ANNUAL PROGRESS REPORT OF KVK, TAWANG FOR 2017-18

1. GENERAL INFORMATION ABOUT THE KVK

1.1. Name and address of KVK with phone, Fax and E-Mail

Titi tame and address of terre man priorie, t ax and 2 man					
Address	Telephone		E mail		
	Office	FAX			
KRISHI VIGYAN KENDRA, CHANGBU VILLAGE, TAWANG, DISTRICT- TAWANG, P.) PIN 790 104	09485235364		kvktawang123@gmail.com		

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

Address	Telephone		E mail
	Office	FAX	
DIRECTORATE OF AGRICULTURE, GOVT. OF ARUNACHAL PRADESH, NAHARALAGUN, DISTRICT- PAPUMPARE, P.) PIN 790 104	03602244252	03602244252	kvkosd@yahoo.co.in

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

Name	Telephone / Contact				
	Residence	Mobile	Email		
Dr.D.S.Chhonkar	-	09485235364	Chhonkards123@gmail.com		

1.4. Year of sanction: 2008

1.5. Staff Position (As on 31st March, 2018)

SI.	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	Senior Scientist and Head	Dr.D.S.Chhonkar	Senior scientist and head	Agronomy	37400- 67000		26.06. 2009	Temporary	Others
2	Subject Matter Specialist	Mr. C.K. Singh	SMS (Agronomy)	Agronomy	15600- 39100	25840	10-12-08	Temporary	Others
3	Subject Matter Specialist	Ms. Lakshmipriya Borah	SMS(Plant Protection)	Entomology	15600- 39100	25840	19-9-11	Temporary	OBC
4	Subject Matter Specialist	Ms. Danima Ering	SMS (Animal Scientce)	Animal Science	15600- 39100	21000	24.04.2017	Temporary	ST
5	Subject Matter Specialist	Ms. Dorjee Yodon Thungon	SMS (Home Science)	Home Science	15600- 39100	21000	27.04.2017	Temporary	ST

6	Programme Assistant	Ms. Lovin Mingki	P A (Soil Sc.)	Soil Sc.	9300- 34800	12-02-13	Temporary	ST
7	Computer Programmer	Ms. K D. Komu	P. A.(Comp.)	PGDCA	9300- 34800	25-11-08	Temporary	ST
8	Farm Manager	Mr.SonamTsering Khumu	Farm Manager	B.Sc (Agri)	9300- 34800	05-02-13	Temporary	ST
9	Accountant / Superintendent	Mr. Koj Richo	Assistant	M.COM	9300- 34800	02-12-08	Temporary	ST
10	Stenographer	Ms. J. Wangmo	Stenographer		5200- 20400	24.06.09	Temporary	ST
11	Driver	Mr. Lham Dorjee	Driver		5200- 20400	18-8-09	Temporary	ST
12	Driver	Mr. Tashi Dorjee	Driver		5200- 20400	18-8-09	Temporary	ST
13	Supporting staff	Mr. Tashi Dawa	Chowkidar		4440- 7400	18-8-09	Temporary	ST
14	Supporting staff	Ms. Tashi Pema	Peon		4440- 7400	18-8-09	Temporary	ST
	Total	14						

- 1.6. a. Total land with KVK (in ha):7.0 ha
 - b. Total cultivable land with KVK (in ha): 6.929
 - c. Total cultivated land (in ha): NA

S.	Item	Area (ha)
No.		
1	Under Buildings (Administrative building+ Farmers' Hostel+ Staff Quarters)	0.055
2.	Under Demonstration Units	0.016
3.	Under Crops (Cereals, pulses, oilseeds etc.)	NA
4.	Under vegetables	NA
5.	Orchard/Agro-forestry	NA
6.	Others (specify)	NA

1.7. Infrastructural Development:

A) Buildings

		Source of	Stage					
S.		funding		Complete			Incomple	ete
No.	Name of building	Name of building	Completion Date	Plinth area (Sq.m)	Expenditure (Rs.)	Starting Date	Plinth area (Sq.m)	Status of construction
1.	Administrative Building		31 Dec. 2012	326.84 sq m	88.0 Lac		223.16	NA
2.	Farmers Hostel							
3.	Staff Quarters (6)							
4.	Demonstration Units (2)		31 Dec. 2012		12.0 Lac			
5	Fencing		31 Dec. 2012		15.0 Lac			

B) Vehicles

Type of vehicle	Regd. No.	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
TATA Sumo Victa	AR 03/1778	2010	4,95,669	44182 as on 30/04/14	Not in good condition
Tractor	-	2016	10,00,000	20 hrs	Running

C) Equipments & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
Power Tiller	2010	2,03,000	Not running without implements
Fax Machine	2010	93,735	Running in good condition
Photocopier	2010	24,825	Running in good conditio
LCD Projector	2010	99,788	Running in good conditio
Digital Camera	2010	19,990	Running in good conditio
Computer with accessories(Desk Top)	2009-10	45,063	Running in good conditio
Computer(Lap Top)	2010	48,672	Running in good conditio
Furniture	2010	2,00000	Running in good conditio
Almiraha & Furniture	2011-12	200000	Running in good conditio
Inverter	2013	23,000	Running in good condition

1.8. A). Details SAC meeting * conducted in the year 2017-18

Sl.No	Date	Name & Designation of	Salient Recommendation	Action taken on last
		Participants		recommendation
1	08.12.18	Dr. Prithviraj Chakravarty,	Chairperson Dr. P Chakravarty suggested for Bull	
		Principal Scientist & acting	exchange programme and AI technique for improving the	
		Director ICAR, NRC-Yak, Dirang,	breed and performance of the animals.	
		West Kameng Bomdila		
2		Sri Tashi Dorjee, Executive (AIR)		
3		Mr. M. C. Adak, DFDO, Tawang	He requested to provide some technologies to rear and conserve the indigenous fish species. He also seeked for scientific and expert help from KVK for further work in his department.	
4		Mr. Tashi Nungnu, BM SBI		
		Tawang		
5		Mr. K. B Kayastha, ADO, Tawang	He adviced to do some fermers friendly work beyond the mandated activities of KVK, if possible to get better output from the farmers keeping in view the topographical and weather condition of the region .	
6		Dr. Tsering Drema. I/C DVO, Tawang		
7		Sri Lham Norbu, P.O CDPO's office		
8		Tomding Tsewang,Farmer		
9		Toka Lama,Farmer		
10		Sri. Rinchin Norbu, Chairman LNCS		
11		Smti. Tsering Drema, ADI		
12		Smti. Chano Lowang, ADTH		
16		Dr D.S.Chhonkar, P.C,KVK,Tawang		

Proceeding of Scientific Advisory committee meeting of KVK, Tawang, 8th Dec 2017

The Scientific Advisory Committee Meeting of KVK, Tawang 2018-19 was conducted on dated 8th Dec 2017 at Zomkhang Hall, Tawang. The meeting was chaired by Dr Prithviraj Chakravarty, Principal Scientist and acting Director ICAR, NRC-Yak, Dirang, District West Kameng. Members of different line departments, NGO and farmers also participated in the meeting.

Outlining the themes and objectives of the SAC meeting, Dr. D. S. Chhonkar, Senior Scientist & Head, KVK, Tawang stated the mandated activities of KVK to transfer the technologies from lab to farm. Progress report of 2017-18 and Action plan 2018-19 of KVK, Tawang were presented by him before the members.

District Fisheries Development Officer, Mr M.C.Adak requested to provide some technologies to rear and conserve the indigeneous fish species. He seeked for scientific and expert help from KVK for future work in his dept. Shri. K.B Kayastha, ADO Tawang advised to do some farmers friendly work beyond the mandated activities of KVK, if possible to get better output from the farmers keeping in view the topographical and weather conditions of the region which is a bottleneck in most of the developmental works.

