

ANNUAL PROGRESS REPORT

2018-19

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Krishi Vigyan Kendra, Jorhat
Assam Agricultural University
Teok-785112



PROFORMA FOR ANNUAL REPORT OF KVKs, 2018-19

1. GENERAL INFORMATION ABOUT THE KVK

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

1.2.

| Address | Telephone | | E mail |
|---|-----------|-----|----------------------|
| | Office | FAX | |
| Krishi Vigyan Kendra Assam Agricultural University Kaliapani, Jorhat (Assam)-785112 | | | kvk_jorhat@aau.ac.in |

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

| Address | Telephone | | E mail |
|--|-----------|-----|---------------|
| | Office | FAX | |
| Assam Agricultural University, Jorhat, Assam-13 | | | dee@aau.ac.in |

1.3. Name of the Programme Coordinator with phone & mobile no.:

| Name | Telephone / Contact | | |
|--------------------|---------------------|------------|-----------------------|
| | Residence | Mobile | Email |
| Dr. Phuleswar Nath | | 9964411012 | drphuleswar@gmail.com |

1.4. Year of sanction: 2006

1.5. Staff Position (As on 31st March, 2019)

| Sl. No. | Sanctioned post | Name of the incumbent | Designation | Discipline | Pay Scale (Rs.) | Present basic (Rs.) | Date of joining | Permanent /Temporary | Category (SC/ST/OBC/Others) |
|---------|-----------------------------|----------------------------|--------------------------------------|----------------------|--------------------------------|---------------------|-----------------|----------------------|-----------------------------|
| 1 | Principal Scientist & Head | Dr. Phuleswar Nath | Head | Plant Pathology | 1,44,200 – 2,18,200 (GP-10000) | 69,520.00 | 09.12.1991 | Permanent | OBC |
| 2 | Subject Matter Specialist | Mr. Sanjib Ranjan Borah | SMS | Soil Science | 68,900 – 2,05,500 (GP- 8000) | 40,690.00 | 25.08.2011 | Permanent | OBC |
| 3 | Subject Matter Specialist | Mr. Sameeron Bhattacharjya | SMS | Agronomy | 56,100 – 1,77,500 | 61,300.00 | 28.01.2014 | Permanent | Others |
| 4 | Subject Matter Specialist | Ms. Sharmistha Borgohain | SMS | Horticulture | 56,100 – 1,77,500 | 61,300.00 | 30.01.2014 | Permanent | OBC |
| 5 | Subject Matter Specialist | Mr. Bikram Bhattacharyya | SMS | Plant Protection | 56,100 – 1,77,500 | 61,300.00 | 03.11.2015 | Permanent | Others |
| 6 | Subject Matter Specialist | Dr. Prabhat Baruah | SMS | Animal science | 56,100 – 1,77,500 | 56,000.00 | 20.08.2018 | Permanent | OBC |
| 7 | Subject Matter Specialist | Vacant | SMS | | | | | | |
| 8 | Programme Assistant | Vacant | Programme Assistant | | | | | | |
| 9 | Computer Programmer | Mr. Rupjyoti Chutia | Prog. Assistant (Computer) | Computer Application | 35,400- 1,12,400 | 41,100.00 | 03.09.2011 | Permanent | OBC |
| 10 | Farm Manager | Mr. Ramen Kalita | Farm Manager | Agriculture | 35,400 - 1,12,400 | 38,700.00 | 11.10.2014 | Permanent | OBC |
| 11 | Accountant / Superintendent | Vacant | Accountant cum Office Superintendent | NA | | | | | |
| 12 | Stenographer | Mr. Biman Jyoti Phukan | Stenographer cum Computer Operator | NA | 25,500 – 81,100 | 31,400.00 | 18.02.2012 | Permanent | OBC |

| | | | | | | | | | |
|----|------------------|--------------------|----------|----|--------------------|-----------|------------|-----------|--------|
| 13 | Driver | Mr. Pankaj Borah | Driver | NA | 21,700 – 69,100 | 26,000.00 | 21.02.2012 | Permanent | OBC |
| 14 | Driver | Mr. Diganta Gogoi | Driver | NA | 21,700 – 69,100 | 23,100.00 | 25.11.2016 | Permanent | OBC |
| 15 | Supporting staff | Mr. Babul Gogoi | Grade IV | NA | 18,000 – 56,900 | 18,000.00 | 10.07.2018 | Permanent | OBC |
| 16 | Supporting staff | Mr. prandeep Bania | Grade IV | NA | 18,000 – 56,900 | 18,000.00 | 11.07.2018 | Permanent | Others |

- 1.6. a. Total land with KVK (in ha) : 11.93 ha
b. Total cultivable land with KVK (in ha) : 8.43
c. Total cultivated land (in ha) : 5.30

| Sl. No. | Item | Area (ha) |
|---------|--|-------------|
| 1 | Under Buildings (Administrative building+ Farmers' Hostel+ Staff Quarters) | 1.20 |
| 2. | Under Demonstration Units | 1.00 (RKVY) |
| 3. | Under Crops (Cereals, pulses, oilseeds etc.) | 5.04 |
| 4. | Under vegetables | 0.26 |
| 5. | Orchard/Agro-forestry | 2.13 |
| 6. | Others (specify) | 2.30 |

1.7. **Infrastructural Development:**

A) Buildings

| S. No. | Name of building | Source of funding | Stage | | | | | |
|--------|-------------------------------------|-------------------|-----------------|--------------------|--|---------------|--------------------|------------------------|
| | | | Complete | | | Incomplete | | |
| | | | Completion Date | Plinth area (Sq.m) | Expenditure (Rs.) | Starting Date | Plinth area (Sq.m) | Status of construction |
| 1. | Administrative Building | ICAR | 30.09.2009 | 547 .00 | 42,33,000.00 | - | - | - |
| 2. | Farmers Hostel | ICAR | 10-2-2012 | 311.50 | 17,12,249.00 (Total value 24 lakhs) | - | - | - |
| 3. | Staff Quarters (6nos) | - | - | - | - | - | - | - |
| | a. PC quarter (1no) | ICAR | 30.09.09 | 108.47 | 8,24,177 | - | - | - |
| | b. SMS quarters (2nos) | ICAR | 06.03.09 | 76.65 x 2 | 11,83,565 | - | - | - |
| | c. Farm manager & PA quarter (2nos) | ICAR | 30.09.09 | 96.90 | 7,73,824 | - | - | - |
| | d. Supporting Staff quarters (1no) | ICAR | 06.05.09 | 37.80 | 3,14,300 | - | - | - |
| 4. | Demonstration Units (15) | | | | | | | |
| | 1. Cattle shed | RKVY | 2010 | 36.45 | 2,33,972.00 | - | - | - |
| | 2. Vermicompost unit | RKVY | 2010 | 46.80 | 1,41,774.00 | - | - | - |
| | 3. Mushroom Unit | RKVY | 2010 | 27.00 | 1,99,515.00 | - | - | - |
| | 4. Poultry Shed | RKVY | 2011 | 44.40 | 3,41,368.00 | - | - | - |
| | 5. Goattery unit | RKVY | 2011 | 34.20 | 2,49,305.00 | - | - | - |
| | 6. Implement shed | RKVY | 2010 | 170.00 | 9,40,866.00 | - | - | - |
| | 7. Piggery unit | RKVY | 2010 | 41.04 | 2,80,000.00 | - | - | - |
| | 8. Dem -Display unit | RKVY | 2011 | 93.50 | 7,74,700.00 | - | - | - |
| | 9. Fertilizer godown | RKVY | 2011 | 22.79 | 1,63,000.00 | - | - | - |
| | 10. Rice- Fish-Vegetable Unit | RKVY | 2011 | 5332 (4 bighas) | 2,00,000.00 | - | - | - |
| | 11. Fish pond | RKVY | 2010 | 50m x 20m | 68,533.00 | - | - | - |

| | | | | | | | | |
|----|---|-----------|---------|-------------------|--------------|---|---|---|
| | 12. Deep tube well with distribution line | RKVY | 2011 | 287.60 running m. | 4,10,509.00 | - | - | - |
| | 13. Green House | ICAR | 2011 | 10m x 8m | 5,00,000.00 | - | - | - |
| | 14. Automatic Weather Station | RKVY | 2011 | 3m X 3m | 45,000.00 | - | - | - |
| | 15. Azolla production unit | RKVY | 2012 | 9.9m X 5.5m | 2,72,000.00 | - | - | - |
| | 16. Compost production Unit | RKVY | 2012 | 9.6m X 5m | 2,20,000.00 | - | - | - |
| 5 | Fencing | ICAR | 2012 | 800RM | 15,00,000 | - | - | - |
| | | RKVY | 2012 | 980RM | 9,00,562.00 | - | - | - |
| 6. | Seed processing plant | Pulse Hub | 2017-18 | | 50,00,000.00 | - | - | - |
| | Godown | Pulse Hub | 2017-18 | | | - | - | - |

B) Vehicles

| Type of vehicle | Regd. No. | Year of purchase | Cost (Rs.) | Total kms. Run | Present status |
|---------------------|---------------|------------------|-------------|----------------|------------------------------|
| Jeep | AS 03- H-9470 | 2012 (ICAR) | 6,49,819 | 154926 | Handed over to KVK, Golaghat |
| | AS-03-M- 9471 | 2015 (ICAR) | - | 93215 | Running condition |
| Tractor | AS03 AC-2223 | 2010(RKVY) | 4,59,301.00 | 952 | Running condition |
| Power tiller (2nos) | - | 2008(RKVY) | 1,36,511.00 | - | Running condition |

C) Equipments & AV aids

| Sl. No. | Name of the equipment | Year of purchase | Cost (Rs.) | Present status |
|---------|---------------------------------|------------------|-------------|----------------|
| 1 | Desktop Computer | 2007 | 32,000.00 | Working |
| 2 | UPS | 2007 | 6,930.00 | Not Working |
| 3 | Laser Printer | 2007 | 7,571.00 | Working |
| 4 | Xerox (1) | 2010 | 1,01,920.00 | Working |
| 5 | LCD Projector (1) | 2010 | 98,000.00 | Not Working |
| 6 | Digital Camera (1) | 2010 | 19,000.00 | Working |
| 7 | Computer (2) | 2010 | 55,094.00 | Working |
| 8 | Laser printer (1) | 2010 | 5,475.00 | Working |
| 9 | UPS (2) | 2010 | 16,474.00 | Not Working |
| 10 | Scanner (1) | 2010 | 2,724.00 | Working |
| 11 | Fax (1) | 2010 | 15,190.00 | Not Working |
| 12 | Desktop Computer (2) | 2016 | - | Working |
| 13 | UPS (4) | 2016 | - | Working |
| 14 | LCD Projector (1) | 2016 | - | Working |
| 15 | DSLR camera (1) | 2016 | - | Working |
| 16 | Laptop (1) | 2016 | - | Working |
| 17 | Laserjet printer all in one (1) | 2016 | - | Working |
| 18 | Laserjet printer (1) | 2018 | - | Working |
| 19 | UPS (1) | 2018 | - | Working |

| | | | | |
|----|---|------|-----------|-------------|
| 20 | Trailer capacity 1.5 tone | 2008 | - | Working |
| 21 | Dugged Wheel for 13 HP | 2008 | - | Working |
| 22 | Hitch braket with pine set for 13 HP VST Tiller | 2008 | - | Working |
| 23 | Five Tyne cultivator for power Tiller | 2008 | - | Working |
| 24 | Tail wheel float for 13 HP VST power tiller | 2008 | - | Working |
| 25 | Wheel Changer for BHP VST Power tiller | 2008 | - | Working |
| 26 | Two share MB plough to be fitted with 13 HP VST Sakti power tiller | 2008 | - | Working |
| 27 | Handle weight Assembly for 13 HP power tiller | 2008 | - | Working |
| 28 | Short rotary for power tiller | 2008 | - | Working |
| 29 | Extension lagged wheel for power tiller | 2008 | - | Working |
| 30 | Straight blade 18 Nos | 2008 | - | Working |
| 31 | Water pump with accessory-suction pipe & head | 2008 | - | Working |
| 32 | Legged wheel carrier for power tiller | 2008 | - | Working |
| 33 | Motorized knapsack sprayer with 1.2 HP petrol/kerosine engine | 2008 | - | Working |
| 34 | Mechanized brush cutter, Model –sparta-37 petrol driven 2 stroke engine | 2008 | - | Working |
| 35 | Multi purpose power weeder, Model –APW-43 | 2008 | - | Working |
| 36 | Sealing machine(8”) (1.5 x 3) mm sealing width option. | 2012 | - | Not Working |
| 37 | Earth augar, Model –MTL-51 | 2008 | 45,967.00 | Working |
| 38 | Post hole Digger accessories. | - | - | - |
| 39 | i. Auger for digger(6”) | 2011 | 3,308.00 | Working |
| 40 | ii. Auger for digger(12”) | 2011 | 5,513.00 | Working |
| 41 | iii. Auger for digger(18”) | 2011 | 9,371.00 | Working |
| 42 | iv. Auger for digger(24”) | 2011 | 13,892.00 | Working |
| 43 | Eight Row self propel rice transplanter | 2008 | - | Working |
| 44 | Drag Net (Double knotted 100% nylon machine made) | 2008 | - | Working |
| 45 | Fingering catching net(Knotless 100% nylone | 2008 | - | Working |
| 46 | Ti -9 tine spring loaded Tiller | 2008 | - | Working |
| 47 | Greaves pump set GSP-80B,Engine No- TKG 6748998 pump no-1798 | 2008 | - | Working |
| 48 | Chaff Cutter (J) No. Blade – 2 | 2008 | - | Working |
| 49 | T I plough -2 disc (J) | 2008 | - | Working |
| 50 | T I Disc Harrow (12 disc) (J) | 2008 | - | Working |
| 51 | Lagged wheel | 2008 | - | Working |
| 52 | Tail wheel Float | 2008 | - | Working |
| 53 | Wheel changer | 2008 | - | Working |
| 54 | Hitch bracket | 2008 | - | Working |
| 55 | Rotavator, 25-35 and 35-50 HP tractor drawn | 2008 | - | Working |
| 56 | Puddler | 2008 | - | Working |
| 57 | Power paddy weeder | 2008 | - | Working |
| 58 | Seed cleaner Model PC-2 | 2008 | - | Working |
| 59 | Power sprayer | 2008 | - | Working |
| 60 | Knapsack mist blower cum duster | 2008 | - | Not Working |

| | | | | |
|----|---|------|-------------|-------------|
| 61 | Autoclave: Table top | 2011 | 8,810.00 | Working |
| 62 | Autoclave vertical, media make, Model-7440PAD, Size-40x60 cm | 2011 | 93,638.00 | Working |
| 63 | Horizontal Laminar air flow, Make-Rescolar, Model-RH58-7, Size-120 x 60 x 60 cm | 2011 | 57,930.00 | Working |
| 64 | Hot air Oven (600x600x600) mm | 2011 | 36,888.00 | Working |
| 65 | Portable Ph meter with 4 digit LCD display | 2011 | 2,270.00 | Not Working |
| 66 | B.O.D Incubator(Low temp.) capacity -171 lt. | 2011 | 1,22,131.00 | Working |
| 67 | Spirit lamp(Brass) | 2011 | 280.00 | Working |
| 68 | Wheel burrow (wheels made of cast iron with solid rubber ring) | 2011 | 5,175.00 | Working |

1.8. A). Details SAC meeting* conducted in the year 2018-19

| Sl. No. | Date | Name and Designation of Participants | Salient Recommendations | Action taken on last SAC recommendation |
|---------|-----------|--|-------------------------|--|
| 1. | 26.3.2019 | <p>1. Dr. K. M. Bujarbaruah, Vice Chancellor, AAU, Jorhat, Chairman.</p> <p>2. Dr. P.K. Pathak, Director of Extension Education, AAU, Jorhat.</p> <p>3. Dr. A. Bhattacharyya, Director of Research (Agri), AAU, Jorhat</p> <p>4. Dr. Tamizuddin Ahmed, Chief Scientist, RARS, Titabor</p> <p>5. Dr. M. Neog, Assoc. Director of Extension Education (T), AAU, Jorhat</p> <p>6. Dr. R. K.Saud, Assoc. Director of Extension Education (P&I), AAU, Jorhat</p> <p>7. Dr. P. Nath, Head, KVK, Jorhat</p> <p>8. Dr. U. Goswami, Senior Extension Specialist, DoEE, AAU, Jorhat</p> <p>9. Dr. M. K. Sarmah, Senior Extension Specialist, DoEE, AAU, Jorhat</p> <p>10. Mr. R. J. Borah, Junior Extension Specialist, DoEE, AAU, Jorhat</p> <p>11. Mr. Samir Bordoloi, Gen. Secretary, SPREAD, NE</p> <p>12. Mr. Janardan Baruah, Govt. Sericulture Farm, Titabor</p> <p>13. Mr. Umananda Raj Borah, President, KASS Jorhat</p> <p>14. Mr. Bipul Borah, Secretary, KASS Jorhat</p> <p>15. Mr. Dipak Bordoloi, Social</p> | | <p>Action point 1. Preparation of action plan for doubling farmers income</p> <p>Action taken : Action plan has been prepared and activities are going on in the village Na-selauria, Titabar</p> <p>Action point 2. Establishment of market linkage with Arunachal Pradesh that will create new hopes for mushroom growers.</p> <p>Action taken : The mushrooms produced in the villages were not sufficient to fulfilled the demand at local market. The mushroom produced in the district is sold at much higher price at local market.</p> <p>Action Point 3. Popularization of dual purpose poultry breed instead of broiler duck</p> <p>Action Taken: The dual purpose poultry breed “Rainbow Rooster” has been promoted by the KVK</p> <p>Action point 4. Priority should be given on organic farming and bee keeping as highlighted by Hon,ble Prime Minister, Narendra Modi</p> <p>Action taken : We could not promote any true organic village due to shortage of organic inputs but we convert 15% our cultivable KVK land into organic one. In reference to bee keeping, we are promoting Bee rearing along with the CFLD on oilseed.</p> <p>Action 5. Creation of awareness amongst the farmers on the utilization of residual moisture through utera cultivation</p> <p>Action taken : We are demonstrating the utera crop cultivation through our FLD and OFT programme. We promote lathyrus, lentil and pea as utera crop.</p> |

| | | | |
|--|--|--|--|
| | <p>Forestry, Jorhat Range 16. Mr. Balindra Nath Chetia, Asstt. Director of Agriculture, Jorhat 17. Dr. Bhupen Das, District AH & Veterinary Officer, Jorhat 18. Mr. Atul Kr. Baruah, Asstt. Agril. Engineer, Jorhat 19. Mrs. Rekha Bora, Farmer Representative, Pirakata Bharalua Gaon 20. Mr. Nabanidhi Gogoi, Farmer Representative, Boloma Moran Gaon 21. Mr. Phoni Bora, Farmer Representative, Burakurti Gaon 22. Mr. Girin Chetia, Director, NEADS(NGO), Dhekiakhowa, Jorhat. 23. Mr. Kirti Bordoloi, AIR, Jorhat 24. Mr. Prasanta Kr. Dutta, AIR, Jorhat 25. Mr. Keshav Ch. Bora, DI&CC, Jorhat 26. Mr. Rajib Kr. Kalita, RFRI, Jorhat 27. Mr. Sankar Baruah, District Fishery Development Office, Jorhat 28. Mr. Keshav Ch. Barua, Jorhat Soil Conservation Division 29. Mr. Chandan Sarmah, SIPRD, Jorhat</p> | | <p>Action 6. House suggested to develop a Khaki Campbell duck village Action taken : It is yet to be done due to non availability of breed Action 7. House suggested to conduct vocational training for skill development Action taken : 4 vocational trainings have already been conducted. Action 8. The House emphasized on the need of attending the ADO meet organised by DAO, Jorhat. Action taken : It was done and will be continued in future also. Action 9. Considering the importance of the sericulture in the Jorhat District, the house suggested to take demonstration on high foliage castor variety Action taken : It could not be done due to mass transfer of SMSs and will be done this year</p> |
|--|--|--|--|

** Attach a copy of SAC proceedings along with list of participants*

Proceeding of 7th Scientific Advisory Committee (SAC) Meeting of Krishi Vigyan Kendra, Jorhat, 2018-19

Date: 26/03/2019

Chairman: Dr. H. C. Bhattacharya, Director of Extension Education, AAU, Jorhat.

Venue: Conference Hall, Directorate of Extension Education, AAU, Jorhat

Rapporteurs: Mr. S. R. Borah, Mr. S. Bhattacharyya, Mr. R. Kalita, Ms. S. Gohain

The 7th Scientific Advisory Committee (SAC) meeting of KVK, Jorhat was held in the Conference Hall of the Directorate of Extension Education, AAU, Jorhat on 26th of March, 2019 under the Chairmanship of Hon'ble Vice Chancellor, AAU, Jorhat. At the outset, Dr. P. Nath, Head of KVK, Jorhat welcomed the dignitaries present followed by felicitation.

The Action Taken Report for the year 2017-18 and Progress Report of 2018-19 were presented by the Head, KVK and suggestions from the house were as follows:

1. Popularisation of high foliage castor variety, NBR -1 was not done during 2018-19 and will be undertaken during 2019-20 in collaboration with CMER&TI, Lahdoigarh.
2. Jorhat district is to be developed as model one in association with the all stalk holders combining all components of improved farming like improved seed, suitable varieties, irrigation and suitable production technologies.
3. Bari System of cultivation is to be developed with the inclusion of medicinal plants.
4. Two Schedule Cast (SC) villages are to be promoted for piglet production under SC Fund scheme. The house also suggested selecting 10 new farmers and promotes them to be progressive one by helping them in the aspects like-skill training, resources mobilization etc.
5. In case of OFT on Joha rice, closer spacing can be done at 15x 20 cm
6. In case of the OFT on small potato tuber production, it was suggested for early planting to get better production.
7. In case of OFT on Bhut Jalakia, the package on plant protection measures should be revisited and the KVK was suggested to contact the Department of Plant Pathology, AAU, Jorhat.
8. KVK should do the needful to promote the most promising hardy crop lathyrus by increasing the area coverage.

Then the Action Plan for the year 2019-20 was presented for discussion.

1. Discussing on the proposed Action Plan 2019-20, the house suggested to promote pulse crop as relay with rice. The technology developed by RARS, Shillongoni on the system may be followed.
2. The proposed OFTs on Poultry breed Kadaknath, rearing of Rabbit for meat purpose and cooking quality of black rice was advised to be dropped. One of the FLDs on Pumpkin variety Arjuna F₁ was also suggested to drop.
3. Further, the house suggested to demonstrate rice-rabi pulse and other vegetable crop sequence in the KVK farm.
4. Popularization Bor Keseru plantation to promote Eri rearing in the district, a radio talk may be arranged in All India Radio, Jorhat for awareness.
5. Training on Japanese quail, is to be arranged in which Mrs. Rekha Bora, a progressive lady farmer is to be invited.

The Chairman put forwarded the following points to be executed -

1. To create a farmers data base of the areas under each crops of the district.
2. A research programme may be undertaken to solve the germination problem of Bhut Jalakia seed during storage which may be forwarded to the Department of Seed Science and Technology, AAU, Jorhat – 13.
3. KVK, Jorhat is asked to prepare a proposal to support Mr. Nabanidhi Gogoi, a progressive pig farmer of Boloma to produce improved breeds of piglet in public –private partnership (PPP) mode to meet the short supply of piglets in the SC villages.

4. A team of experts comprising professionals from NERIWALM, Department of Agriculture Engineering and Dr. Romoni Thakuria from AICRP on Water Management, AAU, Jorhat is suggested to visit the flood affected area of Teok and prepare a blue print for water shade management.

The meeting was ended with vote of thanks from Mr Ramen Kalita, Farm Manager, KVK Jorhat.

