# PROFORMA FOR ANNUAL REPORT 2018-19 (April 2018 to March 2019)

#### 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	
Uttar Dinajpur Krishi Vigyan Kendra	07584077210	_	udpkvk@gmail.com
P.O Chopra, DistUttar Dinajpur,	0700.077220		
West Bengal, Pin-733216			

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

Address	Telephone		E mail
	Office FAX		
Uttar Banga Krishi Viswavidyalaya	03582-	_	deeubkv@gmail.com
Pundibari, Cooch Behar, Pin- 736165	270986	-	deedbkv@gman.com

### 1.3. Name of Senior Scientist and Head with phone & mobile No.

Name	Telephone / Contact					
	Residence Mobile Email					
Dr. Dhananjoy Mandal	03526 – 257395	09475164047/09064389475	dhananjoy17@rediffmail.com			

#### 1.4. Year of sanction of KVK:

Reference of Sanction Order- F.No.6-3/2000-AE-I dated 28<sup>th</sup> Feb, 2005

Date of Establishment- 28<sup>th</sup> Feb, 2005

# 1.5. Staff Position (as on 1<sup>st</sup> April, 2019)

SI. No.	Sanctioned post	Name of the incumbent	Designation	Discipline	Pay Scale with present basic	Date of joining	Permanent/ Temporary	Category (SC/ST/ OBC/ Others)
1	Senior Scientist& Head	Vacant	Sr. Scientist and Head					
2	Subject Matter Specialist	Dr. Dhananjoy Mandal	Sr. Scientist and Head (Actg.) and Subject Matter Specialist (P. P)	Plant Protection	15600-39100+7600	05.07.05	Temporary	Other
3	Subject Matter Specialist	Dr. Debdas Sekhar	Subject Matter Specialist	Fishery Science	15600-39100+6600	27.06.05	-do-	Other
4	Subject Matter Specialist	Dr. Anjali Sharma	Subject Matter Specialist	Home Science	15600-39100+7600	05.01.06	-do-	Other
5	Subject Matter Specialist	Dr. Moutusi Dey	Subject Matter Specialist	Horticulture	15600-39100+5400	16.07.14	-do-	Other
6	Subject Matter Specialist	Dr. Debasish Mahata	Subject Matter Specialist	Agronomy	15600-39100+5400	02.11.18	-do-	OBC B
7	Subject Matter Specialist	Vacant	Subject Matter Specialist	Animal Science	15600-39100+5400			
8	Programme Assistant	Mr. Prasenjeet Barman	Programme Assistant (Lab. Technicians)	Plant pathology	9300-34800 + 4200	02.11.18	-do-	SC
9	Computer Programmer	Mr. Sudipta Debnath	Programme Assistant (Computer)	Computer	15600-39100+5400	16.06.06	-do-	Other
10	Farm Manager	Dr. Soumen Mahapatra	Farm Manager	Seed Science	15600-39100+5400	02.07.07	-do-	Other
11	Accountant / Superintendent	Mr. Ayanul Haque	Assistant (Accounts and Admn.)	Commerce	9300-34800 + 4200	29.12.16	-do-	OBC - 1
12	Stenographer	Mr. Palash Das	Sr. Stenographer	Commerce	9300-34800 + 4200	29.06.06	-do-	Other
13.	Driver	Mr. Himanish Sarkar	Driver	-	5200-20200 + 2800	18.06.07	-do-	Other
14.	Driver	Biswajit Roy	Driver	-	5200-20200 + 2000	-	-do-	-
15.	Supporting staff	Mr. Kanak Ch. Mondal	Skilled Support staff	Arts	5200-20200 + 1800	03.11.15	-do-	SC
16.	Supporting staff	Mr. Kalyan Tarafdar	Skilled Support staff	Arts	5200-20200 + 1800	03.11.15	-do-	SC

# 1.6. Total land with KVK (in ha):

S. No.	Item	Area (ha)		
1	Under Buildings	0.1208		
2. Under Demonstration Units		0.0160		
3.	Under Crops	5.8632		
4.	Orchard/Agro-forestry	1.0000		
5. Others with details		2.6100		
	Total	09.61		

Total area should be matched with breakup

## **1.7.** Infrastructure Development:

## A) Buildings and others

S. No.	Name of infrastructure	Not yet started	Completed up to plinth level	Completed up to lintel level	Completed up to roof level	Totally completed	Plinth area (sq.m)	Under use or not*	Source of funding
1.	Administrative Building	-	-	-	-	✓	500	Under use	ICAR
2.	Farmers Hostel	-	-	-	-	<b>✓</b>	305	Under use	ICAR
3.	Staff Quarters (6)	-	-	-	✓	-	400	Not in use	ICAR
4.	Piggery unit	-	-	-	-	-	-	-	-
5	Fencing	-	-	-	-	<b>√</b>	-	In use	ICAR (0.25%) &UBUP, Govt. of W.B.(0.75%)

S. No.	Name of infrastructure	Not yet started	Completed up to plinth level	Completed up to lintel level	Completed up to roof level	Totally completed	Plinth area (sq.m)	Under use or not*	Source of funding
6	Rain Water harvesting structure	-	-	-	-	✓	-	In use	ICAR
7	Threshing floor	-	-	-	-	<b>√</b>	120	In use	ICAR
8	Farm godown	-	-	-	-	✓	54	In use	ICAR
9.	Dairy unit	-	-	-	-	-	-	-	-
10.	Poultry unit	-	-	-	-	✓		In use	ICAR & RKVY
11.	Goatary unit	-	-	-	-	✓		In use	RKVY
12.	Mushroom Lab	-	-	-	-	✓		In use	NAIP-III
13.	Mushroom production unit	-	-	-		-			
14.	Shade house	-	-	-	-	<b>√</b>		In use	RKVY
15.	Soil test Lab	-	-	-	-	✓		In use	RSVY
16	Others, Please Specify								
Α	Plant Health Clinic	-	-	-	-	✓		In use	ICAR
В	Training hall	-	-	-	-	<b>√</b>		In use 2 nos.	ICAR, RKVY
С	Training Hut	-	-	-	-	✓		In use	RKVY

S. No.	Name of infrastructure	Not yet started	Completed up to plinth level	Completed up to lintel level	Completed up to roof level	Totally completed	Plinth area (sq.m)	Under use or not*	Source of funding
d	Implement shade	-	-	-	-	✓		In use	RKVY

<sup>\*</sup> If not in use then since when and reason for non-use

## B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total km. Run	Present status
Tractor	2004-05	4,99,696.00	1056.9 hr	Needs major repairing
Jeep	2005-06	4,99,493.00	210430 km	Condemn
Motor Cycle (Bike & Scooty – 2 nos.)	2016-17	1,00,000.00		Working Condition

## C) Equipment & AV aids

Name of equipment	Year of purchase	Cost (Rs.)	Present status	Source of fund
a. Lab equipment				
Spectra Photometer	2015-16	115000.00	Working condition	ICAR
Flame Photometer	2015-16	51800.00	Working condition	ICAR
Digital pH meter	2015-16	12400.00	Working condition	ICAR
Mushroom Drayer	2015-16	56000.00	Working condition	ICAR
Mrida Parikshak	2015-16	125000.00	Working condition	ICAR
Refractro meter (3 nos.)	2015-16	6900.00	Working condition	ICAR
Weight Balance	2015-16	79500.00	Working condition	ICAR
Automatic Nitrogen Analyzer	2015-16	405761.00	Working condition	ICAR
b. Farm machinery				
Power Sprayer	2008-09	8,178.00	Working condition	ICAR
Generator	2008-09	65,000.00	Working condition	ICAR, RKVY
Cultivator	2009-10	15,000.00	Working condition	ICAR
Disc harrow	2009-10	34,000.00	Working condition	ICAR

Name of equipment	Year of purchase	Cost (Rs.)	Present status	Source of fund
Power chain saw	2009-10	40,000.00	Working condition	RKVY
Weighing machine	2009-10	32,000.00	Working condition	ICAR
Multiple crop thresher	2010-11	85,000.00	Working condition	RKVY
Zero till cum Multiple seed drill	2010-11	68,000.00	Working condition	RKVY, NAIP
Bed planter	2011-12	45,000.00	Working condition	RWC
Power Tiller	2011-12	85,000.00	Working condition	RWC
Aerator	2012-13	36000.00	Working condition	RKVY
c. AV Aids				
Computer and Accessories	2005 – 06	63,346.00	Working condition	ICAR
Computer and Accessories	2015-16	32,000.00	Working condition	ICAR
Laptop	2017-18	35889.00	Working condition	ICAR
Camera	2005 – 06	26,990.00	Working condition	ICAR
Camera	2010-11	25,000.00	Not Working	RKVY
Camera	2011-12	30,000.00	Working condition	RKVY
Camera	2012-13	20,000.00	Working condition	RKVY
Camera	2017-18	12226.00	Working condition	ICAR
Over Head Projector	2005 – 06	14,040.00	Working condition	ICAR
LCD Projector	2006-07	84,990.00	Not Working	ICAR
LCD Projector	2012-13	36,000.00	Not Working	RKVY
LCD Projector	2012-13	36,000.00	Not Working	RKVY
LCD Projector	2012-13	36,000.00	Working condition	RKVY
Interective system	2012-13	80,000.00	Working condition	RKVY
Motorized screen	2012-13	54,000.00	Working condition	RKVY
Motorized screen	2012-13	54,000.00	Working condition	RKVY
Photocopier Machine	2006-07	74,360.00	Not Working	ICAR
Fax Machine	2006-07	6,900.00	Working condition	ICAR
Laptop	2010-11	45,555.00	Not Working	RSVY
Laptop (2 nos)	2012-13	45,000.00	Working condition	RKVY
Laptop	2012-13	20,000.00	Working condition	RKVY
Laptop	2013-14	20,000.00	Not Working	RKVY

## D) Farm implements

Name of equipment	Year of purchase	Cost (Rs.)	Present status	Source of fund
Seed Grader	2015-16	405000.00	Working condition	ICAR
Power Reaper	2015-16	120750.00	Working condition	ICAR
Thrasher cum weanor	2015-16	100000.00	Working condition	ICAR
Gravity Separator	2018-19	6,94,000.00	Working condition	Seed Hub Project, ICAR, Govt. of India

# 1.8. Details OF 15<sup>th</sup> SAC meeting\* conducted in the year

SI.No.	Date	Number of Participants	Salient Recommendations	Action taken	If not conducted, state reason
1.	October 03, 2018	22	➤ Dr. Subrata Kumar Roy, Principal scientist, ICAR-ATARI, Kolkata suggested that training programme of Agronomy and Plant Protection discipline should be given separately in the Action Plan for next year. He also proposed to increase the nos. of approved SAC members in the coming year. He also opined for publication and documentation of DFI programme	recommendation training programme in the discipline of Agronomy and Plant Protection have been separated in the	
2.			➤ Prof. Prabhat Kumar Pal, DEE, UBKV suggested that SAC meeting should be arranged before Kharif season. He also opined that Action Plan and Annual Report should be presented by the respective SMSs as per their discipline.		
3.			➤ Dr. Saikat Mookherjee, Deputy Director of Extension Education, Uttar Banga Krishi Viswavidyalaya, suggested to check the yield performance of Blackgram Var. PU — 31 in Summer and post Kharif season.	performance of Blackgram Var.	

Sl.No.	Date	Number of Participants	Salient Recommendations	Action taken	If not conducted, state reason
4.			Prof. Pradut Kumar Pal, Head Pomology and Post Harvest Technology, UBKV suggested to take Training Programme on cultivation of Milky Mushroom.	As per his suggestion, milky mushroom cultivation training programme has been included in the training programme of the financial year 2019-20.	
5.			Prof. Ranjit Chatterjee, Head Vegetable and Spice Crops, UBKV suggested that local variety of Garden Pea should be replaced with Azad P -3. He also suggested that to quantify the percentage of organic matter of soil used in portray and seedbed for sapling production. He also opined that the problems emerging out in the prescribed format throughout the year at the KVK level should be transferred to the concerned department of University for further research purpose.	replaced by Azad P -3 and organic matter of soil used in portrays and seedbed for	
6.			➤ Dr. Bikash Roy, Senior Scientist and Head of Coochbehar Krishi Vigyan Kendra opined that short duration rice var. Should be used in varietal replacement purposes.	As per his suggestion, short duration rice var. has been included in the research aspects in varietal replacement purposes for the financial year 2019-20.	