Chairperson Dr. P Chakravarty,in his speech problems faced in the region on yak/cattle viz, inbreeding in the herd using the same bull for breeding which adversely affects productive and reproductive performance of yak; feed/nutritional crises of the animals in winter causing almost 30% decrease in its body weight. He further suggested for bull exchange programme and AI technique in improving the breed and performance of the animals. He further desired that collaborative programmes with ICAR, NRC-Yak may be taken up for cattle and yak towards benefitting farmers for which the institute will extend its full support and cooperation.

(D. S. Chhonkar)

Member secretary, SAC, Meeting

(Prithviraj Chakravarty)

Chairperson, SAC Meeting

2. DETAILS OF DISTRICT

2.1 Major farming systems/enterprises (based on the analysis made by the KVK)

SI. No	Farming system/enterprises
1.	Agriculture+Horticulture+Animal Husbandry+Pisciculture+Forestry
2.	Agriculture+ Horticulture+Animal Husbandry+ Forestry

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

SI. No	Agro-climatic Zone	Characteristics
	Eastern Himalayan Region (Zone II) Sub region-: Higher Himalayan region(Alpine) High altitudes mountainous belt from 6000 ft to 1100 ft (Temperate Alpine zone)	Snow Covered Himalayan Peaks from 11,000 feet to 22,000 feet which mostly includes bare mountains and are mostly uninhabited.
	Sub-Mountainous area.	It contains plateau and narrow valley and is sparsely populated. Tropical to cool climate throughout the year.
		It ranges from 3000 ft to 6000 ft which covers valleys and slpoes. Sub-Tropical climate with hot humid summer and moderately cool climate.

2.3 Soil type/s

SI. No	Soil type	Characteristics	Area in ha
	Sandy skeletal/loamy/fine loamy texture	Rocky and loamy skeletal with medium to deep depth.	7596

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

SI. No	Crop	Area (ha)	Production (ton)	Productivity (Qtl /ha)
1.	Rice	760	11780	15.5
2.	Maize	695	6997	10.06
3.	Wheat	860	8991	10.45
4.	Finger Millet	1000	1000	10
5.	Burley	205	2134	10.41
6.	Buck Wheat	90	900	10
7.	Oil Seeds	155	1350	8.70
8	Pulses	152	1243	8.10
9.	Chilly	70	1540	22
10.	Garlic	15	375	25
11.	Ginger	26	650	25
12.	Turmeric	14	308	22
13.	Other Spices	08	84	10.5

2.5. Weather data

Month	Rainfall (mm)	•	Temperature ⁰ C	Relative Humidity (%)
		Maximum	Minimum	
October	3.30	22.52	4.53	80.19
November	0.41	17.48	0.13	80.13
December	Snowfall(4mm)	13.53	-1.87	80.61
January	Snowfall (6 mm)	17.24	-2.18	74.92
February	Snowfall (10 mm)	11.25	-2.89	71.56
March	3.21	11.78	2.31	80.15

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

Category	Population	Production	Productivity
Cattle			
Crossbred	1211		-
Indigenous	10882	53900 ltrs milk,1395 qtls meat	1.5 lt/cow/day
Buffalo	7490		
Sheep			

Crossbred	655		
Indigenous	6760	1500 kg meat	4 kg/sheep
Goats	2389	5328 kg meat	3.5 kg/goat
Pigs	1015		
Crossbred	149		-
Indigenous	866	6000kg	6 kg/pig
Rabbits			-
Poultry			
Hens	947		
Desi	3320	14409kg	1.25 kg/hen
Improved			-
Ducks	133		-
Turkey and others	8		-

Category	Area	Production	Productivity
Fish	140.85 ha	21517 kg	153 kg/ha
Marine			
Inland			-
Prawn			

Scampi	 	
Shrimp	 	

Note: Pl. provide the appropriate Unit against each enterprise

2.6 Details of Operational area / Villages (2017-18)

SI. No.	Taluk/ Eleka	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified thrust area
1.	Tawang	Kitpi	Kitpi, Shernup,&Audu ng	Paddy (Transplanted)	 Traditional mixed cropping Poor soil fertility & lack of knowledge about fertility management. Attack of stem borer, gall midge, gandhi bug, leaf folder, and leaf roller Poor yield of local varieties Lack of irrigation facility Loss of nutrient through water erosion Attack of khaira, Stem rot, blast and bacterial leaf blight Infestation of wild animals 	 Scientific cropping system INM package Varietal intervention IPM against major pests and disease. Scientific crop management Spraying of water soluble fertilizer. Application of organic manure Soil acidity management

2.	Lumla	Lumla	Poito	,Pea,Soyabean,Fi nger millet,Groundnut	 Traditional management Poor soil fertility & lack of knowledge about fertility management. Attack stem borer and top borer Lack of awareness aboutmaize based cropping system Lack of irrigation facility Loss of nutrient through water erosion Poor yield of local variety Acidity of soil 	 Scientific cropping systems INM package IPM against major pests. Scientific crop management Spraying of water soluble fertilizer. Application of organic manure Varietal intervention Soil acidity management
3.	Tawang	Lumla	Lumla,Sherban g	Paddy,Pea,Soyab ean,Finger millet,Black gram,Groundnut	 Traditional management Poor yield of local varieties Acidity of soil Loss of nutrient through water erosion Attack of Bihar hairy caterpillar and tobacco caterpillar Attack of seedling rot and rust. 	1. Scientific production technology 2. INM package 3. Varietal intervention 4. Soil acidity management 5. Spraying of water solublefertilizer 6. IPM against major pests. 7. Application of organic manure

4.	Tawang	Tawang	Audung,Soma	Blackgram	 Traditional management Poor soil fertility & lack of knowledge about fertility management. Poor yield of local varieties Acidity of soil Lack of irrigation facility Loss of nutrient through water erosion 	1. Scientific production technology 2. INM package 3. Varietal intervention 4. Soil acidity management 5. IPM against major pest and disease 6. Scientific crop management 7. Application of organic manure
5.	Tawang	Kitpi	Kitpi, Shernup, Audung	Brinjal	 Poor soil fertility & lack of knowledge about fertility management. Poor yield of local varieties Lack of irrigation facility Loss of nutrient through water erosion Attack of bacterial blight Acidity of soil. 	 Scientific cropping system INM package Varietal intervention IPM against major pests and disease. Scientific crop management Spraying of water soluble fertilizer. Application of organic manure Soil acidity management.

6.	Tawang	Tawang	Lamberdung	Cabbage	1. Traditional management 2. Poor soil fertility & lack of knowledge about fertility management. 3. Attack stem borer and top borer 5. Lack of irrigation facility 6.Loss of nutrient through water erosion 7. Poor yield of local variety 8. Acidity of soil Traditional mixed cropping	1. Scientific cropping systems 2. INM package 3. IPM against major pests. 4. Scientific crop management 6. Spraying of water soluble fertilizer. 7. Application of organic manure 8. Varietal intervention 9. Soil acidity management
7.	Tawang	Zemithang Dudunghar	Namtsering	Paddy (Transplanted)	 Traditional mixed cropping Poor soil fertility & lack of knowledge about fertility management. Attack of stem borer, gall midge, gandhi bug, leaf folder, and leaf roller Poor yield of local varieties Lack of irrigation facility Loss of nutrient through water erosion Attack of khaira, Stem rot, blast and bacterial leaf blight 8. Acidity of soil. 	 Scientific cropping system INM package Varietal intervention IPM against major pests and disease. Scientific crop management Spraying of water soluble fertilizer. Application of organic manure Soil acidity management

8.	Tawang	Zemithang Dudunghar	Lumtsang,Bleti ng,Yusur	Groundnut	 Traditional management Poor soil fertility & lack of knowledge about fertility management. Poor yield of local varieties Acidity of soil Lack of irrigation facility Loss of nutrient through water erosion 	1. Scientific production technology 2. INM package 3. Varietal intervention 4. Soil acidity management 5. IPM against major pest and disease 6. Scientific crop management 7. Application of organic manure
9.	Tawang	Kitpi	Kitpi, Soma	Farm women	Labourous and time consuming by traditional method	Introduction of maize sheller among farm women Light weight and low cost metal maize sheller for drudgery reduction
10.	Tawang	Tawang	Khrimethang , Lemberdung & Changbu	Farm women	Lack of awareness on complementary food	Assessment of nutritional status of children by anthropometry, Introduction of Assam Mix-Rice flour (70 g.) Green Gram flour (20g) Sesame (5 g) and Ground nut (5 g), 2-3 meals per day @2-3 tablespoonful per feed i.e. 1 tablespoonful – 5g.

