

ANNUAL REPORT OF KVKs 2020

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 Yisemyong Post Box No-23 Mokokchung Nagaland-798601	0369-2225121	0369-2225121	kvkmokokchung@gmail.com

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

Address	Telephone		E mail
	Office	FAX	
Directorate of Agriculture Nagaland Kohima	0370-2243116	0370-2243970	agrkvk@yahoo.com

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

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. Keviletsu Khate	Yisemyong	7085879890	keviletsu@gmail.com

1.4. Year of sanction:2003

1.5. Staff Position

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. Keviletsu Khate	Sr. Scientist & Head	Vety & A.H	162300		16.08.10	Temporary	ST
2	Subject Matter Specialist	E.RenbomoNgullie	ACTO	Horticulture	88400		24.05.06	Temporary	ST
3	Subject Matter Specialist	Dr. Rongsensusang	ACTO	Vety& AH	88400		24.05.06	Temporary	ST
4	Subject Matter Specialist	K.SamuelSangtam	ACTO	Agronomy	88400		24.05.06	Temporary	ST
5	Subject Matter Specialist	Imtisenla	ACTO	Agronomy	85800		31.05.07	Temporary	ST
6	Subject Matter Specialist	Imtilemla	ACTO	Soil science	85800		11.11.07	Temporary	ST
7	Subject Matter Specialist	Dr.Ruopfuselhuo Kehie	SMS (Entomology)	Entomology	85800		15.02.07	Temporary	ST
8	Programme Assistant	Moainla	Programme Assistant	Horticulture	60400		24.05.06	Temporary	ST

9	Computer Programmer	I.Tangitla	Programme Assistant(Computer)	BLIS	60400		24.05.06	Temporary	ST
10	Farm Manager	Ilika v achumi	Programme AssistantFarm manager	Horticulture	58600		19.02.07	Temporary	ST
11	Accountant / Superintendent	Kiyelu Chophoy	Office Supt-cum-Accountant	Account	56900		15.02.07	Temporary	ST
12	Stenographer	Imosangla	Jr. Steno-cum-Computer Operator	PU	40400		01.06.06	Temporary	ST
13	Driver	Supongmeren	Driver	Matriculate	32300		01.06.06	Temporary	ST
14	Driver	Jongpongyanger	Driver	Matriculate	29600		01.03.10	Temporary	ST
15	Supporting staff	Imkonglemla	Peon	Matriculate	24900		01.06.06	Temporary	ST
16	Supporting staff	Aotoshi	Chowkidar	Matriculate	21500		01.03.10	Temporary	ST

- 1.6. a. Total land with KVK (in ha) :23.9
b. Total cultivable land with KVK (in ha):18
c. Total cultivated land (in ha):6.5

S. No.	Item	Area (ha)
1	Under Buildings (Administrative building+ Farmers' Hostel+ Staff Quarters)	1
2.	Under Demonstration Units	1
3.	Under Crops (Cereals, pulses, oilseeds etc.)	1.5
4.	Under vegetables	3 (Instructional Farm)
5.	Orchard/Agro-forestry	2 ha

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	20.06.09	400	53.5 lakhs	28.09.07	400	completed
2.	Farmers Hostel	NA	NA	NA	NA	NA	NA	NA
3.	Staff Quarters (6)	ICAR	NA	200		2011	100	Completed

4.	Demonstration Units (2)	ICAR, Host & ATMA	2008 & 2010	40	24,55,500 lakh	2008 & 2013	-	Completed
5	Fencing	ICAR	NA	7500mtr	3.5 lakhs	2011	-	Completed
6	Fencing	ICAR	30.09.11	800mtr	17.0 lakhs	2011	-	Completed

B) Vehicles

Type of vehicle	Regd. No.	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Bolero	NL-10 C0679	2016	8.0 Lakhs	65000	Good

C) Equipment's& AV Aids

Name of the equipments	Year of purchase	Cost (Rs.)	Present status
1. Computer	2004, 2016	70000	2004 unserviceable
2. Sound system	2005	60000	Good
3. Digital camera	2020	50000	Good
4. OHP	2004	5000	Good
5. Laptop	2008	37,000	Need replacement
6. Handycam	2008	16,000	Out of order
7. Photocopier	2010	1,20,000	Unserviceable
8. Handycam	2010	18,000	Good
9. Computer	2010	45,000	Good
10. LCD projector	2020	55,000	Good
11. Computer	2016	Provided by Host	Good
12. Computer	2016	-do-	Good
13. Computer	2016	- -do -	Good
14. Printer with Scanner (2 nos)	2016	- Do -	Good
15. Printer Epson L110	2016	3500	Good
16. Xerox Ricoh	2016	Provided by Host	Unserviceable
17. Xerox Cannon Image Scanner	2017	Provided by Host	Good
18. Epson Printer L3110	2018	12,300	Good
19. Generator	2018	30,000	Good

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

Date	Name and Designation of Participants	Salient Recommendations	Action taken on last SAC recommendation
28 th Feb.2020	Dr. Nuchetla Dy, DAO, Dr. Sanen VAS, Roko DSCO, Dr. Sunep DFO, Dr. Sentila, IFS, DFO , Rongsenungla Dy PD,ATMA, Moangsangla SDO. Mejong, Progressive farmer, Meyatoshi Progressive farmer and the staffs of KVK Mokokchung	<ol style="list-style-type: none"> 1. Technologies fund suitable for the dist. Should be made known to allied depts for better spread amongst farmers. 2. Indigenous knowledge on farming should be considered while testing new technologies to analyze if these help in reduction insect pest infestation 3. KVK should take the lead to put suitable mechanism in place in order to reduce jhum cycle 4. More emphasis should be given on cropping system module and IFS to enhance income of farmers 5. Area under HYV should be increased. 6. Introduction of pest/disease resistant varieties of crop needs be considered. 7. To re-introduce and promote cultivation of high yielding varieties of millets and coarse cereals 8. Explore the possibility of promoting duckery 9. Access the feasibility of introducing artificial insemination in pigs so as to contribute towards systematic breeding in swine production. 	Successfully conducted.

