ANNUAL REPORT 2018-19

1. GENERAL INFORMATION ABOUT THE KVK

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

Address	Telephone		E mail
Krishi Vigyan Kendra, Chirang PO: Kajalgaon, Dist: Chirang BTAD, PIN: 783385	Office	FAX	kvkbngn@gmail.com

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

Address	Telephone		E mail
	Office	FAX	
Assam Agricultural University Jorhat-785013	0376-2340013	0376-2340001	kvkaau@gmail.com

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

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. Kameswar Das	-	9854071472	kameswardas@rediffmail.com

1.4. Year of sanction: 2004

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	Programme Coordinator	Dr. Kameswar Das	Programme Coordinator	Agronomy	37,400-67,000	1,93,800.00	17.08.11	Permanent	General
2	Subject Matter Specialist	Dr. Hiranya Kumar Baruah	SMS	Agril. Economics	15,600-39,100	73,200.00	07.11.08	Permanent	General
3	Subject Matter Specialist	Ms Mandakini Bhagawati	SMS	Horticulture	15,600-39,100	61,300.00	10.10.15	Permanent	General
4	Subject Matter Specialist	Dr Rajeev Bhandar Kayastha	SMS	Animal Science	15,600-39,100	61,300.00	17.10.15	Permanent	General
5	Subject Matter Specialist	Mr. Mahesh Kalita	SMS	Agronomy	15,600-39,100	61,300.00	04.02.14	Permanent	General
6	Subject Matter Specialist	Ms. Juri Talukdar	SMS	Entomology	15,600-39,100	56,100.00	26.04.18	Permanent	OBC
7	Subject Matter Specialist	Mr. Poran Kishor Dutta	SMS	Soil Science	15,600-39,100	56,100.00	25.08.18	Permanent	General
8	Programme Assistant	Mr Sailen Talukdar	Programme Assistant	Crop Physiology	8000-35,000	50,500.00	21.03.09	Permanent	SC
9	Computer Programmer	Anirban Singha	Computer Programme Assistant	-	8000-35,000	38,700.00	06.08.15	Permanent	General
10	Farm Manager	Mr Jyotish Sarma	Farm Manager	Crop Physiology	8000-35,000	41,100.00	09.09.11	Permanent	General
11	Accountant cum Superintendent	Mr. Pradip Kumar Roy	Supperintendent cum Accountant	-	8000-35,000	39,900.00	25.02.12	Permanent	OBC
12	Jr. Stenographer cum computer operator	Mr. Mrinmoy Jyoti Dutta	Jr. Stenographer cum computer operator	Stenography	5200-20200	25,500.00	04.02.19	Permanen	General
13	Supporting staff	Mr. Levi Murmu	Supporting staff	-	4,560-	25,500.00	16.10.04	Permanent	OBC

					15,000				
14	Driver	Mr. Lakhi Ram Brahma	Driver cum Mechanics	-	5,200-20,200	27,220.00	20.02.12	Permanent	ST
15	Driver	Mr. Sanju Boro	Driver cum Mechanics	-	5,200-20,200	26,000.00	20.02.12	Permanent	ST
	Total								

1.6. a. Total land with KVK (in ha) :12.00 ha
b. Total cultivable land with KVK (in ha) :7.49 ha
c. Total cultivated land (in ha) :6.00 ha

S. No.	Item	Area (ha)
1	Under Buildings (Administrative building)	4.00
2.	Under Demonstration Units	2.00
3.	Under Crops (Cereals, pulses, oilseeds etc.)	2.00
4.	Under vegetables	1.00
5.	Orchard/Agro-forestry	2.00
6.	Others (Medium land)	1.00

1.7. Infrastructural Development:

A) Buildings

Sl. 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 with training hall	ICAR	31.3.13	400	47,19,000.00	-	-	-
2.	Farmers Hostel	-	-	-	-	-	-	-
3.	Staff Quarters (6)	-	-	-	-	-	-	-
4.	Demonstration Units (2)					-	-	-
	a. Azolla tank	RKVY	31.03.13	51	246000.00			
	b. Vermicopost unit	RKVY	31.03.13	52	246000.00			
	c. Shade net house	RKVY	31.3.14	100	500000.00			
	d. Goatary unit	TSP	31.3.19	45	200000.00			
	e. Poultry unit	TSP	31.3.19	45	200000.00			
5.	Fencing	ICAR	31.3.13	406 m	1500000.00-	-	-	-

B) Vehicles

Type of vehicle	Regd. No.	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Jeep	AS03 E 0026	2006	4.90 lakh	151011	Good
Tractor	19B 1740	2006	3.66 lakh	1121	Good
Motocycle	AS26 9226	2017	0.67 lakh	5000	Good

C) Equipments & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
Copier Machine (1 No.)	2006-07	0.54	Good
Digital Camera (1 No.)	2015-16	0.14	Good
Copier Machine (1 No.)	2009-10	1.20	Good
Computer (2 No.)	2009-10	0.63	Good
Computer (2 No.)	2016-17	1.00	Good
Computer UPS (1 No.)	2009-10	0.12	Good

LCD projector (1 No.)	2009-10	0.98	Good
Laser printer (1 No.)	2009-10	0.06	Good
Scanner (2 No.)	2009-10	0.07	Good
Ralson By Closure Machine (1No.)	2011	-	Good
Mixer Grinders (1No.)	2012	-	Good
Autoclave(1 no)	2012	-	Good
Universal Hot air Oven (1 No)	2012	-	Good
Rotary Flask shaker Shaker (1 No)	2012	-	Good

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	05.02.18	Enclosed in Annexure I	Enclosed in Annexure II	Enclosed in Annexure III

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

2. DETAILS OF DISTRICT

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

Sl. No	Farming system/enterprises
1.	Agriculture (field crops)—Horticulture (Fruits and vegetables)
2.	Agriculture (Field crops)—Animal Husbandry (Piggery, duckery, goatary, poultry and dairy)
3.	Agriculture (Field crops) – Fishery
4.	Agriculture (Field crops)—Sericulture (Eri and muga silkworm)
5.	Agriculture (Field crops)—Horticulture – Animal Husbandry (Piggery, duckery, goatary, poultry and dairy)
6.	Agriculture (Field crops)—Horticulture (Fruits and vegetables)—Fishery
7.	Agriculture (Field crops)—Horticulture (Fruits and vegetables)—Forestry
8.	Agriculture (Field crops)—Animal Husbandry (Piggey, duckery, goatary, poultry and dairy)-Fishery
9.	Agriculture (Field crops)—Animal Husbandry (Piggey, duckery, goatary, poultry and dairy)-Forestry

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

A. Agro-climatic Zone:

Sl. No	Agro-climatic Zone	Characteristics
1.	Lower Brahmaputra Valley Zone	The soil of the zone is mostly acidic in nature and soil PH gradually increases towards the river Brahmaputra. The soil is medium to high in organic carbon and available N and P_2O_5 low and medium in K_2O status. Four orders of soils are found in the zone (i) Entisol, (ii) Inceptisol, (iii) Alfisol and (iv) Ultisol.

B. Agro-ecological Situations

Sl. No	Agro-climatic Zone	Characteristics
1.	Foot hill old mountain valley alluvial plain	The northern part of the district comprising this situation contains old mountain valley alluvial soils (Alfisol & Ultisol). Build up of alluvial materials washed down from the hill slops. Surface soil is light yellow to pale brown, compact, sticky and plastic. Generally, medium to heavy in soil texture. The elevation is higher towards foot hills which gradually slop towards south.
2.	Flood prone recent riverine alluvial plain	Recent riverine alluvial (Entisol), sandy to sandy loam in soil texture. This situation is represented by an almost flat topography which often experiences flood hazard. Apart from some natural depressions, some riverine islands are also in existence.
3.	Flood free riverine	Old riverine alluvial type (Inceptisol). The texture of the surface soils ranges from

	alluvial middle plain	sandy loam to loam, silty clay loam, silty clay and clay. The topography is almost plain.
4.	Hill and Hillock	Old alluvial type (Alfisol), sandy to sandy loam in texture and acidic in nature. The topography is undulating.

2.3 Soil types

Sl. No	Soil type	Characteristics	Area in ha
1.	Light gray	Sandy loam to silly loam in texture	186.00
2.	Red soil (Mixed)	High in 'Fe' and 'Al' oxides. Fairly well drained soil	48349.33
3.	Sandy soil	Light textured soil	162.66
4.	Sandy loam	Medium textured	489.50
5.	Clay loam	Heavy textured. Poor external as well as internal drainage	228.54

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

Sl. No	Crop	Area (ha)	Production (ton)	Productivity (Qtl /ha)
1	Autumn Rice	10568.5	10663.62	10.09
2	Winter Rice	38910.6	61634.40	15.84
3	Boro Rice	1566	3875.85	24.75
4	Wheat	1064	1755	16.49
5	Maize	478	291	6.09
6	Arhar	382.5	318.62	8.33
7	Green gram	143.5	58.26	4.06
8	Black gram	1364	636.98	4.67
9	Gram	213	100	4.70
10	Lentil	2050.5	1060.10	5.17
11	Peas	883	675.50	7.65
12	Other Pulses	754	367.95	4.88
13	Rapeseed & Mustard	8683.5	3490.77	4.02

2.5. Weather data

Month/Year	Rainfall (mm)	Temperature ^{0} C		Relative Humidity (%)
		Maximum	Minimum	
April 2018	325.0	34.5	17.9	80.5
May 2018	375.6	36.7	22.1	85.7
June 2018	368.1	36.3	20.8	84.8
July 2018	425.6	35.9	22.6	82.8
August 2018	725.8	38.6	23.1	92.2
September 2018	965.7	38.1	23.9	91.6
October 2018	464.5	34.2	17.3	90.5
November 2018	5.2	29.6	12.0	76.2
December 2018	8.6	26.5	8.5	77.1
January 2019	1.2	25.2	5.0	70.6
February 2019	0.6	25.4	8.4	75.3
March 2019	42.5	28.1	11.0	78.5

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

Category	Population	Production	Productivity
Cattle			
Crossbred	462	1329 liters/day	3.31 litrs./day
Indigenous	36952	9000 liters/day	300 ml/day
Buffalo			
Crossbred	194	500 liters/day	3 liters/day

Indigenous	666	600 liters/ day	1 liters/day
Sheep			
Crossbred			
Indigenous	6167	-	-
Goats	24902	10 ton kg/year	5 kg/animal
Pigs			
Crossbred	4948	60 ton kg/year	25 kg/animal
Indigenous	9412		
Rabbits	-	-	-
Poultry			
Backyard	68320	Meat: 5 ton/year	Meat: 0.83 kg/ animal
Farm	255913	Eggs: 32 lakhs nos	90 eggs/bird
Improved	-	-	-
Ducks	-	-	-
Turkey and others	-	-	-

Category	**Area**	**Production(MT)**	**Productivity (Kg/ha)**
Fish	2695	57394.31	2150
Marine			
Inland			
Prawn			
Scampi			
Shrimp			

Category	**Area (ha)**	**Production(MT)**	**Productivity (Kg/ha)**
1. Tank and pond	332	7138	2150
2. Beel	6201	21393	345
3. River	256	640	250
4. Paddy field	621	9135	150
5. Forest Fishery	0.85	46	550
6. Others	211	369	175

(Source: SREP, Chirang)

Note: Pl. provide the appropriate Unit against each enterprise

2.7 Details of Operational area / Villages (2018-19)

Sl. No.	Taluk/ Eleka	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified thrust area
1.	Kajalgaon	Sidli	South Kajalgaon, Kasikotra, Hulmagaon No. 1, Saljhora, Baikhungaon, Tangabari, Padmapur, Nimagaon, Kolobari, Banduguri, Sundari, Kashikotra, Hatipota, Dangaigaon, Baikhungaon, Dwkhanagar Tirimari, Basugaon, Runikhata, Dadgiri, Deoshree, Tukrajhar, Mulandubi, , Amlaiguri, North Sukhanipara, Thuribari, South Silkaguri, Sakatiuzanpara, Sakati Bhatipara, Fulguri, Khagrabari, Nalbari, Kachutola, Bhutkura, Nichinapara, Basugaon Turibari, Bhutiapara, Tukrajhar-I, Kanibhur, Salbari, Domgaon, Paschim Hulmagaon-I, Hulmagaon-II, Pub – Domgaon, Choto Nilibari, Maidam Runikhata, Runikhata, Ashrabri, Pub-Ashrabari, Taktara, Ghoramari, Duligaon, Pakhriguri - 2, Gossaigaon, Pakhriguri-1 Amguri –II, Guwabari, Nehalgaon, Kathalpara, Ulubari, Garubhasa No.1, Julioga, Goragaon Salibari, Kahibari, Jaoliabari, Balapara, Lauripara, Garubhasa No.2, Goragaon, Dologaon, Amguri, Athiabari, Bamungaon, Dangshibari, Bairajhora. Shymthaibari, Thuribari, Simlaguri, Hwswarabari, Khakaragaon Mwkwnaguri, Thuribari, Rabhapara, North Rowmari, Palashguri, New Dimapur, Monglagaon, Barigaon, Hasrabari, Banduguri,West Gumargaon,Thalirbari, Deolguri, Sefrnguir, Bangaldoba, New Latima Hatipota,Bhouraguri	Rice, rapeseed & mustard, sesame, black gram, buckwheat, kharif & rabi vegetables, maize, banana etc. are important crops. Major enterprises included cropping, dairy, backyard poultry, goatery etc	-Soil acidity -Rain fed farming -Low rate of seed replacement - Yield gap in paddy, pulses, oilseeds, fruits and vegetables -Imbalance use of chemical fertilizer -Low productivity of animals	-Acid soil management -Productivity enhancement in major field crops. - Popularization of HYVs - Seed and planting material production --Commercial production of fruits and vegetables. -Adoption of INM and IPM technologies. -Live-stock management -Formation of farm science club
2.	Bijni	Boroba zar	Majrabari, Batabari, Pub Khamarpara, Saragaon, Laugaon, Larugaon, Batabari, Agrong pakriguri, Dahlapara, Daisunguri, Khamarpara, Labdanguri, Kishan Bazar Majrabari, Moneswari, Kochubari, Borgaon, Ulu	Major crops are rice, lentil, toria, rapeseed & mustard, areca nut, coconut,	-Soil acidity -Yield gap in paddy, pulses, oilseeds, fruits and vegetables	-Management of acid soil -Crop planning for rainfed area. -Commercial production of

			Bari, Thasobari, Ballamguri, Pub-Makra, Malivita, Janata Bazar, Malivita F.V, Amteka F.V, Dhalpani Forest Block, Simlaguri Forest Block, Dakhingaon F.V, Bhurbasti FB, Bhur FV, Parbatipur, Gendabil, Koila - Moila, Narayanpur, Napalpara, Parbatjhora, Pub - amguri, No. 1 Mazrabari, Malipara, Pachim Makra, Baripara No.1, Sowari No. 2, Sowari No. 1, Dahalapara No. 2, Dahalapara No.2, Bishnupur No. 3, Bishnupur No. 2, Bishnupur No. 1, Kachubil No. 1, Kachubil No. 2, Thaisobari No. 2, Thaisobari No. 1, Panbari, Betbari No. 1, Betbari No. 2, Purakhola, Silikhaguri, Larugaon No. 1, Larugaon No. 2, Bagargaon, Silikhaguri No. 2, Dewanpara No. 2, Silikhaguri No. 1, Lasatipara, Pub – Khamarpara, Batabari, Doturi, Kawatika -1 Kalobari, Puradia, Silbari, Dangage, Bagakgaa, Dokhona gaon	banana, vegetables, bamboo etc. Major enterprises are cropping, fishery, dairy, duckery, goatery, backyard poultry, Mushroom etc.	-Low rate of seed replacement and poor adoption of HYVs -Poor fertility management -Rainfed farming -Un-organized marketing system -Low productivity of animals --Low production of fish per unit of water bodies.	fruits and vegetables. -Increasing productivity of major field crops through improved crop management practices -Popularization of HYVs -Seed and planting material production -Adoption of INM and IPM technologies. -Live-stock management -Adoption of improved fish production technology. - Formation of SHGs and farmer's club

