PROFORMA FOR ANNUAL REPORT OF KVKS, (Jan-Dec2020)

1. GENERAL INFORMATION ABOUT THE KVK

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

Address	Telephone		E mail
	Office	FAX	
KVK, Nagaland University, Lumami, P.O. Lumami PIN-798627			kvkzunheboto@gmail.com

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

Address	Telephone		E mail
	Office	FAX	
Vice-chancellor, Nagaland University, Lumami PIN-798627	(0369)2268248	(0369)2268248	vicechancellornu@yahoo.com

1.3. Name of the Sr. Scientist & Head with phone & mobile No

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. Rakesh Kumar Chaurasia		09856072100	rchaurasia_2004@yahoo.co.in

1.4. Year of sanction: 2005

1.5. Staff Position **(As on 31st December 2020)**

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	Sr. Scientist & Head	Dr. Rakesh Kumar Chaurasia	Sr. Scientist & Head	Animal Science	131400	147900	5/10/12	Permanent	OBC
2	Subject Matter Specialist	Wapangtoshi Longkumer	ACTO	Plant Protection	74000	83300	17/04/07	Permanent	ST
3	Subject Matter Specialist	Dr. Kundan Kumar	SMS	Agril. Extension	69000	77700	19/04/07	Permanent	Others
4	Subject Matter Specialist	Edenly Chishi	ACTO	Horticulture	74000	83300	20/04/07	Permanent	ST
5	Subject Matter	Dr. Visakho Shunyu	ACTO	Agronomy	74000	83300	14/05/07	Permanent	ST

	Specialist								
6	Subject Matter Specialist	Sentimenla	SMS	Agril. Chemistry & Soil Science	59500	67000	10/10/12	Permanent	ST
7	Subject Matter Specialist	Dr. Z. Nongothung Ezung	SMS	Animal Science	56100	65000	3/3/14	Permanent	ST
8	Programme Assistant	Narola Anichari	Programme Assistant	Home Science	38700	43600	25/10/12	Permanent	ST
9	Computer Programmer	Imnameren	TO (Computer)	IT	50500	56900	02/04/07	Permanent	ST
10	Farm Manager	Naropongla	Farm Manager	Soil and water conservation	38700	43600	17/10/12	Permanent	ST
11	Accountant / Superintendent	Katovi Shohe	Accountant / Superintendent		47600	55200	08/08/07	Permanent	ST
12	Stenographer	Tiarenla	Jr. Steno. Cum Compt Operator		27900	31400	3/10/12	Permanent	ST
13	Driver	Wepretso Marhu	Driver cum mechanic		30500	34300	22/06/07	Permanent	ST
14	Supporting staff	Kekhriengulie	Skilled Supporting staff		23500	27600	2/4/07	Permanent	ST
15	Supporting staff	Shumben Patton	Skilled Supporting staff		23500	27600	01/06/07	Permanent	ST

Note: No column in the table must be left blank

1.6. a. Total land with KVK (in ha) : 20

b. Total cultivable land with KVK (in ha): 17.75

c. Total cultivated land (in ha): 5.50

S. No.	**Item**	**Area (ha)**

1	Under Buildings (Administrative building+ Farmers' Hostel+ Staff Quarters)	1
2.	Under Demonstration Units (pl. specify the name) i. IFS ii. Nutrition garden iii. Vermi-compost	 1 0.005 0.001
3.	Under Crops (Cereals, pulses, oilseeds etc.) (Pl. specify separately) i. Spices	 0.04
4.	Under vegetables (Pl. specify separately) i. Okra ii. Colocasia iii. Cucumber iv. Bottle gourd v. Bitter gourd vi. King chilli	 0.001 0.01 0.001 0.001 0.001 0.001
5.	Orchard/Agro-forestry	2
6.	Others (empty terrace)	1.5

1.7. Infrastructural Development:

A) Buildings

S. No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Date	Plinth area (Sq.m)	Expenditure (Rs.)	Starting Date	Plinth area (Sq.m)	Status of construction
1.	Administrative Building	ICAR	April 2014	550	110.51			
2.	Farmers Hostel							
3.	Staff Quarters (2)	ICAR	April 2014	144				
4.	Demonstration Units							
5	Fencing							

B) Vehicles

Type of vehicle	Regd. No.	Year of purchase	Cost (Rs.)	Total kms. Run	Present status

Bolero	NL 10 C- 758	2017	750696	48888	Working
Mini Tractor with trolley	NL 07- A2068	2006	369126/-	160	Working
Power tiller		2010	296200/-	170hrs	Working
Power tiller		2016	197500/-	New	Working

C) Equipments& AV Aids

Name of the equipment	**Year of purchase**	**Cost (Rs.)**	**Present status**
PC	2010	34700/-	Needs replacement
Laptop	2010	43140/-	Needs replacement
LCD Projector	2010	85100/-	Needs replacement
Camera	2010	19999/-	Needs replacement
Camera	2017	51300/-	Working
Photo copier	2010	95000/-	Needs Repairing
Fax machine	2010	16000/-	Needs Replacement
Generator	2012	337000/-	Working
PC	2016	43590/-	Working
PC	2016	43590/-	Working
PC	2016	43590/-	Working
Laptop	2016	47590/-	Working
Laptop	2017	76700/-	Working
Scanner	2016	9350/-	Working
Generator	2016	129800/-	Working

1.8. A). Details SAC meeting* conducted in 2020

Date	**Name and Designation of Participants**	**Salient Recommendations**
9/12/2020	1. Prof. P.Lal, Vice Chancellor, Nagaland University 2. Prof. R.C. Nayak, Dean In charge 3. Dr. L.Daiho Professor and Head, Plant Pathology; 4. Dr. C. Maiti Professor and Head Horticulture; 5. Dr. L. Tongpang Professor and Head Agronomy; 6. Mr. L. Holuto Aye, Progressive Farmer, Tichipami Village; 7. Mr. Kakuto Chishi, Progressive Farmer, Litta New Village; 8. Ms. Aholi, Progressive Women Farmer, Lumami Village; 9. Ms. Anatoli, Progressive Women Farmer, Zaphumi Village 10. Dr. Rakesh Kumar Chaurasia, Sr. Scientist & Head 11. Mr. Wapangtoshi Longkumer, ACTO, Plant Protection 12. Dr. Visakho Shunyu, ACTO, Agronomy 13. Dr. Kundan Kumar, SMS, Agril Extension 14. Ms. Edenly Chishi, ACTO, Horticulture 15. Dr. Z. Nongothung Ezung, SMS, Animal Science 16. Ms. Narola Anichari, PA (Home Science.	1. Limimg in soil at the recommended dose if soils are acidic. 2. Use of copper Oxychloride @3g/litre of water for foliar application to control leaf spot disease in Soybean. 3. Organic farming to be initiated 4. Wet towel method should be adopted to observe seed germination percentage before conducting on farm trial. 5. Selection of location specific HYV seeds which are resistant to disease pest infestation. 6. The technologies selected to be tested in control environment or as per package of practices. 7. Input/output ratio needs to be calculated in the crops cultivated to get B.C. Ratio. 8. Timely supply of inputs should be done so that farmers can sow the crops at the right

		time.

Proceedings of 11th SAC Meeting of KVK Zunheboto Nagaland University.

The 11th SAC meeting of Krishi Vigyan Kendra, Zunheboto, Nagaland University was held on 9th Dec. 2020 through online mode at 11:00 AM under the chairmanship of Prof. P. Lal, Vice Chancellor, Nagaland University. The meeting was attended by Dean In charge Prof. R.C. Nayak , Dr. L.Daiho Professor and Head, Plant Pathology; Dr. C. Maiti Professor and Head Horticulture; Dr. L. Tongpang Professor and Head Agronomy; Mr. L. Holuto Aye, Progressive Farmer, Tichipami Village; Mr. Kakuto Chishi, Progressive Farmer, Litta New Village; Ms. Aholi, Progressive Women Farmer, Lumami Village; Ms. Anatoli, Progressive Women Farmer, Zaphumi Village of Zunheboto district and KVK staffs. Sr. Scientist & Head Dr. Rakesh Kumar Chaurasia welcomed all the members. The agenda items included the presentation of Annual Report 2020 and Annual Action Plan 2021 to the SAC members for their valuable suggestions/recommendation which can be taken up by the KVK for improvement of Agri. and Allied sector in the district.

The programme ended with vote of thanks from Dr. Visakho Shunyu, ACTO Agronomy.