*** 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 +Horticulture
2.	Agriculture + Veterinary
3.	Agriculture + Fishery

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

Sl. No	Agro-climatic Zone	Characteristics
1.	Mid Tropical hill Zone	Hot and humid in the foot hills to moderate in the mid and high with heavy rainfall during summer Moderate to extreme cold and dry in higher altitude during winter

2.3 Soil type/s

Sl. No	Soil type	Characteristics	Area in ha
1.	Sandy clay loam	20-35% clay 28% silt 45% more sand pH 4-5	1,20,000
2.	Clay Loam	27-40% clay 20-45% sand Medium organic matter pH 4-5	40,000
3.	Forest Soil	Broad leaves rain forest, evergreen, temperate climate, high organic matter, dark brown soil with pH 4	50

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	8294	18247	22
2.	WTRC Paddy	2420	7744	32
3.	Maize	575	1260	22
4.	Beans	98	132	13.5
5.	Pea	78	125	16
6.	Rapeseed/ Mustard	103	98	9
7.	Potato	158	917	65
8.	Tapioca	213	4579	215
9.	Orange	1739	59126	340
10.	Banana	1155	71610	620
11.	Litchi	970	24250	250
12.	Pineapple	820	13284	162
13.	Tomato	38	9880	2600
14.	Chilli	76	5099.6	671

2.5. Weather data

Met data Source: District Soil Conservation Office, Mokokchung				
Meteorological data, 2020				
	Total Rainfall (mm)	Tmax (0C)	Tmin (0C)	RH (%)
January	43.4	17.7	10.7	78.1
February	50.1	19.2	12.0	77.6
March	30.3	23.0	15.3	85.6
April	181.6	25.3	17.0	76.5
May	231.6	25.8	18.7	82.8
June	446.4	27.3	20.3	79.9
July	211.4	27.0	20.9	83.4
August	252.7	28.4	21.2	80.0
September	264.4	27.5	21.0	83.5
October	264.4	26.6	19.4	83.7
November	99.4	23.1	15.2	78.1
December	3.2	20.8	12.1	75.1

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

Category	Population	Production	Productivity
Cattle			
<i>Crossbred</i>	726	520 MT	3.5 lit/day lactation period of 270 days
<i>Indigenous</i>	265	1	120kg in 12 months
Buffalo	-	-	-
Sheep			
Crossbred	-	-	-
<i>Indigenous</i>	-	-	-
Goats	415	972 kg	10-14 kg per year
Pigs			
<i>Crossbred</i>	23900	1787.2 MT	110 kg in 12 months
<i>Indigenous</i>	-	-	-
Rabbits	-	-	-
Poultry			
Hens	-	-	-
<i>Desi</i>	156750	83.8MT	1 Kg in 6months
<i>Improved</i>	18000	10MT	1.5 kg in one month
Ducks	-	-	-
Turkey and others	-	-	-

Category	Area	Production	Productivity
Fish			
<i>Marine</i>			
<i>Inland</i>	408.50 ha	1534 MT	2581.5 kg/ha
Prawn			
Scampi			
Shrimp			

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		Ongpangkong (N)	Longkhum, Longsa, Mokokchung	Paddy, Maize, Tapioca Ginger, Passion fruit Tea, Piggery, Poultry, weaving	Low productivity due to non adoption of improved technology, Majority of the farmers involved in cultivation of mix crops, lack of awareness on potentialities of floriculture, lack of irrigation facilities, unavailability of HYV seeds, post harvest management problem, lack of proper infrastructure and marketing network	Create awareness on fallow management and jhum intensification, Cultivation of both kharif and rabi vegetables, production of passion fruit, ginger, tapioca, tea on commercial scale, popularization of floriculture, handloom and handicraft, promotion of infrastructures and marketing network
2		Opangkong (s)	Chungtia, Aliba, Khensa	Paddy, Maize, Tapioca Cucumber, Passion fruit, Ginger, Orange	Low productivity due to non adoption of improved technology, Indiscriminate use of inorganic products in cucumber cultivation, lack of awareness on INM, lack of upgrade dairy breeds, inadequate availability of fodder, insect pest problem, lack of extension activities	Create awareness on fallow management and jhum intensification, Organic Off season cucumber cultivation, development of dairy and fodder crops, production of orange.
3		Kobulong	Mopungchuket, Impur	Paddy, Tapioca, Maize Passion fruit, ginger, Banana, Piggery, Poultry, Dairy, Sericulture	Low productivity due to non adoption of improved technology, lack of irrigation facilities, unavailability of HYV seeds, post harvest management problem, pest /disease problem in crops and silkworm, lack of processing unit and marketing, lack of spinning & weaving centers, lack of awareness on citronella cultivation, Inbreeding, disease and nutrition in piggery	Create awareness on fallow management and jhum intensification, To increase productivity of passion fruit, ginger and vegetables, promotion on spinning and weaving centre of sericulture, popularization of citronella cultivation, awareness on breeding programme, prevention and control of disease, scientific feeding management
4		Changtongya	Chuchuyimlang, Unger, Akhoya	Paddy, Tapioca, Maize, Collocasia, banana, Orange, Pineapple Tea, piggery, Poultry, Fishery	Low productivity due to non adoption of improved technology, lack of awareness on value addition products, insect pest and disease problem, poor transportation and marketing facilities, lack of upgraded breeds and health centre	Create awareness on fallow management and jhum intensification, To increase production of banana, tapioca, orange, pineapple, development of tea, arecanut, betel vine, improvement of piggery, fishery and sericulture,

5		Mangkolemba	Longsemdang, Khar	Paddy, Maize, Tapioca, Orange, Pineapple, Arecanut, Tea, betel vine, fishery, cattle, piggery	Unavailability of HYV (lowland paddy), Lack of knowledge on improved method of cultivation, lack of processing unit, insect pest and disease problem, lack of awareness on INM, poor skill in fishery pond management, financial constraint to take up in commercial scale, inadequate availability of ploughing bullock, swine diseases	Promotion of HYV (paddy), production of oilseed and pulses, production of orange, pineapple, arecanut, tea and fish. Breeding programme for cattle and training of draught animals, prevention & control of swine diseases
6		Longchem	Japu Nokpu	Paddy, Tapioca, Maize, colocassia, Agar, Arecanut, betel vine, cattle, piggery	Unavailability of HYV (lowland paddy), Lack of knowledge and awareness on improved method of cultivation on plantation crops, lack of processing unit, lack of awareness on INM, financial constraint for commercial cultivation, inadequate availability of ploughing bullock, swine diseases	Promotion of HYV (paddy), Commercial cultivation of arecanut, tea, rubber, betel vine, colocassia, orange, production of oilseeds and pulses, Breeding programme for cattle and training of draught animals, prevention & control of swine diseases

3. TECHNICAL ACHIEVEMENTS

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

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
Horticulture	2	2	3	3	4	6	21	38
Agronomy	2	2	3	3	4	4	30	30
Plant Protection	2	2	6	6	2	2	14	14
Plant breeding	2	2	3	3	4	4	16	16
Extension	-	-	-	-	1	1	10	10

Training (including sponsored, vocational and other trainings carried under Rainwater Harvesting Unit)				Extension Activities	
3				4	
Number of Courses		Number of		Number of activities	Number of

			Participants				participants	
Clientele	Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
Farmers	37	28	925	542	233	242	145030	115198
Rural youth (Sponsored)	-	2	-	35				
Extn. Functionaries	7	5	127	47				
Rural youth	4	3	75	56				
Total								
Seed Production (ton.)				Planting material (Nos. in lakh)				
5				6				
Target		Achievement		Target		Achievement		
14.5		11.5		46000		41500		

Note: Target set during last Annual Zonal Workshop

3. B. Abstract of interventions undertaken during

Sl. No	Thrust area	Crop/ Enterprise	Identified problem	Interventions					
				Title of OFT if any	Title of FLD if any	Title of Training if any	Title of training for extension personnel if any	Extension activities	Supply of seeds, planting materials etc.
1	Vegetable production	Brinjal	Poor yield due to use of low yielding varieties	Performance evaluation of Brinjal var. ArkaKeshav	-	-	-	Advisory service, Field day, awareness programme	Seed, plant protection chemicals.