11.	Tawang	Kitpi	Kitpi	Cattle	Non availability of green fodder due to extreme winter	Complete feed block (CFB) as a feed supplement in lactating cattle. Lactating cattle @ 10-11 blocks/day (300-400kg),each block@1.7kg
12.	Tawang	Tawang & Zemithang Dudunghar	Lemberdung, Lumla & Namtsering	Poultry	Lesser production by local poultry strain	Introduction of 'Vanaraja'as backyard poultry rearing. Brooding of day old chick for 21 days, vaccination of the chicks.

3. TECHNICAL ACHIEVEMENTS

3. A. Details of target and achievements of mandatory activities by KVK during 2017-18

Discipline	OF	T (Technology Asse	ssment and F	Refinement)	FLD (Oilseeds, Pulses, Maize, Other Crops/Enterprises)				
	Nur	nber of OFTs	Number of Farmers		Num	ber of FLDs	Number of Farmers		
	Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement	
Agronomy	03	03	10	09	04	04	39	40	
Plant	03	03	08	08	03	03	40	40	

Protection								
Home Science	02	02	07	07	01	01	06	06
Animal Science	02	Ongoing	13	Ongoing	-	-	-	-
Total	10	08	38	24	08	08	85	85

Note: Target must be as set during last Action Plan Workshop

Training (inc		ored, vocational an ainwater Harvestin		ngs carried under		Ext	tension Activities		
		3					4		
ı	Number of Cou	urses	Numb	er of Participants	Num	ber of activities	s Numb	er of participants	
Clientele	Targets	Achievement	Targets	Achievement	Targets	Achievemer	nt Targets	Achievement	
Farmers									
Rural youth									
Extn.									
Functionaries									
Total									
	Seed	d Production (ton.)				Planting mate	erial (Nos. in lakh)		
		5					6		
	Target Achievement					Target Achievement			

Note: Target must be as set during last Action Plan Workshop

3. B. Abstract of interventions undertaken during 2017-18

						lı	nterventions					
SI. No	Thrust area	Crop/ Enterprise	Identified problems	Title of OFT if any	Title of FLD if any	Title of Training if any	Title of training for extension personnel if any	Extension activities	Supply of seeds, planting materials etc.			

1	Varietal evaluation	Paddy-Pea	Low yield of local variety	Varietal evaluation of Paddy var.Ranjit	Scientific cultivation of Paddy	Seed
2	Varietal evaluation	Maize- Potato	Low yield of local variety	Varietal evaluation of Maize var. HQPM-1	Scientific cultivation of Maize	Seed
3	Varietal evaluation	Green gram-Wheat	Low yield of local variety	Varietal evaluation of Green gram var.Pratap	Scientific cultivation of Green gram	Seed
4	Varietal evaluation	Potato Potato-Cole crop	Low yield of local variety	Varietal evaluation of Potato var. Kufri kanchan	Scientific cultivation of Potato	Seed

5	Pest management	Cauliflower Vegetables- Rice	Low yield due to infestation of insect-pests	Bio- intensive package to control the pests of cole crops.	IPM in Cole crops	Major pest and diseases of vegetables in Tawang dist and their eco- friendly managem ent	Field visit,Diagn ostic visit,Leafle t pulication	Seeds,Plant protection materials like stickers,bio- pesticides etc.
6	Disease management	Apple	Low yield due to apple scab disease	Management of Scab disease in Apple	Management of Scab disease in apple	-	Field visit,Diagn ostic visit	Plant protection materials
7	IPM	Potato Potato- vegetables	Low yield due to different pests	Management of cut worm Agrotis ipsilon in potato	Major pests and diseases of potato and their management	-	Field visit,Diagn ostic visit	Plant protection materials

8	Nutritional	Children	Lack of	Assessment of	Complementar	Compleme	Assam Mix -
	diet for		awareness	nutritional	y food and	ntary food	
	children/		on	status of	feeding	and	Rice flour (70 g.)
	Pregnant		complementa	children by	technique –	feeding	Cross Cross (Investigation)
	women		ry food	anthropometry.	Assam mix	technique	Green Gram flour (20g)
				Introduction of Assam Mix- Rice flour (70 g.) Green Gram flour (20g) Sesame (5 g) and Ground nut (5 g), 2-3 meals per day @2-3 tablespoonful per feed i.e. 1 tablespoonful – 5g.		- Assam mix	Sesame (5 g) and Ground nut (5 g), 2-3 meals per day @2-3 tablespoonful per feed i.e. 1 tablespoonful – 5g.
				og.			
9	Energy saving tools/ devices	Farm women	Labourous and time consuming by traditional method	Introduction of maize sheller among farm women. Light weight and low cost metal maize sheller for drudgery reduction			Maize Sheller

10	F	Poultry	Lesser production by local poultry strain	Introduction of 'Vanaraja'as backyard poultry rearing. Brooding of day old chick for 21 days, vaccination of the chicks		Vanaraja Chicks
11.	C	Cattle	Non availability of green fodder due to extreme winter	Complete feed block (CFB) as a feed supplement in lactating cattle. Lactating cattle @ 10-11 blocks/day (300-400kg),each block@1.7kg		Complete feed block (CFB)

3.1 Achievements on technologies assessed and refined during 2017-18

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	02		01						01	04
Evaluation										
Seed / Plant										
production										
Weed										
Management										
Integrated Crop										
Management										
Integrated										
Nutrient										
Management										
Integrated										
Farming System										
Mushroom										
cultivation										
Cropping										
sequence										
Farm machineries	1									01
Value addition										
Integrated Pest					01				01	02
Management										

Integrated Disease Management			01		01
Nutrition					01
Small Scale income generating enterprises					
TOTAL					09

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

5. Results of On Farm Testing

SI. No.	Title of OFT	Problem Diagnosed	Name of Technology Assessed	Crop/Croppi ng system/ Enterprise	No. of Trials	Results of Assessment/ Refined (Data on the parameter should be provided)	Feedback from the farmer	Feedback to the Researcher	B.C . Ratio (if applicable)
01	Varietal evaluation of paddy var.Ranjit	Low yield of local variety	Scientific cultivation of Ranjit	Rainfed	03	i. Paddy Plant height 93 m. ii. No. of effective tillers/m²-218 iii. No.of panicle/m²- 218 iv. Grain/panicle- 85 v. 1000-grain weight 22 gm.	Farmers are interested for adopt ion of new variety of paddy	Technology is suitable for the District	2:1
02	Varietal evaluation of Maize var.HQPM- 1	Low yield of local variety	Scientific cultivation of HQPM-1	Rainfed	04	i. Plant height(cm)- 132 ii. Cob/plant-1.5 iii. Length of cob(cm)-17	Farmers are interested for adopt ion of new variety of	Technology is suitable for the District	2.5:1