Members Present:

| Sl. No. | Name and Designation of members |
|---------|--|
| 1. | Dr. K. M. Bujarbaruah, Vice Chancellor, AAU, Jorhat, Chairman. |
| 2. | Dr. P.K. Pathak, Director of Extension Education, AAU, Jorhat. |
| 3 | Dr. A. Bhattacharyya, Director of Research (Agri), AAU, Jorhat |
| 4 | Dr. Tamizuddin Ahmed, Chief Scientist, RARS, Titabor |
| 5 | Dr. M. Neog, Assoc. Director of Extension Education (T), AAU, Jorhat |
| 6 | Dr. R. K.Saud, Assoc. Director of Extension Education (P&I), AAU, Jorhat |
| 7 | Dr. P. Nath, Head, KVK, Jorhat |
| 8 | Dr. U. Goswami, Senior Extension Specialist, DoEE, AAU, Jorhat |
| 9 | Dr. M. K. Sarmah, Senior Extension Specialist, DoEE, AAU, Jorhat |
| 10 | Mr. R. J. Borah, Junior Extension Specialist, DoEE, AAU, Jorhat |
| 11 | Mr. Samir Bordoloi, Gen. Secretary, SPREAD, NE |
| 12 | Mr. Janardan Baruah, Govt. Sericulture Farm, Titabor |
| 13 | Mr. Umananda Raj Borah, President, KASS Jorhat |
| 14 | Mr. Bipul Borah, Secretary, KASS Jorhat |
| 15 | Mr. Dipak Bordoloi, Social Forestry, Jorhat Range |
| 16 | Mr. Balindra Nath Chetia, Asstt. Director of Agriculture, Jorhat |
| 17 | Dr. Bhupen Das, District AH & Veterinary Officer, Jorhat |
| 18 | Mr. Atul Kr. Baruah, Asstt. Agril. Engineer, Jorhat |
| 19 | Mrs. Rekha Bora, Farmer Representative, Pirakata Bharalua Gaon |
| 20 | Mr. Nabanidhi Gogoi, Farmer Representative, Boloma Moran Gaon |
| 21 | Mr. Phoni Bora, Farmer Representative, Burakurti Gaon |
| 22 | Mr. Girin Chetia, Director, NEADS(NGO), Dhekiakhowa, Jorhat. |
| 23 | Mr. Kirti Bordoloi, AIR, Jorhat |
| 24 | Mr. Prasanta Kr. Dutta, AIR, Jorhat |
| 25 | Mr. Keshav Ch. Bora, DI&CC, Jorhat |
| 26 | Mr. Rajib Kr. Kalita, RFRI, Jorhat |
| 27 | Mr. Sankar Baruah, District Fishery Development Office, Jorhat |
| 28 | Mr. Keshav Ch. Barua, Jorhat Soil Conservation Division |
| 29 | Mr. Chandan Sarmah, SIPRD, Jorhat |

2. DETAILS OF DISTRICT

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

| Sl. No | Farming system/enterprises |
|--------|---|
| 1. | Agri – Horti – Animal husbandry – Fishery |
| 2. | Agri – Horti – Animal husbandry |
| 3. | Agri – Horti – Fishery |
| 4 | Agri – Horti |

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

| Sl. No | Agro-climatic Zone | Characteristics |
|--------|-------------------------------|--|
| 1 | Upper Brahmaputra Valley Zone | The Upper Brahmaputra Valley Agro-climatic Zone is characterized by the existence of hills, high land, plain land and char areas. Soils of this zone consist of mostly recent immature alluvium in char areas to mature ultisol in the piedmont, high land and hilly areas in the southern part. These soils fall under Entisol order. Annual rainfall varies from 1,200 mm to 2,400 mm. The temperature of the zone varies from a maximum of 37°C to a minimum of 7°C on an average. The zone, however, shows considerable variation in physiography, climate, soil, flood proneness, socioeconomic condition and cropping patters. Based on these parameters, the zone is further classified into eight Agro-Ecological Situations. Out of them six exist in the district and out of them two are related with forest and tea growing areas. |

2.3 Soil type/s

| Sl. No. | Soil type | Characteristics | Area in ha |
|---------|-----------------|--|------------|
| 1. | Sandy | Contains sand separates 70% or more of the material by weight | 15169 |
| 2. | Sandy loam | Exhibits property in between sandy and loam and contains more sand separates than loam | 89070 |
| 3. | Loam | Contains a mixture of sand, silt and clay particles which exhibit light and heavy properties in about equal proportion | 12491 |
| 4. | Silty clay loam | Contains more silt and clay than loam | 23545 |
| 5. | Clay | Contains atleast 35% of clay separates and in most cases not less than 40% | 12626 |

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

| Sl. No. | Crop | Area (ha) | Production (Qtl) | Productivity (Qtl /ha) |
|---------|--------------|-----------|------------------|------------------------|
| 1. | Autumn paddy | 6450.00 | 161300.00 | 25.00 |
| 2. | Winter paddy | 83100.00 | 2492900.00 | 30.00 |
| 3. | Summer paddy | 2710.00 | 56600.00 | 20.94 |
| 4. | Wheat | 520.00 | 600.00 | 12.00 |
| 5. | Black gram | 2980.00 | 17900.00 | 6.00 |
| 6. | Green gram | 2070.00 | 12400.00 | 6.00 |
| 7. | Pea | 1050.00 | 6200.00 | 5.94 |
| 8. | Lentil | 520.00 | 2700.00 | 5.20 |
| 9. | Mustard | 9390.00 | 80000.00 | 8.50 |
| 10. | Sesame | 220.00 | 1100.00 | 5.20 |
| 11. | Potato | 3110.00 | 298000.00 | 96.00 |
| 12. | Sugarcane | 500.00 | 16700.00 | 33.75 |
| 13. | Ridge gourd | 270.00 | 5000.00 | 18.20 |

| | | | | |
|-----|-------------------|---------|-----------|--------|
| 14. | Pumpkin | 610.00 | 30200.00 | 50.00 |
| 15. | Kharif vegetables | 3600.00 | 310300.00 | 86.20 |
| 16. | Rabi vegetables | 6500.00 | 429900.00 | 66.16 |
| 17. | Garlic | 890.00 | 53400.00 | 60.00 |
| 18. | Ginger | 150.00 | 7800.00 | 52.00 |
| 19. | Areca nut | 3090.00 | 593200.00 | 192.00 |
| 20. | Banana | 3400.00 | 519400.00 | 153.00 |
| 21. | Assam Lemon | 920.00 | 106200.00 | 115.40 |

2.5. Weather data

| Month | Rainfall (mm) | Temperature ° C | | Relative Humidity (%) |
|---------------|------------------|-----------------|---------|-----------------------|
| | | Maximum | Minimum | |
| April' 18 | 111.8 | 29.7 | 19.4 | 69 |
| May' 18 | 226.9 | 30.7 | 22.3 | 76 |
| June' 18 | 399.2 | 32.8 | 25.0 | 81 |
| July' 18 | 275.1 | 33.6 | 25.9 | 84 |
| August' 18 | 361.3 | 33.5 | 25.8 | 83 |
| September' 18 | 340.2 | 32.3 | 24.9 | 85 |
| October' 18 | 17.4 | 29.6 | 20.5 | 82 |
| November' 18 | 32.4 | 26.7 | 14.9 | 81 |
| December' 18 | 29.6 | 24.9 | 10.9 | 71 |
| January' 19 | 24.6 | 24.6 | 09.2 | 58 |
| February' 19 | 36.0 | 24.8 | 12.4 | 66 |
| March' 19 | 77.2 | 27.0 | 15.7 | 65 |

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

| Category | | Population | Production | Productivity | |
|----------------|-------------------|------------|--------------------------|--------------------------------------|----------------------------|
| Cattle | <i>Crossbred</i> | 13126 | 57.70 million lit (Milk) | 236 lit/ animal/ lactation (Average) | |
| | <i>Indigenous</i> | 474886 | | | |
| Buffalo | | 29845 | 0.80 Million lit (Milk) | 180 lt/lactn./period of avg 120 days | |
| Sheep | <i>Crossbred</i> | - | - | - | |
| | <i>Indigenous</i> | 330 | - | - | |
| | Goats | 170793 | 0.425 million kg (Meat) | 8 kg/goat | |
| Pigs | <i>Crossbred</i> | 85625 | 0.25 million kg (Pork) | 55 kg./pig (Average) | |
| | <i>Indigenous</i> | 202797 | | | |
| Poultry | Hens | | 51.0 million nos | 45 nos/ bird/yr (average) | |
| | <i>Desi</i> | 444062 | | | |
| | <i>Improved</i> | 12275 | | | 150 nos/ bird/ yr(average) |
| | Ducks | 190000 | | | 45 nos/ bird/yr (average) |
| | Turkey and others | | | | |

| | Category | Area | Production | Productivity |
|------|---------------|-------------|------------|--------------|
| Fish | | | | |
| | <i>Marine</i> | | | |
| | <i>Inland</i> | 43553.49 ha | 10468.68 t | 0.24 t/ha |

Note: Pl. provide the appropriate Unit against each enterprise

2.7 Details of Operational area / Villages of Jorhat & Majuli District (2018-19)

| Sl. No. | Taluk | Name of the block | Name of the village | Major crops & enterprises | Major problem identified | Identified thrust area |
|---------|---------|-----------------------|--|--|--|---|
| 1 | Teok | Kaliapani | Boloma Moran Gaon | Vegetables Poultry, Piggery | 1. Unawareness about scientific crop production 2. Nematode infestation in cucurbitaceous vegetables 3. Low participation of women in agriculture 4. Poor growth rate of indigenous pigs | 1. ICM 2. Processing and value addition 3. Entrepreneurship development 4. Women empowerment 5. IPM |
| 2 | Kakojan | Sipahikhola | Fesual - II | Vegetable, Dairy, rice, fishery, duckery | 1. Lack of scientific knowledge in crop production especially for vegetables 2. Lack of organized milk market 3. Lack of knowledge about management of group 4. Lack of knowledge and skill on scientific fish rearing | 1. ICM and IPM on vegetables 2. Group marketing 3. Integrated livestock production and management 4. Group mobilization 5. Training on commercial poultry farming |
| 3 | Garmur | Kamalabari, Majuli | Mahkinagaon, Borbari gaon, Bhakat Chapori, Na Hatra, Birina Bari | Toria, vegetables, sugarcane, rice | 1. Lack of HYV of rapeseed 2. Lack of awareness about water management 3. Unorganized market 4. Infestation of white grub in vegetable crops 5. Lack of knowledge about scientific cultivation of kharif pulse and oilseed | 1. Introduction of newly released variety 2. Integrated crop management 3. IPM for vegetables 3. Marketing |
| 4 | Garmur | Kamalabari, Majuli | 1 no Borgoain, Borgoain Marituni | Piggery, Poultry, Assam Lemon, | 1. Poor growth rate of indigenous pigs 2. Lack of knowledge about scientific poultry farming 3. Lack of knowledge about scientific cultivation of hybrid lemon | 1. Introduction of newly released variety 2. Group mobilization 3. Capacity building |
| 5 | Teok | Kaliapani | Tipomia village | Mushroom, Bhut Jalakia | 1. Lack of scientific knowledge in crop production especially for vegetables 2. Lack of knowledge about commercial mushroom production. | |

| | | | | | | |
|----|------------|-----------|----------------------------|-------------------------------------|---|--|
| 6 | Lahing | Selenghat | Siram Missing gaon | Rice, piggery, poultry | <ol style="list-style-type: none"> 1. Low yield of local rice variety 2. Lack of knowledge about cultivation practices of HYV Sali rice. 3. Problem of water stagnation during planting period 3. Poor growth of pig 4 Incidence of diseases of poultry and pig 5. Lack of knowledge of farm women about livestock management | <ol style="list-style-type: none"> 1. Introduction of HYV of sali rice 2. ICM and IPM 3 Integrated livestock management 4. Integrated poultry management 5. Women empowerment |
| 7 | Koliapani | | Tamuli Goan | Vegetables, rice, Piggery, Poultry | <ol style="list-style-type: none"> 1. Lack of knowledge on management practices of vegetables 2. Low production of fruits 3. Low performance of desi poultry birds | <ol style="list-style-type: none"> 1. ICM and IPM of fruits and vegetables 2. Integrated poultry farming 3. Mobilization of CIG |
| 8 | Lahing | Selenghat | Changmaigaon, Adarsha gaon | Tea, piggery and poultry | <ol style="list-style-type: none"> 1. Non availability of scented Sali HYV 2. Low production of local scented varieties | <ol style="list-style-type: none"> 1. Introduction of scented HYV of Sali rice |
| 9 | Lahing | Selenghat | Haloapathar | Rice, rabi Vegetables, potato | <ol style="list-style-type: none"> 1. Lack of knowledge about scientific cultivation of high value vegetables 2. Non availability of quality seeds and planting material | <ol style="list-style-type: none"> 1. ICM and IPM for high value vegetables 2. Group mobilization 3. Entrepreneurship development |
| 10 | Teok | Kaliapani | Kaowimari | Rice, fishery, vegetable, livestock | <ol style="list-style-type: none"> 1. Monocropping 2. Low yield of available rice varieties 3. Lack of scientific knowledge about natural fish farming | <ol style="list-style-type: none"> 1. Group mobilization 2. Wasteland utilization through boro rice cultivation and community fish farming |
| 11 | Lahing | Selenghat | Tengabari | Sali rice, vegetable, livestock | <ol style="list-style-type: none"> 1. High incidence of pests and diseases of vegetables 2. Lack of knowledge on judicious application of pesticides 3. Lack of knowledge on scientific cultivation of high value vegetables | <ol style="list-style-type: none"> 1. ICM and IPM of vegetables 2. Production of quality paddy seeds 3. Popularization of high value vegetables |
| 12 | Lahing | Selenghat | Kathalbari | Vegetables | <ol style="list-style-type: none"> 1. Low productivity, Water scarcity during winter | <ol style="list-style-type: none"> 1. Introduction of integrated crop management |
| 13 | Simaluguri | Kaliapani | Kaliapani gohaingaon | Banana | <ol style="list-style-type: none"> 1. Low productivity, Water scarcity during winter | <ol style="list-style-type: none"> 1. Introduction of integrated crop management |

| | | | | | | |
|----|-------------------|-----------|---|---|--|--|
| 14 | Simaluguri | Kaliapani | Marijhanji, Khanamukh | Vegetable cultivation | 1. Lack of quality planting material 2. Low yield | 1. Production of quality planting material |
| 15 | Amguri Kharikatia | Titabar | Dangdhora, No Selauria, Bampathar, Dihingia | Assam Lemon, Coconut saplings, Apple Beer, Piggery, Poultry | 1. Low productivity of traditional variety. 2. Unawareness of scientific production technology 3. Unscientific horticultural pocket. 4. Under utilization of natural resources | 1. Organic vegetable and fruit production. 2. Entrepreneurship development for rural youths and farm women. 3. Integrated Nutrient Management. 4. Increasing crop productivity through scientific management 5. Introduction of improved bred of pig and poultry suitable for backyard rearing |
| 16 | Borhola | Titabor | Sodial | Assam Lemon, Coconut saplings, Apple Beer, Piggery, Poultry | 1. Low productivity of traditional variety. 2. Unawareness of scientific production technology 3. Unscientific horticultural pocket. 4. Under utilization of natural resources | 1. Entrepreneurship development for rural youths and farm women. 2. Introduction of improved bred of pig and poultry suitable for backyard rearing |
| 17 | Teok | Koliapani | Tipomia, | Winter and kharif vegetable, Potato, rapeseed, black pepper, banana, goatery, duckery, pine apple | 1. Low productivity of traditional variety. 2. Unawareness of scientific production technology 3. Unscientific horticultural pocket. 4. Under utilization of natural resources. | 1. Organic vegetable and fruit production. 2. Entrepreneurship development for rural youths and farm women. 3. Integrated Nutrient Management. 4. Increasing crop productivity through scientific management 5. Introduction of improved bred of pig and poultry suitable for backyard rearing. 6. IPDM in crop and vegetables. |

| | | | | | | |
|----|-------------|---|--|---|--|---|
| 18 | Kamalabari | Majuli Development Block | Mahkina gaon, Bhakat chapari, Danigaon, Borbarigaon, Gormur, Kamalabari, Gormur, Na hatra, Birina Bari | Sali rice, rapeseed & mustard, rabi vegetables, potato, garlic, apiary piggery, fish production | <ol style="list-style-type: none"> 1. Low crop productivity 2. Unawareness of scientific production technology 3. Pest and disease incidence especially in vegetables 4. Injudicious use of pesticides 5. Traditional low productive pig, duck poultry production. 6. Lack of management of natural depression for fish production | <ol style="list-style-type: none"> 1. Integrated farming systems 2. Entrepreneurship development for rural youths and farm women. 3. Integrated Nutrient Management. 4. Increasing crop productivity through scientific management 5. Integrated livestock production and management 6. Introduction improved bred of pig, duck and poultry suitable for backyard rearing. 7. IPDM in crop and vegetables. |
| 19 | Fesual | Central Devevelopment Block, Chipahikhola | Fesual No-II goan, Fesual No-I gaon, Holongpara Gohaingaon, Karigaon, Jotokia, Hingipulia | Potato, kharif and rabi vegetables, ginger, banana, Assam lemon, fishery, Goatery, dairy Mushroom | <ol style="list-style-type: none"> 1. Mono cropping 2. Unorganised marketing of Milk, Kharif and Winte vegetable 3. Water scarcity during winter season 4. Lack of awareness about child care and nutrition 5. Pest and disease incidence 6. Injudicious use of chemical pesticides | <ol style="list-style-type: none"> 1. Rain water harvesting 2. Increasing crop productivity through scientific management 3. Orgranised marketing under group approach. 4. Integrated pest and disease management 5. Entrepreneurship development for rural youths 6. Integrated farming systems 7. Women empowerment |
| 20 | Gakhirkhowa | Teok | Kanupukhuri, Dulakharia | Food processing, Union Fabric, Nutritional Garden | <ol style="list-style-type: none"> 1. Low crop productivity 2. Unawareness of scientific production technology 3. Lack of awareness about child care and nutrition | <ol style="list-style-type: none"> 1. Integrated farming systems 2. Entrepreneurship development for rural youths and farm women. |

| | | | | | | |
|----|------------|------------------------------|---|--|---|--|
| 20 | Allengmora | Dhekorgora Development Block | Bahfola, Koriadari, Neolgaon, Loliti, Kolia, Dhudang, Malowkhat | Kharif & Rabi Vegetables, Maize, Piggery | <ol style="list-style-type: none"> 1. Low yielding variety 2. Unawareness of scientific production technology 3. Pest and disease incidence especially in vegetables 4. Injudicious use of pesticides 5. Traditional low productive pig, duck poultry production. 6. Lack of management of natural depression for fish production | <ol style="list-style-type: none"> 1. Integrated pest and disease management on vegetables 2. Group marketing 3. Integrated livestock production and management 4. Integrated farming systems 5. Introduction improved bred of pig, duck and poultry suitable for backyard rearing. 6. Integrated Nutrient Management 7. Production of quality piglets. |
| 21 | Tengabari | Kaliapani | Tengabari | kharif and rabi vegetables, ginger, banana, Assam lemon, poultry, piggery, Mushroom | <ol style="list-style-type: none"> 1. Unawareness about scientific crop production 2. Traditional low productive pig, duck poultry production 3. Injudicious use of pesticides 4. Mono cropping 5. Under utilization of natural resources. | <ol style="list-style-type: none"> 1. Crop intensification 2. ICM and IPM of rice 3. Introduction improved bred of pig, duck and poultry suitable for backyard rearing 4. Production of quality piglets 5. Integrated Nutrient Management |
| 22 | Pirakota | Chipahikhola | Gohaingaon, Dewan Bharalua gaon. | Winter and kharif vegetable, Potato, banana, Assam lemon, fishery, Goatery, dairy, Poultry | <ol style="list-style-type: none"> 1. Low yielding variety 2. Unawareness of scientific production technology 3. Pest and disease incidence especially in vegetables 4. Injudicious use of pesticides 5. Traditional low productive pig, duck poultry production | <ol style="list-style-type: none"> 1. Processing and value addition 2. Entrepreneurship development 3. Women empowerment 4. Integrated Nutrient Management 5. Increasing crop productivity through scientific management |

| | | | | | | |
|----|---------------|-----------|----------------------------------|--|--|--|
| 23 | Khonamuk h | Kaliapani | Gharphaliagaon, charingiagaon | Sali rice, vegetable, livestock ,banana, Assam lemon | 1.Unorganised marketing of Milk, Kharif and Winte vegetable 2. Water scarcity during winter season 3. Lack of awareness about child care and nutrition 4. Pest and disease incidence | 1.Integrated farming systems 2. Introduction improved bred of pig, duck and poultry suitable for backyard rearing. 3. Integrated Nutrient Management 4. Production of quality piglets 5.Group marketing |
|----|---------------|-----------|----------------------------------|--|--|--|

3. TECHNICAL ACHIEVEMENTS

3. A. Details of target and achievements of mandatory activities by KVK during 2018-19

| Discipline | OFT (Technology Assessment and Refinement) | | | | FLD (Oilseeds, Pulses, Maize, Other Crops/Enterprises) | | | |
|------------------|--|-------------|-------------------|-------------|--|-------------|-------------------|-------------|
| | 1 | | | | 2 | | | |
| | Number of OFTs | | Number of Farmers | | Number of FLDs | | Number of Farmers | |
| | Targets | Achievement | Targets | Achievement | Targets | Achievement | Targets | Achievement |
| Agronomy | 1 | 1 | 3 | 3 | 1 | 1 | 5 | 8 |
| Soil Science | 4 | 8 | 12 | 20 | 3 | 3 | 15 | 17 |
| Plant Protection | 4 | 4 | 12 | 12 | 4 | 4 | 20 | 22 |
| Horticulture | 3 | 4 | 9 | 10 | 3 | 2 | 9 | 6 |
| Animal Science | 3 | 3 | 26 | 16 | 3 | 3 | 23 | 23 |
| Home Science | 4 | 4 | 25 | 25 | 2 | 4 | 12 | 23 |
| Total | 19 | 23 | 87 | 86 | 16 | 19 | 84 | 99 |

Note: Target set during last Annual Zonal Workshop

| Training (including sponsored, vocational and other trainings carried under Rainwater Harvesting Unit) | | | | | Extension Activities | | | |
|--|-----------|-------------|------------------------|-------------|----------------------------------|-------------|------------------------|-------------|
| 3 | | | | | 4 | | | |
| Number of Courses | | | Number of Participants | | Number of activities | | Number of participants | |
| Clientele | Targets | Achievement | Targets | Achievement | Targets | Achievement | Targets | Achievement |
| Farmers | 15 | 17 | 375 | 538 | 1969 | 4689 | 5046 | 10288 |
| Rural youth | 2 | 4 | 40 | 111 | | | | |
| Extn.Functionaries | 2 | 3 | 60 | 145 | | | | |
| Total | 19 | 24 | 475 | 795 | 1969 | 4689 | 5046 | 10288 |
| Seed Production (ton.) | | | | | Planting material (Nos. in lakh) | | | |
| 5 | | | | | 6 | | | |
| Target | | Achievement | | | Target | | Achievement | |
| 5.052 | | 2.6035 | | | 0.52 | | 0.51 | |

Note: Target set during last Annual Zonal Workshop

3. B. Abstract of interventions undertaken during 2018-19

| Sl. No | Thrust area | Crop/ Enterprise | Identified problems | Interventions | | | | | |
|--------|---------------------|------------------|---|--|---|-------------------|---|--|--|
| | | | | Title of OFT | Title of FLD | Title of Training | Title of training for extension personnel | Extension activities | Supply of seeds, planting materials etc. |
| 1 | Varietal Evaluation | Paddy | Lack of farmers accepted HY paddy varieties for SDW condition | Performance assessment of newly developed HY <i>sali</i> rice var. LPR 1130 & LPR 1103 under SDW condition | Demonstration of newly developed submergence tolerant rice varieties Ranjit Sub-1 & Bahadur Sub-1 in submerged areas. | - | - | Field visit | Seeds, Fertilizers, Pesticides |
| 2 | Varietal Evaluation | Hybrid Paddy | Poor yield of local varieties | - | Demonstration on Hybrid Paddy variety, Arise 6444-G | - | - | Field visit, Farmer scientist interaction, field day | Seeds, Fertilizers, Pesticides |
| 3 | Organic farming | Paddy | Absence of organic package for premium paddy varieties. | Organic cultivation of high value aromatic rice (Variety-Konjoha) | - | - | - | Field visit, Farmer scientist interaction | Seeds, Bio-Fertilizers, organic plant protection chemicals |

| | | | | | | | | | |
|---|-----|----------------------------|--|---|---|---------------|---|--|--|
| 4 | | Bhut Jolokia (King Chilli) | Absence of organic package for Bhut Jolokia | Assessment of organic Bhut Jolokia cultivation Package | - | - | - | Field visit, Farmer scientist interaction | Seeds, Bio-Fertilizers, organic plant protection chemicals |
| 5 | INM | Black gram | - | - | Biofertilizer supplementation on production performance of kharif black gram (HYV-PU-31) | INM in pulses | - | Field visit, Farmer scientist interaction | Seeds, Bio-Fertilizers, plant protection chemicals |
| 6 | | Lentil | Deterioration of soil health, Non adoption of INM practices in utera cropping of Lentil | INM in Lentil under rice utera condition (Variety-KLS218) | - | - | - | Field visit, Farmer scientist interaction. | Seeds, Bio-fertilizers, Fertilizers, Pesticides |
| 7 | | Lentil | Deterioration of soil health, Non adoption of INM practices in Lentil, 34% soils of Jorhat district are zinc deficient | Effect of biofertilizer and ZnSO4 on the productivity of lentil (Variety-KLS218) | - | - | - | Field visit, Farmer scientist interaction. | Seeds, Bio-fertilizers, Fertilizers, Pesticides |

| | | | | | | | | | |
|----|------------------------------|-----------------|--|---|---|---|---|---|---|
| 8 | | Hybrid Paddy | Non availability of precise site specific fertilizer recommendation in Hybrid rice | “Fertilizer Prescription Equations for Targeted Yield on Hybrid Rice (Variety-US-382) | - | - | - | Field visit | Seeds, Fertilizers, Pesticides |
| 9 | Fertility Management | Toria | Low yield due to poor seed formation | Combined Effect of S and Boron Toria (var. TS-38) | - | - | - | Field visit | Seeds, Fertilizers, Pesticides |
| 10 | Production of organic inputs | Vermicomposting | - | - | Demonstration on Low Cost Vermicompost production Technique | - | - | Field visit, Farmer scientist interaction | Polythene sheet, vermiworm etc. |
| 11 | Integrated crop management | Maize | - | - | Improved cultivation practices in maize | - | - | Field visit, field day | Seeds, Fertilizers, Pesticides |
| 12 | Weed Management | Black gram | High cost of weeding in black gram cultivation | Planting and weed management method for Black gram | - | - | - | Field visit | Seeds, Fertilizers, weedicide, Pesticides |
| 13 | Varietal evaluation | Dolichos | Lack of year round cultivable high yielding varieties | Assessment of Dolichos variety <i>Arka Swagath</i> | - | - | - | Field visit | Seeds, Fertilizers, Pesticides |