2	Vegetable production	Okra	Low yield and poor quality	Performance trial on okra var Arka Nikita	-	-	-	Field day, awareness programme Advisory service,	Seed, plant protection chemicals.
3	Vegetable production	Chilli	Low yield in existing varieties	-	Demonstration on Improved chilli var. Arka Meghana	-	-	Advisory service, Field day,	Seed, plant protection chemicals.
4	Vegetable production	Tomato	Low yield in farmers cultivated varieties		FLD on tomato var. Arka Samrat	-	-	Field day, awareness programme Advisory service,	Seed, plant protection chemicals.
5	Vegetable production	Tomato	Low yield in farmers cultivated varieties		FLD on tomato var. Chiranjivi	-	-	Field day, awareness programme Advisory service,	Seed, plant protection chemicals.
6	Vegetable production	Broccoli	Lack of awareness in high value crops	-	Demonstration on Broccoli var. Green Magic	-	-	Advisory service, Field day, awareness programme	Seed, plant protection chemicals.
7	Citrus rejuvenation	Orange	Citrus decline		FLD on rejuvenation of khasi mandarin orchard			Field day, awareness programme Advisory service	Lime, CuSO ₄ , other necessary inputs
8	Vegetable production	Cabbage	Lack of awareness in HYV	-	FLD on improved cabbage variety BC 76	-	-	Advisory service, Field day, awareness programme	Seed, plant protection chemicals.
9	Crop production	Soybean	Poor yield	Assessment On Performance of Soybean Var : VL – Soya 65	-	-	-	Field day, awareness programme Advisory service,	Seed, plant

10	Crop production	Mustard	Poor yield	Performance trial on Mustard Var: NRCHB-101	-	-	-	Field day, awareness programme Advisory service,	Seed, plant
11	Crop production	Paddy	Long duration and low yield		Demonstration on Paddy CAU –R1	Cultivation of Paddy	-	Field visit, field day	Seeds
12	Oilseed production	Toria	Less adaption of Toria cultivation , leave field fallow during rabi		Demonstration on Toria TS-67	Cultivation practices of Toria	-	Field visit, field day	Seeds
13	Pulse production	Pea	Less adaption of second crops due to delayed paddy harvesting		Demonstration on pea Azad	Cultivation of pulses	-	Field visit	seeds
14	Crop production	Soybean	Low yield		Demonstration on Soybean Var: PK-1225	Cultivation of Soyabean	-	Field visit, field day	Seeds
15	Vegetable production	Cowpea	Low yield in local cultivars	Performance trial on cowpea	-	-	-	Field day, awareness programme Advisory service,	Seed, plant protection on chemicals.
16	Pulses production	Pea	Low yield in local cultivars	Performance trial on pea (ongoing)				Field day, awareness programme Advisory service,	Seed, plant protection on chemicals.
17	Crop production	Paddy	Long duration and poor yield		Demonstration on paddy		-	Field visit	Seeds

18	Vegetable production	Onion	Poor management practices	-	Scientific cultivation practices of onion	-	-	Advisory service, awareness programme	Seed, plant protection chemicals.
19	Seed production	Cucumber	Low yields due to non adoption of recommended practices	-	Scientific seed production of off season cucumber	-	-	Advisory service, awareness programme	Plant protection chemicals.
20	Pulses production	Pea	Low yield in existing varieties		Demonstration on pea (ongoing)			Advisory service, Field day, awareness programme	Plant protection chemicals.
21	Integrated Disease Mgmt	King Chilli	Leaf curl disease	Management of Leaf curl disease in King Chilli		Insect Pest in Chilli & their management	-	Method demonstration -Diagnostic visit -Field Visit	Supply of saplings, & Bio Agents
22	Biological control	Cabbage crops	Severe infestation of Lepidopteran	Bio intensive IPM package for the pests of cabbage crops		Pest of Cabbage and their management	-	Method demonstration -Diagnostic visit -Field Visit	Supply of Seeds,, Bio Agents & yellow sticky traps
23	Integrated Pest Mgmt	Potato	White grub		Management of White grub in Potato	Biological management of insect pest in Potato	-	Method demonstration -Diagnostic visit -Field Visit	Supply of tuber, Agri-lime & Bio Agents

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

[illegible]

Integrated Farming System										
Mushroom cultivation										
Drudgery reduction										
Farm machineries										
Value addition										
Integrated Pest Management					1				1	1
Integrated Disease Management					1				1	1
Impact Study										
Small Scale income generating enterprises										
TOTAL		2	1		5					8

* 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

[illegible]

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	Rabbitry	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.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	Performance trial on Brinjal	Use of Low yielding varieties	ArkaKeshav	Brinjal	3	Varieties A. KeshavLocal PH (cm) 95.3195.05 FP (no) 23.2213.33 FW (gm) 60.542.41 FL (cm) 15.4911.49 FD (cm) 2.781.4 Yld (Q/ha)) 280 112.67	Yield and quality of the new variety is very good		2.9
2	Performance evaluation of Okra	Low yield due to poor adoption of suitable varieties	ArkaNikita	Okra	3	Varieties A.NikitaLocal PH (cm) 117.781.15 FP (no) 20.014.6 FW (gm) 19.86 15.1 FL (cm) 16.43 11.73 Yld(Q/hac) 119.13 66.37	Gives high yield and Very profitable		2.6
3	Performance trial on Soybean (var. VL Soya -65)	Local cultivars were mostly long duration and low yield potential	VL Soya -65	Rainfed.	3	Ave. Pt.ht-64.42 cm No of ave. branches-8 nos. No.of ave. seeds/pod-3 Yield – 9.4qt/ha	Higher yield than existing varieties.	-	2.4:1
4	Performance trial on Mustard (Var. NRCHB-101	Poor yield, Long duration	NRCHB-101	Rainfed	3	Ave. Pl. ht - 148cm Ave.Pods/pl - 135 Ave. Seeds/pod -18 Yield - 12.8 qt/ha Duration - 118 days Year -2009 Source - DRMR, Bharatpur	Higher yield and tall plants	-	2:1
5	Performance trial on pea.	Low yield and poor quality	Akra Apoorva	Pea	3	Average pod length (cm) Demo Check 8.8 6.5 Average No. of fruit / pods 7.1 4.5 Yield (t/h) 8.6 6.7	Resistant to insect and pest diseases thereby reducing the cost of		1:2