03	Varietal evaluation of Green gram Var.Pratap	Low yield of local variety	Scientific cultivation of Pratap	Rainfed	03	iv. 1000-grain weight(gm)- 212 i. Plant height(cm)-42 ii. Branches/plan t-07 iii. Pod/plant-17 iv. Seed/pod-5.0 v. 100-Seed weight (gm)-4	Farmers are interested for adopt ion of new variety of Green gram	Technology is suitable for the District	3.2:1
04	Varietal evaluation of Potato var.Kufri kanchan	Low yield of local variety	Scientific cultivation of Kufri kanchan	Rainfed	02	1.Plant height-(Cm.)- 27 2.No. of stem/hill-(03) 3.No. of tuber/hill-14 4.Tuber yield/hill(55gm.)	Farmers are interested for adopt ion of new variety of Potato	Technology is suitable for the District	2.5:1
05	Bio- intensive package to control the pests of	Low yield due to infestation of various	1. Physical collection of larvae of lepidopteran pests.	Rainfed	03	1.Pre-treatment count of insects= 24 2. Post-treatment	Farmers are interested to adopt this technology	Technology is suitable for the District	2.6:1

	cole crops	insect pests	2. Yellow sticky traps 3. Release of Trichogramma chilonis 4. Spray Bt (Dipel)1kg/ha at 15 days interval from 30 DAT			count of insects=2 3. Population of natural enemies before treatment =7 4. Population of NE after treatment=5 5. Yield (q/ha)= 140			
06	Manageme nt of Scab disease in Apple	Low yield due to aaple scab	Captan 600gm/ 200 lit at green tip stage, Bavistin 100gm/ 200lit at petal fall stage and Diathane M- 45 600 gm/200 lit of water at walnut stage	Rainfed	02	% of infected plants =4% (Mean of observation taken in 10 days interval) Infestation of other pest =6% Yield=38 q/ha	Farmers are interested to adopt this technology	Technology is suitable for the District	2.6:1
07	Manageme nt of cut worm Agrotis ipsilon in potato	Low yield due to cut worm	1- Soil application of imidacloprid 17.8 SL @ 48 g a.i/ha at the time of sowing. 2- One spray of NSKE 5ml/lit @15 DAS.	Rainfed	03	% hulm cut=4 ii. % tuber damage = 7 iii. yield=141	Farmers are interested to adopt this technology	Technology is suitable for the District	2.8 :1

8	Introductio n of maize sheller among farm women	Labourous and time consuming by traditional method.	Light weight and low cost metal maize sheller for drudgery reduction	-	04	Technology:- 1. Ease of shelling 2. Efficiency 3. Acceptability of technology 4. Spread over effect	The farmwomen found it more accessible than the traditional method. Farmers are interested to adopt this technology.	Technology is suitable for the District	-
9	Assessme nt of nutritional status of children by anthropom etry	Lack of awareness on complement ary food.	Introduction of Assam Mix- Rice flour (70 g.) Green Gram flour (20g) Sesame (5 g) and Ground nut (5 g), 2-3 meals per day @2-3 tablespoonful per feed i.e. 1 tablespoonful – 5g.	-	03	Technology:- 1. Body weight 2. Height 3. Head circumference 4. Beneficiary reaction	Farmers are interested to adopt this technology as these complement ary foods were palatable for the baby.	Technology is suitable for the District	-
10	Complete feed block (CFB) as a	Non availability of green fodder	Lactating cattle @ 10-11 blocks/day (300-	-	03	Technology :- 1. Quantity of	ongoing	ongoing	ongoing

feed supplen t in lactating cattle.	winter	400kg),each block@1.7kg			milk produced 2. Quality of milk 3. Body weight of animal			
11. Introduction of 'Vanaraj s backya poultry rearing.	production a'a by local	Brooding of day old chick for 21 days, vaccination of the chicks	-	03	1. Age at first lay 2. Body weight at 1st lay. 3. No of eggs per year. 4. Annual body weight gain 5. Mortality rate(%) 6. Disease incidence (%)	Ongoing	Ongoing	Ongoing

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

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

3.2 Achievements of Frontline Demonstrations during 2017-18

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

List of technologies demonstrated during previous year and popularized during 2016-17 and recommended for large scale adoption in the district

SI. No	Crop/ Enterprise	Technology demonstrated	Horizonta	ll spread of tech	nology
			No. of villages	No. of farmers	Area in ha
01	Maize-Pea	Varietal performance of Maize var. RCM-76	05	15	10
02	Soyabean- Wheat	Varietal performance of Soyabean var. Js-335	04	12	08
03	Paddy-pea	Varietal performance of Paddy var. CAU-R	05	12	10
04	Potato- vegetables	Varietal Performance of potato Var. Kufri kanchan	02	08	02
05	Rice Vegetables - Rice	Management of stem borer in rice: 6-8 releases of <i>Trichogramma japonicum</i> @ 50,000/ha/week in the form of trichocards, starting from 30 days after transplanting.	05	10	07
06	Chilli	Management of fruit rot disease in chilli:	03	12	1.0
	Chilli-Pea	Seed treatment with Captan @2g/kg seeds before sowing.			

		Spray the crop with 2kg of Indofil M-45 in 625 ltr water/ ha at 10 days interval.			
07	Cabbage Potato- Cabbage	IPM in cabbage: Yellow stickers, Summer ploughing, Spray with Neem pesticide at every 10 days interval from 30 DAT.	04	10	1.0
08	Kitchen gardening	Nutritional Gardening Cabbage, Radish, Carrot & Broccoli	05	06	0.5

^{*} 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.)

S I.	Crop	Thematic area	Technology Demonstrated	Season and year	Area	(ha)		farmers/ monstra		Reasons for shortfall in achieve ment	Farming situation (Rainfed/Irrigated, Soil type, altitude, etc)	Statu so (Kg/l	il ha)
					Propos ed	Actua I	SC/S T	Other s	Total				
1	Maize	Varietal	Scientific	Kharif,	10	10	15	-	15		Rainfe		

-		performance	cultivation of Maize var.RCM-76	2017						d
2	Soyabe an	Varietal performance	Scientific cultivation of Soyabean var.Js-335	Kharif 2017	08	08	12	-	12	Rainfe d
3	Paddy	Varietal performance	Scientific cultivation of Paddy var. RCM-1	Kharif 2017	10	10	12	-	12	
4	potato	Varietal performance	Scientific cultivation of Potato var. Kufri kanchan	Rabi 2018	02	02	08	-	08	
3	Rice	Biological control	Management of stem borer in rice: 6-8 releases of Trichogramma japonicum @ 50,000/ha/week in the form of trichocards,sta rting from 30 days after transplanting	Kharif, 2017	10	10	10	-	10	Rain fed
4	Cabbag e	Disease management	IPM in cabbage:	Kharif, 2017	02	02	15	-	15	Rain fed

			stickers,Summe r ploughing, Spray with Neem pesticide at every 10 days interval from 30 DAT.								
5	Chilli	Disease management	Management of fruit rot disease in chilli: Seed treatment with Captan @2g/kg seeds before sowing. Spray the crop with 2kg of Indofil M-45 in 625 ltr water/ ha at 10 days interval.	Kharif, 2017	02	02	15	-	15	Rain fed	
6	Kitche n garden	Nutritional Gardening Cabbage Radish Carrot Broccoli		2017 April – Octob er	0.5	0.5	06	1	06	Rain fed	

$\ \, \textbf{c. Performance of FLD on Crops}$

SI . N o.	Crop	Thematic area	Area (ha.)	_	yield /ha.)	% increas e in Avg. yield	dat demo	tional a on . yield 'ha.)	Data on par other than y disease incid incidenc	ield, e.g., ence, pest	GC**	GR**	o. (Rs./ha.	BCR*	GC	GR	eck (Rs./H	BCR
									Demo	Local								
1	Maize	Variet al perfor manc e	10	31.0	23.0	35	32	30			42,000	93,000	51,000	2.2:1	38,0	69,000	31,000	1.8:1
2	Soyabean	Variet al perfor manc e	08	22.0	16.0	38	23	21			40,500	1,21,50	81,000	3.0:1	34,5 00	72,000	34,500	2.0:1
3	Paddy	Variet al perfor manc e	10	39.0	29.0	34.0	40	38			36,000	70,002	34002	1.9:1	32,0 00	52,200	20,200	1.6:1

4	potato	Variet al perfor manc e	02	Ongo ing													
5	Paddy	Mana geme nt of Stem Borer in rice	07	37	26	42.3	39	35		48,000	91,200	43,200	1.9:1	32,0 00	51,200	20,200	1.6:1
6	Cabbage	IPM in cabb age	02	255	180	41.6	260	251		90,000	2,52,00	1,62,00	2.8:1	53,0 00	1,00,70	47,700	1.9:1
7	Chilli	Mana geme nt of fruit rot disea se in chilli	02	86.5	60	44.1	86.5	84.0		85,000	2,21,00	1,36,00	2.6:1	68,0	1,22,40	54,400	1.8:1
7	Kitchen Gardenin g	Nutrit ional Garde ning	0.5	185	138	34	190	180		50,000	167,000	117,00	3.3:1	34,0 0 0	74,800	40,800	2.2:1

a. Extension and Training activities under FLD on Crops: Field day

e. Details of FLD on Enterprises :NA

(i) Farm Implements

Name of the implement	Crop	No. of farmers	Area (ha)	Performance parameters /	* Data on parame to technology de		% change in the parameter	Remarks
				indicators	Demon.	Local check		

^{*} Field efficiency, labour saving etc.