| | | | | | | | | | |
|----|----------------------------|--------------|---|--|--|---|---|-------------------------|--------------------------------|
| 14 | | Tomato | Lack of multi disease resistant varieties | Assessment of tomato var. <i>Arka Samrat</i> | - | - | - | Field visit | Seeds, Fertilizers, Pesticides |
| 15 | | Chilli | Lack of viral disease resistant varieties | Assessment of tomato var. <i>Arka Harita</i> | - | - | - | Field visit | Seeds, Fertilizers, Pesticides |
| 16 | Scientific crop production | Pumpkin | - | - | Scientific cultivation of Pumpkin var. <i>Leela</i> | - | - | Field visit, field day | Seeds, Fertilizers, Pesticides |
| 17 | | Marigold | - | - | Scientific cultivation of Marigold var. <i>Pusa Narengi Gainda</i> | - | - | Field visit, field day | Seeds, Fertilizers, Pesticides |
| 18 | | Small potato | No proper planting time maintained | Effect of planting time on small tuber potato variety to improved variety under rainfed condition of Assam | - | - | - | Field visit | Seeds, Fertilizers, Pesticides |
| 19 | Mushroom cultivation | Mushroom | Lack of year round mushroom varieties | - | Year round cultivable paddy straw Mushroom variety <i>Ostrietus - 444</i> | - | - | Field visit , field day | Spwan, Poly bags |

| | | | | | | | | | |
|----|------|-------------|--|--|---|---|---|------------------------|---|
| 20 | IPDM | king chilli | High incidence of viral diseases in <i>king chilli</i> | Management of viral diseases in <i>king chilli</i> | - | - | - | Field visit | Seedlings, mulching materials, insecticides, fungicides |
| 21 | IPM | Okra | Indiscriminate use of chemical pesticides | Biocontrol based IPM module against pests of okra | - | - | - | Field visit | Seeds, yellow sticky card, pheromone trap, neem pesticides |
| 22 | IPM | Potato | Indiscriminate use of chemical pesticides | Management of cutworm (<i>Agrotis ipsilon</i>) in potato | | | | Field visit | Neem oil, Pesticides, Gram bait, jiggery, yeast extract |
| 23 | IPM | Cole crops | Indiscriminate use of chemical pesticides | Biointensive IPM Package for the pests of cole crops | | | | Field Visit | Mustard seeds, T. Chillonis, T. Pieridis, NSKE, yellow sticky traps |
| 24 | IPM | Tomato | - | - | Use of pheromones in controlling tomato fruit borer and brinjal shoot and fruit borer | | - | Field visit, Field Day | Seeds, pheromone trap, neem pesticides |

| | | | | | | | | | |
|----|--------------------|----------------|--|---|---|---|---|------------------------|--|
| 25 | IPM | Rice | - | - | Biological suppression of rice pest(BIPM Package) | | | Field visit, Field day | <i>P.Fluorescence</i> , <i>B.bassiana</i> , <i>T.japanicum</i> , Neem oil, Pheromone trap |
| 26 | Bee keeping | Toria | - | - | European bee keeping (<i>Apis mellifera</i>) in toria | - | - | Field visit, field day | Honeybee hive with live colony |
| 27 | Housing Management | Japanese Quail | Lack of knowlwdge about the diffrent housing system | Productive assessment of Japanese Quail in different housing system (Cage and Litter) | - | - | | Field visit | Japanese Quail |
| 28 | Breed introduction | Turkey | i. High fat content of poultry meat. ii. Awareness of people for good food and health conciouness. iii. Buying capacity of the general people has increase. iv. Requirement of lean meat. v. Animal protein source for hypertensive and diabetic person. | Productive performance of Turkey for lean meat production in Jorhat district | - | - | - | Field visit | Turkey, Feed |

| | | | | | | | | | |
|----|---------------------|---------------------------|--|---|--|---|---|--------------------------|-----------------|
| 29 | Breed Introduction | Vigova Super broiler duck | - | - | Demonstration on productive performance of Vigova Super broiler duck | - | - | Field visit, field day | Duck |
| 30 | Health care | Pigs | - | - | Demonstration of Area Specific mineral mixture (AAUVETMIN) supplementation during flushing and gestation in pigs | Necessity of mineral mixture supplementation in pig | - | Field day | Mineral mixture |
| 31 | Protective clothing | Women friendly tools | Unavailability of proper dress during performing Agricultural work | Uses of Protective clothing for Agricultural activities performed by farm women | - | - | - | Technology demonstration | - |
| 32 | Seed Stripper | Drudgery reduction | Non appropriate agricultural tools for seed collection | On Farm Testing on the Efficiency of women friendly Seed Stripper | - | - | - | Technology demonstration | - |
| 33 | Value addition | Vegetable preservation | Wastage of excessively produced vegetables | Assessment of fermentation based low cost vegetable preservation technique | - | Value addition of underutilized fruits and vegetables | - | Technology demonstration | - |
| 34 | Union Fabric | Value addition | | Construction of Union Fabric | - | - | - | Technology demonstration | - |

| | | | | | | | | | |
|----|-----------------------|------------------------------|---|---|--|---|---|----------------------|-----------|
| 35 | Natural dye | Cotton, silk and wool fabric | - | - | Demonstration on improved colour fastness on cotton, silk and wool fabric with natural dye | Uses of natural dye to cotton, silk and wool fabric | - | Method demonstration | - |
| 36 | Fruit harvester | Fruit crops | - | - | Demonstration on uses of Fruit Harvester | - | - | Method demonstration | Harvester |
| 37 | Vegetable plucker | Drudgery reduction | - | - | Demonstration on women friendly vegetable plucker | - | - | Method demonstration | Plucker |
| 38 | Nutritional Gardening | Vegetables | - | - | Establishment of Nutritional Gardening for nutritional security | - | - | Field visit | - |

3.1 Achievements on technologies assessed and refined during 2018-19

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

| Thematic areas | Cereals | Oilseeds | Pulses | Commercial Crops | Vegetables | Fruits | Flower | Fodder | Protective clothing | Vermicompost | TOTAL |
|----------------------|---------|----------|--------|------------------|------------|--------|--------|--------|---------------------|--------------|-------|
| Varietal Evaluation | 1 | - | - | - | 3 | - | - | - | - | - | 4 |
| ICM | - | - | - | - | 1 | - | - | - | - | - | 1 |
| INM | - | - | 3 | - | - | - | - | - | - | - | 3 |
| Fertility management | - | 1 | - | - | - | - | - | - | - | - | 1 |
| IWM | - | - | 1 | - | - | - | - | - | - | - | 1 |
| Drudgery reduction | 1 | - | - | - | - | - | - | - | - | - | 1 |

| | | | | | | | | | | | |
|----------------------|----------|----------|----------|----------|-----------|----------|----------|----------|----------|----------|-----------|
| Value addition | - | - | - | - | 2 | - | - | - | - | - | 2 |
| IPM | - | - | - | - | 3 | - | - | - | - | - | 3 |
| IDM | - | - | - | - | 1 | - | - | - | - | - | 1 |
| RCT | - | - | - | - | - | - | - | - | - | - | |
| Women friendly tools | | | - | - | - | - | - | - | 1 | - | 1 |
| Organic management | 1 | - | - | - | 1 | - | - | - | - | 1 | 3 |
| TOTAL | 3 | 1 | 4 | - | 11 | - | - | - | 1 | 1 | 21 |

* Any new technology, which may offer solution to a location specific problem but not tested earlier in a given micro farming situation.

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

| Thematic areas | Cereals | Oilseeds | Pulses | Commercial Crops | Vegetables | Fruits | Flower | Plantation crops | Tuber Crops | TOTAL |
|----------------|---------|----------|--------|------------------|------------|--------|--------|------------------|-------------|-------|
| NIL | | | | | | | | | | |
| TOTAL | - | - | - | - | - | - | - | - | - | - |

* Technology that is refined in collaboration with ICAR/SAU Scientists for improving its effectiveness.

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

| Thematic areas | Cattle | Poultry | Sheep | Goat | Piggery | Rabbitry | Fisheries | TOTAL |
|----------------------|--------|----------|-------|------|----------|----------|-----------|----------|
| Evaluation of Breeds | - | - | - | - | 1 | - | - | 1 |
| Breed introduction | - | 3 | - | - | - | - | - | 3 |
| TOTAL | - | 3 | - | - | 1 | - | - | 4 |

A.5. Results of On Farm Testing

| Sl. No. | Title of OFT | Problem Diagnosed | Name of Technology Assessed | Crop/Cropping system/ Enterprise | No. of Trials | Results of Assessment/ Refined | Feedback from the farmer | Feedback to the Researcher | B.C. Ratio (if applicable) |
|----------------------|--|---|--|----------------------------------|-----------------|--------------------------------|--|---|-----------------------------|
| 1 | Performance assessment of newly developed HY <i>sali</i> rice var. LPR 1130 & LPR 1103 under SDW condition | Absence of SDW tolerant HY rice variety | Newly developed HY <i>sali</i> rice var. LPR 1130 & LPR 1103 under SDW condition, Ranjit Sub-1 as (Check) | Winter paddy | 3 | Referred to the table below | Positive response towards the technology | As these varieties are assessed for the first time , hence need further trial at least for 2 years to forward for large scale demonstrations and recommendation | Referred to the table below |
| | | | Variety : LPR 1130 & LPR 1103 under SDW condition, Ranjit Sub-1 as (Check)No. of trials: 03 Location : Charingia gaon, Khonamukh, Kamarkhatual Area: 0.39 ha Date of Sowing : 20.06.18 Date of transplanting: 15.07.18 Date of Harvesting: 21.12.18 Farming situation : Lowland , flood prone, rainfed Flood stress: Recurring flood from early July – early sept. (3 flashes) | Parameters | LPR 1130 | LPR 1103 | Ranjit Sub-1 (Check) | | |
| Plant ht (cm) | 103.7 | 102.45 | | 105.7 | | | | | |
| Effective tiller no. | 11.23 | 10.87 | | 12.85 | | | | | |
| Duration (days) | 152 | 155 | | 152 | | | | | |
| Pest & Disease | Negligible | | | | | | | | |
| Yield (t/ha) | 4.17 | 4.05 | | 5.32 | | | | | |
| Gross cost (Rs/ha) | 23760 | 23760 | | 27100 | | | | | |
| Gross return Rs/ha) | 56295 | 54675 | | 71820 | | | | | |
| Net return (Rs/ha) | 32535 | 30915 | | 44720 | | | | | |
| B:C Ratio | 1.37 | 1.30 | | 1.65 | | | | | |

| Sl. No. | Title of OFT | Problem Diagnosed | Name of Technology Assessed | Crop/Cropping system/ Enterprise | No. of Trials | Results of Assessment/ Refined | Feedback from the farmer | Feedback to the Researcher | B.C . Ratio (if applicable) |
|---------|--|---|--|----------------------------------|-----------------------|--------------------------------|--|---|-----------------------------|
| 2 | Organic cultivation of high value aromatic rice var. Konjoha | Absence of organic package for premium paddy varieties. | 1. Enriched compost @ 5 t/ha + Biofertilizer (Azospirillum, Azotobacter, PSB) as seedling root dip. 2. Plant Protection Measures : Pheromone traps + Trichocard + Neem based pesticides | Organic cultivation | 4 | Referred to the table below | Positive response towards the technology | As the technology is assessed for two years , hence may be go for large scale demonstrations and recommendation | Referred to the table below |
| | | | Variety : Konjoha Area : 0.65 ha Location: Khonamukh Gharfalia, Grazing Chapori, , Mohkina, Majuli. | | Results | | | | |
| | | | | | Parameters | Treatment | Farmers practice | | |
| | | | | | Date of Sowing | 30.06.18 | 30.06.18 | | |
| | | | | | Date of Transplanting | 29.07.18 | 29.07.18 | | |
| | | | | | Date of Harvesting | 10.12.18 | 10.12.18 | | |
| | | | | | Plant height (cm) | 94.8 | 91.7 | | |
| | | | | | Av. Yield (t/ha) | 2.51 | 2.12 | | |
| | | | | | % increase over FP | 18.40 % | - | | |
| | | | | | Gross cost | 22260 | 21570 | | |
| | | | | | Gross return | 45180 | 38160 | | |
| | | | | | Net return | 22920 | 16590 | | |
| | | | | | B:C Ratio | 2.02 | 1.76 | | |

| Sl. No. | Title of OFT | Problem Diagnosed | Name of Technology Assessed | Crop/Cropping system/ Enterprise | No. of Trials | Results of Assessment/ Refined | Feedback from the farmer | Feedback to the Researcher | B.C . Ratio (if applicable) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|--|---|----------------------------------|---------------|--------------------------------|--|---|-----------------------------|---|---------|--|--|------------|-------------|-------------|----------------|--|--|-------------------|------|------|----------------------|------|------|------------------|------|------|--------------|-------|-------|----------------------|-------|-------|--------------------|-------|-------|--------------------|-------|-------|-----------|------|------|
| 3 | INM in Lentil under rice utera condition | Deterioration of soil health, Non adoption of INM practices. | T1: Application of 5: 13 kg N : P ₂ O ₅ /ha at lentil sowing(10-15 days after flowering of winter rice when soil is moist) + 5: 13:15 kg N : P ₂ O ₅ : K ₂ O/ha at rice harvest + seed inoculation with <i>Rhizobium</i> & PSB @ 50 g/kg of seed T2: Two sprays of 2 % urea at branching and pod initiation stages) (Source of Technology: AAU, RARS, Shillongani) | Lentil | 3 | Referred to the table below | Positive response towards the technology | As the technology is assessed for two years, hence may be go for demonstrations | Referred to the table below | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | <table border="1"> <tr> <td rowspan="10"> Variety : KLS-218 Area : 0.39 ha Location: Namkatani, Birinabari, Na-Satra Farming Situation: Rain fed </td> <td colspan="3">Results</td> </tr> <tr> <td>Parameters</td> <td>Treatment-1</td> <td>Treatment-2</td> </tr> <tr> <td>Date of Sowing</td> <td colspan="2">15th Nov to 19th Nov, 2018</td> </tr> <tr> <td>Plant height (cm)</td> <td>57.7</td> <td>58.7</td> </tr> <tr> <td>No of branches/plant</td> <td>19.7</td> <td>18.2</td> </tr> <tr> <td>No of Pod/ plant</td> <td>33.6</td> <td>33.1</td> </tr> <tr> <td>Yield (t/ha)</td> <td>0.731</td> <td>0.670</td> </tr> <tr> <td>Gross return (Rs/ha)</td> <td>58480</td> <td>53600</td> </tr> <tr> <td>Gross cost (Rs/ha)</td> <td>25050</td> <td>24170</td> </tr> <tr> <td>Net return (Rs/ha)</td> <td>33430</td> <td>29430</td> </tr> <tr> <td>B:C ratio</td> <td>2.33</td> <td>2.20</td> </tr> </table> | | | | | | | Variety : KLS-218 Area : 0.39 ha Location: Namkatani, Birinabari, Na-Satra Farming Situation: Rain fed | Results | | | Parameters | Treatment-1 | Treatment-2 | Date of Sowing | 15 th Nov to 19 th Nov, 2018 | | Plant height (cm) | 57.7 | 58.7 | No of branches/plant | 19.7 | 18.2 | No of Pod/ plant | 33.6 | 33.1 | Yield (t/ha) | 0.731 | 0.670 | Gross return (Rs/ha) | 58480 | 53600 | Gross cost (Rs/ha) | 25050 | 24170 | Net return (Rs/ha) | 33430 | 29430 | B:C ratio | 2.33 | 2.20 |
| Variety : KLS-218 Area : 0.39 ha Location: Namkatani, Birinabari, Na-Satra Farming Situation: Rain fed | Results | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Parameters | Treatment-1 | Treatment-2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Date of Sowing | 15 th Nov to 19 th Nov, 2018 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Plant height (cm) | 57.7 | 58.7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | No of branches/plant | 19.7 | 18.2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | No of Pod/ plant | 33.6 | 33.1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Yield (t/ha) | 0.731 | 0.670 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Gross return (Rs/ha) | 58480 | 53600 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Gross cost (Rs/ha) | 25050 | 24170 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Net return (Rs/ha) | 33430 | 29430 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B:C ratio | 2.33 | 2.20 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Sl. No | Title of OFT | Problem Diagnosed | Name of Technology Assessed | Crop/Cropping system/ Enterprise | No. of Trials | Results of Assessment/ Refined | Feedback from the farmer | Feedback to the Researcher | B.C . Ratio (if applicable) |
|--------|---|---|---|----------------------------------|---------------|--------------------------------|--|---|-----------------------------|
| 4 | Effect of biofertilizer and ZnSO ₄ on the productivity of lentil (Variety- KLS218) | Deterioration of soil health, 34% soils of Jorhat district are zinc deficient . | T ₁ : Seed inoculation with <i>Rhizobium</i> & PSB each @ 50 g/kg of seed + 0.5 kg Amonium Molybdate/ha (Soil application) + 10: 26:15 kg N: P ₂ O ₅ : K ₂ O/ha T ₂ : Seed inoculation with <i>Rhizobium</i> & PSB each @ 50 g/kg of seed + 20Kg Zn SO ₄ (Soil application) + 10: 26:15 kg N : P ₂ O ₅ : K ₂ O/ha T ₃ (Farmers practice): Recommended dose- 15 kg N, 35 kg P ₂ O ₅ , 15 kg K ₂ O/ha (Source of Technology: AAU, RARS, Shillongani) | Lentil | 3 | Referred to the table below | Positive response towards the technology | As the results from the technology is encouraging, hence may be go for demonstrations . | Referred to the table below |

| | | | | |
|---|----------------------|--|-----------------------------|-----------------------------|
| Variety : Moitree Area : 0.39 ha Location: Namkatani, Birinabari, Na-Satra Farming Situation: Rain fed | Results | | | |
| | Parameters | Treat.-1 | Treat.-2 | Treat.-2 |
| | Date of Sowing | 15 th Nov to 19 th Nov, 2018 | | |
| | Plant height (cm) | 62.5 | 63.2 | 58.7 |
| | No of branches/plant | 23.7 | 25.7 | 18.2 |
| | No of Pod/ plant | 43.6 | 45.9 | 33.1 |
| | Yield (t/ha) | 0.72 | 0.77 | 0.74 |
| | Gross return (Rs/ha) | 57600 | 61600 | 59200 |
| | Gross cost (Rs/ha) | 26800 | 26200 | 25650 |
| | Net return (Rs/ha) | 30800 | 35400 | 33550 |
| B:C ratio | 2.14 | 2.35 | 2.30 | |
| Soil Parameters | | | | |
| Parameters | Initial | Treat.-1 (Final) | Treat.-2 (Final) | Treat.-3 (Final) |
| pH (1:2.5) | 6.6 | 6.5 | 6.6 | 6.6 |
| OC(%) | 0.58 | 0.58 | 0.59 | 0.58 |
| Av. N (kg ha ⁻¹) | 248 | 252 | 255 | 253 |
| Av. P (kg ha ⁻¹) | 21.98 | 22 | 22 | 23.5 |
| Av. Zinc (ppm) | 0.45 | 0.44 | 0.52 | 0.45 |
| Av. K (kg ha ⁻¹) | 195 | 196 | 195 | 196 |

| Sl. No. | Title of OFT | Problem Diagnosed | Name of Technology Assessed | Crop/Cropping system/ Enterprise | No. of Trials | Results of Assessment/ Refined | Feedback from the farmer | Feedback to the Researcher | B.C . Ratio (if applicable) |
|---------|---|--|---|---|---|--------------------------------|--------------------------|---|-----------------------------|
| 5 | Assessment of organic <i>Bhut Jolokia</i> cultivation package | Absence of Organic package for <i>Bhut Jolokia</i> | 1. Enriched compost @ 10 t/ha or Compost @ 10 t/ha + biofertilizer (Azospirillum and PSB) (Ordinary compost primed with Azo, + PSB, @ 1% adjusted with 1% RP as P, cure for 15-20 d Plant protection measures : 1. Planting of maize plants as border crop, 2. Use of yellow sticky card for aphids @ 20 traps/bigha, 3. Application of neem based pesticides at 10 days interval 4. Use of Bordeaux mixture for control of fungal disease (Source of Technology AAU) | Organic Bhut Jolokia | 3 | Referred to the table below | In progress | Incidence of Disease in all the locations. Need to revisit the plant protection package | In progress |
| | | | Variety : Bhut Jolokia Location : Tulshijan, Pohumora, Bamunpukhuri No of Trial : 03 Area : 0.13 ha Farming Situation: Rain fed | Results | | | | | |
| | | Parameters | | Treatment | Farmers practice | | | | |
| | | 1. Nutrient Status (Initial) | | pH-5.35, %, OC-0.95 Av. N-365 kg/ha, Av. P ₂ O ₅ -29.75 kg/ha Av. K ₂ O-112.50kg/ha | pH-5.35, %, OC-0.95 Av. N-365 kg/ha, Av. P ₂ O ₅ -29.75 kg/ha Av. K ₂ O-112.50kg/ha | | | | |
| | | 2. Plant height(cm) | | 125.0 | 110.0 | | | | |
| | | 3. No. primary branches | | 12.0 | 11.0 | | | | |
| | | 4. Days to 50% flowering | | 107 d | 105 d | | | | |
| | | 5. Yield/ha | | In Progress | | In Progress | | | |
| | | 6. Nutrient status(post) | | | | | | | |
| | | 7. B:C ratio | | | | | | | |

| Sl. No. | Title of OFT | Problem Diagnosed | Name of Technology Assessed | Crop/Cropping system/ Enterprise | No. of Trials | Results of Assessment/ Refined | Feedback from the farmer | Feedback to the Researcher | B.C . Ratio (if applicable) |
|---------|--|--|---|----------------------------------|---------------|--------------------------------|--|---|-----------------------------|
| 6 | Fertilizer Prescription Equations for Targeted Yield on Hybrid Rice (Variety-US-382) | Non availability of precise site specific fertilizer recommendation in Hybrid rice | Fertilizer recommendation based on soil test report T1=Targeted Yield 60 q/ha-Inorganic (Only N, P and K fertilizer (Urea, SSP and MOP) based on soil test values) T2= Targeted Yield 60 q/ha-IPNS test value (N, P and K fertilizer (Urea, SSP and MOP) based on soil test values + Vermicompost @ 2t/ha. Amount of N, P and K fertilizer will be adjusted after analysis of initial soil and FYM sample.) | Winter Paddy | 2 | Referred to the table below | Positive response towards the technology | Soil testing facility has to be made available to all farmers at doorstep & at affordable cost. | Referred to the table below |

| Variety : US-382 Location : Boloma, Pirakata No of Trial : 02 Area : 0.26 ha Farming Situation: Rain fed | Results | | |
|--|----------------|-------------|-------------|
| | Parameters | Treatment-1 | Treatment-2 |
| | Land situation | Medium land | Medium land |
| | Yield | 6.2 t/ha | 6.6 t/ha |
| | Gross cost | 28900 | 30100 |
| | Gross return | 62000 | 66000 |
| | Net return | 21700 | 22500 |
| | B.C Ratio | 2.14 | 2.19 |

| Targeted Yield Equations (NPK + IPNS) for hybrid rice | | | | |
|---|------|-----|---|------------------------|
| FN = | 4.08 | * T | - | 0.75 * STVN - 0.59 * M |
| FP = | 1.39 | * T | - | 2.57 * STVP - 0.37 * M |
| FK = | 4.17 | * T | - | 1.15 * STVK - 0.58 * M |

| Sl. No. | Title of OFT | Problem Diagnosed | Name of Technology Assessed | Crop/Cropping system/ Enterprise | No. of Trials | Results of Assessment/ Refined | Feedback from the farmer | Feedback to the Researcher | B.C . Ratio (if applicable) |
|---------|---|-----------------------------------|--|----------------------------------|---------------|--------------------------------|--|--|-----------------------------|
| 7 | Combined Effect of S and Boron Toria (var. TS-38) | Low yield and poor seed formation | T1:11 kg SSP as S source + 950 g Borax as Boron Source + R.D. NPK (5 kg urea, 3 kg DAP, 1.5 kg MOP per half bigha plot) T2: RDF | Toria | 3 | Referred to the table below | Positive response towards the technology | As the technology is assessed for the first years, hence need further trial for large scale demonstrations and recommendation. | Referred to the table below |

| Variety : TS-38 Location : Mohkina, No-1 Borgoyan, Birinabari No of Trial : 03 Area : 0.39 ha Farming Situation: Rain fed | Results | | |
|--|-----------------------|-----------|------------------|
| | Parameters | Treatment | Farmers practice |
| | Plant height (cm) | 95.0 | 82.0 |
| | No. of branches/plant | 12 | 9.8 |
| | No. of siliqua/plant | 245 | 182 |
| | No. of seed/siliqua | 22 | 19.8 |
| | Yield (q/ha) | 9.8 | 7.4 |
| | % increase over FP | 32% | - |
| | B:C | 1.91 | 1.64 |

