

PROFORMA FOR ANNUAL REPORT OF KVKS 2019-20

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	kvmkokchung@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. PijushKantiBiswas	Aoyimkum, Dimapur	9402343069	drpijushpckvk@g mail.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.PijushKanti Biswas	Sr. Scientist & Head	Horticulture	143600		15/4/13	Temporary	Gen.
2	Subject Matter Specialist	E.RenbomoNgullie	SMS (Horticulture)	Horticulture	83300		24.05.06	Temporary	ST
3	Subject Matter Specialist	Dr. Rongsensusang	SMS(Vety. &AH)	Vety& AH	83300		24.05.06	Temporary	ST
4	Subject Matter Specialist	K.SamuelSangtam	SMS (Agronomy)	Agronomy	83300		24.05.06	Temporary	ST
5	Subject Matter Specialist	Bendangjungla.l	SMS (PB &G)	PB &G	83300		24.05.06	Temporary	ST
6	Subject Matter Specialist	RuyosuNakro	SMS (Extension)	Agri. Extension	80900		13.11.07	Temporary	ST
7	Subject Matter Specialist	Dr.Ruopfuselhuo Kehie	SMS (Entomology)	Entomology	80900		15.02.07	Temporary	ST
8	Programme Assistant	Moainla	Programme Assistant	Horticulture	56900		24.05.06	Temporary	ST
9	Computer Programmer	I.Tangitla	Programme Assistant(Computer)	BLIS	56900		24.05.06	Temporary	ST

10	Farm Manager	Ilika v achumi	Programme Assistant Farm manager	Horticulture	55200		19.02.07	Temporary	ST
11	Accountant / Superintendent	Meyatula	Office Supt-cum-Accountant	PU	55200		01.06.06	Temporary	ST
12	Stenographer	Imosangla	Jr. Steno-cum-Computer Operator	PU	38100		01.06.06	Temporary	ST
13	Driver	Supongmeren	Driver	Matriculate	30500		01.06.06	Temporary	ST
14	Driver	Jongpongyanger	Driver	Matriculate	27900		01.03.10	Temporary	ST
15	Supporting staff	Imkonglemla	Peon	Matriculate	23500		01.06.06	Temporary	ST
16	Supporting staff	Aotoshi	Chowkidar	Matriculate	20300		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 C0496	2016	8.0 Lakhs	21000	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	2004	70000	Unserviceable
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	2010	55,000	Out of order
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
5 th Feb.2019	Shri. M. Ben Yanthan, Director of Agriculture, Dr. A. K. Singha, Principal Scientist, ATARI, Zone-VII, Barapani. The meeting was attended by Additional Director, Deputy Director, Senior Officers from the directorate of Agriculture, SAC members, farmer's representatives, Senior Scientist & Head, SMSs	<ol style="list-style-type: none"> 1. Crop diversification should be included under OFT to increase the income of farmers. 2. Organic farming should be encouraged under new technologies introduced for OFT. 3. Chemicals are to be avoided while 	Successfully conducted.

	and staffs of 4 KVKs.	proposing technologies under OFT for quality maintenance.	
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* 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

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)
		Maximum	Minimum	
April	119.63	22.1	18.95	80.64
May	176.50	26.4	19.85	79.15
June	345.02	26.2	21.25	88.72
July	421.00	27.1	21.60	78.9
August	452.00	26.5	22.32	76.8
September	238.08	25.1	20.1	83
October	381.00	23.8	20.1	73
November	122.65	21.4	15.7	76
December	Nil	17.4	11.4	79
January	Nil	14.7	8.85	72
February	Nil	15.5	9.24	73
March	74.31	18.7	11.78	74

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 (2018-19)

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,

Farmers	36	36	900	871	225	230	1500	1613
Rural youth (Sponsored)	3	6	60	93				
Extn. Functionaries	8	9	160	197				
Rural youth	10	13	200	306				
Total								
Seed Production (ton.)				Planting material (Nos. in lakh)				
5				6				
Target		Achievement		Target		Achievement		
-		0.29		-		25000		

Note: Target set during last Annual Zonal Workshop

3. B. Abstract of interventions undertaken during

SI 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	Tomato	Poor yield due to use of low yielding varieties	Performance evaluation of Tomato var. Arka Samrat	-	-	-	Advisory service, Field day, awareness programme	Seed, plant protection chemicals.
2	Vegetable production	Chilli	Low yield and poor quality	Performance trial on Chilli var Arka Harita	-	-	-	Field day, awareness programme Advisory service,	Seed, plant protection chemicals.
3	Vegetable production	Chilli	Poor yield due to use of low yielding varieties	Performance trial on Chilli var Arka Meghana	-	-	-	Advisory service, Field day, awareness programme	Seed, plant protection chemicals.
4	Vegetable production	Chilli	Low yield in existing varieties	-	Demonstration on Improved chilli var. Tejasveni	-	-	Advisory service, Field day,	Seed, plant protection chemicals.

5	Vegetable production	Tomato	Low yield in farmers cultivated varieties		FLD on tomato var. Chiranjevi			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	Crop production	Soybean	Poor yield and Unsustainable income	Performance trial on Soybean (var. RVS-2001-4) under rainfed condition		Sequential cropping of maize-soybean for higher income	-	Field visit	Seeds
9	Crop production	Pea	Low income due to mono cropping system	Performance trial on field pea (var. aman) after paddy.		Sequential cropping of paddy-pea	-	Field visit	Seeds
10	Pulse production	Soybean	Early sowing and use of age old varieties		Demonstration on Soybean JS-335	Cultivation of Soybean	-	Field visit, field day	Seeds
11	Oilseed production	Toria	Less adaption of Toria cultivation, leave field fallow during rabi		Demonstration on Toria TS-67/38	Cultivation practices of Toria	-	Field visit, field day	Seeds
12	Pulse production	Pea	Less adaption of second crops due to delayed paddy harvesting		Demonstration on pea Azad	Cultivation of pulses	-	Field visit	seeds