Sl.No	Recommendation/Resolutions	Action to be taken by
1.	Limimg in soil at the recommended dose if soils are acidic.	ACTO (Ag. /GPB)
2.	Use of copper Oxychloride @3g/litre of water for foliar application to control leaf spot disease in Soybean.	
3.	Organic farming to be initiated	
4.	Wet towel method should be adopted to observe seed germination percentage before conducting on farm trial.	ACTO (Plant Protection)
5.	Selection of location specific HYV seeds which are resistant to disease pest infestation.	i. ACTO Horti ii. ACTO (Ag. /GPB)
6.	The technologies selected to be tested in control environment or as per package of practices.	
7.	Input/output ratio needs to be calculated in the crops cultivated to get B.C. Ratio.	
8.	Timely supply of inputs should be done so that farmers can sow the crops at the right time.	

**** 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	Agri + horti
2	Agri + horti + Animal husbandry
3	Agri + Animal husbandry

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

Sl. No	Agro-climatic Zone	Characteristics
1	Agro Ecological Sub Region (ICAR)	Warm to hot moist (humid to per humid eco sub region), Tropical to sub-tropical (D2 A9)
2	Agro-Climatic Zone (Planning Commission)	Eastern Himalayan Region
3	Agro Climatic Zone (NARP)	Upper Brahmaputra Valley zone, Sub tropical hill zone (2,3)

2.3 Soil type/s

Sl. No	**Soil type**	**Characteristics**	**Area in ha**

1	Deep sandy loam to loamy soils	Akhuhuta series, Fine, mixed, thermic, typic Dystrudepts	36600
		Langposeries , Fine loamy, mixed, thermic, Dystric Eutrudeps	2040

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

Sl. No	**Crop**	**Area (ha)**	**Production (ton)**	**Productivity (Qtl /ha)**
1.	Jhum paddy	9410	18510	19.6
2.	T.T.C/W.R.C Paddy	4210	11500	27.3
3.	Maize	10100	19940	19.7
4.	Jowar	40	40	10
5.	Small Millet	810	910	11.2
6.	**Arhar**	280	250	8.9
7.	Jobstear	120	120	10
8.	Urd/ Moong	30	30	10
9.	Nagadal	460	530	11.5
10.	Rajma (kholar)	740	940	12.7
11.	Beans	200	260	13
12.	Horse gram	40	40	10
13.	Pea	600	660	11.1
14.	Groundnut	120	120	10
15.	Soyabean	7610	9760	12.8
16.	Sesamum	150	90	6
17.	Perilla	210	130	6.2
18.	Castor	30	20	6.6
19.	Potato	240	2400	100

Source: Statistical handbook of Nagaland 2017

2.5. Weather data

Month	Average Rainfall (mm)	Temperature ^{0} C		Relative Humidity (%)	
		Maximum	Minimum	Maximum	Minimum
Jan	1.33	18	7	86	41
Feb	1.68	20	10	89	38
Mar	0.87	22	13	71	32
April	7.36	24	14	82	38
May	8.45	26	16	94	57
June	1	27	19	99	80
July	23.64	28	21	99	92
Aug	17.54	29	22	99	76
Sept	13.43	29	20	99	82
Oct	11.54	27	18	99	66
Nov	2.2	25	14	91	43
Dec	0	21	8	90	39

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

3. Category	Population	Production	Productivity
Cattle			
Crossbred	11485		
Indigenous	27292		
Buffalo	14		
Sheep			
Crossbred	0		
Indigenous	0		

Goats	9678		
Pigs			
Crossbred	39631		
Indigenous	59691		
Rabbits	917		
Poultry			
Hens			
Desi	205112		
Improved			
Ducks	5476		
Turkey and others			

Source: Statistical handbook of Nagaland 2017

Note: Pl. provide the appropriate Unit against each enterprise

2.6 Details of Operational area/ Villages (2020)

Sl. No.	Taluk/ Eleka	Name of the block	Name of the village	Major crops & enterprises	Major problem Identified	Identified thrust area
1	Akuluto ,Atoizu, Zunheboto, Suruhoto	Akuluto ,Atoizu, Zunheboto, Suruhoto	Zaphumi, Shichimi, Alaphumi, Lumami, Sumi Settsu, Lumithsami, Sastami, Phishumi, Litami Old, Litami New, Aotsakilimi, Phisa,Phuye Old, Phuye, Ajiqami, Tichipami, Lokobo, Sapotimi, Kholeboto, Zhekuto Yeshelutomi, Izheto, Maromi, Naghuto Old	Paddy, Orange, Maize, Tomato, Brinjal, Cucumber, Ginger, Chilli, Banana, Pineapple, Colocassia, Tapioca, Tea, Piggery, Poultry. Goattery Beans, Rabbitry, Kiwi, large cardamom, soybean	Heavy weed infestation in existing cropping system, lack of post - harvest management facilities, lack of improved breed of pigs and fowl. Lack of financial support. Lack of HYV of crops. Lack of employment opportunities	1. Identification of farming system of Zunheboto District at different altitude and settlement. 2.Collection and identification of available crop germplasm 3.Improvement in existing shifting cultivation by scientific intervention 4.SHG formation for small scale enterprise 5. Improved package of practices for orange cultivation 6. Post harvest management of Horticulture and field crops 7. Piggery, poultry and dairy up-gradation and improved management. 8. Introduction of HYV of crops

3. TECHNICAL ACHIEVEMENTS

3. A. Details of target and achievements of mandatory activities by KVK during 2020

Discipline	OFT (Technology Assessment and Refinement)	FLD (Oilseeds, Pulses, Maize, Other Crops/Enterprises)

	Number of OFTs		Number of Farmers		Number of FLDs		Number of Farmers	
	Targets	**Achievement**	**Targets**	**Achievement**	**Targets**	**Achievement**	**Targets**	**Achievement**
Agronomy	2	2	4	6	3	3	65	128
Horticulture	2	2	7	7	2	2	13	13
Plant Protection	2	1	6	3	2	2	6	6
Animal Sc.	2	4	40	41	2	4	35	35
Agril Extension	2	2	30	30	1	1	30	30
Home science	2	2	42	42	2	2	70	70
Total	**12**	**13**	**129**	**129**	**12**	**14**	**219**	**282**

Note: Target set during last Annual Zonal Workshop

Training (including sponsored, vocational and other trainings carried under Rainwater Harvesting Unit)					**Extension Activities**			
Number of Courses			**Number of Participants**		**Number of activities**		**Number of participants**	
Clientele	**Targets**	**Achievement**	**Targets**	**Achievement**	**Targets**	**Achievement**	**Targets**	**Achievement**
Farmers	42	42	1050	872				
Rural youth	22	19	475	286				
Extn. Functionaries	3	1	25	16				
Total	**67**	**62**	**1550**	**1174**	**177**	**230**	**687**	**737**

Seed Production (ton.)		**Planting material (Nos. in lakh)**	
Target	**Achievement**	**Target**	**Achievement**
5.17 (ton.)	7.5 (ton.)	0.017 (Nos.)	0.04050
		Colocasia, Turmeric , Ginger	(0.04q, 14q, 22.16q) = 36.2Qt

Note: Target set during last Annual Zonal Workshop

4. B. Abstract of interventions undertaken during 2020

Sl.	**Thrust**	**Crop/**	**Identified**	**Interventions**

No	area	Enterprise	problems	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	Crop production	Soybean	Low productivity	OFT on Soybean VL-63				Field visits	5 kg of seeds supplied.
2	Crop production	Maize+Beans	Intercropping of Maize+Beans not practiced	OFT on Maize + Beans under organic management				Field visits	5 kg of maize and 5 kg of beans supplied
3	Crop production	Maize	Low productivity		FLD on Maize HQPM-1	Package & Practices of Maize		Field visits, Farmers Scientist Interaction	150 kg of Maize HQPM-1 supplied
4	Crop production	Soybean	Low productivity		CFLD on Soybean JS-9560	Package and Practices of Soybean		Field visits, Farmers Scientist Interaction	500 kg of Soybean supplied
5	Crop production	Field pea	Low productivity		CFLD on Field pea Var. Prakash	Package and Practices of FieldPea		Field visits, Farmers Scientist Interaction	500 kg of Fieldpea supplied

6	Vegetable production	Okra	Economic and yield loss due to weeds	Use of black polythene 30micron as mulching material for effective weed management in Okra		Benefits of mulching in vegetables			2kg Okra seeds
7	Value addition	Bamboo shoot	Lack of knowledge on processing and value addition	ITK on Bamboo shoot pickle		Value addition of locally available vegetables. 2. ITK on Bamboo shoot pickle			Spices and Mustard oil
8	Fruit production	Pineapple	Low yield and no uniformity in Flowering and fruiting		Enhancement of pineapple production by application of ethrel 2.5ml/l water @50ml/plant	Production technology of pineapple			Ethrel
9	Vegetable production	Okra	Low yield due to lack of nutrients		Cultivation of Okra by using organic sources of nutrients	Organic cultivation of Okra			Seeds, Bio-fertilizers, rock phosphate, vermi-compost and FYM.