SI.No.	Date	Number of Participants	Salient Recommendations	Action taken	If not conducted, state reason
7.			➤ Dr. Rakesh Roy, SMS (Animal Science), representative of Senior Scientist and Head of Darjeeling KVK suggested that pure breed of Black Bengal should be used in multiplication for future germplasm conservation of Black Bengal goat.	As per his suggestion KVK has taken action and distributed pure Black Bengal goat (Buck) at the village level for conservation of germplasm.	
8.			Mr. Goutam Ghosh, DDM, NABARD, Uttar Dinajpur district suggested to arrange some training programmes on Tulaipanji for Farmers' Producers Organization.	As per his suggestion, training programme has been framed for training programme on Tulaipanji Farmers' Producer Organization.	
9.			➤ Mr. Jogesh Ray, LDM, Uttar Dinajpur district requested to provide resource persons to their training centre for Skill Development Training Programme.	As per his suggestion, KVK is being provided resource persons to their training centres for skill development training programme.	
10.			➤ Mir Farhad Hossain, Dy. Director of Agriculture (Admn.), Uttar Dinajpur district suggested for arranging training programme on Farm Mechanization. He also suggested conducting short term research programme on Soil Nutrient restoration in case of Maize cultivation. He agreed upon for arranging frequent visit on centrally sponsored programme like NFSM.	As per his suggestion, KVK included training programme on Farm Mechanization and submitted one project proposal on Soil Nutrient restoration in case of Maize cultivation. The said project already been approved by the ATMA, Uttar Dinajpur. For which scheduled works has been started.	
11.			Mr. Dhrubajit Dey, representation of District Social Welfare Officer, Uttar Dinajpur suggested to arrange some skill oriented Training Programme for Home Dwellers.	As per his suggestion KVK on the way to start some skill oriented Training Programme for Home Dwellers	

#### 15th SAC meeting proceedings:

15<sup>th</sup> Scientific Advisory Committee (SAC) of Uttar Dinajpur Krishi Vigyan Kendra was held at the seminar Hall of Uttar Dinajpur KVK on October 03, 2018. The meeting was chaired by, Prof. Prabhat Kumar Pal, Director of Extension Education, Uttar Banga Krishi Viswaayalaya. Mr.Debdas Sekhar, SMS (Fishery Science) and Dr. Moutusi Dey, SMS (Horticulture) acted as repotier in the SAC meeting. Details of proceedings are given below -

The meeting was started with the welcome address of Dr. Dhananjoy Mandal, Senior Scientist and Head (Actg.), Uttar Dinajpur KVK. Dr. Mandal proposed the name of Prof. Prabhat Kumar Pal, DEE, UBKV as President of the 15<sup>th</sup> SAC Meeting and Mr. Debdas Sekhar, SMS, (Fishery Science) agreed with the proposal.

Dr. Mandal presented previous SAC recommendations and action taken report, Action Plan 2018-19. He also presented the Progress Report of 2017-18 of Uttar Dinajpur Kristi Vigyan Kendra before the house.

- > Dr. Subrata Kumar Roy, Principal scientist, ICAR-ATARI, Kolkata suggested that training programme of Agronomy and Plant Protection discipline should be given separately in the Action Plan for next year. He also proposed to increase the nos. of approved SAC members in the coming year. He also opined for publication and documentation of DFI programme.
- > Prof. Prabhat Kumar Roy, DEE, UBKV suggested that SAC meeting should be arranged before Kharif season. He also opined that Action Plan and Annual Report should presented by the respected SMSs as per their discipline.
- ➤ Dr. Saikat Mookherjee, Deputy Director of Extension Education, Uttar Banga Krishi Viswavidyalaya suggested to check the yield performance of Blackgram Var. PU 31 in Summer and post Kharif season.
- > Prof. Pradut Kumar Pal, Head Pomology and Post Harvest Technology, UBKV suggested to take Training Programme on cultivation of Milky Mushroom.

- ➤ Prof. Ranjit Chatterjee, Head Vegetable and Spice Crops, UBKV suggested that local variety of Garden Pea should be replaced with Azad P -3. He also suggested that to quantify the percentage of organic matter of soil used in portray and seedbed for sapling production. He also opined that the problems emerging out in the prescribed format throughout the year at the KVK level should be transferred to the concerned department of University for further research purpose.
- > Dr. Bikash Roy, Senior Scientist and Head of Coochbehar Krishi Vigyan Kendra opined that short duration rice var. Should be used in varietal replacement purposes.
- > Dr. Rakesh Roy, SMS (Animal Science), representative of Senior Scientist and Head of Darjeeling KVK suggested that pure breed of Black Bengal should be used in multiplication for future germplasm conservation of Black Bengal goat.
- > Mr. Goutam Ghosh, DDM, NABARD, Uttar Dinajpur district suggested to arrange some training programmes on Tulaipanji for Farmers' Producers Organization.
- Mr. Jogesh Ray, LDM, Uttar Dinajpur district requested to provide resource persons to their training centre for Skil Development Training Programme.
- Mir Farhad Hossain, Dy. Director of Agriculture (Admn.), Uttar Dinajpur district suggested for arranging training programme on Farm Mechanization. He also suggested conducting short term research programme on Soil Nutrient restoration in case of Maize cultivation. He agreed upon for arranging frequent visit on centrally sponsored programme like NFSM.
- Mr. Dhrubajit Dey, representation of District Social Welfare Officer, Uttar Dinajpur suggested to arrange some skill oriented Training Programme for Home Dwellers.

At the end, Mr.Debdas Sekhar, SMS (Fishery Science) gave vote of thanks to all the participants present in the meeting. With the kind permission of the Chair, the 15<sup>th</sup> SAC meeting of Uttar Dinajpur KVK was brought to end with great hope and future prosperity.

# List of members present in the 15<sup>th</sup> SAC meeting:

SI. No.	Name	Designation
1.	Dr. Prabat Kumar Pal	DEE, UBKV, Pundibari
2.	Dr. Subrata Roy	Principal Scientist, ICAR- ATARI
3.	Dr. Mrigendra Ghosh	DF, UBKV
4.	Dr.Saikat Mukherjee	Dy. DEE, UBKV, RRS (OAZ), Majhian, D. Dinajpur
5.	Dr. Ranjit Chatterjee	Associate Prof. (Vegetables and spice crops), Faculty of Horticulture
6.	Dr. Pradut Kumar Pal	Prof. Fruits and Post Harvest cultivation
7.	Mr. Sumit Kumar Chakraborty	Representative from AIR, Silliguri
8.	Mir. Farhad Houssain	Dy. Director Agriculture (Admn.), Uttar Dinajpur
9.	Shri. Goutam Ghosh	DDM, NABARD, Uttar Dinajpur
10.	Mr. Drubojit Dey	Representation of District Social Welfare Officer, Uttar Dinajpur
11.	Md. Faiyaz Rahaman	Representative of Horticulture Department, Govt. of W. B.
12.	Dr.Bikash Roy	Senior Scientist and Head, Coochbehar KVK
13.	Dr. Rakesh Roy	Representative of Sr. Scientist & Head, Darjeeling KVK
14.	Dr. Dhananjoy Mandal	Senior Scientist and Head, Uttar Dinajpur KVK
15.	Dr. Bankim Chandra Rudra	Farm Manager, Malda KVK & Representative of Sr. Scientist & Head, Malda KVK
16.	Mr. Jogesh Roy	LDM, Raiganj, Uttar Dinajpur
17.	Smt. Rupa Sarkar	Farm Women Representative
18.	Smt. Sushila Tudu	Farm Women Representative
19.	Dr. Moutusi Dey	SMS, Uttar Dinajpur KVK
20.	Dr. Anjali Sharma	SMS, Uttar Dinajpur KVK
21.	Dr. Debdas Sekhar	SMS, Uttar Dinajpur KVK
22.	Mr. Shyam Chandra Lala	Farmers' Representative

## 2.a. District level data on agriculture, livestock and farming situation (2018-19)

## 2.a.1 Major farming systems/enterprises (based on the analysis made by the KVK)

CI N	Major Farming system/enterprise				
Sl. No.	Pre-kharif	Kharif	Rabi/ winter		
A. IRRIG	ATED CONDITION				
(a) Uplar	nd & medium land situation				
1.	Jute / Mesta/Maize	Rice	Wheat / mustard		
2.	Ridgegourd / cucumber / Okra / Brinjal / Pumpkin	Rice	Potato / Mustard		
3.	Okra / Pointed gourd	Rice	Brinjal / Chilli / Tomato / Cabbage / Cauliflower		
4.	Greengram	Pointed gourd / Brinjal	Cabbage /Cauliflower /Tomato		
5.	Pointed gourd	Pointed gourd	Radish / Tomato (Late)		
6.	Sesame / Maize	Rice	Brinjal /Cabbage / Cucumber		
7.	Chilli / Maize	Rice	Potato		
(b) Low lo	and situation	•	·		
1.	Maize	Rice	Fallow		
2.	Jute	Rice	Fallow		
3.	Maize	Rice	Potato		
B. RAINF	ED CONDITION	•	·		
(a) Upla	nd situation				
1.	Jute	Rice	Fallow		
2.	Fallow	Rice	Mustard		
3.	Ginger / Turmeric	Ginger / Turmeric	Fallow		
b. Low la	nd situation				
1.	Jute	Rice	Fallow		
2.	Sesame	Rice	Fallow		
3	Maize	Fallow	Potato		

### 2.a.2 Description of Agro-climatic Zone

Sl. No.	Agro-climatic Zone	Characteristics	
1.	Terai zone (Islampur sub-division)	<ul> <li>Soil pH varies from 4.6 to 6.2;</li> <li>Soil organic matter: 0.10 – 0.72</li> <li>Available P<sub>2</sub>O<sub>5</sub>: 8 – 94 kg ha<sup>-1</sup></li> <li>Available K<sub>2</sub>O: 30-290 kg ha<sup>-1</sup></li> <li>Phosphate fixation capacity is high;</li> <li>Ca and Mg and some of the important micronutrients are deficient</li> </ul>	
2.	New and Old Alluvial zone (Raiganj sub-division)	<ul> <li>Soil pH varies from 4.6 – 6.3;</li> <li>Soil organic matter: 0.18 – 0.90</li> <li>Available P<sub>2</sub>O<sub>5</sub>: 4.5 – 200 kg ha<sup>-1</sup></li> <li>Available K<sub>2</sub>O: 12 – 367 kg ha<sup>-1</sup></li> </ul>	

**Source:** Directorate of Agriculture, Govt. of W.B.

## 2.a.3. Major agro ecological situations (based on soil and topography)

SI. No	Agro ecological situation	Characteristics
1.	Agro-ecological region (AER) -15 Western Himalayas, warm dry to moist sub-humid (inclusion of humid) eco region with brown forest and podozolic soils & GP 180-210 (+) days, and Agro ecological sub region (AESR) 15.1 (Bengal basin and North Bihar Plain, hot moist sub-humid ESR with deep loamy to clayey alluvium-derived soils , medium to high AWC and LGP 210-240 days)	<ul> <li>Soil pH varies from 4.6 to 6.2;</li> <li>Soil organic matter: 0.10 – 0.72</li> <li>Available P<sub>2</sub>O<sub>5</sub>: 8 – 94 kg ha<sup>-1</sup></li> <li>Available K<sub>2</sub>O: 30-290 kg ha<sup>-1</sup></li> <li>Phosphate fixation capacity is high;</li> <li>Ca and Mg and some of the important micronutrients are</li> </ul>
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### 2.a.4 Soil type/s

SI. No	Soil type	Characteristics	Area in ha
1.	New Alluvium	<ul> <li>Soil pH varies from 4.6 to 6.2;</li> <li>Soil organic matter: Low to medium</li> <li>Phosphate fixation capacity is high;</li> <li>Ca and Mg and some of the important micronutrients are deficient</li> </ul>	96,320
2.	Alluvium	Soil pH around 6.3;	29,076

SI. No	Soil type	Characteristics	Area in ha
		Soil organic matter : Medium	
2	Old Alluvium	• Soil pH varies from 5.0 – 6.3;	95,896
3.	Old Alluvidili	Soil organic matter : Medium	93,690

### 2.a.5. Area, Production and Productivity of major crops cultivated in the district:

Sl. No	Crop	Area (ha)	Production (q)	Productivity (q/ha)
1.	Aus Paddy	3887	58360	15.00
2.	Aman Paddy	190469	4619330	24.25
3.	Boro paddy	69985	2449480	35.00
4.	Jute	28898	515540	17.84
5.	Wheat	52532	1050640	20.00
6.	Mustard	54020	526150	12.38
7.	Potato	15230	2793180	183.4
8.	Pulses (Khesari, Lentil, Gram, Blackgram, Kulthi etc.)	6458	63290	9.80
9.	Chilli	3560	21360	6.00
10.	Tomato	1924	236880	123.05
11.	Cauliflower	2588	406320	157.00
12.	Cabbage	3488	638310	183.00
13.	Brinjal	3200	169600	53.00
14.	Ginger	908	36320	40
15.	Turmeric	1546	27860	18.02
16.	Sugarcane	477	310050	650.00
17.	Mesta	870	8610	9.90
18.	Maize	7145	500150	70.00
19.	Linseed	2073	29610	14.28
20.	Sesame	1092	5460	5.00
21.	Mango	945	60240	63.75
22.	Jackfruit	522	34190	65.50
23.	Litchi	400	14600	36.5
24.	Sapota	8	530	66.25
25.	Guava	456	28730	63.00
26.	Citrus fruits	195	8300	42.56

Sl. No	Crop	Area (ha)	Production (q)	Productivity (q/ha)
27.	Banana	704	72860	103.50
28.	Papaya	350	17670	50.48
29.	Pineapple	1650	132000	80.00
30.	Cashew nut	2	270	135
31.	Coconut	195	17.472 lakh nuts	-
32.	Arecanut	345	166.46 lakh nuts	-
33.	Marigold	20	60 lakh Cut flower	-
Source: Di	rectorate of Agriculture, Govt. of W.B.			

