PROFORMA FOR ANNUAL REPORT 2020 OF KVK,THOUBAL

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 Thoubal , near Rice Research, Khangabok, Thoubal, Manipur-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 Dec, 2020

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

	Specialist		(Horticulture)						
3	Subject Matter Specialist	Dr.M.Thoithoi Singh	SMS(Plant Protection)	Plant protection	15600-39100	83600	25-07-07	-do-	Gen
4	Subject Matter Specialist	S.Sumangal Singh	SMS(PBG)	Plant Breeding & Genetics	15600-39100	83600	25-07-07	-do-	Gen
5	Subject Matter Specialist	N.Tomba Singh	SMS (Agronomy)	Agronomy	15600-39100	83600	25-07-07	-do-	Gen
6	Subject Matter Specialist	R.K.Lembisana Devi	SMS (Home Sc.)	Home Science	15600-39100	61300	26-12-16	-do-	Gen
7	Subject Matter Specialist	SribidyaWaikhom	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	-	5200-20200	39200	12-04-07	-do-	-do-
13	Driver	M.Hemanta Singh	Driver cum Mechanic	-	5200-20200	31900	12-04-07	-do	-do-
14	Driver	Th.Tiken Singh	-do-	-	5200-20200	31900	03-05-07	-do	-do-

15	Supporting staff	E.Dhabali Singh	Peon cum Chowkidar	-	5200-20200	23800	12-04-07	-do-	-do-
16	Supporting staff	Mangminthang Zou	-do-	-	5200-20200	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): 6.5 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) ii. Fish pond & integrated poultry fish unit iii.Vermiculture iv.Green house & shade net	 i. 1.5 ii. 1.5 iii. 0.1 iv. 0.2
3	Under Crops (Cereals, pulses, oilseeds etc.) (Pl. specify separately) i.Paddy ii. Pea,Lentil,Chickpea iii.Rape seed and Mustard,Chia,Oilpalm iv.Potato, Groundnut	 1. 3.5 2. 0.4 3. 1.25

		4. 0.3, 0.1
4	Under vegetables (Pl. specify separately) 1. Chilli 2. King Chilly 3. Brinjal 4. French bean 5. Cabbage 6. Broccoli 7. Cauliflower 8. Tomato 9. Ladies Finger 10. Pumpkin 11. Bottle Gourd 12. Cucumber	0.45
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(1st 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	216m	49.97407	13-10-17	-	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	Condemn
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	6 computers not in working condition
LCD Projector	March,2016	50,000	Good
Computer with accessories(1 no)	March,2019	32,000	Good
Digital Camera	December,2019	35,000	Good

Computer Printer	July 2019	14980	Good
Computer Monitor & Camera	Jan.2020	29900	Good
Presenter Innovier	March 2020	3800	Good
Bullet Camera with accessories	March2020	22808	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**
15-12-2020	Ms. Laltanpuii Vanchhong, IAS, Director of Agriculture, Manipur Dr.AKSingha Principal Scientist , (I/C) Director ATARI, Zone-VII Dr. I. Meghachandra Singh, Joint Director, ICAR, Manipur Centre Dr. Dipak Nath, Deputy Director (Extn. Edn.) CAU, Imphal KhaidemMohendra Singh Project Coordinator, MSFAC M. Srinivasa Rao Manager, NABARD Manipur	• For Fisheries, suggestions were madeto mention the specific name of the species of the carp instead of mentioning the groupname as Chinese carp. • Similarly, it was suggested towrite Amur carp as Common carp var. Amur carp • Regarding CFLD on mustard it was suggested to calculate the economics and compare whether it is better to sell as	Done as suggested Written as suggested Done as suggested

	Kh. Ngamluishang Rice Breeder, RRS Wangbal Ak. Chittaranjan Singh AO(HQ) Dept. of Agriculture, Manipur N. Bijyalakshmi Devi D.O(H & SC), Thouba O. Joykumar Singh DAO, Thoubal S. Bhimo Singh CEO/FFDA, Thoubal SanjitLaishram Dy.Manager, MSCB, Thoubal Kh. Hera Singh Sr. Scientist and Head, KVK, Imphal West Dr. Deepak Singh Sr. Scientist and Head, KVK, Chandel Dr. A. Tarajit Singh SMS (Agri Extension), KVK, Bishnupur T. Molibala Devi i/c Sr. Scientist and Head , KVK,	seed or by selling extracted oil. ● While mentioning the rice variety i.e., RCM and RC Maniphou should not be mixed as these two varieties are different ● Regarding publication of reports/ Findings of any kind, the name of the journal should be mentioned. ● Regarding training programmes it was suggested to increase more training programmesfor extension personnel during Covid pandemic as they are more experience than normal farmers.	It was taken as RC Maniphou. Mentioned the name of Journal It has been taken up

	Imphal East Dr. S. Roma Devi Sr. Scientist and Head, KVK, Churchanpur Dr. N. Jyotsana Sr. Scientist and Head, KVK, Sanapati O.Nabadwip Singh Retd. DFO, Thoubal Y. Megha Singh Progressive Farmer T. Achouba Singh Progressive Farmer M. Manglembi Devi Progressive Farmer S. Devjani Devi Progressive Farmer M. Robert Singh Progressive Farmer Bisheshore Progressive Farmer M. Menjor Singh Progressive Farmer		

**** Attached a copy of SAC proceedings along with list of participants(Annexure 1)***

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 find 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 Tupic 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

(Source -economic survey 2019-20)

2.5. Weather data (Jan2020- Dec,2020)

Month	Rainfall (mm)	Temperature ^{0} C		Relative Humidity (%)
		Maximum	Minimum	
January	2.1	21.2	7.5	60.9
February	0.5	23.4	8.2	50.8
March	0.4	27.6	12.1	40.5
April	0.4	26.5	13.5	55.3
May	0.7	29.4	15.3	45.1
June	0.6	31.5	14.2	48.4
July	0.5	28.6	13.6	63.1
August	1.5	29.1	14.1	54.1

September	0.9	31.5	12.1	62.2
October	5.3	37.1	20.9	77.0
November	3.5	26.3	12.7	56.5
December	0.0	23.1	6.5	48.4

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

Category	Population	Production	Productivity
Cattle			
Crossbred	18790	526120 lt	28 lt/day
Indigenous	40927	163708 lt	4 lt/day
Buffalo	3554	11373 lt	3.2 lt/day
Sheep			
Crossbred	333	3996 kg	12 kg/sheep
Indigenous	5964	65604kg	11 kg/sheep
Goats	20091	160.7 tonnes	8 kg/goat
Pigs			
Crossbred	52741	4113.79 tonnes	78 kg/pig
Indigenous	68027	3537.40 tonnes	78 kg/pig
Rabbits	1180	3209 kg	2.72 kg/rabbit
Poultry			

Hens	159168	274.56 lakh egg	-
Desi	119376	191 lakh egg	160 egg/year/hen
Improved	39792	83.56 lakh egg	210 egg/year/hen
Ducks	69797	90.7 tonnes	1.3 kg/duck
Turkey and others	**11312**	**-**	**-**
Fish	**1525 ha**	**6520 tonnes**	**4.2 t/ha**

(Source -economic survey 2019-20)

2.6 Details of Operational area / Villages

Sl.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			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.			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	Phythoptora 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.			Heirok	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 admiature,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

3. TECHNICAL ACHIEVEMENTS

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

Discipline	OFT (Technology Assessment and Refinement)				FLD (Oilseeds, Pulses, Maize, Other Crops/Enterprises)			
	Number of OFTs		Number of Farmers		Number of FLDs		Number of Farmers	
	Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
Agronomy	2	2	10	10	2	2	10	10
Plant Breeding & Genetics	2	-	10	-	2	2	20	20
Plant Protection	2	2	10	10	2	2	16	16
Fisheries	2	2	10	10	2	2	14	14

Home Science	2	2	10	10	2	2	20	20
Agri. Extension	-	-	-	-	2	2	255	255
Total	**10**	**8**	**50**	**40**	**12**	**12**	**335**	**335**

Note:Target set during last Annual Zonal Workshop

Training (including sponsored, vocational and other trainings carried under Rainwater Harvesting Unit)					**Extension Activities**			
Number of Courses			**Number of Participants**		**Number of activities**		**Number of participants**	
Clientele	**Targets**	**Achievement**	**Targets**	**Achievement**	**Targets**	**Achievement**	**Targets**	**Achievement**
Farmers								
Rural Youth								
Extn. Functionaries								

Seed Production (ton.)		**Planting material (Nos. in lakh)**	
Target	**Achievement**	**Target**	**Achievement**
30	41.59	10000	86100

Note: Target set during last Annual Zonal Workshop

3. B. Abstract of interventions undertaken during 2020

Sl. No	Thrust area	Crop/ Enterprise	Identified problems	Interventions					
				Title of OFT if any	Title of FLD if any	Title of Training if any	Title of training for extension personnel if any	Extension activities	Supply of seeds, planting materials etc.
1.	Cropping system of Rice-Lentil-Chickpea	Rice-Lentil Rice-Chickpea	Usually rice field being kept fallow Rice alone cannot increase farmer's income	Performance evaluation on Rice based cropping system (Rice-Lentil Rice-Chickpea)	-	Rice based cropping system	-	Field visit, Farmer Scientist interaction, E-gosthies	Seed, Fertlilizer, PP inputs
2.	Crop Production	Lentil	Poor germination and establishment under normal sowing condition	Seed priming of Lentil	-	Scientific cultivation of Rabi field crops	-	Field visit, E-gosthies	Seed
3.	Management of frost bite and viral diseases of potato	Potato	Frost bites – 70% Viral diseases-55%	Management of frost bite and viral diseases of potato	-	Integrated Pest management	-	Field visit	PP chemicals

4.	Management of aphid in cabbage	Cabbage	Management of sucking insects in cabbage and lettuce which is consumed as raw, is usually controlled by using chemicals which results in health hazards if consumed before waiting period of the insecticide	Performance evaluation of Metarhizium anisoplea (a Bio pesticide) in management of aphid in cabbage	-	Integrated Pest management	-	Field visit , Farner scientist interaction	PP chemicals
5.	Fish Production	Fish- Silver barb (*Puntius gonionotus*)	Culture of major carps alone fetches limited income and farmers are not aware of diversified aquaculture.	Performance assessment of Incorporation of Silver barb (*Puntius gonionotus*) in feed based seasonal carp polyculture pond system	-	Composite/ Polyculture fish farming	-	Field visit	Fish
6.	Fish Production	Ornamental fish	Breeding and rearing of ornamental fishes had not been practiced by farmers of Thoubal district	Introduction to Low cost backyard ornamental fish farming for income enhancement for rural youths using polyline thermocol box	-	Ornamental fish farming	-	Field visit, TV talk	Fish

7.	Value addition	Bori Production	High Cost of production for Blackgram bori	Production of Chow Chow Bori during peak and lean production period	-	Value addition of fruits, vegetables & pulses	-	Field visit, TV talk	Blackgram, preservatives
8.	Value addition	Amla	Due to its perishable nature during peak season it is difficult to store.	Osmotic Dehydration of Amla	-	Dehydration of Amla	-	Field visit,radio talk	sugar, preservatives