10	IPM	Brinjal	Infestation of fruit and shoot borer	Assessment of Application of Arka Neem Soap to reduce Incidence of Fruit and shoot borer infestation in Brinjal				Field visit	Brinjal seeds, Arka Neem soap
11	IPM	Potato	Infestion of white grub	Assessment for management of white grub in potato				Field visit	Supply of potato, quinalphos
12	IPM	Jhum paddy	Infestation of leaf folder		Popularization of yellow sticky trap for leaf folder management in jhum paddy			Field visit	Yellow sticky trap
13	IDM	Ginger	Infestation of rhizome rot		Popularization of different technologies for ginger storage against rhizome rot				Ginger rhizome
14	Value addition	Gooseberry	Lack of knowledge in processing and value addition	Processing and value addition of gooseberry					

15	Drudgery reduction	Citrus	1.Damage /injury of fruits while harvesting 2.Energy and time consumption	Use of food harvester for harvesting fruits					
16	Value addition	Bambooshoot	Lack of processing and value addition		Processing and value addition of Bamboo shoot				
17	Value addition	Tapioca	Lack of processing and value addition		Cake preparation from tapioca flour				
18	Identification of leadership			Sociometry technique					
19	Social Concept			SWOC Analysis					
20					Performance of Different Group Size of SHG on Income Generation			Data collection is in Process	

21	Piggery production	Hampshire cross	Non availability of good quality breeds	Assessment of Growth Performance of Crossbreed Pigs (Hampshire cross) under local feeding		Piggery production and management	--	Diagnostic visit, field visit, treatment. etc.	20 Nos. of piglets supplied
22	Housing management	Piggery management	Poor housing management	Assessment of Low cost climate resilient environment affinitive pig pen model by use of locally available materials in deep litter system of management					Sawdust (Bedding material)
23	Poultry production	Rainbow Rooster (Kuroiler)	Rainbow rooster	Backyard Poultry Farming with Rainbow Rooster		Poultry production and management ment	--	Diagnostic visit, field visit, treatment. Etc.	21 Farmers
24	Piggery production	Hampshire cross pigs (75%)	Poor performance by indigeneous variety of pigs	Performance trial on Hampshire cross pigs (75%) under ; local feeding condition			Piggery production and management	Field visit, Diagnostic visit	10 Nos. Piggery supplied

25	Feeding management	Pig			Demonstration of Mineral mixture supplementation in pig feed		Piggery production and management	Field visit, Diagnostic visit	10 packets of mineral mixture
26	Disease management	Poultry			Popularization of Routine deworming of poultry using broad spectrum Anthelmintic		Poultry production and management	Field visit, Diagnostic visit	480 Nos. of Poultry chicks supplied
27	Disease management	Piggery			Demonstration on management of Swine Fever in pigs under farmers field condition		Piggery production and management	Field visit, Diagnostic visit	18 Nos piglets supplied
28	Piggery production	Piggery			Popularization of Routine deworming of Piggery using broad spectrum Anthelmintic		Piggery production and management	Field visit, Diagnostic visit	Routine deworming in 10 piglets

3.1 Achievements on technologies assessed and refined during 2020

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		1								1
Seed / Plant production										

Weed Management					1					1
Integrated Crop Management	1									1
Integrated Nutrient Management										
Integrated Farming System										
Mushroom cultivation										
Drudgery reduction						1				1
Farm machineries										
Value addition					2					2
Integrated Pest Management				1	1					2
Integrated Disease Management										
Resource conservation technology										
Small Scale income generating enterprises										
SWOT Analysis										1
Sociometry technique										1
TOTAL	1	1		1	4	1				10

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

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

Thematic areas	**Cereals**	**Oilseeds**	**Pulses**	**Commercial Crops**	**Vegetables**	**Fruits**	**Flower**	**Plantation crops**	**Tuber Crops**	**TOTAL**
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								
Nutrition Management								
Disease of Management								
Value Addition								
Production and Management		1			1			2
Feed and Fodder					1			1
Small Scale income generating enterprises								
Housing management					1			1
TOTAL		**1**			**3**			**4**

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

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 (OFT)

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)
1	Assessment of Maize + Beans intercropping system for rainfed condition	Intercropping of Maize and Beans not practiced	Using maize stem as beans stalk, Planting distance 75 x 25 cm, under organic management system	Rainfed	2	1. 50% flowering (Days)- 60 2. Plant height (cm)- 182 3. Crop duration (days)- 94 4. Gross return (Rs.)-143000.00 5. Net return (Rs./ha)- 90500.00	Farmers are happy with the result of the OFT and is willing to take it up in large scale in the coming years.	Maize + beans can do well almost everywhere where maize and beans were grown before . beans can be sown when maize are in knee height stage.	3.2
2	Assessment of Soybean Var. VL-63	Low yield of local variety	Seed treatment with rhizobium & phosphotika @20g each per 1 kg of seeds, Planting distance 45 x 10cm	Rainfed	2	1. 50% flowering (Days)- 92 2. Plant height (cm)- 66 3. Crop duration (days)- 137 4. Yield (Kg/ha)- 2367 5. Gross return (Rs.)-153855.00 6. Net return (Rs./ha)- 109455.00	Farmers are happy with the result of the OFT and is willing to take it up in large scale in the coming years.	Soybean Var. VL-63 was observed to be performing better when sown before the 1st fortnight of June.	3.4

3	Use of black polythene 30 micron as mulching material for effective weed management on okra	Economic and yield loss due to weeds	Use of black polythene 30 micron as mulching material before sowing seeds; Spacing – 60 x 30 cm; Seed rate – 10kg/ha; Sowing time- April	Okra as rainfed crop	3	1. Plant height (cm)- 98 2. No. of fruits / plant-12.26 3. Yield / ha (kg)-9000 4. % of weed density reduction-94 5. No. of hand weeding- 6. Net Return-160000 7. Weeds identified - Ageratum conyzoides, Euphrbia hirta, Commelina benghalensis, galinsoga Ciliata, Oxalis	Farmers were happy as black polythene mulch proved to be effective weed management which reduces their labour cost	FLD can be taken up	2.45
4	ITK on Bamboo Shoot Pickle	Lack of knowledge on processing and value addition	Clean bamboo shoot is cut into small pieces and put in brine solution for 8 days, drained the brine after the 8 days and then bamboo shoot along with spices (Hing, turmeric powder, green chilli, chilli powder) are fried in oil	Bamboo shoot pickle	4	1) Taste acceptability-70% 2) Shelf life-More than 6 months 3) Adoption – 15% 4) Net return - 3690	Farm women were happy as it gain additional income to their families as well as for home consumption	FLD can be taken	2.05

5	Assessment of Application of Arka Neem Soap to reduce Incidence of Fruit and shoot borer infestation in Brinjal	Fruit and shoot borer infestation	Arka Neem soap	Brinjal	3	Failure due to poor germination at nursery stage			
6	Assessment for management of white grub in potato	White grub infestation	Quinalphos	Potato	3	**Demo** 1. Percent infestation: 7% 2. Yield: 89q/ha Farmer practice 1. Percent infestation: 16% 2. Yield: 76q/ha	Satisfactory and ready to adopt the technology	Recommended to FLD	2.5
7	Processing and value addition of gooseberry	Lack of knowledge in processing and value addition	Post Harvest	Gooseberry	3	After conducting this trial it has been found that , there is 70% of acceptability and 20% of adoption rate.	Farmer response were very positive to take up this post harvest technology as it has fetch a good amount to their livelihood	After testing gooseberry candy and knowing the acceptability and status of observation, it can be easily marketed in the nearby location in an around of Nagaland university	B:C ratio – 1.2:1

							generation.	Lumami by the nearby villages . In the process of making candy, it has also been observed that there is a demand for Amla murabba.	
8	Use of food harvester for harvesting fruits	1.Damage /injury of fruits while harvesting 2.Energy and time consumption	Fruit harvester	citrus	3	**Fruit harvester** No. of fruit harvested /h: 250 Man-days /ha: 8 Damage %: 5 **Hand/Stick** No. of fruit harvested /h: 150 Man-days /ha: 14 Damage %: 20	As per the suggestion and recommendation given by the farmer, if the rope is replaced with some wire and fixed in the lower side of the handle the resultant in the food harvest will increase .	As per the suggestion and recommendation given by the farmer, if the rope is replaced with some wire and fixed in the lower side of the handle the resultant in the food harvest will increase.	
9	Sociometry technique		1	Identification of leadership	3	Data collection is in Process			NA
10	SWOT Analysis	Improper use of locally available resources	1	Social Concept	3	Data collection is in Process			NA
11	Assessment of Growth Performance of	Poor performance by local indigenous	Hampshire cross		10	1. Average Body Weight gained at 11 months of age: M= 86.4 kg, F= 83.5 kg 2. Average daily	Satisfied	Recommended	3.8