(ii) Livestock Enterprises:

Sl. No.	Enterpr ise/ Categor y (e.g.,	Them atic	Name of	No. of farme	No. of	No. of animals,	Perfor param	ijor mance aeters / ators	% chang e in the	parame ar	her eters (if ny)		(Rs./				(Rs./H	(a.)		Remark s
	Dairy, Poultry etc.)	area	Techn ology	rs	unit s	poultry birds etc.	Demo	Check	para meter	Demo	Check	G C **	G R **	N R **	B C R **	GC	GR	N R	B C R	

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

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

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

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

(iii) Fisheries:NA

SI. No.	Categ ory, e.g. Comm	The mati	Nam	No.	No.	No. of	Major Perfor e param	% chan ge in the	Other param (if any			on. o ./Ha.	f den)	10.	Ecor (Rs./	n. of ch Ha.)	neck		Remar ks
	on carp, ornam ental fish etc.	c area	e of Tech nolo gy	of farm ers	uni ts	fish/ fingerli ngs	Dem o	para mete r	Dem o	Chec k	G C **	G R **	N R **	B C R **	GC	GR	N R	B C R	

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

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

(iv) Other enterprises:NA

SI. No.	Catego ry/ Enterp rise,	Them atic			No.	Major Perfori parame	eters /	% chan ge in the	Other parame (if any)			n. of ./Ha.)		Ю.	Econ (Rs./I	. of ch Ha.)	eck		Remar ks
	e.g., mushr oom, vermic ompos t, apicult ure etc.	area	Nam e of Tech nolo gy	No. of farm ers	unit	Dem o	Chec k	para mete r	Dem o	Chec k	G C* *	G R* *	N R* *	B C R* *	GC	GR	N R	B C R	

l l										
l l										

^{**} 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:NA

SI. No.	Name of implement	Crop	Name of Technol ogy demonst rated	No. of farmers	Area (In ha.)	Field obse (Output/ m		% change in the paramet er	Labour reduction (Man days)	Cost reduction (Rs. per ha. or Rs. per unit etc.)	Remarks
						Demo	Check				

f. Performance of FLD on Crop Hybrids:NA

Sl.	Crop	Name of hybrids	Area (ha.)	No. of farmers	Avg. yie (Q/ha.)	ld	% increase in Avg. yield	Additi data o demo. (Q/ha.	n yield	Econ. of	demo. (R	s./Ha.)		Econ. of	check (Rs	s./Ha.)	
No.	Стор				Demo.	Check		H*	L*	GC**	GR**	NR**	BC R**	GC	GR	NR	BCR

^{*}H-Highest recorded yield, L- Lowest recorded yield

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

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

3.3. Achievements on Training

3.3.1. <u>Farmers and Farm Women</u> in <u>On Campus</u> including <u>Sponsored On Campus</u> Training Programmes On means On Campus training programmes sponsored by external agencies):NIL

(*Sp.

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

	No	of Cou prg.	ırses/									Partic	ipants									Gran d
Thematic area						Gen	eral					SC	C/ST					Te	otal			Tota
Thematic area	Off	Sp Off *	Total	M	ale	Fem	ale	T	otal	N	Iale	Fei	male	Te	otal	M	ale	Fer	nale	To	otal	
		*		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 Producti	on				<u> </u>		ı	I	I	1		I	I	1	ı	I					I	ı
Weed Management	01	-	01							18	-	27	-	45	-	18	-	27	-	45	-	45
Resource Conservation Technologies																						
Cropping Systems																						
Crop Diversification																						

Integrated Farming																			
Water management																			
Seed production	1	-	1				22	-	42	-	64	-	22	-	42	-	64	-	64
Nursery management	1	-	1				12	-	19	-	31	-	12	-	19	-	31	-	31
Integrated Crop Management																			
Fodder production	1	-	1				10	-	22	-	32	-	10	-	22	-	32	-	32
Production of organic inputs	1	-	1				74	-	64	-	13 8	-	74	-	64	-	13 8	-	138
II. Horticulture						<u> </u>													
a) Vegetable Cro	ops																		
Production of																			
low volume																			
and high value																			
crops																			
Off-season																			
vegetables																			
Nursery																			

raising											
Exotic											
vegetables like											
Broccoli											
Export											
potential											
vegetables											
Grading and											
standardizatio											
n											
Protective											
cultivation											
(Green											
Houses, Shade											
Net etc.)											
b) Fruits											
Training and											
Pruning											
Layout and											
Management											
of Orchards											
Cultivation of											
Fruit											
Management											
of young											
plants/orchard									 	 	

	1 1			1	1	1	1	1	1	1				1
S														
Rejuvenation of old orchards														
Export potential fruits														
Micro irrigation systems of orchards														
Plant propagation techniques														
others														
c) Ornamental I	Plants			<u> </u>			<u> </u>							
Nursery Management														
Management of potted plants														
Export potential of ornamental plants														

Duanastian								1				
Propagation												
techniques of												
Ornamental												
Plants												
d) Plantation cr	ops		l	ı	I			I				
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												
technology												

			ı	1	ı		1	ı	ı	1	ı	1	ı	ı		1		
Processing																		
and value																		
addition																		
g) Medicinal an	d Aron	natic F	Plants	1					I	I	I	I		I				
Nursery																		
management																		
Production																		
and																		
management																		
technology																		
Post harvest																		
technology																		
and value																		
addition																		
III Soil Health a	nd Fert	ility N	/lanage	ment														
Soil fertility																		
management																		
Soil and Water																		
Conservation																		
Integrated																		
Nutrient																		
Management																		
Production																		
and use of																		
organic inputs																		
						<u> </u>												

Management																			
of Problematic																			
soils																			
30113																			
Micro nutrient																			
deficiency in																			
crops																			
Nutrient Use																			
Efficiency																			
Soil and Water																			
Testing																			
_																			
VII Plant Protec	tion																		
VIII I I III I I I OCCC																			
Integrated						48	-	46	-	9	94	-	48	-	46	-	94	-	94
Pest	1	-	1																
Management																			
Integrated						20	-	19	-		39	-	20	-	19	-	39	-	39
Disease	1	-	1																
Management																			
Bio-control of						15	-	25	-	4	40	-	15	-	25	-	40	-	40
pests and	1	-	1																
diseases																			
Rodent pest																			
management																			
Chemical	1	_	1			14	-	10	-	1	24	-	14	-	10	-	24	-	24
control	-		_																

Organic farming	1	-	1				,	41	30) -	7	'1	-	41	-		30	-	71	-	71
Plant protection in fruit	5	-	5					138	13	30 -	2	268	-	138	-		13 0	-	26 8	-	268
X Capacity Build	ling ar	nd Gro	up Dyn	amics							<u> </u>				<u> </u>						
Leadership development																					
Group dynamics																					
Formation and Management of SHGs																					
Mobilization of social capital																					
Entrepreneuri al development of farmers/youth s	1	-	1					48	-	67	-	11 5	-	4	8	-	67	-	115	-	115
WTO and IPR issues																					