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	
	T	A	T	A	T	A	T	A
Agronomy	2	4	5	10	8	9	67	93
Plant protection	3	4	9	12	3	4	30	23
Soil Science	3	3	9	9	2	2	25	15
Horticulture	3	4	9	12	3	3	10	10
Ani. Sci.	3	3	9	9	5	5	15	15
Economics	0	0	0	0	2	2	250	150
Total	**14**	**18**	**41**	**52**	**23**	**26**	**397**	**306**

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	**T**	**A**	**T**	**A**	**T**	**A**	**T**	**A**
Farmers	30	33	750	831	600	507	8440	7101
Rural youth	17	17	425	421				
Extn. Functionaries	9	10	225	249				

Vocational Training	6	5	150	114				
Total	**62**	**65**	**1550**	**1615**	**1565**	**507**	**8440**	**7101**

Seed Production (ton.)		**Planting material (Nos. in lakh)**	
5		**6**	
Target	**Achievement**	**Target**	**Achievement**
407.4	582.91	0.225	0.13

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 if any	**Title of FLD if any**	**Title of Training if any**	**Title of training for extension personnel if any**	**Extension activities**	**Supply of seeds, planting materials etc.**

1.	Reduction of yield gap in major field crops through introduction of improved varieties and crop management practices	Mustard Sali rice, Buckwheat, Jute,Fingermillet, Lentil, Toria, Sugarcane, Sesamum, Watermelon, Marigold, Broccoli, Chickpea	Yield gap due to poor adoption of HYV and poor knowledge on scientific management practices, poor weed management	1. Cultivation of Okra by using organic sources of nutrient 2.Performance of mid duration Sali rice Variety - Tripura Chikon, CR Dhan 909 3.Performance of Buckwheat variety Sikkim Local 1 & Sikkim Local 2 4.Comparative performance of chickpea varieties	1. Integrated crop management of Buckwheat 2. Integrated crop management niger in rice – niger sequence 3. FLD on Finger Millet(Local) 4. Performance of olitorious jute Var. '*Tarun*' for fibre production.in jute –toria system 5. Varietal Demonstration BAYER`S Hybrid rice variety-Arize-644 old 6. Performance of olitorious jute Var. '*Tarun*' for fibre production.in jute –toria system 7. ICM on Black gram in Black gram toria sequence 8. Foundation seed production of Toria Var.TS29 through PPP mode 9. Improved production technology of newly released wheat Var. HD-2967	1. Crop diversification in sand & silt deposited areas. 2. Scientific method of cultivation of rabi oilseed crops in rice – toria sequence 3. Scientific methods of cultivation of rabi pulse crops in rice-pulse sequence 4. Scientific method of cultivation of olitorius jute	-	Advisory services, diagnostics visit, field visit, Field day, Method demonstrations	Seed, fertilizers and other critical inputs
2.	Seed production	Toria, Jute,	Non availability of quality seed and planting materials	-	1. Foundation Seed production of olitorious Jute var. Tarun 2. Foundation seed production of Toria(TS-67,TS-46,TS-29) through PPP mode	1. Seed production technology and scientific cultivation practices of jute 2. Seed production technology and scientific cultivation practices of oilseed crops	1.Certification procedure of different field crops	Field Day on Improved production and foundation seed production technology in Toria, Jute	Seed, chemical fertilizer and pesticides

3.	Integrated pest management/Integrated disease management/Biological Management	Sali rice, Tomato, Sugarcane Wheat, jute	Lack of scientific approaches in insect pest and disease management strategies	1. Effect of management practices of whitefly (leaf curl vector)in tomato 2. Biological control of sugarcane pest 3. Control of stem rot and root rot disease of olitorius jute through potassic fertilizer 4. Management of cutworm in field pea	1. Monitoring and management of rice yellow stem borer through pheromone trap in rice-toria sequence 2. Rodent management in wheat through low cost bamboo trap 3. Determination of efficacy of non-woven poly propylene 17 GSM bunch bag for controlling fruit scarring beetle in Banana	1. Integrated pest management in summer and winter rice. 2. Scientific Beekeeping. 3. Integrated pest and disease management in tomato.	Recent advancement in pest and disease management in agriculture.	Advisory services, field visits, Diagnostic visit, Field day	Chemical pesticides and fertilizer, low cost bamboo traps, Honey bee hive, Pheromone traps (Funnel trap)
4.	Soil health and nutrient management	Sali paddy, Linseed, okra, Toria, Cabbage, Turmeric, Jute, Knolkhol	Improper management of soil due to imbalanced chemical fertilizer use, poor knowledge on nutrients and resource use efficiency and poor fertilizer management.	1. INM on rice-linseed sequence 2. Cultivation of Okra by using organic sources of nutrient 3. Cultivation of Cabbage by using organic sources of nutrient 4. Integrated Nutrient Management of Jute in Jute-Toria sequence 5.Cultivation of Knolkhol by using organic sources of nutrient	1. Application of zinc and boron on rice-rapeseed sequence	1. INM in rice based cropping system 2. Soil testing procedures and its importance in crop production.	Production technology of biofertilizer and its utilization in farmers field to sustain soil health.	Diagnostic visit and Advisory Services and field day.	Seed & fertilizer
5.	Soil microbes (beneficial)	Vermi compost	Improper use of biowaste	-	1. Production of vermicompost in low cost vermicompost unit	Production technology of biofertilizer (Azolla, Vermicompost and Enriched compost)	-	Advisory services and method demonstrations and field day	Bamboo based earthen mud plastered low cost vermi compost unit & earth worm species *Eisenia foetida*

6	Demonstration	Nursery raising	Lack of Scientific Knowledge		1. Popularization of poly tunnel technology for raising nursery in vegetables	Scientific method nursery raising		Advisory services and method demonstrations and field day	plastic Sheet, Bamboo
7	Scientific livestock management	Poultry, Duck, Rabbit, Pig, Goat,	Low productivity of indigenous birds and animals,	1. Productive performance of Hampshire breed of pig under intensive system 2. Performance of Kadaknath chicken under backyard system of management 3. Productive performance of turkey birds for meat production in Chirang district	1. Demonstration on productive performance of Vigova Super M Broiler duck 2. Productive performance of broiler rabbit under backyard (Newzealand White/Soviet) 3.Housing management of goat for optimum production performance. 4. Performance of Khaki Campbell ducks 5. Demonstration of mineral mixture supplementation in growth of weaning piglets		-	Advisory services, Field visit	60 nos Kadaknath chicks, 9 nos Pigs, 60nos Turkey birds, 100 nos. broiler Ducks, 15 nos Broiler rabbits, 100 nos layer ducks, 3 nos. Goat shed and 9 nos Pigs
8	Commercial production and management of horticultural crops	Capsicum, Broccoli, Summer marigold, Watermelon, turmeric	Yield gap due to poor adoption and poor knowledge on scientific management practices of vegetable and fruit crops	1. Performance of Broccoli variety (Hybrid) in farmer`s field 2. Assessment of Capsicum varieties in farmers field 3. Organic cultivation of turmeric *var*. Megha Turmeric	1. Crop diversification in sand silt deposited areas 2. Popularization of summer marigold var. Ceracole in Farmers field	1. Scientific methods of cultivation of capsicum 2.Scientific method of cultivation of summer marigold	-	Advisory services, diagnostics visit, field visit, Field day,	Seed, fertilizers and other critical inputs

9	Scientific mushroom cultivation	Mushroom	Consumption of wild mushroom	-	1. Milky Mushroom cultivation for economic upliftment 2. Oyster Mushroom cultivation for economic upliftment	Year round mushroom cultivation for economic upliftment	-	Practical demonstration, Training, monitoring and field day	Mushroom spawn, plastic bag
10	Beneficial Insect	Honey bee	Lack of scientific knowledge		Scientific Beekeeping. Rearing of Indian honey bee, *Apis cerana indica*				

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	Plantation crops	Tuber Crops	TOTAL
Varietal Evaluation	2		1	1	3					7
Seed / Plant production										
Weed Management										
Integrated Crop Management										
Integrated Nutrient Management	2				2					4
Integrated Farming System										
Mushroom cultivation										
Drudgery reduction										
Farm machineries										
Value addition										
Integrated Pest Management			2	1	1					4
Integrated Disease Management										
Resource conservation technology										
Small Scale income generating enterprises										

TOTAL	**4**		**3**	**2**	**6**					**15**

* *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 :NIL

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Varietal Evaluation										
Seed / Plant production										
Weed Management										
Integrated Crop Management										
Integrated Nutrient Management										
Integrated Farming System										
Mushroom cultivation										
Drudgery reduction										
Farm machineries										
Post Harvest Technology										
Integrated Pest Management										
Integrated Disease Management										
Resource conservation technology										
Small Scale income generating enterprises										
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**	**Rabbitery**	**Fisheries**	**TOTAL**
Evaluation of Breeds		2						2
Nutrition Management								
Disease of Management								
Value Addition								
Production and Management					1			1
Feed and Fodder								
Small Scale income generating enterprises								
TOTAL		**2**			**1**			**3**

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

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

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 (Data on the parameter should be provided)	Feedback from the farmer	Feedback to the Researcher	B.C . Ratio (if applicable)
Agronomy									
1	Performance of mid duration Sali rice Scented Variety - Tripura Chikon, CR Dhan 909	Non availability of mid duration improved Scented rice varieties	T1 :Var:Tripura Chikon T2: CR Dhan 909 T3: Kala jaha (Check)	Rice	3	Yield(q/ha) T1: 28.20 T2: 34.14 T3: 33.26 Pl. height (cm) T1: 79 T2: 84 T3: 95 Effective tiller/ hill T1: 9 T2: 12 T3: 11	Farmers found the variety CR Dhan 909 better than Tripura Chikon	Traditional Scented rice variety can be replaced by CR Dhan 909	T1: 1.69 T2: 2.05 T3: 2.00
2	Performance of Buckwheat variety Sikkim Local 1 & Sikkim Local 2	Non availability of improved of Buckwheat varieties after rice	T1: Sikkim local 1(Tita) T2: Sikkim Local 2 (mitha) T3: Gossaigaon local	Buckwheat	2	Yield (q/ha) T1: 12.5 T2:11.5 T3: 9.5 Plant height (cm) T1: 53 T2:54 T3: 41 Branch/ plant T1: 9 T2:9 T3: 4	Farmers found both the variety suitable	Both the tested varieties have shown superior result in terms of yield. Sikkim local can be sown late.	T1: 3.47 T2:3.19 T3: 2.64
3	Integrated Nutrient Management of Jute in Jute-Toria sequence	Injudicious application of fertilizer	T_1: 75% recommended dose of NPK + 25% supplement from compost T_2: Farmers practice	Jute	3	Yield (q/ha) T1: 30.50 T2: 26.50 Plant height (m) T1: 2.4	Farmers found both the variety suitable	The variety has shown superior result with INM	T1: 2.71 T2: 2.37

						T2: 1.7 Basal diameter stick T1: 1.4cm T2: 1.0 cm			
4	Comparative performance of chickpea varieties	Non availability of chickpea variety	T_1: variety-GNG 2207 T_2: variety-GNG 2264 T_3: JG 14 (check)	Chickpea	2	Yield (q/ha) T_1: 4.2 T_2: 4.0 T_3: 3.3 Branch/ plant T_1: 4 T_2: 4 T_3: 3 Pod per plant T_1: 74 T_2: 75 T_3: 56 Seed per Pod T_1: 2 T_2: 2 T_3: 2	Conducted at KVK farm	Variety GNG 2207 and GNG 2264 had comparative yield advantage over the variety JG 14. Wilting of plants was higher in JG 14 than the other two varieties	T_1: 1.43 T_2: 1.37 T_3: 1.13
Plant Protection									
5	Control of stem rot and root rot disease of *olitorius* jute through potassic fertilizer	Poor quality and low yield of fiber due to root and stem rot	T1: Application of 50 kg/ha K2O at the time of sowing T2: Control	Jute	3	Yield (q/ha): T1: 35.0 T2: 28.0 Disease incidence %: T1: 2.50% T2: 8.25% Disease severity%: T1: 1.60% T2: 12.5%	Farmers found the technology suitable and feasible in controlling the root rot disease.	The technology is easily affordable and effective in controlling root rot disease. The procedure is user friendly.	T1: 2.45 T2: 1.96
6	Effect of management	Excessive use of pesticides	**T1:** **Nursery:** One week after germination of seeds, spray the	Tomato	3	T1:Per cent of infected plants: 5.30 Plant height(cm):72.68	Farmers found the	The use of Imidacloprid 200 SL was found to be	T1:3.3

	practices of whitefly *(Bemisia tabaci)* in tomato	in nursery and main field	seedlings with Imidacloprid 200 SL @0.3 ml/l or Thiamethoxam 25 WP @ 0.3 g/l **Before transplanting**: Dip the roots of the seedlings with with imidacloprid 200SL @ 0.3 ml/l or Thiamethoxam 25 WP @ 0.3 g/l **Main field**: Spraying of Imidacloprid 200SL @ 0.4 ml/l or Thiamethoxam 25 WP @ 0.3 g/l after 15 days of planting in the main field **T2** : farmers practice			Days to flwering:34 Yield(q/ha): 375 T2:Per cent of infected plants: 11.23 Yield(q/ha): 230 Plant height(cm):57.19 Days to flwering:39	chemical suitable and effective against white fly(leaf curl vector)	suitable and very much effective.	T2:2.3
7	Biological control of sugarcane pest	Yield loss due to sugarcane shoot and top borer	T1:Release of *Trichogramma chilonis* on 45 day after crop germination @ 50,000/ha at 10 days interval. Total of 8-12 releases to be made depending pest severity T2:Control	Sugarcane	3	Yield (q/ha) T1: 502.4 T2: 420.9 Incidence of C. infeuscatellus %: T1: 5.90% T2: 13.9%	Farmers found the technology suitable.	The technology is more effective than chemical measure and environment friendly	T1: 3.52 T2: 3.20
8	Management of cutworm in field pea	Sever attack of cut worm	**T_1 :** Mulching with rice straw just after of sowing **T_2 :** Control	Pea	3	Yield (q/ha) T1 :16.0 T2: 10.5 T1: Plant height:53.73cm Days to flower: 70 No. of seeds /pod:6.00 No. of pod/plant:26.00 Infection :3.70% T2: Plant height: 51.29 cm Days to flower: 67 No. of seeds /pod:5.53 No. of pod/plant:22.36 Infection : 5.2%	Farmers found the technology effective and suitable	The technology is suitable and feasible for farmers with positive effect.	T2: 2.8 T: 1.58

Soil Science									
9	INM on rice-linseed sequence.	Imbalance use of nutrient.	**T1:** **In rice** 75% of RD + FYM 3t/ha + Azospirillum+ PSB each(@50g/kg of seed for both) **In Linseed** 75% of RD + Azotobacter+ PSB (@ 50g/kg of seed for both T2: Farmers practice	Rice , Linseed	3	Plant height(cm): T1: in rice,98 cm In linseed,40 cm T2: in rice,122 cm In linseed,37 cm Yield(q/ha): In rice, T1:42.00 T2:40.50 In linseed(q/ha), T1: 8.20 T2: 7.00	Farmers found effective in grain production by use of balanced chemical fertilizers along with biofertilizers.	Use of balanced chemical fertilizers along with biofertilizers in both Sali paddy and linseed can enhance the grain yield and crop growth as compared to application of recommended dose of N,P2O5,K2O fertilizers alone .	In rice, T1: 1.8 T2:1.95 In linseed, T1:1.55 T2: 1.70
10	Cultivation of Okra by using organic sources of nutrient	High use of chemical fertilizer	**T1:**Azotobacter and Phosphorus Solubilizing Bacteria @ 7.5g each per 100g of seeds Farm Yard Manure @ 5t/ha+ Vermi Compost @1t/ ha along with Rock Phosphate 313 kg/ha at the time of final land preparation. **T2:** Farmers practice	Okra	3	Yield (q/ha): T1: 232.0 T2: 258.0 Plant height T1 :137.16 cm T2 :140.00 cm	Farmers found both the bio fertilizers suitable in enhancing yield	The technology is more effective than chemical measure and environment friendly.	T1: 3.95 T2. 2.90
11	Cultivation of Cabbage by using organic sources of nutrient	High use of chemical fertilizer	**T1:** Azotobacter and Phosphorus Solubilizing Bacteria @ 7.5g each per 100g of seeds Vermicompost @5 t/ha + Rock Phosphate@375kg/ha T2: Farmers practice	Cabbage	3	Yield (q/ha): T1: 220.0 T2: 235.0 Average head weight T1 : 1.2 kg T2 : 1.5 kg	Farmers found both the bio fertilizers suitable in enhancing yield	The technology is more effective than chemical measure and environment friendly.	T1: 2.9 T2: 4.3
Horticulture									
12	Assessment of Capsicum varieties in farmers field	Low market price of traditional vegetable crops	T1: Angel (F1 Hybrid) T2: California Wonder	Capsicum	3	Plant height (cm): T1: 60.45 T2: 58.50 Avg. Fruit no/plant (no): T1: 12	Farmers found the variety suitable	Both the variety has shown good result in terms of yield and market value. Performance will be better if grown under	T1: 5.15 T2: 5.98