	Crossbred Pigs (Hampshire cross) under local feeding	Pigs				body weight gain 11 months of age: M= 256 g/day, F= 249 g/day 3.Mortality rate and disease incidence rate: 2% and 0% respectively 4. Litter size, Age at first farrowing: 10-14, 11 months			
12	Assessment of Low cost climate resilient environment affinitive pig pen model by use of locally available materials in deep litter system of management.	Poor swine housing practices	Saw dust as bedding material + floor space 5ft. by 5ft.		5	1.Average body weight attained at 11 months of age : 75 2.Mortality rate: 0% 3. Disease incidence: 0% 4.Respiratory problem: Nil 5. Hoof problem: Nil	Satisfied	Recommended	NA
13	Backyard Poultry Farming	Rainbow Rooster	Rainbow Rooster (Kruoiler)		21	1. Average body weight at 8^{th} week of age :M=	Satisfied	Recommended	3.7:1

	with Rainbow Rooster					1.4kg, f=1.2kg 2. Average daily body weight gain at 8th week of age: M=23.33 g/day, F =20.00 g/day 3. Mortality and Disease incidence rate: 2.2% and 0% resp. 4. Net Return/bird (Rs): 350			
14.	Performance trial on Hampshire cross pigs under local feeding condition (75%)	Poor performance by indigeneous variety of pigs	Hampshire pigs		5	1. Average body weight at 210th days of age: M= 38.85kg, f=36.75kg 2. Average daily body weight gain at 210th days of age: M=185 g/day, F =175 g/day 3. Mortality and Disease incidence rate: 0% and 6% resp.			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 2020

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

List of technologies demonstrated during previous years and popularized during 2017-18 and recommended for large scale adoption in the district

Sl. No	Crop and Variety/ Enterprise	Technology demonstrated	Horizontal spread of technology		
			No. of villages	No. of farmers	Area in ha
1	Maize	HQPM-1	14	>150	>15
2	Soybean	JS - 9560	8	>200	>20
3	Field Pea	Prakash	11	>150	>30
4	Social Concept	Performance of Different Group Size of SHG on Income Generation	4	30	

**** 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					
1.	Maize	Seed/ Plant Production	HQPM1	Kharif 2020	5	5	20		20		Rainfed, Acidic Soil			
2.	Soybean (CFLD	Integrated Nutrient	JS-9560	Kharif 2020	10	10	28		28		Rainfed, Acidi			

	)	managem ent									c Soil			
3.	Field Pea (CFLD)	Seed/ Plant Productio n	Prakash	Rabi 2020	10	20	50		5 0		Rainf ed, Acidi c Soil			
4	Pineap ple	Nutrient managem ent	Ethrel 2.5ml/l water @ 50ml/plant	2/3/20 to 15/10/ 20	1	1	10		1 0		Rainf ed			
5.	Okra	INM	AZB,PSB@7.5g, rock phosphate 313kg/ha,vermicompost1t,F YM5t/ha	11/6/2 0 to 10/9/2 0	0.3	0.3	8		8		Rainf ed			
6.	Jhum paddy	IPM	Yellow sticky trap	Kharif 2020	1	1	3		3		Rainfed			
7.	Ginger	IDM	1.Pit of 1 X 2m under shade 2.Uniform spread of 5cm sand at the bottom of pit 3.Treatment of rhizome with *Trichodermma* @5g/lt of water for 30 minutes	Rabi 2020-21	0.00 6	0.0 06	3		3		Rainf ed			

c. Performance of FLD on Crops during 2020

Sl. No.	Crop	Thematic area	Area (ha.)	Avg. yield (Q/ha.)	% increase	Additional data on demo. yield (Q/ha.)	Data on parameters other	Econ. of demo. (Rs./ha.)	Econ. of check (Rs./Ha.)

				Demo.	Check	in Avg. yield	H*	L*	than yield, e.g., disease incidence, pest incidence etc.		GC**	GR**	NR**	BCR **	GC	GR	NR	BCR
									Demo	Local								
1	Maize	Seed/ plant production	5	70	55	27.2	73	67			43,600	105,000	61,000	2.4	43,600	82,500	38,900	1.8
2	Soybean (CFLD)	Integrated Nutrient Management	10	18.30	17.45	4.8	18.62	17.98			43,600	118,950	75,350	2.7	43,600	113,425	69,825	2.6
3	Field pea (CFLD)	Seed/ plant production	20	12.5	10.68	16.9	12.8	12.2			29,750	87,500	57,750	2.9	29,750	74,830	45,080	2.5
4	Pineapple	Nutrient management	1	139	122	13.28	158	120			134500	279000	144500	2.07	121020	244000	122980	2.01
5	Okra	INM	0.3	71	50	42	75	66			90000	213000	123000	2.36	75000	150000	75000	2.0
6	Jhum paddy	IPM	1	22.3	17.8	27.8	24.5	21.2	% Infestation: 7%	% Infestation: 15%				1.4				1.1
7	Ginger storage	IDM	0.006						1. Total ginger infested: 3kg 2. % infestation- 3%	2. Total ginger infested: 15kg 2. % infestation- 15%								

***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	1	17/1/20		27	27	Conducted a field day on field pea.
2	Farmers Training	10	22/5/20 27/7/20 21/10/20, 17/1/20, 19/2/20		246	246	Training conducted on package and practices of soybean , maize and weed management.
3	Media coverage						
4	Training for extension functionaries						
5	Any other (Pl. specify)	Field visit	17/06/20 12/07/20 03/12/20		16	16	
	Total				**289**	**289**	

e. Details of FLD on Enterprises

(i) Farm Implements

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		
Processing and value addition of Bamboo	Bambooshoot	40		1. Adoption 2. Shelf life 3. B.C.Ratio	1. After conducting demonstration, it has been found by observation that 40% of targeted group have adopted	Newly introduced concept.	40%	

shoot					the technology. There is also market opportunity for the bamboo shoot pickle as local populace in this location are in the habit of consuming bamboo shoot 2. Shelf life-.6 Months 3. B.C.Ratio-1.9:1			
Cake preparation from tapioca flour	Tapioca	30		1. Adoption 2. Shelf life of tapioca cake 3. B:C ratio	1. After conducting this demonstration it has been found that, 25% of the targeted group have adopted the technology . There may be a market demand s as tapioca is grown well in the existing soil and the inputs for making tapioca cake are cheaper than any other edible cakes. 2. Shelf life-upto 4 days 3. B:C ratio -1.3:1	Newly introduced concept of new technology	30%	

**** 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	Piggery (Local and cross)	Piggery production and management	Demonstration on Management of Swine Fever in Pigs Under	10	10	18	1. Susceptibility rate (%) 2. Survivability rate (%) 3.Mort	1. 0% 2. 100% 3. 0%	No case of Swine fever was reported (Completed)						N/A				N.A	--

			Farmers Field Condition				ality rate (%)												
2	Piggery (Local and cross)	Piggery production and management	popularization of routine deworming of pigs Using Broad Spectrum Anthelmintics	10	10	20	Susceptibility rate (%)=20 %	60%	100%						N/A	—	—	—	N/A	—
3	Piggery (Local and cross)	Piggery production and management	Demonstration of mineral mixture supplementation in pig food	5	5	10	Average body weight at 10 months age(M=55.5kg F=54.5 kg)	M= 54.6kg, f= 52.5kg	M=1.6 %, F=3.6 %						N/A				N/A	—
4	Poultry	Poultry production and management	Popularization of Routine Deworming of Poultry Using Broad Spectrum	10	10	10	1.susceptibility rate/ rte 2. Survivability 3. mortality rate (%)=0 %	1. 0% 2. 100% 3. 0%	Nil NIL NIL						N/A					

			Anthelmintic																

**** 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

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.,	Thematic area	Name of Technolog	No. of farmers	No. of unit	Major Performance parameters / indicators	% change in the para	Other parameters (if any)		Econ. of demo. (Rs./Ha.)				Econ. of check (Rs./Ha.)				Remarks
								Demo	Chec	G	G	N	B	GC	GR	N	B	

	mushroom, vermicompost, apiculture etc.		**y**		**s**	**Demo**	**Check**	**meter**		**k**	**C **	**R **	**R **	**CR ****			**R**	**CR**	

***** 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

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

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.