Dairy Management	2	-	2					26	-	13	-	39	-	26	-	13	-	39	-	39
Poultry Management	1	-	1					6	-	18	-	24	-	6	-	18	-	24	-	24
Piggery Management																				
Rabbit Management																				
Disease Management	2	-	2					46	-	9	-	55	-	46	-	9	-	55	-	55
Feed management	4	-	4					57	-	37	-	94	-	57	-	37	-	94	-	94
Production of quality animal products	1	-	1					13	-	0	-	13	-	13	-	0	-	13	-	13
V Home Science	e/Wor	nen en	npowe	rment	<u> </u>										<u> </u>	<u> </u>	<u> </u>		<u> </u>	
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 mainstreamin g through SHGs																			
Storage loss minimization techniques	3	-	3				37	-	67	-	10 4	-	37	-	67	-	10 4	-	104
Value addition	5	-	5				48	-	87	-	13 5	-	48	-	87	-	13 5	-	135
Income generation activities for empowerment of rural Women																			
Location specific drudgery																			

reduction technologies																			
Rural Crafts																			
Women and child care	3	-	3				22	-	46	-	68	-	22	-	46	-	68	-	68

(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):NIL

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

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

	No.	of Cou										Partic	ipants									Grand Total
						Gen	eral					SC	C/ST					To	otal			
Thematic area	Of	Sp	Tota	M	ale	Fem	ale	T	otal	M	lale	Fei	male	To	otal	М	ale	Fen	nale	To	tal	
	f	Off	1	Of f	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	-	14	-	34	-	20	-	14	-	34	-	34
Bee-keeping																						

			1		1											l	l	l	
Integrated																			
farming																			
Seed																			
production																			
Production of																			
organic inputs																			
Integrated																			
Farming																			
Planting																			
material																			
production																			
Vermi-culture	1	-	1				20	•	14	-	34	-	20	-	14	-	34	-	34
Sericulture																			
Protected																			
cultivation of																			
vegetable																			
crops																			
Commercial																			
fruit																			
production																			
Repair and																			
maintenance																			
of farm																			
machinery and																			
implements																			
]	l]]										<u> </u>	l	<u> </u>	

Nursom				1		1				1									
Nursery																			
Management																			
of Horticulture																			
crops																			
Training and																			
pruning of																			
orchards																			
Value addition	1	-	1				20	-	14	-	34	-	20	-	14	-	34	-	34
Production of																			
quality animal																			
products																			
Dairying	1	-	1				13	-	-	-	13	-	13	-	-	-	13	-	13
Sheep and																			
goat rearing																			
Quail farming																			
Piggery																			
Rabbit farming																			
Poultry																			
production																			
Ornamental																			
fisheries																			
Para vets																			

Para extension	T										
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	4				73	42	11 5	73	42	11 5	115

C. Extension Personnel

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

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

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

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

	No.	of Cor prog										Partic	cipants									Grand Total
				Gen						SC/ST						Total						
Thematic area	0	Sp	Tota	M	Iale	Fem	ale	To	otal	Ma	ale	Fei	male	Total		Male	•	Fema	ıle	Total		
	N	ON *	l	O N	Sp ON *	ON	Sp ON *	O N	Sp ON *	ON	Sp O N*	O N f	Sp ON *	ON	Sp ON *	O N	Sp v*	ON	Sp ON *	ON	Sp O N *	
Productivity enhancement in field crops																						
Integrated Pest Management	1	-	1	5	-	1	-	6	-	10	-	8	-	18	-	18	-	9	-	24	-	24

Integrated Disease management	1	-	1	4	-	1	-	5	-	10	-	5	-	15	-	14	-	6	-	21	-	21
Crop production	2	-	2	8	-	1	-	9	-	13	-	6	-	19	-	21	-	7	-	28	-	28
Capacity building																						
Formation and Management of SHGs																						
Group Dynamics and farmers organization																						
Information networking among farmers																						
Capacity building for ICT application	2	-	2	10	-	2	-	12	-	24	-	12	-	36	-	34	-	14	-	48	-	48
Care and																						

			Ι		1	1	I		ı	ı			I	1	I		1		I			
maintenance																						
of farm																						
machinery and																						
implements																						
																						<u> </u>
																						<u> </u>
WTO and IPR																						
issues																						
133463																						
																						<u> </u>
Management																						
in farm																						
animals																						<u> </u>
Livestock feed										25	_	-	_	25	_	25	-	-	_	25	-	25
and fodder																						
production	1	-	1																			
production																						
Household																						
food security																						
Women and	2	-	2							19	-	31	-	50	-	19	-	31	-	50	-	50
Child care	2	-	2																			
Low cost and																						
nutrient																						
efficient diet																						
designing																						
Production																						
and use of																						
	·	1	·	1	1	1	l	1	l	l	l	l	L	1	L	l			L			

organic inputs												
Gender mainstreamin g through SHGs												
TOTAL	9	9	27	5	32	101	62	16 3	10 1	62	163	163

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

Annexure 1: Details of Training Programme (On Campus including Sponsored On Campus) for Extension Personnel:

Discipline	Area of training	Title of the training programme	Date (From – to)	Duration in days	Venue		Genera participa			SC/ST		Gr	and To	tal
						М	F	Т	М	F	Т	M	F	Т
Agronom y	Crop productio n	Scientific cultivation of Kharif pulse	20.7.2017	One day	KVK office	3		3	3	2	5	6	2	8
		Scientific cultivation of Maize crop	4.8.2017	One day	Do	5	1	6	10	4	14	15	5	20
Plant Protectio	IPM	Major pest and disease of vegetables in Tawang district and	25.7.2017	One day	Do	5	1	6	10	8	18	15	09	24

n		their management												
	IDM	Major pest and disease of fruit crops in Tawang district and their management	20.9.2017	One day	do	4	1	5	10	5	15	15	6	21
Agri.Exte nsion	Extension method	Oyster mushroom production technology	5.9.2017	One day	Do	5	1	6	14	8	22	19	9	28
		Entrepreneur ship development in agriculture	4.8.2017	One day	Do	5	1	6	10	4	14	15	5	20
Home	Food and	Nutrition & health care for adolescence.	23.03.201	One day	KVK Office				10	15	25	10	15	25
Science	Nutrition	Complementary food & feeding technique – Assam mix.	26.03.201 8	One day	KVK Office				09	16	25	09	16	25

Animal Science	Fodder managem ent	Highland Pastures and their management for Betterment of Livestock Productivity	23.04.201	One day	KVK Office		25	25	25		25

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	ı		neral cipants		SC/ST		Gr	and To	tal
		programme	.5,			M	F	Т	М	F	Т	М	F	Т
Agronom y	Weed Management	Integrated Weed Management in Maize	14.4.17	One day	Kitpi				10	13	23	10	13	23
	Weed Management	Integrated Weed Management in Potato	22.05 .17	One day	changpro ng				08	14	22	08	14	22S
	Seed Production	Seed Production of Wheat	20.7.17	One day	sernup				09	12	21	09	12	21
		Seed Production	2.8.17	One day	Khinmey				13	30	33	13	30	33

		of Potato										
	Fodder Production	Fodder Production of Berseem	14.8.17	One day	Changpro ng		10	22	32	10	22	32
	Nursery Management	Scientific method of raising paddy seedlings	08.10.1 6 7	Noe days	Urgeling		12	19	31	12	19	31
	Production of Organic Inputs	Production Of Organic Manure	12.11.1 7	One day	Thanga		8	12	20	8	12	20
	Production of Organic Inputs	Production & use of Vermicompost	15.10.1 7	One day	Namtseri ng		14	19	33	14	19	33
	Production of Organic Inputs	Production Of Organic Manure	20.12.1 7	One day	damgin		10	08	18	10	08	18
	Production of Organic Inputs	Production & use of Vermicompost	24.01.1	one day	Yusur		20	13	33	20	13	33
	Production of organic manure	Production and use of vermicompost	12.3.18	One day	Khinmey		22	12	34	22	12	34
Plant Protectio n	IPM	IPM in vegetables	13/4/1 7	One day	Kitpi		12	11	23	12	11	23

