

PROFORMA FOR ANNUAL REPORT 2019.OF KVKS

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	
Krishi Vigyan Kendra, near Rice Research, Khangabok, Thoubal- 795138	-	-	kvkthoubal@gmail.com

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

Address	Telephone		E mail
	Office	FAX	
Department of Agriculture, Government of Manipur, Sanjenthong Imphal- 795001	-	-	amdmn@nic.in

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

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr.S.Zeshmarani	-	8415902143	zeshma.sarangthem@gmail.com

1.4. Year of sanction: 16th Nov.,2005

1.5. Staff Position as on 31st December, 2019

Sl. No.	Sanctioned post	Name of the incumbent	Designation	Discipline	Pay Scale (Rs.)	Present basic (Rs.)	Date of joining	Permanent /Temporary	Category (SC/ST/ OBC/ Others)
1	Sr. Scientist & Head	Dr.S.Zeshmarani	Senior Scientist & Head	Animal Science	37400-67000	139400	28-02-18	Permanent	Gen
2	Subject Matter Specialist	Kh.Premlata Devi	SMS (Horticulture)	Horticulture	15600-39100	83600	12-04-07	-do-	SC

3	Subject Matter Specialist	N.Tomba Singh	SMS (Agronomy)	Agronomy	15600-39100	83600	25-07-07	Permanent	Gen
4	Subject Matter Specialist	Dr.M.Thoithoi Singh	SMS (Plant protection)	Plant protection	15600-39100	83600	25-07-07	-do-	-do-
5	Subject Matter Specialist	S.Sumangal Singh	SMS (Plant Breeding & Genetics)	PBG	15600-39100	83600	25-07-07	-do-	-do-
6	Subject Matter Specialist	R.K.Lembisana Devi	SMS (Home Sc.)	Home Science	15600-39100	61300	26-12-16	-do-	-do-
7	Subject Matter Specialist	Sribidya Waikhom	SMS(Fishery)	Fishery	15600-39100	56100	24-07-19	-do-	OBC
8	Programme Assistant (Computer)	L.Babita Devi	Prog. Asst. (Computer)	Computer	15600-39100	59500	12-04-07	-do-	Gen
9	Programme Assistant (Agri. Extension)	Salam Prabin Singh	Prog. Asst. (Ext. Edu. Agri. & Allied)	Agriculture Extension	9300-34800	35400	24-07-19	-do-	OBC
10	Farm Manager	Dr.W.Jiten Singh	Farm Manager	Agronomy	15600-39100	59500	12-04-07	-do-	OBC
11	Accountant / Superintendent	O.Shilhenba Singh	Accountant	-	9300-34800	38700	05-10-16	-do-	Gen
12	Stenographer	M.Geeta Devi	Jr. Steno cum Computer operator	-	5200-20,200	39200	12-04-07	-do-	-do-
13	Driver	M.Hemanta Singh	Driver cum Mechanic	-	5200	31900	12-04-07	-do	-do-
14	Driver	Th.Tiken Singh	-do-	-	5200	31900	03-05-07	-do	-do-
15	Supporting staff	E.Dhabali Singh	Peon cum Chowkidar	-	5200	23800	12-04-07	-do-	-do-

16	Supporting staff	Mangminthang Zou	-do-	-	5200	23800	12-04-07	-do-	ST
	Total	16	-	-	-	-	-	-	-

- 1.6. a. Total land with KVK (in ha) : 10 ha
b. Total cultivable land with KVK (in ha): 7.5 ha
c. Total cultivated land (in ha): 5 ha

S. No.	Item	Area (ha)
1	Under Buildings (Administrative building+ Farmers' Hostel+ Staff Quarters)	1
2	Under Demonstration Units (pl. specify the name)	
	i. Animal Sc. Demo Unit (Piggery, Poultry, Dairy)	1. 1.5
	ii. Fish pond & integrated poultry fish unit	2. 1.5
	iii. Vermiculture	3. 0.1
	iv. Green house & shade net	4. 0.2
3	Under Crops (Cereals, pulses, oilseeds etc.) (Pl. specify separately)	
	i. Paddy	1. 3.5
	ii. Pea, Lentil, Chickpea	2. 0.4
	iii. Rape seed and Mustard	3. 0.75
	iv. Potato, Groundnut	4. 0.3, 0.1
4	Under vegetables (Pl. specify separately)	

	<ol style="list-style-type: none"> 1. Chilli 2. King Chilly 3. Brinjal 4. French bean 5. Cabbage 6. Broccoli 7. Cauliflower 8. Tomato 	0.40
5	Orchard/Agro-forestry	0.50
6	Others (specify)) Farm road, approach road, Wall fencing	0.70

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	2016	550(Ground floor)	76,33,000	Dec,2007	550(1 st floor)	completed
2.	Farmers Hostel	-	-	-	-	-	-	-
3.	Staff Quarters (5)	-do-	31-3-12	-	67.90	2-1-12	-	Completed
4	Demonstration Units (2)	-do-	31-3-12	-	20.07	2-1-12	-	Completed
5	Fencing	-do-	31-3-12	215m	19.75	2-1-12	-	Completed
6	Seed processing Unit	ICAR	15/02/2018	216	49.97407	-	-	Completed

B) Vehicles

Type of vehicle	Regd. No.	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Bolero, Diesel jeep	MNO1K-8510	2006-07	5,08,657	259603	Bad (Process for condemnation)
Tractor, complete set	MN01A-0765	2006-07	4,35,543	1933	Good

C) Equipments & AV Aids

Name of the equipments	Year of purchase	Cost (Rs.)	Present status
Computer with accessories (2nos.)	March 2010	75,000	Good
Digital Camera	March,2010	20,000	Not in working condition
LCD projector	March,2010	1,00,000	Not working
Portable carp hatchery	March,2010	2,25,000	Good
Computer with accessories (8nos.)	March,2016	2,00,000	Good
LCD Projector	March,2016	50,000	Good
Computer with accessories(1 no)	March,2019	32,000	Good
Digital Camera	December,2019	35,000	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
20-2-2020	Ms. Laltanpuii Vanchhong, IAS, Director of Agriculture, Manipur	-	<ul style="list-style-type: none"> ➤ OFT under PP, technology was checked in accordance with the problem. ➤ FLD under PBG on rice seed production, seed rate @ 50kg should be rechecked and reduced. It was checked and demonstrated using 45 kg/ha. ➤ FLD under PBG on Mustard, source of technology has been verified and corrected. ➤ FLD under Home Science on Jackfruit chips, source of technology has been verified and corrected. ➤ Under Farm production, on production of Bio-Products, <i>Eisenia foetida</i> has been included in the vermicompost production. ➤ Regarding non existence of Farmers' hostel Dr.A.K Singha, Principal Scientist, ATARI suggested to submit a proposal to ATARI for their consideration. In the mean time, Chairman of the SAC also placed before the committee that he would examine if the Farmers' Hostel could be sanctioned under RKVY Scheme. It was not realized. ➤ It was recommended to fill up the vacant posts of SMS as Fishery since Thoubal ranks second position in Fish production. However, the post of Program Assistant may be filled by an Extension (Agri. & Allied disciplines). SMS has been filled up from the discipline Fishery and Program Asst. from Agri. Extension. <ul style="list-style-type: none"> ➤ For Plant protection, Dr. A.K Singha
	Dr. I. Meghachandra Singh, Joint Director, ICAR, Manipur Centre	It was suggested that while mentioning the seed rate for a variety and the method of cultivation of rice, it should be clearly explained under what condition the seed rate is taken as 45kg/ha. Regarding FLD on modified SRI on rice, it was suggested to mention the name of the var. and details of technology adopted. Recommendations were made to carry out the Impact Assessment on the programmes taken up by KVK Thoubal. Further it was said that source of technology is not applicable in case of Agri. Extension OFTs, instead the details of methodology to be followed should be mentioned with sample size not less than 120.	
	Dr. Dipak Nath, Deputy Director (Extn. Edn.) CAU, Imphal	-	
	A.K.Mukherjee, AGM, NABARD Manipur	-	
	Ak.Chittaranjan Singh, AO(HQ) Dept. of Agriculture, Manipur	It was suggested that Seed Hub programme on pulses, suggestions were made for continuation of pea seed production for which breeder seed could be obtained from ICAR	