3.3. Achievements on Training during 2020

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 Trainings (Courses)			Participants																		
				General						SC/ST						Total						Grand Total
				Male		Female		Total		Male		Female		Total		Male		Female		Total		
	On-Campus (1)	Spon 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)	(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		1							4		16		20		4		16		20		20
Off-season vegetables																					
Nursery raising																					
Exotic vegetables like Broccoli																					
Export potential vegetables																					
Grading and standardization																					
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																						
Processing and value addition	1		1							0		4		4		0		4		4		4
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 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	1		1							9		16		25		9		16		25		25

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																						
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**		**3**							**13**		**36**		**49**		**13**		**36**		**49**		**49**

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 Trainings (Courses)**			**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	2		2							20		32		52		20		32		52		52
Resource Conservation Technologi	1		1							2		17		19		2		17		19		19

es																					
Cropping Systems	2		2							7		21		28		7		21		28		28
Crop Diversification	2		2							8		26		34		8		26		34		34
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	9		9							69		169		238		69		169		238		238
Off-season vegetables																						
Nursery raising																						
Exotic vegetables like Broccoli																						
Export potential vegetables	2		2							12		32		44		12		32		44		44
Grading and standardization																						
Protective cultivation (Green Houses, Shade Net etc.)	1		1							3		27		30		3		27		30		30
b) Fruits																						
Training and Pruning																						

Layout and Management of Orchards																					
Cultivation of Fruit	1		1							8		19		27		8		19		27		27
Management of young plants/orchards																					
Rejuvenation of old orchards																					
Export potential fruits																					
Micro irrigation systems of orchards																					
Plant propagation techniques																					
c) Ornamental Plants																					
Nursery Management																					
Management of potted																					

plants																						
Export potential of ornamental plants																						
Propagation techniques of Ornamental Plants																						
d) Plantation crops																						
Production and Management technology																						
Processing and value addition																						
e) Tuber crops																						
Production and Management technology																						
Processing and value addition																						

f) Spices																						
Production and Management technology																						
Processing and value addition																						
g) Medicinal and Aromatic Plants																						
Nursery management																						
Production and management technology																						
Post harvest technology and value addition																						
III Soil Health and Fertility Management																						
Soil fertility management																						
Soil and Water Conservation																						

Integrated Nutrient Management																						
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	3		3							45		47		92		45		47		92		92
Piggery Management	2		2							20		32		52		20		32		52		52

Rabbit Management																						
Disease Management	3		3							20		50		70		20		50		70		70
Feed management																						
Production of quality animal products																						
V Home Science/Women empowerment																						
Household food security by kitchen gardening and nutrition gardening	1		1							1		17		18		1		17		18		18
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	5		5							1		77		78		1		77		78		78
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 Management	2		2							19		25		44		19		25		44	44
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	2									06		14		20		06		14		20		20
Group dynamics																						
Formation and Management of SHGs	4									04		32		36		04		32		36		36
Mobilization of social capital																						
Entrepreneurial development of farmers/youths																						
WTO and IPR issues																						

XI Agro-forestry																						
Production technologies																						
Nursery management																						
Integrated Farming Systems																						
TOTAL	**42**		**42**							**245**		**637**		**882**		**245**		**637**		**882**		**882**
(B) RURAL YOUTH																						
3.3.3. Achievements on Training <u>Rural Youth</u> in <u>On Campus</u> including <u>Sponsored On Campus</u> Training Programmes **(*Sp. On means On Campus training programmes sponsored by external agencies)**																						
Thematic area	**No. of Trainings (Courses)**			**Participants**																		**Grand Total**
			Tot	**General**				**SC/ST**				**Total**										

	On (1)	Sp On * (2)	al (1+2)	Male		Female		Total		Male		Female		Total		Male		Female		Total		(x + y)
				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)	
Mushroom Production																						
Bee-keeping																						
Integrated farming																						
Seed production																						
Production of organic inputs		**1**	**1**								**5**		**15**		20		5		15		20	20
Integrated Farming																						
Planting material production																						
Vermi-culture																						
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		1	1								7		13		20		7		13		20	20
Small		1	1								3		17		20		3		17		20	20

poultry																					
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																						
IPM	1		1							3		17		20		3		17		20		20
IDM	1		1							3		17		20		3		17		20		20
TOTAL	**2**	**3**	**5**							**6**	**15**	**34**	**45**	**40**	**60**	**6**	**15**	**34**	**45**	**40**	**60**	**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 Trainings (Courses)**			**Participants**									**Grand Total**
	Off	**Sp Off**	**Total**	**General**			**SC/ST**			**Total**			
				Male	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**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***	
Mushroom Production	1		1							1		9		10		1		9		10		10
Bee-keeping																						
Integrated farming																						
Seed production																						
Production of organic inputs																						
Integrated Farming																						
Planting material production																						
Vermi-culture																						
Sericulture																						
Weed management	**1**		**1**							**8**		**6**		**14**		**8**		**6**		**14**		**14**
Commercial crop	**1**		**1**							**12**		**13**		**25**		**12**		**13**		**25**		**25**

production																					
Soil Nutrient management	**1**		**1**							**0**		**12**		**12**		**0**		**12**		**12**		**12**
Nursery Management of Horticulture crops																					
Training and pruning of orchards																					
Value addition	**3**		**3**							**14**		**31**		45		**14**		**31**		45		45
Production of quality animal products																					
Dairying																					
Sheep and goat rearing																					
Quail farming																					
Piggery	1		1							9		11		20		9		11		20		20
Rabbit																					

farming																					
Poultry production	3		3							25		28		53		25		28		53		53
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	**2**									0		24		24		0		24		24		24
Nutritional Garden	**1**									0		12		12		0		12		12		12
Training and pruning of orchards	**1**									0		12		12		0		12		12		12
Formation and Management of SHGs	1		1							**0**		15		15		0		15		15		15
TOTAL	16		16							69		173		242		69		173		242		242

C. Extension Personnel

3.3.5. Achievements on Training of Extension Personnel in On Campus including Sponsored On Campus Training Programmes

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

Thematic area	**No. of Trainings (Courses)**	**Participants**	**Grand**

	On (1)	Sp On * (2)	Total (1+2)	General						SC/ST						Total						Total (x + y)
				Male		Female		Total		Male		Female		Total		Male		Female		Total		
				On (4)	Sp. On (5)	On (6)	Sp. On (7)	On (a=4+6)	Sp. On (b=5+7)	On (8)	Sp. On (9)	On (10)	Sp. On (11)	On (c=8+10)	Sp. On (d=9+11)	On (4+8)	Sp. On (5+9)	On (6+10)	Sp. On (7+11)	On (x = a+c)	Sp. On (y= b+d)	
Productivity enhancement in field crops																						
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																					
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																					

3.3.6. Achievements on Training of Extension Personnel in Off Campus including Sponsored Off Campus Training Programmes

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

Thematic area	**No. of Trainings (Courses)**			**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																					
Integrated Pest Management	**1**		**1**							**7**		**9**		16		7		9		16		16
Integrated Nutrient management																					
Rejuvenation of old orchards																					
Protected cultivation technology																					
Formation and Management of SHGs																					
Group Dynamics and farmers organization																					
Information networking among farmers																					
Capacity																					

building for ICT application																					
Care and maintenance of farm machinery and implements																					
WTO and IPR issues																					
Management in farm animals																					
Livestock feed and fodder production																					
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	**1**		**1**							**7**		**9**		16		7		9		16		16

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 days	Venue	(Farmer & Farm women/ RY/ EP and NGO Personnel)	General participants			SC/ST			Grand Total		
							M	F	T	M	F	T	M	F	T
Agronomy	Skill development	Organic Grower	4/3/20 to 28/3/20	25 days	On	RY				5	15	20	5	15	20
Animal Sc.	Skill development	Small poultry farmer	4/3/20 to 28/3/20	25 days	On	RY				7	13	20	7	13	20
Animal Sc.	Skill development	Rearing of improved breeds of cattle and its management	23/11/2020 to 28/11/2020	6 days	On	RY				3	17	20	3	17	20
Horticulture	Vegetable	Compost tea preparation for vegetable health	26-02-2020	1 day	On	PR				4	16	20	4	16	20
Horticulture	Processing and value addition	ITK on bambooshoot	25-09-2020	1 day	On	PF				0	4	4	0	4	4
Plant Protection	IDM	IDM on ginger	11/2/20	1 day	ON	RY				3	17	20	3	17	20
Plant Protection	IPM	IPM on paddy	12/3/20	1 day	ON	PF				9	16	25	9	16	25
Plant	IPM	IPM on kitchen	26/10/2	1 day	ON	RY				3	17	20	3	17	20