| Sl. No. | Title of OFT | Problem Diagnosed | Name of Technology Assessed | Crop/Cropping system/ Enterprise | No. of Trials | Results of Assessment/ Refined | Feedback from the farmer | Feedback to the Researcher | B.C . Ratio (if applicable) |
|---------|--|--|---|----------------------------------|---------------|--------------------------------|--------------------------|---|-----------------------------|
| 8 | Planting and weed management method for Black gram | High cost of weeding in black gram cultivation | Planting & weed management method for blackgram T1=raised bed planting using tractor drawn raised bed planter and pedimethalin 1.0 kg /ha as pre-emergence + hand weeding at 25-30 | Blackgram | 1 | Referred to the table below | - | Chemical method of weed control reduces cost of mandys for weeding and cost of cultivation. | Referred to the table below |

| | | | | | | | | |
|--|--|--|--|----------------------------------|--|--------------------|--|--|
| | | | DAS T2=Farmers practice-flat bed line sowing | | | | | |
| | | | Variety : PU-31 Location : KVK, Jorhat farm No of Trial : 01 Area : 0.13 ha Farming Situation: Irrigated | Results | | | | |
| | | | | Parameters | Treatment 1 | Treatment 2 | | |
| | | | | Plant height | 56.7 cm | 54.2cm | | |
| | | | | No of branches/ plant | 10 | 9 | | |
| | | | | Prominent weed species | <i>Chenopodium album, Ageratum conyzoides</i> <i>Cynodon dactylon, Cyparus rotundus</i> | | | |
| | | | | Weed population per square metre | 10.73 | 12.41 | | |
| | | | | Yield (Q/ha) | 5.3 | 5.2 | | |
| | | | | B: C ratio | 1.4 | 1.25 | | |
| | | | | Weed population per square metre | 10.73 | 12.41 | | |

| Sl. No. | Title of OFT | Problem Diagnosed | Name of Technology Assessed | Crop/Cropping system/ Enterprise | No. of Trials | Results of Assessment/ Refined | Feedback from the farmer | Feedback to the Researcher | B.C. Ratio (if applicable) | | | | | | |
|---------|--|--|--|----------------------------------|---------------|--------------------------------|--|--|-----------------------------|--|--|----------------|-------------------|--|--------------------------------------|
| 9 | Assessment of Dolichos variety <i>Arka Swagath</i> | Lack of year round cultivable high yielding varieties of Dolichos bean | Dolichos variety <i>Arka Swagath</i> (pole type) | Dolichos bean | 3 | Referred to the table below | Positive response towards the technology | As the technology is assessed for the first years , hence need further trial for large scale demonstrations and recommendation | Referred to the table below | | | | | | |
| | | | | | | | | | | Location: Khonamukh, Tipomia, Chelenghat Area: 0.13ha | | | Technology | | Farmers practice (Local Var.) |
| | | | | | | | | | | Parameters | | Results | | | |
| | | | | | | | | | | Plant height | | 2.6 m | 2.1 m | | |
| | | | | | | | | | | No. of beans/plant | | 160 nos. | 142 nos. | | |
| | | | | | | | | | | Yield/ha (t) | | 20.0 | 15.0 | | |
| | | | | | | | | | | B:C ratio | | 2.4:1 | 2.0:1 | | |

| Sl. No. | Title of OFT | Problem Diagnosed | Name of Technology Assessed | Crop/Cropping system/ Enterprise | No. of Trials | Results of Assessment/ Refined | Feedback from the farmer | Feedback to the Researcher | B.C. Ratio (if applicable) |
|---------|--|---|--|----------------------------------|---------------|--------------------------------|--|--|-----------------------------|
| 10 | Assessment of Tomato variety <i>Arka</i> | Lack of multi disease resistant varieties of Tomato | Tomato variety <i>Arka Samrat</i> (triple disease resistant) | Tomato | 3 | Referred to the table below | Positive response towards the technology | As the technology is assessed for the first years , hence need further trial for large scale demonstrations and recommendation | Referred to the table below |

| Sl. No. | Title of OFT | Problem Diagnosed | Name of Technology Assessed | Crop/Cropping system/ Enterprise | No. of Trials | Results of Assessment/ Refined | Feedback from the farmer | Feedback to the Researcher | B.C. Ratio (if applicable) | | | | | | | | | | | | | | | | | | | |
|---|---|---|--|----------------------------------|---------------|--------------------------------|--|--|-----------------------------|--|---------------|--|--|--|--|--|--|--|--|---|------------|--|-------------------------------|------------|---------|--|---------------------|---------|
| | | | | | | | | | | | <i>Samrat</i> | | <table border="1"> <tr> <td rowspan="6">Location: Khonamukh, Morijhanji Area: 0.13ha</td> <th colspan="2">Technology</th> <th>Farmers practice (Local Var.)</th> </tr> <tr> <th>Parameters</th> <th>Results</th> <th></th> </tr> <tr> <td>No. of fruits/plant</td> <td>50 nos.</td> <td>32 nos.</td> </tr> <tr> <td>TLCV, bacterial wilt & early blight</td> <td>Resistant</td> <td>Susceptible</td> </tr> <tr> <td>Yield/ha (t)</td> <td>78.0</td> <td>42.0</td> </tr> <tr> <td>B:C ratio</td> <td>4.9:1</td> <td>3.1:1</td> </tr> </table> | | | | | | | Location: Khonamukh, Morijhanji Area: 0.13ha | Technology | | Farmers practice (Local Var.) | Parameters | Results | | No. of fruits/plant | 50 nos. |
| Location: Khonamukh, Morijhanji Area: 0.13ha | Technology | | Farmers practice (Local Var.) | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Parameters | Results | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | No. of fruits/plant | 50 nos. | 32 nos. | | | | | | | | | | | | | | | | | | | | | | | | | |
| | TLCV, bacterial wilt & early blight | Resistant | Susceptible | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Yield/ha (t) | 78.0 | 42.0 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | B:C ratio | 4.9:1 | 3.1:1 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | Assessment of Chilli variety <i>Arka Harita</i> | Lack of viral disease resistant varieties of Chilli | Chilli variety <i>Arka Harita</i> (powdery mildew and virus resistant) | Chilli | 3 | Referred to the table below | Positive response towards the technology | As the technology is assessed for the first years , hence need further trial for large scale demonstrations and recommendation | Referred to the table below | | | | | | | | | | | | | | | | | | | |

| Sl. No | Title of OFT | Problem Diagnosed | Name of Technology Assessed | Crop/Cropping system/ Enterprise | No. of Trials | Results of Assessment/ Refined | Feedback from the farmer | Feedback to the Researcher | B.C. Ratio (if applicable) |
|-----------|--|------------------------------------|---|----------------------------------|-------------------|----------------------------------|--|--|-----------------------------|
| | | | | | | | | | |
| | | | Location: Khonamukh, Morijhanji Area: 0.13ha | | Technology | | | Farmers practice (Local Var.) | |
| | | | | | | Parameters | Results | | |
| | | | | | | Fruit size | 9 x 0.8 cm | 6 X 0.5 cm | |
| | | | | | | Viral disease and powdery mildew | Resistant | Susceptible | |
| | | | | | | Yield/ha (t) | 32.0 | 8.0 | |
| | | | | | | B:C ratio | 4.1:1 | 2.9:1 | |
| 11 | Effect of planting time on small tuber potato variety to improved variety under rainfed condition of Assam | No proper planting time maintained | Time of planting | Potato | 1 | Referred to the table below | Positive response towards the technology | As the technology is assessed for the first years , hence need further trial for large scale demonstrations and recommendation | Referred to the table below |
| | | | Location: Potiagaon Area: 0.065 ha | | Technology | | | Farmers practice (Local Var.) | |
| | | | | | | Parameters | Results | | |
| | | | | | | Date of planting | 24/10/2018 | 20/11/2018 | |
| | | | | | | Yield/plant | 0.3 kg | 0.2 kg | |
| | | | | | | Yield/ha (t) | 3.0 | 2.0 | |
| | | | | | | B:C ratio | 3.8:1 | 3.2:1 | |

| Sl. No . | Title of OFT | Problem Diagnosed | Name of Technology Assessed | Crop/Cropping system/ Enterprise | No. of Trials | Results of Assessment/ Refined | Feedback from the farmer | Feedback to the Researcher | B.C. Ratio (if applicable) |
|----------|--|---|---|----------------------------------|---------------|--------------------------------|--|--|-----------------------------|
| 12 | Biointensive IPM package for pests of cole crops | Use of Injudicious use of chemical pesticides | Border plantation of mustard crop against DBM Three release of T. Chilonis@ 10,000/ha against DBM and T. Pieridis against P.brassicae at 7 days interval Mechanical collection of larvae of lepidopteran pests Spraying of NSKE or neem based botanicals @ 5ml.lit of water at 10 days interval Use of yellow sticky trap@ 10 traps/bigha | Cole crops | 3 | Referred to the table below | Positive response towards the technology | As the technology is assessed for the first years , hence need further trial for large scale demonstrations and recommendation | Referred to the table below |

| | | | | | | |
|--|--|--|---|--|-----------------|------------------|
| | | | Location: Dekhiakhua, birinabari, kordoiguri, Area/Unit: 0.39 ha, 3 Farmers | Result | | Farmers practice |
| | | | | Parameters | Result | |
| | | | | 1. Lepidopteran pests at 15 days interval on 5 plants/replication | 10 | 16 |
| | | | | 2. No. of aphid at 3 leaves/plant/replication | 5 | 8 |
| | | | | 3. Yield record | 225 q/ha | 188q/ha |
| | | | | 4. B:C Ratio | 5.0 | 3.2 |

| Sl. No. | Title of OFT | Problem Diagnosed | Name of Technology Assessed | Crop/Cropping system/ Enterprise | No. of Trials | Results of Assessment/ Refined | Feedback from the farmer | Feedback to the Researcher | B.C . Ratio (if applicable) |
|---------|--|--|--|----------------------------------|---------------|--------------------------------|--|----------------------------|-----------------------------|
| 13 | Management of cutworm (<i>Agrotis ipsilon</i>) in potato | Injudicious use of chemical pesticides against cutworm | 1. Soil application of Imidacloprid @ 200SL at the time of sowing 2. One spray of NSKE r neem oil @ 5ml/lit of water at 15 days after sowing. 3. Gram Bait 1 st at 25 DAS and 2 nd at 55 DAS | Potato | 3 | Referred to the table below | Positive response towards the technology | Need further Trial | Referred to the table below |

| | | | | | | | | | |
|----|--|--|---|---|---|--|--|---|--|
| | | | | Location: Bamun gaon, Borkhelia, Dhekekiakhua Area/Unit: 0.13 ha Farmers: 3 | | Parameters 1. No. of cutworm infested plants/5 m2 at 15 days interval. 2. No. of trapped insect/bait at 15 days interval 3. No. of tuber infested per plant 4. Yield record | Technology 10 3 1 112.5 q/ha | Farmers practice 17 7 3 92 q/ha | |
| 14 | Management of viral diseases in <i>king chilli</i> | High incidence of viral diseases in <i>king chilli</i> | 1. Treatment of seeds with trisodium phosphate @ 0.3% by soaking the seeds for 24 hrs. 2. Weed management 3. Spraying of systemic insecticides like Imidachloprid 17.8 SL @ 1 ml/lit. of water at 10 days interval Spraying of Mancozeb (Indofil 45) @ 2 ml/lit of water at 10 days interval | King chilli | 3 | Referred to the table below | Positive response towards the technology | Need further Trial | Referred to the table below |
| | | | | Location: Tipomia, gharpholia, khonamukh Area/Unit: 3 | | Technology Parameters (at 15 days interval) 1. No. of curled leaves/ plant 2. Per cent disease incidence/5m ² Per cent of fruit infested/ 5 m ² 3. Yield record 4. B:C ratio | | Results 22 70% 55% In progress | Farmers practice 30 90 % 78% In progress |

| Sl. No. | Title of OFT | Problem Diagnosed | Name of Technology Assessed | Crop/Cropping system/ Enterprise | No. of Trials | Results of Assessment/ Refined | Feedback from the farmer | Feedback to the Researcher | B.C . Ratio (if applicable) | | | | | | | | | | | | | | | | | | | |
|--|--|--|---|----------------------------------|---------------|--------------------------------|--|----------------------------|-----------------------------|---|--|------------|--|------------|------------------|---|---------------|--------------------------------|--------|---|------------------|-----|---------|--|------|------|---------------------------|-----------------|
| 15 | Biocontrol based IPM module against pests of okra | Indiscriminate use of chemical pesticides | 1.Use of yellow sticky card 2. Six release of <i>T. chilonis</i> @ 50000/ha /week 3. Removal and destruction of infested fruits and shoots 4.Rouging of YMV infested plants 5.Application of need based botanicals thrice at 15 days interval | IPM | 5 | Referred to the table below | Positive response towards the technology | Need further Trial | Referred to the table below | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | <table border="1"> <tr> <td rowspan="5">Location: Puronimotia, Maibelia, Nahatia gaon, Gharphalia gaon, Tengabari Area: 0.13ha/location</td> <td colspan="2">Parameters</td> <td>Technology</td> <td>Farmers practice</td> </tr> <tr> <td>1. No. of insect infested shoots/ 5m²</td> <td></td> <td>3</td> <td>7(Avg)</td> </tr> <tr> <td>2. No. of insect infested fruits/ plant</td> <td></td> <td>1</td> <td>3 (Avg)</td> </tr> <tr> <td>3. No. of YMV infested plants / 5 m²</td> <td></td> <td>2</td> <td>5</td> </tr> <tr> <td>4. Yield record</td> <td></td> <td>On going</td> <td>On going</td> </tr> </table> | Location: Puronimotia, Maibelia, Nahatia gaon, Gharphalia gaon, Tengabari Area: 0.13ha/location | Parameters | | Technology | Farmers practice | 1. No. of insect infested shoots/ 5m ² | | 3 | 7(Avg) | 2. No. of insect infested fruits/ plant | | 1 | 3 (Avg) | 3. No. of YMV infested plants / 5 m ² | | 2 | 5 | 4. Yield record |
| Location: Puronimotia, Maibelia, Nahatia gaon, Gharphalia gaon, Tengabari Area: 0.13ha/location | Parameters | | Technology | Farmers practice | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1. No. of insect infested shoots/ 5m ² | | 3 | 7(Avg) | | | | | | | | | | | | | | | | | | | | | | | | |
| | 2. No. of insect infested fruits/ plant | | 1 | 3 (Avg) | | | | | | | | | | | | | | | | | | | | | | | | |
| | 3. No. of YMV infested plants / 5 m ² | | 2 | 5 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 4. Yield record | | On going | On going | | | | | | | | | | | | | | | | | | | | | | | | |
| 17 | Assessment of Productive performance of Rainbow as backyard poultry in Jorhat district | Low productivity of local hen both terms of egg and meat production. | Rainbow | Rainbow as backyard poultry | 10 | Referred to the table below | Positive response towards the technology | Need further Trial | Referred to the table below | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | <table border="1"> <tr> <td rowspan="9">No. of trials: 10 Location: Dangdhora Month of start: Oct, 2018</td> <td colspan="3">Result</td> </tr> <tr> <td>Parameters</td> <td>Rainbow</td> <td>Local (Check)</td> </tr> <tr> <td>1. Body weight at distribution</td> <td>256 g</td> <td>145g</td> </tr> <tr> <td>2. Mortality (%)</td> <td>5.0</td> <td>2.0</td> </tr> <tr> <td>3. Weight at onset of laying.(kg)</td> <td>1.65</td> <td>1.12</td> </tr> <tr> <td>4. Age at onset of laying</td> <td>181 d</td> <td>185 d</td> </tr> <tr> <td>5. Nos. of egg laid</td> <td>234</td> <td>165</td> </tr> <tr> <td>6. FCR (in 40 days)</td> <td>1.6:1</td> <td>1.4:1</td> </tr> <tr> <td>8. B:C ratio</td> <td>2.5:1</td> <td>2.1:1</td> </tr> </table> | No. of trials: 10 Location: Dangdhora Month of start: Oct, 2018 | Result | | | Parameters | Rainbow | Local (Check) | 1. Body weight at distribution | 256 g | 145g | 2. Mortality (%) | 5.0 | 2.0 | 3. Weight at onset of laying.(kg) | 1.65 | 1.12 | 4. Age at onset of laying | 181 d |
| No. of trials: 10 Location: Dangdhora Month of start: Oct, 2018 | Result | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Parameters | Rainbow | Local (Check) | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1. Body weight at distribution | 256 g | 145g | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 2. Mortality (%) | 5.0 | 2.0 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 3. Weight at onset of laying.(kg) | 1.65 | 1.12 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 4. Age at onset of laying | 181 d | 185 d | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 5. Nos. of egg laid | 234 | 165 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 6. FCR (in 40 days) | 1.6:1 | 1.4:1 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 8. B:C ratio | 2.5:1 | 2.1:1 | | | | | | | | | | | | | | | | | | | | | | | | | |

| Sl. No. | Title of OFT | Problem Diagnosed | Name of Technology Assessed | Crop/Cropping system/ Enterprise | No. of Trials | Results of Assessment/ Refined | Feedback from the farmer | Feedback to the Researcher | B.C . Ratio (if applicable) |
|---------|---|--|-----------------------------|----------------------------------|---------------|--------------------------------|--------------------------|----------------------------|-----------------------------|
| 18 | Assessment of productive performance of quail in different housing system (case and litter) | Lack of knowlwdge about different housing system in Japanese Quail | Japanese Quail | Japanese Quail | 3 | Referred to the table below | Positive response | Need further Trial | Referred to the table below |
| | | | | | | | | | |

| Sl. No. | Title of OFT | Problem Diagnosed | Name of Technology Assessed | Crop/Cropping system/ Enterprise | No. of Trials | Results of Assessment/ Refined | Feedback from the farmer | Feedback to the Researcher | B.C . Ratio (if applicable) | | | |
|---------------|---|--|---|----------------------------------|---------------|--------------------------------|--|----------------------------|-----------------------------|----------------------------|-----------------------|----------------------|
| 19 | Uses of Protective clothing for Agricultural activities performed by farm women | Unavailability of proper dress during performing Agricultural work | Protective clothing 1. Apron 2.Loose Pant 3.Head dress | Protective clothing | 03 | Referred to the table below | Positive response towards the technology | Need further Trial | Referred to the table below | | | |
| | | | | | | | | | | Technology/ Social Concept | Result | |
| | | | | | | | | | | | Activity (Harvesting) | Activity (Winnowing) |
| | | | | | | | | | | 1. Apron | Highly suitable | Highly suitable |
| | | | | | | | | | | 2. Loose Pant | Suitable | Suitable |
| 3. Head dress | Less suitable (very hot for harvesting operation) | Highly Suitable | | | | | | | | | | |
| 20 | Assessment of | Wastage of excessively | Value addition of underutilized vegetables | Food processing and preservation | 10 | Referred to the table below | Positive response | Need further Trial | Referred to the table below | | | |

| | | | | | |
|--|---------------------|---|--|--|--|
| fermentation based low cost vegetable preservation technique | produced vegetables | Parameter | | Result | |
| | | i. Appearance (without colour vs food colour) | | i. Lighter than original | |
| | | ii. Taste | | ii. Fermented taste | |
| | | iii. Flavour | | iii. Fermented flavour | |
| | | iv. Self life | | iv. Upto 2 months product showed good taste & appearance | |

| Sl. No. | Title of OFT | Problem Diagnosed | Name of Technology Assessed | Crop/Cropping system/ Enterprise | No. of Trials | Results of Assessment/ Refined | Feedback from the farmer | Feedback to the Researcher | B.C . Ratio (if applicable) | | |
|------------------|---|--|--|----------------------------------|---------------|--------------------------------|--|----------------------------|-----------------------------|--|--|
| 21 | Efficiency of women friendly paddy Stripper | Non appropriate agricultural tools for seed collection | Energy saving tools | Paddy Stripper | 07 | Referred to the table below | Positive response towards the technology | Need further Trial | Referred to the table below | | |
| | | | Parameters | | | Results | | | | | |
| | | | | | | Demonstration | | | Traditional method | | |
| | | | Pulse rate | | | 60-70 beats/min | | | 75-85 beats/min | | |
| | | | Collection efficiency | | | 90-95% | | | 75- 85% | | |
| | | | Capacity kg/hr | | | 8 kg/hr | | | 5 kg/hr | | |
| Farmers reaction | | | Farmers well accepted the women friendly seed stripper. Time and energy saving. Easy to operate. | | | | | | | | |
| 22 | Construction of Union | | Value addition | Union Fabric | 05 | Referred to the table below | Positive response | Need further Trial | Referred to the table below | | |

| Fabric | Parameters | | | | Result | | | |
|--------|------------------------|-------------|--|--|--|--|--|--|
| | Fabrics | Eri x Eri | Eri x Cotton | Muga x Eri | Cotton x Art silk | | | |
| | Warp | 52 | 53 | 68 | 62 | | | |
| | Weft | 54 | 59 | 62 | 68 | | | |
| | Total weight (g/sq.mt) | 148.75 | 145.56 | 142.00 | 143.00 | | | |
| | Remark | More weight | Weight is less than Eri x Eri. Good drapability | Weight is less than Eri x Eri and Eri x Cotton Drapability is higher than Eri x Eri and Eri x Cotton Showed very good Shine. | Weight is less than Eri x Eri. Good drapability | | | |

*Field crops – ton/ha, * for horticultural crops -= kg/t/ha, * milk and meat – litres or kg/animal, * for mushroom and vermicompost kg/unit area.

** Give details of the technology assessed or refined and farmer's practice

3.2 Achievements of Frontline Demonstrations during 2018-19

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

List of technologies demonstrated during previous year and popularized during 2018-19 and recommended for large scale adoption in the district

| Sl. No. | Crop/Enterprise | Technology demonstrated | Horizontal spread of technology | | |
|---------|-------------------|--|---------------------------------|----------------|------------|
| | | | No. of villages | No. of farmers | Area in ha |
| 1 | Paddy | Demonstration of newly developed submergence tolerant rice varieties Ranjit Sub-1 & Bahadur Sub 1 in the submerged areas . | 3 | 8 | 2 |
| 2 | Paddy | Demonstration on hybrid paddy Arize 6444G | 2 | 2 | 0.26 |
| 3 | Paddy | Demonstration of aromatic premium quality rice variety KDML 105 (Padumoni) suitable for semi deep water situation | 2 | 4 | 2 |
| 4 | Sesamum | Integrated crop management of sesamum | 3 | 5 | 0.5 |
| 5 | kharif green gram | Integrated weed management in kharif green gram | 2 | 5 | 1 |
| 6 | Boro paddy | Demonstration on cultivation of HY boro paddy variety 'Kanaklata' with farmer's participatory mode | 2 | 12 | 2 |
| 7 | Maize | Integrated crop management of maize | 1 | 4 | 1 |
| 8 | Linseed | Demonstration on Linseed | 1 | 5 | 2 |
| 9 | Rice | Efficacy of Zinc in Rice Productivity | 3 | 3 | 1.5 |

| | | | | | |
|----|-----------------------|--|---|----|---------|
| 10 | kharif black gram | Biofertilizer supplementation on production performance of kharif black gram | 3 | 3 | 1.5 |
| 11 | Lentil | Integrated Nutrient Management (INM) in Lentil along with Biofertilizer component (Variety—KLS 218) | 3 | 3 | 1.5 |
| 12 | Vermicompost | Demonstration on Low Cost Vermicompost production Technique | 1 | 5 | 5 units |
| 13 | Pumpkin | Demonstration on scientific cultivation of Pumpkin var. <i>Leela</i> | 6 | 12 | 1.5 |
| 14 | Marigold | Demonstration on scientific cultivation of Marigold var. <i>Pusa Narengi Gainda</i> | 4 | 8 | 0.5 |
| 15 | Mushroom | Scientific cultivation of Mushroom var. <i>Oyster444</i> | 5 | 15 | 5 units |
| 16 | Tomato, Brinjal | Use of pheromones in controlling tomato fruit borer and brinjal shoot and fruit borer | 5 | 5 | 3 |
| 17 | Rice | Biological suppression of rice pest (BIPM package) | 5 | 5 | 2 |
| 18 | Bee keeping in toria | Scientific bee keeping (<i>Apis mellifera</i>) in toria for increasing toria productivity | 1 | 3 | 3 units |
| 19 | Natural dye | Demonstration on application of Natural dye on cotton, silk and wool fabric | 5 | 20 | 4 units |
| 20 | Fruit Harvester | Demonstration on Uses of Fruit Harvester | 3 | 12 | 4 nos. |
| 21 | Vegetable Plucker | Demonstration on Women friendly Vegetable Plucker | 4 | 16 | 4 nos. |
| 22 | Nutritional Gardening | Establishment Nutritional Gardening for nutritional security | 2 | 6 | 600 sqm |
| 23 | Broiler duck | Demonstration on productive performance of Vigova Super broiler duck | 3 | 10 | 10 unit |
| 24 | Pigs | Demonstration of Area Specific mineral mixture (AAUVETMIN) supplementation during flushing and gestation in pigs | 3 | 3 | 3 unit |
| 25 | Poultry | Demonstration on Productive performance of Turkey for lean meat production in Jorhat district | 3 | 3 | 3 unit |