#### 2.a.6. Weather data

Manth	Dainfall (mm)	Highest Rainfall	Daine dae	Temperatu	re <sup>0</sup> C	Relative Humidity (%)	
Month	Rainfall (mm)	(mm)	Rainy day	Maximum	Minimum	Max	Min
April, 18	36	11.8	3	35	21.11	85.1	58.5
May, 18	122	40.2	12	34	24	87.4	65.7
June, 18	316	47.1	19	32.61	25.28	94.5	77.3
July, 18	358	59.2	22	31.78	26	92.2	77.5
Aug, 18	303	48.9	26	31.72	25.78	95.5	80.8
Sept., 18	303	50.4	20	31.72	25.29	96.5	73.5
Oct., 18	87	43.5	8	31.11	22.11	94.5	68.8
Nov., 18	8	10.1	3	28.5	15.28	93.6	54.6
Dec., 18	0	-	0	25.39	11.11	91.8	63.7
Jan., 19	20	8.9	1	24.22	9.88	97.8	54.9
Feb., 19	3	-	0	26.72	11.65	90.8	54.9
March, 19	14	35.2	3	32	16.28	89.4	65.8

Source: Directorate of Agriculture, Govt. of W.B.

### 2.a.7 Production and productivity of livestock, poultry, fisheries etc. in the district

Category	Population	Production	Productivity
Cattle		Milk – 65.51 ton	-
Crossbred	32,627	Egg – 599.43 lakhs	-
Indigenous	7,50,579	Meat – 12960 ton	-
Buffalo	35,411	Wool – 1.103 ton	-

Category	Population	Production	Productivity
Sheep	6,348		-
Goats	5,94,239		-
Pigs	23,778		-
Poultry			-
Hen	1,467,493		-
Desi	14,30,317		-
Improved	37,176		-
Duck	4,12,214		-
Desi	4,08,452		-
Improved	3,762		-
Turkey and others	1,378		-

Category	Area	Production	Productivity
Fish	-	-	-
Inland	1534.47 ha	13244.62 q	8.63 q/ha

# 2.b. Details of operational area / villages (2018-19)

SI. No.	Name of Taluk	Name of the block	Name of the villages	Major crops & enterprises	Major problems identified (crop-wise)	Identified Thrust Areas
1	-	Chopra	Dhandugachh	Rice, jute, wheat, rape seed, vegetables	<ul> <li>Low productivity of crops and vegetables</li> <li>Poor coverage and yield of pulses and oilseed crops.</li> <li>Low Productivity of available water resources</li> <li>Low productivity of livestock's</li> <li>Severe infestation of brinjal fruit and shoot borer</li> <li>Nutritional anemia of farm women</li> </ul>	<ul> <li>Introduction of suitable variety</li> <li>Crop diversity</li> <li>Introduction of eco-friendly pest management practices</li> <li>Breed improvement</li> <li>Introduction of integrated farming systems</li> <li>Household food security</li> </ul>

2	-	Chopra	Durgagachh	Rice, jute, rapeseed, vegetables, tea, pineapple	<ul> <li>Occurrence of micronutrient deficiencies in different crops and vegetables</li> <li>Low productivity of crops</li> <li>Poor coverage and yield of pulses and oilseed crops.</li> <li>Low Productivity of available water resources</li> <li>Infestation of mealy bug in pineapple</li> <li>Lack of awareness among farm women for drudgery reduction</li> <li>Inadequate storage facility of perishables ( Pineapple)</li> </ul>	<ul> <li>Introduction of suitable variety         Crop diversity         Proper pest management practices         Introduction of integrated farming systems         Empowerment of women     </li> </ul>
3	-	Chopra	Satram gachh	Rice, wheat, rapeseed,	<ul> <li>Occurrence of micronutrient deficiencies in different crops</li> <li>Low productivity of crops &amp; livestock</li> <li>Lack of awareness among farm women for drudgery reduction</li> <li>Nutritional anemia of farm women</li> </ul>	<ul> <li>Introduction of suitable variety with proper crop management</li> <li>Breed improvement &amp; Disease management</li> <li>Nutritional management</li> <li>Empowerment of women</li> <li>Household food security</li> </ul>
4	-	Chopra	Sadhuram gachh	Rice, jute, rapeseed, vegetables, tea, pineapple	<ul> <li>Low productivity of crops</li> <li>Low productivity of livestocks</li> <li>Lack of awareness among farm women for drudgery reduction</li> <li>Nutritional anemia of farm women</li> </ul>	<ul> <li>Introduction of suitable variety</li> <li>Breed improvement &amp; Disease management</li> <li>Empowerment of women</li> <li>Household food security</li> </ul>
5	-	Chopra	Suvandigachh	Rice, jute rapeseed, vegetables, tea, pineapple	<ul> <li>Poor coverage and yield of pulses and oilseed crops.</li> <li>Lack of awareness among farm women for drudgery reduction</li> <li>Low productivity of livestocks</li> <li>Improper use of natural resources</li> <li>Lack of awareness among farm women for drudgery reduction</li> </ul>	<ul> <li>Introduction of suitable variety</li> <li>Empowerment of women</li> <li>Breed improvement &amp; Disease management</li> </ul>

6	-	Chopra	Narayanpur	Rice, jute, maize, rapeseed, vegetables, tea	<ul> <li>Occurrence of micronutrient deficiencies in different crops and vegetables</li> <li>Low productivity of crops</li> <li>Low Productivity of available water resources</li> <li>Insect infestation and disease infection of major crops</li> </ul>	<ul> <li>Proper insect pest management practices</li> <li>Introduction of integrated farming systems</li> </ul>
7	-	Islampur	Vivekananda Colony	Vegetables, rice, maize, rapeseed, flowers,	<ul> <li>Low productivity and occurrence of micronutrient deficiencies in different crops and vegetables</li> <li>Poor coverage and yield of pulses and oilseed crops.</li> <li>Low productivity of livestocks</li> <li>Insect infestation and disease infection of major crops</li> <li>Severe infestation of brinjal fruit and shoot borer</li> <li>Lack of awareness among farm women for drudgery reduction</li> </ul>	<ul> <li>Introduction of suitable variety</li> <li>Crop diversity</li> <li>Sequence and management strategies for crops and vegetables</li> <li>Introduction of eco-friendly pest management practices</li> <li>Disease management</li> <li>Empowerment of women</li> <li>Adoption of Resource Conservation Technology</li> </ul>
8.		Chopra	Bilatibari	Vegetables, rice, maize, rapeseed, flowers,	<ul> <li>Poor coverage and yield of pulses.</li> <li>Insect infestation and disease infection of major crops</li> <li>Low productivity and occurrence of micronutrient deficiencies in different crops and vegetables</li> <li>Lack of awareness among farm women for drudgery reduction</li> </ul>	<ul> <li>Crop diversity</li> <li>Introduction of eco-friendly pest management practices</li> <li>Introduction of suitable variety and Sequential crop and vegetables</li> <li>Empowerment of women</li> </ul>
9.		Hemtabad	Bishnupur	Vegetables, rice, spices rapeseed	<ul> <li>Low productivity and occurrence of micronutrient deficiencies in different crops and vegetables</li> <li>Poor coverage and yield of pulses and oilseed crops.</li> <li>Insect infestation and disease infection of major crops and vegetables</li> <li>Lack of awareness among farm women for drudgery reduction</li> </ul>	<ul> <li>Introduction of suitable variety and Sequential crop and vegetables management strategies</li> <li>Crop diversity</li> <li>Introduction of eco-friendly pest management practices</li> <li>Empowerment of women</li> </ul>

10.	Hemtabad	Kasimpur	Vegetables, rice, spices rapeseed	<ul> <li>Low productivity of crops</li> <li>Poor coverage and yield of pulses and oilseed crops.</li> <li>Low productivity of livestocks</li> <li>Lack of awareness among farm women for drudgery reduction</li> </ul>	<ul> <li>Introduction of suitable variety</li> <li>Crop diversity</li> <li>Breed improvement &amp; disease management</li> <li>Empowerment of women</li> </ul>
11.	Chopra	Goalgachh	Vegetables, rice, maize, rapeseed, flowers,	<ul> <li>Poor coverage and yield of pulses.</li> <li>Insect infestation and disease infection of major crops</li> <li>Low productivity and occurrence of micronutrient deficiencies in different crops and vegetables</li> <li>Lack of awareness among farm women for drudgery reduction</li> </ul>	<ul> <li>Crop diversity</li> <li>Introduction of eco-friendly pest management practices</li> <li>Introduction of suitable variety and Sequential crop and vegetables</li> <li>Empowerment of women</li> </ul>
12.	Chopra	Golamigachh	Vegetables, rice, maize, rapeseed, flowers,	<ul> <li>Poor coverage and yield of pulses.</li> <li>Insect infestation and disease infection of major crops</li> <li>Low productivity and occurrence of micronutrient deficiencies in different crops and vegetables</li> <li>Lack of awareness among farm women for drudgery reduction</li> </ul>	<ul> <li>Crop diversity</li> <li>Introduction of eco-friendly pest management practices</li> <li>Introduction of suitable variety and Sequential crop and vegetables</li> <li>Empowerment of women</li> </ul>
13.	Chopra	Dhuliagauchh	Vegetables, rice, maize, rapeseed, flowers,	<ul> <li>Poor coverage and yield of pulses.</li> <li>Insect infestation and disease infection of major crops</li> <li>Low productivity and occurrence of micronutrient deficiencies in different crops and vegetables</li> <li>Lack of awareness among farm women for drudgery reduction</li> </ul>	<ul> <li>Crop diversity</li> <li>Introduction of eco-friendly pest management practices</li> <li>Introduction of suitable variety and Sequential crop and vegetables</li> <li>Empowerment of women</li> </ul>

14.	Chopra	Moulanigauchh	Vegetables, rice, maize, rapeseed, flowers,	<ul> <li>Poor coverage and yield of pulses.</li> <li>Insect infestation and disease infection of major crops</li> <li>Low productivity and occurrence of micronutrient deficiencies in different crops and vegetables</li> <li>Lack of awareness among farm women for drudgery reduction</li> </ul>	<ul> <li>Crop diversity</li> <li>Introduction of eco-friendly pest management practices</li> <li>Introduction of suitable variety and Sequential crop and vegetables</li> <li>Empowerment of women</li> </ul>
15.	Karandighi	Dhatipara	Vegetables, rice, maize, rapeseed,	<ul> <li>Low productivity and occurrence of micronutrient deficiencies in different crops and vegetables</li> <li>Poor coverage and yield of pulses crops.</li> <li>Low productivity of fish and livestocks</li> <li>Insect infestation and disease infection of major crops</li> <li>Lack of awareness among farm women for drudgery reduction</li> </ul>	<ul> <li>Introduction of suitable variety</li> <li>Crop diversity</li> <li>Sequence and management strategies for crops and vegetables</li> <li>Introduction of eco-friendly pest management practices</li> <li>Disease management</li> <li>Empowerment of women</li> <li>Adoption of Resource Conservation Technology</li> </ul>
16.	Karandighi	Machol	Vegetables, rice, maize, rapeseed,	<ul> <li>Low productivity and occurrence of micronutrient deficiencies in different crops and vegetables</li> <li>Poor coverage and yield of pulses crops.</li> <li>Low productivity of fish and livestocks</li> <li>Insect infestation and disease infection of major crops</li> <li>Lack of awareness among farm women for drudgery reduction</li> </ul>	<ul> <li>Introduction of suitable variety</li> <li>Crop diversity</li> <li>Sequence and management strategies for crops and vegetables</li> <li>Introduction of eco-friendly pest management practices</li> <li>Disease management</li> <li>Empowerment of women</li> <li>Adoption of Resource Conservation Technology</li> </ul>