	Manipur Centre, if proposed timely. It was also suggested that a MoU should be signed between the pea growers and the institution regarding selling of pea as green pod and dry seed in the ratio 50:50 in order to sustain the production of pea seed.	
Kh.Ngamluishang, Rice Breeder RRS, Wangbal	-	
N. Joykumar Singh, DAO, Thoubal	-	
Ksh. Nabakishwar Singh, D.O (H& SC), Thoubal	-	
AK. Rocket Singh, DSO, Thoubal	-	
Dr.Mohd. Fajur Rahman, D.V.O,Thoubal	-	
Khaidem Mohendra Singh, Project Coordinator, MSFAC	-	
Th. Joyprakash Singh, Nodal Officer, ATMA	-	
Dr. Deepak Singh, Sr. Scientist and Head, KVK, Chandel	-	
Dr. R.K.Imotomba Singh, Principal Scientist and Head, KVK, Bishnupur	It was suggested to specify the conditions used for priming of Lentil seed for OFT on Seed priming of Lentil. Regarding OFT on Osmotic dehydration of Pineapple, it was recommended that it can go for direct FLD as the technology is already proven. Suggestions were made to change the FLD on Popularization	<p>suggested to check the severity % of wilting in tomato as the gap between lowest and highest is too high. It was checked and necessary action has been taken care of.</p> <ul style="list-style-type: none"> ➤ For Home science in chow chow Bori, Dr.I.Meghachandra and Dr. R.K Imotomba suggested to include parameters like keeping quality and make comparison of price keeping it lower in case of chow chow Bori to make it preferred by the public. Based on the suggestion Study on consumers' acceptability was carried out. Price was lowered but still B:C was high. ➤ Regarding the Jackfruit chip, Dr.S.Basanta Singh, Director of Instruction, CAU Imphal suggested that the source of technology may be confirmed. Further Dr. I.M Singh suggested to check the variety for Chip making, whether the same is grown in Manipur or not. The source of technology was confirmed. It was found that variety found in Manipur is good for chips. ➤ For SMS Plant protection, Dr, R.K Imotornba suggested to include various parameter for incidence of pest and disease in a report table format. And Dr.S.Basanta also suggested for taking up some new var. of sugarcane' it was done. ➤ For SMS Agronomy, as suggested package of practices and name of the variety has been included. ➤ Regarding PBG, it was suggested by Dr. I Meghachandra Singh and Dr.R.K Imotomba Singh that the check var. for OFT on WR-15-6-1 may be replaced with RC Maniphou-12 instead of Norin-18. It has been replaced.

		Beehive Briquette Mould with some other proven technology.	
	M.Kunjo Singh, Farmer Representative	-	
	Y. Megha Singh, Farmer Representative	-	
	M. Ibechaobi Leima, Farmer Representative	-	
	L.Bimola Devi, Farmer Representative	-	
	Ph.Thoiba Singh, Farmer	-	
	AK. Deben Singh, Farmer	-	
	S. Lukhoi Singh, Farmer	-	
	Kh. Memcha Devi, Farmer	-	
	Th. Romola Devi, Farmer	-	

** Attached 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
2.	Agriculture-Horticulture
3.	Agriculture-Horticulture-Livestock
4.	Agriculture-Horticulture-Fishery
5.	Agriculture-Livestock-Fishery
6.	Agriculture-Fishery
7.	Fishery
8.	Animal Husbandry

9	Agriculture-Livestock
10	Horticulture-fishery
11	Horticulture-Livestock-Fishery

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

Sl. No	Agro-climatic Zone	Characteristics
1.	Sub tropical plain zone	The agro-climatic zone of the Thoubal dist. May be characterized by diverse soil type ranging from clay, clay loam, silty loam to peat and muck soil, high rainfall and high RH with distinct temperature variation between summer and winter, wide cultural diversity with different cropping pattern from fruits (pine apple, banana, mango), Vegetables (cauliflower, cabbage, brinjal, tomato), paddy, pulses and oil seeds, fish and farm animals. The district has the following topographical structures:- upland, medium land and low land and shallow lakes.

2.3 Soil type/s

S. No	Soil type	Characteristics	Area in ha
1	Fine, Umbric Dystrochrepts Fine, Typic Haplo humults.	Deep, excessively drained fine soils moderately steep side slopes of hills having clayey surface with moderate erosion, associated with deep well drained fine soils on moderately sloping side slopes of hills with moderate erosion and slight stoniness.	3470
2.	Fine Typic, Haplo humults Fine, Loamy Umbric Dystrochrepts	Deep, well drained, fine soils on moderately sloping side slopes of hills having loamy surface with moderate erosion, associated with moderately deep, excessively drained fine loamy soils on moderately steep side slopes of hills with moderate erosion and slight stoniness.	14,320
3.	Fine, Typic Haplaquepts Fine Ruptic Ultic Dystrochrepts	Deep, poorly drained, fine soils on nearly level valleys having clayey surface with very slight erosion, ground water table between one to two meters of the surface and slight flooding, associated with deep well drained fine soils on gently sloping side slopes of hills with slight erosion.	6340
4.	Very fine, molic haplaquepts	Deep, very poorly drained, very fine soils on nearly valleys having clayey surface with very slight erosion ground water level between one meter of the surface and severe flooding associated with deep, poorly drained fine soils on very gently sloping valleys with slight erosion ground water table between one to two meters of the surface and slight flooding.	22,320
5.	Fine, Typic Hapludalfs, Fine Silty Typic Haplumbrepts	Deep, somewhat excessively drained, fine soils on sloping side slopes of hillocks having clayey surface with moderate to severe erosion associated with well drained fine silty soils on moderately sloping side slopes of hillocks with moderate erosion.	4540
		Total	50990