* *Thematic areas as given in Table 3.1 (A1 and A2)*

b. Details of FLDs conducted during reporting period (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 | Farming situation (Rainfed/ Irrigated, Soil type, altitude, etc) | Status of soil (Kg/ha) | | |
|---------|-----------------|------------------------------|--|-----------------|-----------|---------|-------------------------------|--------|-------|--------------------------------------|--|------------------------|---|---|
| | | | | | Proposed | Actual | SC/ST | Others | Total | | | N | P | K |
| 1. | Paddy | Varietal evaluation | Demonstration of newly developed submergence tolerant rice varieties Ranjit Sub-1 & Bahadur Sub 1 in the submerged areas | Kharif'18 | 2 | 2 | - | 8 | 8 | - | Rainfed | | | |
| 2. | Paddy | Varietal evaluation | Demonstration on Bayers Hybrid Paddy variety, Arise 6444-G | Kharif'18 | 0.26 | 0.26 | - | 2 | 2 | | Rainfed | | | |
| 3 | Maize | Crop production | Demonstration on improved cultivation practices in Maize | Rabi' 19 | 15 | 15 | 32 | | | - | Rainfed | | | |
| 4 | Black gram | INM | Biofertilizer supplementation on production performance of kharif black gram | Kharif'18 | 2.5 | 2.5 | 5 | 5 | 10 | - | Rainfed | | | |
| 5 | Vermicomposting | Production of organic inputs | Demonstration on Low Cost Vermicompost production Technique | Rabi' 19 | 5 unit | 5 units | - | 5 | 5 | - | - | | | |
| 6 | Pumpkin | Scientific crop management | Demonstration on scientific cultivation of Pumpkin var. <i>Leela</i> | Kharif,18 | 0.39 | 0.39 | - | 3 | 3 | - | Rainfed | | | |
| 7 | Marigold | Scientific crop management | Demonstration on scientific cultivation of Marigold var. <i>Pusa Narengi Gaiinda</i> | Rabi' 18 | 0.19 | 0.19 | 2 | 1 | 3 | - | Rainfed | | | |
| 8 | Tomato, Brinjal | IPM | Use of pheromones in controlling tomato fruit borer and brinjal shoot and fruit borer | Rabi' 18 | 3 | 3 | 7 | 8 | 15 | - | - | | | |
| 9 | Rice | IPM | Biological suppression of rice pest | Kharif 18 | 1ha | 1 ha | - | 6 | 6 | - | - | | | |

c. Performance of FLD on Crops

| Sl. No. | Crop | Thematic area | Area (ha) | Avg. yield (Q/ha.) | | % increase in Avg. yield | Additional data on demo. yield (Q/ha.) | | Data on parameters other than yield, e.g., disease incidence, pest incidence etc. | Econ. of demo. (Rs./ha.) | | | | Econ. of check (Rs./Ha.) | | | |
|---------|--|---------------------|-----------|-------------------------|----------------------|--------------------------|--|------|---|--------------------------|-------|-------|--------|--------------------------|-------|-------|------|
| | | | | Demo | Check | | H* | L* | | GC** | GR** | NR** | BC R** | GC | GR | NR | BC R |
| | | | | Dem o | Local | | | | | | | | | | | | |
| 1 | Demonstration of newly developed submergence tolerant rice varieties Ranjit Sub-1 & Bahadur Sub 1 in the submerged areas .semi deep water situation. Check : Kola Joha | Varietal evaluation | 2 | 53.2 (Ranjit Sub-1) | Damaged due to flood | Nil | 55.5 | 49.0 | Negligible | 27100 | 71820 | 44720 | 1.65 | - | - | - | - |
| | | | | 51.7 (Bahadur Sub-1) | | | 52.9 | 47.0 | Negligible | 27100 | 69795 | 42695 | 1.57 | - | - | - | - |
| 2 | Demonstration on Bayers Hybrid Paddy variety, Arise 6444-G | Varietal evaluation | 0.26 | 67.0 | 55.0 (Ranjit) | 21.8 1 | 68.0 | 66.0 | Negligible | 34500 | 73700 | 29200 | 2.13 | 34500 | 60500 | 26000 | 1.75 |

| Sl. No. | Crop | Thematic area | Area (ha) | Avg. yield (Q/ha.) | | % increase in Avg. yield | Additional data on demo. yield (Q/ha.) | | Data on parameters other than yield, e.g., disease incidence, pest incidence etc. | Econ. of demo. (Rs./ha.) | | | | Econ. of check (Rs./Ha.) | | | |
|---------|--|-----------------------------|-----------|--------------------|-------|--------------------------|--|------|---|--------------------------|-------|-------|--------|--------------------------|-------|------|------|
| | | | | Demo | Check | | H* | L* | | GC** | GR** | NR** | BC R** | GC | GR | NR | BC R |
| | | | | | | | | Demo | | Local | | | | | | | |
| 3 | Biofertilizer supplementation on production performance of kharif black gram (HYV-PU-31) | INM | 2.5 | 5.0 | 4.8 | 4.17 | 5.1 | 4.9 | Negligible | 18200 | 30000 | 11800 | 1.65 | 20800 | 28800 | 8000 | 1.38 |
| 4 | Demonstration on improved cultivation practices in Maize | Crop production | 23 | In progress | | | | | | | | | | | | | |
| 5 | Demonstration on Low Cost Vermicompost production Technique | Production of organic input | 5 unit | In progress | | | | | | | | | | | | | |

| Sl. No. | Crop | Thematic area | Area (ha) | Avg. yield (Q/ha.) | | % increase in Avg. yield | Additional data on demo. yield (Q/ha.) | | Data on parameters other than yield, e.g., disease incidence, pest incidence etc. | Econ. of demo. (Rs./ha.) | | | | Econ. of check (Rs./Ha.) | | | |
|---------|--|----------------------------|-------------|--------------------|------------|--------------------------|--|------------|---|--------------------------|------------------|------------------|------------|--------------------------|-------------|-------------|-------|
| | | | | Demo | Check | | H* | L* | | GC** | GR** | NR** | BC R** | GC | G R | N R | BC R |
| | | | | Demo | | Local | | | | | | | | | | | |
| 6 | Pumpkin var. <i>Leela FI</i> | Scientific crop management | 0.39 | 155 | 116 | 33.62 | 161 | 147 | Negligible | 2,25,000.00 | 6,97,500.00 | 4,72,500.00 | 3.1:1 | 2,17,500.00 | 5,22,000.00 | 3,04,500.00 | 2.4:1 |
| 7 | Marigold var. <i>Pusa Narengi Gainda</i> | Scientific crop management | 0.19 | 212 | 155 | 36.77 | 221 | 204 | Negligible | 192,727.00 | 6,36,000.00 | 4,43,273.00 | 3.3:1 | 1,72,222.00 | 4,65,000.00 | 2,92,780.00 | 2.7:1 |
| 8 | Brinjal and Tomato | IPM | 1 ha 1ha | 320 190 | 260 150 | 23 26.6 | 370 220 | 280 180 | Negligible | 52000 55000 | 320000 190000 | 268000 135000 | 6.1 3.4 | - | - | - | - |
| 9 | Mushroom Oyster 444 | Varietal evaluation | 50 units | 2.3 kg | - | - | 950 gm in one plucking | 500 gm | Negligible | 50 per bed | 345 per bed | 295 | 5.9 | - | - | - | - |

*H-Highest recorded yield, L- Lowest recorded yield, ** GC- Gross Cost, GR- Gross Return, NR- Net Return, BCR- Benefit-Cost Ratio

Produce Sale Price must be as per MSP or Registered Marketing Society. Pl. apply the formula: Net Return= Gross Return-Gross Cost, BCR= GR/GC

d. Extension and Training activities under FLD on Crops

| Sl. No. | Activity | No. of activities organised | Date | Number of participants | | | Remarks |
|---------|---|-----------------------------|------------|------------------------|-------|-------|---------|
| | | | | Gen | SC/ST | Total | |
| 1 | Field days | 06 | | | | | |
| | Field day under FLD on Bayers Hybrid Paddy variety, Arise 6444 - G | | 19.11.18 | 73 | - | 73 | |
| | Field day under FLD on Biological suppression of rice pest (BIPM package) | | 27.11.2018 | 30 | 3 | 33 | |

| | | | | | | | |
|----------|---|---|------------|------------|------------|------------|--|
| | Field day under FLD on Mushroom cultivation var. Oyster - 444 | | 15.12.2018 | 30 | 5 | 35 | |
| | Field day under FLD on use of pheromone traps in controlling fruit borer in tomato and fruit and shoot borer in brinjal | | 09.02.2019 | - | 38 | 38 | |
| | Field day under FLD on Scientific cultivation of Pumpkin var. <i>Leela</i> | | 26/03/19 | 35 | 15 | 50 | |
| | Field day under FLD on Scientific cultivation of Marigold var. <i>Pusa Narengi Gainda</i> | | 27/03/19 | 45 | 5 | 50 | |
| 2 | Farmers Training | 3 | - | 51 | 43 | 94 | |
| 3 | Media coverage | - | - | - | - | - | |
| 4 | Training for extension functionaries | - | - | - | - | - | |
| | Total | | | 234 | 109 | 340 | |

e. **Details of FLD on Enterprises**

(i) Community Science

| Name of the implement | Crop | No. of farmers | Area (ha) | Performance parameters / indicators | * Data on parameter in relation to technology demonstrated | | % change in the parameter | Remarks | | | | | | | | | | | | | | | | |
|-----------------------------|--|----------------|-----------|--|--|-------------|---------------------------|---------|--------|------------------------|------|--------------------|------|-------------|-----------------------------|--|-----------------|---|------------------|--------------------------------------|--|--|--|--|
| | | | | | Demon. | Local check | | | | | | | | | | | | | | | | | | |
| - | Natural dye used: 1. Pomegranate peel 2. Marigold pestles 3. Night Jasmine | 10 | 10 unit | <table border="1"> <thead> <tr> <th>Parameters</th> <th>Result</th> </tr> </thead> <tbody> <tr> <td>Colour properties</td> <td></td> </tr> <tr> <td> Cotton</td> <td>Yellow (Night Jasmine)</td> </tr> <tr> <td> Silk</td> <td>Pale yellow Colour</td> </tr> <tr> <td> Wool</td> <td>Dark yellow</td> </tr> <tr> <td>Effect of mordanting (alum)</td> <td>Fix the colour adequately in all 3 types of fabrics (Using alum mordant a number of different shades can also be obtained from a single dye source)</td> </tr> <tr> <td>Colour fastness</td> <td>The treated samples showed excellent colour fastness properties</td> </tr> <tr> <td>Farmers reaction</td> <td>Farmers well accepted the technology</td> </tr> </tbody> </table> | Parameters | Result | Colour properties | | Cotton | Yellow (Night Jasmine) | Silk | Pale yellow Colour | Wool | Dark yellow | Effect of mordanting (alum) | Fix the colour adequately in all 3 types of fabrics (Using alum mordant a number of different shades can also be obtained from a single dye source) | Colour fastness | The treated samples showed excellent colour fastness properties | Farmers reaction | Farmers well accepted the technology | | | | |
| Parameters | Result | | | | | | | | | | | | | | | | | | | | | | | |
| Colour properties | | | | | | | | | | | | | | | | | | | | | | | | |
| Cotton | Yellow (Night Jasmine) | | | | | | | | | | | | | | | | | | | | | | | |
| Silk | Pale yellow Colour | | | | | | | | | | | | | | | | | | | | | | | |
| Wool | Dark yellow | | | | | | | | | | | | | | | | | | | | | | | |
| Effect of mordanting (alum) | Fix the colour adequately in all 3 types of fabrics (Using alum mordant a number of different shades can also be obtained from a single dye source) | | | | | | | | | | | | | | | | | | | | | | | |
| Colour fastness | The treated samples showed excellent colour fastness properties | | | | | | | | | | | | | | | | | | | | | | | |
| Farmers reaction | Farmers well accepted the technology | | | | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | |
|-----------------------|---|--|--------------------------------|---|--|----------------------|---------------------------|-----------|-------------------|-----------------|
| Fruit Harvester | Papaya | 6 | 6 nos. | Parameters | | Results | | | | |
| | | | | | | Demonstration | Traditional method | | | |
| | | | | Pulse rate | | 60-70 beats/min | 80-90 beats/min | | | |
| | | | | Plucking efficiency | | 95- 99% | 70- 80% | | | |
| | | | | Capacity kg/hr i. Papaya | | 60kg/hr | 40kg/hr | | | |
| Farmers reaction | | Farmers accepted the fruit harvester. Farmers very much satisfied for harvesting ripen fruit like papaya, custard apple, carambola, ber etc. | | | | | | | | |
| Name of the implement | Crop | No. of farmers | Area (ha) | Performance parameters / indicators | * Data on parameter in relation to technology demonstrated | | % change in the parameter | Remarks | | |
| | | | | | Demon. | Local check | | | | |
| Vegetable Plucker | Brinjal, Ladies finger | 4 | 4 | Parameter | | Result | | | | |
| | | | | | | Vegetable plucker | Hand plucker | | | |
| | | | | Pulse rate | | 60-70 beats/min | 80-90 beats/min | | | |
| | | | | Plucking rate 1. Brinjal 2. Lady's finger | | 38 kg/hr 30 kg/hr | 25 kg/hr 18 kg/hr | | | |
| | | | | Plucking efficiency | | 90-98% | 70-80% | | | |
| Farmers reaction | | Farmers well accepted the vegetable plucker | | | | | | | | |
| - | Nutritional Gardening (cabbage, tomato, brinjal, chilli, carrot etc.) | 3 | 100 m ² / household | Results | | | | B:C ratio | | |
| | | | | Crops | Area | Yield (kg) | Cost of production (Rs) | | Gross income (Rs) | Net income (Rs) |
| | | | | Cabbage | 20 | 80 | 825.00 | | 4170.00 | 3320.00 |
| | | | | Tomato | 20 | 75 | | | | |
| | | | | Brinjal | 20 | 82 | | | | |
| | | | | Chilli | 20 | 20 | | | | |
| Carrot | 20 | 16 | | | | | | | | |

* Field efficiency, labour saving etc.

(ii) Livestock Enterprises

| Sl. No. | Enterprise/ Category (e.g., Dairy, Poultry etc.) | Thematic area | Name of Technology | No. of farmers | No. of units | No. of animals, poultry birds etc. | Major Performance parameters / indicators | | % change in the parameter | Other parameters (if any) | | Econ. of demo. (Rs./Ha.) | | | | Econ. of check (Rs./Ha.) | | | | Remarks | |
|---------|--|--------------------|---------------------------|----------------|--------------|------------------------------------|---|-------|---|---------------------------|-------------------------|--------------------------|---------------------|------|--|--------------------------|----|----|-----|---------|--|
| | | | | | | | Demo | Check | | Demo | Check | GC** | GR** | NR** | BCR** | GC | GR | NR | BCR | | |
| | | | | | | | | | | | | | | | | | | | | | |
| 1 | Broiler duck | Breed introduction | Vigova Super broiler duck | 10 | 10 | 100 | Performance parameters/ indicators | | Data on parameters in relation to technology demonstrated | | | | % Change (Wt basis) | | Remarks | | | | | | |
| | | | | | | | | | Demo | | Local | | | | | | | | | | |
| | | | | | | | 1. Body weight at (1d) | | 0.068kg | | 0.053kg | | 147% | | Vigova Super M also known as broiler duck is a suitable breed and can be recommended for rearing as meat purpose duck in Jorhat district | | | | | | |
| | | | | | | | 2. 15 days- | | 0.390Kg | | 0.225kg | | | | | | | | | | |
| | | | | | | | 3. 45 days- | | 1.76kg | | 0.635kg | | | | | | | | | | |
| | | | | | | | 4. 60 days- | | 2.71kg | | 0.710kg,1.50kg(8 month) | | | | | | | | | | |
| | | | | | | | 5. Chick Mortality- | | 2.00% | | 6.00% | | | | | | | | | | |
| | | | | | | | 6. Feed intake(in 60 days)/duck- | | 6.16kg | | 2.75kg | | | | | | | | | | |
| | | | | | | | 7. FCR - | | 2.27:1 | | 3.87:1 | | | | | | | | | | |
| | | | | | | | 8.Gross return/duck | | Rs.813.0 | | Rs.250.0 | | | | | | | | | | |
| | | | | | | | 9.Gross cost/duck | | Rs.468.0 | | Rs.210.0 | | | | | | | | | | |
| | | | | | | | 10 B:C | | 1.73 | | 1.19 | | | | | | | | | | |
| 2 | Turkey | Breed Introducing | Turkey | 7 | 7 unit | 49 | In progress | | | | | | | | | | | | | | |

| Sl. No. | Enterprise/ Category (e.g., Dairy, Poultry etc.) | Thematic area | Name of Technology | No. of farmers | No. of units | No. of animals, poultry birds etc. | Major Performance parameters / indicators | | % change in the parameter | Other parameters (if any) | | Econ. of demo. (Rs./Ha.) | | | | Econ. of check (Rs./Ha.) | | | | Remarks |
|---------|--|-----------------|------------------------------|--|--------------|------------------------------------|---|--------|---|---------------------------|----------|---|-------|-------|--------|--------------------------|-----|-----|-----|---------|
| | | | | | | | Demo | Check | | Demo | Check | GC ** | GR ** | NR ** | BCR ** | G C | G R | N R | B C | |
| | | | | | | | | | | | | | | | | | | | | |
| 3 | Piggery | Feed management | Mineral mixture (AAUV ETMIN) | 3 | 3 unit | 30 | Performance parameters/ indicators | | Data on parameters in relation to technology demonstrated | | % Change | Remarks | | | | | | | | |
| | | | | Demo | | Non.supp | | | | | | | | | | | | | | |
| | | | | 1. Weaning age of piglet after furrowing. | | 2m | | 2m | | - | | Regular supplementation of AAUVETMIN @ 30g help the sow to maintain health physiological growth with good litter health | | | | | | | | |
| | | | | 2. Occurrence of heat from date of last furrowing. | | 2m28d | | 3m15d | | | | | | | | | | | | |
| | | | | 3. Gestation period | | 113d | | 114d | | | | | | | | | | | | |
| | | | | 4. Litter size at furrowing | | 9 Nos | | 7 Nos. | | | | | | | | | | | | |
| | | | | 5. Avg. weight of the litter | | 1.9kg | | 1.75 | | | | | | | | | | | | |
| | | | | 6. Mortality | | 3% | | 12% | | | | | | | | | | | | |
| | | | | 7. Age at weaning | | 1m 18d | | 2m5d | | | | | | | | | | | | |
| | | | | 8. Weight at weaning | | 9.23kg | | 8.00 | | | | | | | | | | | | |

** GC- Gross Cost, GR- Gross Return, NR- Net Return, BCR- Benefit-Cost Ratio

Produce Sale Price must be as per MSP or Registered Marketing Society .Pl. apply the formula: Net Return= Gross Return-Gross Cost, BCR= GR/GC

(iv) Other enterprises

| Sl. No | Category/ Enterprise, e.g., mushroom, vermicompost, apiculture etc. | Thematic area | Name of Technology | No. of farmers | No. of units | Major Performance parameters / indicators | % change in the parameter | Other parameters (if any) | | Econ. of demo. (Rs./Ha.) | | | | Econ. of check (Rs./Ha.) | | | | Remarks | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|----------------------------|---------------------------------|----------------|--------------|---|---------------------------|---------------------------|-------|--------------------------|-----|-----|------|--------------------------|----|----|---|----------------|----------------------------|--------------------------|-----------|----------|--------|--------|--------|-----|--|--|--|--|--------|---|--|--|--|--------|--|--|--|--|--------|---|--|--|--|--------|----------------|--|--|--|---------|----------------------------------|--|--|--|--------|--|
| | | | | | | | | Demo | Check | GC* | GR* | NR* | BCR* | GC | GR | NR | BCR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Mushroom | Mushroom cultivation | Mushroom var. <i>oyster-444</i> | 50 | 5 | <table border="1"> <thead> <tr> <th>Avg. Cost of Cultivation (Rs./Mushroom bed)</th> <th>Rate (Rs./ kg)</th> <th>Avg. Gross Return (Rs/bed)</th> <th>Avg. Net Return (Rs/bed)</th> <th>B:C Ratio</th> </tr> </thead> <tbody> <tr> <td>Rs. 50/-</td> <td>150.00</td> <td>345.00</td> <td>295.00</td> <td>5.9</td> </tr> <tr> <td colspan="4">Weight of Mushroom in 1st picking /bed</td> <td>950 gm</td> </tr> <tr> <td colspan="4">Weight of Mushroom in 2nd picking / bed</td> <td>650 gm</td> </tr> <tr> <td colspan="4">Weight of Mushroom in 3rd picking /bed</td> <td>450 gm</td> </tr> <tr> <td colspan="4">Weight of Mushroom in 4th picking / bed</td> <td>250 gm</td> </tr> <tr> <td colspan="4">No. of picking</td> <td>4 times</td> </tr> <tr> <td colspan="4">Avg. Yield per Mushroom bed (kg)</td> <td>2.3 kg</td> </tr> </tbody> </table> | | | | | | | | | | | Avg. Cost of Cultivation (Rs./Mushroom bed) | Rate (Rs./ kg) | Avg. Gross Return (Rs/bed) | Avg. Net Return (Rs/bed) | B:C Ratio | Rs. 50/- | 150.00 | 345.00 | 295.00 | 5.9 | Weight of Mushroom in 1st picking /bed | | | | 950 gm | Weight of Mushroom in 2nd picking / bed | | | | 650 gm | Weight of Mushroom in 3rd picking /bed | | | | 450 gm | Weight of Mushroom in 4th picking / bed | | | | 250 gm | No. of picking | | | | 4 times | Avg. Yield per Mushroom bed (kg) | | | | 2.3 kg | |
| Avg. Cost of Cultivation (Rs./Mushroom bed) | Rate (Rs./ kg) | Avg. Gross Return (Rs/bed) | Avg. Net Return (Rs/bed) | B:C Ratio | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rs. 50/- | 150.00 | 345.00 | 295.00 | 5.9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Weight of Mushroom in 1st picking /bed | | | | 950 gm | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Weight of Mushroom in 2nd picking / bed | | | | 650 gm | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Weight of Mushroom in 3rd picking /bed | | | | 450 gm | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Weight of Mushroom in 4th picking / bed | | | | 250 gm | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| No. of picking | | | | 4 times | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Avg. Yield per Mushroom bed (kg) | | | | 2.3 kg | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

** GC- Gross Cost, GR- Gross Return, NR- Net Return, BCR- Benefit-Cost Ratio

Note: Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.