							cultivation and high returns. The demonstrated variety is used as salad and also for cooking.		
6	Performance evaluation on cowpea	Long duration and	Cowpea UPC 628	rainfed	3 (0.75 ha)	Pod length (cm)= 14.8 cm Yield = 6.4 qt/ha	Less pest and diseases infestation, matures earlier than the local cultivars and fetches higher returns.		1.82:1
7	Management of Leaf curl disease in King Chilli	Leaf Curl	Foliar spraying of Neem product (Achook) @2ml/l 2-3 times at 10-15 days or installing yellow sticky traps @ 10 traps/ha plus foliar spraying of Imidacloprid 17.8SL @0.5ml/l 20-25 days after transplanting	Monocropping	3	<u>%tage. of affected Plants in treated plot:</u> 30 DAT – 5 % 45 DAT – 8 % 60 DAT – 20 % <u>%tage. of affected Plants in untreated plot:</u> 30 DAT - >15 % 45 DAT – 25-30 % 60 DAT– >60 %	Significant reduction of leaf curl in treated plot	Excess rainfall during Kharif season affects the schedule of spraying.	1.49 : 1

8	Bio intensive IPM package for the pests of cabbage crops	Lepidopteran pests	a) Border plantation of mustard crops against <i>Plutella xylostella</i> (DBM) (b) 3 release of <i>Trichogramma chilonis</i> , T. Brassicae @ 100000/ha against DBM and T. pieridis (c) Mechanical collection of larvae of lepidopteran pests. (d) Spray Bt 1 kg/ha at 15 days interval and NSKE @ 5% against lepidopteran pests 10 days interval for 3 times	Monocropping	2	<u>No. of caterpillars/plant in treated plot :</u> At 45 DAP - 1.6 At 60 DAP - 3.1 At 75 DAP - 2.2 <u>No. of caterpillars/plant in untreated plot :</u> At 45 DAP - 2.1 At 60 DAP - 4.7 At 75 DAP - 5.2	Incidence of Larvae were reduced	Increase in spraying numbers of Bt 1 kg/ha at 15 days interval and NSKE @ 5% against lepidopteran pests 10 days may further reduce the pest load	1.68 : 1
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***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

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

List of technologies demonstrated during previous years and popularized during _____ 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	Broccoli	Cultivation of improved broccoli variety	5	15	3.0
2	Tomato	Cultivation of improved variety of tomato	4	12	2.5
3	Pulses	Pea- Arkel	8	18	12
4	Maize	HQPM-1	3	9	6
5	Paddy	CAU R1	2	4	2

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.	Chilli	Vegetable production	ArkaMeghana	Kharif 2020	3	3	6		8	-	Rainfed			
2	Tomato	Vegetable production	ArkaSamrat	Kharif 2020	3	3	6		6	-	Rainfed			
3	Tomato	Vegetable production	Chiranjevi	Kharif 2020	-	3	-		7	-	Rainfed			
4	Broccoli	Vegetable production	Green Magic	Rabi 2020	3	3	6		8	-	Rainfed			
5	Orange	Citrus decline	Rejuvenation	Kharif 2020	1.5	1.5	3		4	-	Rainfed			
6	Cabbage	Vegetable production	BC 76	Rabi 2020	-	2.0	-		5	-	Rainfed			
7	Paddy	Increase in production and productivity	CAUR-1	Kharif, 2018	6	6	8	-	8	-	Rainfed, Silt loam, 450-800msl	-	9.7 k g/ha	124 k g/ha
8	Soybean	Seed production	JS-335	Kharif 2018	2	2	6	-	6	-	Rainfed, siltloam, 750-1100msl	-	9.2 k g/ha	131 k g/ha

9	Tori a	Seed producti on	TS-67	Rabi 2018	2	5	10	-	10	-	Rainfed, silt loam, 425- 900msl		9. 0 k g/ h a	1 4 1 k g/ h a
10	Pea	Seed producti on	Azad	Rabi 2018	1	1	4		4	-	Rainfed, silt loam, 425- 1200msl		9- 9. 8 k g/ h a	1 3 2- 1 4 5 k g/ h a
11	Pad dy	Increas e in producti on and producti vity	Shasharan g	Kharif, 2020	1	1	4	-	4		Irrigate	-	-	-
12	Onion	Spices production	Nasik Red	Rabi 2020	1	1	4	-	4		Rainfed	-	-	-
13	Cucu mber	seed production	Local	Rabi 2020	1	1	4	-	4		irrigated			
14	Pea	Pulses producti on	Aman	Rabi 2020	1	1	4	-	4		Rainfed	-	-	-

15	Pota to	Integrated Pest Manageme nt	Management of White grub in Potato 1.Liming 2- 3 months before sowing @ 200- 400 kgs/ha 2.Application of ash and Lanata camara leaves at time of planting 3.Mixing Metarhizium anisopliae and EPN in organic manure 15 days before sowing to be applied during planting of tubers and at earthing up and spray of Beauveria bassiana and NPV @5ml/lt water at vegetative stage	Rabi, 2020	2	2	8	-	8	-	- Rainfed -Clay Sandy Loam	-	-	-
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16	To mat o	Biological Control	Management of fruit borers in Tomato -Seed treatment with Trichoderma 2.5g/kg seed -Foliar spray with neem formulation @ 2ml/l water -Release of Trichogramma brassiliensis at 30 DAYS @ 50000 eggs/ha Thereafter 15 days interval	Kharif 2020	1.5	1.5	6	-	6	-	- Rainfed -Clay Sandy Loam	-	-	-
17	Fod der cro p	Drudge ry reductio n	Chaff cutter	Kharif	-	-	10		10		Rainfed			

c. Performance of FLD on Crops during 2020

Sl. No.	Crop	Thematic area	Area (ha.)	Avg. yield (Q/ha.)		% increase in Avg. yield	Additional data on demo. yield (Q/ha.)		Data on parameters other than yield, e.g., disease incidence, pest incidence etc.		Econ. of demo. (Rs./ha.)				Econ. of check (Rs./Ha.)			
				Demo .	Check		H*	L*			GC**	GR**	NR**	BC R**	GC	GR	NR	BCR
									Demo	Local								
1	Chilli	Vegetable production	3	215.1	115.2	46.4	216.2	213.9	-	-	74550	236390	161840	3.2	64663	121000	56337	1.9
2	Tomato	Vegetable production	3	651	309.5	52.4	658	644	-	-	72013	227413	155400	3.16	60948	107678	46730	1.8
3	Tomato	Vegetable production	3	301.5	197.3	34.6	307.2	295.7	-	-	52625	150100	97475	2.9	46288	94125	47837	2.0
4	Broccoli	Vegetable production	3	125.81	104.67	16.8	134.08	117.54	-	-	74650	185650	111000	2.4	69750	142080	72330	2.0
5	Orange	Rejuvenation	1.5	190.7	141.4	25.8	198.6	182.8	-	-	67085	190700	123615	2.8	53250	98980	45730	1.9