17.	Karandighi	Kuaitore & Altapur	Vegetables, rice, maize, rapeseed,	<ul> <li>Low productivity and occurrence of micronutrient deficiencies in different crops and vegetables</li> <li>Poor coverage and yield of pulses crops.</li> <li>Low productivity of fish and livestocks</li> <li>Insect infestation and disease infection of major crops</li> <li>Lack of awareness among farm women for drudgery reduction</li> </ul>	<ul> <li>Introduction of suitable variety</li> <li>Crop diversity</li> <li>Sequence and management strategies for crops and vegetables</li> <li>Introduction of eco-friendly pest management practices</li> <li>Disease management</li> <li>Empowerment of women</li> <li>Adoption of Resource Conservation Technology</li> </ul>
18.	Goalpokher- I	Ambari	Vegetables, rice, maize, rapeseed,	<ul> <li>Low productivity and occurrence of micronutrient deficiencies in different crops and vegetables</li> <li>Poor coverage and yield of pulses and Oilseed crops.</li> <li>Low productivity of fish and livestocks</li> <li>Insect infestation and disease infection of major crops</li> <li>Lack of awareness among farm women for drudgery reduction</li> </ul>	<ul> <li>Introduction of suitable variety</li> <li>Crop diversity</li> <li>Sequence and management strategies for crops and vegetables</li> <li>Introduction of eco-friendly pest management practices</li> <li>Disease management</li> <li>Empowerment of women</li> <li>Adoption of Resource Conservation Technology</li> </ul>
19.	Goalpokher – II	Ramkrishnapur	Vegetables, rice, maize, rapeseed,	<ul> <li>Low productivity and occurrence of micronutrient deficiencies in different crops and vegetables</li> <li>Poor coverage and yield of pulses and Oilseed crops.</li> <li>Low productivity of fish and livestocks</li> <li>Insect infestation and disease infection of major crops</li> <li>Lack of awareness among farm women for drudgery reduction</li> </ul>	<ul> <li>Introduction of suitable variety</li> <li>Crop diversity</li> <li>Sequence and management strategies for crops and vegetables</li> <li>Introduction of eco-friendly pest management practices</li> <li>Disease management</li> <li>Empowerment of women</li> <li>Adoption of Resource Conservation Technology</li> </ul>

20.	Goal pokher – II	Chaugharoriya & Batashpur	Vegetables, rice, maize, rapeseed,	<ul> <li>Low productivity and occurrence of micronutrient deficiencies in different crops and vegetables</li> <li>Poor coverage and yield of pulses and Oilseed crops.</li> <li>Low productivity of fish and livestocks</li> <li>Insect infestation and disease infection of major crops</li> <li>Lack of awareness among farm women for drudgery reduction</li> </ul>	<ul> <li>Introduction of suitable variety</li> <li>Crop diversity</li> <li>Sequence and management strategies for crops and vegetables</li> <li>Introduction of eco-friendly pest management practices</li> <li>Disease management</li> <li>Empowerment of women</li> <li>Adoption of Resource Conservation Technology</li> </ul>
21	Goal pokher – II	Udga	Vegetables, rice, maize, rapeseed,	<ul> <li>Low productivity and occurrence of micronutrient deficiencies in different crops and vegetables</li> <li>Poor coverage and yield of pulses and Oilseed crops.</li> <li>Low productivity of fish and livestocks</li> <li>Insect infestation and disease infection of major crops</li> <li>Lack of awareness among farm women for drudgery reduction</li> </ul>	<ul> <li>Introduction of suitable variety</li> <li>Crop diversity</li> <li>Sequence and management strategies for crops and vegetables</li> <li>Introduction of eco-friendly pest management practices</li> <li>Disease management</li> <li>Empowerment of women</li> <li>Adoption of Resource Conservation Technology</li> </ul>
22	Chopra	Moulani	Vegetables, rice, maize, rapeseed, flowers,	<ul> <li>Poor coverage and yield of pulses.</li> <li>Insect infestation and disease infection of major crops</li> <li>Low productivity and occurrence of micronutrient deficiencies in different crops and vegetables</li> <li>Lack of awareness among farm women for drudgery reduction</li> </ul>	<ul> <li>Crop diversity</li> <li>Introduction of eco-friendly pest management practices</li> <li>Introduction of suitable variety and Sequential crop and vegetables</li> <li>Empowerment of women</li> </ul>

23	Goal pokher – I	Dangipara	Vegetables, rice, maize, rapeseed,	<ul> <li>Low productivity and occurrence of micronutrient deficiencies in different crops and vegetables</li> <li>Poor coverage and yield of pulses and Oilseed crops.</li> <li>Low productivity of fish and livestocks</li> <li>Insect infestation and disease infection of major crops</li> <li>Lack of awareness among farm women for drudgery reduction</li> </ul>	<ul> <li>Introduction of suitable variety</li> <li>Crop diversity</li> <li>Sequence and management strategies for crops and vegetables</li> <li>Introduction of eco-friendly pest management practices</li> <li>Disease management</li> <li>Empowerment of women</li> <li>Adoption of Resource Conservation Technology</li> </ul>
24.	Islampur	Ashram-Matikunda	Vegetables, rice, maize, rapeseed, flowers,	<ul> <li>Low productivity and occurrence of micronutrient deficiencies in different crops and vegetables</li> <li>Poor coverage and yield of pulses and oilseed crops.</li> <li>Low productivity of livestocks</li> <li>Insect infestation and disease infection of major crops</li> <li>Severe infestation of brinjal fruit and shoot borer</li> <li>Lack of awareness among farm women for drudgery reduction</li> </ul>	<ul> <li>Introduction of suitable variety</li> <li>Crop diversity</li> <li>Sequence and management strategies for crops and vegetables</li> <li>Introduction of eco-friendly pest management practices</li> <li>Disease management</li> <li>Empowerment of women</li> <li>Adoption of Resource Conservation Technology</li> </ul>
25.	Islampur	Larukhawa	Vegetables, rice, maize, rapeseed, flowers,	<ul> <li>Low productivity and occurrence of micronutrient deficiencies in different crops and vegetables</li> <li>Poor coverage and yield of pulses and oilseed crops.</li> <li>Low productivity of livestocks</li> <li>Insect infestation and disease infection of major crops</li> <li>Severe infestation of brinjal fruit and shoot borer</li> <li>Lack of awareness among farm women for drudgery reduction</li> </ul>	Introduction of suitable variety

26.	Chopra	Boxivita	Vegetables, rice, maize, rapeseed, flowers,	<ul> <li>Poor coverage and yield of pulses.</li> <li>Insect infestation and disease infection of major crops</li> <li>Low productivity and occurrence of micronutrient deficiencies in different crops and vegetables</li> <li>Lack of awareness among farm women for drudgery reduction</li> </ul>	<ul> <li>Crop diversity</li> <li>Introduction of eco-friendly pest management practices</li> <li>Introduction of suitable variety and Sequential crop and vegetables</li> <li>Empowerment of women</li> </ul>
27.	Chopra	Telivita	Vegetables, rice, maize, rapeseed, flowers,	<ul> <li>Poor coverage and yield of pulses.</li> <li>Insect infestation and disease infection of major crops</li> <li>Low productivity and occurrence of micronutrient deficiencies in different crops and vegetables</li> <li>Lack of awareness among farm women for drudgery reduction</li> </ul>	<ul> <li>Crop diversity</li> <li>Introduction of eco-friendly pest management practices</li> <li>Introduction of suitable variety and Sequential crop and vegetables</li> <li>Empowerment of women</li> </ul>
28.	Chopra	Chandagachh	Vegetables, rice, maize, rapeseed, flowers,	<ul> <li>Poor coverage and yield of pulses.</li> <li>Insect infestation and disease infection of major crops</li> <li>Low productivity and occurrence of micronutrient deficiencies in different crops and vegetables</li> <li>Lack of awareness among farm women for drudgery reduction</li> </ul>	<ul> <li>Crop diversity</li> <li>Introduction of eco-friendly pest management practices</li> <li>Introduction of suitable variety and Sequential crop and vegetables</li> <li>Empowerment of women</li> </ul>
29.	Raiganj	Fidilpur	Rice, Mustard, Maize	<ul> <li>Low productivity and occurrence of micronutrient deficiencies in different crops and vegetables</li> <li>Poor coverage and yield of pulses crops.</li> <li>Low productivity of fish and livestocks</li> <li>Insect infestation and disease infection of major crops</li> <li>Lack of awareness among farm women for drudgery reduction</li> </ul>	<ul> <li>Introduction of suitable variety</li> <li>Crop diversity</li> <li>Sequence and management strategies for crops and vegetables</li> <li>Introduction of eco-friendly pest management practices</li> <li>Disease management</li> <li>Empowerment of women</li> <li>Adoption of Resource Conservation Technology</li> </ul>

30.	Karandighi	Titpukur	Rice. Mustard. Maize. Pulse, Vegetables	<ul> <li>Low productivity and occurrence of micronutrient deficiencies in different crops and vegetables</li> <li>Poor coverage and yield of pulses crops.</li> <li>Low productivity of fish and livestocks</li> <li>Insect infestation and disease infection of major crops</li> <li>Lack of awareness among farm women for drudgery reduction</li> </ul>	<ul> <li>Introduction of suitable variety</li> <li>Crop diversity</li> <li>Sequence and management strategies for crops and vegetables</li> <li>Introduction of eco-friendly pest management practices</li> <li>Disease management</li> <li>Empowerment of women</li> </ul>
31.	Raiganj	Runia	Rice. Mustard. Maize. Pulse, Vegetables	<ul> <li>Low productivity and occurrence of micronutrient deficiencies in different crops and vegetables</li> <li>Poor coverage and yield of pulses crops.</li> <li>Low productivity of fish and livestocks</li> <li>Insect infestation and disease infection of major crops</li> <li>Lack of awareness among farm women for drudgery reduction</li> </ul>	<ul> <li>Introduction of suitable variety</li> <li>Crop diversity</li> <li>Sequence and management strategies for crops and vegetables</li> <li>Introduction of eco-friendly pest management practices</li> <li>Disease management</li> <li>Empowerment of women</li> </ul>
32.	Karandighi	Satveti	Vegetables, rice, maize, rapeseed, flowers,	<ul> <li>Poor coverage and yield of pulses.</li> <li>Insect infestation and disease infection of major crops</li> <li>Low productivity and occurrence of micronutrient deficiencies in different crops and vegetables</li> <li>Lack of awareness among farm women for drudgery reduction</li> </ul>	<ul> <li>Crop diversity</li> <li>Introduction of eco-friendly pest management practices</li> <li>Introduction of suitable variety and Sequential crop and vegetables</li> <li>Empowerment of women</li> </ul>

## 2. c. Details of village adoption programme:

Name of the villages adopted by PC and SMS (2018-19) for its development and action plan

Name of village	Block	Action taken for development	
		Problem Identification	
		Problem Prioritization	
Machol, Fadilpur & Titpukur	Karandighi/Raiganj	Thrust area Identified	
	KVK Mandate Activity (FLD, Trg.)going on		
		CFLD Programme, Seed Village and Seed Hub programme going on	

Name of village	Block	Action taken for development
		Other programme for entrepreneurship development like
		Problem Identification
		Problem Prioritization
AshokPally- Ramkrishnapur	Goalpokhor –II	Thrust area Identified
		<ul> <li>Farmers club formation for disseminating the technology</li> </ul>
		KVK Mandate Activity (FLD, Trg.)going on
		Problem Identification
		Problem Prioritization
Fatepur & Piyajga	Chopra	Thrust area Identified
		<ul> <li>Farmers club formation for disseminating the technology</li> </ul>
		KVK Mandate Activity (FLD, Trg.)going on
		Problem Identification
Pagligachh Dhuliagachh 9		Problem Prioritization
Pagligachh, Dhuliagachh &	Chopra	Thrust area Identified
Golamigachh		<ul> <li>Farmers club formation for disseminating the technology</li> </ul>
		KVK Mandate Activity (FLD, Trg.)going on

# 2.1 Priority thrust areas

S. No	Thrust area
1.	Introduction of suitable variety, sequence and management strategies for crops and vegetables
2.	Crop Diversification
3.	Resource conservation
4.	Use of micronutrient, bio-fertilizers and organic manures for maintaining sustainable soil health
5.	Introduction of judicious and eco-friendly pest management of different crops.
6.	Introduction of suitable fish culture practices in the available water resources
7.	Empowerment of women in decision making through self-sufficient
8.	Drudgery reduction of farm women.
9.	Nutritional management of resource poor farm families.
10.	Human Resource Development through training and demonstration of improved agricultural technologies.

S. No	Thrust area
11.	Entrepreneurship development through training for income generation (Mushroom cultivation, vermicompost)
12.	