3.3.1. Farmers and Farm Women in On Campus including Sponsored On Campus Training Programme (*Sp. On means On Campus training programmes sponsored by external agencies)

| Thematic area | No. of Courses/ prog | | | Participants | | | | | | | | | | | | | | | | | | GT (x + y) |
|--|----------------------|-----------------|----------------|--------------|------------------|------------|------------------|-------------------|--------------------------|-----------|------------------|------------|-------------------|--------------------|---------------------------|-------------|--------------------|--------------|---------------------|--------------------|---------------------------|---------------|
| | On-Campus (1) | Spon On* (2) | Total (1+2) | General | | | | | | SC/ST | | | | | | Total | | | | | | |
| | | | | Male | | Female | | Total | | Male | | Female | | Total | | Male | | Female | | Total | | |
| | | | | On (4) | Sp. On (5) | On (6) | Sp. On (7) | On (a= 4+6) | Sp. On (b= 5+7) | On (8) | Sp. On (9) | On (10) | Sp. On (11) | On (c= 8+10) | Sp. On (d= 9+11) | On (4+8) | Sp. On (5+9) | On (6+10) | Sp. On (7+11) | On (x= a +c) | Sp. On (y= b +d) | |
| I. Crop production | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| II. Horticulture | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| III Livestock Production and Management | | | | | | | | | | | | | | | | | | | | | | |
| Poultry Mgt. | 2 | - | 2 | 5 | - | 45 | - | 50 | - | - | - | - | - | - | - | 5 | - | 45 | - | 50 | - | 50 |
| IV. Home Science/Women empowerment | | | | | | | | | | | | | | | | | | | | | | |
| | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| V. Soil Science | | | | | | | | | | | | | | | | | | | | | | |
| | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| VI. Plant Protection | | | | | | | | | | | | | | | | | | | | | | |
| Mushroom cultivation | 1 | - | 1 | 12 | - | 2 | - | 14 | - | 10 | - | 1 | - | 11 | - | 23 | - | 3 | - | 26 | - | 26 |
| Bipesticides production | 1 | - | 1 | 5 | - | 52 | - | 57 | - | - | - | - | - | - | - | 5 | - | 52 | - | 57 | - | 57 |
| Biocontrol | 1 | - | 1 | 10 | - | 5 | - | 15 | - | 6 | - | 6 | - | 12 | - | 16 | - | 11 | - | 27 | - | 27 |
| TOTAL | 5 | - | 5 | 32 | - | 104 | - | 136 | - | 16 | - | 7 | - | 23 | - | 49 | - | 111 | - | 160 | - | 160 |

3.3.2. Achievements on Training of Farmers and Farm Women in Off Campus including Sponsored Off Campus Training Programmes (*Sp. Off means Off Campus training programmes sponsored by external agencies)

| Thematic area | No. of Courses/ prg. | | | Participants | | | | | | | | | | | | | | | | GT | | |
|---|----------------------|----------|-----------|--------------|-----------|-----------|----------|------------|-----------|------------|----------|------------|----------|------------|----------|------------|-----------|------------|----------|------------|----------|------------|
| | Off | Sp Off* | Total | General | | | | | | SC/ST | | | | | | Total | | | | | | |
| | | | | Male | | Female | | Total | | Male | | Female | | Total | | Male | | Female | | | Total | |
| | | | | Of f | Sp Off* | Of f | Sp Off* | Off | Sp Off* | Off | Sp Off* | Off | Sp Off* | Off | Sp Off* | Off | Sp Off* | Off | Sp Off* | | Off | Sp Off* |
| I. Crop Production | | | | | | | | | | | | | | | | | | | | | | |
| | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| II. Horticulture | | | | | | | | | | | | | | | | | | | | | | |
| a) Vegetable Crops | | | | | | | | | | | | | | | | | | | | | | |
| Export potential vegetables | 1 | - | 1 | 19 | - | 6 | - | 26 | - | - | - | - | - | - | - | 19 | - | 6 | - | 25 | - | 25 |
| b) Spices | | | | | | | | | | | | | | | | | | | | | | |
| Production and Management technology | 1 | - | 1 | 19 | - | 16 | - | 35 | - | - | - | - | - | - | - | 19 | - | 16 | - | 35 | - | 35 |
| c) Nursery management | | | | | | | | | | | | | | | | | | | | | | |
| Nursery raising | 1 | - | 1 | - | 34 | - | 4 | - | 38 | - | 6 | - | 1 | - | 7 | - | 40 | - | 5 | - | 45 | 45 |
| III. Soil Health and Fertility Management | | | | | | | | | | | | | | | | | | | | | | |
| Soil fertility management, Integrated Nutrient Management | 3 | - | 3 | - | -- | - | - | - | - | 34 | - | 39 | - | 73 | - | 34 | - | 39 | - | 73 | - | 73 |
| IV. Livestock Production and Management | | | | | | | | | | | | | | | | | | | | | | |
| Poultry Mgt. | 2 | - | 2 | 13 | - | 18 | - | 31 | - | 14 | - | 15 | - | 29 | - | 27 | - | 33 | - | 60 | - | 60 |
| Piggery Mgt. | 3 | - | 3 | - | - | - | - | - | - | 55 | - | 60 | - | 115 | - | 55 | - | 60 | - | 115 | - | 115 |
| V. Home Science/Women empowerment | | | | | | | | | | | | | | | | | | | | | | |
| Value addition | 1 | - | 1 | - | - | 25 | - | 25 | - | - | - | - | - | - | - | - | - | 25 | - | 25 | - | 25 |
| VII. Plant Protection | | | | | | | | | | | | | | | | | | | | | | |
| IPM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| IDM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| TOTAL | 12 | - | 12 | 51 | 34 | 65 | 4 | 117 | 38 | 103 | 6 | 114 | 1 | 217 | 7 | 154 | 40 | 179 | 5 | 333 | - | 333 |

| (B) RURAL YOUTH | | | | | | | | | | | | | | | | | | | | | | |
|--|-------------------------|------------------|----------------|--------------|------------------|-----------|------------------|-------------------|--------------------------|-----------|------------------|------------|-------------------|--------------------|---------------------------|-------------|--------------------|--------------|---------------------|-----------------------|------------------------------|---------------|
| 3.3.3. Achievements on Training <u>Rural Youth</u> in <u>On Campus</u> including <u>Sponsored On Campus</u> Training Programmes | | | | | | | | | | | | | | | | | | | | | | |
| (*Sp. On means On Campus training programmes sponsored by external agencies) | | | | | | | | | | | | | | | | | | | | | | |
| Thematic area | No. of Courses/ Prog | | | Participants | | | | | | | | | | | | | | | | | | GT (x + y) |
| | | | | General | | | | | | SC/ST | | | | | | Total | | | | | | |
| | Male | | Female | | Total | | Male | | Female | | Total | | Male | | Female | | Total | | | | | |
| | On (1) | Sp On* (2) | Total (1+2) | On (4) | Sp. On (5) | On (6) | Sp. On (7) | On (a= 4+6) | Sp. On (b= 5+7) | On (8) | Sp. On (9) | On (10) | Sp. On (11) | On (c= 8+10) | Sp. On (d= 9+11) | On (4+8) | Sp. On (5+9) | On (6+10) | Sp. On (7+11) | On (x= a +c) | Sp. On (y= b +d) | |
| Poultry | 1 | - | 1 | 5 | - | 20 | - | 25 | - | - | - | 8 | - | 8 | - | 5 | - | 28 | - | 33 | - | 33 |
| Livestock and health care | - | 1 | 1 | - | 17 | - | - | - | 17 | - | 8 | - | - | - | 8 | - | 25 | - | 25 | - | 25 | 25 |
| Commercial pig farming | 1 | - | 1 | - | - | - | - | - | - | 16 | - | 9 | - | 25 | - | 16 | - | 9 | - | 25 | - | 25 |
| TOTAL | 2 | 1 | 3 | 5 | 17 | 20 | - | 25 | 17 | 16 | 8 | 17 | - | 33 | 8 | 21 | 25 | 37 | 25 | 58 | 25 | 83 |

| 3.3.4. Achievements on Training of <u>Rural Youth</u> in <u>Off Campus</u> including <u>Sponsored Off Campus</u> Training Programmes | | | | | | | | | | | | | | | | | | | | | | |
|---|--------------------------|-----------|----------|--------------|------------|----------|------------|----------|------------|-----------|------------|-----------|------------|-----------|------------|-----------|------------|-----------|------------|-----------|------------|----------------|
| (*Sp. Off means Off Campus training programmes sponsored by external agencies) | | | | | | | | | | | | | | | | | | | | | | |
| Thematic area | No. of Courses/ Prog. | | | Participants | | | | | | | | | | | | | | | | | | Grand Total |
| | | | | General | | | | | | SC/ST | | | | | | Total | | | | | | |
| | Male | | Female | | Total | | Male | | Female | | Total | | Male | | Female | | Total | | | | | |
| | Off | Sp Off | Total | Off | Sp Off* | Off | Sp Off* | Off | Sp Off* | Off | Sp Off* | Off | Sp Off* | Off | Sp Off* | Off | Sp Off* | Off | Sp Off* | Off | Sp Off* | |
| Piggery | 1 | - | 1 | - | - | - | - | - | - | 17 | - | 11 | - | 28 | - | 17 | - | 11 | - | 28 | - | 28 |
| TOTAL | 1 | - | 1 | - | - | - | - | - | - | 17 | - | 11 | - | 28 | - | 17 | - | 11 | - | 28 | - | 28 |

| C. Extension Personnel | | | | | | | | | | | | | | | | | | | | | | | |
|--|-------------------------|------------------|----------------|----------------|------------------|----------------|------------------|-------------------|--------------------------|----------------|------------------|----------------|-------------------|--------------------|---------------------------|----------------|--------------------|----------------|------------------|-----------------------|---------------------------|--|----------------|
| 3.3.5. Achievements on Training of <u>Extension Personnel</u> in <u>On Campus</u> including <u>Sponsored On Campus</u> Training Programmes (*Sp. On means On Campus training programmes sponsored by external agencies) | | | | | | | | | | | | | | | | | | | | | | | |
| Thematic area | No. of Courses/ prog | | | Participants | | | | | | | | | | | | | | | | | | G T (x + y) | |
| | | | | General | | | | | | SC/ST | | | | | | Total | | | | | | | |
| | Male | | Female | | Total | | Male | | Female | | Total | | Male | | Female | | Total | | | | | | |
| | On (1) | Sp On* (2) | Total (1+2) | On (4) | Sp. On (5) | On (6) | Sp. On (7) | On (a= 4+6) | Sp. On (b= 5+7) | On (8) | Sp. On (9) | On (10) | Sp. On (11) | On (c= 8+10) | Sp. On (d= 9+11) | On (4+8) | Sp. On (5+9) | On (6+10) | Sp. On (7+11) | On (x= a +c) | Sp. On (y= b +d) | | |
| Disease Mgt in Farm animal | 1 | - | 1 | 17 | - | - | - | 17 | - | 4 | - | - | - | 4 | - | 21 | - | - | - | 21 | - | 21 | |
| TOTAL | 1 | - | 1 | 17 | - | - | - | 17 | - | 4 | - | - | - | 4 | - | 21 | - | - | - | 21 | - | 21 | |
| 3.3.6. Achievements on Training of <u>Extension Personnel</u> in <u>Off Campus</u> including <u>Sponsored Off Campus</u> Training Programmes (*Sp. Off means Off Campus training programmes sponsored by external agencies) | | | | | | | | | | | | | | | | | | | | | | | |
| Thematic area | No. of Courses/ prog | | | Participants | | | | | | | | | | | | | | | | | | G r a n d T o t a l | |
| | | | | General | | | | | | SC/ST | | | | | | Total | | | | | | | |
| | Off | | Sp Off * | Total | Male | | Female | | Total | | Male | | Female | | Total | | Male | | Female | | Total | | |
| | Of f | Sp Off * | Of f | Sp Off * | Of f | Sp Off * | Of f | Sp Off * | Of f | Sp Off * | Of f | Sp Off * | Of f | Sp Off * | Of f | Sp Off * | Of f | Sp Off * | Of f | Sp Off * | Of f | | Sp Off * |
| Production and use of organic inputs | 2 | - | 2 | - | - | 11 | - | 116 | - | - | - | - | - | - | - | 8 | - | 8 | - | 124 | - | 124 | |
| TOTAL | 2 | - | 2 | - | - | 11 | - | 116 | - | - | - | - | - | - | - | 8 | - | 8 | - | 124 | - | 124 | |

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

Annexure 1: Details of Training Programme (On Campus including Sponsored On Campus) for Farmers, Farm Women, Rural Youth and Extension Personnel

| Discipline | Area of training | Title of the training programme | Date (From – to) | Duration in days | Venue | Please specify Beneficiary group (Farmer & FW/ RY/ EP and NGO Personnel) | General participants | | | SC/ST | | | Grand Total | | |
|------------------|-----------------------------|--|-------------------|------------------|-------------|--|----------------------|----|----|-------|---|---|-------------|----|----|
| | | | | | | | M | F | T | M | F | T | M | F | T |
| Agronomy | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Horticulture | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Soil Science | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Plant Protection | Mushroom cultivation | Mushroom cultivation a profitable venture for self employment | 19.9.18-23.9.18 | 5 | KVK, Jorhat | F/FW | 5 | 20 | 25 | - | - | - | 5 | 20 | 25 |
| | Production of biopesticides | Production technology of home made botanicals and bio pesticides | 16.11.18-18.11.18 | 3 | KVK, Jorhat | F/FW | 8 | 15 | 23 | - | - | - | 8 | 15 | 23 |
| | Biocontrol | Organic management of insect pest of horticultural crops | 23.10.18-27.10.18 | 5 | KVK, Jorhat | F/FW | 9 | 20 | 29 | - | - | - | 9 | 20 | 29 |
| Animal Science | Poultry | Scientific back yard poultry farming | 8.10.18 | 1 | KVK, Jorhat | F/FW | - | 31 | 31 | - | - | - | - | 31 | 31 |
| | | Commercial poultry farming | 19.11.18-23.11.18 | 5 | KVK, Jorhat | RY | 5 | 20 | 25 | - | 7 | 7 | 5 | 27 | 32 |
| | Duckery | Scientific rearing of broiler duck | 18.12.18 | 1 | KVK, Jorhat | F/FW | 5 | 20 | 25 | - | - | - | 5 | 20 | 25 |
| | Piggery | Scientific commercial pig farming | 12.11.18-16.11.18 | 5 | KVK, Jorhat | RY | 17 | - | 17 | 4 | - | 4 | 21 | - | 21 |
| | Poultry Disease management | Management and prevention of Zoonotic diseases along with biosecurity measures | 18.02.19 | 1 | KVK, Jorhat | EP | 17 | - | 17 | 4 | - | 4 | 21 | - | 21 |
| | Livestock and health care | Livestock management and health care | 21.01.19-25.01.19 | 2 | KVK, Jorhat | RY | 17 | - | 17 | 8 | - | 8 | 25 | - | 25 |

Annexure 2: Details of Training Programme (Off Campus including Sponsored Off Campus) for Farmers, Farm Women, Rural Youth and Extension Personnel

| Discipline | Area of training | Title of the training programme | Date (From – to) | Duration in days | Venue | Please specify Beneficiary group (Farmer & FW/ RY/ EP and NGO Personnel) | General participants | | | SC/ST | | | Grand Total | | |
|--------------|------------------------------|---|---|------------------|----------------|--|----------------------|----|----|-------|----|----|-------------|----|----|
| | | | | | | | M | F | T | M | F | T | M | F | T |
| Soil Science | Soil fertility management | Soil fertility management in organic farming | 10.10.18 | 1 | 1 No. Borgayan | F/FW | - | - | - | 16 | 6 | 22 | 16 | 6 | 22 |
| | INM | INM in Pulses | 11.10.18 | 1 | Morituni | F/FW | - | - | - | 6 | 20 | 26 | 6 | 20 | 26 |
| | Soil fertility management | Soil fertility management in organic farming | 27.11.18 | 1 | Darge Sonowal | F/FW | - | - | - | 7 | 17 | 24 | 7 | 17 | 24 |
| | Production of organic inputs | Low cost production technology of Vermicompost, enriched compost and Azolla for krishi Sakhis under ASRLM, Jorhat | 12.03.19 to 13.03.19 | 2 | Bor Ahum Gaon | EP | - | 51 | 51 | - | - | - | - | 51 | 51 |
| | | Low cost production technology of Vermicompost, enriched compost and Azolla for krishi Sakhis under ASRLM, Jorhat | 14.03.19 to 15.03.19 | 2 | Allengmora | EP | - | 65 | 65 | - | 8 | 8 | - | 73 | 73 |
| Horticulture | Spice | Commercial production of important spice crops | 21/6/18, 27/6/18, 28/6/18, 29/6/18, 06/7/18 | 5 | Puranimotia | F/FW | 19 | 6 | 25 | - | - | - | 19 | 6 | 25 |
| | Nursery raising | Nursery raising techniques of winter vegetables | 23/8/18 – 25/8/18 | 1 | AAU | F/FW | 34 | 4 | 38 | 6 | 1 | 7 | 40 | 5 | 45 |
| | Vegetable production | Advance production technology of winter | 29/3/19 – 31/3/19 | 3 | Kathalbari | F/FW | 19 | 16 | 35 | - | - | - | 19 | 16 | 35 |

| | | | | | | | | | | | | | | | | |
|------------------|-----------------|---|---------------------------|---|------------|------|---|----|----|----|----|----|----|----|----|---|
| | | vegetables and their organic management | | | | | | | | | | | | | | |
| Plant Protection | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Animal Science | Poultry | Training on scientific quail farming | 20.03.19 | 1 | Pirakata | F/FW | 5 | 18 | 23 | - | 2 | 2 | 5 | 20 | 25 | |
| | Piggery | Scientific pig farming | 22.10.18 | 1 | Borgayan | F/FW | - | - | - | 17 | 6 | 23 | 17 | 6 | 23 | |
| | | Scientific pig farming | 23.10.18 | 1 | Baligaon, | F/FW | - | - | - | 12 | 16 | 28 | 12 | 16 | 28 | |
| | | Commercial pig farming | 22.11.18 | 1 | Dangdhora | F/FW | - | - | - | - | 20 | 20 | - | 20 | 20 | |
| Home Science | Food Processing | Food processing and preservation | 07.09.18 - 11.09.18 | 1 | Dulakhoria | FW | - | 24 | 24 | - | 1 | 1 | - | 25 | 25 | |

(D) Vocational training programmes for Rural Youth

| Crop / Enterprise | Date (From - To) | Duration (days) | Area of training | Training title* | No. of Participants | | | | | | | | | Impact of training in terms of Self employment after training | | | | Whether Sponsored by external funding agencies (Please Specify with amount of fund in Rs.) |
|-------------------|------------------|-----------------|------------------|-----------------|---------------------|---|---|-------|---|---|-------|---|---|---|-------------|----------------------------|--|--|
| | | | | | General | | | SC/ST | | | Total | | | Type of enterprise ventured into | No of units | Number of persons employed | Avg. Annual income in Rs. generated through the enterprise | |
| | | | | | M | F | T | M | F | T | M | F | T | | | | | |
| | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Total (2) | | | | | | | | | | | | | | | | | | |

*training title should specify the major technology /skill transferred

Annexure 3: Only Sponsored Training Programmes (On, Off and Vocational) :

| On/ Off/ Vocational | Beneficiary group (F/ FW/ RY/ EP) | Date (From- To) | Duration (days) | Discipline | Area of training | Title | No. of Participants | | | | | | | | | Sponsoring Agency | Amount of fund received (Rs.) |
|---------------------|-----------------------------------|-------------------|-----------------|--------------|--------------------|---|---------------------|---|----|-------|---|---|-------|---|----|---|-------------------------------|
| | | | | | | | General | | | SC/ST | | | Total | | | | |
| | | | | | | | M | F | T | M | F | T | M | F | T | | |
| Off | F/FW | 23/8/19 – 25/8/18 | 3 days | Horticulture | Nursery management | Horticultural crop management and improved nursery techniques | 34 | 4 | 38 | 6 | 1 | 7 | 40 | 5 | 45 | Central Institute of Horticulture (CIH), Medziphema, Nagaland | 1,20,000.00 |
| Total | | | | | | | 34 | 4 | 38 | 6 | 1 | 7 | 40 | 5 | 45 | | |

Extension Activities (including activities of FLD programmes) (Please mention specific Extension Activity conducted by the KVK such as Field Day, Kisan Mela, Exhibition, Diagnostic Visit, etc) during 2018 -19

| Sl. No. | Extension Activity | Topic | Date and duration | No. of activities | Participants | | | | | | | | | | | |
|---------|--------------------|---|-------------------|-------------------|--------------|----|-----|-----------|----|----|-------------------------|---|---|-------------------|----|-----|
| | | | | | General (1) | | | SC/ST (2) | | | Extension Officials (3) | | | Grand Total (1+2) | | |
| | | | | | M | F | T | M | F | T | M | F | T | M | F | T |
| 1 | Advisory services | | | 60 | 85 | 40 | 125 | 40 | 35 | 75 | - | - | - | 125 | 75 | 200 |
| 2 | Diagnostic visit | - | | 24 | 140 | 14 | 154 | 81 | 11 | 92 | - | - | - | 221 | 24 | 245 |
| 3 | Field day | Field day under FLD on Bayers Hybrid Paddy variety, Arise 6444-G | 19.11.20 18 | 7 | 60 | 13 | 73 | - | - | - | - | - | - | 60 | 13 | 73 |
| | | Field day under FLD on Biological suppression of rice pest (BIPM package) | 27.11.20 18 | | 20 | 10 | 30 | 3 | - | 3 | - | - | - | 23 | 10 | 33 |
| | | Field day under FLD on Mushroom cultivation var. Oyster - 444 | 15.12.20 18 | | 18 | 12 | 30 | 5 | - | 5 | - | - | - | 30 | 5 | 35 |
| | | Field day under FLD on use of pheromone traps in controlling fruit borer in tomato and fruit and shoot borer in brinjal | 09.02.20 19 | | - | - | - | 28 | 10 | 38 | - | - | - | 28 | 10 | 38 |
| | | Field day under FLD on area specific mineral mixture (AAUVETMIN) supplementataion during flushing and gestation in pig | 20.02.18 | | 9 | 2 | 11 | 4 | - | 4 | - | - | - | 13 | 2 | 15 |

| | | | | | | | | | | | | | | | | |
|----|------------------------------------|---|---|-----|-----|-----|-----|-----|-----|-----|----|---|----|-----|-----|------|
| | | Field day under FLD on Scientific cultivation of pumpkin var. <i>Leela</i> | 26.03.19 | | 20 | 22 | 42 | 4 | 4 | 8 | 1 | - | 1 | 24 | 26 | 50 |
| | | Field day under FLD on Scientific cultivation of Marigold var. <i>Pusa Narengi Gainda</i> | 27.03.19 | | 16 | 34 | 50 | - | - | - | - | - | - | 16 | 34 | 50 |
| 4 | Group Discussion | Doubling Farmers Income, Mera gaon Mera Gaurav, TSP programme | | 20 | 112 | 44 | 156 | 67 | 22 | 89 | - | - | - | 179 | 66 | 245 |
| 5 | Kishan Gosthi | | | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 6 | Kishan Mela | | | 1 | 460 | 138 | 598 | 367 | 205 | 572 | 15 | - | 15 | 842 | 343 | 1185 |
| 7 | Film show | Environment Day, Awareness camp | | 4 | 276 | 107 | 383 | 172 | 115 | 287 | - | - | - | 448 | 222 | 670 |
| 8 | SHG formation | | | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 9 | Exhibition | | | 3 | 612 | 384 | 996 | 308 | 296 | 624 | 20 | - | 20 | 940 | 680 | 1620 |
| 10 | Scientists visit to farmers fields | | | 161 | 170 | 90 | 260 | 40 | 60 | 100 | - | - | - | 210 | 150 | 360 |
| 11 | Plant/ Animal Health camp | | | 2 | 28 | 22 | 50 | 26 | 11 | 37 | - | - | - | 54 | 33 | 87 |
| 12 | Farm science club | | | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 13 | Ex-trainee Sammelan | | | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 14 | Farmers seminar/ workshop | | | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 15 | Method demonstration | | | 25 | 256 | 164 | 420 | 111 | 74 | 185 | - | - | - | 367 | 238 | 605 |
| 16 | Celebration of important days | World Env. Day, World Food Day, World Sparrow Day, Mahila Kisan Divas, Anatar Divas, Kisan Divas, World Yoga Day, World Soil Day, Republic Day, Independence Day, University Foundation Day | 05.06.18, 16.10.18, 20.03.19, 15.10.18, 23.12.18, 20.03.19, 21.06.18, 05.12.18, 26.01.18, 15.08.18, | 11 | 346 | 251 | 597 | 174 | 104 | 278 | - | - | - | 520 | 355 | 875 |

| | | | | | | | | | | | | | | | | |
|----|--------------------------------------|--|----------|----|-----|-----|-----|-----|-----|-----|---|---|---|-----|-----|----------|
| | | | 01.04.18 | | | | | | | | | | | | | |
| 17 | Exposure visits | | | 5 | 55 | 32 | 87 | 30 | 39 | 69 | - | - | - | 85 | 71 | 156 |
| 18 | Electronic media (CD/DVD) | | | - | | | | | | | | | | | | |
| 19 | Extension literature | | | - | | | | | | | | | | | | |
| 20 | Newspaper coverage | | | 12 | - | - | - | - | - | - | - | - | - | - | - | Mas s |
| 21 | Popular articles | Thalua Krishi Prajukti aru Antanirhit Vigyan, Hopun Magazine | | 1 | - | - | - | - | - | - | - | - | - | - | - | 500 |
| | | Krishi Khetrat Gramin Mahila, Hopun Magazine | | 1 | - | - | - | - | - | - | - | - | - | - | - | |
| | | Unnata Padhatire Kol Kheti, Hopun Magazine | | 1 | - | - | - | - | - | - | - | - | - | - | - | |
| | | Vigyan Hanmmata Padhatire Bota Sorai (Quail) Palon, Hopun Magazine | | 1 | - | - | - | - | - | - | - | - | - | - | - | |
| 22 | Radio talk | Soil fertility management in organic farming | 13.08.18 | 1 | - | - | - | - | - | - | - | - | - | - | - | Mas s |
| | | Livestock enterprise - Way to Entrepreneurship development | 16.01.19 | 1 | - | - | - | - | - | - | - | - | - | - | - | Mas s |
| 23 | TV talk | | | - | | | | | | | | | | | | |
| 24 | Training manual | | | - | | | | | | | | | | | | |
| 25 | Soil health camp | | | 1 | 30 | 10 | 40 | 15 | 5 | 20 | - | - | - | 45 | 15 | 60 |
| 26 | Awareness camp | | | 6 | 68 | 40 | 108 | 37 | 20 | 57 | - | - | - | 105 | 60 | 165 |
| 27 | Lecture delivered as resource person | | | 8 | 85 | 62 | 147 | 70 | 33 | 103 | | | | 155 | 95 | 250 |
| 28 | PRA | | | 4 | 71 | 19 | 90 | 64 | 6 | 70 | - | - | - | 135 | 25 | 198 |
| 29 | Farmer-Scientist interaction | | | 3 | 308 | 215 | 523 | 242 | 110 | 352 | - | - | - | 550 | 325 | 875 |
| 30 | Soil test campaign | | | | | | | | | | | | | | | |

1. Production and supply of Technological products during 2018 - 19

A. SEED MATERIALS

| Major group/class | Crop | Variety | Quantity (qt) | Value (Rs.) | No. of recipient/ beneficiaries | | |
|-------------------|------------|------------------|---------------|-------------|---------------------------------|-------|-------|
| | | | | | General | SC/ST | Total |
| Cereals | Sali paddy | Ranjit | 9.5 q | 1140 | 1 | 0 | 1 |
| | | Gitesh | 1.75 q | - | 0 | 0 | 0 |
| | | Mahsuri | 9.0 q | 1330 | 2 | 0 | 2 |
| | | Black Rice | 2.15 q | 3120.00 | 3 | 0 | 3 |
| | | Ranjit Sub – 1 | 1.67 q | - | 0 | 0 | 0 |
| | | Bahadur Sub – 1 | 1.57 q | - | 0 | 0 | 0 |
| Pulses | | French bean | 7.5 kg | - | 0 | 0 | 0 |
| | | Rajmah | 30 kg | 2850 | 5 | 2 | 7 |
| Flowers | | Marigold Flowers | 2.0 kg | 450 | 2 | 0 | 2 |

A1. SUMMARY of Production and supply of Seed Materials during 2018-19

| Sl. No. | Major group/class | Quantity (ton.) | Value (Rs.) | Number of recipient/ beneficiaries | | |
|--------------|-------------------|-----------------|----------------|------------------------------------|----------|-----------|
| | | | | General | SC/ST | Total |
| 1 | CEREALS | 2.564 | 3880.00 | 6 | 0 | 6 |
| 3 | PULSES | 0.0375 | 2850 | 5 | 2 | 7 |
| 5 | FLOWER CROPS | 0.002 | 450.00 | 2 | 0 | 2 |
| TOTAL | | 2.566 | 4330.00 | 13 | 2 | 15 |