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

S. No	Crop	Area (ha)	Production (Qtl)	Productivity (Qtl /ha)
1.	Paddy			
	i) Pre kharif	6285	2, 38, 830	38.00
	ii) Kharif	2880	1, 07, 100	45.00
	iii) Improved	10,645	2, 66, 125	25.00
	iv) Local paddy	1227	19,600	16.00
2.	Maize	322	8372	26
3.	Kharif pulses	150	615	4.1
4.	Kharif oilseeds	136	979.2	7.2
5.	Sugarcane	724	1, 08, 600	1,50, 000
6.	Rabi pulses	1325	8,612.5	6.5
7.	Rabi oilseeds	1550	12,090	7.8
8.	Potato	735	66,150	90
9.	Cole crops	2100	2,37, 300	113
10.	Chilli	250	1875	7.5
11.	Pineapple	2,500	2,055,000	822
12.	Wheat	45	945	21

2.5. Weather data (January 2019- December 2019)

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)
		Maximum	Minimum	
January	3.4	23.7	4.6	64.2
February	20.3	24.7	7.7	64.4
March	36.0	26.6	11.2	62.25
April	77.6	29.4	15.3	66.0
May	87.1	29.9	19.5	67.9
June	181.4	30.7	21.7	76.8
July	202.6	29.7	22.4	80.1
August	62.9	30.7	22.5	77.3
September	253.7	29.5	21.6	79.3
October	159.8	28.4	19.3	80.5
November	38.7	26.3	13.5	74.9
December	13.6	22.5	6.4	69.5

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

Category	Population	Production	Productivity
Cattle			
<i>Crossbred</i>	18790	526120 lt	28 lt/day
<i>Indigenous</i>	40927	163708 lt	4 lt/day
Buffalo	3554	11373 lt	3.2 lt/day
Sheep			
<i>Crossbred</i>	333	3996 kg	12 kg/sheep
<i>Indigenous</i>	5964	65604kg	11 kg/sheep
Goats	20091	160.7 tonnes	8 kg/goat
Pigs			
<i>Crossbred</i>	52741	4113.79 tonnes	78 kg/pig
<i>Indigenous</i>	68027	3537.40 tonnes	78 kg/pig
Rabbits	1180	3209 kg	2.72 kg/rabbit
Poultry			
Hens	159168	274.56 lakh egg	-
<i>Desi</i>	119376	191 lakh egg	160 egg/year/hen
<i>Improved</i>	39792	83.56 lakh egg	210 egg/year/hen
Ducks	69797	90.7 tonnes	1.3 kg/duck
Turkey and others	11312	-	-

2.6 Details of Operational area / Villages

SI.No.	Taluk/ Eleka	Name of the block	Name of the village	Major crops & enterprise	Major problem identified	Identified Thrust Areas
1.		Thoubal	Athokpam	Paddy	Lack of suitable cultivation practice, fertilizer use and pest management	ICM, SRI, Hybrid Rice, INM, Balanced Fertilizer and IPM
				Fishery	Lack of knowledge of scientific fish farming	Composite fish culture, Nursery rearing
				Cattle	Lack of knowledge of scientific farming, breed & feeding	Improved breeds, Fodder cultivation, vaccination
2		Thoubal	Bengi	Paddy	Lack of suitable cultivation practice, fertilizer use and pest management	ICM, SRI, Hybrid Rice, INM, Balanced Fertilizer and IPM
				Goat farming	No vaccination, castration and improper feeding and housing	Goat farming with less input and vaccination
3.		Thoubal	Salungpham	Paddy	Varietal admixture, improper cultivation methods	ICM, SRI, Hybrid Rice, INM, Balanced Fertilizer and IPM
				Horticulture (Green chilli)	Lack of knowledge of summer vegetable varieties and pest management	Summer vegetable, Corm Cultivation and IPM
				Pig farming	No, vaccination, improper feeding and breed	Vaccination, Castration and Housing

4			Hijam khunou	Paddy	Varietal Admixture, improper cultivation technique and pest management	ICM, SRI, Hybrid Rice, INM, Balanced Fertilizer and IPM
				Oilseeds & Pulses	Limited area under oilseed and pulses	Pulses and oilseed cultivation
				Poultry Farming	Lack of scientific knowledge of poultry farming	Broiler farming, vaccination
				Piggery	No vaccination, castration and improper housing	Pig rearing, vaccination
5.			Tekcham	Paddy	Lack of suitable cultivation practice ,fertilizer use & pest mgmt.	ICM, IPM, INM, Hybrid Rice
				Fishery	Lack of knowledge of Scientific fish farming	Composite Fish culture
6.			Tentha	Paddy	Lack of deep water rice varieties, nutrient & pest mgmt	Deep water rice var. , nutrient & pest mgmt.
				Fishery	Lack of scientific fish culture	Composite fish culture, integrated fish farming
				Gorgun nut	Phytopthora blights on lean and weevil infestation	IPM
7			Langathel	Cole crops, cucurbits	Selection of variety & injudicious use of fertilizer, pesticides. Lack of cultivation techniques	IPM, INM, Varietal demonstration and new cultivation techniques
				Paddy	Lack of suitable cultivation techniques	SRI, Hybrid rice cultivation,ICM
8.			Heiropk	Cabbage, onion, broadbean	Lack of suitable varieties & its cultivation techniques	Varietal demonstration and new cultivation techniques

				Paddy	Lack of suitable cultivation techniques	SRI, Hybrid rice cultivation, ICM
				Oilseeds & pulses	Lack of knowledge of oilseed & pulses cultivation	Scientific pulse & Oilseed cultivation
				Cattle	Lack of knowledge of scientific farming, breed & feeding	Improved breeds, Fodder cultivation, vaccination
9.			Ukhongsang	Paddy	Injudicious use of fertilizer, pesticides & lack of proper cultivation method	SRI, INM, intercropping of paddy with pulses & oilseed crops
				Fishery	Lack of Scientific fish culture	Composite fish culture, integrated fish farming
				Piggery	No vaccination & castration	Vaccination & castration
				Poultry	Problems in feeding readymade feeds	Feeding mgmt. with locally available feeds
				Oilseeds & pulses	Lack of knowledge of oilseed & pulses cultivation	Scientific pulse & Oilseed cultivation
10.			Lourembam	Pig farming	Lack of good quality feed	Feeding management using indigenous micro organism
				Vegetable crops	Lack of knowledge of nutrient management eg. Crops & its cultivation techniques	INM, cropping system
				Potato	Improper variety & lack of nutrient & pest mgmt	IPM, INM, Kufri chipsona variety
				Paddy	Varietal admixture, improper cultivation methods	ICM, SRI, Hybrid Rice INM, balanced Fertilizer & IPM
				Poultry	Problems in feeding readymade feeds	Feeding mgmt. with locally available feeds