3.1 Achievements on technologies assessed and refined during 2020

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

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Varietal Evaluation	-	-	-	-	-	-	-	-	-	-
Seed / Plant production	-	-	-	-	-	-	-	-	-	-
Weed Management	-	-	-	-	-	-	-	-	-	-
Integrated Crop Management	-		Lentil	-	-	-	-	-	-	2
Integrated Nutrient Management	-	-	-	-	-	-	-	-	-	

Integrated Farming System	-	-	-	-	-	-	-	-	-	-
Mushroom cultivation	-	-	-	-	-	-	-	-	-	-
Drudgery reduction	-	-	-	-	-	-	-	-	-	-
Farm machineries	-	-	-	-	-	-	-	-	-	-
Value addition	-	-	-	-	Chow chow	Amla				2
Integrated Pest Management	-	-	-	-	-	-	-	-	Cabbage	1
Integrated Disease Management	-	-	-	-	-	-	-	-	Potato	1
Resource conservation technology	-	-	-	-	-	-	-	-		
Small Scale income generating enterprises	-	-	-	-	-	-	-	-		
TOTAL	-	-	-	-	-	-	-	-		**6**

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

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

Thematic areas	**Cereals**	**Oilseeds**	**Pulses**	**Commercial Crops**	**Vegetables**	**Fruits**	**Flower**	**Plantation crops**	**Tuber Crops**	**TOTAL**
Varietal Evaluation	-	-	-	-	-	-	-	-	-	-
Seed / Plant	-	-	-	-	-	-	-	-	-	-

production										
Weed Management	-	-	-	-	-	-	-	-	-	-
Integrated Crop Management	-	-	-	-	-	-	-	-	-	-
Integrated Nutrient Management	-	-	-	-	-	-	-	-	-	-
Integrated Farming System	-	-	-	-	-	-	-	-	-	-
Mushroom cultivation	-	-	-	-	-	-	-	-	-	-
Drudgery reduction	-	-	-	-	-	-	-	-	-	-
Farm machineries	-	-	-	-	-	-	-	-	-	-
Post Harvest Technology	-	-	-	-	-	-	-	-	-	-
Integrated Pest Management	-	-	-	-	-	-	-	-	-	-
Integrated Disease Management	-	-	-	-	-	-	-	-	-	-
Resource conservation technology	-	-	-	-	-	-	-	-	-	-
Small Scale income generating enterprises	-	-	-	-	-	-	-	-	-	-

TOTAL	-	-	-	-	-	-	-	-	-	-

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

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

Thematic areas	Cattle	Poultry	Sheep	Goat	Piggery	Rabbitery	Fisheries	TOTAL
Evaluation of Breeds	-	-	-	-	-	-	Fish- Silver barb (*Puntius gonionotus*)	1
Nutrition Management	-	-	-	-	-	-	-	-
Disease of Management	-	-	-	-	-	-	-	-
Value Addition	-	-	-	-	-	-	-	-
Production and Management	-	-	-	-	-	-	-	-
Feed and Fodder	-	-	-	-	-	-	-	-
Small Scale income generating enterprises	-	-	-	-	-	-	Ornamental fish	1
TOTAL								2

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

Thematic areas	Cattle	Poultry	Sheep	Goat	Piggery	Rabbitery	Fisheries	TOTAL
Evaluation of Breeds	-	-	-	-	-	-	-	-
Nutrition Management	-	-	-	-	-	-	-	-
Disease of Management	-	-	-	-	-	-	-	-

Value Addition	-	-	-	-	-	-	-	-
Production and Management	-	-	-	-	-	-	-	-
Feed and Fodder	-	-	-	-	-	-	-	-
Small Scale income generating enterprises	-	-	-	-	-	-	-	-
TOTAL								

A.5. Results of On Farm Testing (OFT)

<table>
<tr><th>Sl. No.</th><th>Title of OFT</th><th>Problem Diagnosed</th><th>Name of Technology Assessed</th><th>Crop/Cropping system/ Enterprise</th><th>No. of Trials</th><th>Results of Assessment/ Refined (Data on the parameter should be provided)</th><th>Feedback from the farmer</th><th>Feedback to the Researcher</th><th>B:C Ratio (if applicable)</th></tr>
<tr><td>1.</td><td>Performance evaluation on Rice based cropping system (Rice-Lentil Rice-Chickpea)</td><td>Usually rice field being kept fallow Rice alone cannot increase farmers income</td><td>Cropping system of Rice-Lentil/Chickpea

Rice:Var. CAU R1

Seed rate: 60 kg/ha

Spacing: 15x15 cm

Date of transplanting: July 1st week

Fertilizer dose: 60:40:30 kg NPK/ha

Lentil: Var. HUL 57

Seed rate: 40 kg/ha

Spacing-30 cm between rows

Date of transplanting: 2nd fortnight of</td><td>Rice-Lentil Rice-Chickpea</td><td>5</td><td>Technology:

Rice:

<table><tr><th>Parameter</th><th>Treatment</th></tr><tr><td>Plant ht. (cm)</td><td>135</td></tr><tr><td>No.of grains/panicles</td><td>268</td></tr><tr><td>No. of tillers/plant</td><td>12</td></tr><tr><td>Yield (q)</td><td>54.00</td></tr></table>
Chickpea/Lentil:

<table><tr><th>Parameter</th><th>Chickpea</th><th>Lentil</th></tr><tr><td>Plant height</td><td>35-40 cm</td><td>30-35cm</td></tr><tr><td>Plant stand/sq.m</td><td>35-40</td><td>80-90</td></tr><tr><td>No. of branches</td><td>7-10</td><td>8-12</td></tr></table></td><td>Appreciated</td><td>Appreciated and recommended for FLD</td><td>Rice- 1.8

Chickpea-1.83

Lentil-1.85</td></tr>
</table>

<table>
<tr>
<td></td>
<td></td>
<td></td>
<td>November

Fertilizer dose: 15:35:15 Kg NPK/ha

Chickpea: Var. JG-16

Seed rate : 60kg/ha

Spacing 30 x 10 cm

Date of planting-: 2nd fortnight of Nov.

Fertilizer dose: 15:35:15 kg /NPK</td>
<td></td>
<td></td>
<td>
<table>
<tr><td>per plant</td><td></td><td></td></tr>
<tr><td>No. of pods per plant</td><td>35-40</td><td>100 -110</td></tr>
<tr><td>No. of seed per pod</td><td>1-3</td><td>2</td></tr>
<tr><td>Yield q/ha</td><td>7.6</td><td>7.8</td></tr>
</table>
Farmers Practice:
<table>
<tr><th>Parameter</th><th>Treatment</th></tr>
<tr><td>Plant ht. (cm)</td><td>135</td></tr>
<tr><td>No.of grains/panicles</td><td>260</td></tr>
<tr><td>No. of tillers/plant</td><td>10</td></tr>
<tr><td>Yield (q)</td><td>52.00</td></tr>
</table>
</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Seed priming of Lentil</td>
<td>Poor germination and establishment under normal sowing condition</td>
<td>Seed soaking for 6 hours in water & then bringing down to almost original weight by drying under shade before sowing.

➢ Seed rate: 40</td>
<td>Lentil</td>
<td>5</td>
<td>Technology:

Plant height (cm) – 30-35

Plant stand (no./sq.m) – 90-100

Pod/plant(nos) – 110- 120

Seed/pod - 2</td>
<td>Appreciated</td>
<td>Appreciated</td>
<td>2.01</td>
</tr>
</table>

			Kg/ha ➢ Spacing : 30 cm between rows ➢ Sowing time: Mid Oct – Mid Nov ➢ Fertilizer dose: 20:40:15 Kg NPK/ha			Seed yield (q/ha) – 8.2 **Farmers Practice:** Plant height (cm) – 30-35 Plant stand (no./sq.m) – 80-90 Pod/plant(nos) – 110- 120 Seed/pod - 2 Seed yield (q/ha) – 7.4			
3.	Management of frost bite and viral diseases of potato	Frost bites – 70% Viral diseases- 55%	• Management of frost bites & viral diseases with Dimethyl sulfloxide 38.4% & Imidachloprid 17.8% (Control) @ 400 ml/ha two sprays at 20 days interval • First spray at first earthing up (25-30DAS)	Potato	5	**Technology:** No. of infected plants (Nos./sq m) - 9 a) Yellow mosaic – 0.32% b) Crinkle – 3.57% c) Stem necrosis – 7.4% d) Frost affected plants (%) - 72% e) Yield q/ha – 87 **Farmers Practice:** No. of infected plants (Nos./sq m) - 9 a) Yellow mosaic – 0.23% b) Crinkle – 4.01% c) Stem necrosis – 6.8% d)Frost affected plants (%) - 38 %	Appreciated	Appreciated	2.6

						e)Yield q/ha – 72			
4.	Performance evaluation of Metarhizium anisoplea (a Bio pesticide) in management of aphid in cabbage	Management of sucking insects in cabbage and lettuce which is consumed as raw, is usually controlled by using chemicals which results in health hazards if consumed before waiting period of the insecticide.	Management of aphids with Metarhizium anisoplea(a Bio pesticide) @ 30ml/ 15 litre water	Cabbage	5	**Technology:** Just Before spraying - 72/plant 1st Two days after spraying - 68/plant 20th day after 1st spraying - 63/plant Two days after 2nd spray - 42/plant 20 days after 2nd spray - 8/plant Yield q/ha - 165 **Farmers Practice:** Just Before spraying - 77/plant 1st Two days after spraying - 24/plant 20th day after 1st spraying - 32/plant Two days after 2nd spray - 19/plant 20 days after 2nd spray - 36/plant Yield q/ha - 167	Appreciated	Appreciated	2.7
5.	Performance assessment of Incorporation of Silver barb (*Puntius gonionotus*) in feed based seasonal carp polyculture	Culture of major carps alone fetches limited income and farmers are not aware of diversified	• Stocking density: 10000 fingerlings/ha • Stocking ratio: Catla: Silver barb : grass carp: common carp @ 3:3:2:2	Silver barb (*Puntius gonionotus*)	5	**Technology:** Avg. wt. gain of Catla - **640g** Avg. wt gain of grass carp - **700g** Avg.wt gain of Common carp -**650g** Avg wt gain of Silver barb - **460g**	Appreciated	Recommended for FLD	2.8

	pond system	aquaculture.	• Feeding @3% body weight • Culture period: 6 months			Survivility – **90%** Productivity - **358kg/0.1ha** **Farmers Practice:** Avg. wt. gain of Catla - **630g** Avg. wt gain of grass carp - **780g** Avg.wt gain of Common carp -**640g** Survivility – **85%** Productivity - **296kg/0.1ha**			
6.	Introduction to Low cost backyard ornamental fish farming for income enhancement for rural youths using polyline thermocol box	Breeding and rearing of ornamental fishes had not been practiced by farmers of Thoubal district	Species: Guppy (*Poecila raticulata*), Platy (*Xiphophorus maculatus* Use of polyline thermocol fish box, as rearing unit. Submerged plant such as Hydrilla is used as hiding place for fry. Stocking density /box = 50 nos. **Feeding-** Diet with 35-40% crude protein and live feed such as zooplankton, blood	Ornamental fish		**Technology:** Survival % - 87 Productivity – 3219 fry/50 brooders Net return - Rs. 12,595/- (Rs./unit)	Appreciated	Instead of ornamental fish it was suggested to go for seed production of indigeneous fishes such as climbing perch or magur	3.5

<table>
<tr><td></td><td></td><td></td><td>worms

Water depth- 30-60 cm for one month for fry rearing</td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>7.</td><td>Production of Chow Chow Bori during peak and lean production period</td><td>High Cost of production for Blackgram bori</td><td>Development of bori from squash (40 % squash mixed with KMS @ 1.5 g/kg with blackgram paste 60%)</td><td>Chow chow</td><td>5</td><td>Technology:

<table><tr><th>Parameters</th><th>Product recovery/ kg</th><th>Cost/Unit(10kg)</th><th>Net return (Rs.)</th></tr><tr><td>Peak season</td><td>370 (no)</td><td>1,155</td><td>1435</td></tr><tr><td>Lean season</td><td>370 (no)</td><td>1,315</td><td>1275</td></tr></table>
Farmers Practice:

Product recovery/kg - 350(no)

Cost/Unit(10kg) – 14375

Net return (Rs.) - 11325</td><td>Appreciated</td><td>Appreciated</td><td>Peak season-2.2

Lean season-1.9</td></tr>
<tr><td>8.</td><td>Osmotic Dehydration of Amla</td><td>Due to its perishable nature during peak season it is difficult to</td><td>Washing, blanching, segment making, dipping in sugar syrup 60°brix for 24 hours</td><td>Amla</td><td>5</td><td>Technology:

Product recovery/kg: 700g/kg

Shelf life (months) : 3 months</td><td>Appreciated</td><td>Appreciated</td><td>2.5</td></tr>
</table>

		store.				Net return :**Rs.3920 from 20kg** **Farmers Practice:** Product recovery/kg: **500g/kg** Shelf life (months) : **3 months** Net return :**Rs.2800 from 20kg**			

Field crops – ton/ha, * for horticultural crops -= kg/t/ha, * milk and meat – litres or kg/animal, * for mushroom and vermicompost kg/unit area.