13	Crop production	Paddy	Long duration and poor yield		Demonstration on Paddy CAU R-1	Cultivation of paddy	-	Field visit, field day	Seeds
14	Crop production	Maize	Long duration, tall varieties and low yield		Demonstration on Maize RCM -76	Cultivation of HYV Maize	-	Field visit, field day	Seeds
15	To increase production and productivity	Paddy	Use of old aged cultivar and poor yield	Performance evaluation on paddy var. Shasharan g	-	Improved cultivation practices on paddy	-	Field day, awareness programme Advisory service,	Seed, plant protection chemicals.
16	Pulse production	Pea	Low yield in local cultivars	Performance evaluation on Pea Var. Arka Apoorva	-	-	-	Field day, awareness programme Advisory service,	Seed, plant protection chemicals.
17	Cereal production	Maize	Low yield in local cultivars	-	Demonstration on Maize var. HQPM-7	Management of fall army worm in Maize	-	Field day, awareness programme Advisory service, leaflets	Seed, plant protection chemicals.
18	Tuber production	Tapioca	Low yield in existing varieties	-	Demonstration on Tapioca var. Shree Jaya	-	-	Field day, awareness programme Advisory service, leaflets	Planting material, protection chemicals.
19	Pulse production	Pea	Low yield in existing varieties	-	Demonstration on pea var. Arka Sampoorna	-	-	Field day, awareness programme Advisory service, leaflets	Seeds, bio chemical
20	Integrated Pest Mgmt	Potato	White grub	Management of White grub in Potato		Management of Insect Pest in Potato	-	Method demonstration -Diagnostic visit -Field Visit	Supply of Seeds
21	Biological control	Cabbage	Cabbage butterfly Larvae	Management of cabbage butterfly larvae		Management of Insect Pest in Vegetables	-	-Method demonstration -Diagnostic visit -Field Visit	Supply of Seeds, & Bio Agents

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 Chilli	Use of Low yielding varieties	Arka Meghana	Chilli	3	<table border="1"> <tr> <td>Varieties</td> <td>A. Meghana</td> <td>Local</td> </tr> <tr> <td>PH (cm)</td> <td>97.78</td> <td>98.45</td> </tr> <tr> <td>FP (no)</td> <td>128.78</td> <td>102.67</td> </tr> <tr> <td>FW (gm)</td> <td>4.42</td> <td>3.29</td> </tr> <tr> <td>FL (cm)</td> <td>8.26</td> <td>6.74</td> </tr> <tr> <td>FD (cm)</td> <td>1.0</td> <td>0.97</td> </tr> <tr> <td>Yld (mt)</td> <td>12.52</td> <td>7.42</td> </tr> </table>	Varieties	A. Meghana	Local	PH (cm)	97.78	98.45	FP (no)	128.78	102.67	FW (gm)	4.42	3.29	FL (cm)	8.26	6.74	FD (cm)	1.0	0.97	Yld (mt)	12.52	7.42	Yield and shelf life of the new variety is very long		2.19
Varieties	A. Meghana	Local																												
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2	Performance evaluation of tomato	Low yield due to poor adoption of suitable varieties	Arka Samrat	Tomato	3	<table border="1"> <tr> <td>Varieties</td> <td>Arka Samrat</td> <td>Local</td> </tr> <tr> <td>PH (cm)</td> <td>93.68</td> <td>87.42</td> </tr> <tr> <td>FP (no)</td> <td>34.0</td> <td>26.17</td> </tr> <tr> <td>FW (gm)</td> <td>95.6</td> <td>58.87</td> </tr> <tr> <td>FD (cm)</td> <td>6.61</td> <td>4.31</td> </tr> <tr> <td>YP (kg)</td> <td>3.26</td> <td>1.54</td> </tr> <tr> <td>Yld (mt)</td> <td>65.0</td> <td>30.80</td> </tr> </table>	Varieties	Arka Samrat	Local	PH (cm)	93.68	87.42	FP (no)	34.0	26.17	FW (gm)	95.6	58.87	FD (cm)	6.61	4.31	YP (kg)	3.26	1.54	Yld (mt)	65.0	30.80	Very profitable		3.03
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3	Performance trial on Chilli	Low yield and poor quality	Arka Harita	Chilli	3	<table border="1"> <tr> <td>Varieties</td> <td>A. Harita</td> <td>Local</td> </tr> <tr> <td>PH (cm)</td> <td>96.45</td> <td>96.85</td> </tr> <tr> <td>FP (no)</td> <td>128.89</td> <td>99.83</td> </tr> <tr> <td>FW (gm)</td> <td>3.63</td> <td>3.13</td> </tr> <tr> <td>FL (cm)</td> <td>8.67</td> <td>6.92</td> </tr> <tr> <td>FD (cm)</td> <td>0.96</td> <td>0.93</td> </tr> <tr> <td>Yld (mt)</td> <td>10.27</td> <td>6.88</td> </tr> </table>	Varieties	A. Harita	Local	PH (cm)	96.45	96.85	FP (no)	128.89	99.83	FW (gm)	3.63	3.13	FL (cm)	8.67	6.92	FD (cm)	0.96	0.93	Yld (mt)	10.27	6.88			2.16
Varieties	A. Harita	Local																												
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4	Performance trial on Soybean	Local cultivars were mostly long duration and low yield potential	RVS-2001-4	Rainfed	3	<p>Ave. Pt.ht-57 cm Ave. opds/pt - 48.25 nos. Yield – 12.85 qt/ha</p>	Higher yield and shorter duration than existing varieties.	-	3.02 :1																					
5	Performance testing on pea after paddy	Mono cropping, use of old and long duration kharif local cultivars.	Aman	Rainfed	3	<p>Pods/Plant - 13.2 nos Seeds/pod - 6.2 nos Yield – 14.2qtl /ha</p>	Good yield, shorter duration and can be sown late after paddy.	-	3.3:1																					
6	Performance	Use of old aged cultivar	Shasharang	Paddy	3	<table border="1"> <tr> <td>Varieties</td> <td>Local</td> </tr> <tr> <td>Shasharang</td> <td></td> </tr> </table>	Varieties	Local	Shasharang		Maturity of the																			
Varieties	Local																													
Shasharang																														