11.			Wanging	Paddy	Injudicious use of fertilizers, Pest and diseases problem, Varietal admixture, failure of crop due to error in planting season	Integrated pest management, Integrated nutrient management, Balance fertilization, Seed prodn. Of paddy.
				Poultry farming	Problems in feeding readymade feeds.	Feeding management with locally available feeds.
				Horticulture (Green chilli)	Die Back, fruit rot.	Integrated pest management.
12.			Nongpok Sekmai	Paddy	Injudicious fertilizers used, lack of suitable cultivation technique	ICM, SRI, Hybrid Rice, INM, Balanced Fertilizer and IPM
				Oilseed & pulses	Not grown	Pulses & oilseed cultivation
				Piggery	No vaccination & castration	Vaccination & castration
13.		Kakching	Thongjao	Paddy	Injudicious use of fertilizers, Pest and diseases problem, Varietal admixture, failure of crop due to error in planting season	Integrated pest management, Integrated nutrient management, Balance fertilization, Seed prodn. Of paddy, varietal trails.
				Fishery	Lack of Knowledge of Disease management	Fish Health management.
				Pig farming	Reduce body weight, preweaning mortality.	Piggery management.
14.			Umathel	Paddy	Injudicious use of fertilizer,pesticides & lack of proper cultivation method	SRI,INM,Intercropping of paddy with pulses & oilseed crops
				Oilseeds & pulses	Lack of knowledge of oilseed & pulses cultivation	Scientific pulse & oilseed cultivation

15.			Waikhong	Paddy	Injudicious use of fertilizer,pesticides & lack of proper cultivation method	SRI,INM,Intercropping of paddy with pulses & oilseed crops
				Pig farming	No vaccination & castration	Vaccination & castration
16.			Serou	Maize	Lack of suitable maize varieties & its cultivation technique	Proper composite & hybrid varieties,intercropping of maize with pulses & oilseeds
				Oilseeds & pulses	Lack of knowledge of oilseed & pulses cultivation	Scientific pulse & oilseed cultivation
17.			Wangoo	Paddy	Injudicious use of fertilizer,pesticides & lack of proper cultivation method	SRI,INM,Intercropping of paddy with pulses & oilseed crops
				Fishery	Lack of scientific fish culture	Composite fish culture
18.			Wabagai	Paddy	Lack of suitable cultivation technique	ICM,SRI,hybrid rice cultivation
				Horticulture (Chilli, cole crops)	Lack of relay cropping & pest management	Relay cropping with beans and cucurbits,IPM
				Fishery	Lack of scientific fish culture	Composite fish culture, integrated fish farming
				Potato	Improper variety & lack of nutrient & pest management	Kufri varieties, IPM,INM
				Tomato	Improper variety & lack of nutrient & pest management	IPM, INM, Hybrid varieties

Extn. Functionaries								
Seed Production (ton.)				Planting material (Nos. in lakh)				
5				6				
Target		Achievement		Target		Achievement		
11.20		8.8		25,000		1,22,715		

Note: Target set during last Annual Zonal Workshop

7 B. Abstract of interventions undertaken during 2019

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	Weed management	Maize Var.Vijay Composite	Heavy weed infestation and high cost of hand weeding	IWM in Spring Maize	-	IWM in Spring Maize	Maize seed production	Field visits	Seed, FYM, weedicide
2	Pulse production	Lentil Var. HUL-57	No foliar (urea) application is done in lentil cultivation, only basal application could not meet the required nutrition	Foliar nutrition of lentil using 2% urea	-	Foliar nutrition of lentil using 2% urea	Pulse production	Field visits	Seed, Fertilizer

3	Oilseed Production	Mustard Var. NRCHB-101	Low yield practices done by farmers under zero tillage	Nutrient management in rapeseed mustard var. NRCHB-101	-	Nutrient management in rapeseed mustard var. NRCHB-101	Oil Seed Production	Field visits	Seed, Fertilizer
4	Rice seed production	Rice Var. WR-15-6-1	Timely sowing of winter crops not possible due to long duration rice varieties	Cultivation of rice Var. WR-15-6-1 (First year)	-	Cultivation of rice Var. WR-15-6-1	Rice seed production	Field visits	Seed, FYM, pesticide
5	Seed production	Rice	Lodging and yield reduction (assessed in 2018-19 without any fertilizer). The plant lodged.	Performance evaluation of rice var. CAUR-4 in semi deep water area under direct seeded wet sown condition(2 nd year)	-	Performance evaluation of rice var. CAUR-4 in semi deep water area under direct seeded wet sown condition	Seed production	Field visits	Seed, FYM, pesticide
6	IPM in rice	Rice	Higher rate of incidence of Stem borer and plant Hopper in rice field	Insect pest management of stem borers & plant hoppers (First year)	-	Insect pest management of stem borers & plant hoppers	IPM in rice	Field visit	Seed, Pesticide
7	IPM in cowpea	Cowpea	Higher rate of incidence of fruit borer Aphid infested shoot, semi loopers	Insect pest management of fruit borer & Aphid	-	Insect pest management of fruit borer & Aphid	IPM in cowpea	Field visit	Seed, pesticide

8	Value addition	Chow chow bori	Wastage of chow chow in peak season	Production of Chow Chow Bori	-	Production of Chow Chow Bori	Value addition	Field visit	Chow chow, black gram
9	Value addition	Amla	Due to perishable nature, Amla is difficult to store	Osmotic Dehydration of Amla	-	Osmotic Dehydration of Amla	Value addition	Field visit	Amla, Sugar
10.	IFS	Paddy cum fish	Less income from single enterprise	Integrated paddy cum fish culture	-	Integrated paddy cum fish culture	Integrated paddy cum fish culture	Field Visits	Fish seed
11	Breed evaluation	Colour Broiler birds	Less income from white broiler birds	Introduction of colour broiler birds	-	Introduction of colour broiler birds	Introduction of colour broiler birds		Colour broiler birds

3.1 Achievements on technologies assessed and refined during 2019

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

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Varietal Evaluation										
Seed / Plant production	CAUR-4, WR-15-6-1									2
Weed Management	Maize Var.Vijay Composite (oxyfuorfen)									1
Integrated Crop Management			Lentil							1

Management										
Resource conservation technology										
Small Scale income generating enterprises										
TOTAL										

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

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

Thematic areas	Cattle	Poultry	Sheep	Goat	Piggery	Rabbitery	Fisheries	TOTAL
Evaluation of Breeds		1						1
Nutrition Management								
Disease of Management								
Value Addition								
Production and Management								
Feed and Fodder								
Small Scale income generating enterprises								
TOTAL								1

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

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	Maize Var. Vijay Composite	Heavy weed infestation and high cost of hand weeding	Integrated Weed Management in Spring Maize	Maize	3	Technology: Weed count/sq.m -25 Plant ht.(cm) -264 Nos. of grain/cob-712 Yield(q) -2.83 B.C ratio-2.69 Farmers practices: Weed count/sq.m -102 Plant ht.(cm) -248 Nos. of grain/cob-645 Yield(q) -2.31 B.C ratio-2.04	Appreciated	Appreciated	2.69 2.04
2	Lentil Var. HUL-57	Fertilizer application as basal and top dressing in soil could not increase additional yield of lentil	Performance Evaluation of Spraying of urea 1% at flowering and pod formation stage of lentil	Lentil	5	-	-	-	-
3	Mustard Var. NRCHB-101	Fertilizer application in soil only could not increase additional yield of mustard	Performance Evaluation of Spraying of urea 1% at flowering and pod formation stage of mustard	Mustard	5	-	-	-	-
4	Rice Var. Wr-15-6-1	Timely sowing of winter crops not possible due to long duration rice	Cultivation of rice Var. WR-15-6-1 (First year)	Rice	5	Technology: Duration(days)-125 Plant Height (cm) -95 Tiller no.-5	Appreciated	Appreciated	1.87

