style-type: none"> ➤ Member of sale ➤ Input procurement ➤ Exchange of technical knowledge | |
| 8. | DRDA (state govt.) | <ul style="list-style-type: none"> ➤ Intra structural development financial support ➤ Training ➤ Extension activities ➤ Demonstration | |
| 9. | K. V. K. Holycross, Hazaribag | <ul style="list-style-type: none"> ➤ Exchange of scientific information | |
| 10. | Soil conservation department | <ul style="list-style-type: none"> ➤ Soil testing ➤ Training ➤ Resource person | |
| 11. | ATMA, Chatra | <ul style="list-style-type: none"> ➤ Training, Extension activities, Technology assessment and refinement | |

4.2 Details of linkage with ATMA

a) Is ATMA implemented in your district Yes

| S. No. | Programme | Nature of linkage | Outcome of linkage |
|--------|-------------|---|--------------------|
| 1 | REF Linkage | Training, Extension activities, Technology assessment and refinement. | |
| 2 | | | |

5. Utilization of Hostel facilities

| S. No. | Programme | No. of days |
|--------------|-----------|-------------|
| 1 | | |
| 2 | | |
| 3 | | |
| 4 | | |
| 5 | | |
| Total | | 50 |

6. Partnership with departments for technology out scaling (proposed):

i) Farmers & Farm women (On Campus)

**Annexure -
Training Programme**