6	Cabbage	Vegetable production	2.0	241.5	211.25	12.5	245.6	237.4	-	-	72850	168595	95745	2.3	72975	144205	71230	1.9
7	Paddy	Increase in production and productivity	3	36	28	28.6	37.5	34.3	Pl. height - 48cm Eff.tiller-16 Panicle length - 26.3cm	Pl. height - 72cm Eff.tiller-11 Panicle length - 23.7cm	18500	28230	9730	1.53:1	16800	20830	4030	1.24:1
8	Soyabean	Increase in production and productivity	2.5	8.7	7.3	19.2	8.9	8.5	Pods/plant :52	Pods/plant :44	12000	33300	21300	2.81	11000	27700	17600	2.52:1
9	Toria	Seed production	1.5	7.1	6	18.3	7.24	5.33	Pl.height-77cm Branches/pl-7.5 Siliqua/pl-84	Pl.height-68cm Branches/pl-6 Siliqua/pl-70	10000	28400	18400	2.84:1	9000	24000	15000	2.6:1

10	Pea	Seed production	1	11.1	8.8	27	12.43	9.96	Av. No of pods/plant=33.6 Av. No of seeds/plant=7.8 Yield (qt/ha)=11.1	Av. No of pods/plant=Av. No of seeds/plant=6.5 Yield (qt/ha)=8.8	15000	33300	18300	2.2:1	14000	26400	12400	1.8:1
11	Paddy	Increase in production and productivity	1	30	26	15	31.5	27.8	Pl. height - 95.37 cm Panicle length - 32.3 cm Grains/panicle- 223.2	Pl. height - 1109.5 cm Panicle length - 25.2 cm Grains/panicle- 122.9	15000	24730	9730	1.64	13000	17030	4030	1.31
12	Onion	Vegetable production	1	159.6	135.8	14	160.8	138	-	-	83500	191520	108020	2.3	82850	162960	80110	1.9

13	Cucumber	Vegetable production	1	78	75	3.8	80	62	Fruit length – 22.88 cm Avg. Fruit circumference – 23.65 cm Fruit weight- 0.89 gm Ave. no of seed/fruit – 192.1 Germination test (%) – 98%	Fruit length – 22.6 cm AVG. Fruit circumference – 22.76 cm Fruit weight- 0.84 gm Ave. no of seed/fruit – 191.8 Germination test (%) – 85%	53600	15600	10240	1.9	52950	15000	97050	1.8
14	Pea (Aman)	Pulse production	2	9.10	8.5	6.6	10.1	8.1	Ave. Pod lgt – 8.3 Ave. no. of seed – 6.8	Ave. Pod lgt – 5.5 Ave. no. of seed – 4.2	21200	36400	15200	1.72	24300	34400	10100	1.42

15	Potato	IPM	2	56.75	52.55	7.9%	57.8	55.7	<u>Infestation</u> <u>Percent</u> <u>age :</u> 30 DAP – 6% 40 DAP – 9.4% 50 DAP – 13.7%	<u>Infestation</u> <u>Percent</u> <u>age :</u> 30 DAP – 9.2% 40 DAP – 16.8% 50 DAP – 22%	69,290	1,34,580	65,290	1.94:1	67,680	1,28,420	61,740	1.89:1
16	Tomato	Biological control	1.5	85.5	82.4	3.76%	87	84	<u>Infestation</u> <u>Percentage</u> <u>:</u> <u>Treated</u> <u>Plot</u> <u>(T₁) :</u> i.60 DAP – 2.22% ii.75 DAP – 6.13%	<u>Infestation</u> <u>Percentage</u> <u>:</u> <u>Local</u> <u>Check</u> <u>(T₀) :</u> i.60 DAP – 8.8% ii.75 DAP – 13.63%	85,800	2,99,250	2,13,450	2.47	83,800	2,88,400	2,04,900	2.44

***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	Diagnostic Visit	16	Jan – Dec '20	-	86	86	Activities undertaken against FLD
2	Advisory Services	68	Jan – Dec '20	-	278	25	Activities undertaken against FLD
3	Visit to Farmers Field	18	Jan –Dec '20	-	94	113	Activities undertaken against FLD
4	Method Demonstration	9	Jan – Dec '20	-	101	67	Activities undertaken against FLD

E.Details of FLD on Enterprises

** Field efficiency, labour saving etc.*

(ii) Livestock Enterprises

Sl. No.	Enterp rise/ Catego ry (e.g., Dairy, Poultr y etc.)	The matic area	Nam e of Tech nolog y	No. of farm ers	No. of unit s	No. of animals, poultry birds etc.	Major Performance parameters / indicators		% chan ge in the para mete r	Other parameters (if any)		Econ. of demo. (Rs./Ha.)				Econ. of check (Rs./Ha.)				Rem arks
							Dem o	Chec k		GC **	G R **	N R **	B C R **	GC	GR	N R	BC R			

**** 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.	The mati	Name of Tech	No. of farm	No. of	No. of fish/ fingerli	Major Performanc e	% change in	Other parameters (if any)	Econ. of demo. (Rs./Ha.)	Econ. of check (Rs./Ha.)	Remarks
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Note: Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.