	evaluation on paddy	and poor yield				PH (cm)95.36 Panicle length (cm) 110 Grains/panicle(no.) 222.4 Yield (Q/ha) 30	31.4 21.3 122.5 27.6	crop is shorter than (145 days)the local cultivar (165 days), thereby reducing the cost of cultivation.		
7	Performance evaluation on Pea	Low yield in local cultivars	Arka Apoorva	Pea	3	Varieties Arka Apoorva Local Pod length (cm)9 Seeds/pod (no)6.6 Yield (q/ha) 11.9	6.6 5.1 9.75	Sweet to taste, dual purpose and less diseases incidence.		
8	Management of White grub in Potato	White grub	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	Mono-cropping	8	Incidence Percentage : <u>Treated Plot (T₁)</u> : i.30 DAP – 2.5% ii.40 DAP – 4% iii. 50 DAP –12% <u>Local Check (T₀)</u> : i.30 DAP – 6% ii.40 DAP – 15% iii.50 DAP – 20%	Marketable tuber yield is enhanced.	Deep ploughing during Autumn minimized the population build up of white grubs	NA	

			Beauveria bassiana and NPV @5ml/lt water at vegetative stage							
9	Managemnt of cabbage butterfly larvae	Cabbage Butterfly	Bio-BT-L @ 5ml/litre of water	Mono-cropping	4	<u>No. of caterpillars/plant :</u>		Incidence of Cabbage butterfly Larvae were significantly reduced	Incorporation of early planting with spraying of Bio-BT-L may further reduce the pest load	NA
						<u>Treated Plot :</u> At 45 DAP - 0.6 At 60 DAP - 2.3 At 75 DAP - 1.2	<u>Local Check :</u> At 45 DAP - 1.3 At 60 DAP - 9.2 At 75 DAP - 5.5			

10	Impact study of off-season cucumber cultivation	Economic Analysis	Off-season and Normal-season Cultivation	Cucumber	30	<p>Table 1. Economic analysis of cucumber cultivation under Off-season and Normal season (Rs. /acre). (N=30)</p> <table border="1" data-bbox="1031 266 1587 699"> <thead> <tr> <th rowspan="2">Year</th> <th colspan="2">Farmers' yield (q/acre)</th> <th colspan="2">Gross Return (Rs.)</th> <th colspan="2">Cost of Cultivation (Rs.)</th> <th colspan="2">Net Return (Rs.)</th> <th colspan="2">BCR</th> </tr> <tr> <th>O</th> <th>N</th> <th>O</th> <th>N</th> <th>O</th> <th>N</th> <th>O</th> <th>N</th> <th>O</th> <th>N</th> </tr> </thead> <tbody> <tr> <td>2018-19</td> <td>512</td> <td>500</td> <td>1840</td> <td>1800</td> <td>4280</td> <td>3800</td> <td>1410</td> <td>1400</td> <td>4.1</td> <td>3.66</td> </tr> </tbody> </table> <p>OS-off season, NS-normal season</p> <p>Table:2.Problems faced by the farmers on preferential ranking</p> <table border="1" data-bbox="1031 824 1587 1474"> <thead> <tr> <th>S.No.</th> <th>Problems</th> <th>Frequency</th> <th>Percentage</th> <th>Rank</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Insect-pests and diseases</td> <td>30</td> <td>100</td> <td>1st</td> </tr> <tr> <td>2</td> <td>Lack of credit facilities</td> <td>28</td> <td>93.33</td> <td>2nd</td> </tr> <tr> <td>3</td> <td>Lack of irrigation facilities</td> <td>26</td> <td>86.66</td> <td>3rd</td> </tr> <tr> <td>4</td> <td>High cost of cultivation</td> <td>25</td> <td>83.33</td> <td>4th</td> </tr> <tr> <td>5</td> <td>Non-availability of labours</td> <td>24</td> <td>80</td> <td>5th</td> </tr> <tr> <td>6</td> <td>Lack of profitable marketing system</td> <td>23</td> <td>76.66</td> <td>6th</td> </tr> </tbody> </table>	Year	Farmers' yield (q/acre)		Gross Return (Rs.)		Cost of Cultivation (Rs.)		Net Return (Rs.)		BCR		O	N	O	N	O	N	O	N	O	N	2018-19	512	500	1840	1800	4280	3800	1410	1400	4.1	3.66	S.No.	Problems	Frequency	Percentage	Rank	1	Insect-pests and diseases	30	100	1st	2	Lack of credit facilities	28	93.33	2nd	3	Lack of irrigation facilities	26	86.66	3rd	4	High cost of cultivation	25	83.33	4th	5	Non-availability of labours	24	80	5th	6	Lack of profitable marketing system	23	76.66	6th	<p>The study shows that there was no much differences in the cost of cultivation and yield in both the seasons, but the higher returned from off-season cucumber was due to higher price. The benefit cost ratio shows that it is a highly profitable farming. So farmers should be encourage to take up a large scale of farming in order to increase their income for better livelihood. The severe most problem face by the farmers was Insect-pests and diseases, so the line department</p>	
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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	4	10	2.5
2	Tomato	Cultivation of improved variety of tomato	3	6	2.0
3.	Paddy	CAU -R1	2	6	2
4	Pulses	Pea- azad, Soybean – JS-335	8	18	12
5	Oilseed	Toria – TS - 38	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)		
					Proposed	Actual	SC/ST	Others	Total			N	P	K
1.	Chilli	Vegetable production	Tejasveni	Kharif 2019	1.5	1.5	4		4		Rainfed			
2	Tomato	Vegetable production	Chiranjevi	Kharif 2019	2.0	2.0	4		4		Rainfed			
3	Broccoli	Vegetable production	Green Magic	Rabi 2019	2.0	2.0	8		8		Rainfed			
4	Orange	Citrus decline	Rejuvenation	2019	1.5	1.5	3		3		Rainfed			
5	Soyabe	Seed producti	JS-335	Kharif	2.5	2	6	-	6	-	Rainfed, siltloam,	-	9.2 kg/h	131 kg/h