B. Production of Planting Materials (Nos. in lakh)

| Major group/class | Crop | Variety | Numbers | Value (Rs.) | Number of recipient beneficiaries | | |
|-------------------|------------------|---------|---------|-------------|-----------------------------------|-------|-------|
| | | | | | General | SC/ST | Total |
| Fruits | Banana Sucker | Malbhog | 150 | 30 | 1 | 0 | 1 |
| | Pineapple sucker | Kew | 200 | - | 0 | 0 | 0 |

| | | | | | | | |
|-----------------------------|----------------------|---------------|-------------|-------|-----------|-----------|------------|
| | Dragon Fruit sapling | Red Flesh | 500 | 16150 | 32 | 6 | 38 |
| | Assam Lemon Cutting | Seedless | 160 no. | 4590 | 3 | 50 | 53 |
| Spice | Turmeric | Megha | 3.3 q | 200 | 1 | 0 | 1 |
| Flowers | Gerbera | Red Gem | 200 | 50 | 1 | 0 | 1 |
| | Ixora | | 10 no | 180 | 3 | 0 | 3 |
| | Bougainvillea | | 20 no | 390 | 5 | 1 | 6 |
| Plantation crops | | | | | | | |
| Sugarcane | Sugarcane | | 5 q | 825 | 3 | 0 | 3 |
| Forage Crop | Forage Crop | Setaria | 30000 slips | 720 | 5 | 2 | 7 |
| | | Congo Signal | 15000 slips | 20 | 1 | 0 | 1 |
| | | Hybrid Napier | 5000 setts | 270 | 2 | 1 | 3 |
| OTHERS (Pl. Specify) | - | | - | - | - | - | - |
| Total | | | | | 64 | 62 | 126 |

B1. SUMMARY of Production and supply of Planting Materials (In Lakh) during 2018-19

| Sl. No. | Major group/class | Numbers (In Lakh) | Value (Rs.) | Number of recipient beneficiaries | | |
|--------------|-----------------------------|-------------------|-------------|-----------------------------------|-----------|------------|
| | | | | General | SC/ST | Total |
| 1 | Fruits (Thailand Apple ber) | 1010 no. | 20770 | 33 | 6 | 39 |
| 2 | Spices(Turmeric) | 3.3 q | 200 | 1 | 0 | 1 |
| 8 | OTHERS (Specify) Fodder | 50000 no. | 1010 | 8 | 3 | 11 |
| TOTAL | | | | 20 | 85 | 105 |

C. Production of Bio-Products during 2018-19

| Major group/class | Product Name | Species | Quantity | | Value (Rs.) | Number of Recipient /beneficiaries | | |
|-------------------|--------------|-----------------|----------|------|-------------|------------------------------------|-------|-------|
| | | | No. | (qt) | | General | SC/ST | Total |
| BIOAGENTS | | | | | | | | |
| Vermi worm | | Eisenia foetida | | 0.30 | 12600 | 7 | 1 | 8 |

| BIOFERTILIZERS | | | | | | | | |
|-----------------------|--|--------------------------------|--|-----|------|---|---|----|
| Vermicompost | | | | 160 | 9120 | 9 | 2 | 11 |
| Azolla | | <i>Azolla (A. caroliniana)</i> | | 4 | - | 0 | 0 | 0 |
| BIO PESTICIDES | | | | | | | | |
| | | | | - | - | 0 | 0 | 0 |

C1. SUMMARY of production of bio-products during 2018-19

| Sl. No. | Product Name | Species | Quantity | | Value (Rs.) | Number of Recipient beneficiaries | | Total number of Recipient beneficiaries |
|---------|-----------------|------------------------------------|----------|-------|-------------|-----------------------------------|----------|---|
| | | | Nos | (kg) | | General | SC/ST | |
| 1 | BIOAGENTS | <i>E. foetida</i> | | 30 | 12600 | 7 | 1 | 8 |
| 2 | BIO FERTILIZERS | Vermicompost (<i>E. foetida</i>) | | 16000 | 9120 | 9 | 2 | 11 |
| | | Azolla (<i>A. caroliniana</i>) | | 400 | - | 0 | 0 | 0 |
| 3 | BIO PESTICIDE | - | - | - | - | - | - | - |
| | TOTAL | | | | | 16 | 3 | 19 |

D. Production of livestock during 2018-19

| Sl. No. | Type of livestock | Breed | Quantity | | Value (Rs.) | Number of Recipient beneficiaries | | | |
|---------|-------------------|-----------|----------------|-----|-------------|-----------------------------------|-------|-------|-----|
| | | | (Nos) | Kgs | | General | SC/ST | Total | |
| A. | Cattle/ Dairy | Cow | HF | 3 | | - | 0 | 0 | 0 |
| | | Calf | HF | 3 | | - | 0 | 0 | 0 |
| | | Bull | HF | 1 | | - | 0 | 0 | 0 |
| | | Milk | | | 3763.25 | 173110 | 120 | 80 | 200 |
| | Cow Servicing | HF | 4 | | 1600 | 3 | 1 | 4 | |
| B. | Goattery | Goat | Beetal | 9 | | 7000 | 1 | 0 | 1 |
| | Goat Servicing | | Beetal | 49 | | 2450 | 40 | 9 | 49 |
| C. | Piggery | Pig | Hampshire | 6 | | - | 0 | 0 | 0 |
| | | | Yorkshire | 4 | | - | 0 | 0 | 0 |
| | Piglets | Hampshire | 39 | | 215000 | 27 | 8 | 35 | |
| | Pig Servicing | Hampshire | 15 | | 7500 | 10 | 4 | 14 | |
| D. | Poultry | Birds | Japanese Quail | 218 | | 14600 | 22 | 10 | 32 |
| | | Chicks | Japanese Quail | 800 | | 25260 | 35 | 15 | 50 |

| | | | | | | | | |
|----|----------------|----------------|-----------------|----------|--------|------|-----|-----|
| | | Rainbow | 4000 | | 517120 | 210 | 174 | 384 |
| | | Turkey | 39 | | 4560 | 3 | 0 | 3 |
| | Table egg | Japanese Quail | 758 | | 2274 | 25 | 5 | 30 |
| | | Kalinga Brown | 17 | | 136 | 3 | 0 | 3 |
| | | White Leg Horn | 22 | | 176 | 2 | 0 | 2 |
| | | Turkey | 28 | | 280 | 2 | 0 | 2 |
| | | Kamrupa | 11 | | 88 | 1 | 1 | 2 |
| | | Hatching Egg | Kalinga Brown | 110 | | 1650 | 15 | 2 |
| | White Leg Horn | | 91 | | 1365 | 14 | 1 | 15 |
| | Turkey | | 185 | | 5550 | 24 | 3 | 27 |
| | Kamrupa | | 69 | | 1035 | 6 | 1 | 7 |
| | | Rainbow | 6 | | 90 | 1 | 0 | 1 |
| E | Fishery | Fish | Catla, Rahu etc | 91.66 kg | 19368 | 9 | 2 | 11 |
| F. | Duckery | Duck | Vigova Super M | 4 | 1000 | 2 | 0 | 2 |
| | | | Khaki Campbell | 32 | 8000 | 12 | 4 | 16 |
| | | Table egg | Khaki Campbell | 309 | 2472 | 17 | 5 | 22 |
| | | Hatching egg | Khaki Campbell | 158 | 2370 | 15 | 2 | 17 |

D1. SUMMARY of production of livestock during 2018 – 19

| Sl. No. | Livestock category | Breed | Quantity | | Value (Rs.) | Number of Recipient beneficiaries | | Total number of Recipient beneficiaries |
|---------|--------------------|-----------|----------------|---------|-------------|-----------------------------------|-------|---|
| | | | Nos | (kg) | | General | SC/ST | |
| A. | CATTLE | HF | 3 | | - | 0 | 0 | 0 |
| | Milk | | | 3763.25 | 173110 | 120 | 80 | 200 |
| | Cow Servicing | HF | 4 | | 1600 | 3 | 1 | 4 |
| B. | SHEEP & GOAT | Beetal | 9 | | 7000 | 1 | 0 | 1 |
| | Goat servicing | Beetal | 49 | | 2450 | 40 | 9 | 49 |
| C. | POULTRY | Birds | Japanese Quail | 218 | 14600 | 22 | 10 | 32 |
| | | Chicks | Japanese Quail | 800 | 25260 | 35 | 15 | 50 |
| | | | Rainbow | 4000 | 517120 | 210 | 174 | 384 |
| | | | Turkey | 39 | 4560 | 3 | 0 | 3 |
| | | Table egg | Japanese Quail | 758 | 2274 | 25 | 5 | 30 |
| | | | Kalinga Brown | 17 | 136 | 3 | 0 | 3 |

| | | | | | | | | |
|----|--------------|---|----------|--|--------|------------|------------|------------|
| | | White Leg Horn | 22 | | 176 | 2 | 0 | 2 |
| | | Turkey | 28 | | 280 | 2 | 0 | 2 |
| | | Kamrupa | 11 | | 88 | 1 | 0 | 1 |
| | Hatching egg | Kalinga Brown | 110 | | 1650 | 15 | 2 | 17 |
| | | White Leg Horn | 91 | | 1365 | 14 | 1 | 15 |
| | | Turkey | 185 | | 5550 | 24 | 3 | 27 |
| D. | PIGGERY | Pig | | | | | | |
| | | Hampshire | 6 | | - | 0 | 0 | 0 |
| | | Yorkshire | 4 | | - | 0 | 0 | 0 |
| | | Piglet | 39 | | 215000 | 27 | 8 | 35 |
| | | Pig Servicing | 15 | | 7500 | 10 | 4 | 14 |
| E. | FISHERIES | Magur,Rahu, Katla, Grass carp, Silver carp etc. | 91.66 kg | | 19368 | 25 | 4 | 29 |
| F. | Duckery | Duck | | | | | | |
| | | Vigova Super M | 4 | | 1000 | 2 | 0 | 2 |
| | | Khaki Campbell | 32 | | 8000 | 12 | 4 | 16 |
| | | Table egg | 309 | | 2472 | 17 | 5 | 22 |
| | | Hatching egg | 158 | | 2370 | 15 | 2 | 17 |
| | | TOTAL | | | | 628 | 327 | 955 |

3.6. Literature Developed/Published (with full title, author & reference) during 2018-19

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

(B) Articles/ Literature developed/published

| Item | Title /and Name of Journal | Authors name | No. of copies |
|----------------------------------|--|--|---------------|
| Research papers | - | - | |
| Abstract | - | - | |
| Training manuals | - | - | |
| Instruction Manual | - | - | |
| Technical Report | - | - | |
| Book/ Book Chapter | - | - | |
| Item | Title /and Name of Journal | Authors name | No. of copies |
| Popular articles | Thalua Krishi Prajukti aru Antanirhit Vigyan,Hopun Magazine | Dr. P. Nath, Head, KVK, Jorhat | 500 |
| | Krishi Khetrat Gramin Mahila, Hopun Magazine | Ms. Binapani Deka, SMS, KVK, Jorhat | 500 |
| | Unnata Padhatire Kol Kheti, Hopun Magazine | Ms. Sharmistha Borgohain, SMS, KVK, Jorhat | 500 |
| | Vigyan Hanmmata Padhatire Bota Sorai (Quail) Palon, Hopun Magazine | Dr. Prabhat Baruah, SMS, KVK, Jorhat | 500 |
| Technical bulletins | - | - | |
| Newsletter | - | - | - |
| Conference/ workshop proceedings | | - | - |
| Leaflets/folders | - | - | - |
| e-publications | - | - | - |

N.B. Please enclose a copy of each. In case of literature prepared in local language, please indicate the title in English

(C) Details of Electronic Media Produced: Nil

| S. No. | Type of media (CD / VCD / DVD / Audio-Cassette) | Title of the programme | Number produced |
|--------|---|------------------------|-----------------|
| 1. | | | |

3.7. Success stories on horizontal spread of the technologies/Case studies, if any (two or three pages write-up on each case/ successes with suitable action photographs)

Commercial production of Indigenous chicken chicks through self made hatching incubator:

The backdrop: Tipomia village is a typical pristine Assamese village situated in Kaliapani Development Block in the district of Jorhat. Winter paddy is the main cereal crop of the village though other crops like potato, pulses etc. are also grown. Each homestead garden (*Bari*) of the village has various crops like banana, Assam lemon, areca nut, coconut, various minor fruit species, bamboo and agar plants which to some extent supplement livelihood of the farmers. Commercial cultivation of seasonal vegetable is however a major source of earning of the villagers which are sold to the nearby markets.

Animal husbandry is another source of income for the farmers and almost every household have animals like cattle, goat and backyard poultry. Local indigenous chicken has a huge market demand. The sale of local chicken as well as eggs is a major source of subsidiary income and which also provides nutritious chicken egg and meat for their family consumption. However, due to lack of organized market and non availability of quality chick's farmers are unable to produce to meet the market demand. By seeing the market demand and profit margin, many farmers producing broiler chicken are interested to shift their farm to local which will also help the farmers to grow up their business in terms of egg and meat production.

The emerging agro entrepreneur: Mr. Rantu Phukan is a youth from Tipomia village in the Kaliapani area. He always had an inclination towards agriculture. Once he completed his schooling, due to financial hardship and need to support his parents and siblings he could not continue his studies and decided to adopt various livelihood activities to support his parents. He has completed a three month motor mechanical training course and started his motor mechanic work. But his ambition was to be become self sufficient by doing something innovative in the field of farming. From the year 2011 he was helping his father to run up the small poultry farm however, he could hardly earn enough to support his family. Subsequently he diversified into various other livelihood activities like small tea cultivation, bee keeping, fishery, duckery etc. He received all the technical guidance from KVK, Jorhat in this venture. He started chick production by making an incubator in an ordinary thermocol box and kerosene lamp and able to produce few chicks in the first batch. Boosted up by the success to produce chicks, he looked for improving his ventures for further enhancing his farm income and that's when KVK, Jorhat advised him to take up local chicken chick's production unit as a commercial venture. The KVK provided him all the technical knowhow and showed him the possible forward market linkages for his produce.



His Debut in hatching business: During the year 2013-14, Mr. Phukan make an incubator fitted with kerosene lamp and start producing chicks. In the first batch 65 chicks hatched out of 120 eggs. He was continuously improving his incubator and he was continuously producing the chicks in a small scale and supplied to the farmers from the neighboring villages. In the year 2016, he made a kerosene incubator of 2000 egg capacity to take up the venture in to a new height. But kerosene incubator is labor intensive and hatching percentage is also low. So, he tried to change it with electrical filament and gradually improved its quality. He used all the scientific interventions suggested by the KVK to improve upon. Presently he is producing 3000 local chicken chicks every month and earning an average net income of 50,000.00 per month. During the financial year 2018-19, he has generated an income of Rs. 4 lakh by selling quality chicks to the farmers of Jorhat and nearby districts. He is also fabricating incubator and spreading his business by selling the incubators of different caoacity and getting a good market response. A farmer can buy an incubator from him at a very affordable price. He has also established a local chicken poultry farm for egg production. He is also buying back the local eggs in a good price from the farmers for his hatchery.

Way forward: His success in commercial local chicken chick's production made a big sensation in his village particularly among rural unemployed youths. Seeing his success, many young farmers and rural youth of the locality is taking up the business for production of chicks of Japanese quail, local chicken, turkey and duck. During the year 2018-19, he participated in the district Kisan Mela organized by KVK, Jorhat and received the progressive farmer award in

the field of veterinary science. He is now in the process of expanding his business and targeting to produce 10,000 chicks per month also to take up his business in to a new height.

3.8 Give details of innovative methodology/technology developed and used for Transfer of Technology during the year

Non availability of quality fish seed is a major bottle neck in fish farming particularly in upper Assam. Due to non availability of right seed at right time the farmer can not take the full period growth advantage of fish farming (March to October). To do so, a programme on production of carried over seed was undertaken so that farmers rear the previous years fish seed (Carried over) when temperature become congenial for fish farming. Some of the farmers can also take this method of fish seed production as a business venture in the locality.

3.9 Give details of indigenous technology practiced by the farmers in the KVK operational area which can be considered for technology development (in detail with suitable photographs)

| S. No. | Crop / Enterprise | ITK Practiced | Purpose of ITK |
|--------|-------------------|---|---|
| 1 | Duckery | Use of <i>Bhatghila</i> [<i>Oroxylum indicum</i> (L) Vent.] bark extract. The rural people use the bark, make paste and provided to the local ducks when observe symptom of lameness. The symptom of lameness resembles parosis condition of duck. They believe that bhatghila bark can control this problem of duck. This believe if standardized can be converted to technology for controlling duck's deficient in magnesium and iron. This is the first reporting ITK on duck by bhatghila bark. | Treatment for lameness problem (suspected parosis) in duck |
| 2 | Rice | Application of leaves of 'Bihlongini' (<i>Polygonum hydropiper</i>) or 'Bihdhekia' (<i>Sphaerostiphnosunitus</i>) in the standing crop | Management of rice stem borer |
| 3 | Rice | 'Posotia' leaves are dried, grinded and dusted in the rice field | Management of rice hispa |
| 4 | Rice | Application of Chopped <i>Kola kachu</i> (<i>Colocasia esculanta</i> Black) and fresh cowdung | Management of case worm problem of rice |
| 5 | Rice | Keeping the stubbles of <i>Boro</i> rice undisturbed avoiding ploughing and grazing by the cattle for 1 - 1½ months. The practices is usually practised in traditional varieties grown in low lying (beel) areas | C |
| 6 | Rice | Grains for seed purpose are stored in 'koloh or earthen pitcher with a lid made of earth | The stored grain pests cannot enter the structure, thereby savings the seeds. The earthen pot also saves the grains from outside moisture |
| 7 | Banana | Spraying solution of "Samsolokha"/ <i>germani bon</i> (<i>Chromolena odorata</i>) leaves along with detergent soap in banana plant | To control banana weevil |
| 8 | Banana | The juice of <i>gundhowa bon</i> , (<i>Ageratum conizoides</i>) is sprayed on banana plant | To get rid of leaf and fruit scarring beetle of banana |
| 9 | Potato | First spread a layer of dried 'Dhekia' leaves on the floor, then keep a layer of tuber seed and then again cover it with another layer of wild Dhekia leaves | This helps in repelling Potato tuber moth infestation. |

| | | | |
|----|---|---|---|
| 10 | Aphid and pod borer infestation in vegetables | Foliar application of wood ashes in the wee hours of the day keeps away aphids pod borers and diseases from plants (vegetables) | Thin film of ash coat with dew inhibits the attacks of pest and pathogens. Ash also act as nutrient |
|----|---|---|---|

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

- Identification of courses for farmers/farm women
- Rural Youth
- Extension personnel

3.11 Field activities

- i. Number of villages adopted : 6
- ii. No. of farm families selected : 860
- iii. No. of survey/PRA conducted : 3

3.12. Activities of Soil and Water Testing

Status of establishment of Lab : No STL (1 no. mini Soil Testing, Mridaparikshak)

- 1. Year of establishment : Nil
- 2. List of equipments purchased with amount : Nil

| Sl. No. | Name of the Equipment | | | Qty. | Cost |
|---------|-----------------------|--------------------------|------------------------------------|------|----------|
| | S&WT lab | Mini lab/ Mridaparikshak | Manufacturer | | |
| 1 | - | Mridaparikshak | Nagarjuna Agro Chemic Pvt. Limited | 1 | 72000.00 |
| Total | | Mridaparikshak | | 1 | 72000.00 |

3. Details of samples analyzed (2018- 19) :

| Details | No. of Samples analysed | No. of Farmers | No. of Villages | Amount (In Rupees) realized |
|-----------------|-------------------------|----------------|-----------------|------------------------------|
| Soil Samples | 180 | 380 | 9 | - |
| Water Samples | - | - | - | - |
| Plant Samples | - | - | - | - |
| Petiole Samples | - | - | - | - |
| Total | 180 | 380 | 9 | - |

1. Details of Soil Health Cards (SHCs) (2018-19)

- a. No. of SHCs prepared: 180
- b. No. of farmers to whom SHCs were distributed: 180
- c. Name of the Major and Minor nutrients analysed: N, P, K, S, pH, OC, EC, Fe, Zn, B.
- d. No. of villages covered : 9
- e. Soil health card based nutrient management in different crops (pl. submit in brief in separate page) : Nil

3.13. Details of SMS/ Voice Calls sent on various priority areas

| Message type | Crop | | Livestock | | Weather | | Marketing | | Awareness | | Other Ent. | | Total | |
|-------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|
| | No. of Message | No. of Beneficiary | No. of Message | No. of Beneficiary | No. of Message | No. of Beneficiary | No. of Message | No. of Beneficiary | No. of Message | No. of Beneficiary | No. of Message | No. of Beneficiary | No. of Message | No. of Beneficiary |
| Text only | 25 | 25000 | 15 | 15000 | 6 | 6000 | 4 | 4000 | 12 | 12000 | 8 | 8000 | 70 | 70000 |
| Voice only | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Voice & Text both | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Total | 25 | 25000 | 15 | 15000 | 6 | 6000 | 4 | 4000 | 12 | 12000 | 8 | 8000 | 70 | 70000 |

3.14 Contingency planning for 2018-19

a. Crop based Contingency planning

| Contingency (Drought/ Flood/ Cyclone/ Any other please specify) | Proposed Measure | Proposed Area (In ha.) to be covered | No. of beneficiaries proposed to be covered | | |
|--|---|--------------------------------------|---|-------|-------|
| | | | General | SC/ST | Total |
| Drought due to delay in monsoon | Introduction of new variety or crop | | | | |
| 1. Monsoon delay by 4 weeks, i.e. 1 st week of July | Staggered planting var. viz. Prafulla, Gitesh (Quality seeds from RARS, Titabor, AAU, Jorhat), Irrigate the seedbed and nursery raising in community basis, Trainings | 50.00 | 80 | 40 | 120 |
| 2. Monsoon delay by 6 weeks, i.e. 3 rd week of July | Manohar Sali, Andrew Sali etc. and close spacing, increase no. of seedlings per hill, irrigation, Short duration variety: Luit, Dishang, Kapili etc | 50.00 | 70 | 30 | 100 |
| 3. Monsoon delay by 8 weeks, i.e. 1 st week of August | Short duration var. Luit, Broad casting of sprouted seeds, irrigation | 40 | 50 | 30 | 80 |
| | Introduction of Resource Conservation Technologies | | | | |
| | RCT like Mulching, Drip irrigation in horticultural crops like banana, Assam lemon, Awareness training | 5 | 40 | 10 | 50 |
| | Distribution of seeds and planting materials | 3 | 35 | 15 | 50 |
| | Distribution of seeds of short duration varieties like Luit for direct sowing of sprouted seeds | 5 | 25 | 10 | 35 |
| | Establishment of Community nursery near assured water source for varieties like Gitesh , Prafulla, Luit, Dishang, Kanaklata etc for free distribution of seedling | 1 | 60 | 30 | 90 |

a. Livestock based Contingency planning

| Contingency (Drought/ Flood/ Cyclone/ Any other please specify) | Number of birds/ animals to be distributed | No. of programmes to be undertaken | No. of camps to be organized | Proposed number of animals/ birds to be covered through camps | Number of beneficiaries proposed to be covered | | |
|---|---|---------------------------------------|---------------------------------|--|---|-------|-------|
| | | | | | General | SC/ST | Total |
| Drought | - | - | - | - | - | - | - |
| Flood | - | 07 (Awareness cum animal health camp) | 07 | 1923 | 320 | 200 | 520 |

4.0. IMPACT

4.1. Impact of KVK activities (Not to be restricted for reporting period only)

| Name of specific technology/skill transferred | No. of participants | % of adoption | Change in income (Rs.) | |
|--|---------------------|---------------|------------------------|------------------|
| | | | Before (Rs./Unit) | After (Rs./Unit) |
| Rice variety KDML 105 (Padumoni) | 25 | 100 | 18750 | 31700 |
| Rice-toria double cropping with medium duration HY <i>Sali</i> rice var. TTB-404 | 22 | 100 | 18100 | 29150 |
| Direct seeded <i>Sali</i> paddy var. Luit | 35 | 100 | 10000 | 12250 |
| Boro paddy variety 'Kanaklata' | 20 | 100 | 107440 | 125890 |
| <i>Sali</i> Paddy Var. Gitesh & Swarna sub-1 | 135 | 100 | 18750 | 31700 |
| Toria (variety : TS- 36) | 100 | 100 | 25000 | 32000 |
| Lentil var. Moitree, KLS 218 | 20 | 100 | 11000 | 20800 |
| Sugarcane (Variety –Kalang, Borak, Dhansiri, Kapilipar & Doria) | 20 | 100 | 107440 | 125890 |
| Black gram (variety PU-31) | 100 | 100 | 11090 | 25800 |
| Green gram (variety IPM02-3, SGC-16) | 100 | 100 | 12000 | 27800 |
| Mushroom (Oyster) | 150 | 100 | 15000 | 35000 |
| Vermicompost | 40 | 100 | - | 17000 |