***** Give details of the technology assessed or refined and farmer's practice***

3.2 Achievements of Frontline Demonstrations during 2020

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

List of technologies demonstrated during previous years and popularized during 2020 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	Popularization of Modified SRI	5	5	1.25
2.	Rice Var.RC Maniphou 13	Participatory seed production of Rice Var. RC Maniphou-13	10	10	5
3.	Rice Var.RC Maniphou 12	Popularization of Rice Var. RC Maniphou-12	10	10	3

4.	Chilli	Demonstration-Popularisation on management of Thrips and Fruit Borer of chilli	8	8	2.0
5.	Tomato	Mgmt. of Fusarium wilt in Tomato caused by F.Oxysporium	8	8	2.0
6.	Sugarcane	Demonstration on shoot borer and smut management in sugarcane	10	10	2.5
7.	Jackfruit	Popularization of Jackfruit chips	8	8	-
8.	Ring Cutter	Popularization of Ring cutter for bhindi Plucking	8	8	-
9.	Roselle	Popularization of Roselle Jam	5	10	-

**Thematic areas as given in Table 3.1(A1 and A2)*

b. Details of FLDs conducted during reporting period (Information is to be furnished in the following **three tables** for **each category** i.e. **cereals, horticultural crops, oilseeds, pulses, cotton and commercial crops**.)

Sl. No.	**Crop**	**Thematic area**	**Technology Demonstrated**	**Season and year**	**Area (ha)**		**No. of farmers/ demonstration**			**Reasons for shortfall in achievement**	**Farming situation (Rainfed/ Irrigated, Soil type, altitude, etc)**	**Status of soil (Kg/ha)**		
					Proposed	**Actual**	**SC/ST**	**Others**	**Total**			**N**	**P**	**K**
1.	Rice	Integrated Crop Management	Integrated Crop Management in rice	Kharif	1.25	1.25	-	5	5	-	Rainfed	60	40	30

2.	Maize	Weed Management	Weed Management in Maize	Kharif	0.75	0.75	-	5	5	-	Irrigated	80	40	30
3.	Rice	Pest management	Popularization of Voliam flexi in management of stem borers and plant hoppers in Rice	Kharif	2.0	2.0	-	8	8	-	Irrigated	60	40	30
4.	Cowpea	Pest management	Popularisation of Emamectin benzoate and yellow sticky traps in Fruit borer and Aphid management	Kharif	2.0	2.0	-	8	8	-	Irrigated	20	40	30
5.	Rice	Seed production	Seed production technology of rice var. RC Maniphou-13	Kharif	5.0	5.0	-	10	10	-	Rainfed	60	40	40
6.	Blackgram	Seed production	Participatory seed production of Black gram Var. PU-31	Kharif	5.0	5.0		10	10	-	Rainfed	20	40	30

c. Performance of FLD on Crops during 2020

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

				Demo.	**Check**	**Avg. yield**	**H***	**L***	**incidence, pest incidence etc.**		**GC****	**GR****	**NR****	**BCR****	**GC**	**GR**	**NR**	**BCR**
									Demo	**Local**								
1.	Rice	Integrated Crop Management	1.25	67.50	58.50	13.3	72.00	65.00	-	-	**72000**	**135000**	**63000**	**1.875**	**75000**	**117000**	**42000**	**1.56**
2.	Maize	Weed Management	0.75	27.70	25.00	9.7	30.50	25.00	-	-	38500	71750	33250	1.86	42000	62500	20500	1.48
3.	Rice	Pest management	2.0	60.70	58.78	3.16	63.50	57.80	Stem borer-**25-30%** Plant hopper-**50-60%**	Stem borer-**30-40%** Plant hopper-**60-70%**	108000	133540	25540	1.24	105000	129316	24316	1.23
4.	Cowpea	Pest management	2.0	56.50	55.00	2.65	58.00	49.00	Fruit borer – **20-25%** Aphid-**40-50%**	Fruit borer – **30-40%** Aphid-**60-70%**	68200	213360	145160	3.13	64500	203500	139000	3.15
5.	Rice	Seed pproduction	5.0	58.00	55.00	5.17	62.00	53.00	-	-	75000	174000	99000	2.32	72000	143000	71000	1.98
6.	Black gram	Seed production	5.0	7.00	6.50	7.14	7.80	6.50	-	-	32000	63000	31000	1.96	31000	58500	27500	1.88

***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	07/03/2020	23	7	30	Training & distribution of inputs for OFT, FLD Seed production.
2	Farmers Training	12	26/5/2020-28/5/2020 19/6/2020 26/6/2020 13/7/2020 10/9/2020 24/9/2020 6/10/2020 28/11/2020 30/11/2020	324	72	396	Training & distribution of inputs for OFT, FLD Seed production.

			3/12/2020 7/12/2020				
3	Media coverage	2					TV talk,radio talk
4	Training for extension functionaries						
5	Any other (Pl. specify)						
	Total	**15**		**347**	**79**	**426**	

E .Details of FLD on Enterprises

(i) Farm Implements

Name of Implement								

** Field efficiency, labour saving etc.*

(ii) Livestock Enterprises

Sl. No.	Enterprise/ Category (e.g., Dairy, Poultry etc.)	Thematic area	Name of Technology	No. of farmers	No. of units	No. of animals, poultry birds etc.	Major Performance parameters / indicators		% change in the parameter	Other parameters (if any)		Econ. of demo. (Rs./Ha.)				Econ. of check (Rs./Ha.)				Remarks
							Demo	Check		Demo	Check	GC **	GR **	NR **	BCR **	GC	GR	NR	BCR	

**** 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.

(ii) Fisheries

Sl. No.	Category, e.g. Common carp, ornamental fish etc.	Thematic area	Name of Technology	No. of farmers	No. of units	No. of fish/ fingerlings	Major Performance parameters / indicators		% change in the parameter	Other parameters (if any)		Econ. of demo. (Rs./Ha.)				Econ. of check (Rs./Ha.)				Remarks
							Demo	Check		Demo	Check	GC**	GR**	NR**	BCR**	GC	GR	NR	BCR	
1.	**Fish :** Catla, Rohu, Mrigal, Silver carp, Grass carp, Common carp **Duck :** Khaki	Integrated farming system	Popularization of Fish based integrated farming system	7	-	8000 fingrlings	Fish yield- 3430kg/ha Duck yield- 325 kg Horticulture yield- 315 kg	Fish yield- 2480kg/ha	38.3			146800	367000	220200	2.5	153500	276300	122800	1.8	

	campbell **Horticulture crops:** cabbage, cauliflower, chilli, knol kohl, cucumber																		
2.	Amur common carp Catla, Rohu		Popularization of Amur carp in composite fish culture system	7		**10000 fingerlings** Amur carp-4000 Catla-3000 Rohu-3000	Final wt gain of Amur (8 months) - 1200g Yield of the fish (Kg/ha) – 4250 kg	Final wt.gain of local common carp(8 months) - 950g Yield of the fish (Kg/ha) – 3530				47600	1062500	5865000	2.23	492600	985200	492600	2.0	

***** 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.

(iii) Other enterprises

Sl. No.	Category/ Enterprise, e.g., mushroom, vermicompost, apiculture etc.	Thematic area	Name of Technology	No. of farmers	No. of units	Major Performance parameters / indicators		% change in the parameter	Other parameters (if any)		Econ. of demo. (Rs./Ha.)				Econ. of check (Rs./Ha.)				Remarks
						Demo	Check		Demo	Check	GC**	GR**	NR**	BCR**	GC	GR	NR	BCR	
1.	Roselle	Value addition	Popularization of Roselle Jam	10	10	Product Recovery/kg-**1.25litre/kg** Carbohydrate – **33.72** Protein-**0.18** Sugar content-**33.18** Shelf life (months)- **6**	Product Recovery/kg-**1.0litre/kg** Carbohydrate – **30.3** Protein- **0.28** Sugar content-**23.74** Shelf life (months)- **6**	25			845	1800	955	2.1	455	600	145	1.3	
2.	Assam mix	Value addition	Popularization of Assam mix	10	10	Adoption %-**80%** Shelf life- **3**					249	-	-	-	555	-	-	-	

						months Consumer preference - **Like slightly (based on 5 point Hedonic scale)** Monthly Body weight(6 to 12 months) in Kg- Aug- **6.5 kg** Sept- **6.9 kg** Oct- **7.4kg** Nov – **7.8 kg** Dec – **8.2 kg** Jan – **8.7 kg** Feb – **9.3 kg**													
3.	Oilseed Mustard var. NRCHB -101 under zero tillage	Impact Assessment	Impact study on CFLD of oilseed Mustard Var. NRCHB			Variety-NRCHB-101 Crop Yield (q/ha)-**8.20** Increase in	Variety-Local Cultivar *Yella* Crop Yield (q/ha)-7**.80** Increase in income (net income in	- 15.21			**24500**	**57400**	**32900**	1.34	24000	50700	26700	1.11	Moderately accepted by farmers

	cultivation		-101 Under Zero Tillage Condition			income (net income in Rs.)-**32900** Adoption rate-**135**	Rs.)-2**6700** -	18.84 85.18										based on crop oil content, yield and locally suitable
	Extent of Utilization of Soil Health Card prepared and distributed by KVK	Impact Assessment	Extent of Utilization of Soil Health Card prepared and distributed by KVK			**Kharif: Paddy** Crop Yield (q/ha)-**52.0** Increase in income (net income in Rs.)-**55700** **Rabi: Field Pea** Crop Yield (q/ha)- **9.20** Increase in income (net income in Rs.)- **16750**	**Kharif: Paddy** Crop Yield (q/ha)-**47.0** Increase in income (net income in Rs.)-**40200** **Rabi: Field Pea** Crop Yield (q/ha)- **7.30** Increase in income (net income in Rs.)- **525**	9.61 27.82 20.65 68.65			**Paddy:** 79094 **Field Pea:** 29500	134794 **Field pea:** 92000	55700 **Field Pea** 62500	**Paddy:** 1.42 **Field Pea:** 3.1	**Paddy:** 24000 **Field pea:** 31000	**Paddy:** 117500 **field pea:** 73000	**Paddy:** 40200 **Field pea:** 42000	**Paddy:** 1.34 **Field Pea:** 2.35	Uses of imbalance fertilizer leads to increase in cost of cultivation