	an	on		2019							650-1100msl		a	a
6	Tori a	Seed producti on	TS-67	Rabi 2019	3	2	8	-	8	Farmer s prefer to sown in lesser area.	Rainfed, silt loam, 425- 900msl		9.0k g/ha	141 kg/h a
7	Pea	Seed producti on	Azad	Rabi 2019	2	1.5	8		8	Farmer s prefer to sown in lesser area.	Rainfed, silt loam, 425- 1200msl		9- 9.8k g/ha	132 - 145 kg/h a
8	Mai ze	Seed producti on	RCM -76	Kharif 2018	3	2	6	-	6	Due to less availabil ity of seeds	Rainfed, silt loam, 800- 1200msl	-	9.5k g/ha	138 kg/h a
9	Pad dy	Increas e in producti on and producti vity	CAUR-1	Kharif, 2018	8	8	12	2	14	-	Rainfed, Silt loam, 450- 800msl	-	9.7 kg/h a	124 kg/h a
10	Mai ze	Cereal producti on	HQPM-7	Kharif 2019	2	2	6		6		Rainfed			
11	Tapi oca	Tuber producti on	ShreeJaya	Kharif 2019	2	2	6		6		Rainfed			
12	Pea	Seed producti	Arka	Rabi	1	1	6	6	6		Rainfed			

		on	Sampoorna	2019										
13	Pea	Integrated Disease Management	Integrated management of powdery mildew 1.Early sowing in the month of August 2.Field sanitation and destruction of diseased plants 3.Spray of wettable Sulphur @ 0.2% at 14 days interval after disease incidence is noticed	Rabi, 2019	2	2	8	-	8	-	-Rainfed -Clay Sandy Loam	-	-	-
14	Pad dy	Biological control	Bio-control of leaf folder in Rice a) Three release of Trichogramma japonicum @ 1,00,000/ha from 30 DAT b) Application of botanicals (Neem oil/pestoneem @3ml/lit) at the time of pest occurrence	Kharifi, 2019	2	2	8	-	8	-	Rainfed -Clay Sandy Loam	-	-	-
15	Fod der crop	Drudge ry reduction	Chaff cutter	Kharif	-	-	10		10		Rainfed			

c. Performance of FLD on Crops during

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**	BCR**	GC	GR	NR	BCR
											Demo	Local						
1	Chilli	Vegetable production	1.5	89.1	76.3	14.4	90.3	87.9	-	-	64150	17800	11385	2.7	63863	13260	68988	2.05
2	Tomato	Vegetable production	2.0	298.6	248.2	16.9	307.2	290.1	-	-	73338	17892	10558	2.4	64863	10095	36088	1.5
3	Broccoli	Vegetable production	2.0	125.8	104.6	16.8	134.0	117.54			74650	18565	11100	2.4	69750	14208	72330	2.0
4	Orange	Rejuvenation	1.5	36.47	28.17	22.76	38.25	34.68			54085	10965	55565	2.0	46150	84500	38350	1.82
5	Soybean	Increase in production and productivity	2	8.55	7.6	12.5	8.75	8.32	Pods/plant :48	Pods/plant :41	12000	34800	21300	2.9	12000	29200	17600	2.4
6	Toriya	Seed production	2	6.6	6	10	6.8	5.7	Pl.height-	Pl.height-	10000	29700	19700	2.9:1	10000	27000	17000	2.7:1

		on							74cm Branches/pl-7.1 Siliqua/pl-77	65cm Branches/pl-6 Siliqua/pl-72								
7	Pea	Pulse production	1.5	12.4	10.2	21.6	12.8	9.4	Av. No of pods/plant=28 Av. No of seeds/plant=7.8 Yield (qt/ha)=12.4	Av. No of pods/plant=24 Av. No of seeds/plant=6.5 Yield (qt/ha)=10.2	15000	49600	34600	3:1	15000	40800	25800	2.7:1
8	Pad dy	Increase in production and productivity	8	36.8	31.5	16.8	38.3	35.2	Pl. height-48cm Eff.tiller-16 Panicle length-26.3cm	Pl. height-72cm Eff.tiller-11 Panicle length-23.7cm	18500	37200	18700	2:1	16800	31500	14700	1.8:1
9	Mai ze	Crop production and management	2	32.6	28.75	13.4	34.5	30.7	No. of cobs/plant=2.5 No. of grains/cob=438.8 Yield (qt/ha)=32.6	No. of cobs/plant=2.3 No. of grains/cob=408.5 Yield (qt/ha)=28.8	20000	48900	28900	2.4:1	19000	43125	24125	2.27:1

10	M a i z e	Cere al p ro d u c t i o n	2	40.2	32.46	19.25	42.86	29.1	Cobs/p lant 2.25 No. of grains/ plant 478.6	Cobs/pl ant 2.75 No. of grains/p lant 396.5	23600	60300	36700	2.5: 1	24300	48690	24300	2:1
11	T a p i o c a	Tube r p ro d u c t i o n	2	342.3	292.1	17.2	348	335	-	-	47922	99267	51345	2.1: 1	43815	84709	40894	1.9:1
12	P e a	Seed p ro d u c t i o n	1	10.8	8.6	25.5	12.7	9	Pods/p l-34.2 Seeds/ pod- 7.6	Pods/pl - 25.8 Seeds/ pod-5.8	17880	34560	16680	1.9:	16400	27520	11120	1.6:1
13	Pea	IDM	2.	10.2	8.9	14.6%	11.5	9.7	<u>%tage. of affected Plants:</u> 30 DAS – 5% 45 DAT – 8.5% 60 DAT – 18%	<u>%tage. of affected Plants</u> 30 DAS - 9% 45 DAS -22% 60 DAS– 45%	18,270	31,780	13,510	1.74 :1	17,060	29,280	12,220	1.72:1
14	P a d d y	Biologic al control	2	28.8	27.1	6.27 %	30.1	26.7	<u>Infestat ion Percent age/hill :</u> 45 DAT – 2.9% 60DAT	<u>Infestati on Percenta ge/hill :</u> 45 DAT -6.8% 60 DAT -11.6% 75	25,130	45,750	20,620	1.82 :1	24,650	43,080	18,430	1.74:1