						<p>B:C ratio-1.98</p> <p>Farmers practices: 30DA treatment- Stem borer-12 Hopper-7 60 DAT- Stem borer-13, Hopper-8 Production (qt/ha)- 55 Net return-67,500 B:C ratio-1.96</p>			1.96
7	Cow pea	Leaf curl	Insect pest management of fruit borer & Aphid	Cowpea	5	<p>Technology: % of infestation level 10 DAT- Pod borer-3, Aphid infested shoot-7 , semilooper- 4 % infestation level 40 days after 1st spray or 10 days after 2nd spray – Pod borer-1.1, Aphid infested shoot-2.3, semi looper-0 Yield(q/ha)-26 Net return(Rs./ha) -2,08,000 BC ratio: 3.7</p> <p>Farmers practice: % of infestation level 10 DAT- Pod borer-21, aphid infested-11, semilooper-5</p> <p>% infestation level 40 days after 1st spray or 10 days after 2nd spray- Pod borer-10, Aphid infested shoot-27, semi looper-2.3 Yield(q/ha) -24.2 Net return(Rs./ha) -193600 BC ratio: 3.53</p>	Appreciated	Appreciated	3.7
8	Chow-Chow Bori	High Cost of production for Blackgram bori	Production of Chow Chow Bori	Chow chow bori	5	<p>Technology: Product recovery/kg- 370 Cost/unit(10kg)-Rs.845</p>	Appreciated	Appreciated	2.1

						Net return/unit- 1005 B:C ratio-2.1 Farmers practice: Product recovery/kg- 350 Cost/unit(10kg)-Rs.1225 Net return/unit- 875 B:C ratio-1.7			1.7
9	Amla	Due to perishable nature, Amla is difficult to store	Osmotic Dehydration of Amla	Amla	5	Technology: Product recovery/kg- 700g/kg Rs.3150 @ 350/kg (for 10.5kg) Net return/unit- 2080 B:C ratio-2.9 Farmers practice: Product recovery/kg- 600g/kg Rs.2700 @350/kg (for 9kg) Net return/unit- 1487 B:C ratio-2.2	Appreciated	Appreciated	2.9 2.2

**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 2019

a. Follow-up for results of FLDs implemented during previous years 2019

List of technologies demonstrated during previous years and popularized during 2019 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	Rice Var. Tamphaphou	Modified SRI 1. Seed rate:-7-10 kg/ha 2. Organic manure:10t/ha 3. NPK: 50% of recommended dose 4. Seedling age :18-20 days 5. No. of seedling/hill:1 6. Irrigation:imtermittent wetting & drying 7. Weed mgmt.: Cono + HW 2times at 10 days interval	5	5	1.25
2	Rice Var.RC Maniphou 13	Seed Production of rice 1. Seed rate: 45 kg/ha 2. N:P:K :60:40:30(N in three splits,K in two splits) 3. Rogueing as per need 4. PP : Seed treatment , as and when needed 5. Spacing:20cm x 15 cm 6. Weed control: 1 pre emergence weedicide & 1 HW	3	10	5
3	Rice Var.RC Maniphou 12	Seed Production of rice 1. Seed rate: 45 kg/ha 2. N:P:K :60:40:30(N in three splits,K in two splits) 3. Rogueing as per need 4. PP : Seed treatment , as and when needed 5. Spacing:20cm x 15 cm 6. Weed control: 1 pre emergence & 1 HW	3	10	3
4	Mustard Var. DRMR-150-35	Zero tillage mustard cultivation Seed rate-15-20kg/ha Fertilizer:Urea-80 kg/ha, SSP-250 kg/ha, MOP-40 kg/ha	3	10	2.5
5	Chilli	Management of Thrips and Fruit Borer of chilli with Spinetroram 12%SC 60gm ai/ha.Three sprays at 15 days interval	8	8	2
6	Tomato	Mgmt. of Fusarium wilt in Tomato caused by F.Oxysporium by spraying Tebuconazole 250 EC(Folicur)@400ml/ha	9	9	2.25
7	Jackfruit	Popularization of Jackfruit chips Blanching in warm water with 1% KMS for 1 min-deep fried in cooking oil	8	8	8 units
8	Ring cutter for bhindi	Ring cutter for bhindi –Length(mm)-140, Width(mm)-95, Wt(kg)-0.15	8	8	8units

- 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	Rice. Var. Tamphaphou	Seed production	Modified SRI	Kharif	1.25	1.25	-	10	10	NA	Rainfed	260	13	295
2	Rice Var.RC Maniphou 13	Seed production	Rice seed production .RC Maniphou 13	Kharif	5	5	-	10	10	NA	Rainfed	260	13	295
3	Rice Var.RC Maniphou 12	Seed Production	Rice seed production RC Maniphou 12	Kharif	3	3	-	10	10	NA	Rainfed	260	13	295
4	Chilli	Pest management	Popularisation on management of Thrips and Fruit Borer of chilli	Kharif	2	2	-	8	8	NA	Irrigated	320	15	290

5	Tomato	Pest management	Mgmt. of Fusarium wilt in Tomato caused by F.Oxysporium	Kharif	2.25	2.25	-	9	9	NA	Irrigated	310	12	260
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c. Performance of FLD on Crops during 2019

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.)			
				Dem o.	Check		H*	L*			GC**	GR**	NR**	BCR**	GC	GR	NR	BC R
											Demo	Local						
1.	Rice Var. Tampha phou	Cereal production	1.25	72	43	40.27	78	47	No. of grains / panicle-320	No. of grains s/ panicle-115	67,000	1,44,000	77,000	2.14	75,000	86,000	11,000	1.14
2.	Rice Var.RC Maniphou 13	Seed production	5	52	49	12.2	65	52	No. of grains / panicle-250	No. of grains s/ panicle-120	71,000	1,75,500	1,04,500	2.5	75,000	1,43,325	68325	1.91
3	Rice Var.RC	Seed production	3	46	40	15	48	43	No. of grains	No. of grain	69,000	1,28,800	59,800	1.87	74,000	1,12,000	38,000	1.51

	Maniphou 12								/ panicl e-150	s/ panicl le- 110								
4	Chilli	Pest manageme nt	2	44	42	10	49	42	15% pest incide nce	25% pest incide nce	62,000	2,42,000	1,80,000	3.90	69, 500	2,31 ,000	1,61, 500	3.32
5	Tomato	Pest manageme nt	2	268	260	3.08	274	251	12% pest incide nce	20% pest incide nce	87,000	5,48,000	4,61,000	6.29	89, 000	5,20 ,000	4,21, 000	5.84