***** 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											

f. Performance of FLD on Crop Hybrids

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

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

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

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

3.3. Achievements on Training during 2020

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

Thematic area	No. of Courses/ prog			Participants																		
				General						SC/ST						Total						
				Male		Female		Total		Male		Female		Total		Male		Female		Total		
	On-Campus (1)	SponOn* (2)	Total (1+2)	On (4)	Sp. On (5)	On (6)	Sp. On (7)	On (a=4+6)	Sp. On (b=5+7)	On (8)	Sp. On (9)	On (10)	Sp. On (11)	On (c=8+10)	Sp. On (d=9+11)	On (4+8)	Sp. On (5+9)	On (6+10)	Sp. On (7+11)	On (x = a+c)	Sp. On (y=b+d)	Grand Total (x+y)
I. Crop Production																						
Weed Management	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Resource Conservation Technologies	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cropping Systems	1	-	1	10	-	-	-	10	-	5	-	-	-	5	-	15	-	-	-	15	-	15
Crop Diversificati	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

on																						
Integrated Farming	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water management	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Seed production	1	-	1	16	-	-	-	16	-	-	-	-	-	-	-	16	-	-	-	16	-	16
Nursery management	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Integrated Crop Management	1	-	1	14	-	-	-	14	-	-	-	-	-	-	-	14	-	-	-	14	-	14
Fodder production	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Production of organic inputs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
II. Horticulture																						
a) Vegetable Crops																						
Production of low volume and high value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

crops																						
Off-season vegetables	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nursery raising	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Exotic vegetables like Broccoli	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Export potential vegetables	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Grading and standardization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Protective cultivation (Green Houses, Shade Net etc.)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
b) Fruits																						
Training and Pruning	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Layout and Management of	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Orchards																						
Cultivation of Fruit	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Management of young plants/orchards	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rejuvenation of old orchards	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Export potential fruits	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Micro irrigation systems of orchards	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Plant propagation techniques	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
c) Ornamental Plants																						
Nursery Management	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Management of potted	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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

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

n																					
Integrated Nutrient Management																					
Production and use of organic inputs																					
Management of Problematic soils																					
Micro nutrient deficiency in crops																					
Nutrient Use Efficiency																					
Soil and Water Testing	1	-	1	13	-	-	-	13	-	7	-	-	-	7	-	20	-	-	-	20	-	20
IV Livestock Production and Management																					
Dairy Management																					

Poultry Management	1	-	1	12	-	3	-	15	-	5	-	-	-	5	-	17	-	3	-	20	-	20
Piggery Management	3	-	3	35	-	5	-	40	-	15	-	5	-	20	-	50	-	10	-	60	-	60
Rabbit Management																						
Disease Management																						
Feed management																						
Production of quality animal products																						
V Home Science/Women empowerment																						
Household food security by kitchen gardening and nutrition gardening																						

Design and development of low/minimum cost diet																						
Designing and development for high nutrient efficiency diet																						
Minimization of nutrient loss in processing																						
Gender mainstreaming through SHGs																						
Storage loss minimization techniques																						
Value addition	3	-	3	5	-	15	-	20	-	-	-	15	-	15	-	5	-	30	-	5	-	35
Income generation activities for	2	-	2	3	-	15	-	18	-	2	-	10	-	12	-	5	-	25	-	30	-	30

empowerment of rural Women																					
Location specific drudgery reduction technologies																					
Rural Crafts																					
Women and child care																					
VI Agril. Engineering																					
Installation and maintenance of micro irrigation systems																					
Use of Plastics in farming practices																					
Production of small tools and implements																					

Repair and maintenance of farm machinery and implements																					
Small scale processing and value addition																					
Post Harvest Technology																					
VII Plant Protection																					
Integrated Pest Management	1	-	1	15	-	-	-	15	-	5	-	-	-	5	-	20	-	-	-	20	-	20
Integrated Disease Management																					
Bio-control of pests and diseases																					
Production of bio control agents and bio																					

pesticides																					
VIII Fisheries																					
Integrated fish farming	1	-	1	5	-	5	-	20	-	-	-	-	-	-	-	20	-	-	-	20	-	20
Carp breeding and hatchery management																					
Carp fry and fingerling rearing																					
Composite fish culture																					
Hatchery management and culture of freshwater prawn																					
Breeding and culture of ornamental fishes																					
Portable plastic carp																					

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

Bio-fertilizer production																					
Vermi-compost production																					
Organic manures production																					
Production of fry and fingerlings																					
Production of Bee-colonies and wax sheets																					
Small tools and implements																					
Production of livestock feed and fodder																					
Production of Fish feed																					
X Capacity Building and Group Dynamics																					
Leadership developmen																					

t																						
Group dynamics																						
Formation and Management of SHGs	1	-	1	17	-	2	-	19	-	6	-	-	-	6	-	23	-	2	-	25	-	25
Mobilization of social capital																						
Entrepreneurial development of farmers/youths	1	-	1	14	-	-	-	14	-	6	-	-	-	20	-	20	-	-	-	20	-	20
WTO and IPR issues																						
XI Agro-forestry																						
Production technologies																						
Nursery management																						
Integrated Farming																						

Systems																						
TOTAL	16	0	16	154	0	40	0	194	0	51	0	30	0	95	0	205	0	70	0	245	0	275

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
				General						SC/ST						Total						
				Male		Female		Total		Male		Female		Total		Male		Female		Total		
	Off	Sp Off*	Total	Off	Sp Off*	Off	Sp Off*	Off	Sp Off*	Off	Sp Off*	Off	Sp Off*	Off	Sp Off*	Off	Sp Off*	Off	Sp Off*	Off	Sp Off*	
I. Crop Production																						
Weed Management																						
Resource Conservation Technologies																						
Cropping Systems	1	-	1	20	-	-	-	20	-	-	--	-	-	-	-	20	0	-	-	20	-	20
Crop Diversificati																						

on																						
Integrated Farming																						
Water management																						
Seed production																						
Nursery management																						
Integrated Crop Management																						
Fodder production																						
Production of organic inputs																						
II. Horticulture																						
a) Vegetable Crops																						
Production of low volume and high value																						

crops																					
Off-season vegetables																					
Nursery raising																					
Exotic vegetables like Broccoli																					
Export potential vegetables																					
Grading and standardization																					
Protective cultivation (Green Houses, Shade Net etc.)																					
b) Fruits																					
Training and Pruning																					
Layout and Management of																					

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

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

f) Spices																					
Production and Management technology																					
Processing and value addition																					
g) Medicinal and Aromatic Plants																					
Nursery management																					
Production and management technology																					
Post harvest technology and value addition																					
III Soil Health and Fertility Management																					
Soil fertility management	1	-	1	20	-	-	-	20	-	-	-	-	-	-	-	20	0	-	-	20	-	20
Soil and Water Conservatio																					

n																						
Integrated Nutrient Management																						
Production and use of organic inputs	1	-	1	15	-	5	-	20	-	-	-	-	-	-	-	15	-	5	-	20	-	20
Management of Problematic soils																						
Micro nutrient deficiency in crops																						
Nutrient Use Efficiency																						
Soil and Water Testing																						
IV Livestock Production and Management																						
Dairy Management	1	-	1	17	-	3	-	20	-	5	-	-	-	5	-	22	-	3	-	25	-	25

Poultry Management																						
Piggery Management	1	-	1	17	-	5	-	22	-	-	-	-	-	-	-	17	-	5	-	22	-	22
Rabbit Management																						
Disease Management																						
Feed management																						
Production of quality animal products																						
V Home Science/Women empowerment																						
Household food security by kitchen gardening and nutrition gardening																						

Design and development of low/minimum cost diet																						
Designing and development for high nutrient efficiency diet																						
Minimization of nutrient loss in processing																						
Gender mainstreaming through SHGs																						
Storage loss minimization techniques																						
Value addition	2	-	2	-	-	20	-	20	-	-	-	-	-	-	-	-	-	20	-	20	-	20
Income generation activities for																						

empowerment of rural Women																					
Location specific drudgery reduction technologies																					
Rural Crafts																					
Women and child care																					
VI Agril. Engineering																					
Installation and maintenance of micro irrigation systems																					
Use of Plastics in farming practices																					
Production of small tools and implements																					

Repair and maintenance of farm machinery and implements																					
Small scale processing and value addition																					
Post Harvest Technology																					
VII Plant Protection																					
Integrated Pest Management	5	-	5	70	-	10	-	80	-	15	-	5	-	20	-	85	-	15	-	100	-	100
Integrated Disease Management																					
Bio-control of pests and diseases																					
Production of bio control agents and																					

bio pesticides																					
VIII Fisheries																					
Integrated fish farming	1	-	1	18	-	3	-	21	-	-	-	-	-	-	-	18	-	3	-	21	-	21
Carp breeding and hatchery management																					
Carp fry and fingerling rearing																					
Composite fish culture	2	-	2	17	-	-	-	17	-	3	-	2	-	5	-	20	-	2	-	22	-	22
Hatchery management and culture of freshwater prawn																					
Breeding and culture of ornamental fishes																					

Portable plastic carp hatchery																					
Pen culture of fish and prawn																					
Shrimp farming																					
Edible oyster farming																					
Pearl culture																					
Fish processing and value addition	1	-	1	20	-	-	-	20	-	-	-	-	-	-	-	20	-	-	-	20	-	20
IX Production of Inputs at site																					
Seed Production																					
Planting material production																					
Bio-agents production																					

Bio-pesticides production																					
Bio-fertilizer production																					
Vermi-compost production																					
Organic manures production																					
Production of fry and fingerlings																					
Production of Bee-colonies and wax sheets	1	-	1	25	-	-	-	25	-	-	-	-	-	-	-	25	-	-	-	25	-	25
Small tools and implements																					
Production of livestock feed and fodder																					
Production of Fish feed																					

X Capacity Building and Group Dynamics																					
Leadership development																					
Group dynamics																					
Formation and Management of SHGs	2	-	2	27	-	5	-	32	-	5	-	-	-	5	-	32	-	5	-	37	-	37
Mobilization of social capital																					
Entrepreneurial development of farmers/youths	2	-	2	10	-	3	-	13	-	10	-	5	-	15	-	20	-	8	-	28	-	28
WTO and IPR issues																					
XI Agro-forestry																					
Production technologies																					
Nursery managemen																					

t																						
Integrated Farming Systems																						
TOTAL	**21**	**0**	**21**	**268**	**0**	**54**	**0**	**312**	**0**	**38**	**0**	**12**	**0**	**50**	**0**	**314**	**0**	**66**	**0**	**380**	**0**	**380**