									-5.3%	DAT- 75DAT - 6.5%	12.2%																																																													
15	Chaff Cutter	Drudger y							<p>1. Distribution of fodder growers on the basis of knowledge on drudger reduction by using chaff cutter.</p> <table border="1"> <thead> <tr> <th>Aspects</th> <th>Frequency</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Effectiveness (Avg. quantity/hr)</td> <td></td> <td></td> </tr> <tr> <td>Low</td> <td>7</td> <td>70%</td> </tr> <tr> <td>Medium</td> <td>2</td> <td>20%</td> </tr> <tr> <td>High</td> <td>1</td> <td>10%</td> </tr> <tr> <td>Expenditure (/hour basis in Rs)</td> <td></td> <td></td> </tr> <tr> <td>Low</td> <td>6</td> <td>60%</td> </tr> <tr> <td>Medium</td> <td>2</td> <td>20%</td> </tr> <tr> <td>High</td> <td>2</td> <td>20%</td> </tr> <tr> <td>Farmers acceptance</td> <td></td> <td></td> </tr> <tr> <td>Low</td> <td>1</td> <td>10%</td> </tr> <tr> <td>Medium</td> <td>1</td> <td>10%</td> </tr> <tr> <td>High</td> <td>8</td> <td>80%</td> </tr> </tbody> </table> <p>2. Distribution of fodder growers on the basis of overall knowledge regarding chaff cutter.</p> <table border="1"> <thead> <tr> <th>Aspects</th> <th>Frequency</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Category</td> <td></td> <td></td> </tr> <tr> <td>Low</td> <td>6</td> <td>60%</td> </tr> <tr> <td>Medium</td> <td>2</td> <td>20%</td> </tr> <tr> <td>High</td> <td>2</td> <td>20%</td> </tr> </tbody> </table>										Aspects	Frequency	Percentage	Effectiveness (Avg. quantity/hr)			Low	7	70%	Medium	2	20%	High	1	10%	Expenditure (/hour basis in Rs)			Low	6	60%	Medium	2	20%	High	2	20%	Farmers acceptance			Low	1	10%	Medium	1	10%	High	8	80%	Aspects	Frequency	Percentage	Category			Low	6	60%	Medium	2	20%	High	2	20%
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*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

production																						
Bio-pesticides production																						
Bio-fertilizer production																						
Vermi-compost production																						
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Production of Fish feed																					
X Capacity Building and Group Dynamics																					
Leadership development	1		1						16		7		23		16		7		23		23
Group dynamics	1		1						13		12		25		13		12		25		25
Formation and Management of SHGs/farmer	4		4						51		43		94		51		43		94		94

club																						
Mobilization of social capital	1		1							14		12		26		14		12		26		26
Entrepreneurial development of farmers/youths																						
WTO and IPR issues																						
XI Agro-forestry																						
Production technologies																						
Nursery management																						
Integrated Farming Systems																						
TOTAL																						
(B) RURAL YOUTH																						
3.3.3. Achievements on Training Rural Youth in On Campus including Sponsored On Campus Training Programmes (*Sp. On means On Campus training programmes sponsored by external agencies)																						
Thematic area	No. of Courses/ Prog			Participants																		Grand Total (x + y)
	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)	Sp. On (y = b + d)	
Mushroom	1	-	1	-	-	-	-	-	-	2	-	16	-	37	-	21	-	16	-	37	-	37

efficient diet designing																					
Production and use of organic inputs																					
Gender mainstreaming through SHGs																					
TOTAL																					

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	Mushroom Production	Cultivation and Management of Oyster Mushroom	12.1.19	1	KVK conference hall	RY				21	16	37	21	16	37
Extension	Rural Crafts	Rural Crafts	22.01.19	1 day	KVK conference hall	RY				12	13	25	12	13	25
Plant Protection	Beekeeping	Skill Training of Rural Youth on Beekeeping	16-22.3.19	6	KVK, Yisemyong	RY	-	-	-	9	6	15	9	6	15

Horticulture	Post harvest management	Post harvest technology of flowers	18-20.04.19	3	KVK conference hall	RY				9	16	25	9	16	25
Plant breeding	Crop production	Improved cultivation practices of paddy	3-4.5.19	2	KVK, conference hall	PF				12	14	26	12	14	26
Extension	Leadership Development	Farm leadership- its importance and role in technology adoption and dissemination	8/5/19	1	KVV, conference hall	PF				11	13	24	11	13	24
Plant breeding	Value addition	Value addition in Vegetables	25-26.7.19	2	KVK conference hall	RY				5	19	24	5	19	24
Extension	Entrepreneurs development	Entrepreneurs development	5-6/8/19	2	KVK, Office	EP				7	7	14	7	7	14