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

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

Produce Sale Price must be as per MSP or Registered Marketing Society

Pl. apply the formula: Net Return= Gross Return-Gross Cost, BCR= GR/GC

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

d. Extension and Training activities under FLD on Crops

Sl.No.	Activity	No. of activities organised	Date	Number of participants			Remarks
				Gen	SC/ST	Total	
1	Field days	1	5-12-19	95	-	95	

E .Details of FLD on Enterprises

	ornamental fish etc.		y		s		Dem o	Chec k	meter	o	k	C* *	R* *	R* *	C R* *			R	C R	

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

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

(iv) Other enterprises

Sl. No.	Category/ Enterprise, e.g., mushroom, vermicompost, apiculture etc.	Thematic area	Name of Technology	No. of farmers	No. of units	Major Performance parameters / indicators		% change in the parameter	Other parameters (if any)		Econ. of demo. (Rs./Ha.)				Econ. of check (Rs./Ha.)				Remarks	
						De mo	Check		De mo	Che ck	GC**	GR**	NR**	BC R**	G C	G R	N R	B C R		
1.	Jackfruit chips	Value addition	Popularization of jack fruit chips	8	8	Product recovery 700 g/kg			Shelf life-3mths.		1225	3500	2275	2.8						No farmer practice available

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

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

(v) Farm Implements and Machinery

Sl. No.	Name of implement	Crop	Name of Technology demonstrated	No. of farmers	Area (In ha.)	Field observation (Output/ man-hours)		% change in the parameter	Labour reduction (Man days)	Cost reduction (Rs. per ha. or Rs. per unit etc.)	Remarks
						Demo	Check				
1	Ring cutter	Bhindi (Okra)	Ring cutter	8		9.68 kg	2 kg	79.34	40/100kg production	9000	Reduces wrist pain, avoids itching & discomfort to skin thus reducing drudgery as well as reduction of 40 mandays /100 kg production.

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.)
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ths																										
WTO and IPR issues																										
XI Agro-forestry																										
Production technologies																										
Nursery management																										
Integrated Farming Systems																										
TOTAL	8	7	15	87	90	28	39	10	12	1	9	18	45	7	53	44	108	120	152	35	92	14	22	0	7	367

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

Thematic area	No. of Courses/ prg.			Participants																	Grand Total
	Off	Sp Off *	Total	General						SC/ST						Total					
				Male		Female		Total		Male		Female		Total		Male		Female		Total	
				Of	Sp Off	Of	Sp Off	Off	Sp Off	Of	Sp Off	Of	Sp Off	Of	Sp Off	Off	Sp Off	Off	Sp Off	Off	

Design and development of low/minimum cost diet																						
Designing and development for high nutrient efficiency diet																						
Minimization of nutrient loss in processing																						
Gender mainstreaming through SHGs																						
Storage loss minimization techniques																						
Value addition	6	-	6	31	-	72	-	104	-	-	62	-	62	-	-	31	-	134	-	166	-	166

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

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	4	5	20	56	20	32	0	31	0	3	0	1	0	4	20	64	0	6	20	65	85	
3.3.4. Achievements on Training of Rural Youth in Off Campus including Sponsored Off Campus Training Programmes																							

Agronomy	Cultivation of rabi field crops	Cultivation of rabi field crops in rice fallow	25-9-19	1	KVK, Thoubal	Farmers	18	-	18	-	-	-	18	-	18
Fishery	Scientific fish farming	Scientific fish farming	2-4-19	1	KVK, Thoubal	Farmers	13	-	13	3	3	6	16	3	19
	Water quality management in fish farming	Water quality management in fish farming	27-10-19 To 29-10-19	3	KVK, Thoubal	Farmers	20	-	20	-	-	-	20	-	20
Home science	Value addition of Black rice	Value addition of Black rice	26-8-19	1	KVK, Thoubal	FW	-	15	15	-	-	-	-	15	15
Agri Ext	Sesitization on Farmers Club	Sesitization on Farmers Club	28-9-19	1	KVK, Thoubal	RY	10	5	15	-	-	-	10	5	15

Animal Science	Sensitization of farmers club	Sensitization of farmers club	14-11-19	1	KVK, Thoubal	RY	14	-	14	-	-	-	14	-	14
Prog.Asst. Computer	ICT for Agriculture	ICT for Agriculture	27-11-19 To 29-11-19	3	KVK, Thoubal	Farmers	23	-	23	-	-	-	23	-	23

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	Weed management in Rice fields	Weed management in Rice	14-6-19	1	Langmeithet	Farmers	19	10	29	-	-	-	19	10	29
	Pest management in chili crops	Pest management in chili crops	10-5-19	1	Komnao	Farmers	27	4	31	-	-	-	27	4	31
	Pest management	Brinjal shoot borer, stem borer & fruit borer	23-7-19	1	Keirak	Farmers	-	-	-	11	8	19	11	8	19

		management													
	Pest management	Pest management in rice	18-8-19	1	Khongjom	Farmers	18	-	18	-	-	-	18	-	18
	Pest management	Management of stored grain pest	25-11-19	1	Leiphrakpam	Farmers	8	9	17	-	-	-	8	9	17
	Mushroom cultivation	Mushroom cultivation	18-12-19	1	Kakching khunou	Farmers	29	-	29	-	-	-	29	-	29
Agronomy	Scientific cultivation of rice	Scientific cultivation of rice	8-4-19	1	Kakching khunou	Farmers	-	-	-	18	6	24	18	6	24
	Scientific cultivation of rice	Scientific cultivation of rice	14-6-19	1	Salungham	Farmers	27	-	27	-	-	-	27	-	27
	SRI	SRI	25-6-19	1	Wangoo	Farmers	20	4	24	-	-	-	20	4	24
Home Science	Value addition of fruits	Value addition of fruits	15-5-19	1	Lourembam	Farm Women	-	21	21	-	-	-	-	21	21

	Jackfruits products	Jackfruits products	14-6-19	1	Salungpham	Farmers	16	19	35	-	-	-	16	19	35
	Bori production	Bori production	19-7-19	1	Tekcham	Farmers	15	17	32	-	-	-	15	17	32
	Nari mushroom production	mushroom production	22-7-19	1	Lourembam	Farmers	-	22	22	-	-	-	-	22	22
	Jackfruit chip production	Jackfruit chip production	10-7-19	1	Salungpham	Farmers	2	24	26	-	-	-	2	24	26
	Dehydration of vegetables	Dehydration of vegetables	25-9-19	1	Korshantabi	Farmers	-	16	16	-	-	-	-	16	16
	Osmotic dehydration of fruits	Osmotic dehydration of fruits	27-11-19	1	Sapam	FW	-	16	16	-	-	-	-	16	16
	Osmotic dehydration	Osmotic dehydration	18-12-19	1	Oak khunou	FW	-	32	32	-	-	-	-	32	32

	dehydration of Amla	of Amla													
Animal Science	Scientific dairy farming	Scientific dairy farming	9-7-19	1	Khongjom sapham leikai	Farmers	15	-	15	-	-	-	15	-	15
	Scientific broiler farming	Scientific broiler farming	21-8-19	1		Farmers	17	1	18	-	-	-	17	1	18
	Scientific piggy farming	Scientific piggy farming	24-7-19	1		Farmers	15	9	24	4	5	9	19	14	33
PBG	Spring rice cultivation	Spring rice cultivation	8-4-19	1	Komnao	Farmers	14	6	20	-	-	-	14	5	20
	Spring rice cultivation	Spring rice cultivation	8-5-19	1	Komnao	Farmers	15	6	21	-	-	-	15	6	21