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

4.2. Cases of large scale adoption

(Please furnish detailed information for each case)

| Activity | Methodology used for analysis | Impact |
|---|----------------------------------|--|
| Demonstration on Sali paddy (var Gitesh & Swarna sub-1) | Observation and Group Discussion | <ul style="list-style-type: none"> After observing the outstanding performance of demonstrated variety, the farmers become interested to go for large scale cultivation of that varieties in the forthcoming season. Farmers accepted the technology and farmers of the nearby locality also adopted the technology. |
| Demonstration on toria var. TS-36 | Group discussion | <ul style="list-style-type: none"> Farmers of Majuli, Janjimukh and Borkhelia area showed interest towards the technology after getting benefited economically through cultivation of toria. Farmers exhibited keen interest towards the toria var. TS- 36. |
| Advisory services on organic management of Bhut Jalakia | Observation and personal contact | <ul style="list-style-type: none"> Many farmers of local area were benefited from the advisory services and have adopted the recommended management practices |
| Advisory services on organic cultivation of aromatic rice variety <i>Kon Joha</i> | Observation and personal contact | <ul style="list-style-type: none"> Many farmers of local area were benefited from the advisory services and have adopted the recommended package & management practices |

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

5.0. LINKAGES ESTABLISHED

5.1 Functional linkage with different organizations

| Name of organizations | Nature of linkage |
|--|---|
| 1. Department of Agriculture, Govt. of Assam | In planning and organizing training programme, demonstrations, field days, farmers-Scientist interaction, CDAP preparation, resource person in training programmes. The linkage with the department of Agriculture is made effective by frequent meeting with District Agriculture Officer, Joint meeting with the Deputy Commissioner and other agencies |
| 2. Department of Animal Husbandry and veterinary, Govt. of Assam | In planning and implementing training programme and also organizing rural camp for vaccination of farm animals. |
| 3. District Rural Development Agency, Jorhat | Conducting collaborative training programmes and resource persons for DRDA training. Joint visits to the DRDA operated programmes |
| 4. Dairy Development, Jorhat, Assam | In planning and organizing training programme |
| 5. NABARD, Jorhat | Conducting exposure visit, trainings, PRA, Awareness programme |
| 6. North East Affected Area Development Society (NGO) | In planning and organizing training programme |
| 7. All India Radio, Jorhat | For coverage of rural programme and broadcasting of Radio-talk on Agriculture, |

| | |
|--|--|
| | farmers interview |
| 8. ICAR Research Complex for NE Hill Region, Umiam, Barapani | Source of technology and conducting exposure visit |
| 9. NRC on Pig, Rani, Kamrup | Source of technology |
| 10. R & D, TATA Tea, Teok, Jorhat | Exchange of resource person, information sharing, exposure visit |
| 11. Central Silk Board, Lahdoigarh | Knowledge sharing, source of information |
| 12. ATMA, Jorhat | Technology backstopping, conducting demonstration, field day programmes, Joint programme evaluation. |
| 13. Assam Seed Certification Agency | For seed certification of seed growers of the district |
| 14. Regional Agricultural Research Station , Titabar | Source of foundation and breeder seeds for all varieties of paddy. Paddy related technology transfer and advisories, joint on farm testing of pipeline varieties |
| 15. Jorhat Milk Union Limited under PURABI diary | In planning and organizing training programme |

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

5.2 List special programmes undertaken by the KVK, which have been financed by State Govt./Other Agencies during 2018-19

| Name of the scheme | Activity | Date/ Month of initiation | Funding agency | Amount (Rs.) |
|--|--|---------------------------|----------------|--------------|
| Promotion of Agriculture Centric sustainable livelihood security for Tribal farmers of Assam | i. Survey of 5 TSP adopted villages completed ii. Paddy cultivation iii. Maize cultivation iv. Pig sty were constructed and piglets selected v. Poultry beneficiaries were selected Vi. Beneficiaries and plots for horticultural crops were selected | 2018-19 | ICAR | 42,00,000.00 |

5.3 Details of linkage with ATMA

a) Is ATMA implemented in your district Yes

| Sl. No. | Programme | Nature of linkage | Remarks |
|---------|----------------------------------|-------------------------|---------|
| 1 | Governing Body, ATMA, Jorhat | Member | |
| 2 | Training | As Resource persons | |
| 3 | Farmers – Scientists Interaction | As Resource persons | |
| 4 | Field Day | Collaborative programme | |
| 5 | Diagnostic field visit | As specialists | |

5.3 Give details of programmes implemented under National Horticultural Mission : Nil

| S. No. | Programme | Nature of linkage | Constraints if any |
|--------|-----------|-------------------|--------------------|
| | | | |

5.4 Nature of linkage with National Fisheries Development Board : Nil

| S. No. | Programme | Nature of linkage | Remarks |
|--------|-----------|-------------------|---------|
| | | | |

6. PERFORMANCE OF INFRASTRUCTURE IN KVK DURING 2018 -19

6.1 Performance of demonstration units (other than instructional farm)

| Sl. No. | Demo Unit | Year of estd. | Area | Details of production | | | Amount (Rs.) | | Remarks |
|--------------|-------------------|---------------|-------|-----------------------|---------------|---------------|----------------|--------------|---------|
| | | | | Variety | Produce | Qty. | Cost of inputs | Gross income | |
| 1. | Cattle shed | 2010 | 36.45 | HF | Milk | 3763.25 litre | 149244.00 | 173110.00 | |
| | | | | | Cow servicing | 4 no | | 1600.00 | |
| 2. | Vermicompost unit | 2010 | 46.80 | - | Vermicompost | 16000 kg | 3000.00 | 9120.00 | |
| | | | | | Vermiworm | 30 kg | | 12600.00 | |
| 3. | Poultry Unit | 2011 | 44.40 | White Leg Horn | Hatching egg | 91 | 360942.00 | 1365.00 | |
| | | | | | Table egg | 22 | | 176.00 | |
| | | | | Kalinga brown | Hatching eggs | 110 | | 1650.00 | |
| | | | | | Table egg | 17 | | 136.00 | |
| | | | | Turkey | Poult | 39 | | 4560.00 | |
| | | | | | Hatching egg | 185 | | 5550.00 | |
| | | | | | Table egg | 28 | | 280.00 | |
| | | | | Rainbow | Chicks | 4000 | | 517120.00 | |
| | | | | Japanese quail | Chicks | 800 | | 25260.00 | |
| | | | | | Birds | 218 | | 14600.00 | |
| | | | | | Eggs | 758 | | 2274.00 | |
| | | | | Khaki Campbell | Duck | 32 | | 8000.00 | |
| Hatching egg | 158 | 2370.00 | | | | | | | |
| Table egg | 309 | 2472.00 | | | | | | | |
| | Duckling | - | - | | | | | | |

| | | | | | | | | | |
|----|----------------------------------|------|----------------|--------------------|----------------|----------|-----------|-----------|---|
| | | | | Vigova Super M | Duck | 4 | | 1000.00 | |
| | | | | | Duckling | - | | - | |
| 4. | Goattery unit | 2011 | 34.20 | Beetal | Beetal/ Local | 9 | 1258.00 | 7000.00 | |
| | | | | | Goat servicing | 49 | | 2450.00 | |
| 5. | Piggery unit | 2010 | 41.04 | T & D, Hampshire | Pig | 6 | 234836.00 | - | |
| | | | | | Piglet | 39 | | 215000.00 | |
| | | | | | Pig servicing | 15 | | 7500.00 | - |
| | | | | Yorkshire | Pig | 4 | | - | |
| 6. | Fish pond | 2011 | 0.13 | Indian Major Carp | Big fish | 77.66 Kg | 3400.00 | 15168.00 | |
| 7. | Rice- Fish- Vegetable Unit | 2010 | 50m x 20m | Local Fish | Magur etc. | 14.00 kg | - | 4200.00 | |
| 8. | Azolla production unit | 2012 | 9.9m X 5.5m | Azolla caroleniana | Azolla Compost | 200 kg | 500.00 | - | |
| 9. | Vermi Compost production Unit | 2012 | 9.6m X 5m | - | Compost | 16000 kg | | 9120.00 | |
| | | | | | Vermiworm | 30 kg | 3000.00 | 12600.00 | |

6.2 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. | Cost of inputs | Gross income | |
| Cereals | | | | | | | | | |
| Rice | May- Jun- 2018 | Nov-Dec 2018 | | Ranjit | FS | 9.5 q | 44740.00 | 3880.00 | In Stock |
| | | | | Mashuri | FS | 9.0 q | | | |
| | | | | Gitesh | FS | 1.75 q | | | |
| | | | | Black Rice | TLS | 2.15 q | | | |
| | | | | Ranjit Sub – 1 | FS | 1.67 | | | |
| | | | | Bahadur Sub – 1 | FS | 1.57 | | | |
| | | | | Total | | 25.64 | | | |
| Pulses | Oct,18 | Jan, 19 | 0.003 | White Rajmah | Seed | 30 kg | 1500.00 | 2850.00 | 6.25 kg in stock |
| | Oct,18 | Jan, 19 | 0.002 | White French Bean | Seed | 7 kg | | - | In stock |
| Spices & Plantation crops | | | | | | | | | |

| | | | | | | | | | |
|--------------|-----------|---------|---------|--|-------------------------|------------------------|---------|---------------------------|----------|
| Turmeric | May, 18 | Jan, 19 | 0.003 | Megha Turmeric | Rhizome | 3.3 q | 1500.00 | 150.00 | In stock |
| Floriculture | | | | | | | | | |
| Gerbera | Sept, 18 | | 0.001 | Red-gem | Sucker | 200 | - | 50.00 | In stock |
| Fruits | | | | | | | | | |
| Pineapple | April, 17 | | 0.01 ha | Kew | Sucker | 100 | 3450.00 | - | In stock |
| Banana | April, 17 | | 0.01 | Malbhog | Sucker | 150 | | 30.00 | In stock |
| Dragon Fruit | April, 16 | | 0.03 ha | Redflesh | Sapling | 500 | | 16150.00 | |
| Assam Lemon | April, 16 | | 0.13 ha | Seedless | Cutting | 160 | | 4590.00 | |
| Papaya | April, 18 | | 0.04 ha | Viena | - | - | | - | |
| a. Others | | | | | | | | | |
| Sugarcane | 2016 | Ratoon | 0.13 | Nambor, Doria, Borak, Dishang | Setts | 5 q | - | 825 | In stock |
| Fodder crop | 2015 | | 0.4 | Congo Signal Setaria Hybrid Napier | Slips Slips Setts | 30000 15000 5000 | 1250.00 | 20.00 720.00 270.00 | In stock |

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

| Sl. No. | Name of the Product | Qty | Amount (Rs.) | | Remarks |
|---------|---------------------|----------|----------------|--------------|----------|
| | | | Cost of inputs | Gross income | |
| 1 | Vermi worm | 30 kg | 3000.00 | 9120.00 | In stock |
| 2 | Vermicompost | 16000 kg | | 12600.00 | Farm Use |
| 3 | Azolla | 400 kg | 500.00 | - | Farm Use |
| | BIOAGENTS | | | | |

6.4 Performance of instructional farm (livestock and fisheries production)

| Sl. No. | Name of the animal / bird / aquatics | Details of production | | | Amount (Rs.) | | Remarks |
|---------|--------------------------------------|-----------------------|-----------------|---------------|----------------|--------------|---------|
| | | Breed/ Species | Type of Produce | Qty. | Cost of inputs | Gross income | |
| 1. | Cattle | HF | Milk | 3763.25 litre | 149244.00 | 173110.00 | |
| | | | Cow servicing | 4 no | | 1600.00 | |
| 2. | Vermicompost | | Vermi Compost | 16000 kg | 3000.00 | 9120.00 | |
| | | | Vermiworm | 30 kg | | 12600.00 | |

| | | | | | | | |
|----------------|--------------------|--------------------|-----------------------|----------|-----------|-----------|--------------|
| 3. | Poultry | White Leg Horn | Hatching egg | 91 | 360942.00 | 1365.00 | |
| | | | Table egg | 22 | | 176.00 | |
| | | Kalinga brown | Hatching eggs | 110 | | 1650.00 | |
| | | | Table egg | 17 | | 136.00 | |
| | | Turkey | Poult | 39 | | 4560.00 | |
| | | | Hatching egg | 185 | | 5550.00 | |
| | | | Table egg | 28 | | 280.00 | |
| | | Rainbow | Chick | 4000 | | 517120.00 | |
| | | Japanese quail | Chick | 800 | | 25260.00 | |
| | | | Bird | 218 | | 14600.00 | |
| | | | Eggs | 758 | | 2274.00 | |
| | | Khaki campbell | Duck | 32 | | 8000.00 | |
| | | | Hatching egg | 158 | | 2370.00 | |
| | | | Table egg | 309 | | 2472.00 | |
| Vigova Super M | Duck | 4 | 1000.00 | | | | |
| 4. | Goattry | Beetal buck | Beetal/ Local/ Sirohi | 9 | 1258.00 | 7000.00 | |
| | | | Goat servicing | 49 | | 2450.00 | |
| 5. | Piggery | T & D, Hampshire | Pig | 6 | 234836.00 | - | |
| | | Yorkshire | | 4 | | - | |
| | | T& D, Hampshire | Piglet | 39 | | 215000.00 | Sold 55 nos. |
| 6. | Fish | | Big fish | 77.66 kg | 3400.00 | 15532.00 | |
| 7. | Rice- Fish | | Magur etc. | 14.00 kg | - | 4200.00 | |
| 8. | Azolla | Azolla caroleniana | Azolla Compost | 400 kg | 500.00 | - | Farm use |
| 9. | Compost production | - | Vermi Compost | 16000 kg | 3000.00 | 9120.00 | Farm use |
| | | | Vermiworm | 30 kg | | 12600.00 | In stock |

6.5 Rainwater Harvesting

Training programmes conducted by using Rainwater Harvesting Demonstration Unit : Nil

1. Utilization of hostel facilities (Month-Wise) during 2018-19 :

| Name of the Training | Duration | No. of persons staying |
|----------------------------|------------------------------|------------------------|
| Commercial Poultry Farming | 5 days (16.11.18- 20.011.18) | 20 |
| Guest Staying | 3 days (18.03.19- 20.03.19) | 11 |

7. FINANCIAL PERFORMANCE

7.1 Details of KVK Bank accounts

| Bank account | Name of the bank | Location/ Branch | Account Number |
|---------------------|------------------|---------------------------------------|----------------|
| With Host Institute | SBI, AAU, Branch | Assam Agricultural University, Jorhat | 10253825316 |
| With KVK | SBI, Teok | Teok | 30240073924 |
| Revolving Fund | SBI, Teok | Teok | 30705097714 |

7.2 Utilization of funds under FLD on Maize (Rs. In Lakhs) if applicable : Not applicable

7.3 Utilization of KVK funds during the year 2018 -19

| S. No. | Particulars | Sanctioned (in Lakh) | Released (in Lakh) | Expenditure (in Lakh) |
|---------------------------------------|--|----------------------|--------------------|-----------------------|
| A. Recurring Contingencies | | | | |
| 1 | Pay & Allowances | 110.00 | 110.00 | 104.87475 |
| 2 | Traveling allowances | 2.50 | 2.50 | 1.65225 |
| 3 | Contingencies | 15.50 | 15.50 | 14.96925 |
| A | Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines) | | | 3.17624 |
| B | POL, repair of vehicles, tractor and equipments | | | 1.17427 |
| C | Meals/refreshment for trainees | | | 1.15024 |
| D | Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training) | | | 0.86260 |
| E | Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year) | | | 1.66860 |
| F | On farm testing (on need based, location specific and newly generated information in the major production systems of the area) | | | 1.41739 |
| G | Training of extension functionaries | | | 0.69820 |
| H | Misc. | | | 0.30196 |
| I | Other Maintenance | | | 4.51975 |
| J | Establishment of Soil, Plant & Water Testing Laboratory | | | - |
| K | Library | | | - |
| TOTAL (A) | | | | 136.4655 |
| 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 | | | | 10.05939 |
| GRAND TOTAL (A+B+C) | | | | 146.52489 |

7.4 Status of Revolving Fund (Rs. in lakhs) for last three years

| Year | Opening balance as on 1 st April | Income during the year | Expenditure during the year | Net balance in hand as on 1 st April of each year |
|--------------------------|---|------------------------|-----------------------------|--|
| April 2016 to March 2017 | 2,20,216.00 | 8,27,494.00 | 8,15,420.00 | 2,32,290.00 |
| April 2017 to March 2018 | 2,32,290.00 | 12,66,219.23 | 12,25,317.00 | 2,73,191.79 |
| April 2018 to March 2019 | 2,73,191.79 | 12,56,045.00 | 10,05,939.00 | 5,23,297.79 |

Note: No KVK must leave this table blank

8.0 Please include information which has not been reflected above.

Cluster Front Line Demonstrations on Oilseed and Pulses under MNOOP and NFSM, 2018-19 :

| Technology demonstrated | Demonstration Yield (Qt/Ha) | | | Yield of local Check | % increase | Gross Cost (Rs/Ha)/ (Rs./ unit) | Gross Return (Rs/Ha) / (Rs./ unit) | Net Return (Rs/Ha) / | B:C Ratio (GR/GC) |
|---|-----------------------------|------|------|----------------------|--------------|---------------------------------|------------------------------------|----------------------|-------------------|
| | H | L | A | (Qt/Ha) | % | | | | |
| Cluster demonstration of Rabi Oilseeds(Toria) under NMOOP | | | | | | | | | |
| Location: Borkhelia, Jhanjimukh, Patiagaon, Kakarikota | | | | | Area : 30 ha | | No.s of farmers : 65 | | |
| Variety: TS-36 , INM practices (Bio-fertilizer: PSB & Azotobacter) & FYM under Rice-Fallow situation, Soil amendment (Lime), Micronutrient (Borax @ 7.5 kg/ha) | 10.78 | 8.95 | 9.89 | 6.78 | 45.87 | 16,250.00 | 31,648.00 | 15,398.00 | 1.94:1 |
| Cluster demonstration of Kharif Pulses (Black gram) under NFSM | | | | | | | | | |
| Location : Jugunidhari, Malapindha Koibarta Gaon, Gual Gaon, Malapindha Bormukal | | | | | Area : 30 ha | | No.s of farmers : 42 | | |
| VARIETY: PU31 TECHNOLOGY DETAILS: High Yielding variety PU-31, INM Practices (Seed inoculation with Rhizobium@50g/kg seed, FYM @ 3-4 t/ha, Vermicompost 1 t/ha & Lime @65.5 kg/ha as soil amendment SEED RATE: 18 kg/ha FERTILIZER: Chemical fertilizer not applied PLANT PROTECTION MEASURES: No significant pest & disease attack during that period. TIME OF SOWING : 22.09.18 to 02.10.18 TIME OF HARVESTING: 25 .12.18 to 07.01.19 ANY OTHER INFORMATION: Positive response towards the technology. | 6.4 | 5.3 | 5.8 | 4.1 | 41.46 | 26200 | 46400 | 20200 | 1.77 |

| Cluster demonstration of Kharif Pulses (Green gram) under NFSM | | | | | | | | | |
|---|-------|-------|-------|-----|-------|--------------|-------|----------------------|------|
| Location : Jugunidhari, Malapindha Koibarta Gaon, Gual Gaon, | | | | | | Area : 20 ha | | No.s of farmers : 32 | |
| HYV-IPM02-3, TECHNOLOGY DETAILS: High Yielding variety IPM 02-3, Integrated Nutrient Management Practices (Seed inoculation with Rhizobium@50g/kg seed) & FYM @ 3-4 t/ha, Vermicompost 1 t/ha & Lime @65.5 kg/ha as soil amendment SEED RATE:18 kg/ha FERTILIZER: Chemical fertilizer not applied PLANT PROTECTION MEASURES: No significant pest & disease attack during that period. TIME OF SOWING : 22.09.18 to 02.10.18 TIME OF HARVESTING : 25 .12.18 to 07.01.19 ANY OTHER INFORMATION: Positive response towards the technology | 5.1 | 4.8 | 4.9 | 3.7 | 32.4 | 26200 | 49000 | 22800 | 1.87 |
| Cluster demonstration of Rabi Pulses (Field Pea) under NFSM | | | | | | | | | |
| Location : Bhalukmara (Pahumara), Baghar chuk, Gayan gaon, Grezing Chapori | | | | | | Area : 10 ha | | No.s of farmers : 57 | |
| VARIETY: Prakash TECHNOLOGY DETAILS: High Yielding variety Prakash, Integrated Nutrient Management Practices (Seed innoculation with Rhizobium@50g/kg seed, FYM @ 3-4 t/ha, Vermicompost 1 t/ha & Lime @65.5 kg/ha as soil amendment under Rice- Fallow and rice utera situation, SEED RATE: 50 kg/ha FERTILIZER: Chemical fertilizer not applied | 13.10 | 11.53 | 12.67 | 7.9 | 60.37 | 28000 | 44345 | 16345 | 1.58 |

| | | | | | | | | | |
|---|------|------|-----|-----|-------|-------|-------|-------|------|
| PLANT PROTECTION MEASURES: No significant pest & disease attack during that period. TIME OF SOWING: 07.11.18 to 29.11.18 TIME OF HARVESTING : 01.03.19-8.3.19 ANY OTHER INFORMATION: Positive response to the technology | | | | | | | | | |
| Cluster demonstration of Rabi Pulses (Lentil) under NFSM Location : Abani Chapori, Kulamuwa, Balijan Area : 10 ha No.s of farmers : 56 | | | | | | | | | |
| HYV – KLS 218, VARIETY/TECHNOLOGY DETAILS: High Yielding variety KLS 218, Integrated Nutrient Management Practices (Seed inoculation with Rhizobium@50g/kg seed) & FYM @ 3-4 t/ha, Vermicompost 1 t/ha & Lime @65.5 kg/ha as soil amendment under Rice- Fallow and rice utera situation, SEED RATE: 30 kg/ha FERTILIZER: Chemical fertilizer not applied PLANT PROTECTION MEASURES: No significant pest & disease attack during that period. TIME OF SOWING: 07.11.18 to 29.11.18 TIME OF HARVESTING : 01.03.19-8.3.19 ANY OTHER INFORMATION: Positive response to the technology | 7.51 | 6.68 | 7.1 | 5.1 | 39.21 | 23270 | 39050 | 15780 | 1.67 |

Seed Production under Pulse Seed Hub, 2018-19:

| Crop | Area | Technology | Location |
|-------------------|-------|--|---|
| Kharif Black Gram | 30 ha | HYV-PU-31,, Integrated Nutrient Management Practices (Bio-fertilizer: Rhizobium) & FYM , Lime as soil amendment, IPM | Birinabari, Chengelibari, Kordoiguri, Chittadar Chuk, |

| | | | |
|-------------------|-------|--|--|
| Kharif Green Gram | 20 ha | HYV: SGC-16, Integrated Nutrient Management Practices (Bio-fertilizer: Rhizobium) & FYM, Lime as soil amendment, IPM | Grezing chapori, |
| Field Pea | 10 ha | HYV-Prakash, Integrated Nutrient Management Practices (Bio-fertilizer: Rhizobium) & FYM, Lime as soil amendment, IPM | Allengi, Balichapori, Modarguri, Mohkina |

Physical Progress of Pulse Seed Hub:

| Crop | Target (q) | Variety | Class of Seeds | Area (ha) | Production(q.) | Seed buy back (q) | Remarks |
|---------------------|------------|---------|----------------|-----------|----------------|-------------------|--|
| Black gram (Kharif) | 200q | PU 31 | CS | 20 | 15.0 | nil | Could not be bought back due to very poor germination percentage, very poor seed setting after flowering |
| Green gram (Kharif) | 200 q | SGC 16, | CS | 30 | nil | - | No seed setting after flowering |
| Field Pea | 30 q | Prakash | TL | 10 | 10.0 | nil | Could not be bought back due to very poor germination percentage |

Assets creation under Pulse Seed Hub:

| Assets creation | Physical (Nos) | |
|-----------------------|---|-----------|
| | Target | Achieve |
| Seed processing plant | Processing unit with seed grader, bucket elevator and weighing and bagging system | Completed |
| Godown | RCC godown with cooling facility and semi covered threshing floor | Completed |

Financial Progress of Pulse Seed Hub:

| Financial Year | Amount Received (In Lakhs) | Opening balance (A) | Revenue Earned (Rs) | Expenditure (In Lakhs) | Closing Balance (In Lakhs) |
|----------------|-----------------------------|---------------------|---------------------|------------------------|----------------------------|
| 2016-17 | 35,00,000 as Revolving Fund | 35,00,000 | - | 3,69,039.00 | 31,30,961.00 |
| 2017-18 | - | 31,30,961.00 | 496358.50 | 8,21,978.50 | 28,05,341.00 |
| 2018-19 | - | 28,05,341.00 | 8,87,150.00 | 47,809.00 | 37,85,665.00 |

8.1 Constraints

- (a) Administrative: None
- (b) Financial: Delay in release of fund from ATARI for the financial year. Generally the first release is during June –July but our season’s activities start from April; hence, face a lot of problem. Revised budget is always announced almost at the end of the year which makes utilization difficult. The fund under contingency is too meager to take up activities among farmers to make the presence of KVK felt in the district.
- (c) Technical: Soil testing laboratory not established till date
- (d) Mobility: There is only one vehicle at KVK which often become insufficient to make all the field visits. Hence, another vehicle or one/two motorbike may be provided for smooth monitoring of various programmes by the SMS.

(P. Nath)
Principal Scientist cum Head
KVK, Jorhat

Pl. take maximum care while filling up the annual report format as per instructions so that no column is left blank. Pl. note that any incomplete individual KVK report shall not be considered and will be returned.