IDM	Pests and disease management in vegetables	22/5/1 7	One day	Changpro ng	10	12	24	10	12	22
IPM	IPM in vegetables	16/5/1 7	One day	Kitpi	13	15	28	13	15	28
IPM	IPM in fruits	19/7/1 7	One day	Shernup	15	10	25	15	10	25
IDM	IDM in fruits	3/8/17	One day	Khimney	10	07	17	10	07	17
Biological control	Management of rice pests.	9/8/17	One day	Audung	7	13	20	7	13	20
Chemical control	Preparation of pesticidal solution	10/8/1 7	One day	Teli	14	10	24	14	10	24
IPM	IPM in cole crops	21/8/1	One day	Lemberd ung	8	10	18	8	10	18
Biological control	Bio -control of insects crop pests	10/10/ 17	One day	Maidung	8	12	20	8	12	20
Organic farming	Management of Stem borer in rice	12/10/ 17	One day	Shernup	16	14	30	16	14	30

	Organic farming	Management of tomato wilt using biopesticides	7/11/1	One day	Namet		25	16	41	25	16	41
	Training for Rural Youth	Protected cultivation for entrepreneurshi p development	16/3/1 8	One day	Khinmey		16	14	30	16	14	30
	Entrepreneurial development of farmers	Agripeneurship through production of Biopesticide	24.4.17	One day	Teli		12	17	29	12	17	29
Agri.Exte	Entrepreneurial development of farmers	Agripeneurship through production of Biopesticide	12.05 .17	One day	Poito		11	16	27	11	16	27
nsion	Entrepeneurial development of farmers	Enterpenership development through SHG	16.06. 17	One day	Khinmey		13	16	29	13	16	29
	Entrepreneurial development of farmers	Enterpenership development through SHG	10.07.1 7	One day	Gyanghar		12	18	30	12	18	30
		Food processing from locally Available	2 June,17	One day	Kitpi		15	10	25	15	10	25

		resources										
Home Science	Value addition	Value addition and nutritional value of milk	17 July,17	One day	Kitpi		10	13	23	10	13	23
		Training on value addition of garlic and plum.	02–08– 17	One day	Khinmey		07	18	25	07	18	25
		Training on value addition of plum.	8-08-17	One day	Khinmey		05	17	22	05	17	22
	Storgae technique	Training on storage technique of paddy.	09-08- 17	One day	Audung		10	18	28	10	18	28
		Training on storage technique of paddy.	08–09– 17	One day	Namtseri ng		16	19	35	16	19	35
	Health and hygiene	Training on hygiene and sanitation.	14-09- 17	One day	Kharteng		10	15	25	10	15	25
	Storgae technique	Storage technique of paddy.	07 th Nov'17	One day	Namet		11	30	41	11	30	41
	Food and Nutrition	Nutritional diet for school going children.	18 th Nov'17	One day	Soma		07	06	13	07	06	13
		Nutritional diet for school going	21 th	One day	Damgin		05	25	30	05	25	30

		children.	Dec'17									
	Value Addition	Value addition and preservation technique for radish.	04 th Jan,18	One day	Gispu		11	29	40	11	29	40
	Food and Nutrition	Nutrition & health care for adolescence	16 th March 18	One day	Khinmey		09	25	34	09	25	34
Animal Science	Cattle management	Dairy management and clean milk production	17 th July 17	One day	Kitpi		21	1	22	21	1	22
	Poultry Rearing	Backyard poultry farming and their benefits.	10 th August ' 17	One day	Teli		6	18	24	6	18	24
	Disease management	Disease management in livestock	21st August '17	One day	Namtseri ng		25	5	30	25	5	30
	Feeding management	Livestock feed and fodder production.	20 th Septem ber'17	One day	kitpi		18	12	30	18	12	30
		Livestock feed and fodder production	10 th Octobe r'17	One day	Maidung		5	10	15	5	10	15

Cattle management	Scientific rearing of cattle	12 th Oct'17	One day	Shernup		5	12	17	5	12	17
Disease management	Control of parasites in live stock.	7 th Nov'17	One day	Namet		21	4	25	21	4	25
Feed	Importance of concentrate feeds in cattle.	18 th Nov'17	One day	Soma		22	7	29	22	7	29
Feed	Winter mitigation of feed and fodder for cattel.	13 th Dec'17	One day	Kitpi		12	8	20	12	8	20
Value addition of milk	Training on milk by-products for farmers	24 th Jan'18	One day	Teli		13		13	13		13

(D) Vocational training programmes for Rural Youth :NIL

Crop / Enterprise	Date	Durati	Area of	Traini	No. of Participants	Impact of training in terms of Self employment after	Whether

(From –	on	training	ng	G	ener	al	S	C/S	Γ	Т	otal		training				Sponsored
To)	(days		title*														by external
																	funding
																	agencies
																	(Please
																	Specify with
																	amount of
																	fund in Rs.)
				М	F	Т	М	F	T	M	F	T	Type of enterprise	Number	Number	Avg.	
													ventured into	of units	of	Annual	
															persons	income in	
															employed	Rs.	
																generated	
																through	
																the	
																enterprise	

^{*}training title should specify the major technology /skill transferred

Annexure 3: Only Sponsored Training Programmes (On, Off and Vocational):NIL

								No. of Participant	S	Spo	Amou
On/ Off/ Vocational	Beneficiary group (F/ FW/ RY/ EP)	Date (From- To)	Duration (days)	Discipline	Area of training	Title	General	SC/ST	Total	nsor ing Age ncy	nt of fund receiv ed (Rs.)

				M	F	T	M	F	T	M	F	T	
Total													

3.4. Extension Activities (including activities of FLD programmes) (Please mention specific Extension Activity conducted by the KVK such as Field Day, Kisan Mela, Exhibition, Diagnostic Visit, etc) during 2017-18

Sl. No.		Topic	Date and duration							Part	icipa	nts				
	Extension Activity			No. of		ener	al		SC/ST			tens fficia		G	rand To	 otal
	Excusion receiving			activities		(1)			(2)			(3)			(1+2)	
					M	F	T	M	F	T	M	F	Т	M	F	Т
1.	Advisory services		Apr 17– Mar 18	35				12	23					12	23	35
2.	Diagnostic visit		Apr 17– Mar 18	87				393	389					393	389	682
3.	Field day		Sept,Oct	04				135	147					135	147	282
4.	Group Discussion		Apr 17– Mar 18	70				250	270					250	270	520
5.	Kishan Gosthi		April18-Nov.18	08				35	54					35	54	89
	Kishan Mela															
6.	Film show		Apr 17– Mar 18	09				54	52					54	52	106
7.	SHG formation		Sep,	01				-	18							18
8.	Exhibition		Aug	01												Mass

9.	Scientists visit to farmers fields		Apr 17– Mar 18	97	170	198			170	198	368
10.	Plant/ Animal Health camp	Animal Health Camp	21st July'17 25th March'18	2	12	1	31				31
		Camp			12	1	31				31
11.	Farm science club										
12.	Ex-trainee Sammelan										
13.	Farmers seminar/ workshop										
14.	Method demonstration		April,May	04	8	10			8	10	18
15.	Celebration of important days		Jan ,Aug								Mass
16.	Exposure visits										
17.	Electronic media (CD/DVD)										
18.	Extension literature			04							Mass
19.	Newspaper coverage			08							Mass
20.	Popular articles		April,May,June,August,Sept,Oct	08							Mass
21.	Radio talk		April,May,June,August,Sept,Oct	06							Mass
22.	TV talk										
23.	Training manual										
24.	Soil health camp		December	01	45	65			45	65	110

25.	Awareness camp									
26.	Lecture delivered as resource person	April,December,March	06		55	75		55	75	130
27.	PRA	April,May,June,	10		110	130		110	130	240
28.	Farmer-Scientist interaction	April,May,June,August,Sept,Oct	06		65	55		65	55	120
29.	Soil test campaign	December	01		45	55		45	55	100
30.	Mahila Mandal Convener meet									
31.	Any other (Please specify)									
32.										
	Grand Total		818		1302	1428		1302	1428	2730