Protection		garden	0												
Total										**34**	**115**	**149**	**34**	**115**	**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	(Farmer & Farmwomen/ RY/ EP and NGO Personnel)	General participants			SC/ST			Grand Total		
							M	F	T	M	F	T	M	F	T
Agronomy	Weeds	Weeds management on field pea	17/01/20	1	Lumithsami	PF				1	25	26	1	25	26
Agronomy	Pulses	Winter crop production	3/3/20	1	Aotsakili	PF				7	9	16	7	9	16
Agronomy	Oilseeds	Package and practices of Soyabean	22/5/20	1	Phishumi	PF				4	4	8	4	4	8
Agronomy	Weeds	Weed management on soybean	27/7/20	1	Phishumi	RY				8	6	14	8	6	14
Agronomy	Weeds	Weed management on soybean	10/9/20	1	Litta New	PF				12	13	25	12	13	25
Agronomy	Oilseeds	Winter crop production	19/9/20	1	Alaphumi	RY				12	13	25	12	13	25
Agronomy	Pulses	Package and practices of Field Pea	21/10/20	1	Yeshelutomi	PF				1	17	18	1	17	18
Agronomy	Pulses	Winter crop production	23/10/20	1	Yeshelutomi	PF				1	17	18	1	17	18
Agronomy	Nutrient	Soil nutrient management	26/10/20	1	Alaphumi	RY					12	12		12	12

	management														
Agronomy	Soil health	Soil health management	7/11/20	1	Phishumi	PF				11	11	22	11	11	22
Horticulture	Fruits	Production Technology of Pineapple	17-01-2020	1	Lumithsami	PF				8	19	27	8	19	27
Horticulture	Fruits	Value Addidtion of Fruits (Pineapple Juice & Squash)	24-01-2020	1	Shichimi	RY				0	15	15	0	15	15
Horticulture	Vegetables	Organic Cultivation of Okra	19-02-2020	1	Alaphumi	PF				33	2	35	33	2	35
Horticulture	Vegetable	Value Addition of locally available vegetables	22-02-2020	1	Sumi Settsu	RY				9	11	20	9	11	20
Horticulture	Vegetable	Production Technology of summer vegetables (Chilli)	27-02-2020	1	Lumithsami	PF				1	26	27	1	26	27
Horticulture	Vegetable	Package of Practices for French Beans	03-03-2020	1	Naghuto Old	PF				10	15	25	10	15	25
Horticulture	Vegetable	benefits of Mulching in Vegetable Cultivation (okra, tomato)	22-05-2020	1	Akuluto	FW				0	14	14	0	14	14
Horticulture	Nutrition	Awareness programme on nutri garden	15-09-2020	1	Lumami	FW				0	25	25	0	25	25
Horticulture	Nutrition	Nutritional Garden, Nutri Thali and Bio fortified crops	19-09-2020	1	Akuluto	FW				0	18	18	0	18	18
Horticulture	Nutrition	Importance of Nutri-Garden, Nutri Thali and bio fortified Varieties	28-09-2020	1	Tichipami	FW				0	32	32	0	32	32
Horticulture	Protected cultivation	Vegetable Production under low cost Polyhouse	16-11-2020	1	Shichimi	PF				3	27	30	3	27	30
Horticulture	Vegetable	Use of Pusa hydrogel in Onion Cultivation	17-11-2020	1	Litta New	PF				12	17	29	12	17	29
Horticultu	Vegeta	Package of Practices for	17-11-2020	1	Litta New	PF				1	17	29	12	17	29

re	bles	French Beans								2					
Horticulture	Value addition	Value addition of Vegetables locally available (Brinjal, radish, solanum)	19-11-2020	1	Litta New	PF				13	20	33	13	20	33
Horticulture	PHM	Post Harvest management and Value addition of Orange	21-11-2020	1	Litta New	PF				5	5	10	5	5	10
Horticulture	Vegetables	Winter vegetable production (Onion, Cabbage, Carrot)	24-11-2020	1	Litta New	PF				0	15	15	0	15	15
Plant Protection	IPM	Biopesticides applicationa and its management	19/2/10	1	Sumi Settsu	PF				10	14	24	10	14	24
Plant Protection	IPM	IPM on citrus cultivation	22/2/20	1	Alaphumi	PF				9	11	20	9	11	20
Plant Protection	Mushroom	Mushroom cultivation	25/10/20	1	Lumami	RY				1	9	10	1	9	10
Plant Protection	IPM	IPM on Rice	20/02/2020	1	Akuluto	EP				7	9	16	7	9	16
Home science	Value addition	Training on preparation of Amla pickle	21-10-2020	1	Yesholutomi village	Farmers				1	17	18	1	17	18
Home science	Nutritional garden	Importance of nutritional garden	21-10-2020	1	Yesholutomi	Farmers				1	17	18	1	17	18
Home science	Rural craft	Training on soap making	26-10-2020	1	Alaphumi	RY					12	12		12	12
Home science	Nutritional garden	Importance of nutritional garden	27-10-2020	1	Alaphumi	RY					12	12		12	12
Home science	Rural craft	Training on candle making	28-10-2020	1	Alaphumi	RY					12	12		12	12
Home science	Value addition	Training on preparation of solunum pickle	28-10-2020	1	Alaphumi	RY					12	12		12	12
Home	Value	Preparation of tapioca	26-11-2020	1	Alaphumi	Farm					20	20		20	20

science	addition	cake				ers									
Home science	Value addtion	Preparation of pancake	26-11-2020	1	Alaphumi	Farmers					20	20		20	20
Home science	Value addition	Preparation of tapioca cake	27-11-2020	1	Sumi settsu	Farmers					10	10		10	10
Home science	Value Addition	Preparation of Bmbooshoot pickle	27-11-2020	1	Sumi settsu	Farmers					10	10		10	10
Agril. Extn.	SHG	Function of SHGs	25/08/2020	1	Maromi	PF				0	5	5	0	5	5
Agril. Extn.	SHG	Function of SHGs	25/08/2020	1	Maromi	PF				0	6	6	0	6	6
Agril. Extn.	SHG	Function of SHGs	25/09/2020		Litta Old	PF				2	10	12	2	10	12
Agril. Extn.	SHG	Function of SHGs	09/10/2020	1	Ajiqami	PF				0	15	15	0	15	15
Agril. Extn.	SHG	Function of SHGs	22/10/2020	1	Litta New	PF				1	12	13	1	12	13
Agril. Extn.	F.P.O.	Formation of F.P.O.	26/11/2020	1	Sumi Settsu	PF				3	9	12	3	9	12
Agril. Extn.	F.P.O.	Formation of F.P.O.	27/11/2020	1	Zaphumi	PF				4	4	8	4	4	8
Animal Sc.	Poultry	Important Poultry Diseases and their control	17-01-2020	1	Lumithsami	PF				8	19	27	8	19	27
Animal Sc.	Piggery	Swine Production and Management	17-01-2020	1	Lumithsami	PF				8	19	27	8	19	27
Animal Sc.	Poultry	Brooding of Chicks	19-02-2020	1	Alaphumi	PF				33	2	35	33	2	35
Animal Sc.	Poultry	Backyard Poultry Farming	21-02-2020	1	Sumi Settsu	RY				9	11	20	9	11	20
Animal Sc.	Piggery	Feeding Practices in Swine	21-02-2020	1	Sumi Settsu	RY				9	11	20	9	11	20
Animal	Poultr	Poultry feeding practices	22-05-2020	1	Phishumi	RY				4	4	8	4	4	8

Sc.	y				Village										
Animal Sc.	Poultry	Poultry production & Management	10-09-2020	1	Phishumi Village	PF				12	13	25	12	13	25
Animal Sc.	Piggery	Swine Production and Management	10-09-2020	1	Phishumi Village	PF				12	13	25	12	13	25
Animal Sc.	Poultry	Poultry Farming	28-09-2020	1	Tichipami	FW				0	32	32	0	32	32
Animal Sc.	Poultry	Poultry Disease Management	29-10-2020	1	Zaphumi	PF				9	12	21	9	12	21
Animal Sc.	Piggery	Piggery Disease Management	07-11-2020	1	Phishumi Village	PF				3	19	22	3	19	22
Animal Sc.	Feeding	Feeding of Broiler chicks	11-12-2020	1	Zaphumi	RY				12	13	25	12	13	25
Total										**321**	**819**	**1140**	**321**	**819**	**1140**

(D) Vocational training programmes for Rural Youth

Crop / Enterprise	**Date (From – To)**	**Duration (days**	**Area of training**	**Training title***	**No. of Participants**									**Impact of training in terms of Self employment after training**				**(Please Specify with amount of fund in Rs.)**
					General			**SC/ST**			**Total**							
					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**	

Vegetables	27-29/01/2020	3	Vegetable planting material production	Production of planting material for income generation		1	1						1	Seaonal vegetables	1	1	10000	

*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		
On	RY	4/3/20 to 28/3/20	25	Agronomy	Skill training	Organic Grower				5	15	20	5	15	20	ASCI	196000
On	RY	4/3/20 to 28/3/20	25	Animal Science	Skill training	Small poultry farmer				7	13	20	7	13	20	ASCI	238000
On	RY	23/11/2020 to 28/11/2020	6	Animal Sc.	Skill training	Rearing of improved breeds of cattle and its management				3	17	20	3	17	20	STRY	42000