						T2: 9 Avg. Fruit weight (g): T1: 42.0 T2: 65.0 Yield (t/ha): T1: 23.18 T2: 26.91		polyhouse.	
13	Performance of Broccoli variety (Hybrid) in farmer`s field	low market price of other cole crops	T1 :NSC 105 B T2: Green Magic (Check)	Broccoli	3	Plant height (cm): T1: 43.94 T2: 42.56 Head diameter (cm) T1: 14.92 T2: 15.26 Avg.weight of curd (g) T1: 422.33 T2: 394.67 Yield (t/ha): T1: 11.82 T2: 9.91	Farmers found the variety suitable	Less incidence of pest and diseases	T1: 4.73 T2: 4.40
14	Organic cultivation of turmeric *var*. Megha Turmeric	Soil health management	T1: Seed treatment: Cowdung+ cow urine slurry/ FYM inoculated with Trichoderma spp. @5 g/kg seeds Manuring: FYM@ 10 t/ha + Neem cake@ 2 t/ha T2: Farmers Practice	Turmeric	3	Planting is done in March'2019. Experiment is to be continued.	Ongoing		
15	Performance of Knolkhol *var*. Kanchanjangha in farmers field	low market price of other cole crops	T1 :Kanchanjangha T2: Local	Knolkhol	3	Plant height (cm): T1: 27.15 T2: 23.56 Head diameter (cm): T1: 8.60 T2: 5.33 Avg. weight of knob (g)	Farmers found the variety suitable	Less incidence of pest and diseases leading to higher yield	T1: 5.82 T2: 4.36

<table>
<tr><td></td><td></td><td></td><td></td><td></td><td></td><td>T1: 380.00
T2: 156.28
Yield (t/ha):
T1: 26.2
T2: 19.6</td><td></td><td></td><td></td></tr>
<tr><td colspan="10">Animal Science</td></tr>
<tr><td>16</td><td>Productive performance of Hampshire pig under intensive system</td><td>Low productivity of indigenous pig</td><td>T1: Hampshire pigs under intensive system
T2: Farmers practice: indigenous breed</td><td>Pig</td><td>3</td><td colspan="4">Results:
<table>
<tr><td>Parameters</td><td>Hampshire Pig</td><td>Indigenous Pig</td></tr>
<tr><td>Age at puberty</td><td>165 days</td><td>210days</td></tr>
<tr><td>Avg. weight at 5th month of age</td><td>38kgs</td><td>23kgs</td></tr>
<tr><td>Avg. litter size at birth</td><td>8 nos</td><td>6 nos</td></tr>
<tr><td>Avg litter weight of piglets at birth</td><td>1.1kg</td><td>0.75kg</td></tr>
</table>
Farmers found the breed suitable
Can be recommended for further rearing
Ongoing</td></tr>
<tr><td>17</td><td>Performance of Kadaknath chicken under backyard system of management</td><td>Low productivity of local chicken also lack of medicinal value of egg and meat of present all breed of poultry.</td><td>T1: Kadaknath birds as dual purpose breed

T2: Farmers practice- rearing of local chicken</td><td>Chicken</td><td>3</td><td colspan="4">Results
<table>
<tr><td>Parameters</td><td>Kadaknath Chicken</td><td>Local chicken</td></tr>
<tr><td>Mortality rate during brooding</td><td>Nil</td><td>5-10% under natural brooding</td></tr>
<tr><td>Age at first lay</td><td>136 days</td><td>147 days</td></tr>
<tr><td>Avg weight of egg at one month of lay</td><td>36g</td><td>25g</td></tr>
<tr><td>Avg body weight at first lay</td><td>1.75kg</td><td>1.2kg</td></tr>
</table></td></tr>
</table>

						Farmes prefer the breed both for meat and egg production The birds are needed to popularize as they are registrant to most of the poultry diseases and mortality rate during brooding is nil. Ongoing			
18	Productive performance of Turkey for lean meat production in Chirang district.	Low lean meat content in other poultry birds	**T1:**Turkey breed- Spanish black	Turkey	3	1. Body weight at distribution: 55g 2. Mortality during brooding: 5% 3. Body weight at maturity for male 5.8kg and female: 4.5 kg 4. Age at first lay 220days 5. Av weight of egg: 52g 6. FCR: 2.6	Turkeys get popularity among farmers.	Needs to expand the turkey farming for lean meat production	Ongoing

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	Toria	Foundation seed production of Toria (TS-46) in rice – toria sequence	8	65	30ha
2	Buckwheat	Integrated crop management of Buckwheat	2	12	5 ha
3	Buckwheat	Integrated crop management of buckwheat under TSP	5	58	20 ha
4	Toria	Integrated crop management of toria under TSP	3	92	20 ha
5	Niger	Cluster demonstration of Niger under cluster FLD	1	100	10 ha
6	Water melon	Cultivation of water melon in sand and silt deposited areas of Aie river valley	6	10	3 ha
7	Lentil	Technology demonstration under Cluster FLD lentil, Var: Maitree	5	115	50 ha
8	Vermicompost	Production of vermicompost in low cost vermicompost unit	8	32	32 units

9	Toria	Cluster demonstration of toria	20	92	500 ha
10	Pea	Cluster demonstration of pea under cluster FLD	5	50	10 ha
11	Sali paddy	Technology demonstration under technology showcasing of Sali paddy	25	272	72 ha
12	Blackgram	Cluster demonstration of blackgram under cluster FLD	4	72	20 ha
13	Sesamum	Techno/ogy demonstrated under CFLD	3	48	30 ha
14	Linseed	Cluster demonstration of Linseed, variety:T-397	2	37	10 ha
15	Livestock	Performance of improved poultry birds,ducks,pigs under backyard condition under TSP	7	1000	3000 Nos.
16	Honeybee	Scientific bee keeping	4	15	15 units
17	Mushroom	Scientific mushroom cultivation	5	500	50 units

**** 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)		
												N	P	K
					Proposed	Actual	SC/ST	Others	Total					
Agronomy														
1	Blackgram	Varietal evaluation	Integrated crop management of blackgram var PU 31 in blackgram – toria sequence	Kharif 2018-19	1	1	3	2	5	NA	Rainfed, upland	385	26.58	138.5
2	Buckwheat	ICM	Integrated crop management of Buckwheat in rice – buckwheat sequence	Rabi, 2018-19	2	2	5	5	10	NA	Rainfed, medium land	372	25.42	135
3	Niger	ICM	Integrated crop management niger in rice – niger sequence	Rabi, 2018-19	2	2	5	5	10	NA	Rainfed, medium land	350	21.20	140.5
4	Rice	Varietal evaluation	Varietal performance of submergence tolerance varieties of Sali rice(Ranjit Sub-1 & Bahadur Sub-1) in rice lentil sequence	Kharif, 2018-19	5	5	5	10	15	NA	Rainfed, medium land	421	22.03	148
5	Finger Millet	ICM	FLD on Finger Millet(Local)	Kharif, 2018-19	1	1	0	5	5	NA	Rainfed, medium land	385	20.17	145
6	Jute	ICM	Performance of olitorious jute Var. '*Tarun*' for fibre production in jute –toria system	Kharif,	2	2	3	4	7	NA	Rainfed, medium	345	20.20	139

				2018-19							land			
7	Toria	Seed production	Foundation seed production of Toria(TS-67,TS-46,TS-29) through PPP mode	Rabi, 2018-19	2	2	3	6	9	NA	Rainfed, medium land	328	29.42	138
8	Jute	Seed production	Foundation Seed production of olitorious Jute var. *Tarun*	Kharif, 2018-19	1	1	4	2	6	NA	Rainfed, medium land	339	22.49	135.48
9	Rice	varietal evaluation	Varietal Demonstration BAYER`S Hybrid rice variety- Arize-6444 old	Kharif, 2018-19	0.13	0.13	0	1	1	NA	Rainfed, medium land	378	24.00	133
Plant Protection														
10	Rice	IPM	Monitoring and management of rice yellow stem borer through pheromone trap in rice-toria sequence		3	3	6	3	9	NA	Rainfed	385	25.09	144
11	Banana	Biological Management	Determination of efficacy of non-woven poly propylene 17 GSM bunch bag for controlling fruit scarring beetle in Banana		1	1	3	0	3	NA	Rainfed	352	24.09	148
12	Wheat	ITK	Rodent management in wheat through low cost bamboo trap		1	1	3	3	6	NA	Rainfed	378	22.30	149.05
Soil Science														
13	Rice, Rapeseed	Soil management	Application of zinc and boron on rice-rapeseed sequence		3	3	3	2	5	NA	Rainfed, medium upland	387	28.0	144
Horticulture														
14	watermelon	ICM	Crop diversification in sand silt deposited areas		0.26	1	4	0	4	NA	Rainfed	220	15.67	138
15	Marigold	ICM	Popularization of summer marigold var. Ceracole in Farmers field		0.5	0.5	1	2	3	NA	Rainfed	287.5	25.58	133
16	Vegetable	Demonstration	Popularization of poly tunnel technology for raising nursery in vegetables		0.2	0.2	3	0	3	NA	Rainfed	298	23.00	141

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*	Demo	Local	GC**	GR**	NR**	BCR**	GC	GR	NR	BCR

Agronomy																	
1	Blackgram	Varietal evaluation	1	9.0	6.5	38.5%	10.5	5.5	Branch/ pl-6, pod/ pl-76, seed/ pod-10	Branch/ pl-4, pod/ pl-52, seed/ pod-9	20000	63000	43000	3.15	18000	45500	27500	2.52
2	Buckwheat	ICM	2	11.0	8.0	37.5%	12.5	8.0	pant ht- 42 cm, branch/ pl-5	pant ht- 46 cm, branch/ pl-3	18000	55000	37000	3.05	16000	40000	24000	2.50
3	Niger	ICM	2	6.0	4.5	33.0%	6.8	3.0	pl ht- 52 cm,	pl ht- 57 cm,	15000	30000	15000	2.00	12000	22500	10500	1.88
4	Rice	Varietal evaluation	5	56.0	50.0	12%	62.5	42.5	Pl ht- 86 cm, eff tiller/hill-17	Pl ht- 95 cm, eff tiller/hill-12	32000	84000	52000	2.63	30000	75000	45000	2.50
5	Finger Millet	ICM	1	12.0	7.5	60%	13.0	10.0	Pl ht- 93 cm, tiller/hill- 8	Pl ht- 91 cm, tiller/hill- 7	18000	36000	18000	2.00	17000	22500	5500	1.32
6	Jute	ICM	2	33.0	27.5	20%	36.0	23.5	Pl ht- 3.0 m	Pl ht- 2.4 m	53000	132000	79000	2.49	51000	110000	59000	2.16
7	Toria	Seed production	2	10.5	6.5	61%	12.0	9.5	Pl ht-55 cm, brnch/ pl-6, siliqua/ pl-105, seed/ siliqua- 10	Pl ht- 64cm, brnch/ pl-3, siliqua/ pl- 79, seed/ siliqua- 10	21000	57750	36750	2.75	19500	35750	33800	1.83
8	Jute	Seed production	1	3	2.0	50%	4.0	1.0	Pl ht- 1.2 m	Pl ht- 3.0 m	30000	48000	18000	1.6	25000	32000	7000	1.28
9	Rice	varietal evaluation	0.13	55.0	48.5	13%	57.0	40.5	Pl ht- 88 cm, eff tiller/hill-16	Pl ht- 97cm, eff tiller/hill-11	32000	82500	18500	2.58	30000	72750	42750	2.43
1o	Wheat	varietal evaluation	1	16.7	12.0	39.1%	21.0	8.0	Pl ht- 42 cm, length of spikelet-12 cm	Pl ht- 47 cm, length of spikelet-9 cm	22500	33400	10900	1.48	19500	24000	4500	1.23

Plant Protection																	
11	Rice	Biological Management	3	56.0	50.0	12%	62.5	42.5	Avg. nos of insect trapped at vegetative stage: 8.3 per trap at 7 days interval Avg. nos of insect trapped at reproductive stage: 7.4 per trap at 7 days interval Dead heart incidence (%):4.2 % White ear head incidence (%):3.6%	Dead heart incidence (%):6.0 % White ear head incidence (%):5.2%	32000	84000	52000	2.63	30000	75000	45000	2.50
12	Banana	Biological Management	1	353.5	347.5	1.73%	380.5	320.0	Shooting to harvest interval (days): 89.15, Hands per bunch: 13.67, Fingers per bunch (Nos.) :169.9 , Bunch Weight (Kg): 14.48, Scarring intensity (%):1	Shooting to harvest interval (days): 80.05, Hands per bunch: 11.17 Fingers per bunch: 161.3 (Nos.) :169.9, Bunch Weight (Kg): 12.98, Scarring intensity (%):6.86	50000	282000	232000	5.7	37000	188480	151480	5.00

13	Wheat	ITK	1	16.7	12.0	39.1%	21.0	8.0	LBC at tillering stage 12/ha LBC at grain filling stage 11/ha LBC at maturity stage 10/ha Per cent tiller damage:10.7%	Per cent tiller damage: 23.3%	22500	33400	10900	1.48	19500	24000	4500	1.23
Soil Science																		
14	Rice, Rapeseed	Soil management	3	42.5	38.8	9.5%	45.0	40.0	Pl ht- 96cm Panicle length=12 cm Effective tillers / hill =14	Pl ht -94 cm Panicle length =10.5 cm Effective tillers / hill = 12	32000	63750	31750	1.99	30000	58200	28200	1.94
				10	8.0	25. %	12.5	9.8	Siliqua/pl=129 Ht/pl= 119cm Branch/pl= 9	Siliqua/pl=110 Ht/pl= 109cm Branch/pl= 7	22000	55000	33000	2.5	20000	44000	24000	2.0

Horticulture																		
15	watermelon	ICM	0.26	436.0	350.0	25.0%	575.4	270.6	Fr/p=6 Fr/wt=4.3kg	Fr/p=4 Fr/wt=3.1kg	120000	436000	316000	3.63	100000	350000	250000	3.5
16	Summer Marigold	Varietal performance	0.02	40000 no of garlands /ha	32000 no of garlands/ ha	25.0%	45750	30625	Avg. Nos. of branches/plant=14 Avg. Nos. of flowers/plant =56	Avg. Nos. of branches/plant=10 Avg. Nos. of flowers/plant=45	30000	120000	90,000	4.0	27000	96000	69000	3.6
17	Early seedling production of Vegetable (Cabbage, Cauliflower, Palak, coriander) under low cost poly tunnel(L=5m, B=1m,H=0.75m)	Protected cultivation	0.02	36000 no seedlings, 200 mutha (100 sq.m)	24000 no seedlings, 120 mutha (100 sq.m)	51%	-	-	-	-	15000	38000	23000	2.53	13800	25200	11400	1.83

***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

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

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	7	0/11/18, 22/11/18, 22/12/18, 06/01/19, 21/01/19, 07/02/19, 15/03/19,	184	128	312	
2	Farmers Training	3	10/08/18, 20/10/18, 24/02/19	44	42	86	
3	Media coverage (Cluster FLD on pulse and lentil)	-	-	-	-		

4	Training for extension functionaries	-	-	-	-	-	
5	Any other (Pl. specify)	-	-	-	-	-	
	Total	10		228	170	398	

e. Details of FLD on Enterprises

(i) Farm Implements: NIL

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		

**** 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	Demonstration on productive performance of Vigova Super M broiler duck. Technology:Vigova Super M	3	3	100	Avg. bodyweight at 0day, 30 days,45 days and 60days were 75.65g, 1.2kg, 2.1kg and 2.8kg respectively FCR: 2.57											Benefit cost ratio at market age: 1.96		
2	Broiler Rabbit	Breed introduction	Productive performance of broiler rabbit under backyard Technology: Newzealand White/ Soviet Chinchilla as quality broiler rabbit	3	3	15	Av. Body weight on 0 days: 62g, !st week: 240g, 2nd wk: 465g, 3rd wk: 610g, 1month: 840g, 2 month: 1.3kg 3rd month: 2.5kg and 4th month: 3.8kg											Av. Litter size at birth 5 nos, Av. Litter weight 280g , FCR: 4.7		

3	Duck	Feeding management	Performance of Khaki Campbell ducks Technology: Khaki Campbell as improved duck breed	3	3	100	Monthly body weight at 1st, 2nd, 3rd, 4th and 5th month of age were 230g, 450g, 720g, 1.05kg and 1.30kg respectively. Age at 1st laying: 162days,	Benefit cost ratio at market age for male ducks: 1.56 C:B ratio for 6 month egg production: 1.8
4	Pig	Health care	Demonstration of mineral mixture supplementation in growth of weaning piglets. Technology: Commercial Mineral mixture supplements	3	3	Supply of 15 kgs Mineral mixture supplementation per demo.	At 20weeks of age Piglets weaned at 4weeks, 6weeks and 8 weeks of age found to be 19.65kg, 21.5kg and 23.0kg respectively after incorporating mineral mixture and vitamin at the dose rate of 10g per 10 kg body weight as compare to 17.5 Kg at 8 weeks of age in pig without supplementation	Reproductive problems get diminished.
5	Goat	Housing	Housing management of goat for optimum production performance. Technology: Raised platform type Housing with locally available materials	3	3	3 nos Raised platform type Housing	Ongoing. Raised houses are constructed with bamboo. Goats are vaccinated with PPR vaccine with periodic deworming. No incidence of diseases were recorded.	Kids mortality: 0% No incidence of major diseases recorded.