	Seed production	Cultivation of RC Maniphou-13 for seed production	19-6-19	1	Wangoo	Farmers	19	12	31	-	-	-	19	12	31
	Seed production of rice	Seed production of rice	25-6-19	1	Wangoo	Farmers	20	4	24	-	-	-	20	4	24
	Seed production	Cultivation of RC Maniphou-13 for seed production	19-6-19	1	Chairel	Farmers	19	12	31	-	-	-	19	12	31
Soil	Soil health management	Soil health management	8-4-19	1	Thongjao	Farmers	-	-	-	17	-	17	17	-	17
	Importance of soil testing and procedures for soil	Importance of soil testing and procedures for soil	18-6-19	1	Kakching khunou	Farmers	9	9	18	-	-	-	9	9	18
Fishery	Composite fish farming	Composite fish farming	28-9-19	1	Thoubal	Farmers	25	5	30	-	-	-	25	5	30

					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	21-2-20 to 21-3-20	30	Agronomy	Organic farming	Organic farming	20	-	20				20	-	20	ASCI	Rs.1.97

On	RY	29-1-20 to 29-2-20	30	Animal Science	Broiler farm worker	Broiler farm worker	15	2	17	2	1	3	17	3	20	AS CI	Rs.1.97 lakhs
On	F	6-8-19 to 9-8-19	4	Fisheries	Nursery rearing & pond management	Nursery rearing & pond management	30	-	30	-	-	-	30	-	30	ICI CI	Rs.5000
On	RY	10.09.2019 to 17-09-19	7	Animal Science	Dairy farming	Rearing of improved breed and rearing of cattle and management	15	-	15	-	-	-	-	-	15	MANAGE	Rs.42000
On	RY	13-09-2019 to 19-09-2019	7	PBG	Seed Production	Seed Production	13	2	15	-	-	-	13	2	15	MANAGE	Rs.42000

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 2019

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

		Club 4.The Rural Integrated Farmers Club 5.The Rural Progressive Farmers Club 6.The ChaokhatThourang Farmers Club 7.Sangai Farmer Club 8.Rural Divine Farmers Club 9. Lamyamba Farmers Club 10.Siroi Lily Farmers Club														
14	Ex-trainee Sammelan															
15	Farmers seminar/ workshop															
16	Method demonstration		23/12/2019 19/07/2019 27/11/2019 26/08/2019 12/07/2019	23	150	92	242	22	23	45						287

29	PRA															
30	Farmer-Scientist interaction															
31	Soil test campaign															
32	Leaflet/ folder			4												
33	Mahila Mandal Convener meet															
34	Any other (Please specify)															
Grand Total				6276	4971	2752	7700	828	440	1260	0	0	0	100	40	10573

3.5 Production and supply of Technological products during 2019

A. SEED MATERIALS

Major group/class	Crop	Variety	Quantity (qt)	Value (Rs.)	Number of recipient/ beneficiaries		
					General	SC/ST	Total
CEREALS	Rice	Tampha phou	23.57	8249			
		WR 15-6-1	18.365	64277.5			
		Akut phou	6.235	21822.5			
		Sana phou	2.775	9712.5			

		Gin phou	7.68	26880	300	142	442
		RC Mani-7	14.315	50102.5			
		RC Man-13	14.29	50015			
		Chakhao	0.915	3202.5			
		Pari phou	0.315	1102.5			
		RC Mani-12	0.115	402.5			
OILSEEDS	Groundnut	ICGS-76	0.8	880	Kept for farm used		
	Soyabean	VL-Soya-63	0.5	450			
PULSES	Ricebean	VRB-3	0.4	440			
	Arhar	TS-36	2.0	2000	18	7	25
VEGETABLES							
TOTAL			92.275	239536.5	318	149	467

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

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	331	314	10,99,000	1500	593	2093
2	OILSEEDS	30.3	5.6	56,000	37	-	37
3	PULSES	326	50	6,00,000	210	40	250

4	VEGETABLES	-	-	-	-	-	-
5	FLOWER CROPS	-	-	-	-	-	--
6	OTHERS	-	-	-	-	-	-
TOTAL		687.3	369.6	17,55,000	1747	633	2380

B. Production and supply of planting Materials (Nos. in No.) during 2019

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								
Vegetables	Cabbage	Green Hero, F1 hybrid	38000 nos.		19000	63	12	75
	Cauliflower	Candid Charm, White Flash	20500 nos.		15375			
	Broccoli	Green Magic	13000 nos.		16250			
	Onion	Prema,VL Piaz-3 , Alka Lalima, Arka Kirthimana	35500 nos.		5325			
	Tomato	Arka Rasak	6715 nos.		3358			
	Chilli	Arka Meghna, Arka Harita	7000 nos.		3500			
	Brinjal	Arka Kesav	2000 nos.		1500			
	Cabbage	Green Hero, F1 hybrid	38000 nos.		19000			

TOTAL			1,22,715 nos.		64308			
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C. Production of Bio-Products during 2019

Major group/class	Product Name	Species	produced Quantity		Value (Rs.)	Number of Recipient /beneficiaries		
			No	(qt)		General	SC/ST	Total
BIOAGENTS								
BIOFERTILIZERS	Vermicompost	<i>E-fotidae</i>	2000	1700kg	54,000/-	38	-	38
BIO PESTICIDES								

D. Production of livestock during 2019

Sl. No.	Type/ category of livestock	Breed	Quantity		Value (Rs.)	Number of Recipient beneficiaries		
			(Nos)	Kgs		General	SC/ST	Total
1	Cattle/ Dairy		3		27000/-			
2	Goat		30		39,000/-			
3	Piggery		2		30,000/-			
4	Poultry		1000		52,000/-			

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3.6. Literature Developed/Published (with full title, author & reference) during 2019

(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
Popular articles	Every Monday on local newspaper Hueiyen Lanpao http://hueiyenlanpao.com/	Dr.S.Zeshmarani Dr.M.Thoithoi Singh S.Sumangal Singh Dr.W.Jiten Singh	Livestock Plant Protection Plant Breeding & Genetics Soil Science	
Leaflets/ folders	a. Scientific Broiler Rearing b. Fish feed & feeding Practices c. Crop diversification in rainfed upland rice areas d. Extraction of Fibre from Okra	Dr. S. Zeshmarani Sribidya Waikhom Dr.W.Jiten Singh RK Lembisana Devi		300

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

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			
2			
3			
4			

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

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

3.11 Field activities

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

3.12. Activities of Soil and Water Testing

Status of establishment of Lab :

1. Year of establishment :2016
2. List of equipments purchased with amount :Rs. 90,300/-

Sl. No	Name of the Equipment			Qty.	Cost
	S&WT lab	Mini lab/ Mridaparikshak	Manufacturer		
1		Mridaparikshak	Nagarjuna Agro Chemical	1	90,300