#### 3. TECHNICAL ACHIEVEMENTS

3.A. Details of target and achievement of mandatory activities by KVK during the year

	OFT								FLD														
	No. of technologies tested:								No. of technologies demonstrated:														
Numb	Number of OFTs Number of farmers								Numbe	Number of FLDs Number of farmers  Target Achiev ement Achievement													
Target	Achievemen t	Target		Achievement					Target		Target		Achievement										
			S	С	S	T	Oth	ers		Tota					S	С	S	T	Oth	ers		Total	
			M	F	M F M F M			F	Т				М	F	М	F	М	F	М	F	Т		
8	9	86	32	24	3	8	23	6	58	38	96	18	22	667	108	102	106	65	117	60	331	227	558

				Train	ing												Extensi	on activ	vities				
	umber of Number of Participants						Number of activities Number of participants																
Target	Achiev ement	Targe t	arge Achievement						Targ et	Achi eve men t	Targ et				ļ	Achieve	ment						
				SC	S	Т	Otl	ners		Total					S	С	S	Т	Ot	hers		Tota	
			М	F	М	F	М	F	М	F	Т				М	F	М	F	М	F	М	F	T
PF-105	93	2205	808	385	363	202	539	131	1710	718	2428	239	2463	7670	4250	2567	390	908	5221	2897	9861	6372	16233
RY-12	14	265	80	50	40	42	57	26	177	118	295												
EF-12	10	255	40	134	4	15	21	33	65	182	247												

	Imp				Impac	t of Ex	tensic	n acti	vities												
	Number of Participants trained  Number of Trainees got employment (self/ wa entrepreneur/ engaged as skilled manpower)									_	Partic	ber of cipants nded			•	prene	•	igaged	oymen as ski	•	/
Target	Target Achievement		SC	S	Т	Oth	ners		Tot	al	Target	Achiev ement	S	С	S	т	Oth	ners	-	Γotal	
		М	F	М	F	М	F	М	F	Т			М	F	М	F	М	F	М	F	Т
265	295	11	03	04	01	18	05	33	9	42	7670	16233	19	03	08	02	27	05	54	10	64

Seed pro	duction (q)	Planting mat	erial (in Lakh)
Target	Achievement	Target	Achievement
635.1	687	0.52 nos. & 5 q.	0.48 nos. & 3.4 q

Livestock strains and fish fi	ngerlings produced (in lakh)*	Soil, water, plant, manures samples tested (in lakh)				
Target	Achievement	Target	Achievement			
0.62	0.73	0.0025	0.0025			

<sup>\*</sup> Give no. only in case of fish fingerlings

		F	Publication by KVKs				
ltem	Number	No. circulated	No. of Research papers in NAAS rated Journals	Highest NAAS rating of any publication	Average NAAS rating of the publications	Details of awarded publication, if any	Details of Award given to the publication
Research paper	1	10	1	4.6	4.6	Nil	Nil
Seminar/conference/ symposia papers		0					
Books		0					
Bulletins	1	35					
News letter	6	72					
Popular Articles	5	88					
Book Chapter		0					
Extension Pamphlets/ literature	12	322					
Technical reports	2	8					
Electronic Publication (CD/DVD etc)		0					
TOTAL	21	560					

### 1 Achievements on technologies assessed and refined

#### OFT-1

1.	Title of On farm Trial	Assessment of Integrated Disease Management of neck blast in boro rice
2.	Problem diagnosed	Neck blast causes serious damage in rice during panicle initiation from last few years
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	Technology Assessed
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	OUAT and Research Journals
5.	Production system and thematic area	Rice based cropping systems , Integrated Disease Management
6.	Performance of the Technology with performance indicators	Disease intensity and severity index, Loss assessment, Yield performance & Comparative economics
7.	Final recommendation for micro level situation	Low land for boro rice
8.	Constraints identified and feedback for research	
9.	Process of farmers participation and their reaction	Farmers' are eager from the traial and show their eagerness for management of neck blast in Boro Rice.

Thematic area: Integrated Disease Management

Problem definition: Production failed due to incidence of neck blast in Boro rice, specialty at Islampur and Karandighi blocks in every year. Therefore, Uttar Dinajpur Krishi Vigyan Kendra taken the initiation to assessment of Integrated Diseasement of Neck Blast in Boro Rice in the said area for combation the disease problem.

Technology assessed: Integrated Disease Management of Neck Blast in Boro Rice.

Table 1: Performance of different Managemnt options of neck blast in Boro Rice

		Yie	eld compone	ent	Disease/	Disease/				
Technology option		No. of effectiv e tillers/h ill	No. of spikelet per panicle	Test wt. (100 grain wt.)	insect pest incidence (%)	Yield (q/ha)	Cost of cultivati on (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./h a)	BC ratio
Farmers' practice: Minimum routine practice 1: Seed treatment with <i>Trichoderma viridi @ 4 gm/kg of seed</i> + Spray Tricyclozole @ 0.5 gm/L before panicle initiation.		11.2	9.4	1.7	29	38.2	33310	61120	27810	1.83
Technology Option 1 : Minimum routine practice 2 : Seed treatment with <i>Trichoderma viridi @ 4 gm/kg of seed</i> + spray isoprotheolane @ 1.5 ml/L before panicle initiation	7	13.8	12.2	2.1	18	44.8	36820	71680	34860	1.94
Technology Option 2: Seed treatment with <i>Trichoderma viridi</i> @ 4 gm/kg of seed + Seedling treatment with isoprotheolane @ 1.5 ml/L before 7 days of transplanting + spray Tricyclozole @ 0.5 gm/ L during active tillering stage + Spray isoprotheolane @ 1.5 ml/L before panicle initiation.		15.6	13.8	2.4	7	47.2	38570	75520	36950	1.96

Results: Uttar Dinajpur KVK, conducted an OFT during Rabi-Pre-Kharif 2018-19 on the Integrated Disease Management of Neck Blast in Boro Rice due to infestation of neck blast in Boro Rice and yield loss occurred since last few years. Farmers' spryed different Agro-chemicals in their Rice field to combat the problem as per available of different fungicide from the market. But, no solution was found. From the result of the experiment it was revealed that total yield was higjest in Technology option – 2 (47.2 q/ha) and lowest in Farmers practice (38.2 q/ha). Though the cost of cultivation is highest in Technology Option – 2 but the net return and BC Ratio also highest in Technology Oprion – 2 which is 36950 and 1.96 respectively. From the table it was observed that the diseases intencity and severity was lowest among the other options. Therefore, the disease incidence percentage was lower in Technology Option 2 (7 %) and highest in Farmers' practice (29%). From the first year's result the final conclusion and recommendation may not be opined and next year's experiment may be conducted for final comclusion and recommendation.

#### OFT-2:

1.	Title of On farm Trial	Integrated disease management of Maize leaf blight
2.	Problem diagnosed	Different leaf blight disease observed in the field
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	Technology Assessed
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	UBKV
5.	Production system and thematic area	Maize based cropping systems and Integrated Disease management
6.	Performance of the Technology with performance	Plant mortality, Loss assessment,
	indicators	Yield performance & Comparative economics
7.	Final recommendation for micro level situation	Maize based cropping systems
8.	Constraints identified and feedback for research	
9.	Process of farmers participation and their reaction	Farmers' are eager from the traial and show their eagerness for management
		of Maize leaf blight. Though the experiment is not yet been completed.
		Therefore the final reaction from the farmers' community can not be drawn.

**Thematic area:** Integrated Disease management

**Problem definition:** Maize area increased after 2012 in the Uttar Dinajpur district. After continuous cultivation of Maize in both season (Rabi and summer) the different disease problem occurred and reduced the yield. One of the major bottle necks for Maize production is Maize leaf blight disease in the district.

**Technology assessed:** Integrated Disease Management of Maize leaf blight.

Table 1: Performance of different management option of Maize leaf blight

		Yield component					Cost of		Net	
Technology option	No. of tria Is	No. of effective tillers/hill	No. of spikelet per panicle	Test wt. (100 grain wt.)	insect Yield pest (q/ha) (%)		Cost of cultivati on (Rs./ha)	Gross return (Rs/ha)	return (Rs./h a)	BC ratio
Farmers' practice: Minimum routine practice 1: Spraying of Mencozeb 75%/ Carbedazim 50% one time										
Technology Option 1 : Minimum routine practice: Seed treatment with <i>Trichoderma viridi</i> @ 4 gm/ Kg seed + one spray with Tebuconazole 250 EC 1.0 /L										
Technology Option 2: Minimum routine practice: Seed treatment with Carbendazim @ 2 gm/ Kg seed + one spray with Tebuconazole 0.5 ml/L + One sprays with Propiconazole 25% EC 1.0ml/L	7			On goin	g progranm	me (Crop i	in the field	)		
Technology Option 3: Minimum routine practice: Seed treatment with <i>Trichoderma</i> @ 4 gm/ Kg seed + Two sprays with Propiconazole 25% EC 1.0ml/L + one spray with Mencozeb 75% @ 2.5gm/L at 10 days interval.										

<sup>\*</sup>Experiment has been started in the month of February, 2019 in Summer season. Now, it is being treated as on going programme.

Table 2: Performance of different management options of Maize leaf blight

Tachnalagy antion	No of trials		Plant mortality	Disease	Disease
Technology option	No. of trials	No/m sq.	% of plant mortality	intencity	sevearity
Farmers' practice:		6	35.2	39.8	0.89
Technology Option 1 :		5	29.8	31.4	0.67
Technology Option 2 :	7	2	11.2	13.8	0.22
Technology Option 3:		1	5.8	7.6	0.09

**Results:** Final result is awaited.

## OFT-3:

1.	Title of On farm Trial	Assessment of different raising techniques of healthy cauliflower seedling during rainy season						
2.	Problem diagnosed	High mortality percentage of seedling in nursery						
3.	Details of technologies selected for	Treatment details :						
	assessment/refinement	Farmers' practice	No soil treatment and normal raised seedbed practice					
	(Mention either Assessed or Refined)	Technology Option 1	Treated soil through trichoderma @ 200 g/sq.m. and pseudomonas @ 200 g/sq.m with normal raised seedbed					
		recimology option 1	practice					
		Technology Option 2	Treated soil through trichoderma @ 200 g/sq.m. and pseudomonas @ 200 g/sq.m over plastic mulch covered raised seedbed					
		Technology Option 3	Treated soil through trichoderma @ 200 g/sq.m. and pseudomonas @ 200 g/sq.m in portray practice					
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	UBKV						
5.	Production system and thematic area	Vegetable based and N	ursery management					
6.	Performance of the Technology with performance indicators	Mortality percentage seedling, seedling length, no.of leaves/plant, disease index						
7.	Final recommendation for micro level situation	Vegetable based						
8.	Constraints identified and feedback for research	Plastic mulch should be 15 cm beneath the soil						
9.	Process of farmers participation and their reaction	Well accepted						

Thematic area: Nursery management

**Problem definition:** High mortality percentage of seedling in nursery

**Technology assessed:** Different nursery techniques for raising healthy seedlings

Table 1: Performance of different raising techniques of healthy cauliflower seedling during rainy season

		Yiel	d compone	ent	Disease	Yiel				
Technology option		No. of effective tillers/hill	No. of spikelet per panicle	Test wt. (100 grain wt.)	/ insect pest incidenc e (%)	d (q/ ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
<b>Farmers' practice</b> : No soil treatment and normal raised seedbed practice							1550000	3120000	1570000	2.01
<b>Technology Option 1</b> :Treated soil through trichoderma @ 200 g/sq.m. and pseudomonas @ 200 g/sq.m with normal raised seedbed practice							1300000	3390000	2090000	2.61
<b>Technology Option 2:</b> Treated soil through trichoderma @ 200 g/sq.m. and pseudomonas @ 200 g/sq.m over plastic mulch covered raised seedbed	7						1600000	3220000	1620000	2.01
<b>Technology Option 3:</b> Treated soil through trichoderma @ 200 g/sq.m. and pseudomonas @ 200 g/sq.m in portray practice							1700000	3740000	2040000	2.20

Table 2: Performance of different raising techniques of healthy cauliflower seedling during rainy season

	No. Seed		Days to		Plants d			
Technology option	of trials			7 days	14 days	21 days	28 days	Average Mortality of seedlings (%)
Farmers' practice	7 no	80	4	30	20	20	18	22.00
Technology Option 1		90	4	20	10	17	14	15.25
<b>Technology Option 2</b>		85	3	30	10	13	25	19.50
Technology Option 3		85	4	20	2	2	2	6.50

Results: Uttar Dinajpur KVK, conducted an OFT during Kharif 2018 on the Assessment of different raising techniques of healthy cauliflower seedling during rainy season due to high mortality in the nursery. Farmers' spryed different Agro-chemicals in their nursery to combat the

problem as per available of different fungicide from the market. But, no solution was found. From the result of the experiment it was revealed that seedling was highest in farmer practice (22%) and lowest in technology option 3, i.e. portray practice (6.5%). Though the cost of cultivation is highest in Technology Option -3 (1700000) but the net return and BC Ratio also highest in Technology Oprion -3 that is Rs. 2040000 and 2.20 respectively. From the table it was observed that the Plant mortality was lowest among the other options.. From the first year's result the final conclusion and recommendation may not be opined and next year's experiment may be conducted for final comclusion and recommendation.