Total										**15**	**45**	**60**	**15**	**45**	**60**		**476000**

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 2020

Sl. No.	Extension Activity	Topic	Date and duration	No. of activities	Participants											
					General (1)			SC/ST (2)			Extension Officials (3)			Grand Total (1+2)		
					M	F	T	M	F	T	M	F	T	M	F	T
1)	Diagnostic visit			3				3	-	3				3	-	3
2)	Scientist visit to farmer`s field		7/11/20, 17-01-2020, 24-01-2020 19-02-2020, 22-02-2020, 27-02-2020, 03-03-2020, 22-05-2020, 15-09-2020, 19-09-2020 28-09-2020, 16-11-2020, 17-11-2020, 19-11-2020, 25/10/20, 20/02/2020, 21-10-2020, 26-10-2020, 27-10-2020, 28-10-2020, 26-11-2020, 27-11-2020, 11-12-2020	59				69	75	144				69	75	144
3)	Method demonstration		3/3/20, 22/5/20, 27/7/20,10/9/20, 19/9/20, 21/10/20, 23/10/20, 26/10/20,21-11-2020, 24-11-2020, 19/2/10, 22/2/20	20				256	-	256				256	-	256
4)	Farmers scientist interaction		22/5/20, 10/9/20, 19/9/20,	6				79	-	79				79	-	79

5)	Advisory /helpline service			6				4	-	4				4	-	4
6)	Vaccination camp		7/11/2020	1				12	9	21				12	9	21
7)	Animal Health Camp		19/2/20, 28/09/2020	2				32	27	59				32	27	59
8)	Plant health camp			1				16	14	30				16	14	30
9)	Animal treatment		3/3/20, 22/5/20, 27/7/20, 17-11-2020, 19-11-2020 25/10/20, 20/02/2020, 21-10-2020, 26-10-2020, 27-10-2020 28-10-2020, 26-11-2020, 27-11-2020, 10-09-2020 28-09-2020, 29-10-2020, 07-11-2020 11-12-2020	27				18	9	27				18	9	27
10)	Exhibition			1				10	12	22				10	12	22
11)	Field days			1				16	11	27				16	11	27
12)	Kisan Ghosti		25/08/2020, 9/10/2020	2				17	12	29				17	12	29
13)	Mahila mandal		22/10/2020, 27/11/2020	2				-	27					-	27	
14)	T.V. Programme	Organic farming	3/2/2020	1				-	-	-				-	-	-
15)	CSC			78				-	-	-				-	-	-
16)	HRD			7				-	-	-				-	-	-
17)	Benchmark survey		26/11/2020	1				17	19	36				17	19	36
18)	News paper coverage			11												
19)	Research paper			1												
Grand Total				**230**				**549**	**215**	**737**				**549**	**215**	**737**

3.5 Production and supply of Technological products during 2020

A. SEED MATERIALS

Major group/class	Crop	Variety	Quantity (qt)	Value (Rs.)	Number of recipient/ beneficiaries		
					General	SC/ST	Grand Total

					M	F	M	F	
Cereals	Maize	HQPM1	40qt	80000.00			100	55	155
Oilseeds	Soybean	VL9560	20qt	160000.00			40	30	70
Pulses	Field Pea	Prakash	15qt	120000.00			50	32	82
VEGETABLES									

A1. SUMMARY ofProduction and supply of Seed Materials during 2020

Sl. No.	Major group/class	Quantity (q) produced	Quantity (q) supplied	Value (Rs.) of quantity produced	Number of recipient/ beneficiaries				
					General		SC/ST		Grand Total
					M	F	M	F	
1	CEREALS	40qt	HQPM1	80000.00			100	55	155
2	OILSEEDS	20qt	VL9560	160000.00			40	30	70
3	PULSES	15qt	Prakash	120000.00			50	32	82
6	OTHERS								
TOTAL				**360000.00**			**190**	**117**	**307**

B. Production and supply of Planting Materials(Nos. in No.) during 2020

Major group/class	Crop	Variety	Quantity (In No.) produced	Quantity (In No.) supplied	Value (Rs.) of quantity produced	Number of recipient/ beneficiaries				
						General		SC/ST		Grand Total
						M	F	M	F	
FRUITS	Pineapple	Giant kew	500	500	500			1	1	2
	Banana	Grand naine	50	50	500			1	0	1
VEGETABLES	Colocasia	Local	0.04q	0.04q	100			-	1	1
	Turmeric	Megha 1	14q	14q	42000			1	1	2
	Ginger	Rio de janerio	22.16q	20q	66480			3	0	3
	Cabbage	Rare ball	1000	1000	2000			2	30	32
	Brocolli	Magic green	1000	1000	2000			1	22	23
	Tomato	Hybrid	500	500	1000			2	30	32
	Pak choy	Hybrid	1000	1000	2000			1	22	23
Medicinal plants										

OTHERS (Pl. Specify)										

C. Production of Bio-Products during 2020

Major group/class	Product Name	Species	produced Quantity		Value (Rs.)	Number of Recipient /beneficiaries				
			No	(qt)		General		SC/ST		Grand Total
						M	F	M	F	
BIOAGENTS										
BIOFERTILIZERS	Vermicompost	Eisenia fetida		5	10000.00			-	-	-
BIO PESTICIDES										

D. Production of livestock during 2020

Sl. No.	Type/ category of livestock	Breed	Quantity		Value (Rs.)	Number of Recipient beneficiaries				
			(Nos)	Kgs		General		SC/ST		Total
						M	F	M	F	
1	**Cattle/ Dairy**									
2	**Goat**									
3	**Piggery**									
4	**Poultry**									
5	**Fisheries**									
6	**Others (Specify)**									
	Total									

3.6. Literature Developed/Published (with full title, author & reference) during 2020

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

(B) Articles/ Literature developed/published

Item	Title /and Name of Journal	Authors name	Number of copies	
			Produced/ published	Supplied/ distributed
1. Research papers	Application of BERT and CPM for monitoring and scheduling of survey research Indian Journal of Extension Education Voll: 56(1) Page:201-204	Dr. Kundan Kumar, Dr. Survesh Kumar & Dr. Neha Pandey		
2. Training manuals				
3. Technical Report				
Book/ Book Chapter				
Popular articles				
1. Technical bulletins				
2. Extension bulletins				
3. Newsletter	1		500	450
Conference/ workshop proceedings				
Popular articles				
Leaflets/folders				
e-publications				
Any other (Pl. specify)				

TOTAL	**2**		**500**	**450**

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

C) Details of Electronic Media Produced

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

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

(a) Success Story on Tapioca Tuber for Cake Preparation

i. **Profile of the farmer:** Ms. Kiyeshi K, Zaphumi Village,
P.O. : Lumami, Dist. Zunheboto,
India PIN -798627

ii. **Category**: Value addition in Tapioca

iii. **Background:** Ms. Kiyeshi K possess a 1.25 acres of ancestorial land and cultivate tapioca after harvest of jhum paddy. She has learned the techniques of value addition and processing of fruits and vegetables, cake preparation and has been involved in training of women farmers in nearby villages (four numbers).

iv. **Training and motivational support** : Being a successful farmer, she has been able to motivate other women farmers and youths to generate more income through post-harvest technology and value addition.

v. **Impact in the area** : Ms. Kiyeshi K has been able to generate an income of Rs. 12500.00 per month by selling of tapioca cakes. The cakes have now found its place in the menu of farmers and has helped in empowerment of women and nutritional security. She has been able to educate the women farmers regarding the utility of tapioca tubers which usually remains underutilized.

vi. **Awards & recognitions** : Nil

vii. **Contributing/enabling Factors**: KVK, Zunheboto has been playing a significant role in technology transfer with respect to value addition of available fruits and vegetables. It was found that the tapioca tubers remain underutilized and hence KVK took the technology of tapioca cake preparation at farmers field so that it can be utilized and can generate income for the farming community. Ms. Kiyeshi K after successfully attending the training and demonstration from KVK, Zunheboto she took keen interest on the technology. She has set up small value addition processing unit on different fruits and vegetables at her house and has started making different varieties of cakes with tapioca cake has been her main priority.