(B) RURAL YOUTH

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

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

Thematic area	No. of Courses/ Prog			Participants																		Grand Total (x + y)
				General						SC/ST						Total						
				Male		Female		Total		Male		Female		Total		Male		Female		Total		
	On (1)	Sp On * (2)	Total (1+2)	On (4)	Sp. On (5)	On (6)	Sp. On (7)	On (a=4+6)	Sp. On (b=5+7)	On (8)	Sp. On (9)	On (10)	Sp. On (11)	On (c=8+10)	Sp. On (d=9+11)	On (4+8)	Sp. On (5+9)	On (6+10)	Sp. On (7+11)	On (x = a+c)	Sp. On (y= b+d)	
Mushroom Production																						
Bee-keeping	-	1	1	-	10	-	-	-	10	-	5	-	-	-	5	-	15	-	15	-	15	15
Integrated farming																						

Seed production	-	1	1	-	16	-	-	-	16	-	-	-	-	-	-	-	16	-	16	-	16	16
Production of organic inputs																						
Integrated Farming	1	-	1	10	-	-	-	10	-	5	-	-	-	5	-	15	-	-	-	15	-	15
Planting material production																						
Vermi-culture																						
Sericulture																						
Protected cultivation of vegetable crops																						
Commercial fruit production																						
Repair and maintenance of farm machinery and implements																						

Nursery Management of Horticulture crops																						
Training and pruning of orchards																						
Value addition	-	1	-	2	-	20	-	22	-	-	2	-	11	-	13	-	4	-	31	-	35	35
Production of quality animal products																						
Dairying	1	-	1	13	-	-	-	13	-	7	-	-	-	7	-	20	-	-	-	20	-	20
Sheep and goat rearing																						
Quail farming																						
Piggery	2	-	2	17	-	12	-	29	-	9	-	7	-	16	-	26	-	19	-	45	-	45
Rabbit farming	-																					
Poultry production	2	2	4	24	18	4	5	28	23	5	2	4	0	9	2	29	20	6	5	35	25	60
Ornamental fisheries	-	1	1	-	15	-	-	-	15	-	-	-	-	-	-	-	15	-	-	-	15	15

Para vets																						
Para extension workers	1	2	3	15	10	3	2	18	12	-	4	-	-	-	4	15	14	3	2	18	16	34
Composite fish culture																						
Freshwater prawn culture																						
Shrimp farming																						
Pearl culture																						
Cold water fisheries																						
Fish harvest and processing technology																						
Fry and fingerling rearing																						
Small scale processing																						
Post Harvest Technology																						

Tailoring and Stitching																						
Rural Crafts																						
TOTAL	7	8	15	81	69	39	7	120	76	26	13	11	11	37	24	105	84	28	69	133	122	255

3.3.4. Achievements on Training of <u>Rural Youth</u> in <u>Off Campus</u> including <u>Sponsored Off Campus</u> Training Programmes

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

Thematic area	**No. of Courses/ Prog.**			**Participants**																		**Grand Total**
				General						**SC/ST**						**Total**						
				Male		**Female**		**Total**		**Male**		**Female**		**Total**		**Male**		**Female**		**Total**		
	Off	**Sp Off**	**Total**	**Off**	**Sp Off***	**Off**	**Sp Off***	**Off**	**Sp Off***	**Off**	**Sp Off***	**Off**	**Sp Off***	**Off**	**Sp Off***	**Off**	**Sp Off***	**Off**	**Sp Off***	**Off**	**Sp Off***	
Mushroom Production	1	-	1	20	-	-	-	20	-	-	-	10	-	10	-	20	-	10	-	30	-	30
Bee-keeping																						
Integrated farming																						
Seed production	1	-	1	15	-	-	-	15	-	-	-	-	-	-	-	15	-	-	-	15	-	15
Production of organic																						

inputs																						
Integrated Farming	1	-	1	18	-	4	-	22	-	-	-	-	-	-	-	18	-	4	-	22	-	22
Planting material production																						
Vermi-culture																						
Sericulture																						
Protected cultivation of vegetable crops																						
Commercial fruit production																						
Repair and maintenance of farm machinery and implements																						
Nursery Management of Horticulture crops																						

Training and pruning of orchards																						
Value addition	1	-	1	3	-	17	-	20	-	-	-	-	-	-	-	3	-	17	-	20	-	20
Production of quality animal products																						
Dairying																						
Sheep and goat rearing																						
Quail farming																						
Piggery																						
Rabbit farming																						
Poultry production																						
Ornamental fisheries																						
Para vets																						
Para extension workers																						

Composite fish culture																					
Freshwater prawn culture																					
Shrimp farming																					
Pearl culture																					
Cold water fisheries																					
Fish harvest and processing technology																					
Fry and fingerling rearing																					
Small scale processing																					
Post Harvest Technology																					
Tailoring and Stitching																					
Rural Crafts																					

TOTAL	4	0	4	38	0	21	0	77	0	0	0	10	0	10	0	56	0	31	0	87	0	87

C. Extension Personnel

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

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

Thematic area	No. of Courses/ prog			Participants																		Grand Total (x + y)
				General						SC/ST						Total						
				Male		Female		Total		Male		Female		Total		Male		Female		Total		
	On (1)	Sp On * (2)	Total (1+2)	On (4)	Sp. On (5)	On (6)	Sp. On (7)	On (a=4+6)	Sp. On (b=5+7)	On (8)	Sp. On (9)	On (10)	Sp. On (11)	On (c=8+10)	Sp. On (d=9+11)	On (4+8)	Sp. On (5+9)	On (6+10)	Sp. On (7+11)	On (x = a +c)	Sp. On (y= b +d)	
Productivity enhancement in field crops	1	-	1	8	-	5	-	13	-	2	-	-	-	2	-	10	-	5	-	15	-	15
Integrated Pest Management	1	-	1	13	-	-	-	13	-	7	-	-	-	7	-	20	-	-	-	20	-	20
Integrated Nutrient management																						

Rejuvenation of old orchards																					
Protected cultivation technology	1	-	1	17	-	-	-	17	-	3	-	-	-	3	-	20	-	-	-	20	-	20
Formation and Management of SHGs																					
Group Dynamics and farmers organization																					
Information networking among farmers																					
Capacity building for ICT application																					
Care and maintenance of farm machinery and implements																					

WTO and IPR issues																						
Management in farm animals	1	-	1	8	-	5	-	13	-	2	-	-	-	2	-	10	-	5	-	15	-	15
Livestock feed and fodder production	1	-	1	8	-	5	-	13	-	5	-	2	-	7	-	13	-	7	-	20	-	20
Household food security																						
Women and Child care																						
Low cost and nutrient efficient diet designing																						
Production and use of organic inputs																						
Gender mainstreaming through SHGs																						

Total	5	0	5	54	0	15	0	69	0	19	0	2	0	21	0	73	0	17	0	90	0	90

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

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

Thematic area	No. of Courses/ prog.			Participants																		Grand Total
				General						SC/ST						Total						
				Male		Female		Total		Male		Female		Total		Male		Female		Total		
	Off	Sp Off*	Total	Off	Sp Off*	Off	Sp Off*	Off	Sp Off*	Off	Sp Off*	Off	Sp Off*	Off	Sp Off*	Off	Sp Off*	Off	Sp Off*	Off	Sp Off*	
Productivity enhancement in field crops																						
Integrated Pest Management																						
Integrated Nutrient management																						
Rejuvenation of old orchards																						

Protected cultivation technology																					
Formation and Management of SHGs																					
Group Dynamics and farmers organization																					
Information networking among farmers																					
Capacity building for ICT application																					
Care and maintenance of farm machinery and implements																					
WTO and IPR issues																					
Management in farm																					

animals																					
Livestock feed and fodder production																					
Household food security																					
Women and Child care																					
Low cost and nutrient efficient diet designing																					
Production and use of organic inputs																					
Gender mainstreaming through SHGs																					
TOTAL																					

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

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

Discipline	Area of training	Title of the training programme	Date (From – to)	Duration in days	Venue	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
Agronomy	bio fertilizer prodn	Exploring Different types of organic input production from in-situ residues, packaging & marketing thereof	10/01/2020 to 13/01/2020	3	KVK, Thoubal	Farmers	11	0	11	7	2	9	18	2	20
	Post harvest technology	Post harvest management of paddy and value addition of rice under schedule caste sub plan	16-01-20	1	KVK, Thoubal	Farmers	0	0	0	23	2	25	23	2	25
	Organic farming	Skill training for Organic Grower	21-02-20 to 20-03-20	28	KVK, Thoubal	RY	18	0	0	2	0	2	20	0	20

	Seed production	Scientific cultivation of kharif pulses and oilseeds	4-08-20	1	online	Farmer	17	3	20	2		2	19	3	22
	Seed prod.	Market potentials of certified rice seed production	17-08-20	1	Online	RY	16	2	18	3		3	19	2	21
	cropping system and seed prodn	SRI/ICM and seed production of rice	25-09-20	1	KVK, Thoubal	EP	13	3	16	2	0	2	15	3	18
	Cropping system	Scientific cultivation of rabi field crops	19-10-20	1	KVK, Thoubal	Farmer	17	4	21	5		5	22	4	26
Plant Protection	IPM	IPM in Vegetable crops	18-02-2020	1	KVK	Farmer	12	0	12	2	3	5	14	3	17
	Bio control of pest and disease	Management of stored grain pest	20-2-20	1	KVK	Farmer	13	2	15	3	2	5	16	4	20

Fishery	Scientific fish farming	Scientific fish farming	17-01-20	1	KVK, Thoubal	Farmer	11	4	15	1		1	12	4	16
	water mgmt.	Water quality management in fish farming	27-02-20 to 29-02-20	3	KVK, Thoubal	Farmer	9	3	12	2		2	11	3	14
	breeding and culture of ornamental fishes	Ornamental fish farming	10-08-20	1	online	RY									
	breeding and culture of ornamental fishes	Aquarium fabrication and maintenance	21-09-20 to 23-09-20	3	KVK	RY	11	2	13	2		2	13	2	15
Home science	Value addition	Value addition of winter fruits	13-01-20 to 15-01-20	3	KVK,Thoubal	RY	3	7	10		5	5	3	12	15

	value addition	Enhancing Agricultural Marketing Through value addition of Horticultural crops	10-02-20 to 12-02-20	3	KVK, Thoubal	Farmer	2	8	10	3	3	6	5	11	16
	Value addition	Osmotic dehydration of mango	9-06-20	1	KVK, Thoubal	Farm Women	2	8	10		6		2	14	16
	Value addition	Value addition of fruits	16-07-20 to 18-07-20	3	KVK,Thoubal	Farm Women	1	10	11		3	3	1	13	14
	Value addition	Value addition of underutilized minor fruits	29-08-20	1	Online	Farmer	2	11	13		4	4	2	15	17
	Value addition	Nutrition and capacity development	20-09-20 to 29-09-20	10	Anganwadi centre & KVK	EP		9	9				0	9	9
	Value addition	Preparation of Roselle Jam	26-11-20	1	KVK, Thoubal	Farm Women		8	8		4	4	0	12	12
	Value addition	Value addition of fruits, vegetables and pulses	3-12-20 to 7-12-20	5	KVK,Thoubal	Farmer		9	9		5	5	0	14	14