## OFT-4

1.	Title of On farm Trial	Varietal assessment of tomato to district	owards performance aspect in Uttar Dinajpur			
2.	Problem diagnosed	Less yield, luster, freshness and ke	eeping quality of harvested tomato			
	Details of technologies selected for	Treatment details :				
	assessment/refinement	Farmers' practice	Use var. Romeo			
	(Mention either Assessed or Refined)	Technology Option 1	Use of tomato var. Aditya			
3.		Technology Option 2	Use of tomato var. Arka Rakshak (IIHR, Bengaluru)			
		Technology Option 3	Use of tomato var. Arka Samrat (IIHR, Bengaluru)			
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	ICAR_IIHR, Bengaluru				
5.	Production system and thematic area	Vegetable based and Nursery man	agement			
6.	Performance of the Technology with performance indicators	Mortality percentage seedling, seedli	ng length, no.of leaves/plant, disease index			
7.	Final recommendation for micro level situation	Vegetable based				
8.	Constraints identified and feedback for research	Plastic mulch should be 15 cm ben	eath the soil			
9.	Process of farmers participation and their reaction	Well accepted				

**Thematic area:** Crop management

Problem definition: Less yield, luster, freshness and keeping quality of harvested tomato

**Technology assessed:** Varietral assessment of tomato during rabi season

Table1: Varietal assessment of tomato towards performance aspect in Uttar Dinajpur district

	Yield component		Disease/		Cost of	Gross	Not		
Technology option	No. of trials	No. of Fruit/plan t	Fruit weight (g)	Disease/ insect pest incidence (%)	Yield (q/ha)	cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
Farmers' practice		85.2	75.8	16.5	775.0	365000	774979	409979	2.12
Technology Option 1	7 20	86.4	78.2	11.3	810.8	362400	810778	448378	2.24
<b>Technology Option 2</b>	7 no	104.6	115.4	5.6	1448.5	358000	1448501	1090501	4.05
Technology Option 3		113.8	100.8	4.8	1376.5	356800	1376525	1019725	3.86

**Table 2:** Performance of different Varieties of tomato in Uttar Dinajpur district

Technology option	No. of trials	Plant height (cm)	Days to first harvesting	Fruit colour	Texture of fruit	Marketing preference	Yeild per plant (Kg.)
Farmers' practice		4.2	60-65	Dark red	Firm	Average	6.8
Technology Option 1	7.00	3.4	60-65	Average	Modarate	Average	6.9
Technology Option 2	7 no	2.7	60-65	Average	Firm	Good	12.3
Technology Option 3		2.9	60-65	Average	Soft	Modarate	11.6

Results: Uttar Dinajpur KVK, conducted an OFT during Rabi 2018-19 on the: Varietal assessment of tomato towards performance aspect in Uttar Dinajpur district due to Less yield, luster, freshness, pest & disease infestation and keeping quality of harvested tomato. During three days training at ICAR-IIHR, Bengaluru, I have seen the performance of Arka Rakshak and Arka Samrat variety of tomato at the centre. Arka Rakshak is also triple disease resistant variety evolved from the centre. For this, I designed the OFT at Uttar Dinajpur district to assess the performance of the varieties and local acceptance. Generally, Farmers' spryed different Agro-chemicals in their tomato field to combat the pest and disease problem mainly the viral disease available of different fungicide from the market. But, no solution was found. From the result of the experiment it was revealed that total yield was higjest in Technology option – 2 (1448.5q/ha) followed by Technology Option 3 (1376.5q/ha)and lowest in Farmers practice (775.0q/ha). Though the cost of cultivation is highest and the net return and BC Ratio also lowest in Farmers practice.net return and B:C ratio is highest in Technology Option 2(Rs.1090501 & 4.05) followed by Technology Option -3(Rs. 1019725 & 3.86). From the first year's result the final conclusion and recommendation may not be opined and next year's experiment may be conducted for final comclusion and recommendation.

#### OFT-5

1.	Title of On farm Trial	Assessment the efficacy of different organic manures on growth performance of IMC
2.	Problem diagnosed	Poor fish productivity in domestic pond under Mahananda Flood Plain farming situation of <i>Terai</i> zone
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	Farmers practice: Application of cowdung at an lower dose Technology option 1: Application of cowdung @ 10000 kg/ha/yr Technology option 2: Application of vermicompost @ 10000 kg/ha/yr
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	Farmer feedback/books/review of literature
5.	Production system and thematic area	Pond based and application of organic manures in fish culture
6.	Performance of the Technology with performance indicators	Fish yield, DO, plankton production
7.	Final recommendation for micro level situation	-
8.	Constraints identified and feedback for research	-
9.	Process of farmers participation and their reaction	Active participation of fishers to the implementation of the trial

Thematic area: Assessment the efficacy of different organic manures in fish culture ponds

**Problem definition:** Poor fish production in domestic pond as well as in commercially cultured pond may be due to lack of knowledge regarding role and application of organic manures at a proper dose in fish culture pond. During pond preparation and throughout the culture period application of organic manures in split doses plays a vital role in fish production. Fishers uses organic manures mainly cowdung in ponds not in a proper dose and normally it was below the standard dose which hampers primary productivity as well as fish production ultimately.

Technology assessed: Assessment the efficacy of the defined manure on the growth performance of IMC (Catla, Rohu, Mrigal) was conducted.

**Table 1:** Performance of different organic manures on fish production

	No.	Yio	Yield component				Cost of	Gross	Net	
Technology option	of trials	No. of effective tillers/hill	No. of spikelet per panicle	Test wt. (100 grain wt.)	insect pest incidence (%)	Yield (q/ha)	cultivation (Rs./ha)	return (Rs/ha)	return (Rs./ha)	BC ratio
<b>Farmers' practice :</b> Application of cowdung at an lower dose	7	-	-	-	10	15.4	81393.00	89533.00	8140.00	1.10
<b>Technology Option 1</b> : Application of cowdung @ 10000 kg/ha/yr.	-	-	-	-	6.8	26.9	112429.00	189928.00	77499.00	1.69
<b>Technology Option 2</b> : Application of vermicompost @ 10000 kg/ha/yr.	-	-	-	-	6.5	33.2	133913.00	235572.00	101659.00	1.76

Table 2: Yield Performance and effect of different organic manures on physico-chemical and biological parameters

Technology Options	Yield Performance (q/ha)	Dissolved Oxygen (mg/l)	рН	Plankton Production( nos/l)
Farmers' practice	15.4	4.74	6.6	120
Technology Option 1	26.9	6.56	7.2	612
Technology Option 2	33.2	6.84	7.6	754

Results: An OFT was conducted in earthen ponds on Assessment the efficacy of different organic manures on growth performance of IMC. Ponds were prepared according to standard protocol and manured with cowdung @ 10000 kg/ha/yr and vermicompost @ 10000 kg/ha/yr. Manures were applied 25% initial and remaining doses were given once in a month. The trials were conducted on Indian Major Carps (catla, rohu & mrigal). Summerised results of the trials were depicted in Table 1 & Table 2. It was observed that fish production varied from 26.9-33.2 q/ha in technology option 1 & 2. Highest fish yield (33.2 q/ha) was observed in the ponds manured with vermicompost. It may be due to higher natural fish feed production in ponds treated with vermicompost as compare to cowdung. It was also observed that physico-chemical parameters like Dissolved oxygen (6.56-6.84 mg/l), pH (7.2-7.6) remained within the favourable limits for fish culture.

#### OFT-6:

1.	Title of On farm Trial	Assessment of Raikhar Bata ( <i>C. reba</i> ) as bottom dweller fish in polyculture system from conservation point of view
2.	Problem diagnosed	<i>Cirrhinus reba</i> is considered as minor carp of high market value and is often cultivated in ponds at very small scale. In many areas, however, the species is still exploited heavily from its wild populations. As a result the wild populations of this species is suspected to be a threatened.
3.	Details of technologies selected for ssessment/refinement (Mention either Assessed or Refined)	Farmers Practice: Stocking of different bottom dweller fish species without knowing their compatibility and not proper stocking density  Technology Options 1: Stocking of Mrigal ( <i>C. mrigala</i> ) species at stocking density of 3000 nos/ha along with other IMC species  Technology Options 2: Stocking of Mrigal ( <i>C. mrigala</i> ) and Raikhar Bata ( <i>C. reba</i> ) at stocking density of 3000 nos/ha with stocking ratio 1:1 along with other IMC species
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	Farmer feedback/books/review of literature
5.	Production system and thematic area	Pond based and Conservation of threatened species
6.	Performance of the Technology with performance indicators	Fish yield, Economic return
7.	Final recommendation for micro level situation	-
8.	Constraints identified and feedback for research	-
9.	Process of farmers participation and their reaction	Active participation of fishers to the implementation of the trial

Thematic area: Assessment of Raikhar Bata (C. reba) as bottom dweller fish.

**Problem definition:** Raikhar Bata (*Cirrhinus reba*) is considered as minor carp of high market value and is often cultivated in ponds at very small scale. In many areas, however, the species is still exploited heavily from its wild populations. As a result this species is suspected to be a vulnerable in natural waters. It was also observed that fish production from bottom layer of domestic ponds was lower under Mahananda Flood Plain

Technology assessed: Assessment of Raikhar Bata (*C. reba*) as bottom dweller fish in polyculture system to enhance the fishers income was conducted from the conservation point of view.

Table 1: Performance of different technology options on fish production & economic return

	No.	Y	ield compone	ent	Disease/	Disease/		Gross	Net	
Technology option	of trials	No. of effective tillers/hill	No. of spikelet per panicle	Test wt. (100 grain wt.)	insect pest incidence (%)		Cost of cultivation (Rs./ha)		return (Rs./ha)	BC ratio
Farmers' practice: Stocking of different bottom dweller fish -species without knowing their compatibility and not proper stocking density		1	-	-	10	14.8	81393.00	89533.00	8140.00	1.10
Technology Option 1 : Stocking of Mrigal ( <i>C. mrigala</i> ) species at stocking density of 3000 nos/ha along with other IMC species	7	-	-	-	6.4	30.2	139653.00	215513.00	75860.00	1.54
Technology Option 2: Stocking of Mrigal ( <i>C. mrigala</i> ) and Raikhar Bata ( <i>C. reba</i> ) at stocking density of 3000 nos/ha with stocking ratio 1:1 along with other IMC species					6.4	24.2	131881.00	214620.00	82739.00	1.63

Results: An OFT was conducted in earthen ponds on Assessment of Raikhar Bata (*C. reba*) as bottom dweller fish in polyculture system. Ponds were prepared according to standard protocol and some ponds were stocked with Mrigals @ 3000 nos/ha (TO 1) and others were stocked with Mrigals and Raikhar Bata @ 3000 nos/ ha with stocking ratio 1:1 (TO 2) along with IMC species. Summerised results of the trials were depicted in Table 1. It was observed that fish production varied from 2.42-3.02 t/ha in technology option 1 & 2. Highest fish yield (3.02 t/ha) was observed in the ponds stocked with mrigals along with other IMC whereas, fish yield observed @ 2.42 t/ha in the ponds stocked with mrigals and raikhar bata. It may be due to lower growth rate of raikhar bata as compare to mrigals. But in case of economic return, it was observed that B:C ratio of Technology option 2 (1.63) is higher than Technology option 1 (1.54) may be due to comparatively higher market price of raikhar bata.

#### **OFT-7:**

1.	Title of On farm Trial	Assessment of suitable improved parboiling method and paddy variety for brown rice making for better consumer acceptability and marketing
2.	Problem diagnosed	coarse rice grain having least consumer acceptance and long cooking time
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	<b>Farmers' practice:</b> Use of traditional rice varieties and parboiling methods <b>Technology option 1:</b> Four fine rice varieties viz. IET-4094, MTU-1010, Pratiksha and Parijat and use of Short Soaking Tempering method(SST-I) (presoak for 4hrs at 90°c, steamed and dried <b>Technology option 2:</b> Four fine rice varieties viz. IET-4094, MTU-1010, Pratiksha and Parijat and use of Short Soaking Tempering method (SST-II)(presoak for 2hrs at 90°c, steamed and dried.
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	Paddy Processing Research Centre, Thanjavur
5.	Production system and thematic area	SHGs engaged in this occupation, Drudgery reduction/value addition
6.	Performance of the Technology with performance indicators	Cooking time measurement, Time and energy saving, Quality analysis of rice sample, Before and after feedback
7.	Final recommendation for micro level situation	On going
8.	Constraints identified and feedback for research	More awareness and demonstrations are needed.
9.	Process of farmers participation and their reaction	Active farm family participation from diagnosis of the problem to the implementation of the trial

Thematic area: Drudgery reduction and value addition

**Problem definition:** Traditional method of paddy parboiling is tiresome and coarse rice grain having least consumer acceptance and long cooking time.