[illegible]

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**	BC R**	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 2020

3.3.1. Farmers and Farm Women in On CampusincludingSponsored OnCampusTrainingProgrammes
Campus training programmes sponsored by external agencies)

(*Sp. On means On

Thematic area	No. of Courses/ prog			Participants								
	On-Campus	SponOn*	Total	General			SC/ST			Total		
				Male	Female	Total	Male	Female	Total	Male	Female	Total

	(1)	(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)
I. Crop Production																				
Weed Management																				
Resource Conservation Technologies																				
Cropping Systems	1	-	1	-	-	-	-	-	-	6	-	5	-	11	-	6	-	5	-	11
Crop Diversification																				
Integrated Farming																				
Water management																				
Seed production																				
Nursery management																				
Integrated Crop	1	-	1	-	-	-	-	-	-	10	-	14	-	24	-	10	-	14	-	24

c) Ornamental Plants

Nursery

[illegible]

[illegible]

[illegible]

[illegible]

[illegible][illegible]

[illegible]

[illegible]

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	1	3	4	-	-	-	-	-	-	7	27	13	18	20	45	7	27	13	18	20

3.3.4. Achievements on Training of Rural Youth in Off Campus including Sponsored Off Campus Training Programmes

[illegible]

rearing																				
Small scale processing																				
Post Harvest Technology																				
Tailoring and Stitching																				
Rural Crafts																				
TOTAL	1	-	1	-	-	-	-	-	-	9	-	17	-	26	-	9	-	17	-	26

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 Courses/ prog			Participants																
	On (1)	Sp On* (2)	Total (1+2)	General						SC/ST						Total				
				Male		Female		Total		Male		Female		Total		Male		Female		Total
				On (4)	Sp. On (5)	On (6)	Sp. On (7)	On (a= 4+6)	Sp. On (b= 5+7)	On (8)	Sp. On (9)	On (10)	Sp. On (11)	On (c= 8+10)	Sp. On (d= 9+11)	On (4+8)	Sp. On (5+9)	On (6+10)	Sp. On (7+11)	On (x= a +c)
Productivity enhancement	1	-	1	-	-	-	-	-	-	8	-	6	-	14	-	8	-	6	-	14

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	-	-	-	-	-	-	8	-	6	-	14	-	8	-	6	-	14

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 Courses/ prog.			Participants																	
	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*
Productivity enhancement in field crops																					
Integrated Pest Management	1	-	1	-	-	-	-	-	-	7	-	9	-	16	-	7	-	9	-	16	-
Integrated Nutrient management																					
Rejuvenation of old orchards																					
Protected cultivation technology																					
Formation and Management of SHGs	1	-	1	-	-	-	-	-	-	8	-	7	-	15	-	8	-	7	-	15	-

Low cost and nutrient efficient diet designing																					
Production and use of organic inputs																					
Gender mainstreaming through SHGs																					
TOTAL	2	-	2	-	-	-	-	-	-	15	-	16	-	31	-	15	-	16	-	31	-

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

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

Discipline	Area of training	Title of the training programme	Date (From – to)	Duration in days	Venue	Please specify Beneficiary group (Farmer & Farm women/ RY/ EP and NGO Personnel)	General participants			SC/ST			Grand Total		
							M	F	T	M	F	T	M	F	T
Plant Protection	IPM	Integrated Pest Management	17-22.2.20	6	KVK, Yisemyong	Rural youth	-	-	-	9	6	15	9	6	15
Plant Protection	Beekeeping	Beekeeping	24-29.2.20	6	KVK, Yisemyong	Rural youth	-	-	-	11	4	15	11	4	15

Agronomy	Crop Production	Cultivation of soybean as intercropping.	12.5.20	1	KVK conference hall	Farmer & Farm women	-	-	-	6	5	11	6	5	11
Extension	Leadership Development	Farm leadership – its importance and role in technology adoption and dissemination	27.5.20	1 day	KVK conference hall	Farmer & Farm women	-	-	-	11	14	25	11	14	25
Horticulture	Value addition	Value addition of fruits	24 - 26.11.20	3	On	Rural Youth	-	-	-	7	13	20	7	13	20
Agronomy	Vermicomposting	Vermicomposting	30.11.20 – 6.12.20	6	On	Rural Youth	-	-	-	7	8	15	7	8	15

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

Plant Protection	Mushroom	Cultivation and Management of Oyster Mushroom	14.1.20	1	Alichen	Rural youth	-	-	-	9	17	26	9	17	26
Plant breeding	Seed production	Improved cultivation practices on off season cucumber	14.1.20 20 22.1.20 20	2 days	Chungtia Aliba	Farmer & Farm women	-	-	-	19	32	51	19	32	51
Extension	Entrepreneurship	Programme planning	16.1.20	1		Farmer & Farm women	-	-	-	9	6	15	9	6	15
Agronomy	Crop Production	Pre monsoon pulse cultivation	21.1.20	1		Farmer & Farm women	-	-	-	7	12	19	7	12	19
Plant breeding	Crop Management	Integrated crop management	12.2.20 20	1 day	Aopenzu	Farmer & Farm women	-	-	-	12	15	27	12	15	27
Extension	Entrepreneurship	Group Dynamics	13.2.20	1		Farmer & Farm women	-	-	-	15	10	25	15	10	25
Plant Protection	IPM	Integrated pest management of FAW in maize	19.5.20	1	Monsenyimti	Farmer & Farm women	-	-	-	11	12	23	11	12	23
Plant Protection	IPM	Insect Pest in Tomato and their management	10.6.20	1	Alichen	Farmer & Farm women	-	-	-	7	4	11	7	4	11

		nt													
Extension	Farmers club formation	Formation of Farmers' club and its operation	12.6.20	1	Yimchalu	Farmer & Farm women	-	-	-	10	7	17	10	7	17
Horticulture	Fruit production	Scientific cultivation of banana	27.6.20	1	Off	Farmer & Farm women	-	-	-	8	13	21	8	13	21
Plant Protection	IDM	Insect Pest in Chilli and their management	08.7.20	1	Longkhum	Farmer & Farm women	-	-	-	8	6	14	8	6	14
Plant breeding	Crop management	Recent approaches in crop improvement	16.7.2020	1 day	KVK	Extension Personnel	-	-	-	8	6	14	8	6	14
Extension	Social capital	Mobilization of social capital in villages	21.7.20	1	Longkong	Farmer & Farm women	-	-	-	10	10	20	10	10	20
Agronomy	Crop Production	Sequential cropping of paddy – pulses	22.7.20	1	Yisemyong	Farmer & Farm women	-	-	-	4	7	11	4	7	11
Plant breeding	Cereal production	Improved cultivation practices of paddy	24.7.2020	1 day	KVK	Farmer & Farm women	-	-	-	10	14	24	10	14	24

Plant Protection	Biological Management	Bio-intensive Integrated Pest Management in Jhum Paddy	05.8.20	1	Khensa	Farmer & Farm women	-	-	-	9	7	16	9	7	16
Horticulture	Off season vegetables	Production technology of off season vegetable crops	25.8.20	1	Off	Farmer & Farm women	-	-	-	11	14	25	11	14	25
Horticulture	Nursery management	Vegetable Nursery raising and management	10.9.20	1	Off	Farmer & Farm women	-	-	-	9	14	23	9	14	23
Plant Protection	Beekeeping	Handon Training on Scientific Management of Honeybee	14.9.20	1	Kupza	Farmer & Farm women	-	-	-	14	7	21	14	7	21
Plant breeding	INM	Nutrient management in winter crops	15.9.20 20	1 day	Kupza	Farmer & Farm women	-	-	-	10	14	24	10	14	24
Extension	Entrepreneurship	Entrepreneurs development	18.9.20	1 day	DAO's Office,Mkg	Extension Personnel	-	-	-	8	7	15	8	7	15
Horticulture	Vegetable production	Improved cultivation practices of	14.10.20	1	Off	Farmer & Farm women	-	-	-	11	15	26	11	15	26