Agri Ext	Group dynamics	Impact of climate change in Agriculture-its mitigation & adaptation strategy in Manipur	16/01/20	1	KVK, Thoubal	Farmer	13		13	5		5	18	0	18
	Group dynamics	5 days Farmers trg programme on transfer of agricultural technology or DFI	21-02-20 to 25-02-20	5	KVK	Farmer	10		10	3		3	13	0	13
	Group dynamics	Intervention of ICT in Agricultural marketing	6-08-20	1	Online	Farmer	14		14	3	1	4	17	1	18
Animal Science	Poultry production	Skill Training on Broiler Farm Worker	29-01-20 to 28-02-20	31	KVK, Thoubal	RY	18	4	22	1		1	19	4	23
	Dairying	Stry training on Rearing of improved breeds and rearing of cattle and management	14-02-20 to 19-02-20	7	KVK	RY	13	2	15				13	2	15

	Piggery	Scientific piggery farming	9-06-20 to 11-06-20	3	KVK	Farmer	10		10				10	0	10
	Piggery	Bokashi piggery	29-07-20	1	online	Farmer	9		9				9	0	9
	Piggery	Scientific piggery farming	25-08-20	1	Online	Farmer	9		9	7	4	11	16	4	20
	Piggery	Sponsored trg. on Rural livelihood	9-12-20	1	KVK, Thoubal	RY	11		11	2	2	4	13	2	15
	Poultry prodn.	Scientific broiler farming	13-11-20	1	Online	RY	14		14	3	3	6	17	3	20
	Piggery	Scientific Bokashi piggery farming	17-12-20 to 19-12-20	3	KVK, Thoubal	Farmer	13		13	5	3	8	18	3	21
Prog.Asst. Computer	mobilization of social capital	Training on ICT	10-06-20 to 12-06-20	3	KVK, Thoubal	RY	16		16	2		2	18	0	18
	-do-	Agriculture related ICTs	1	26-06-20	KVK,Thoubal	Farmer	8		8	6		6	14	0	14
	-do-	Used of KVK mobile app	1	26-08-20	online	RY	13		13	2		2	15	0	15

Farm Manager	Soil Health mgmt	Soil Health management for sustainable Agriculture	15-07-20	1	Online	PF	10		10	3	2	5	13	2	15
	Soil Health mgmt	Importance of soil testing and its benefits	24-09-20	1	Online		10		10	5		5	15	0	15
Total							358	99	439	109	54	163	467	153	620

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
Agronomy	Scientific cultivation of rice	Scientific cultivation of rice	7-4-20	1	Lourembam	Farmers	16	4	20				16	4	20
	ICM	Scientific cultivation of rabi field crops	9-10-20	1	Thoubal moijing		15	3	18				15	3	18
	SRI	SRI	25-6-20	1	Wanjing	Farmers	20		20	0	0	0	20	0	20

PBG	Seed production	Cultivation of RC Maniphou-13 for seed production	19-6-19	1	Wangoo	Farmers	19	2	21	0	0	0	19	2	21
Plant Protection	Mushroom Cultivation	Mushroom Cultivation	18-01-20 to 20-01-20	3	Kakching Khunou	Farm Women			0	17	5	22	17	5	22
	Pest mgmt.	Pest mgmt. of potato	13-02-20 to 15-02-20	3	Oinam Sawombung	Farmer	16	2	18				16	2	18
	IPM	Training on IPM	17-06-20 to 17-06-20	1	Tekcham	Farmer	23	0	23				23	0	23
	IPM	IPM in rice	26-06-20 to 27-06-20	2	Langmeidong	Farmer	17	2	19				17	2	19
	IPM	IPM in rice	13-07-20 to 15-07-20	3	Thoubal Kshetri Leikai	Farmer	22	0	22				22	0	22
	IPM	IPM in and around our house	17-12-20	1	Langathel	RY	12	3	15				12	3	15
Fishery	Scientific fish farming	Fish Diseases and their control measures	14-01-20 to 16-01-20	3	Tekcham	Farmers	19	2	21				19	2	21

	Water quality mgmt.	Water quality management in fish farming	17-05-20 to 19-05-20	3	Lourembam	Farmer	19	2	21				19	2	21
	Composite fish farming	Composite fish farming	28-9-20	1	Tenthal	Farmers	20	3	23	0	0	0	20	3	23
Home science	Value addition	Dehydration of amla	18-01-20 to 20-01-20	3	Oak Khunou	Farm women				2	5	7	2	5	7
	Value addition	Osmotic dehydration of mango	8-07-20	1	Kakching	Farm Women					6	6	0	6	6
	Value addition	Value addition of fruits	11-08-20 to 12-08-20	2	Lourembam	Farmer	7	12	19				7	12	19
	Value addition	Value addition of underutilized minor fruits	4-09-20	1	Langathel	Farm Women	2	12	14				2	12	14
	Value addition	Preparation of Roselle jam	28-11-20		Kakching	Farmer				2	6	8	2	6	8
	Value addition	Bori production	19-12-20	1	Tekcham	Farmers	8	10	18				8	10	18

Agri Ext	Capacity building and group dynamics	Promotion & formation of SHG	17-05-20	1	Heirok	Farmers	7	9	16				7	9	16
	-do-	Meet the expert programme	9-07-20	1	Lourembam	Farmers	18	2	20				18	2	20
Animal Science	Piggery	Scientific piggery farming	9-06-20 to 11-06-20	3	Lourembam		17		17				17	0	17
	Dairy farming	Scientific dairy farming	9-7-20	1	Khongjom sapam leikai	RY	13	2	15	0	0	0	13	2	15
Farm Manager	Soil Health mgmt	Soil Health management for sustainable griculture	14-01-20 to 16-01-20	3	Khangabok Mayai Leikai	Farmer	16	5	21				16	5	21
	Soil Health mgmt	Importance of Soil testing and procedure for soil sample collection	18/01/20 to 20/01/20	3	Kakching Khunou	Farmer				17		17	17	0	17

Total							**306**	**75**	**381**	**38**	**22**	**60**	**344**	**97**	**441**

(D) Vocational training programmes for Rural Youth

Crop / Enterprise	Date (From – To)	Duration (days	Area of training	Training title*	No. of Participants									Impact of training in terms of Self-employment after training				Whether Sponsored by external funding agencies (Please Specify with amount of fund in Rs.)
					General			SC/ST			Total							
					M	F	T	M	F	T	M	F	T	Type of enterprise ventured into	Number of units	Number of persons employed	Avg. Annual income in Rs. generated through the enterprise	
Production of dehydrated fruits candy/bori/pickles	12-08-20 to 17-08-20	7	Value addition	Production of dehydrated fruits candy/bori/pickles	4	7	11	0	4	4	4	11	15		6	6	Rs.4,60,280	-
Production of value added black rice	21-11-20 to	7	Value addition	Production of value added	2	8	10	0	5	5	2	13	15		4	4	Rs.2,40,000	-

products	26-11-20			black rice products													

*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		7	Agronomy	Seed production	Seed production	15	-	15				15	-	15	MANAGE	Rs.42000
On	RY		7	PP	Bee Keeping	Bee Keeping	14	1	15	-	-	-	14	1	15	MANAGE	Rs.42000
On	RY	29-1-20 to 29-2-20	30	Animal Science	Broiler farm worker	Broiler farm worker	21	2	23	2	-	2	23	2	25	ASCI	Rs.2,20,000
	RY		7		Cattle Rearing	Rearing of improved breed and rearing of cattle and management	12	3	15							MANAGE	Rs,42000

	Farmer		1		Scientific Dairy Farming		26	0	26	28	5	33	54	5	59	Yumbi Dairy	
	Farmer		1		On Fodder & Livestock Based Intervention for Livelihood Improvement of NEH farmers		23		23	3		3	26	0	26	DEE, CAU Imphal	
On	RY		1	Fisheries	Ornamental Fish farming		15	-	15	-	-	-	15	-	15	MANAGE	42,000
On	Farmer	10-2-20 to 12-2-20	3		Enhancing Agricultural Marketing through Value Addition of Horticultural crops		6	13	19	3	7	10	9	20	29	MSFAC	-

On	RY	9-12-20	1		Rural livelihood		30	-	30	-	-	-	30	-	30	ICICI foundation	
Total							162	19	181	36	12	64	198	31	229		

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 2020

Sl. No.	Extension Activity	Topic	Date and duration	No. of activities	Participants											
					General (1)			SC/ST (2)			Extension Officials (3)			Grand Total (1+2)		
					M	F	T	M	F	T	M	F	T	M	F	T
1.	**Advisory services**	**Livestock, Weather, Agriculture, Awareness etc**	**Throughout year**	1560	876	597	1473	58	29	87	-	-	-	934	626	1560
2.	Diagnostic visit			42	84	50	134	25	7	32	-	-	-	109	57	166
3.	Field day		07/03/2020	1	18	5	23	7	-	7	-	-	-	25	5	30
4.	Group Discussion			17	190	64	254	3	10	13	-	-	-	193	74	267
5.	Kishan Gosthi			1	46	13	59	16	-	16	-	-	-	62	13	75

	Kishan Mela	5/12/2020 3/26/2021		2	58	18	76	12	12	24	-	-	-	70	30	100
6.	Film show	29/9/2020		1	21	9	30	3	-	3	-	-	-	24	9	33
7.	SHG formation			7	32	81	113	11	22	33	-	-	-	43	103	146
8.	Exhibition	15/12/2020		1	29	29	58	9	6	15	-	-	-	38	35	73
9.	Scientists visit to farmers fields			96	309	100	409	27	20	47	-	-	-	336	120	456
10.	Plant/ Animal Health camp	26-28 June,2020		3	121	51	172	21	10	31	-	-	-	142	61	203
11.	Farm science club	7/7/2020, 8/7/2020		2	27	10	37	3	2	5	-	-	-	30	12	42
12.	Ex-trainee Sammelan															
13.	Farmers seminar/ workshop	15/12/2020 27/08/2020		2	56	16	72	8	-	8	-	-	-	64	16	80
14.	Method demonstration	Preparation of Bamboo Vinegar and IMO Production of Mango candy Value addition of tamarind Briquette making Preparation of Paneer Preparation of Candle		16	90	53	143	35	19	54	-	-	-	125	72	197

		Preparation of Roselle Jam Bag feeding Soil sample collection Preparation of amla candy Preparation of Assam mix														
15.	Celebration of important days	Celebration of World Food Day,2020 International Womens Day World Environment Day Kisan Diwas World Soil Day		5	106	35	141	28	-	28	-	-	-	134	35	169
16.	Exposure visits	KVK,Senapati	26/02/20	1	25	5	30	4	-	4	-	-	-	29	5	34
17.	Electronic media (CD/DVD)															
18.	Extension literature			1												
19.	Newspaper coverage			36												
20.	Popular articles	Local newspaper Huiyen Lanpao		134												
21.	Radio talk			5												
22.	TV talk			8												
23.	Training			1	33	14	47	7	1	8	-	-	-	40	15	55

	manual															
24.	Soil health camp	5-12-20		140	554	35	589	27	-	27	-	-	-	581	35	616
25.	Awareness camp			5	31	37	68	6	11	17	-	-	-	37	48	85
26.	Lecture delivered as resource person			18												
27.	PRA															
28.	Farmer-Scientist interaction			2	20	10	30	16	10	26	-	-	-	30	26	56
29.	Soil test campaign			4	36	19	55	9	1	10	-	-	-	45	20	65
30.	Mahila Mandal Convener meet	15-10-2020		2	-	46	46	-	-	-	-	-	-	-	46	46
31.	Farmers visit to KVK			1451	1022	293	1315	94	42	136	-	-	-	1116	335	1451
32.	Leaflets/folders			6												
Grand Total					**3728**	**1561**	**5289**	**404**	**191**	**595**				**4132**	**1752**	**5884**