**** 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

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

(iii) Fisheries :Nil

Sl. No.	Category, e.g. Common carp, ornamental fish etc.	Thematic area	Name of Technology	No. of farmers	No. of units	No. of fish/ fingerlings	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	

***** 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

(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		Demo	Check	GC**	GR**	NR**	BCR**	GC	GR	NR	BCR	
1	Vermicompost	Beneficial microbes	Production of vermin compost in low cost vermin compost unit	12	12	900 kg/tank/yr	-	-	-	-	3000	9000	6000	3.00	-	-	-	-	on going
2	Honey bee	Beneficial insect	Scientific beekeeping for increasing agricultural productivity	5	5	Avg. honey production from 18.0kg/ beehive per year		6% increase in toria production	-		3000	9000	6000	3.00		-	-		Initial cost of one beehive with colony=3000.00 ,Income from 18.0 kg honey per year/beehive=9000.00 (@500 per kg honey)
3	Milky Mushroom	Coordination/ Convergence/ Linkages promoted / created	Year round Mushroom cultivation for rural youths	125	5	3 KG/CYLLINDER	2 kg/cylliinder	50 %increase			90	270	180	2.85	75	180	105	1.9	More farmers are interested
4	Oyster Mushroom	Coordination/ Convergence/ Linkages promoted / created	Year round Mushroom cultivation for rural youths	125	5	4 kg/cyllinder	2.5 kg/cylliinder	60 %increase			100	300	200	3:1	80	200	120	2.2	More farmers are interested -

***** 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.

(v) Farm Implements and Machinery : Nil

Sl. No.	Name of implement	Crop	Name of Technology demonstrated	No. of farmers	Area (In ha.)	Field observation (Output/ man-hours)		% change in the parameter	Labour reduction (Man days)	Cost reduction (Rs. per ha. or Rs. per unit etc.)	Remarks
						Demo	Check				
-	-	-	-	-	-	-	-	-	-	-	-

f. Performance of FLD on Crop Hybrids: **Nil**

Sl. No.	Crop	Name of hybrids	Area (ha.)	No. of farmers	Avg. yield (Q/ha.)		% increase in Avg. yield	Additional data on demo. yield (Q/ha.)		Econ. of demo. (Rs./Ha.)				Econ. of check (Rs./Ha.)			
					Demo.	Check		H*	L*	GC**	GR**	NR**	BCR**	GC	GR	NR	BCR
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

****H-Highest recorded yield, L- Lowest recorded yield***

***** 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.

h. Performance of cluster demonstration on Oilseed and Pulses crops

Sl. No.	Crop	Thematic area	Number of farmers	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*	Demo	Local	GC**	GR**	NR**	BCR**	GC	GR	NR	BCR
Oilseed																			
1	Toria	Double	92	30.0	8.5	6.5	30%	10.0	5.5	Siliqua/pl=123	Siliqua/pl=98.5	21000	55250	34250	2.63	19000	42250	23250	2.22

		Cropping								Ht/pl= 132cm Br/pl= 8	Ht/pl= 100.5 cm Br/pl= 5								
2	Sesamum	Double Cropping	48	30.0	8.12	5.22	55%	8.5	7.8	-	-	19300	48540	29240	2.51	16300	32280	15980	1.98
3	Niger	Double cropping	30	10.0	4.6	3.2	31.4%	4.9	3.5	-	-	11000	23000	12000	2.09	10500	16000	5500	1.52
4	Linseed	Double Cropping	37	10.0	9.0	6.0	50%	11.0	8.0	-	-	18500	45000	26500	2.43	17500	30000	12500	1.71
Pulse																			
5	Lentil	Double Cropping	115	50.0	8.5	6.2	31%	12.5	7.8.00	Br/pl=6 Ht/pl= 25.5 cm	Br/pl=4 Ht/pl= 23.0 cm	20500	59500	39000	2.9	18500	43400	24900	2.34
6	Pea	Double Cropping	50	10.0	16.5	10.0	65%	17.0	11.0	Plant height:53. 73cm Days to flower: 70 No. of seeds /pod:6.00 No. of pod/plant :26.00	Plant height: 51.29 cm Days to flower: 67 No. of seeds /pod:5.5 3 No. of pod/plan t:22.36	33500	165000	126500	4.92	30200	100000	69800	3.31
7	Blackgram	Double cropping	172	20.0	8.7	6.2	40%	7.5	5.10	Br/pl=12 Ht/pl= 70 cm NO.of pod=42 seed/pod =8	Br/pl=7 Ht/pl= 50 cm NO.of pod=28 seed/po d=15	22500	47850	25350	2.13	20000	34100	14100	1.7

i. Performance of Tribal Sub Plan Programme (TSP)

Sl. No.	Crop	Thematic area	Number of farmers	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*	Demo	Local	GC**	GR**	NR**	BCR**	GC	GR	NR	BCR
1	Pig	Semi Scientific management	53	137 nos.							Farrowing started. Av littersize at 1st farrowing: 6nos								
2	Duck	Scientific management	15	400 nos.							Avg. Age at first lay: 162days for layer duck								
3	poultry	Scientific management	14	400 nos.							Avg. Age at first lay160 days								
4	Goat	Scientific management	27	50 nos							kidding started								
	Jute	ICM	26	15 ha	ongoing														
4	Toria	Rice fallow	53	20.0	9.0	6.5	39%	10.5	6.0	Siliqua/pl =122 Ht/pl= 130cm Br/pl= 8	Siliqua/pl=98 .5 Ht/pl= 100.5 cm Br/pl= 5	21000	58500	37000	2.78	19000	42250	23250	2.22
5	Buckwheat	Rice fallow	52	30 ha	10.0	8.0	25%	12.5	9.5	-	-	15000	50000	35000	3.33	14000	40000	26000	2.85
6	Assam Lemon	Scientific management	8	1 ha							ongoing								
7	Coconut	Scientific management	4	0.01 ha							ongoing								
8	Orange	Scientific management	5	0.05 ha							ongoing								
9	Mango	Scientific management	3	0.05 ha							ongoing								
10	Papaya	Scientific management	2	0.03 ha							ongoing								
11	Guava	Scientific management	2	0.06 ha							ongoing								
12	Litchi	Scientific management	3	0.07 ha							ongoing								

13	Apple Ber	Scientific management	2	1.1 ha							ongoing								
14	Honey bee	Scientific management	10	10 nos.	Avg. honey production from 18.0kg/ beehive Initial cost of one beehive with colony= 3000.00, Income from 18.0 kg honey /beehive=9000.00 (@500 per kg honey)	-	6% increase in toria production	-	-		4000	3000	9000	6000	3.00	-	-		-

ii. Performance of STC Programme (Bari development)

Sl. No.	Crop	Thematic area	Number of farmers	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*	Demo	Local	GC**	GR**	NR**	BCR**	GC	GR	NR	BCR
1	Arecanut	Scientific management	50	5 ha															
2	Assam Lemon	Scientific management	20	3 ha															
3	Coconut	Scientific management	5	1.1 ha															
4	Orange	Scientific management	5	0.2 ha															
5	Mango	Scientific management	5	0.1 ha															
6	Betelvine	Scientific management	6	0.1 ha															

7	Papaya	Scientific management	2	0.03 ha							Ongoing								
8	Guava	Scientific management	4	0.05 ha															
9	Jackfruit	Scientific management	2	0.02 ha															
10	Aonla	Scientific management	2	0.01 ha															
11	Leteku	Scientific management	2	0.01 ha															
12	Litchi	Scientific management	3	0.07 ha															
13	Sapota	Scientific management	2	0.01 ha															
14	Apple Ber	Scientific management	2	0.03 ha															

j. Technology Showcasing

Crop / Enterprise	Technology demonstrated	Area (ha)	Nos. of beneficiaries	Avg. yield (Q/ha.)		BC Ratio (Demos)
				Demo.	Check	
Sali Rice	Var:Gitesh	72	272	42.0	37.7	1.70
Sali Rice	Var:Shraboni			50.0	48.0	2.05
Sali Rice	Ranjit Sub-1			47.3	45.5	1.92
Sali Rice	CR Dhan 909			40.5	40	1.1.65

3.3. Achievements on Training

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

Thematic area	No. of Courses/ prog			Participants									
	On-	Spon	Total	General			SC/ST			Total			Grand
				Male	Female	Total	Male	Female	Total	Male	Female	Total	

	Campus (1)	On* (2)	(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)	Total (x + y)
I. Crop Production																						
Weed Management																						
Resource Conservation Technologies																						
Cropping Systems																						
Crop Diversification																						
Integrated Farming																						
Water management																						
Seed production																						
Nursery management																						
Integrated Crop Management																						
Fodder production																						
Production of organic inputs																						
II. Horticulture																						
a) Vegetable Crops																						

Production of low volume and high value crops	1	0	1	16	0	2	0	18	0	6	0	2	0	8	0	22	0	4	0	26	0	26
Off-season vegetables																						
Nursery raising																						
Exotic vegetables like Broccoli																						
Export potential vegetables																						
Grading and standardizatio n																						
Protective cultivation (Green Houses, Shade Net etc.)																						
b) Fruits																						
Training and Pruning																						
Layout and Management of Orchards																						
Cultivation of Fruit																						
Management																						

of young plants/orchards																						
Rejuvenation of old orchards																						
Export potential fruits																						
Micro irrigation systems of orchards																						
Plant propagation techniques																						
c) Ornamental Plants																						
Nursery Management																						
Management of potted plants																						
Export potential of ornamental plants																						
Propagation techniques of Ornamental Plants																						
d) Plantation crops																						
Production																						

and Management technology																						
Processing and value addition																						
e) Tuber crops																						
Production and Management technology																						
Processing and value addition																						
f) Spices																						
Production and Management technology	1	0	1	7	0	6	0	13	0	8	0	4	0	12	0	15	0	10	0	25	0	25
Processing and value addition																						
g) Medicinal and Aromatic Plants																						
Nursery management																						
Production and management technology																						
Post harvest technology																						

and value addition																						
III Soil Health and Fertility Management																						
Soil fertility management																						
Soil and Water Conservation																						
Integrated Nutrient Management																						
Production and use of organic inputs																						
Management of Problematic soils																						
Micro nutrient deficiency in crops																						
Nutrient Use Efficiency																						
Soil and Water Testing																						
IV Livestock Production and Management																						
Dairy Management																						
Poultry Management																						
Piggery Management																						
Rabbit																						

Management																						
Disease Management																						
Feed management																						
Production of quality animal products																						
V Home Science/Women empowerment																						
Household food security by kitchen gardening and nutrition gardening																						
Design and development of low/minimum cost diet																						
Designing and development for high nutrient efficiency diet																						
Minimization of nutrient loss in processing																						
Gender mainstreaming through																						

SHGs																						
Storage loss minimization techniques																						
Value addition																						
Income generation activities for empowermen t of rural Women																						
Location specific drudgery reduction technologies																						
Rural Crafts																						
Women and child care																						
VI Agril. Engineering																						
Installation and maintenance of micro irrigation systems																						
Use of Plastics in farming practices																						
Production of small tools																						

and implements																						
Repair and maintenance of farm machinery and implements																						
Small scale processing and value addition																						
Post Harvest Technology																						
VII Plant Protection																						
Integrated Pest Management																						
Integrated Disease Management																						
Bio-control of pests and diseases																						
Production of bio control agents and bio pesticides																						
VIII Fisheries																						
Integrated fish farming																						
Carp breeding																						

and hatchery management																					
Carp fry and fingerling rearing																					
Composite fish culture																					
Hatchery management and culture of freshwater prawn																					
Breeding and culture of ornamental fishes																					
Portable plastic carp hatchery																					
Pen culture of fish and prawn																					
Shrimp farming																					
Edible oyster farming																					
Pearl culture																					
Fish processing and value addition																					
IX Production of Inputs at site																					

Seed Production																						
Planting material production																						
Bio-agents production																						
Bio-pesticides production																						
Bio-fertilizer production																						
Vermi-compost production																						
Organic manures production																						
Production of fry and fingerlings																						
Production of Bee-colonies and wax sheets																						
Small tools and implements																						
Production of livestock feed and fodder																						
Production of																						

Fish feed																						
X Capacity Building and Group Dynamics																						
Leadership development																						
Group dynamics																						
Formation and Management of SHGs	1	0	1	0	0	12	0	12	0	0	0	13	0	13	0	0	0	25	0	25	0	25
Mobilization of social capital																						
Entrepreneurial development of farmers/youths																						
WTO and IPR issues																						
XI Agro-forestry																						
Production technologies																						
Nursery management																						
Integrated Farming Systems																						
TOTAL	**3**	**0**	**3**	**23**	**0**	**20**	**0**	**43**	**0**	**14**	**0**	**19**	**0**	**33**	**0**	**37**	**0**	**39**	**0**	**76**	**0**	**76**

3.3.2. Achievements on Training of <u>Farmers and Farm Women</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/ prg.			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*	
I. Crop Production																						
Weed Management																						
Resource Conservation Technologies																						
Cropping Systems																						
Crop Diversification																						
Integrated Farming																						
Water management																						
Seed production	2	0	2	26	0	5	0	31	0	15	0	4	0	19	0	41	0	9	0	50	0	50
Nursery management																						
Integrated Crop Management	5	0	5	72	0	11	0	83	0	33	0	9	0	42	0	105	0	20	0	125	0	125
Fodder production																						
Production of organic inputs																						