**Technology assessed:** Rice (*Oryza sativa*) is a food staple and primary crop grown all over the world. There are many different types of rice — including long-grain basmati, black rice, white rice and sticky (or glutinous) rice — but in terms of health benefits, not all are created equal. Brown rice's health benefits are partially due to the way it is prepared. Brown rice is a whole grain, meaning that it contains three parts of the grain kernel: the outer, fiber-filled layer called the bran, the nutrient-rich core called the germ, and the starchy middle layer called the endosperm. The outer, inedible hull is removed. White rice, in contrast, is a refined grain, meaning that the bran and the germ have been

removed, leaving just the endosperm. (The outer hull is also removed.) This process strips away much of the fiber and nutrients. Some of these nutrients —including B vitamins and iron — are added back to "enriched" white rice, but fiber is not added back. The health benefits of brown rice are largely due to it being a whole grain. The fiber in brown rice helps lower cholesterol, moves waste through the digestive tract, promotes fullness, and may help prevent the formation of blood clots and low glycemic index. (www.livescience.com).

The women group which are engaged in processing of brown rice are facing problems like less consumer acceptability due to coarse grain, colour of product and cooking time etc. keeping all these aspect in view present OFT has been planned to Assess the suitable improved parboiling method and paddy variety for brown rice making for better consumer acceptability and marketing. To reduce the drudgery of farm women, short soaking tempering (SST) method was tried at farm level under OFT programme conducted by Uttar Dinajpur Krishi Vigyan Kendra, Chopra. The results of the trial indicated that SST 1 parboiling technique gives total rice recovery around 78%, time consumed in traditional method is reduced by more than half with acceptable rice colour and smell. Fuel consumption is also reduced by 30%. While assessing cooking time and other grain characteristics of different rice varieties for brown rice making, it was observed that rice variety IET-4094 has got maximum preference while Pratikha variety has got least preference. Cooking time was almost same for each variety but brown rice took little more time to cook than white rice i.e. why presoaking is beneficial in brown rice cooking.

Table 1: Assessment of Short Soaking tempering method for parboiling.

Technology option		Time	Fuel cost	Rice	Acceptability*			
		(Hrs.)	(in Rs. /qt)	recovery (%)	Colour (mean score)	Smell (mean score)	Technique (mean score)	
Farmer's practice: soaking for 10-15 hrs., steamed and dried.		16	45	65-70	2.17	1.15	2.52	
<b>Technology option 1:</b> SST 1(short soaking tempering method): Soaking of paddy in hot water (90°c) for 1hr., tempering for 4 hrs, steaming and drying.		6	32	78	4.48	4.16	4.24	
<b>Technology option 2</b> : SST 2(short soaking tempering method): Soaking of paddy in hot water (90°c) for 1hr., tempering for 2 hrs, steaming and drying.		4	32	70	3.90	4.16	2.36	

<sup>\*</sup>Five point scale used: 1- Poor, 2- fair, 3- good, 4- very good, 5- Excellent.

Assessment of cooking time, grain characteristics and Consumer acceptability for different rice varieties (after cooking).

Sr. No.	Variety	*Cooking time	Kernel	L/B ratio		Acceptability	**
	,	(min)	length (mm)	igth (mm)	Colour	Taste	Overall appearance
1.	IET 4094	25	10.15	4.1	4.48	3.80	4.0
2.	Parijat	28	9.80	3.04	3.30	3.30	3.9
3.	Patiksha	25	9.50	3.10	3.91	3.40	4.0
4.	MTU1010	24	10.05	3.92	4.13	3.55	4.0

<sup>\*</sup>Half an hour pre-soaked

## OFT - 8:

1.	Title of On farm Trial	Assessment of KVK developed nutritional food supplements fortified with vitamin D on children health.
2.	Problem diagnosed	Lack of dietary essentials, which leads to poor health and growth.
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	Farmers' practice: No practice of giving fortified foods and supplements  Technology option 1: Vit D fortified KVK developed Shihu Aahar-I (fortified with Vit D <sub>3</sub> )  Technology option 2: KVK developed Shishu Aahar.
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	Self designed after studying journal articles and reviews on Vit D deficiency.
5.	Production system and thematic area	Malnourished children
6.	Performance of the Technology with performance indicators	Clinical test for Vit D in blood Excess cost on farm family per subject Before and after feed back
7.	Final recommendation for micro level situation	On going
8.	Constraints identified and feedback for research	More awareness and demonstrations are needed.
9.	Process of farmers participation and their reaction	Active farm family participation from diagnosis of the problem to the implementation of the trial

**Problem definition:** Lack of dietary essentials, which leads to poor health and growth.

**Technology assessed or refined (as the case may be):** Assessment of Vit D fortified nutritional weaning food on child health Vitamin D deficiency prevails in epidemic proportions all over the Indian subcontinent, with a prevalence of 70%-100% in the general population. Indian socio-religious and cultural practices

<sup>\*\*</sup> Five point scale used: 1- Poor, 2- fair, 3- good, 4- very good, 5- Excellent

do not facilitate adequate sun exposure, thereby subclinical vitamin D deficiency is highly prevalent in both rural and urban setting and across all socio economic and geographic strata. Vitamin D deficiency is likely to play an important role in the very high prevalence of rickets, osteoporosis, cardiovascular disease, diabeties, cancer and infections such as tuberculosis in India.(www.mdpi.com/journal/nutrients). KVK took up on-farm trial on low cost nutritional weaning foods fortified with vitamin D and their impact on child health. In this trial two types of supplementary foods were used – one was KVK developed weaning recipe fortified vit D<sub>3</sub> and another one was without fortification. In each treatment 7 children of age group 6 months to 3 years were taken and provided with supplementary food for 4 months. Approximately 75 gm To 150 gm baby food was given per baby per day. Amount of food was varied according to age group. First it was given twice a day and after 15 days food was given thrice a day in milk/water according to availability. Before and after treatment clinical blood test for vit D and calcium were done for all the subjects. It was revealed from result that there was significant change in status of vit D and increase in calcium level after adding particular weaning food in diet schedule of children as compared to farmer's practice. Technology option 1 performed better than control and Technology option 2. Fortified supplementary foods which were rich in essential dietary elements i.e. carbohydrates, protein, minerals and vit D etc. contributed to children's good health and significant increase in vitamin D level. Cost of fortified homemade weaning food is rupees 90/- per kg while cost of non-fortified homemade weaning food is rupees 80/- per kg.

Table 1: Effect of Vit D fortified low cost weaning food on children health

	Sr. No.	Name of Child		Calcium(mg/dl) rence Range: 8.5-10.5)	'	Vitamin D3 ge: Deficiency:<20, insufficiency: D, sufficiency:30-100)
Technology			Before	After	Before	After
option 1: Vit D	1.	Anushka Baskey	10.3	10.4	23.90	40.19
fortified KVK	2.	Md. Samim	9.8	10.0	28.20	28.55
developed Shihu Aahar-I (fortified	3.	Meghla Biswas	9.6	10.1	15.50	26.20
with Vit D <sub>3</sub> )	4.	Ankita singha	10.3	10.0	23.50	33.60
with vie by	5.	Nirab Murmu	9.5	10.2	22.20	38.87
	6.	Sumitra Barman	9.6	10.3	10.90	38.64
	7.	Binita Soren	9.2	10.2	33.50	45.42
	1.	Santana Singha	9.3	10.0	23.50	31.46
	2.	Deeva Tudu	10.0	10.2	29.70	31.20
Technology	3.	Abhi Hemrom	9.7	9.3	19.50	33.40
option 2: KVK developed	4.	Ronit Singha	9.8	10.1	22.80	31.94
Shishu Aahar.	5.	Bipasa Das	9.4	9.4	18.60	21.93
Silisila Auliai.	6.	Anushree Mardi	9.6	9.6	20.40	22.68
	7.	Lili Puspa Kisku	9.5	9.6	18.10	26.92

## 3.2 Achievements of Frontline Demonstrations

## A. Details of FLDs conducted during the year

## Cereals:

SI.	Crop	Thematic area	Technology Demonstrated with detailed treatments	Area	(ha)					of farm nonstra	-				Reaso ns for shortf all in
NO.			treatments	Prop	Act	9	C	S	Т	Oth	ners		Total		achie
				osed	ual	М	F	М	F	М	F	М	F	т	veme nt
1.	Paddy	Varietal replacement	Variety (MTU-1010, Sahabhagi, Swarna Sub-1, Pratiksha)	100	50	26	3	30	16	27	2	83	21	104	
2.	Paddy	Integrated disease management	Use of bio—fertilizers and bio- pesticides	5	5	0	0	0	0	25	5	25	5	30	
3.	Azolla	Animal Health	Introduction of Backyard Azolla cultivation	30	20	0	7	0	3	0	10	0	20	20	
4.	Weaning food	Women and childcare	Weaning food made up of roasted Wheat: Moongdal : Peanut: Sugar	20	20	0	8	0	6	0	6	0	20	20	
5	Oyster Mushroom	Nutritional security and income generation	Oyster/button mushroom	30	10	2	2	0	4	1	1	3	7	10	
6	Other Enterprises	Drudgery reduction	Tubuler Maize Shellar	150	200	30	70	20	30	20	30	70	130	200	
7	Lime Orchard	Orchard Management	Establishment of lime orchard	0.4	0.4	1	0	1	0	4	0	6	0	6	
8	Guava Orchard Management	Orchard Management	Establishment of Guava orchard	0.4	0.4	2	2	0	0	2	0	4	2	6	
9	Areacanut	Resource Conservation Technology	Arecanut based multi-storied cropping systems	0.7	0.7	2	0	0	0	1	2	3	2	5	
10	Fish	Composite fish culture	Stocking of multiple fish species (IMC) maintaining stocking density @ 10000 nos./ ha. With proper stocking ratio,	0.45	0.45	0	0	1	0	5	0	6	0	6	

SI.	Crop	Thematic area	Technology Demonstrated with detailed treatments	Area	(ha)					of farm nonstra	•				Reaso ns for shortf all in
NO.			treatments	Prop	Act	S	C	S	Т	Otl	ners		Total		achie
				osed	ual	М	F	М	F	М	F	М	F	Т	veme nt
			supplementary feeding etc.												
11	Fish	Integrated fish farming system	Integration of fish, ducks and vegetables for higher income	0.45	0.45	2	0	0	0	4	0	6	0	6	
12	Summer squash	Exotic crop	Introduce of exotic vegetable	0.5	0.8	10	0	14	0	9	0	33	0	33	
13	Garden Pea	Production and Management Technology	Varietal replacement with var. Sweet Pearl	4	0.8	9	0	1	0	11	0	21	0	21	
14	Mustard	Integrated Pest Management	Varietal replacement with IPM	15	10	10	0	35	5	0	0	45	5	50	
15	Organic input	Small scale vermi-compost production as entrepreneurial activity for self help groups	Organic input (small unit)	5	5	0	2	0	1	0	2	0	5	5	
16	Ridge gourd	Off-season cultivation	Early season cultivation	0.67	0.67	14	0	4	0	8	0	26	0	26	
17	Drudgery reduction of Farm women	Drudgery reduction of Farm women	Maize sheller	200	200	30	70	20	30	20	30	70	130	200	

## **Details of farming situation**

Crop	Seaso	ng situati on (RF/Ir rigate	Soil type	S	tatus of so (Kg/ha)	oil	Previo us crop	Sowin g date	Harve st date	nal rainfa II	Ño. ot rainy davs
	Š		ب رن	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	<u> </u>	သွဲ့ ထ	<b>± 5</b>	_ 6	2 2 9
Paddy (Varietal replacement)	Kharif, 2018	Rainfed	Sandy-loam	Medium	Low	Medium	Wheat	Transplanting: 1 <sup>st</sup> fortnight of July, 2018	1 <sup>st</sup> fortnight of Nov., 2018	1175	63
Paddy (IDM)	Kharif, 2018	Rainfed	Sandy-loam	Medium	Low	Medium	Wheat	Transplanting : 1 <sup>st</sup> fortnight of July, 2018	1 <sup>st</sup> fortnight of Nov., 2018	1175	63
Lime Orchard	Round the year	Irrigated	Sandy-loam	Medium	Low	Medium	Rice	July to August 2018	-	1479.1	62
Guava Orchard Management	Round the year	Irrigated	Sandy-loam	Medium	Low	Medium	Rice	July to August 2018	-	1479.1	62
Areacanut	Round the year	Irrigated	Sandy-loam	Medium	Low	Medium	Rice	July to August 2018	-	1479.1	62
Summer squash	Rabi,2018-19	Irrigated	Sandy loam	Medium	Low	Medium	Early rice	1 <sup>st</sup> week of Dec,2018	1 <sup>st</sup> Week of March, 2019	56.5	5
Garden Pea	Rabi, 2018-19	Irrigated	Sandy-loam	Medium	Low	Medium	Rapeseed	1 <sup>st</sup> wk of Dec., 2018	3 <sup>rd</sup> Week of March, 2019	56.5	5
Ridge gourd	Rabi, 2018- 19	Irrigated	Sandy-loam	Medium	Low	Medium	vegetables	Sowing: 1 <sup>st</sup> fortnight of January., 2019)	In the field	5.5	2
Mustard (IPM)	Rabi, 2018- 19	Irrigated	Sandy-loam	Medium	Low	Medium	Paddy	Sowing: 2 <sup>nd</sup> fortnight of Nov., 2018)	2 <sup>nd</sup> fortnight of February, 2019	5.3	3

In both the Tables, information of same crop should be provided. For example, if in Table 3.2A crops are mentioned as a,b,c,d etc., in the table for Details of farming situation, the same crop should be mentioned in the identical sequence.