Horticulture	Vegetable production	Production technology of off season vegetables	27.08.19	1	KVK conference hall	RY				8	17	25	8	17	25
Horticulture	Mulching	Mulching of vegetable crops	25.09.19	1	KVK conference hall	EP				10	11	21	10	11	21
Horticulture	Production of planting materials	Scientific production of planting materials	04.10.19	1	KVK conference hall	EP				9	14	23	9	14	23
Agronomy	Vermicomposting	Vermicomposting technique	18-23/9/19	6	KVK, conference hall	RY				14	1	15	14	1	15
Plant breeding	Seed conservation	Seed storage techniques	25.10.19	1	KVK conference hall	EP				8	6	14	8	6	14
Agronomy	Crop production	Cultivation of winter crops	15/11/19	1	KVK, conference	PF				11	14	25	11	14	25
Horticulture	Value addition	Value addition of fruits	27.11.19	3	KVK conference hall	RY				9	12	21	9	12	21

Extension	Marketing	Agri. Business opportunities for uplifting the socio-economic status of rural youth	06-12-19	1	KVK, conference hall	RY				12	10	22	12	10	22
Plant breeding	Soil conservation	Importance of soil health	9.12.19	1	KVK conference hall	RY				10	14	24	10	14	24
Horticulture	Value addition	Processing and value addition of fruits	18.12.19	3	KVK conference hall	PF				10	17	27	10	17	27

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 breeding	Seed production	Seed production in cucumber	11/01/19	1	Aliba	PF				10	14	24	10	14	24
Horticulture	Training and pruning	Training and pruning of orange	17/01/19	1	Yajang	PF				17	8	25	17	8	25

	ng	trees													
Plant Protection	IPM	Training on IPM modules against Insect pest in Potato	23.1.19	1	Longkong	PF	-	-	-	16	11	27	16	11	27
Extension	Program Planning	Program Planning	28.01.19	1 day	DAO's Office, Mkg	EP				8	8	16	8	8	16
Plant Protection	IPM	Vermi-technology for organic farming – a practical approach	9.2.19	1	Sungratsii	PF	-	-	-	24	9	31	24	9	31
Horticulture	Rejuvenation of old orchard	Rejuvenation of citrus orchard	15.02.19	1	DAO conference hall	EP				11	9	20	11	9	20
Plant Protection	IDM	Training on Disease management in Tomato	20.2.19	1	Kubza	PF	-	-	-	27	9	36	27	9	36
Horticulture	Production and Management technology	Package of practices of Arecanut	12/03/19	1	Longjang	PF				12	13	25	12	13	25

Agronomy	vermi production	Vermi composting	2 & 5 /04/19	2	Yisemyong	RY				12	8	20	12	8	20
Plant breeding	Cereals production	Improved cultivation on Maize	8.4.19	1	Kubza	PF				-	15	15	-	15	15
Agronomy	Pulse production	Pulses cultivation	18-04-19	1	Chami	PF				18	10	28	18	10	28
Extension	Programme Planning	Training on Programme planning in agriculture production	19.4.19	1	Chungtia	PF				13	12	25	13	12	25
Agronomy	Crop production	Paddy line sowing and cultivation practices	15-05-19	1	Chubayimkum	PF				17	5	22	17	5	22
Plant Protection	IPM	General information on Fall armyworm <i>Spodoptera frugiperda</i> (J.E. Smith)	15.5.19	1	District Agri Office, Mokokchung	EP	-	-	-	14	17	31	14	17	31
Plant Protection	IPM	Management of Insect Pests (Fall Armyworm) in Maize.	25.5.19	1	Longjang	PF	-	-	-	18	15	33	18	15	33
Plant	Pest	Management	28.5.1	1	Mokokchung	EP				10	15	25	10	15	25

breeding	man age ment	ent of Fall Army worm in Maize	9		ung										
Agronom y	Crop produ ction	Paddy line sowing and cultivation practices	7/6/19	1	Chami	PF				4	12	16	4	12	16
Plant breeding	INM	INM in lowland paddy	10- 11.6.1 9	2	Kinunger	PF				8	15	23	8	15	23
Plant breeding	Crop prod uctio n	Improved cultivatio n practices of paddy	12.6.1 9	1	Aliba	PF				7	12	19	7	12	19
Extensio n	Soci al Capit al	Mobilizat ion of social capital in villages	13- 14/6/1 9	2	Yimchalu	PF				14	12	26	14	12	26
Plant Protection	IPM	Managem ent of Insect Pests in Summer vegetables	15.06.1 9	1	Sungratsu	PF	-	-	-	16	12	28	16	12	28
Agronom y	Crop prod uctio n	Sequentia l cropping	3/07/1 9	1	Cuchuyi mpang	PF				4	13	17	4	13	17
Plant breeding	DFI	Sequentia l cropping	12.7.1 9	1	Yimchalu	PF				20	-	20	20	-	20
Plant	Biolo	Bio-	17.07.1	1	Aliba	PF	-	-	-	19	12	31	19	12	31

Protection	gical Management	intensive Integrated Pest Management in Paddy	9												
Plant Protection	Integrated Farming	Management of Insect vector in Citrus	24.07.19	1	Kupza	RY	-	-	-	13	9	22	13	9	22
Extension	Farmers club formation	Formation of Farmers' club and its operation	31/7/19	1	Kupza	PF				13	12	25	13	12	25
Agronomy	Pulse production	Cultivation of pulses	6/8/19	1	Yimchalu	PF				10	15	25	10	15	25
Plant Protection	Vermiculture	Vermitechnology for Organic Farming – a practical approach	10.08.19	1	Yisemyong	RY	-	-	-	15	12	27	15	12	27
Extension	Formation of SHGs	Common problems of SHGs members and their solution	23/8/19	1	Longjang	PY				11	10	21	11	10	21
Extension	Farm Leadership	Farm-leadership- its	10/9/19	1	Sungratsu	PF				16	7	23	16	7	23