II. Horticulture																						
a) Vegetable Crops																						
Production of low volume and high value crops	3	0	3	38	0	7	0	45	0	21	0	9	0	30	0	59	0	16	0	75	0	75
Off-season vegetables																						
Nursery raising																						
Exotic vegetables like Broccoli																						
Export potential vegetables																						
Grading and standardizatio n																						
Protective cultivation (Green Houses, Shade Net etc.)																						
b) Fruits																						
Training and Pruning																						
Layout and Management																						

of Orchards																						
Cultivation of Fruit																						
Management of young plants/orchards	1	0	1	21	0	0	0	21	0	5	0	0	0	5	0	26	0	0	0	26	0	26
Rejuvenation of old orchards																						
Export potential fruits																						
Micro irrigation systems of orchards																						
Plant propagation techniques	1	0	1	17	0	6	0	23	0	2	0	0	0	2	0	19	0	6	0	25	0	25
c) Ornamental Plants																						
Nursery Management																						
Management of potted plants																						
Export potential of ornamental plants																						

Propagation techniques of Ornamental Plants																					
d) Plantation crops																					
Production and Management technology																					
Processing and value addition																					
e) Tuber crops																					
Production and Management technology																					
Processing and value addition																					
f) Spices																					
Production and Management technology																					
Processing and value addition																					

g) Medicinal and Aromatic Plants																						
Nursery management																						
Production and management technology																						
Post harvest technology and value addition																						
III Soil Health and Fertility Management																						
Soil fertility management	2	0	2	15	0	7	0	22	0	18	0	10	0	28	0	33	0	17	0	50	0	50
Soil and Water Conservation	1	0	1	5	0	5	0	10	0	10	0	5	0	15	0	15	0	10	0	25	0	25
Integrated Nutrient Management																						
Production and use of organic inputs	2	0	2	14	0	8	0	22	0	18	0	10	0	28	0	32	0	18	0	50	0	50
Management of Problematic soils																						
Micro nutrient deficiency in crops																						
Nutrient Use Efficiency																						

Soil and Water Testing																						
IV Livestock Production and Management																						
Dairy Management	2	0	2	33	0	17	0	50	0	0	0	0	0	0	0	33	0	17	0	50	0	50
Poultry Management	2	0	2	0	0	56	0	56	0	0	0	0	0	0	0	0	0	56	0	56	0	56
Piggery Management																						
Rabbit Management																						
Disease Management	1	0	1	8	0	0	0	8	0	12	0	5	0	17	0	20	0	5	0	25	0	25
IFS																						
Production of quality animal products																						
V Home Science/Women empowerment																						
Household food security by kitchen gardening and nutrition gardening																						
Design and development of low/minimum cost diet																						

Designing and development for high nutrient efficiency diet																						
Minimization of nutrient loss in processing																						
Gender mainstreaming through SHGs																						
Storage loss minimization techniques																						
Value addition																						
Income generation activities for empowerment of rural Women																						
Location specific drudgery reduction technologies																						
Rural Crafts																						

Women and child care																						
VI Agril. Engineering																						
Installation and maintenance of micro irrigation systems																						
Use of Plastics in farming practices																						
Production of small tools and implements																						
Repair and maintenance of farm machinery and implements																						
Small scale processing and value addition																						
Post Harvest Technology																						
VII Plant Protection																						
Integrated Pest	3	0	3	40	0	5	0	45	0	27	0	3	0	30	0	67	0	8	0	75	0	75

Management																						
Integrated Disease Management	2	0	2	6	0	1	0	7	0	34	0	10	0	44	0	40	0	11	0	51	0	51
Bio-control of pests and diseases																						
Production of bio control agents and bio pesticides																						
VIII Fisheries																						
Integrated fish farming																						
Carp breeding and hatchery management																						
Carp fry and fingerling rearing																						
Composite fish culture																						
Hatchery management and culture of freshwater prawn																						
Breeding and culture of ornamental																						

fishes																						
Portable plastic carp hatchery																						
Pen culture of fish and prawn																						
Shrimp farming																						
Edible oyster farming																						
Pearl culture																						
Fish processing and value addition																						
IX Production of Inputs at site																						
Seed Production																						
Planting material production																						
Bio-agents production																						
Bio-pesticides production																						
Bio-fertilizer production																						
Vermi-compost																						

production																						
Organic manures production																						
Production of fry and fingerlings																						
Production of Bee-colonies and wax sheets																						
Small tools and implements																						
Production of livestock feed and fodder																						
Production of Fish feed																						
X Capacity Building and Group Dynamics																						
Leadership development																						
Group dynamics																						
Formation and Management of SHGs	1	0	1	2	0	10	0	12	0	0	0	13	0	25	0	12	0	13	0	25	0	25
Mobilization of social capital																						

Entrepreneurial development of farmers/Marketing management	3	0	3	32	0	7	0	39	0	30	0	6	0	36	0	62	0	13	0	75	0	75
WTO and IPR issues																						
Production technologies																						
Nursery management																						
Integrated Farming Systems																						
TOTAL	**31**	**0**	**31**	**329**	**0**	**145**	**0**	**474**	**0**	**225**	**0**	**84**	**0**	**321**	**0**	**564**	**0**	**219**	**0**	**783**	**0**	**783**

(B) RURAL YOUTH

3.3.3. Achievements on Training Rural Youth in On Campus including Sponsored On Campus Training Programmes

(*Sp. On means On Campus training programmes sponsored by external agencies)

Thematic area	No. of Courses/ Prog			Participants																		Grand Total (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)	
Integrated crop management																						

Mushroom Production	1	0	1	2	0	2	0	4	0	18	0	3	0	21	0	20	0	5	0	25	0	25
Bee-keeping																						
Integrated farming																						
Seed production	2	0	2	14	0	0	0	14	0	30	0	6	0	36	0	44	0	6	0	50	0	50
Production of organic inputs																						
Integrated Farming																						
Planting material production																						
Vermi-culture																						
Soil and Water Testing																						
Sericulture																						
Protected cultivation of vegetable crops																						
Commercial fruit production																						
Repair and maintenance of farm machinery and implements																						
Nursery	1	0	1	7	0	3	0	10	0	10	0	5	0	15	0	17	0	8	0	25	0	25

Management of Horticulture crops																						
Training and pruning of orchards																						
Commercial flower cultivation																						
Value addition																						
Production of quality animal products																						
Dairying																						
Sheep and goat rearing																						
Quail farming																						
Piggery																						
Rabbit farming																						
Poultry production																						
Ornamental fisheries																						
Para vets																						
Para extension workers																						
Composite fish culture																						
Freshwater prawn culture																						
Shrimp																						

farming																						
Pearl culture																						
Cold water fisheries																						
Fish harvest and processing technology																						
Fry and fingerling rearing																						
Small scale processing																						
Post Harvest Technology																						
Tailoring and Stitching																						
Rural Crafts																						
TOTAL	**4**	**0**	**4**	**23**	**0**	**5**	**0**	**28**	**0**	**58**	**0**	**14**	**0**	**72**	**0**	**81**	**0**	**19**	**0**	**100**	**0**	**100**

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*	
Crop diversification	2	0	2	18	0	11	0	29	0	17	0	4	0	21	0	35	0	15	0	50	0	50

Oyster Mushroom Production	2	0	2	11	0	6	0	17	0	12	0	22	0	34	0	23	0	28	0	51	0	51
Formation of groups																						
Bee-keeping																						
Pest Management	1	0	1	7	0	2	0	9	0	16	0	0	0	16	0	23	0	2	0	25	0	25
Pest and disease management	2	0	2	9	0	3	0	12	0	28	0	10	0	38	0	37	0	13	0	50	0	50
Integrated farming																						
Integrated crop management																						
Seed production																						
Soil fertility management	2	0	2	14	0	8	0	22	0	18	0	10	0	28	0	32	0	18	0	50	0	50
Production of organic inputs	2	0	2	11	0	9	0	20	0	10	0	20	0	30	0	21	0	29	0	50	0	50
Integrated Farming																						
Planting material production	1	0	1	10	0	5	0	15	0	7	0	3	0	10	0	17	0	8	0	25	0	25
Vermi-culture																						
Soil and Water Testing																						
Sericulture																						
Protected cultivation of vegetable crops																						

Commercial fruit production																						
Repair and maintenance of farm machinery and implements																						
Nursery Management of Horticulture crops																						
Training and pruning of orchards																						
Value addition																						
Production of quality animal products																						
Dairying																						
Sheep and goat rearing																						
Quail farming																						
Piggery																						
Rabbit farming																						
Poultry production																						
Ornamental fisheries																						
Para vets																						
Para extension workers																						
Composite fish culture																						
Freshwater																						

prawn culture																						
Shrimp farming																						
Pearl culture																						
Cold water fisheries																						
Fish harvest and processing technology																						
Fry and fingerling rearing																						
Small scale processing																						
Post Harvest Technology																						
Tailoring and Stitching																						
Rural Crafts																						
TOTAL	**12**	**0**	**12**	**80**	**0**	**44**	**0**	**124**	**0**	**108**	**0**	**69**	**0**	**177**	**0**	**188**	**0**	**113**	**0**	**301**	**0**	**301**

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																		Grand Total (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)	
Productivity enhancement	1	0	1	8	0	7	0	15	0	6	0	4	0	10	0	14	0	11	0	25	0	25

in field crops																						
Horticulture based Cropping system																						
Seed Production																						
Integrated Pest Management																						
Integrated Nutrient management																						
Rejuvenation of old orchards																						
Protected cultivation technology																						
Formation and Management of SHGs																						
Group Dynamics and farmers organization																						
Information networking among farmers	3	0	3	44	0	3	0	47	0	26	0	2	0	28	0	70	0	5	0	75	0	75
Capacity building for ICT application																						
Care and maintenance of farm																						

machinery and implements																					
WTO and IPR issues																					
Management in farm animals																					
Livestock feed and fodder production																					
Household food security																					
Women and Child care																					
Low cost and nutrient efficient diet designing																					
Production and use of organic inputs	1	0	1	7	0	3	0	10	0	9	0	6	0	15	0	16	0	9	0	25	0	25
Gender mainstreaming through SHGs																					
Total	**5**	**0**	**5**	**59**	**0**	**13**	**0**	**72**	**0**	**41**	**0**	**12**	**0**	**53**	**0**	**100**	**0**	**25**	**0**	**125**	**0**	**125**

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**																		**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**	

					*		*		*		*						*				*	
Productivity enhancement in field crops	2	0	2	19	0	7	0	26	0	18	0	6	0	24	0	37	0	13	0	50	0	50
Integrated Pest Management	1	0	1	4	0	1	0	5	0	18	0	3	0	21	0	22	0	4	0	26	0	26
Seed production	1	0	1	12	0	3	0	15	0	8	0	2	0	10	0	20	0	5	0	25	0	25
Integrated Nutrient management																						
Rejuvenation of old orchards																						
Protected cultivation technology																						
Formation and Management of SHGs																						
Group Dynamics and farmers organization																						
Information networking among farmers	1	0	1	21	0	3	0	24	0	1	0	0	0	1	0	22	0	3	0	25	0	25
Capacity building for ICT application																						
Care and maintenance of farm machinery and																						

implements																						
WTO and IPR issues																						
Management in farm animals																						
Livestock feed and fodder production																						
Household food security																						
Women and Child care																						
Low cost and nutrient efficient diet designing																						
Production and use of organic inputs																						
Gender mainstreaming through SHGs																						
TOTAL	**5**	**0**	**5**	**56**	**0**	**14**	**0**	**70**	**0**	**45**	**0**	**11**	**0**	**56**	**0**	**101**	**0**	**25**	**0**	**126**	**0**	**126**

Note: Please furnish the details of above training programmes as <u>Annexure</u> 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	Venue	Please specify Beneficiary	General participants	SC/ST	Grand Total

				days		**group (Farmer & Farm women/ RY/ EP and NGO Personnel)**	**M**	**F**	**T**	**M**	**F**	**T**	**M**	**F**	**T**
Farmer & Farm women																
Horticulture	Crop production	Winter Vegetable cultivation in scientific way	12.11.18, 13.11.18	2	KVK, Chirang	F/FW	16	2	18	6	2	8	22	4	26
Horticulture	Crop production	Organic cultivation of ginger and turmeric	11.03.19, 12.03.19	2	KVK, Chirang	F/FW	7	6	13	8	4	12	15	10	25
Agri Economics	SHG management	Formation and Management of S.H.Gs	09.11.18, 10.11.18	2	KVK Chirang	F/FW	0	12	12	0	13	13	0	25	25
TOTAL							**33**	**20**	**43**	**14**	**19**	**33**	**37**	**39**	**76**
Rural Youth																
Agronomy	Seed Production	Seed production Technology of oilseed crops	16.02.19, 17.02.19	2	KVK, Chirang	RY	0	0	0	11	9	20	11	9	20
Horticulture	Nursery management	Nursery raising for self employment.	18.01.19, 21.01.19	2	KVK, Chirang	RY	7	3	10	10	5	15	17	8	25
Plant protection	Beneficial insect	Scientific bee keeping for economic upliftment	12.10.18, 13.10.18, 14.10.18	3	KVK, Chirang	RY	18	3	21	3	1	4	21	4	25
Agricultural Economics	Capacity building	Milky Mushroom cultivation	16.07.18, 18.07.18	2	KVK Chirang	RY	2	2	4	18	3	21	20	5	25
TOTAL							**27**	**8**	**35**	**42**	**18**	**60**	**69**	**26**	**95**
EP and NGO Personnel																
Soil Science	Production and use of organic inputs	Production technology of biofertilizer and its effect on crop yield and sustainable soil health	07-01-2019	1	KVK Chirang	EF	10	5	15	5	5	10	15	10	25
Soil science	Fertility management	Soil fertility management for soil health and higher crop production	08-01-2019	1	KVK Chirang	EF	3	0	3	7	13	20	10	13	23

Agri economics	Marketing management	Market led extension and Information networking among farmers	07.08.18, 08.08.18	2	KVK Chirang	EF	17	0	17	8	0	8	25	0	25
Agri economics	Marketing management	Market led extension and Information networking among farmers	09.10.18, 10.10.18	2	KVK Chirang	EF	12	2	15	8	2	10	20	5	25
Agri economics	Marketing management	Market led extension and Information networking among farmers	06.12.18, 07.12.18	2	KVK Chirang	EF	15	0	15	10	0	10	25	0	25
Plant protection	IPM	Recent advancement in pest and disease management in agriculture	13.09.18, 14.09.18	2	KVK, Chirang	EF	04	1	4	18	3	21	22	4	26
TOTAL							**61**	**8**	**69**	**56**	**23**	**79**	**117**	**32**	**149**

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 & Farm women/ RY/ EP and NGO Personnel)**	**General participants**			**SC/ST**			**Grand Total**		
							M	**F**	**T**	**M**	**F**	**T**	**M**	**F**	**T**
Farmer and Farm Women															

Agronomy	Crop production	Scientific method of cultivation of jute	10.04.18-11.04.18	2	Bhawraguri	Farmer & Farm women	19	1	20	5	0	5	24	1	25
Agronomy	Crop production	Scientific method of cultivation of rabi pulse	17.09.18 – 18.09.18	2	Silikhaguri	Farmer & Farm women	16	2	18	4	3	7	20	5	25
Agronomy	Crop production	Nursery raising technique of Sali rice	06.05.18 – 07.05.18	2	Rowmari	Farmer & Farm women	14	4	18	5	2	7	19	6	25
Agronomy	Seed production	Seed production technology of winter paddy	02.05.18 – 03.05.18	2	Pretgaon	Farmer & Farm women	9	2	11	10	4	14	19	6	25
Agronomy	Crop production	Newly developed varieties of Sali rice	07.05.18 – 08.05.18	2	Khagrabari	Farmer & Farm women	11	1	12	11	2	13	22	3	25
Agronomy	Seed production	Seed production technology of pulses	18.10.18 – 19 10.18	2	Pub Khamarpara	Farmer & Farm women	17	3	20	5	0	5	22	3	25
Agronomy	Crop production	Newly developed varieties of pulse	05.11.18 – 06.11.18	2	East Doisunguri	Farmer & Farm women	12	3	15	8	2	10	20	5	25
Horticulture	Nursery management	Propagation techniques of major fruit crops	15.03.19 to 16.03.19	2	Lakhipur	Farmer & Farm women	17	6	23	2	0	2	19	6	25
Horticulture	Production of low volume and high value crop	Improved production techniques of garlic and onion	29.10.18 to 30.10.19	2	Tunkubari	Farmer & Farm women	10	5	15	7	3	10	17	8	25
Horticulture	Orchard management	Scientific management of coconut, areca nut and betel nut	20.09.18 to 21.09.18	2	Dwakhanaguri	Farmer & Farm women	21	0	21	5	0	5	26	0	26
Horticulture	Crop diversification	Scientific production technology of pumpkin in sand and silt deposited areas	01.11.18 to 02.11.19	2	Tulsijhar	Farmer & Farm women	18	0	18	7	0	7	25	0	25
Horticulture	Crop production	Improved cultivation technology of potato with reference to TPS	10.12.18 to 11.12.19	2	Syamthaibari	Farmer & Farm women	10	2	12	7	6	13	17	8	25
Plant Protection	IPM	Integrated pest management in winter rice	06.08.18 to 07.08.18	2	Bhouraguri	Farmer & Farm women	15	0	15	10	0	10	25	0	25
Plant Protection	IPM	Biological control of rice insect pests and diseases	13.09.18 to 18.09.18	2	Koila Moila	Farmer & Farm women	15	0	15	10	0	10	25	0	25
Plant Protection	IDM	Integrated disease management in summer vegetables	30.11.18 to o1.12.18	2	Bishnupur	Farmer & Farm women	2	0	2	16	7	23	18	7	25
Plant Protection	IPM	Integrated pest management in winter rice	06.03.19 to 07.03.19	2	Pub Kamarpara	Farmer & Farm women	10	5	15	7	3	10	17	8	25
Plant Protection	IDM	Integrated management methods of late blight disease in potato	07.01.19 to 19.01.18	2	Duturi	Farmer & Farm women	4	1	5	18	3	21	22	4	26
Soil Science	soil management	Use of Microbial biofertilizer in field crops	16-5-2018 17-5-2018	2	Bangaljhora	Farmer & Farm women	21	0	21	1	0	1	22	0	22