3.5 Production and supply of Technological products during 2020

A. SEED MATERIALS

Major group/class	Crop	Variety	Quantity (qt)	Value (Rs.)	Number of recipient/ beneficiaries				
					General		SC/ST		Grand Total
					M	F	M	F	
CEREALS	Rice	Tampha phou	31.60	142200	11	5	5	-	21
		Akut phou	1.64	7380	9	2	-	-	11
		Sana phou	10.00	45000	8	3	-	-	11
		Gin phou	5.70	25650	5	2	-	-	7
		RC Mani-7	17.10	76950	5	3	-	-	8
		RC Man-13	31.20	140400	21	4	3	-	28
		Chakhao	2.46	11070	5	-	-	-	5
		Pari phou	2.80	12600	5	3	-	-	8
		RC Mani-12	3.40	15300	7	1	-	-	8
OILSEEDS	Mustard	NRCHB-101	14.80	88800					
PULSES	Chickpea	JG-16	15.00	150000					
	Lentil	HUL-57	80.00	640000					
	Field pea	Aman	60.00	480000					
	Moong	SML-667	28.00	448000					
	Arhar	TS-3R	25.20	500000					
	Blackgram	PU-31	102	816000					
VEGETABLES									

FLOWER CROPS									
OTHERS (Specify)									
Total			**430.9**	**3599350**					

A1. SUMMARY of Production and supply of Seed Materials during 2020

Sl. No.	**Major group/class**	**Quantity (q) produced**	**Quantity (q) supplied**	**Value (Rs.) of quantity produced**	**Number of recipient/ beneficiaries**		
					General	**SC/ST**	**Total**
1	CEREALS	331	314	10,99,000	1600	400	2000
2	OILSEEDS	30.3	5.6	56,000	37	-	37
3	PULSES	326	50	6,00,000	200	50	250
4	VEGETABLES	-	-	-	-	-	-
5	FLOWER CROPS	-	-	-	-	-	--
6	OTHERS	-	-	-	-	-	-
TOTAL		**687.3**	**369.6**	**17,55,000**	1837	450	2287

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

Major group/class	**Crop**	**Variety**	**Quantity (In No.)**	**Quantity (In No.)**	**Value (Rs.) of quantity**	**Number of recipient/ beneficiaries**		
						General	**SC/ST**	**Grand Total**

			produced	**suppliedced**	**produced**	**M**	**F**	**M**	**F**	
Fruits	Papaya	African Red papaya	200		4000	15	5	-	-	20
Spices	Onion	Prema	20000		5000	75	25	-	-	100
	Chili	Arka Meghana	20000		5000	80	20	-	-	100
Ornamental Plants										
VEGETABLES	Cabbage	Green hero	18000		18000	4	8	-	-	12
	Cauliflower	White flash/ Candid	17000		21250	6	6	-	-	12
	Broccoli	Green magic	4500		6750	10	15	-	-	25
	Tomato	Arka Rakshak	2500		2500	5	20	-	-	25
	Brinjal	Local- Serpentine type	2500		2500	25	35	-	-	60
	Pumpkin	Big gold	200		2000	7	3	-	-	10
	Bottle guard	BSS-333 pratik	200		2000	8	2	-	-	10
Forest Spp.										
Plantation crops	Tree beans	Local	500		5000	43	7	-	-	50
Medicinal plants										
OTHERS (Pl. Specify)	i)Chia		0.5							
	ii)Quinoa		1							
Total			**85601.5**		**74000**					

C. Production of Bio-Products during 2020

Major group/class	Product Name	Species	produced Quantity		Value (Rs.)	Number of Recipient /beneficiaries				
			No	(qt)		General		SC/ST		Grand Total
						M	F	M	F	
BIOAGENTS										
BIOFERTILIZERS	Vermicompost	E-fotidae	12000	4000	92000	47	3	-	-	55
BIO PESTICIDES										

D. Production of livestock during 2020

Sl. No.	Type/ category of livestock	Breed	Quantity		Value (Rs.)	Number of Recipient beneficiaries				
			(Nos)	Kgs		General		SC/ST		Total
						M	F	M	F	
1	**Cattle/ Dairy**		2		10000					
2	**Goat**		5		5000					
3	**Piggery**		9		27000					
4	**Poultry**									
5	**Fisheries**		5000		35000					
6	**Others (Specify) Duckery**		95		9400					
	Total		**5111**		**86400**					

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

(A) KVK News Letter ((Date of start, Periodicity, number of copies distributed etc.):_Jan 2019-March 2021, 250 copies

(B) Articles/ Literature developed/published

Item	Title /and Name of Journal	Authors name	Number of copies	
			Produced/ published	Supplied/ distributed
Research papers				
1.	Farmers perception towards Chemical Castration in piglet	Dr.S.Zeshmarani, Sr.Scientist & Head		
2.	Influence of farmers' club programme in Manipur: an empirical study on degree of farmer's satisfaction	Salam Prabin Singh, PA(Agri Extention)		
3.	Prospect of Fish based integrated aquaculture system in Thoubal district, Manipur	SribidyaWaikhom SMS(Fisheries)		
Training manuals	Broiler Farming	Dr. S. Zeshmarani, Sr.Scientist& Head	**50**	
Technical Report				
1.				
Book/ Book Chapter				
Popular articles	• Livestock • Plant Protection • Plant breeding & genetics • Agronomy	• Dr.S.Zeshmarani, Sr.Scientist & Head • Dr.M.ThoiThoi Singh, SMS(PP) • S.SumangalSingh, SMS(PBG) • N.Tomba Singh,	Every Monday on local newspaper HueiyenLanpao http://hueiyenpao.com/	

		SMS(Agronomy		
Technical bulletins	Nutri gardening	R.K.Lembisana Devi SMS(Home Science)	70	
Extension bulletins				
Newsletter	1		200	
Conference/ workshop proceedings				
Leaflets/folders	i)Nutritional Gardening ii) Nutri Thali iii)Ornamental fish breeding & rearing iv)Crop diversification in rain fed upland rice areas v)Scientific Broiler Rearing vi) Fish feed & feeding practices	• RK Lembisana Devi, SMS (Home Sc.) • RK Lembisana Devi, SMS (Home Sc.) • SribidyaWaikhom SMS (Fisheries) • N.Tomba Singh, SMS(Agro) • Dr.S.Zeshmarani, Sr.Scientist & Head • SribidyaWaikhom SMS(Fisheries)	300	
e-publications				
Any other (Pl. specify)				
TOTAL				

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): 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

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: 2

ii. No. of farm families selected: 140

iii. No. of survey/PRA conducted: 140

3.12. Activities of Soil and Water Testing

Status of establishment of Lab : not upto the mark

1. Year of establishment :2016
2. List of equipments purchased with amount :nil

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

3.Details of samples analyzed (2020) :

Details	No. of Samples analysed	No. of Farmers	No. of Villages	Amount (In Rupees) realized
Soil Samples	140	616	5	Nil
Water Samples	150	138	8	Nil
Plant Samples	-	-	-	-
Petiole Samples	-	-	-	-
Total	**335**	**754**	**13**	**Nil**

4.Details of Soil Health Cards (SHCs) -

a. **No. of SHCs prepared: 1000**
b. **No. of farmers to whom SHCs were distributed: 754**
c. **Name of the Major and Minor nutrients analysed: NPK**
d. **No. of villages covered: 13**

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 Ben	No. of Message	No. of	No. of Message	No. of	No. of Message	No. of Benefi	No. of Message	No. of	No. of Message	No. of	No. of Message	No. of Benefi

		eficiary		Benef iciary		Benef iciary		ciary		Benef iciary		Benef iciary		ciary
Text only	9	1552	8	2770	4	3889	1	10	23	3854	2	645	47	12729
Voice only	1300	1278	632	632	30	30	50	50	50	50	300	300	2462	2462
Voice and Text both	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	**1309**	**2828**	**640**	**3402**	**34**	**3019**	**51**	**60**	**73**	**3904**	**302**	**954**	**2509**	**15191**

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	1400	200	1600
Draught	**Introduction of Resource Conservation Technologies**	100	200	70	270

Flood/ draught	**Distribution of seeds and planting materials**	400	1200	300	1500

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		10	2	700	650	50	700

4. 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)
Bokashi piggery	40	87%	12,000	21,000

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

4.2 Cases of large scale adoption

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

5.0. LINKAGES ESTABLISHED

5.1 Functional linkage with different organizations established during 2020

Name of organization	Nature of linkage
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 Vetinary& 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

DEE,CAU Imphal	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
ICICI Foundation	Training

NB The nature of linkage should be indicated in terms of joint diagnostic survey, joint implementation, participation in meeting, contribution received for infrastructural development, conducting training programmes and demonstration or any other

5.2 List special programmes undertaken by the KVK, which have been financed by State Govt./Other Agencies during 2020

Name of the scheme/ special programme	Activity	Date/ Month of initiation	Funding agency	Amount (Rs.)
MeraGaonMera Gaurauv	Visit, Demonstration, Group meeting	Every month	ATARI-VII	
Rabi Campaign	Input	1 day) 18/11/2020	ATARI-VII	
Swachhta Action Plan (SAP)	Cleaning,Awareness, Vermicomposting, Demonstration	Every month	ATARI-VII	40500
Swachhta Pakhwada	Cleaning,Organic Waste mgmt., aw areness, S WM, Quiz, Water harvesting structure	15 days, 16-31Dec,2020	ATARI-VII	
Constitution Day	Oath taking	26/11/2020	ATARI-VII	
World Soil Health Day	Soil health card distribution, training, interaction	5/12/2020	ATARI-VII	

Kisan Diwas	Awareness programme	23/12/2020	ATARI-VII	
Skill Development Programme under ASCI	Training, practical, Demo & Field visit	(30 days)12/03/21 to 12/04/2021	ASCI	220000
CFLD on Oilseed	Demonstration, Field Day	Rabi season	ATARI-VII	279179
NARI	Establishment of nutria garden, Vermicomposting, Mushroom production unit		ATARI-VII	50000
KSHAMTA	Training, Demonstration, Compilation of traditional knowledge		ATARI-VII	50000
SCSP			ATARI-VII	300000
DAMU			ATARI-VII	120000
Demonstration of growth performance of improved fish varieties-Jayanti Rohu/Amur carp.	Adoption and support of new Technology in fish culture		NFDB	212500
Livelihood Support to farmers through Establishment of Village level Scientific Pig bank at Kakching District, Manipur" under Bokashi system of Pig rearing			NABARD, Imphal	300000
Establishment of seed production centers for air breathing fishes Clarias magur (Ngakra) and Anabas testudineus (Ukabi) at Thoubal and Kakching district, Manipur			NABARD, Imphal	151200
STRY SAMETI	Training, Exposure visit		SAMETI ,Manipur	126000

Bokashi for Sustainable piggery farming.	Training, Demonstration		ICAR,VPKAS Almorah	600000
Capacity building for adoption of technology	Exposure visit		NABARD, Imphal	24440
Capacity building for adoption of technology	Exposure visit		NABARD, Imphal	20950
Total				**2085679**

5.3 Details of linkage with ATMA

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

Sl. No.	Programme	Nature of linkage	Remarks
1.	Training	Conducting training and demonstration	Training programme