3.5 Production and supply of Technological products during 2017-18

A. SEED MATERIALS:NIL

A1. SUMMARY of Production and supply of Seed Materials during 2017-18:NIL

B. Production of Planting Materials: Cabbage -1000 seedlings, Cauliflower-1500 seedlings, Broccoli-1000 seedlings.

- B1. SUMMARY of Production and supply of Planting Materials (In Lakh) during 2017-18:
- C. Production of Bio-Products during 2017-18: Vermicompost-4.0 quintal

C1. SUMMARY of production of bio-products during 2017-18:NIL

- D. Production of livestock during 2017-18:NIL
- D1. SUMMARY of production of livestock during 2017-18:NIL
- 3.6. Literature Developed/Published (with full title, author & reference) during 2017-18:
- (A) KVK News Letter ((Date of start, Periodicity, number of copies distributed etc.): Periodicity Annual, No of Copies-1000
- (B) Articles/ Literature developed/published: Folder- 12, Technical bulletin-1,

Title of Folder:

- 1. Scientific cultivation of Rice
- 2. Complimentary food and feeding technique-Assam Mix
- 3. Major disease of forest plant in Tawang district and their management.
- 4. Eco friendly management of cabbage butterfly.
- 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:NIL
- 3.7. Success stories/Case studies, if any (two or three pages write-up on each case with suitable action photographs):
- 3.8 Give details of innovative methodology/technology developed and used for Transfer of Technology during the year:NIL
- 3.9 Give details of indigenous technology practiced by the farmers in the KVK operational area which can be considered for technology development (in detail with suitable photographs)

S. No.	Crop / Enterprise	ITK Practiced	Purpose of ITK
1	Vegetables	Application of soap water around the plant	To get rid of cut worm
2	Vegetables	Application of wood ash	To manage nursery pest
3	Potato	Apply cut banana@ periphery of the field	To control red ant

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-10
- ii. No. of farm families selected-235
- iii. No. of survey/PRA conducted-10

3.12. Activities of Soil and Water Testing Laboratory:NA

Status of establishment of Lab :

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

SI. No	Name of the Equipment	Qty.	Cost
1			
2			
3			
Total			

3. Details of samples analyzed so far : No of sample analyzed 51 No of Survey:12 villages

3.13. Details of SMS/ Voice Calls sent on various priority areas:NA

3.14 Contingency planning for 2017-18

a. Crop based Contingency planning

Contingency (Drought/ Flood/ Cyclone/ Any other please specify)	Proposed Measure	Proposed Area (In ha.) to be covered	Number of benef	ficiaries proposed to b	e covered
			General	SC/ST	Total
Drought	Paddy var:Satva, Basundhra	10		62	62
	Water harvesting	10		62	62
	Finger millets var: VL Mandua 146,	12		69	69
	-				

Any other (Please specify)		

a. Livestock based Contingency planning :NA

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

4.0. IMPACT

4.1. Impact of KVK activities (Not to be restricted for reporting period only)

Name of specific technology/skill transferred	No. of participants	% of adoption	Change in income (Rs.)	
Tanorenea	partioipanto		Before (Rs./Unit)	After (Rs./Unit)
Scientific cultivation of Groundnut	54	37	45,000	73,500
Scientific cultivation of Paddy	18	26	23,000	41,000

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

4.2. Cases of large scale adoption: Yield of new variety is higher due to adoption of Scientific method of cultivation.

(Please furnish detailed information for each case)

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

Name of specific technology/skill transferred	No. of participants	% of adoption	Change in income (Rs.)	
	paraorpanio		Before (Rs./Unit)	After (Rs./Unit)
Varietal evaluation of Paddy Var:CAU R1	05	65	7000/-	11000/-
Varietal evaluation of Maize Var:RCM-76	05	69	7700/-	12000/-

1.0. LINKAGES ESTABLISHED

5.1 Functional linkage with different organizations

Name of organization	Nature of linkage
ATMA	As a resource person

Ministry of Agriculture	Awareness programme

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 2017-18:

Name of the Programme	Organization
PPV&FRA	Ministry of Agriculture

5.3 Details of linkage with ATMA

a) Is ATMA implemented in your district?

SI. No.	Programme	Nature of linkage	Remarks
01	Training	As a resource person	

- 5.4 Give details of programmes implemented under National Horticultural Mission:NA 5.5 Nature of linkage with National Fisheries Development Board :NA 6. PERFORMANCE OF INFRASTRUCTURE IN KVK DURING 2017-18 6.1 Performance of demonstration units (other than instructional farm): NIL 6.2 Performance of instructional farm (Crops) including seed production: NIL 6.3 Performance of production Units (bio-agents / bio pesticides/ bio fertilizers etc.,) :NIL Performance of instructional farm (livestock and fisheries production):NA 6.5 **Rainwater Harvesting** Training programmes conducted by using Rainwater Harvesting Demonstration Unit:NA 6.6. Utilization of hostel facilities (Month-Wise) during 2017-18 Accommodation available (No. of beds) :NIL Note: (Duration of the training course X No. of trainees)=Trainee days
- 7.1 Details of KVK Bank accounts

7.

FINANCIAL PERFORMANCE

Bank account	Name of the bank	Location/ Branch	Account Number
30641369511	State bank of India	SBI, TAWANG	30641369511

7.2 Utilization of funds under FLD on Maize (Rs. In Lakhs) if applicable Nil

7.3 Utilization of KVK funds during the year 2016 -17

S. No.	Particulars	Sanctioned (in Lakh)	Released (in Lakh)	Expenditure (in Lakh)
A. Re	curring Contingencies			
1	Pay & Allowances	1,10,00,000/-	1,09,65,100/-	1,09,64,169/-
2	Traveling allowances	2,50,000/-	2,46,248/-	2,46,058/-
3	Contingencies	13,50,000/-	11,99,889.24	11,99,616/-
А	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)			
В	POL, repair of vehicles, tractor and equipments			
С	Meals/refreshment for trainees			
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)			
Ε	Frontline demonstration except oilseeds and pulses			

	(minimum of 30 demonstration in a year)			
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			
Н	Maintenance of buildings			
1	Establishment of Soil, Plant & Water Testing Laboratory			
J	Library			
				4 0 4 0 0 0 4 0 4
	TOTAL (A)	1,26,00,000/-	1,24,11,237/-	1,24,09,843/-
B. No	on-Recurring Contingencies	1,26,00,000/-	1,24,11,237/-	1,24,09,843/-
B. No	• •	1,26,00,000/-	1,24,11,237/-	1,24,09,843/-
	on-Recurring Contingencies	1,26,00,000/-	1,24,11,237/-	1,24,09,843/-
1	on-Recurring Contingencies Works	1,26,00,000/-	1,24,11,237/-	1,24,09,843/-
1 2	Works Equipments including SWTL & Furniture	1,26,00,000/-	1,24,11,237/-	1,24,09,843/-
1 2 3	Works Equipments including SWTL & Furniture Vehicle (Four wheeler/Two wheeler, please specify)	1,26,00,000/-	1,24,11,237/-	1,24,09,843/-
1 2 3 4	Works Equipments including SWTL & Furniture Vehicle (Four wheeler/Two wheeler, please specify) Library (Purchase of assets like books & journals)	1,26,00,000/-	1,24,11,237/-	1,24,09,843/-

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

Year	Opening balance as on 1 st April	Income during the year	Expenditure during the year	Net balance in hand as on 1 st April of each year
2015-16	1,08,447/	4,374/- Bank Interest	NIL	1,12,821/-
2016-17	1,12,821/-	5,740/- Bank Interest	NIL	1,18,561/-
2017-18	1,18,561/-	10,722/- Bank Interest & Revenue Generated	NIL	1,29,283/-

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

- (a) Administrative- Administrative Building not completed (Half part completed)
- (b) Financial-Financial position not sufficient.
- (c) Technical- Not fulfill the Technical staffs post.

(Signature) Sr. Scientist & Head