Soil Science	Soil & water conservation	Soil & water conservation practices in dry land farming	6-6-2018 7-6-2018	2	Shyamthaibari	Farmer & Farm women	20	1	21	4	0	4	24	1	25
Soil Science	Soil fertility management	Production technology of Azolla and its use in crop production	21-5-2018 22-5-2018	2	South Bamungaon	Farmer & Farm women	19	2	21	4	0	4	23	2	25
Soil Science	Soil fertility management	Management Soil fertility for vegetable crops	11-7-2018 12-7-2018	2	Denaipara	Farmer & Farm women	7	2	9	10	6	16	17	8	25
Soil Science	Soil fertility management	Management of soil resources for organic farming	15-8-2018 16-8-2018	2	Hengurmari	Farmer & Farm women	10	0	10	15	0	15	25	0	25
Animal Science	Poultry management	Scientific rearing of improved backyard poultry	27-28.10.18	2	Dangtol	Farmer & Farm women	0	25	25	0	0	0	20	5	25
Animal Science	Disease management	Disease of livestock and poultry, their prevention and control measure	18-19.01.19	2	Deolguri	Farmer & Farm women	8	0	8	12	5	17	20	5	25
Animal Science	Dairy management	Fertility management in Dairy cows	12-13.02.19	2	Thuribari	Farmer & Farm women	12	13	25	0	0	0	12	13	25
Animal Science	IFS	Integrated Farming System	20-21.03.19	2	Dangtol	Farmer & Farm women	0	31	31	0	0	0	0	31	31
Agricultural Economics	Marketing management	Marketing of Agricultural and Horticultural Produce	11.07.18, 12.07.18	2	Mwkwnaguri	Farmer & Farm women	7	0	7	18	0	18	25	0	25
Agricultural Economics	Marketing management	Marketing of Agricultural and Horticultural Produce	13.07.18, 14.07.18	2	Saragaon	Farmer & Farm women	5	2	7	12	6	18	17	8	25
Agricultural Economics	Marketing management	Marketing of Agricultural and Horticultural Produce	28.08.18, 29.08.18	2	Nilibari	Farmer & Farm women	20	5	25	0	0	0	20	5	25
Agricultural Economics	SHG Management	Formation and Management of S.H.Gs	11.08.18, 12.08.18	2	Pub Enchorbari	Farmer & Farm women	2	10	12	0	13	13	2	23	25
Total							**351**	**126**	**477**	**213**	**65**	**278**	**584**	**171**	**755**
Rural Youth															
Agronomy	crop production	Scientific method of cultivation of tuber crops	12.10.18 – 13.10.18	2	Batabari	Rural youth	6	0	6	16	3	19	22	3	25
Agronomy	Seed production	Seed production technology of winter paddy	12.05.18 – 13.05.18	2	Shyamthaibari	Rural youth	8	0	8	16	1	17	24	1	25
Agronomy	crop production	Newly developed varieties of pulses	02.12.18- 03.12.18	2	Sanyasibari	Rural youth	12	11	23	1	1	2	13	12	25
Horticulture	Nursery management	Propagation techniques of major fruit crops	18.01.19 to 19.01.19	2	Sanyasibari	Rural youth	10	5	15	7	3	10	17	8	25

Plant Protection	Pest and disease management	Recent advancement in pest and disease management in agriculture	06.03.19 to 07.03.19	2	Pub Kamarpara	Rural youth	6	2	8	10	7	17	16	9	25
Plant Protection	Pest and disease management	Recent advancement in pest and disease management in agriculture	25.01.18	1	Denaipara	Rural youth	3	1	4	18	3	21	21	4	25
Plant Protection	pest management	Rodent management in field and store	04.03.18 to 05.03.18	2	Saljhara	Rural youth	7	2	9	16	0	16	23	2	25
Soil Science	Soil Fertlity management	Use of Microbial biofertilizer in field crops	18-9-2018 19-9-2018	2	Tilakgaon	Rural youth	10	5	15	5	5	10	15	10	25
Soil Science	oranic fertilizer	Production technology of Azolla and its use in crop production	25-10-2018 26-10-2018	2	Bhutiapara	Rural youth	9	5	14	11	0	11	20	5	25
Soil Science	Soil fertility management	Management of soil resources for organic farming	20-11-2018 21-11-2018	2	Mongolagaon	Rural youth	16	5	21	4	0	4	20	5	25
Animal Science	Dairy management	Feeding management of dairy animals	20-24.11.18	5	Nilibari	Rural youth	21	4	25	0	0	0	21	4	25
Agricultural Economics	Mushroom production	Oyster Mushroom cultivation	03.10.18, 04.10.18	2	Sidli	Rural youth	11	6	17	4	5	9	15	11	26
Agricultural Economics	Mushroom production	Oyster Mushroom cultivation	05.10.18, 06.10.18	2	Sidli	Rural youth	0	0	0	08	17	25	08	17	25
TOTAL							**119**	**46**	**165**	**116**	**45**	**161**	**235**	**91**	**326**
EP and NGO Personnel															
Agronomy	Seed production	Seed production technology of oilseeds	25.11.18	1	Saragaon	EF	12	3	15	8	2	10	20	5	25
Agronomy	crop management	Newly developed varieties of Sali rice	19.05.18	1	Palasbari	EF	12	0	12	11	2	13	23	2	25
Soil Science	soil management	Management of soil resources for organic farming	12-2-2019	1	Sidli	EF	9	5	14	11	0	11	20	5	25
Agricultural Economics	Capacity building	Information networking among farmers	04.09.18, 05.09.18	2	Nilibari	EF	21	3	24	1	0	1	22	3	25
TOTAL							**54**	**11**	**65**	**31**	**4**	**35**	**85**	**15**	**100**

(D) Vocational training programmes for Rural Youth

Crop /	Date (From	Dur	Area of	Training title*	No. of Participants	Impact of training in terms of Self employment	Whether

Enterprise	– To)	ation (days	training		General			SC/ST			Total			after training				Sponsored by external funding agencies (Please Specify with amount of fund in Rs.)
					M	F	T	M	F	T	M	F	T	Type of enterprise ventured into	Number of units	Number of persons employed	Avg. Annual income in Rs. generated through the enterprise	
Honey bee	11.03.19 to 13.03.19	3	Beneficial insect	Scientific beekeeping for economic upliftment	10	0	10	15	0	15	25	0	25	ISI-A type beehive with honey bee colony(*Apis cerena*)	05	05	12000/- to 15000/-	No
Oilseeds	26.10.18 – 30.10.18	5	Seed production	Seed production technology	9	0	9	16	0	16	25	0	25	Seed business	02	08	20,000/ - 25,000	No
Biofertilizer	23.03.19, 25.03.19, 26.03.19, 27.03.19	4	Production of organic inputs	Production technology of biofertilizer(Azolla, Vermicompost and Enriched compost)	10	5	15	5	5	10	15	10	25	Low cost Vermicompost production unit	10	10	7000/- to 8000/-	No
IFS	07.01.19, 08.01.19, 09.01.19	3	Dairy farming	Clean milk production and Value addition.	5	0	5	8	1	9	13	1	14	Fish cum duck cum horticultural IFS	3	3	9000/- to 10000/-	No
Mushroom	05.03.19, 06.03.19, 07.03.19	3	Mushroom production	Year round Mushroom cultivation for economic upliftment	6	7	13	7	5	12	13	12	25	self dependent after mushroom cultivation by selling mushroom	15	50	15000/- 20000/-	No
TOTAL					**40**	**12**	**52**	**51**	**11**	**62**	**91**	**23**	**114**		**35**	**76**		

*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	18.11.17	1 day	Agriculture	Resource conservation technologies	Agricultural workshop on Petroleum product conservation	0	0	0	64	0	64	64	0	64	PCRA, Ministry of Petroleum and Natural Gas	7500/-
On	F	24.11.18	1 day	Agriculture	Soil management	Crop seminar on horticulture and agriculture	10	5	15	25	23	48	35	28	63	IFFCO	40000/-
On	F	01.02.19	1 day	Agriculture	water harvesting	Traditional water harvesting	15	0	15	30	0	30	45	0	45	NERIWALM, Assam	40000/-
On	F	21.12.18	I day	Agriculture	ICM	Scientific coconut cultivation technology and value addition	20	5	25	25	5	30	45	10	55	Coconut Development Board	40000/-
Total							**45**	**10**	**55**	**80**	**28**	**108**	**125**	**38**	**163**		**127500/-**

3.4. 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 2017-18

Sl. No.	Extension Activity	Topic	Date and duration	No. of activities	Participnts											
					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	ICM,INM,IPM,Bee keeping, animal rearing, seed production, marketing,		310	75	35	110	140	50	190	10	0	10	235	75	310

		vermin-composting, soil testing, entrepreneurship development, Grafting and budding, nursery raising etc.														
2	Diagnostic visit	Nursery management	07/06/18,12/7/18,13/08/18,12/08/18, 20/08/18, 25/10/18	34	14	20	34	16	10	26	5	2	7	35	32	67
		Stem borer in rice, Gandhi bug attack	21/08/18,5/09/18,09/09/18, 19/10/18, 22/10/18, 27/10/18		25	6	31	30	17	47	5	2	7	60	25	85
		Parasitic disease cattle	11/04/18,18/04/18, 20/6/18, 20/7/18		7	0	7	10	7	17	2	0	2	19	7	26
		Infertility in dairy cows	09/05/18, 19/10/18, 17/12/18, 13/02/19		6	5	11	14	10	24	2	0	2	22	15	37
		Brown spot and blast of rice	22/11/18, 25/11/18		0	0	0	5	0	5	2	0	2	7	0	7
		Nutrient deficiency in banana and tomato, immature fruit drop in coconut, mealy bug in papaya	15/12/18,20/12/18, 05/01/19, 20/01/19, 04/02/19		7	0	7	4	2	6	2	1	3	13	3	16
		FMD in cattle, piggery	28/01/19, 11/02/19		4	0	4	5	0	5	1	0	1	10	0	10
		Aphid attack in toria	20/12/18,05/01/19, 16/01/19		4	1	5	6	5	11	4	2	6	14	8	22
		Aphid infestation in sesamum , collar rot disease in seasamum	09/11/18, 18/11/18		2	0	2	7	0	7	2	0	2	11	0	11
3	Field day	Mushroom cultivation, Varietal performance of Sali rice. Toria cultivation, Sesamum cultivation, Pea cultivation, Cultivation of watermelon, plasti mulching in okra, cultivation of lentil, cultivation of pea and linseed, cultivation of niger	29/10/18, 03/11/18, 08/11/18, 22/11/18, 22/12/18, 06/01/19, 21/01/19, 07/02/19, 15/03/19	9	100	84	184	95	33	128	20	10	30	215	127	342
4	Group Discussion	Formation of SHG, formation of Farmers club,	12/04/18,17/08/18 22/11/18, 07/01/19	4	20	07	27	15	8	23	4	1	5	39	16	55

		formation of Joint liability group, Discussion on doubling income, PRA														
5	Kishan Gosthi			0	0	0	0	0	0	0	0	0	0	0	0	0
6	Kishan Mela			0	0	0	0	0	0	0	0	0	0	0	0	0
7	Film show	Vermicomposting, Mushroom cultivation, Piggery, Bee keeping, poultry farming,	05/06/18,26/06/18, 22/09/18,16/10/18, 05/12/18,23/12/18	6	100	40	140	110	70	180	20	5	25	230	115	345
8	SHG formation	Mithinga SHG, Phungbili SHG, Aie valley SHG, Hatipota Women SHG, Nomalpur women SHG, Bornali SHG, Mangalagaon women SHG, Bengalijora SHG, Maa laksmi SHG, Anjali SHG	10/11/18, 22/11/18, 22/12/18,06/01/19, 21/01/19, 07/02/19, 15/03/19	10	50	15	65	25	30	55	2	0	2	75	45	120
9	Exhibition	PCRA Exhibition, Panbari, PPVFRA Exhibition, Kahikuchi,	18/11/18, 14/12/18	2	70	15	85	65	7	72	5	0	5	140	22	162
10	Scientists visit to farmers fields	Field visit under FLD/OFT/Training/Other extension activities	-	60	13	5	18	20	15	35	6	1	7	39	21	60
11	Plant/ Animal Health camp			0	0	0	0	0	0	0	0	0	0	0	0	0
12	Farm science club			0	0	0	0	0	0	0	0	0	0	0	0	0
13	Ex-trainee Sammelan			0	0	0	0	0	0	0	0	0	0	0	0	0
14	Farmers seminar/ workshop	Traditional water harvesting, Scientific coconut cultivation technology and value	21.12.18, 01.02.19	2	150	40	190	130	70	200	20	4	24	300	114	414

		addition														
15	Method demonstration	Production of Oyster Mushroom, nursery raising, Application of biofertilizer, Pheromone trap, Preparation of low cost vermin compost, Soil testing, Bee keeping, Seed production	07/04/18,15/06/18, 20/06/18,20/07/18, 10/11/18,12/08/18, 17/08/87,27/08/18, 14/12/18	9	10	5	15	13	1	14	6	2	8	29	8	37
16	Celebration of important days	Foundation day of AAU, Golden Jubilee year	01/04/18	1	25	15	40	40	15	55	10	4	14	85	34	119
		Kisan Kalyan Karyasal Gram Swaraj Abhijan	02/05/18	1	35	5	40	25	10	35	3	2	5	63	17	80
		World Environment day	05/06/18	1	78	52	130	62	33	95	5	1	6	145	86	231
		International Yoga Day	26/06/18	1	40	5	45	35	5	40	16	2	18	91	12	103
		Webcasting programme of Prime Minister	12/07/18	1	40	10	50	50	15	65	20	2	22	110	27	137
		Swachhata hi Pakhwada	16/12/18 to 31/12/18	1	320	56	376	220	163	383	6	1	7	546	220	766
		Womens farmers Day	15/10/18	1	31	0	31	20	0	20	6	2	8	57	2	59
		Independence day	15/08/18	1	10	0	10	9	2	11	0	0	0	19	2	21
		14th Foudation Day of KVK Chirang	22/09/18	1	35	15	50	28	22	50	4	2	6	67	39	106
		World Food Day	16/10/18	1	49	6	55	0	0	0	5	1	6	54	7	61
		PCRA	20/10/18	2	50	15	65	60	7	67	5	0	5	115	22	137
		World Soil Day	05/12/18	1	300	120	420	330	167	497	7	2	9	637	289	926
		Kisan Divas	23/12/18	1	45	20	65	42	23	65	10	2	12	97	45	142
		Republic Day	26/01/19	1	5	0	5	7	0	7	4	0	4	16	0	16
17	Exposure visits	PCRA Exhibition, Panbari, PPVFRA Exhibition, Kahikuchi,	18/11/18, 14/12/18	2	70	15	85	65	7	72	5	0	5	140	22	162
18	Electronic media (CD/DVD)			0	0	0	0	0	0	0	0	0	0	0	0	0
19	Extension literature			0	0	0	0	0	0	0	0	0	0	0	0	0
20	Newspaper coverage	World Soil Day, National Science Day Womens farmers Day World Food Day		6	0	0	0	0	0	0	0	0	0	0	0	0