5.4 Give details of programmes implemented under National Horticultural Mission nil

5.5 Nature of linkage with National Fisheries Development Board : Nil

6. PERFORMANCE OF INFRASTRUCTURE IN KVK DURING 2020

6.1 Performance of demonstration units (other than instructional farm)

Sl. No.	Demo Unit	Year of estd.	Area	Details of production	Amount (Rs.)	Remarks

	(Name and No.)			Variety/ species/ breed	Type of Produce	Qty.	Cost of inputs	Gross income	
1	Bokashi piggery	2018-2019	0.01 ha	Cross bred pig	Meat purpose	2	12,000	18,000	
2	Dairy	2017-2018	0.01 ha	Non descript breed	Meat purpose	4	10,000	25,000 (from one cattle)	
3	Fishery	2010-2011	1.5 ha	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	10.7.19 to 24.7.19	20.11.19 to 2.12.19	3.35	Akutphou Ginphou CAU -R1 RC Maniphou7	Truth full level seed	86.7	262536	304000	Yield of crop was low due to late on set of monsoon and long dry spell during

				RC Maniphou12 RC Maniphou13 Pari phou WR 15-6-1					the crop.
Wheat	-	-	-	-	-	-	-	-	-
Maize	-	-	-	-	-	-	-	-	-
Any other	-	-	-	-	-	-	-	-	-
Pulses									
Green gram	-	-	-	-	-	-	-	-	-
Black gram	-	-	-	-	-	-	-	-	-
Arhar	-	-	-	-	-	-	-	-	-
Lentil	25.11.19	14.3.20	0.05	HUL-57	Truth (TL)	0.35	1700	2800	Zero tillage trial
Ay other	-	-	-	-	-	-	-	-	-
Oilseeds									
Mustard	30.11.19	20.3.20	0.2	NRCHB101	Truth (TL)	1.6	5000	9600	Zero tillage trial
Soy bean	-	-	-	-	-	-	-	-	-
Groundnut	-	-	-	-	-	-	-	-	-
Any other	-	-	-	-	-	-	-	-	-
Fibers									

i.	-	-	-	-	-	-	-	-	-
ii.	-	-	-	-	-	-	-	-	-
Spices & Plantation crops									
i.	-	-	-	-	-	-	-	-	-
ii.	-	-	-	-	-	-	-	-	-
Floriculture									
i.	-	-	-	-	-	-	-	-	-
ii.	-	-	-	-	-	-	-	-	-
Fruits									
i.	-	-	-	-	-	-	-	-	-
ii.	-	-	-	-	-	-	-	-	-
Vegetables									
i.	-	-	-	-	-	-	-	-	-
ii.	-	-	-	-	-	-	-	-	-
a. Others (specify)									
i.	-	-	-	-	-	-	-	-	-
ii.	-	-	-	-	-	-	-	-	-

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

Sl. No.	Name of the Product	Qty	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	
1	Vermicompost	700 kgs.	9440	10500	

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

Sl. No	Name of the animal / bird / aquatics	Details of production			Amount (Rs.)		Remarks
		Breed/ species	Type of Produce	Qty.	Cost of inputs(Rs.)	Gross income(Rs.)	
1	Pig	Crossbred	Piglet	5	20000	27000	1 adult pig sold @ Rs.22,000/- &1 piglet @Rs.5000/-
2	Goat	Non-descript local	Kid/Meat	8	3000	12000	4 kids were sold @ Rs.3000/Kid.
3	Cattle	Non-descript local	Milk	5	16200	10500	2 lits. Milk/day @ Rs.70 for 5 month.
4	Poultry	Kamrupa	Egg/Meat	100	10000	18000	
5	Geese	Local	Meat	25	6000	12000	20 nos. of geese @ Rs. 500/Chick & 2nos of adult geese @ Rs.1000.
6	Fisheries	Common carp	fingerling	5000	10000	12800	

6.5 Rainwater Harvesting

Training programmes conducted by using Rainwater Harvesting Unit/ structure

Date	Title of the training course		No. of Courses	No. of Participants including SC/ST

		Client (PF/RY/EF)		Male	Female	Total
-	-	-	-	-	-	-

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

Accommodation available (No. of beds): nil

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	Thoubal	11946667259
Revolving Fund	State Bank of India	Thoubal	37606402881

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

Item	Released by ICAR/ATARI (in lakh)		Expenditure (in lakh)		Unspent balance as on 31st March, 2018
	Amount	Amount	Amount	Amount	
Inputs	0.3780 (Oilseeds Mustard)		0.3780		Nil
Extension activities	0.0720		0.0720		

TA/DA/POL etc.					
TOTAL	**0.45**		**0.45**		

7.3 Utilization of KVK funds during the year 2020

S. No.	Particulars	Sanctioned (in Lakh)	Released (in Lakh)	Expenditure (in Lakh)
A. Recurring Contingencies				
1	**Pay & Allowances**	185.00	185.00	184.96762
2	**Traveling allowances**	2.50	2.50	2.49902
3	**HRD**	0.75	0.75	0.75
4	**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 equipments			
C	Meals/refreshment for trainees			
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)			
E	Frontline demonstration except oilseeds and pulses			

F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)			
G	Training of extension functionaries			
H	Maintenance of buildings			
I	Establishment of Soil, Plant & Water Testing Laboratory			
J	Library			
TOTAL (A)		**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)		**0.30**	**0.30**	**0.30**
C. REVOLVING FUND				
D. NARI		0.50	0.50	0.50
GRAND TOTAL (A+B+C+D)		**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)

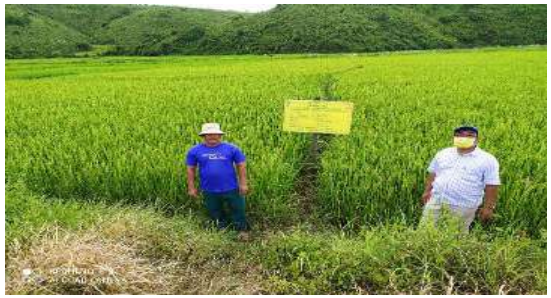
8.1 Constraints and Suggestion (Provide point-wise if any, for recommendation)

(a) Administrative: Lack of infrastructure namely farmers hostel, full fledged soil testing lab,office vehicle condemn needed a new vehicle

(b) Financial :

(c) Technical : Source of technology not older than 5 years for crops and livestocks to conduct trial is very less.

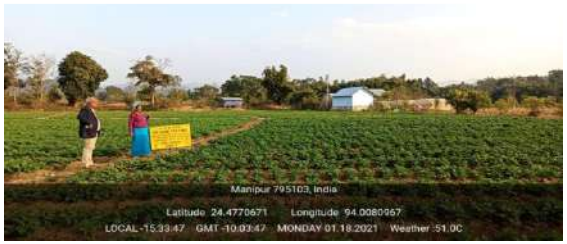
ACTION PHOTOS



Performance evaluation on Rice based cropping system (Rice-Lentil/ Rice-Chickpea) (1st Year)

Seed priming of lentil(1st Year)

Performance assessment on Incorporation of Silver barb (Puntius gonionotus) in feed based seasonal carp polyculture pond system (1st



Management of frost bite and viral diseases of potato (1st year)

Performance evaluation of Metarhizium anisoplea (a Bio pesticide) in management of aphid in cabbage (1st Year)

Introduction to Low cost backyard ornamental fish farming for income generation of rural youths using polyline thermocol box (1st Year)

Production of Chow Chow Bori during peak and lean production period (2nd Year)

Osmotic Dehydration of Amla

Extension Programmes/ Activities

Training Programmes

Awards and recognitions during 2020 (For KVK)

Sl. No.	Name of Award/ recognition/ fellowship	Professional Society/ Govt. Dept./ Any Agency	Value of award (Rs.)	Significant Contribution/ achievement
1	First position in IC Pulse 2020,Bhopal in Poster Presentation	Indian Society of Pulses Research and Development & ICAR- Indian Institute of Pulses Research	-	Impact Study on Seed Hub –Crop-Lentil
2	2nd position in poster competition,	CAU,Imphal ,International Womens day	-	Nutritious foods & Nutri Thallis of the region.
3	Outstanding Award for Distinguishing Service to Farmer for the year 2020	State Agricultural Fair- org. by SAMETI, Manipur (MAI-OWN Exhibition)	-	Recognition of Overall Performance of KVK Thoubal

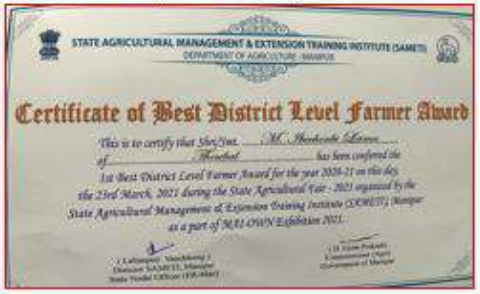
First position in IC Pulse 2020, Bhopal in Poster Presentation

2nd position in poster compete-tion, Theme-Nutritious foods & Nutri Thallis of the region.

Outstanding Award for Distinguishing Service to Farmer for the year 2020

Awards and recognitions during 2020 (For farmer)

Sl. No.	Name of Award/ recognition/ fellowship	Professional Society/ Govt. Dept./ Any Agency	Value of award (Rs.)	Significant Contribution/ achievement
1	M.Ibechaobi Devi, Best district level farmer award	Stae Agricultural Fair- org by SAMETI,Manipur	20000	IFS Value addition of black rice



STATE AGRICULTURAL MANAGEMENT & EXTENSION TRAINING INSTITUTE (SAMETI)
DEPARTMENT OF AGRICULTURE :: MANIPUR

Certificate of Best District Level Farmer Award

This is to certify that Sh./Smt. M. Ibechaobi Devi
of Thoubal has been conferred the
1st Best District Level Farmer Award for the year 2020-21 on this day,
the 23rd March, 2021 during the State Agricultural Fair - 2021 organized by the
State Agricultural Management of Extension Training Institute (SAMETI) Manipur
as a part of MAI-OWN Exhibition 2021.

Integrated Crop Management in rice (1st Year)

Popularization of Assam Mix

Popularization of Modified SRI 2nd Year

Impact study on CFLD of oilseed Mustard Var. NRCHB-101 Under Zero Tillage Condition 1st Year

Popularization of Modified SRI 2nd Year

Popularization of Voliam flexi in management of stem borers and plant hoppers in Rice 1st Year

Popularisation of Emamectin benzoate and yellow sticky traps in Fruit borer and Aphid management 1st Year

Seed production technology of rice var. RC Maniphou-13

Participatory seed production of Black gram Var. PU-31 2nd Year

Popularization of Fish based integrated farming system (1st Year)

Other Activities during Covid-19 lockdown


Preparation of mask



Field visits




Distribution of mask

Mera Gaon Mera Gaurav

Duration	No. of village covered	No. of visit Made	No. of demonstration	No. of beneficiary
May,2020– Dec,2020	18	25	24	760


Khangabok


Wabagai


Ukhongsang


Lourembam


Sikhong


Tentha

Distribution of Covid-19 SOP pamphlets related with harvesting and threshing of paddy to farmers released by Directorate of Health services & NHM,Manipur






SWACCHTA ACTIVITIES

Sl. No.	Duration	Activity	No. of beneficiary
1.	April – June,2020	Cleaning of streets and around office campus, Swacchta Awareness, Training	3
2.	July – September, 2020	cleaning around campus, demonstration on agriculture waste management	14
3.	October-December, 2020	Celebration of Kisan Diwas, ,planting of tress, compost making	34