		Rabi crops													
Agronomy	Crop Production	Nutritional Kitchen Garden	19.10.20	1	Sungratsu	Farmer & Farm women	-	-	-	2	8	10	2	8	10
Plant Protection	IPM	Management on Insect Pest in Potato	26.10.20	1	Longjang	Farmer & Farm women	-	-	-	15	9	24	15	9	24
Plant Protection	Biological Management	Hand-on Training on Biological Management on Insect Pest in Potato	03.11.20	1	Alichen	Farmer & Farm women	-	-	-	5	11	16	5	11	16
Plant Protection	Biological Management	Hand-on Training on Biological Management on Insect Pest in Potato	04.11.20	1	Longkhum	Farmer & Farm women	-	-	-	8	7	15	8	7	15
Plant Protection	IPM	Post Harvest Management on Insect Pest in Cereal	12.12.20	1	Aliba	Farmer & Farm women	-	-	-	18	10	28	18	10	28
Plant Protection	IPM	Pest of Cabbage and thgeir	16.12.20	1	Mokokchung	Extension Personnel	-	-	-	7	9	16	7	9	16

*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		

3.4. Extension Activities (including activities of FLD programmes) (Please mention specific Extension Activity conducted by the KVK such as Field Day, KisanMela, Exhibition, Diagnostic Visit, etc) during

Sl. No.	Extension Activity	Topic	Date and duration	No. of activities	Participants											
					General			SC/ST			Extension Officials			Grand Total		
					(1)			(2)				(3)				(1+2)
M	F	T	M	F	T	M	F	T	M	F	T	M	F	T		
1.	Advisory services	-	Jan-Dec	115				285	415	700				285	415	700

2.	Diagnostic visit	-	Jan-Dec	21				42	69	111				42	69	111
3.	Field day	-	Jan-Dec	4				20	32	52				20	32	52
4.	Group Discussion			-				-	-	-				-	-	-
5.	KishanGosthi															
	KishanMela															
6.	Film show															
7.	SHG formation															
8.	Exhibition															
9.	Scientists visit to farmers fields	-	Jan-Dec	18				20	26	46				20	26	46
10.	Farmers visit to KVK		Jan-Dec	2				6	12	18				6	12	18
11.	Plant/ Animal Health camp															
12.	Farm science club															
13.	Self Help Group Conveners meetings															
14.	Farmers seminar/ workshop															
15.	Method demonstration		Jan-Dec	3				14	17	31				14	17	31
16.	Celebration of important days		Jan-Dec	3				100	140	240				100	140	240

Grand Total			248				53687	61511	12598				53687	61511	12598
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3.5 Production and supply of Technological products during

A. SEED MATERIALS

Major group/class	Crop	Variety	Quantity (qt)	Value (Rs.)	Number of recipient/ beneficiaries		
					General	SC/ST	Total
CEREALS	Paddy	CAU R-1	8	7385	-	12	12
OILSEEDS							
	Toria	TS 67	1.5	6000		15	15
PULSES							
	Soyabean	Js-335 & PK 1225	1.2	5400		12	12
	Pea	Aman	0.8	3600		10	10
VEGETABLES							
TOTAL			11.5	22385		49	49

A1. SUMMARY of Production 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	Total
1	CEREALS	0.7	0.5	1750		3	3
2	OILSEEDS						
3	PULSES	0.25	0.2	1000		5	5
4	VEGETABLES						
5	FLOWER CROPS						
6	OTHERS (Taro)	1.5	1.5	3750		15	15
TOTAL		2.45	2.2	6500		23	23

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

Major group/class	Crop	Variety	Quantity (In quintal) produced	Quantity (In No.) supplied	Value (Rs.) produced	Number of recipient/ beneficiaries		
						General	SC/ST	Total
Fruits								
Spices								

VEGETABLES	Chilli	Arka meghana	-	5500	11000	-	75	75
	Tomato	Chiranjevi and Arka Samrat	-	8000	16000	-	90	90
	Cabbage	BC 76, Rareball	-	7500	16000	25	60	85
	Broccoli	Green Magic	-	7000	21000	-	90	90
	Onion	Arka kirthiman	-	13500	27000	-	70	70
TOTAL				41500	91000	25	385	410

C. Production of Bio-Products during

Major group/class	Product Name	Species	produced Quantity		Value (Rs.)	Number of Recipient /beneficiaries		
			No	(qt)		General	SC/ST	Total
BIOAGENTS								
BIOFERTILIZERS								
1								
2								
BIO PESTICIDES								

1								
Other (Vermi compost)	Vermicompost	Esinia foetida		2	4000	-	10	10

D. Production of livestock during

Sl. No.	Type/ category of livestock	Breed	Quantity		Value (Rs.)	Number of Recipient beneficiaries		
			(Nos)	Kgs		General	SC/ST	Total
1	Cattle/ Dairy							
2	Goat	Bettle cross	8	-	2500		4	4
3	Piggery							
4	Poultry							

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

(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

Research papers				
1.				
2				
3				
Training manuals	Vermicompost production	K. Samuel Sangtam, Moainla, Illika, Dr. Keviletsu Khate	25	
Leaflets/folders				

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

(C) Details of Electronic Media Produced

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)

Aliba, Chungtia and Kinunger villages are the major producer of off season cucumber in Mokokchung district. The cucumbers are sold in the main markets as well as it is supplied to other districts of the state. Sowing starts by mid-January and harvesting commence by April and last till May. However, due to nationwide lockdown during the peak harvesting period the off season cucumber farmers were badly affected as there was total ban on movement in the villages, even for marketing of farm produce of the farmers. Many farmers were forced to throw away loads of this perishable fruits in their fields as there was no alternative means to take it to the markets for sale. Due to this the farmers were devastated as they will be losing a lot of money if they cannot sell their produce. In an effort to address this problem, KVK Mokokchung took an initiative in finding a solution to solve marketing problems of the villages. Mokokchung district administration



developed an App known as **Mokokchung Cart** for home delivery. Hence, KVK Mokokchung in consultation with the district administration linked the growers with the marketing agency and helped the growers in disposing off their produce. As part of the programme the marketing agency collected the produce directly from the farmers ensuring that they receive a fair farm price. The products were transported to the town and sold by way of home delivery system. At the same time, local consumers are also delivered the items at a reasonable rate during the lockdown. By this way the growers earned a good amount of money even during the lockdown without wasting the produce.