		World Honeybee D Swachhata hi sewa ay														
21	Popular articles	In Ghare pathare and other local news paper		10	0	0	0	0	0	0	0	0	0	0	0	0
22	Radio talk			0	0	0	0	0	0	0	0	0	0	0	0	0
23	TV talk			0	0	0	0	0	0	0	0	0	0	0	0	0
24	Training manual			0	0	0	0	0	0	0	0	0	0	0	0	0
25	Soil health camp	Soil health awareness camp	05/12/18	1	300	120	420	330	167	497	7	2	9	637	289	926
26	Awareness camp	Environment awareness camp, Awareness camp on bee keeping , Soil health awareness camp, ,	05/06/18, 11/11/18, 05/12/18,	3	50	20	70	70	30	100	10	2	2	130	52	182
27	Lecture delivered as resource person	Vermicomposting, bee keeping, Marketing of Agricultural Produce, Oyster Mushroom Cultivation, Button Mushroom production, Protected cultivation, Scientific apple Ber cultivation, Organic cultivation, Quail farming, Pig farming, seed production	23/04/18, 25/04/18 27/04/18,28/04/18 20/05/18, 20/06/18 06/07/18, 08/07/18 10/07/18,23/03/19, 07/03/18,14/02/18,	11	105	40	145	60	20	80	6	2	8	171	62	233
28	PRA	Nilibari, Coraikansra, Pachim Bilaspur, Hegurmari	02/02/19,03/02/19, 08/02/19,08/02/19, 12/02/19,13/02/19, 20/02/19, 21/02/19	8	26	25	51	22	27	49	4	0	4	52	52	104
29	Farmer-Scientist interaction	Traditional water harvesting, Scientific coconut cultivation technology and value addition	21/12/18, 01/02/19	2	150	40	190	130	70	200	20	4	24	300	114	414
30	Soil test campaign	Soil testing procedures and its importance in crop production	16.09.18,18.09.18, 23.12.18	3	27	2	29	21	0	21	0	0	0	48	2	50

31	Mahila Mandal Convener meet			0	0	0	0	0	0	0	0	0	0	0	0	0
32	Any other (Please specify)			0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total				**507**	**2448**	**859**	**3307**	**2336**	**1118**	**3454**	**271**	**61**	**332**	**5073**	**2028**	**7101**

3.5 Production and supply of Technological products during 2018-19

A. SEED MATERIALS

Major group/class	Crop	Variety	Quantity (qt)	Value (Rs.)	Number of recipient/ beneficiaries		
					General	SC/ST	Total
CEREALS	Sali Rice	Gitesh, Shraboni	3752.0	14,257,600.00	108	164	272
OILSEEDS	Sesamum	ST-1683	246.6	4,438,000.00	19	29	48
	Toria	TS-67, TS-46, TS-29,	575.0	4,887,500.00	110	74	184
	Linseed	T-397	90.0	5,4000.00	20	17	37
	Niger	NG-1	82.5	3,30,000.00	15	18	33
PULSES	Lentil	HUL 57	500	58,50,000.00	46	69	115
	Pea	Prakash	150	10,50,000.00	32	18	50
	Blackgram	PU-31	174.0	27,84,000.00	30	42	72
VEGETABLES	Potato	Kufri Jyoti	6	6,000.00	3	1	4
FLOWER CROPS	-	-	-	-	-	-	-
OTHERS (Specify)	Buckwheat	local	253	12,65,000.00	40	22	62

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	375.20	14,257,600.00	108	164	272
2	OILSEEDS	99.41	97,09,500.00	164	138	302
3	PULSES	82.40	96,84,000.00	108	129	237
4	VEGETABLES	0.6	6,000.00	3	1	4

5	FLOWER CROPS	0	0	0	0	0
6	OTHERS	25.3	12,65,000.00	40	22	62
TOTAL		**582.91**	**3,49,22,100.00**	**423**	**454**	**877**

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

Major group/class	Crop	Variety	Numbers (In Lakh)	Value (Rs.)	Number of recipient beneficiaries		
					General	SC/ST	Total
Fruits	Pineapple	Kew	0.042	33600.00	1	0	1
Spices	Black pepper	Paniyur-1	0.001	1500.00	3	3	6
Ornamental plants	Dahlia	-	0.001	500.00	1	1	2
	Gerbera	Red gem	0.001	200.00	2	0	2
VEGETABLES	Tomato	BNT-1217F	0.020	4000.00	5	5	10
	Cabbage	BC-76	0.010	2000.00	2	3	5
	Knolkhol	Kanchanjonga	0.030	3000.00	5	8	13
	Chilli	Tejaswani	0.003	600.00	3	2	5
	Brinjal	Navkiran	0.022	3300.00	4	4	8
Forest Spp.	-	-	-	-	-	-	-
Plantation crops	-	-	-	-	-	-	-
Medicinal plants	-	-	-	-	-	-	-
OTHERS (Pl. Specify)	-	-	-	-	-	-	-

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	0.042	33,600.00	1	0	1
2	Spices	0.001	1,500.00	3	3	6
3	Ornamental Plants	0.002	700.00	3	1	4
4	VEGETABLES	0.085	12,900.00	19	22	41
5	Forest Spp.	-	-	-	-	-

6	Medicinal plants	-	-	-	-	-
7	Plantation crops	-	-	-	-	-
8	OTHERS (Specify)	-	-	-	-	-
TOTAL		**0.13**	**48,700.00**	**26**	**26**	**52**

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	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
BIOFERTILIZERS	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
1	Vermicompost	*Eisenia foetida*	-	7.0	7000	2	1	3
2	Azolla	Azolla caroliniana	-	2.0	2000	-	-	-
BIO PESTICIDES	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

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	-	-	-	-	-	-	-
2	BIO FERTILIZERS	Vermicompost (*Eisenia foetida*)	-	700	7000	2	1	3
		Azolla (*Azolla caroniana*)	-	200	2000	-	-	-
3	BIO PESTICIDE	-	-	-	-	-	-	-
	TOTAL	**-**	**-**	**900**	**9000**	**2**	**1**	**3**

D. Production of livestock during 2018-19: NIL

Sl. No.	Type of livestock	Breed	Quantity		Value (Rs.)	Number of Recipient beneficiaries		
			(Nos)	Kgs		General	SC/ST	Total
1	**Cattle/ Dairy**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
2	**Goat**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
3	**Piggery**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

5	**Poultry**	-	-	-	-	-	-	-
6	**Fisheries**	-	-	-	-	-	-	-
7	**Others (Specify)**	-	-	-	-	-	-	-

D1. SUMMARY of production of livestock during 2018-19: Nil

Sl. No.	Livestock category	Breed	Quantity		Value (Rs.)	Number of Recipient beneficiaries		Total number of Recipient beneficiaries
			Nos	(kg)		General	SC/ST	
1	CATTLE	-	-	-	-	-	-	-
2	SHEEP & GOAT	-	-	-	-	-	-	-
3	POULTRY	-	-	-	-	-	-	-
4.	PIGGERY	-	-	-	-	-	-	-
5	FISHERIES	-	-	-	-	-	-	-
6	OTHERS (Pl. specify)	-	-	-	-	-	-	-
	TOTAL	-	-	-	-	-	-	-

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.)KVK Chirang News letter(Yearly, since 2011)

(B) Articles/ Literature developed/published

Item	Title /and Name of Journal	Authors name	Number of copies
Research papers			

Training manuals			
Technical Report			
Book/ Book Chapter			
Popular articles	Krishi Khetrot Plastikor Bhumika, ABAD	Dr. Kameswar Das and Juri Talukdar	-
	Gramanchalat uparjon aru poripustir babe boigyanik bhabe oyster kathfula ba mushroom r krish podhoti, ABAD	Dr. Hiranya Kr. Baruah	-
	Relay ba Utera xoisya podhoti, ABAD	Sailen Talukdar	-
	Bigyan Sanmotot bota sorai palon, ABAD	DR. Rajib Bhandar Kayastha	-
	Assamor Jalabayut Boigyanic Podhatire Lichur Unnat Kheti podhatti, ABAD	Juri Talukdar	
	Broccoli khetir Boigyanik podhoti, ABAD	Jyotish Kr. Sarma	
	Xoisyor Gunmanot Phosphorus r bhumika, ABAD	Poran kishor Dutta	
	Krishi Vigyan Kendra Chirangor logot jorito krishokor xofolotar khotiyan, ABAD	Sailen Talukdar, Mandakini Bhagawati	
	Bybosayik bhittit tamulor puli utpadonor babe pulibari Prastut karan at Ghore Pothare, ABAD	Juri Talukdar	
	Assamor jalabayut dekha dia Tamulor prodhan bemar aru iar protikar at Ghore Pothare, ABAD	Juri Talukdar	
Technical bulletins			
Extension bulletins			

Newsletter	Newsletter	Dr. Kameswar Das and other Scientific staff of KVK, Chirang	100
Conference/ workshop proceedings			
Leaflets/folders			
e-publications			
Any other (Magazine)	ABAD	Dr. Kameswar Das and other Scientific staff of KVK, Chirang	200
TOTAL			

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

I Details of Electronic Media Produced

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

1.7. 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)

1. Progressive Farmer Subhan Ali of Bijni Sub division:

Name of KVK	KVK, Chirang
Crop and Variety	Crop: Blackgram

	Variety: PU-31
Name of farmer & Address	Subhan Ali Father's Name: Shom Miya Village: Majrabari, P.O: District: Chirang (BTAD), Assam Ph: 8011151993
Background information about farmer field	Md. Subhan Ali a small farmer of Chirang district has a land holding of 2.5 ha. He used to grow rice, blackgram and jute according to land situation during kharif season. After harvesting the Kharif crops, he used some areas for cultivation of rabi crops viz-rapeseed, lentil and vegetables. The soil condition is mostly sandy loam and rainfed. Md. Subhan Ali cultivates blackgram in the kharif season in his upland fields under rainfed condition with no scientific production technology.
Details of technology demonstrated	The technology demonstrated was the scientific method of cultivation that included the use of high yielding variety (PU-31), application of recommended dose of fertilizer ($N:P_2O_5:K_2O$@10:35 kg/ ha), treatment of seed with rizhobium.
Institutional Involvement	The demonstration was conducted with active involvement of KVK Chirang. The critical inputs viz- seed, bio fertilizer, fertilizer, pesticides etc were provided by KVK. Also Training, method demonstration for treatment of seeds with rizhobium culture, diagnostic field visit etc were carried out by KVK.
Success Point	Earlier the farmer, Mr. Subhan Ali used to grow blackgram in traditional method. He used local varieties which are generally low performer. No recommended dose of fertilizer and/ or bio fertilizer was applied. As a result yield was very low. But, due to intervention of KVK, Chirang in respect of HYV, scientific method of production, INM, IPM, training, diagnostic service the yield of the crop increased significantly.
Farmer Feedback	The farmer, Mr. Subhan Ali was very happy and satisfied for the achievement of technology demonstrated by KVK, Chirang. He found the technology very useful and easy to apply in the field situation. Mr. Subhan Ali showed his field to other farmers of nearby villages and motivated most of them to accept the technology
Outcome Yield (q/ha)	
Demonstration	8.7
Potential yield of variety/technology	12.0
District average (Previous year)	5.3
State average (Previous year)	5.1

Performance of technology vid-a-vis local check:

Specific Technology	Yield (q/ha)	Gross cost (Rs/ha)	Gross income (Rs/ha)	Net income (Rs/ha	B:C ratio

Farmer practices	**6.2**	**22500.00**	**49600.00**	**28100.00**	**2.20**
Demonstration	**8.7**	**26000.00**	**69600.00**	**48100.00**	**2.67**
% Increase	**40.23%**		**40.23%**		

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

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	Rice	Erection of “Tara paat” branches in the rice field	To control case worm attack
2	Rice	Beating the upper half of standing rice crop with thorny branches of trees	Controlling leaf folder
3	Rice	Use of perches in the paddy field so that predatory birds sit on it and can trap insect pests.	Control insect pests.

4	Rice	Erection of “Germani bon” branches in the rice field	To control case worm attack
5	Rice	Erection of damaged video film in the rice field at the time maturity	To repel birds feeding rice seed
6	Rice	Broadcasting of outer rind of citrus fruit in the standing water of paddy field to control case worm.	Control case worm
7	Rice	Use of dead frog and crab in the paddy field to repel Gandhi bug.	Repel Gandhi bug
8	Rice	Spraying of fresh cow dung solution in paddy crop to control bacterial leaf blight.	Control bacterial leaf blight.
9	Rice	Application of kerosene oil in standing water of paddy field to control case worm	Control case worm infestation.
10	Seed preservation	Use of neem leaves for controlling storage pests.	Controlling storage pests.
11	Vegetable crops	Spraying of solution of one part of cattle urine and six part of water in vegetable crops to protect against insect pests.	Protect against insect pests.
12.	Rice	Erection of polythene packets in bamboo poles at 3-4 feet distances to repel rodent pests	Rodent pest of cereals
13.	Rice	Application cut pieces of rabab tenga in the field	Reduces leech population
14.	Storage rice	Application of naphthalene balls over the storage bin	Reduces different storage insect pest attack

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

- **Identification of courses for farmers/farm women**
  - a. PRA
  - b. Group Discussion
  - c. Zonal Review Meeting
  - d. Farmers – Scientists’ interaction
  - e. ZREAC meeting
  - f. Farm and home visit
  - g. Problem tree analysis
  - h. SWOT analysis
- **Rural Youth**
  - a. PRA

b. Group Discussion
c. Zonal Review Meeting
d. Farmers – Scientists' interaction
e. ZREAC meeting
f. Farm and home visit
g. Problem tree analysis
h. SWOT analysis

- **Extension personnel**
  a. Zonal Review Meeting
  b. ZREAC meeting

3.11 Field activities

i. Number of villages adopted : 6
ii. No. of farm families selected : 350
iii. No. of survey/PRA conducted :4

3.12. Activities of Soil and Water Testing

Status of establishment of Lab : Established

1. Year of establishment : 2017

2.List of equipments purchased with amount : nil

Sl. No	Name of the Equipment			Qty.	Cost
	S&WT lab	Mini lab/ Mridaparikshak	Manufacturer		
1	-				
2	-				
Total					

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

Details	No. of Samples analysed	No. of Farmers	No. of Villages	Amount (In Rupees) realized

Soil Samples	12	10	2	NIL
Water Samples	0	0	0	0
Plant Samples	0	0	0	0
Petiole Samples	0	0	0	0
Total	**12**	**10**	**2**	**NIL**

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

a. No. of SHCs prepared :10
b. No. of farmers to whom SHCs were distributed : 10
c. Name of the Major and Minor nutrients analysed : N, P, K, B, Zn, Fe, S
d. No. of villages covered :2
e. Soil health card based nutrient management in different crops (pl. submit in brief in separate page) :

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	45	115191	8	16750	5	65676	-	-	6	20175	5	18550	69	236342
Voice only	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Voice and Text both	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	**45**	**115191**	**8**	**16750**	**5**	**65676**	**-**	**-**	**6**	**20175**	**5**	**18550**	**69**	**236342**

3.14 Contingency planning for 2018-19

a. Crop based Contingency planning

Contingency (Drought/ Flood/ Cyclone/ Any other please specify)	Proposed Measure	Proposed Area (ha.) to be covered	Number of beneficiaries proposed to be covered		
			General	SC/ST	Total
Flood and drought	Introduction of new variety or crop	13.000 ha (6000ha flood affected, 7000ha drought affected)	270	680	700
Flood and drought	Introduction of Resource Conservation Technologies	Training programme on Resource Conservation Technologies	230	350	580