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

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

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

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

3.11 Field activities

i. Number of villages adopted :4

ii. No. of farm families selected :76

iii. No. of survey/PRA conducted :2

3.12. Activities of Soil and Water Testing

Status of establishment of Lab : NIL

1. Year of establishment :
2. List of equipment's purchased with amount :

Sl. No	Name of the Equipment			Qty.	Cost
	S&WT lab	Mini lab/ Mridaparikshak	Manufacturer		
1					
2					
3					
Total					

3. Details of samples analyzed (2020) :

Details	No. of Samples analysed	No. of Farmers	No. of Villages	Amount (In Rupees) realized
Soil Samples	40	521	8	
Water Samples				
Plant Samples				
Petiole Samples				
Total	**40**	**521**	**8**	

NB: Soil test done using mini soil testing kit

4. Details of Soil Health Cards (SHCs) (2020)

- **a. No. of SHCs prepared:**521
- **b. No. of farmers to whom SHCs were distributed:** 521
- **c. Name of the Major and Minor nutrients analyzed:** NPK and Zinc and Boron

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	6	3239	3	1284	-	-	-	-	5	2945	3	1859	17	9327
Voice only														
Voice and Text both														
Total	**6**	**3239**	**3**	**1284**	**-**	**-**	**-**	**-**	**5**	**2945**	**3**	**1859**	**17**	**9327**

3.14 Contingency planning for 2020

a. Crop based Contingency planning

Contingency (Drought/ Flood/ Cyclone/ Any other please specify)	Proposed Measure	Proposed Area (In ha.) to be covered	Number of beneficiaries proposed to be covered		
			General	SC/ST	Total
	Introduction of new variety or crop				
	Introduction of Resource Conservation Technologies				
Drought	Distribution of seeds and planting materials	100		200	200
Insects infestation outbreak	Distribution of pesticides & IPM kits	100		200	200

a. Livestock based Contingency planning

Contingency (Drought/ Flood/ Cyclone/ Any	Number of birds/ animals to be	No. of programmes to	No. of camps to be organized	Proposed number of animals/ birds to be covered through camps	Number of beneficiaries proposed to be covered

other please specify)	distributed	be undertaken			General	SC/ST	Total
Poultry	500	1	1	50		25	25
Piggery	30	1	1	15		25	25

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)

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

4.2. Cases of large scale adoption

(Please furnish detailed information for each case)

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

5.0. LINKAGES ESTABLISHED

5.1 Functional linkage with different organizations established during 2020

Name of organization/ Agency	Nature of linkage
1.Nagaland University	Scientific & Administrative
2.ICAR , NRC on Mithun	Scientific, participation in meeting,. Administrative and financial
3.SARS	Scientific, participation in meeting,. Administrative and financial
4. ATMA, DAO, DVO, DHO, DRDA, DFO, DSCO, DPO	Scientific, participation in meeting, financial and joint implementation

5. NABARD	Scientific and joint implementation
6. Directorate of Arecanut and Spices Development, Ministry of Agriculture, Department of Agriculture	Training, Demonstration and production of planting material
7. ASCI	Skill Training
8. MANAGE Hyderabad	Skill Training

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 2020

Name of the scheme/ special programme	Activity	Date/ Month of initiation	Funding agency	Amount (Rs.)
Paramparagat Krishi Vikas Yojana		10/9/2020, 14/10/2020	Ministry of Agriculture (ICAR)	
KSHAMTA			ICAR	50,000.00
NARI			ICAR	50,000.00
NCIPM			ICAR / NCIMP	3,75,000.00
IMD - DAMU			IMD	1,20,000.00
SAP			ICAR	40,500.00
Almora Project Under VPKAS			ICAR	6,00,000.00
Skill Development Training Prog.			ACAR	4,84,000.00
Cluster Frontline Demo. Of Oilseeds			ICAR	73,468.00

Cluster Frontline Demo. of Pulses			ICAR	90,000.00
World Soil Health Day		05/12/2020		
Soil health card day		19/02/2020		
Poshan Mah		17/09/2020		
Web casting of the address by the Hon'ble Prime Minister		28/01/2020		
Mahila Kissan Diwas		15/10/2020		
Constitution day		26/11/2020		
Swachtta Pakhwadda		16-31st Dec 2020		
National Unity day		31/10/2020		
Awareness on new farm acts				
International women's day		8/03/2020		

5.3 Details of linkage with ATMA

a) Is ATMA implemented in your district : Yes

Sl. No.	Programme	Nature of linkage	Remarks
1	Farmers Scientist Interaction	Scientific, participation in meeting, financial and joint implementation	

5.4 Give details of programmes implemented under National Horticultural Mission

S. No.	Programme	Nature of linkage	Constraints if any

5.5 Nature of linkage with National Fisheries Development Board

S. No.	Programme	Nature of linkage	Remarks

6. PERFORMANCE OF INFRASTRUCTURE IN KVK DURING 2020

6.1 Performance of demonstration units (other than instructional farm)

Sl. No.	Demo Unit (Name and No.)	Year of estd.	Area	Details of production			Amount (Rs.)		Remarks
				Variety/ species/ breed	Type of Produce	Qty.	Cost of inputs	Gross income	
1	IFS	2018	1ha			1	-		Ongoing
2	Nutri Garden	2020	0.005			1	25000.00		Ongoing

6.2 Performance of instructional farm (Crops) including seed productionduring 2020

Name	Date of	Date of	Area (ha)	Details of production	Amount (Rs.)	Remarks

of the crop	sowing	harvest		Variety	Type of Produce	Qty.	Cost of inputs	Gross income	
Cereals									
Rice									
Wheat									
Maize									
Pulses									
Green gram									
Black gram									
Arhar									
Lentil									
Ay other									
Oilseeds									
Mustard									
Soy bean									
Groundnut									
Any other									
Fibers									
i.									

Spices & Plantation crops									
i.									
Floriculture									
i.									
Fruits									
i. Mango	2018	2020	0.08	Amra Pali	Fruits	375pc		1500	
ii. Banana	2018	2020	0.06	Grand naine	Fruits	10kg		1200	
iii. Passion fruit	2018	2020	0.05	Yellow	Fruits	32.5kg		1300	
iv. Assam lemon	2018		0.04						
Vegetables									
i. Farm Manager									
a. Others (specify)									
i.									

6.3 Performance of production Units (bio-agents / bio pesticides/ bio fertilizers etc.) during 2020

Sl. No.	Name of the Product	Qty	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	
1	Vermicompost	500 kg		10000.00	

6.4 Performance of instructional farm (livestock and fisheries production) during 2020

Sl.	Name	Details of production	Amount (Rs.)	Remarks

No	of the animal / bird / aquatics	Breed/ species	Type of Produce	Qty.	Cost of inputs	Gross income	
1	Cow	HF	Milk	1	43768.00		Newly initiated
2	Fishery	-	-	-	-		Water stagnation problem
3	Poultry	Broiler	Meat	200	36000		Newly initiated

6.5 Rainwater Harvesting

Training programmes conducted by using Rainwater Harvesting Unit/ structureduring 2020

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

6.6. Utilization of hostel facilities (Month-Wise) during 2020

Accommodation available (No. of beds):

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					

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 KVK	SBI	Lumami	32196734473
Revolving fund	SBI	Lumami	31674931931

7.2 Utilization of funds under CFLD on Oilseeds and Pulses (Rs. In Lakhs) if applicable during 2020

Item	Released by ICAR/ATARI (in lakh)		Expenditure (in lakh)		Unspent balance as on 31st March, 2020
	Amount	Amount	Amount	Amount	
Inputs	Sanctioned 1. Oilseeds Rs. 56,250.00 2. Pulses Rs. 90,000.00	Released 1. Rs.56,250.00 2. Rs.38,700.00	Opening balance 1. Rs. 28,250.00 2. Rs. NIL	Expenditure 1. Rs. 72,000.00 2. Rs. 80,000.00	1. Rs (-) 44,000.00 2. Rs. (-) 41,300.00
Extension activities					
TA/DA/POL etc.					
TOTAL	Rs. 1,46,250.00	Rs. 94,950.00	Rs. 28,250.00	Rs. 1,52,000.00	Rs. (-) 85,300.00

7.3 Utilization of KVK funds during the year 2020

S. No.	Particulars	Sanctioned (in Lakh)	Released (in Lakh)	Expenditure (in Lakh)
A. Recurring Contingencies				
1	**Pay & Allowances**	280.29	279.81	272.89
2	**Traveling allowances**	2.30	2.30	0.53

3	**Contingencies**	17.18	17.27	17.35
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)			
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			
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)		**299.77**	**300.28**	**290.77**
B. Non-Recurring Contingencies				
1	**Works**			
2	**Equipments including SWTL & Furniture**	1.80	1.74	1.34
3	**Vehicle** (Four wheeler, please specify)			

4	**Library** (Purchase of assets like books & journals)			
TOTAL (B)		**1.80**	**1.74**	**1.34**
C. REVOLVING FUND				
GRAND TOTAL (A+B+C)		**301.57**	**302.02**	**295.89**

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 with KVK (in lakh)
April 2018 to March 2019	1.88	1.90	0.88	2.90
April 2019 to March 2020	2.90	0.55	0.10	3.35
April 2020 to March 2021	3.35	0.23	00	3.58

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 and Suggestion (Provide point-wise if any, for recommendation)

(a)Administrative

b) Financial: Funds should be provided for infrastructural development at KVK for demonstration units, quarters, fencing and farmers guest house.

(c)Technical

(Signature)
Sr. Scientist cum Head