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
1			

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

- Identification of courses for farmers'/farm women: Group discussion
- Rural Youth :interaction
- Extension personnel

3.11 Field activities

- i. Number of villages adopted: 6
- ii. No. of farm families selected: 25
- iii. No. of survey/PRA conducted:

3.12. Activities of Soil and Water Testing

Status of establishment of Lab : Completed :

1. Year of establishment :2011 :

2. List of equipments purchased with amount :

Sl. No	Name of the Equipment			Qty.	Cost
	S&WT lab	Mini lab/ Mridaparikshak	Manufacturer		
	Soil Lab				
1		Visiscan spectrophotometer		1	81,200
2		Digital Flame Photometer		1	54,875
3		Digital P.H meter with electrode		1	17,100
4		Digital conductivity meter with cell		1	16,845
5		Physical balance		2	5,100
6		Chemical balance		1	3,125
7		VAT 13.5%			23,695
8		SDFR		1	
		Mridaparikshak	Nagarjuna Agro Chemicals Pvt. Ltd	2	161000
Total				9	362940

3. Details of samples analyzed (2020) :

Details	No. of Samplesanalyzed	No. of Farmers	No. of Villages	Amount (In Rupees) realized
Soil Samples	36	36	7	360
Water Samples				
Plant Samples				
Petiole Samples				
Total	36	36	7	360

a. Details of Soil Health Cards (SHCs) :36

b. No. of SHCs prepared: 36

c. No. of farmers to whom SHCs were distributed:36

d. Name of the Major and Minor nutrients analysed: NPK

e. No. of villages covered: 7

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	75	1455	5	375	45	120555	-	-	8	1575	5	225	138	124185
Voice only														
Total	75	1455	5	375	45	120555	-	-	8	1575	5	225	138	124185

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	0.5		5	5
	Introduction of Resource Conservation Technologies				

	Distribution of seeds and planting materials	2		20	20
	Any other (Please specify)				
Long dry spell	Already sown crops i. In-situ moisture conservation to safeguard the standing crop from moisture stress. ii. Mulching with crop residue or thin plastic sheets if the water stress continues. iii. Raising nursery of crops in which transplanting is easily possible for filling the gaps				

a. Livestock based Contingency planning

Contingency (Drought/ Flood/ Cyclone/ Any other please specify)	Number of birds/ animals to be distributed	No. of programmes to be undertaken	No. of camps to be organized	Proposed number of animals/ birds to be covered through camps	Number of beneficiaries proposed to be covered		
					General	SC/ST	Total

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	% of adoption	Change in income (Rs.)

	participants		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

1.3 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

Name of organization	Nature of linkage
State Agricultural Research Station (SARS) Yisemyong	Joint implementation in conducting training, demonstration, meeting, trials etc.
DAO, DHO, DVO, DSCO, DFO,LRD in the district	Conducting training, demonstration programmes
ICAR, Jharnapani, Nagaland University	Consultation, meeting and exchange of technologies

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

Name of the scheme	Activity	Date/ Month of initiation	Funding agency	Amount (Rs.)
Mera Gaon Mera Gaurav	Training, Demonstration field visit	10 days	-	-
Rabi Campaign	Seeds distribution, Training, Interaction	1 day	-	-

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									
a) Maize	13.04.20	16-18.08.20	0.05	HQPM-1	Green cobs		1200	900	Green cobs are prefer much by the farmers
Pulses									
a) Pea	4/10/20	7jan-17feb 2021	0.1	Arkel	Pod	0.72	850	1080	-
b) Soybean	18/06/20	18/12/2020	0.002	PK-1225	PoD	0.32	650	1120	-
Toria	8/10/21	10/01/21	0.02	TS-67	Seed	0.20	750	1250	-
Spices & Plantation crops									
Turmeric	17/04/20	8.01.21	0.0585	Megha -1	Rhizome	2	900	2000	Good yield
Ginger	21.04.20.	25.01.21	0.003	Local red ginger	Rhizome	1.5	100 0	1500	Good yield
Vegetables									
Bitter gourd	16.02.20	16.06-20	0.001	Palu F ₁	Head	0.35	650	525	

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

Sl. No.	Name of the Product	Qty	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	
1	Vermi compost	2	750	4000	good

6.4 Performance of instructional farm (livestock and fisheries production)

Sl. No	Name of the animal / bird / aquatics	Details of production			Amount (Rs.)		Remarks
		Breed/ species	Type of Produce	Qty.	Cost of inputs	Gross income	
1							

6.5 Rainwater Harvesting

Training programmes conducted by using Rainwater Harvesting Unit/ structure

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

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

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)

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	State Bank of India	Lerie, Kohima	01000050059
With KVK	State Bank of India	Mokokchung, Main Branch	11361013166
Revolving Fund	Nagaland State Cooperative Bank	Mokokchung	20003392

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

Item	Released by ICAR/ATARI (in lakh)		Expenditure (in lakh)		Unspent balance
	Amount	Amount	Amount	Amount	
Inputs					
Extension activities					
TA/DA/POL etc.					
TOTAL					

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	227.97520	227.97520	227.97520
2	Traveling allowances	2.30	2.30	2.30
3	Contingencies			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	6.18968	6.18968	6.18968
B	POL, repair of vehicles, tractor and equipment			
C	Meals/refreshment for trainees	11.49512	11.49512	11.49512
D	Training material (posters, charts, demonstration material including chemicals etc. required for			

	conducting the training)			
<i>E</i>	Frontline demonstration except oilseeds and pulses			
<i>F</i>	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)			
<i>G</i>	Training of extension functionaries			
<i>H</i>	Maintenance of buildings			
<i>I</i>	Establishment of Soil, Plant & Water Testing Laboratory			
<i>J</i>	Library			
4	HRD			
TOTAL (A)		247.95	247.95	247.95
B. Non-Recurring Contingencies				
1	Works			
2	Equipments including SWTL & Furniture	1.80	1.80	1.80
3	Vehicle (Four wheeler, please specify)			
4	Library (Purchase of assets like books & journals)			
TOTAL (B)		1.80	1.80	1.80
C. REVOLVING FUND				
GRAND TOTAL (A+B+C)		249.75	249.75	249.75

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

Year	Opening balance as on 1 st April	Income during the year	Expenditure during the year	Net balance with KVK (in lakh)
2020 (Seed money)	0.79310	0.34000	0.17200	0.81140

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
- (c) Technical



(Signature)

Sr. Scientist cum Head