Flood and drought	Distribution of seeds and planting materials	Rice seedlings, pulse and oilseed crops	650	700	1350
Flood and drought	Any other (Please specify)	Training programmes on alternate activities after flood/drought like mushroom cultivation	200	300	500

23. **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
-	-	-	-	-	-	-	-

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)
Commercial cultivation of Banana, Var. Malbhog through 'corm' as planting material along with recommended doses of fertilizer, treatment of planting material and all plant protection measures	350	40	55,000.00/ha	100,500.00/ha
Scientific method of potato cultivation	205	55	57,000.00/ha	10,000.00/ha
Introduction of HYV of *Sali* rice var. Ranjit, TTB-404, Shraboni etc.with modern cultivation technology viz. time of sowing & transplanting, seed treatment, fertility management, water management and plant protection measures	550	55	21,600.00/ha	50,200.00/ha
Introduction of HYV of Boro rice var. Joymoti and Kanaklata with modern cultivation technology viz. time of sowing & transplanting, seed treatment, fertility management, water management and plant protection measures	120	25	28,000.00/ha	38,500.00/ha
Seed production technique in *Sali* rice (Variety: Ranjit, TTB-404)	130	37	27,000.00/ha	82,000.00/ha
Improved production technology of lentil	600	35	11,000.00/ha	15,200.00/ha
Rearing of chara chamelli duck	150	20	-	-
Seed production technique in toria (Variety: TS-36, 38, 46, 67, 29)	450	71	32,000.00/ha	45,000.00/ha
Seed production technique in lentil (Var. PL 406, Maitree)	270	40	25,500.00 / has	48750.00/ha
Rearing of Indian runner duck	100	20	-	-

Pig Rearing	1025	40	-	-

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

Cases of large scale adoption (*Please furnish detailed information for each case***)**

1. Since 2009-10, KVK, Chirang has been exploring cultivation technology in silt deposited areas of Bongaigaon district, especially in Aie river bank with potential crop water melon. The crop was cultivated in the several pockets with no to slight scientific intervention. But with continuous efforts of KVK, Chirang famers came to know about the high yielding varieties along with scientific crop management and pest management techniques. Thus farmers were able to earn a ransom every year and now have trying for other cucurbitaceous vegetable like pumpkin, bitter gourd, snake gourd, maize and even Bengal gram. Thus Chowraguri area of Aie river bank has been demarcated as water melon growing hot spot in the locality.
2. Summer rice has been cultivated in limited areas of the district that too, with some unknown, intruded varieties without following proper method of cultivation. KVK, Chirang has been consistently trying to popularize HYVs of summer rice 'Jaymoti' and 'Kanaklata' and their scientific production technology in the district for last five years through on farm testing, front line demonstration and training programme. Because of its continuous effort in this direction, there has been gradual increase in area (Approx. 130.0 ha) under these two HYVs of summer rice and also increase in crop yield (60.0 q/ha). Moreover, with the development of irrigation facility, many farmers have come forward to cultivate summer rice in some new areas also. Further, because of the continuous effort made by KVK, Chirang to popularize SRI technology in summer rice, about 60.0 ha in Kokila village and 10.0 ha in Kayethpara village under Bongaigaon district have been put under summer rice cultivation with system of rice intensification.
3. Quality seed plays an important role in increasing the crop yield; however, seed replacement rate in the district is very low which may be attributed to ignorance of farmers on seed production technology. KVK, Chirang has been working hard to popularize seed production technology in rice in the farmer's field through training programme, front line demonstration programme, advisory services etc. since inception. About 140.0 ha area was brought under seed production programme of kharif rice (var. Ranjit) and which produced 3000.0 q quality certified seed during kharif, 2012, inspite of damage by flood in 40.0 ha area. During 2012-13, seed production in summer rice was extended to Nowapara part I, Bongaigaon, Assam with summer rice (var. Kanaklata & Joymoti) cultivation in about 34.0 ha area for the first time.

3 *Kharif* rice is the most important crop of the district which occupies more than 70% of the total rice growing areas. Adoption of improved production technology of Kharif rice in the farmers' field is not yet satisfactory and KVK, Chirang is trying hard to popularize improved technology through various activities like training, front line demonstration, on farm testing, advisory service etc. Because of the sincere effort, farmers have started adopting improved production technology of Sali rice especially in respect of quality seed, fertility management and pest management. At present HYV of *Kharif* rice is cultivated more than 40% of rice growing

areas of the district. Considering the high yield potential of HYVs of Sali rice, it is expected that more farmers will come forward to adopt these varieties in near future.

4 Potato is an important vegetable crop of the district and necessary technologies required for obtaining higher yield has been initiated by the scientists of KVK, Chirang. Many farmers have adopted scientific cultivation practices of potato after receiving necessary helps and guidance from the scientists of KVK, Chirang and could harvest higher crop yield. KVK, Chirang has been demonstrating irrigation management technology in potato since 2007-08 which has become a popular technology among the potato growing farmers of KVK operational areas.

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

Name of specific technology/skill transferred	No. of participants	% of adoption	Change in income (Rs.)	
			Before (Rs./Unit)	After (Rs./Unit)
Foundation seed production of Toria under PPP mode	1	50%	44000.00/ha	68750.00/ha
Cluster demonstration of toria, variety-TS 46, NRC HB 101	92	30%	40000.00/ha	60750.00/ha
Technology demonstration under technology showcasing of Sali paddy Var: Gitesh, Ranjit Sub 1, TTB 404, cr Dhan909	272	25%	35,000.00/ha	55,000.00/ha
Seed production technique in toria (Variety: TS-46& 67)	15	63%	30,000.00/ha	45,000.00/ha
Technology demonstration under Cluster FLD lentil, Var: HUL 57	115	40%	47125.00 / has	71500.00/ha
Improved cultivation practices in water melon (Var. Sugar Baby)	10	90%	2,66,,060.00/ha	4,80,460.00 /ha
Cluster demonstration of pea under cluster FLD	50	20%	112000/ha	144000.00 /ha
Techno*l*ogy demonstrated under CFLD of Kharif oilseed Sesamum,Var: ST-1683	48	25%	45000.00 /ha	70000.00/ha
Cluster demonstration of Linseed, variety:T-397	37	30%	24000.00 /ha	32000.00/ha
Cluster demonstration of Blackgram, Var: PU-31	72	25%	35,000.00/ha	55,000.00/ha
Technology demonstration Niger under ClusterFLD	33	10%	115000/ha	145000.00 /ha

5.0. LINKAGES ESTABLISHED

5.1 Functional linkage with different organizations

Name of organization	**Nature of linkage**
1. Department of Agriculture, Chirang	i) NAEP on Rabi field crops ii) Technology Mission for Horticultural crops

	iii) Mission Double Cropping iv) Supply of seed for BGREI programme v) PRA for preparation of SREP, Chirang district vi) Technical support for BGREI programme vii) Association KVK scientist as resource person viii) Programme formulation and execution under CSS-ATMA
2. Directorate of Agriculture, BTC, Kokrajhar	i) Preparation of Impact point for BTAD at Bimonthly Zonal Workshop
3. Department of Veterinary, Chirang	i) Association KVK scientist as resource person ii). Collaborative training programme organization
4. DICC, Chirang	i) Entrepreneurship development through training
5. RSETI, SBI, Kajalgaon	i) Organization of vocational training programmes for self-employment of Rural Youths
6. NABARD	i) Involvement of KVK scientists as resource person in training programmes
7. DRDA	i) Involvement of KVK scientists as resource person in training programmes
8. SIRD, Khanapara	i). Organization of sponsored training programme ii). Association KVK scientist as resource person iii). Carrying out of sponsored action research programme in veterinary
9.KASS and NASS	i) Organization of training programmes ii) Technology demonstration cum seed production ofMaize,
10. NGO 'SeSTA'	i) Upliftment of rural community through programmes planning, identification of beneficiaries and execution of training, demonstration and awareness programmes ii) Attending the Annual Meeting
11. Anjali SHG	i) Organizing training and demonstration programmes for economic upliftment of SHGs ii) FLD Programme on oilseed and pulse crop
12. Rosy SHG	
13. Bornali SHG	
14. Fungbeli SHG	
15. Wildlife Trust of India	i). Collaborative training to the extension functionaries
16. PPVFR Authority	i). Collaborative awareness cum training programme on PPV&FR Act 2001
17. SSB, Banduguri, Chirang	Collaborative awareness cum training programme.
18. Indo Global Social Service Society	Collaborative HRD programme

19. Bongaigaon Gana Seva Society	Delivered lecture as resource person.
20. Luthern World Service India Trust	Delivered lecture as resource person in awareness programme on Scientific cultivation of field crops.
21. Livelihood Mission Trust	Collaborative interection of KVK for livelihood generating activity
22. Jagaran NGO	Delivered lecture as resource person.
23. Ramdhenu Social Development NGO	Delivered lecture as resource person.

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.)
Technology Showcasing	Seed production	June, 2018	DR(A)	
Cluster demonstration on pulse	FLD	August, 2018, Oct, 2018	ICAR-ATARI VI	4,50,000.00
Cluster demonstration on oilseed	FLD	July, 2018, Oct, 18	ICAR-ATARI VI	2,34,000.00
TSP	ICM OF Jute	March, 2019	DR(A)	32,96,584.00
STC (Bari development)	Bari Development		DR(A)	3,40,000.00
AINP on VPN	Awareness programme	15/09/17 to 02/10/17	AAU, Jorhat	10,000.00
Awareness cum training: PCRA	Awareness programme petroleum conservation	18/11/17	PCRA, Ministry of Petroleum and Natural Gas	7,400.00

5.3 Details of linkage with ATMA

a) Is ATMA implemented in your district: Yes

Sl. No.	Programme	Nature of linkage	Remarks
1.	Programme Planning	Expert opinion as a member of Governing Body	
2.	Training Programmes	KVK scientists act as Resource Persons in the training programmes organized under ATMA	
3.	Farm School	KVK scientists act as Resource Persons	
4.	Farmers – Scientists interaction	KVK scientists act as Resource Persons	

5.4 Give details of programmes implemented under National Horticultural Mission: No

S. No.	Programme	Nature of linkage	Constraints if any

5.5 Nature of linkage with National Fisheries Development Board : No.

S. No.	Programme	Nature of linkage	Remarks

5.6 Nature of linkage with Coconut Development Board: Yes

S. No.	Programme	Nature of linkage	Remarks
1	Workshop on Scientific Coconut cultivation technology and value addition	KVK scientists act as Resource Persons in the programmes	

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	

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									
Wheat									
Maize									

Any other									
Pulses									
Green gram									
Black gram	27.08.17	-	0.5	PU-31	Seed	0	996.00	0	damage due to heavy rainfal
Arhar									
Lentil									
Ay other									
Oilseeds									
Mustard									
Soy bean									
Groundnut									
Sesamum	25.08.17		1.0	Kaliabor local	Seed	0	4254.00	0	damage due to heavy rainfal
Niger	29.10.17	26.02.18	2.0	NG-1	Seed	0.50 q	5500.00	5000.00	Post harvest yield loss due to rain
Any other									
Fibers									
i.									
ii.									
Spices & Plantation crops									
Black pepper	02.04.16			Paniyur-1	cutting	50 nos.	130.00	750.00	
i.									
Floriculture									
Dianthus	07.11.17				Seedling	50 nos.	50.00	200.00	
Gerbera	14.08.17			Red gem	cutting	200nos.	200.00	600.00	
Chrysanthemum	18.07.17				cutting	50 nos.	50.00	150.00	
Fruits									
Pineapple			0.13	Kew	Fruit	9.0 q	4000.00	9000.00	Ratoon crop
Pineapple			0.13	Kew	Sucker	7000 nos.	4000.00	35000.00	Ratoon crop
Banana			0.13	Malbhog	Fruit	5.0 q	1500.00	5400.00	
Banana			0.13	Malbhog	Sucker	300 nos.	1500.00	3000.00	
Vegetables									
Tomato	24.09.17	13.01.18	0.033	BNT-1213F1	Fruit	3.0 q	500.00	3000.00	

Tomato	10.09.17	14.10.17		BNT-1213F1	Seedling	500 nos.	300.00	1000.00	
Brinjal	14.10.17	20.01.18	0.035	Nav kiran	Fruit	4.0 q	800.00	4000.00	
Brinjal	10.09.17	14.10.17		Nav kiran	Seedling	650 nos.	200.00	500.00	
Chilli	09.10.17	10.03.18	0.033	Tejaswini	Fruit	0.12 q	200.00	500.00	
Chilli	10.09.17	14.10.17		Tejaswini	Seedling	300 nos.	150.00	300.00	
Cabbage	10.09.17	14.10.17		BC-76	Seedling	400 noss.	200.00	400.00	
Cauliflower	10.09.17	14.10.17		Kimaya	Seedling	300 noss.	100.00	200.00	
Potato	10.12.17	15.03.18	0.013	Kufri jyoti	Tuber	5.0 q	3000.00	5000.00	
Others (specify)									
Buckwheat	29.10.17	26.02.18	2.0	local	Seed	2.0 q	4000.00	5000.00	Post harvest yield loss due to rain

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	Azolla	2.0 qt		1500.00	Products were used in the KVK farm
2	Vermicompost	3.0 qt	Farm wastage used	3000.00	

6.4 Performance of instructional farm (livestock and fisheries production) : No livestock unit at the farm

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	

6.5 Rainwater Harvesting

Training programmes conducted by using Rainwater Harvesting Demonstration Unit: Nil

Date	Title of the training course	Client (PF/RY/EF)	No. of Courses	No. of Participants including SC/ST			No. of SC/ST Participants		
				Male	Female	Total	Male	Female	Total

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

Accommodation available (No. of beds) : No hostel facilities

Months	Title of the training course/Purpose of stay	Duration of Training	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
Total					
Grand total					

Note: (Duration of the training course X No. of trainees)=Trainee days

7. FINANCIAL PERFORMANCE

7.1 Details of KVK Bank accounts

Bank account	Name of the bank	Location/ Branch	Account Number
With Host Institute			
With KVK	State Bank of India	BRPL Complex, Dhaligaon	0010266315899
Revolving Fund	State bank of India	BRPL Complex, Dhaligaon	0031766578300

7.2 Utilization of funds under FLD on Maize *(Rs. In Lakhs) if applicable: NA*

Item	Released by ICAR/ZPD		Expenditure		Unspent balance as on 31st March, 2015
	Year	Year	Year	Year	
Inputs					
Extension activities					
TA/DA/POL etc.					
TOTAL					

7.3 Utilization of KVK funds during the year 2018 -19

S.	Particulars	Sanctioned (in	Released	Expenditur

No.		Lakh)	(in Lakh)	e (in Lakh)
A. Recurring Contingencies				
1	Pay & Allowances	110.00	104.55	104.55
2	Traveling allowances	2.50	1.59	1.59
3	Contingencies			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	15.50	15.09	15.09
B	POL, repair of vehicles, tractor and equipments			
C	Meals/refreshment for trainees			
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)			
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)			
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)			
G	Training of extension functionaries			
H	Maintenance of buildings			
I	Establishment of Soil, Plant & Water Testing Laboratory			
J	Library			
TOTAL (A)		15.50	15.09	15.09
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)		0.00	0.00	0.00
C. REVOLVING FUND				
GRAND TOTAL (A+B+C)				

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

Year	Opening balance as on 1st April	Income during the year	Expenditure during the year	Net balance in hand as on 1st April of each year
April 2016 to March 2017	1.54376	1.19342	0.62407	2.11311
April 2017 to March 2018	2.11311	0.44414	0.02304	2.53421
April 2018 to March 2019	2,53,421.00	40,180.00	5,679.00	2,87,922.00

Note: No KVK must leave this table blank

8.0 Please include information which has not been reflected above.

(Write in detail)

8.1 Constraints

(a) Administrative: One vehicle is not sufficient for functioning of all mandated activities and other activities
(b) Financial: Allocation of fund under the recurring head is not sufficient
(c) Technical: Additional activities other than mandated activities affect the normal activities

(Signature)
Sr. Scientist cum Head