	p	importance and role in adoption and dissemination													
Plant Protection	IPM	Management of Insect Pests in Potato	25.09.19	1	Longkong	PF	-	-	-	14	9	23	14	9	23
Agronomy	Crop production	Oilseed production	26/9/19	1	Kubza	PF				10	14	24	10	14	24
Extension	Formation of SHGs	Common problems of SHGs members and their solution	11/10/19	1	Akhoya	PF				14	10	24	14	10	24
Agronomy	Crop production	Winter crop cultivation	16/10/19	1	Longpha	PF				10	6	16	10	6	16
Agronomy	Crop production	Pulses cultivation	19/10/19	1	Khanimu	PF				13	10	23	13	10	23
Plant Protection	Beekeping	Apiary Management- a Practical Approach	24.10.19	1	Aliba	RY	-	-	-	12	7	19	12	7	19
Extension	Record keeping	Orientation	08-11-19	1	Ungma	PF				13	11	24	13	11	24

	ng	proper record keeping in SHGs													
Agronomy	Crop production	Cultivation of oilseed after paddy	11/11/19	1	Moalenden	PF				8	14	22	8	14	22
Plant Protection	IPM	Strategies for Successful Management of Rodents	23.11.19	1	Mokokchung	PF	-	-	-	15	11	26	15	11	26
Plant Protection	Biological Management	Training on Citrus decline and its management	04.12.19	1	Yimchalu	PF	-	-	-	19	8	27	19	8	27
Agronomy	Post harvest	Post harvest technology	10/12/19	1	Moalenden	PF				7	12	19	7	12	19

(D) Vocational training programmes for Rural Youth

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

*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	5-25/3/19	21	Agronomy	Agriculture	Vermi compost producer				5	13	18	5	13	18	ASCI	-
On	RY	16-21/03/19	6	Plant protection	Agriculture	Bee keeping				9	6	15	9	6	15	STRY	42,000
On	RY	13-18/3/19	6	Horticulture	Agriculture	Mushroom production techniques				-	15	15	-	15	15	STRY	42,000

On	RY	16-21/9/19	6	Horticulture	Agriculture	Mushroom production techniques				1	1	1	1	1	1	1	ST RY	42,000
On	RY	18-24/9/19	6	Agronomy	Agriculture	Vermi compost producer				1	1	1	1	1	1	1	ST RY	42,000
On	RY	16-21/3/19	6	Plant breeding	Agriculture	Vermicomposting				-	1	1	-	1	1	1	ST RY	42,000

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 (1)			SC/ST (2)			Extension Officials (3)			Grand Total (1+2)					
					M	F	T	M	F	T	M	F	T	M	F	T			
	Advisory services			44				125	88								125	88	213
	Diagnostic visit			66				110	100								110	100	210
	Field day			6				68	68								51	51	119
	Group Discussion			16				116	122								116	122	238
	KishanGosthi																		
	KishanMela																		
	Film show			4				73	73								49	49	122
	SHG formation																		
	Exhibition			3															
	Scientists visit to farmers fields			57				93	84								93	84	177
	Farmers visit to KVK			2				28	31								28	31	59
	Plant/ Animal Health camp																		
	Farm science club																		
	Self Help Group Conveners meetings			1				6	5								6	5	11
	Farmers seminar/ workshop																		
	Method demonstration			12				80	95								80	95	175

	Celebration of important days		2				43	36				43	36	79
	Exposure visits													
	Electronic media (CD/DVD)													
	Extension literature		1				60	50				60	50	110
	Newspaper coverage		4				-	-				-	-	-
	Popular articles													
	Radio talk		6				-	-				-	-	-
	TV talk													
	Training manual													
	Soil health camp		1				24	24				21	21	45
	Awareness campaign (Kharif & Rabi)													
	Lecture delivered as resource person		6				78	87				78	87	165
	PRA		1				20	0				20	0	20
	Farmer-Scientist interaction		1				12	10				12	10	22
	Soil test campaign													
	MahilaMandal Convener meet													
	Any other (Please specify)													
Grand Total														

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	2.5	2500	-	14	14

	Maize	RCM 76	0.5	1200		7	7
OILSEEDS							
	Toria	TS 36 &67	0.6	3500		8	8
PULSES							
VEGETABLES	Taro	Muktakeshi	0.3	750	-	5	5
TOTAL	Ginger	Naida	0.3	300	-	5	5

A1. SUMMARY of Production and supply of Seed Materials during 2019-20

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						
2	OILSEEDS						
3	PULSES						
4	VEGETABLES	0.25	76500		160	160	0.25
5	FLOWER CROPS						
6	OTHERS						
TOTAL							

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	Tejasveni	0.045	13500		21	21	VEGETABLES
	Tomato	Chiranjevi, Rocky	0.065	21000		42	42	
	Cabbage	BC 76, Rareball	0.04	12000		25	25	
	Broccoli	Green Magic	0.07	21000		50	50	
	Cauliflower	Cross Katika	0.03	9000		22	22	
TOTAL								

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								
2								

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				
	Impact of Front Line Demonstration (FLD) on the yield and Economics of Tomato. <i>Indian Journal of Agril Science.</i>	Renbomo Ngullie and Pijush Kanti Biswas		
2	Studies on the performance of different genotypes of cabbage grown in Mokokchung district. <i>Indian Journal of Agril Science</i>	Renbomo Ngullie and Pijush Kanti Biswas		
3	Analysis of role of performance of women in farm activities under KVK Mokokchung, Nagaland <i>URDO-Journal of Agriculture and Research</i>	Bendangjungla.I,Ruyosu Nakro, Pijush Kanti Biswas		
Training manuals	Vermicompost production	K. Samuel Sangtam, Bendangjungla, Pijush Kanti Biswas	50	
Leaflets/folders	Package and practice of groundnut cultivation Package and practice of Bitter gourd cultivation Honeybee production Package and practice of Chilli cultivation	KVK MOKOKCHUNG	200	

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

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

Success Story on Maize variety HQPM-7

HQPM-7 is a variety of Maize released in the year 2008 from CCSHAU. The average potential yield is 6-7t/ha and has true protein digestibility (%) 92. It is high seed germinability, seed size bold and maturity 88-95 days .