3. Details of samples analyzed (2019) :

Details	No. of Samples analysed	No. of Farmers	No. of Villages	Amount (In Rupees) realized
Soil Samples	130	520	7	
Water Samples	20	20	3	
Plant Samples				
Petiole Samples				
Total	150	540	10	

1. Details of Soil Health Cards (SHCs)
2. No. of SHCs prepared: 700
3. No. of farmers to whom SHCs were distributed: 520
4. Name of the Major and Minor nutrients analysed: NPK
5. 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												
Text only	36	371	24	214	4	37	-	-	-	-	9	65	73	687
Voice only	913	913	440	440	30	30	70	70	85	85	650	650	2188	2188
Total	949	1284	464	654	34	67	70	70	85	85	659	715	2263	2875

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
Flood/ draught	Introduction of new variety or crop	500	1500	300	1800
Draught	Introduction of resource Conservation technology	100	220	40	260
Flood/ draught	Distribution of seeds & planting materials	400	1200	350	1550

b. 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
Flood		15	3	1000	700	300	1000

A) IMPACT

B) 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.

C) Cases of large scale adoption

2.6. 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
NBFGR, Lucknow	Research.
DCFR, Bhimtal	Demonstration.
DRDA,IWMP, Thoubal	Organizing Training and Demonstration
ATMA, Thoubal	Organizing Training for extension personnel, Demonstration, field visit & Annual Mela.
NFDB, Hyderabad	Financial assistance for training and field visit, supplied fingerlings of Jayanti Rohu and Amur Carp through farmers
Horticulture and soil conservation	Training
Vety& AH	Organizing Training and Demonstration

Dept. of Agriculture, Manipur	Attended SAC, Training & Demonstration
Dept. of Horticulture, Manipur	Attended SAC, Training & Demonstration
Dept. of Veterinary & Animal Science, Manipur	Attended SAC, Training & Demonstration
Dept. of Sericulture, Manipur	Attended SAC, Training
Dept. of Fishery, Manipur	Attended SAC, Training
NGOs	Training
Farmers' Club	organizing Training & Demonstration
Bank	SAC, Credit support
MSFAC	Training and marketing support
CIFT	Research and training
NABARD	SAC, sponsored fund for providing low cost tools and implement to the farmers club. Formation of JLG for piggery production especially to the women farmers.
MANAGE	Skill training, upgradation of knowledge of KVK scientist

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

3.3 List special programmes undertaken by the KVK, which have been financed by State Govt./Other Agencies during 2019

Name of the scheme	Activity	Date/ Month of initiation	Funding agency	Amount (Rs.)
World Vety Day	Awareness programme	27/04/2019	ATARI	
World Environment Day	Tree plantation	5/06/2019	ATARI	

International Yoga Day	Yoga	21/06/2019	ATARI	
Large Scale tree plantation campaign and Krishan Gosthi	Tree plantation	17/09/2019	ATARI	
Launching of NADCP & NAIP	Webcasting	11/09/2019	ATARI	
Swachhta Pakhwada	Swachhta activity	Every month	ATARI	
Constitution Day	Oath taking	26/11/2019	ATARI	
Fertilizer Application Awareness Week	Webcasting	22/10/2019	ATARI	
World Soil Health Day	Training	5/12/2019	ATARI	
Kisan Diwas	Awareness programme	23/12/2019	ATARI	

5.3 Details of linkage with ATMA

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

SI. No.	Programme	Nature of linkage	Remarks
1.	Training	Conducting training and demonstration	Training programme for extension personnel

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
	Demonstration	Supply of fish seed (Jayanti Rohu & Amur Carp)	Supply of fish seed

6. PERFORMANCE OF INFRASTRUCTURE IN KVK DURING 2019

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	Bokashi piggery	2018-2019		Cross bred pig	Meat purpose	2	12,000	18,000	
2	Dairy	2017-2018		Non descript	Meat purpose	4	10,000	25,000 (from one cattle)	

				breed					
3	Fishery	2010-2011		Catla, Rohu, Mrigal, Commom carp, Pengba, Ngaton, Tilapia, Grass carp	Meat purpose	5000	46,000	25% recovered remaining yet to recovered.	

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	25-06-2019	02-11-201	0.9	Tamphaphou	T/L	23.57qt	70815	82495	@Rs.35/kg
	27-06-2019	27-10-2019	0.5	WR-15-6-1	T/L	18.36qt	39341	64260	
	15-06-2019	10-11-2019	0.2	Akut-phou	T/L	6.23 qt	15736	21805	
	27-06-2019	4-11-2019	0.1	Sana-phou	T/L	2.77 qt	7868	9695	
	20-06-2019	6-11-2019	0.2	Gin-phou	T/L	7.68 qt	15736	26880	
	29-06-2019	5-11-2019	0.5	RC Mani-7	T/L	14.31qt	39347	50083	

Any other									
Fibers									
1.									
2.									
Spices & Plantation crops									
i) Ginger									
ii)									
Floriculture									
1.									
2.									
Fruits									
1. Pineapple									
Vegetables									
i.									
ii.									
1. Others (specify)									
7.									

6.4 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					
2					

4.0. 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	SBI	Thoubal	11746667259
Revolving fund	SBI	Thoubal	37606402881

5.2 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, 2020
	Amount	Amount	Amount	Amount	
Inputs	-	-	0.40200	-	
Extension activities			0.4800		
TA/DA/POL etc.					
TOTAL	0.44934	0.00066 (last year unspent balance)	0.45000	-	Nil

7.3 Utilization of KVK funds during the year 2019 – 2020

S. No.	Particulars	Sanctioned (in Lakh)	Released (in Lakh)	Expenditure (in Lakh)
A. Recurring Contingencies				

1	Pay & Allowances	185.00	18500	184.96762
2	Traveling allowances	2.50	2.50	2.49902
3	Contingencies	14.50	14.50	14.46319
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	0.75	0.75	0.75
TOTAL (A)		202.75	202.75	202.67983

B. Non-Recurring Contingencies				
1	Works			
2	Equipments including SWTL & Furniture	0.30	0.30	0.30
3	Vehicle (Four wheeler, please specify)			
4	Library (Purchase of assets like books & journals)			
TOTAL (B)		203.050	203.050	202.97983
C. REVOLVING FUND				
D. NARI		0.50	0.50	0.50
GRAND TOTAL (A+B+C)		203.55	203.55	203.47983

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

Year	Opening balance as on 1st April	Income during the year	Expenditure during the year	Net balance with KVK (in lakh)
April 2017 to March 2018	4.083135	1.23454	2.45260	5.31768
April 2018 to March 2019	5.31768	5.92701	5.02185	6.22284
April,2019 to March,2020	6.22284	1.24855	6.88916	7.47139

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: Lack of infrastructure namely farmers hostel, staff quarters, demo unit, full fledged soil testing lab, vehicle
- (b) Financial : Untimely release of fund hindered the mandate activities of KVK.
- (c) Technical : Availability of local specific varieties of crop and livestock having less than 5 years is very rear in this reason.