Frontline demonstration programme was taken up in two villages – Chungtia and Longkhum. Sowing of the crop was done from 3rd to 4th week of April . The performance of the crop was found to be very good. The local variety (*mendi*) goes to an average height of 300 cm but the number of grains borne is very less (251 nos). But in case of HQPM-7 it was observed that though the plant grew up to a maximum height of 252 cm, the grains were thickly borne on the cobs (447.4 nos). The local variety is of long duration (110-120 days) and so higher cost for production.

Maize is very popular crop in the district and has a good market demand and farmers fetches a good price since it matures earlier than the local variety. The produce can be easily sold. Maize is sold at Rs.70-100 per kg. The cost benefit ratio was worked out 2.7:1 for HQPM-7, 1.78:1 for local variety.



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: 14
- ii. No. of farm families selected:56
- iii. No. of survey/PRA conducted: 2

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 (2019-20):

Details	No. of Samples analyzed	No. of Farmers	No. of Villages	Amount (In Rupees) realized
Soil Samples	76	76	8	760
Water Samples				
Plant Samples				
Petiole Samples				
Total	76	76	8	760

- a. Details of Soil Health Cards (SHCs) :76
- b. No. of SHCs prepared: 76
- c. No. of farmers to whom SHCs were distributed:76
- d. Name of the Major and Minor nutrients analysed: NPK
- e. No. of villages covered: 8

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	43	2135	-	-	13	653	10	470	10	704	5	245	81	4207
Voice only														
Total	43	2135	-	-	13	653	10	470	10	704	5	245	81	4207

3.14 Contingency planning for

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	0.75		10	10

	Introduction of Resource Conservation Technologies				
	Distribution of seeds and planting materials	3		40	40
	Any other (Please specify)				
Long dry spell	Already sown crops				
	i. In-situ moisture conservation to safeguard the standing crop from moisture stress.	1.0		20	20
	ii. Mulching with crop residue or thin plastic sheets if the water stress continues.	1.5		20	20
	iii. Raising nursery of crops in which transplanting is easily possible for filling the gaps	0.2		10	10

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 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

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.)

5.3 Details of linkage with ATMA

a) Is ATMA implemented in your district: **Yes**

Sl. No.	Programme	Nature of linkage	Remarks
1.	Training, trial & Demonstration, Exhibition, Joint field visit	Resource person and programme Planning, implementation and monitoring	Actively participating in programme 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

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									

6.2 Performance of instructional farm (Crops) including seed production

Name of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty.	Cost of inputs	Gross income	
Cereals									
Rice									
Wheat									
Maize	4/3/19	30/7/19	0.0044	RCM-76, Sweet corn, Baby corn	Green cob	54 kg	2000	3200	
Any other									
Pulses									
Pea	4/10/19	17/1/20 – 10/2/20	0.0056	Aman, Azad	Pod	250 kg	-	-	-
Black gram									
Arhar									
Lentil									
Cowpea	12/3/19	4/6/19	0.0018	Fulgani Red	Pod	7.8 kg	-	-	-
Beans	12/3/19	4/6/19	0.0018	NSC French	pod	9.2 kg			
Oilseeds									
Mustard									
Soy bean	6/6/19	30/10/19	0.0084	JS-335,	Seed	9.5 kg	-	-	-

				RVS 2001-4					
Groundnut									
Any other									
Fibers									
Spices & Plantation crops									
Ginger	18/2/19	10/12/19	0.0024	Local	Rhizome	33 kg	-	-	-
Floriculture									
Fruits									
Pineapple	13/5/19	-	0.0040	Kew	-	-	-	-	-
Orange	15/5/19	-	0.0040	Khasi mandarin					
Vegetables									
Cabbage	16/9/19	14/1/20	0.00016	Rareball, BC 76	Head Head	29 kg			
Colocassia	22/2/19	13/4/20	0.0026	Muktakeshi	Tuber	-	-	-	
Cauliflower	17/9/19	20/12/19	0.00012	Cashmere, Cross Katika	Flower	10.5 kg	-	-	
Tomato	19/2/19	20/5/19	0.0010	Rocky	Fruit	7.3 kg	-	-	-
Coriender	17/9/19	25/11/19	0.0003	Bliss	leaf	-	-	-	-
Carrot	22/4/19	25/6/19	0.0009	Kuroda power	Tuber	27kg	-	-	-
Broccoli	17/9/19	20/12/19	0.0012	Green magic	Flower	12 kg	-	-	-
Chilli	12/2/19	24/6/19	0.0008	Tejaswani	Fruit	4.5kg	-	-	
Bitter groud	22/4/19	July – august	0.0024	Anushka	Fruit	7kg	-	-	-
Potato	14/10/19	7/2/20	0.0026	Kurfi jyoti	Tuber	42kg	-	-	-
a. Others (specify)									

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					

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	

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 as on 31 st March, 2018
	Amount	Amount	Amount	Amount	
Inputs					
Extension activities					
TA/DA/POL etc.					
TOTAL					

7.3 Utilization of KVK funds during the year

S. No.	Particulars	Sanctioned (in Lakh)	Released (in Lakh)	Expenditure (in Lakh)
A. Recurring Contingencies				
1	Pay & Allowances			
2	Traveling allowances			
3	Contingencies			
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 equipment			
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			
4	HRD			

TOTAL (A)			
B. Non-Recurring Contingencies			
1	Works		
2	Equipments including SWTL & Furniture		
3	Vehicle (Four wheeler, please specify)		
4	Library (Purchase of assets like books & journals)		
TOTAL (B)			
C. REVOLVING FUND			
GRAND TOTAL (A+B+C)			

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

Year	Opening balance as on 1 st April	Income during the year	Expenditure during the year	Net balance with KVK (in lakh)
April 2017 to March 2018	0.39160	0.10200	0.10000	0.39360
April 2018 to March 2019	0.39360	0.48150	0.8200	0.79310
April 2019 to March 2020	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

SR. SCIENTIST & HEAD
KVK Mokokchung