## **Performance of FLD**

Oilseeds:

## Frontline demonstrations on oilseed crops

Cron	Thematic	Name of the technology	No. of	Area	Yield	(q/ha)	%	*Econ	omics of o		ation	*6	conomics (Rs./		
	Area	demonstrated	Farmers	(ha)	Demo	Check	Increase	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Mustard	Integrated pest manageme nt	Varietal Replacement with IPM	50	15	12.62	9.80	28.78	24520	56790	32270	2.32	26280	44100	17820	1.68
Total			50	15	12.62	9.80	28.78	24520	56790	32270	2.32	26280	44100	17820	1.68

<sup>\*</sup> Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.

**Pulses: Nil** 

## Frontline demonstration on pulse crops

Crop	Thematic	Name of the technology	No. of	Area	Yield (	q/ha)	%	*Eco		demonstra /ha)	tion	*	Economic (Rs./	s of check 'ha)	
0.00	Crop Area	demonstrated	Farmers	(ha)	Demo	Check	Increase	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR

<sup>\*</sup> Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.

<sup>\*\*</sup> BCR= GROSS RETURN/GROSS COST

<sup>\*\*</sup> BCR= GROSS RETURN/GROSS COST

# Other crops:

0	<b>T</b>	Name of the	No. of	Area	Yield (	q/ha)	% chang	Otl paran		*Econom	ics of demo	onstration (Rs	./ha)		*Economic	cs of check /ha)	
Crop	Thematic area	technology demonstrated	Farme r	(ha)	Demon s ration	Chec k	e in yield	Dem o	Chec k	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Returi	BCR
					46.2	36.8	25.54	#	##	35540	73920	38380	2.07	34980	58880	23900	1.68
								emo:						# Check:			
		Sahabhagi			i) N		nical bea					•	•		_	ers/m² : 18	36
					ii)		of spikel	-		.22		ii) No	•	keletes/p		35.8	
							ii) Test w			T		1		t weight:			
					44.8	36.3	23.42	#	##	34520	71680	37160		33800		24280	1.72
							# De			. 1				# Check:			
		MTU – 1010			i)		•	_		/m² : 206		•	•		_	ers/m² : 18	36
					ii)		of spikel	-		.18		ii) No	-	keletes/		35.8	
Rice	Varietal Replace-		104	50			) Test we			I		1		t weight:	1	1 1	
	ment				52.6	40.4	30.20	#	##	38870	84160	45290	2.17		64640	29440	1.84
		5					# De		. 2			_		# Check:		. 2	
		Pratikhya			1		enical bea					•	•		_	ers/m² : 20	07
					ii)		of spikel			.42		ii) No	•	keletes/p		90.4	
			-				) Test we							t weight:			
					49.4	40.4	22.28	#	##	38870	79040	40170	2.03		64640	29440	1.84
		Swarna Sub			., ,		# De		, 2	276		.\		# Check:		, 2 2	. <del></del>
		- 1			1 '	•	nical bea	_	-				-		_	ers/m <sup>2</sup> : 20	)/
					ii)		of spikel ) Test we			.38		ii) No	•	keletes/pat weight		90.4	
						<u>   </u>	) Test we	igiit. Z	). <b>८</b>				2.0	weight		2878	
			30	5	49.8	40.2	23.88	*	**	39220	79680	40460	3	35540	64320	0	1.81
	Integrated	Use of bio-					# De	mo:				1 40400		# Check:			1.01
Rice	disease	pesticides			(i) N	lo of ne	nical bea		ers/m²	: 276		i) N	• • • • • • • • • • • • • • • • • • • •		aring tille	ers/m² : 20	07
	Management	for IDM			ii)	•	of spikel	_	-			•	•	keletes/	_		
							) Test we	-				,	•	st weight			
Mustard	Integrated pest management	Yellow sticky trap	50	10	10.9	8.6	26.74	_		20340	49050	28710	2.4	20360	4905 0	2869 0	2.41

	<b>.</b>	Name of the	No. of	Area	Yield (d	q/ha)	% chang		her neters	*Econom	nics of demo	onstration (Rs	./ha)			cs of check /ha)	
Crop	Thematic area	technology demonstrated	Farme r	(ha)	Demon s ration	Chec k	e in yield	Dem o	Chec k	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Returi	BCR
Lime	Orchard management	Establishme nt of orchard	06	0.4	99,00 0 nos	-	-	4	-	99,000	2,47,5 00	1,48,00 0	2.5	-	-	-	-
			** the		_	-		-			-	olant/ year- with prope			price- R	s. 2.50/pi	ece
Guava	Orchard management	Establishme nt of orchard	06	0.4	130	-	-	#	-	78,000	2,60,0 00	1,82,00 0	3.3	-	-	-	-
			# ** the		_	-			-			ts/plant/ ye vith proper		•	e price- F	Rs. 20/kg	
Arecanu t	Resource conservation technology	Multi- storied cropping system	05	0.7	Not yet	proper	ly establ	ished									
Summe r squash	Non- conventional vegetable	Crop diversity	30	0.8	551.2 5	-	-	•	-	2,08,75 0	6,61,5 00.00	4,52,75 0	3.1 7	-	-	-	-
						• De	emo para	meter-	No. (	Of plant/ ha		no. of fruit,	•	-	_	_	•
Garden Pea	Production and management technology and varietal replacement	Crop Manage ment	13	1.0	54.5	41.7	30.7 %	-	-	47325	16590 0	118575	3.5	4125	1042 50	6300 0	2.53
Ridge gourd	Crop management	Early cultivation	26	0.67	- Crop in the field -												

## Livestock: Nil

Category	Thematic	Name of the technology	No. of	No.of	Major para	ameters	% change in major	Other par	ameter	*Econo	mics of der	nonstratio	n (Rs.)	*	Economics (Rs		
cutegory	area	demonstrated	Farmer	units	Demons ration	Check	parameter	Demons ration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Dairy																	
Cow																	
Sheep and goat																	
Duckery																	
Others (pl.specify)																	
Total																	

<sup>\*</sup> Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.

## Fisheries:

Categor	Thematic	Name of the technology	No. of	No.o	Maj param		% change in major	Other para	ameter	*Eco		demonstra s.)	ation	•	*Economics (Rs.		
у	area	demonstrate d	Farme r	f units	Demon s ration	Chec k	paramete	Demons ration	Check	Gros s Cost	Gross Retur n	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BC R
Fish	Fish culture	Composite fish culture	6	6	21.2	13.8	53.62	*	**	79150.0	37900.00	58750.00	1.74	68800.00	95050.00	26250.00	1.38
			*Demo:	Catla 70	0g Rohu 47	75g Mriga	al300g		**Chec	k: Catla	400g Rohu	275g Mrig	al 250g				
6	6	18.6	13.8	34.7 8	*	**	71500.00	126000.00	54500.0 0	1.76	67300.0	88500.00	21200 .00	1.32			
			*Demo :	Catla 5	50g Rohu	400g M	rigal325g		**Chec	k: Catla	350g Rol	nu 250g N	Irigal 20	00g			
		Total															

<sup>\*</sup> Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.

<sup>\*\*</sup> BCR= GROSS RETURN/GROSS COST

<sup>\*\*</sup> BCR= GROSS RETURN/GROSS COST

## Other enterprises:

Catagor	Name of the	No. of	No of	Major para	ameters	% change	Othe parame	-		mics of c (Rs.) or F		ration		conomics (Rs.) or R		k
Categor Y	technology demonstrated		units	Demonstrati on	Check	in major paramet er	Demons ration	Chec k	Gross Cost	Gross Retur n	Net Retur n	** BCR	Gross Cost	Gross Retur n	Net Retur n	** BC R
Others	Oyster mushroom cultivation for nutritional security and entrepreneuria activity	10	10	Additional Availability of mushroom./d ay /Family 150 gm	Mushroom s are not the part of diet due to non availability		Oyster mushroom cultivation as entrepreneu rial activity*	**	1568 0	2892 0	1324 0	1.84	-	-	-	-

<sup>\*(</sup>for 4 batches 100 kg of mushrooms)

<sup>\*\*</sup>Oyster mushroom cultivation as entrepreneurial activity (small scale) taken up by majority of the respondents including 16 Nos. individual enterprenurer and 6 Nos.

SHGs & FCs

Vermi-compost Production for entrepreneurship development	5 SHG	5	Average Production per SHG 7 q per month	-	-	-	-	3600 0	1200 00/ye ar	8400	3.33	-	-	-	-
Backyard Azolla production for cattle feed	20	20	Average Feed cost Rs.1200/- per crossbred cow per month	Average Feed cost Rs.2500/- per crossbred cow per month	48%	The milk production has been ncreased b 12-16 %	ined	1500 0 (per year per cow)	3840 0 (4 It.mil k per day)	2340	2.56	2500 O(per year per cow)	3840 0(4 lt.mil k per day)	1340 0	1.5 4

<sup>\*</sup> Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.

<sup>\*\*</sup> BCR= GROSS RETURN/GROSS COST

## Women empowerment

Category	Name of technology	No. of demonstrations	Name of observations	Demonstration	Check
Farm Women					
Pregnant women					
Adolescent Girl					
Other women					
Children	Low cost nutritional weaning foods to combat malnutrition	20	1.Weight gain	11.85 Kg	8.65Kg
Neonatal					
Infants					

## Farm implements and machinery

Name of the	Crop	Name of the technology	No. of	Area (output/m		Filed observation (output/man hour)		Labor reduct days)	tion (man	Cost reduction ect.)	(Rs./ha or Rs./Unit
implement	СІОР	demonstrated	Farmer	(ha)	Demons Ration	Check	- major parameter	Demons ration	Check	Demons ration	Check
Tubular maize sheller	Maize	Use of hand maize sheller	150	30	38 kg/hr/person	14 kg/hr /person	65%	Time : 152.48 hr. Man unit :18.16	Time :472.56 hr. Man unit :60.24	:4086 Cost of sheller: Rs. 150/Piece Total cost :Rs.4236/- Cost per qt.: Rs.42.36/-	Labour cost :13554 Cost of sheller : nil Total cost : Rs.13554/- Cost per qt. : Rs.135.54/-
Turmeric steaming Unit	Turmeric	TNAU Model	14 (one SHG)	-	Fuel costs Rs. 50 per qt.	Fuel costs Rs. 80 per qt.	32% fuel save & cost saving	Time: 7.00 hr. Man unit: 1.00	Time: 12.00 hr. Man unit:2.00	Total Cost per qt. : Rs.300/-	Total Cost per qt. : Rs.550/-

<sup>\*</sup> Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.

\*\* BCR= GROSS RETURN/GROSS COST

## Demonstration details on crop hybrids: Nil

Crop	Name of the Hybrid	No. of farmers	Area (ha)	Yield (kg/ha)	/ major par	ameter		Economic	s (Rs./ha)	
Cereals				Demo	Local check	% change	Gross Cost	Gross Return	Net Return	BCR
Bajra										
Maize										
Paddy										
Sorghum										
Wheat										
Others (Pl. specify)										
Total										
Oilseeds										
Castor										
Mustard										
Safflower										
Sesame										
Sunflower										
Groundnut										
Soybean										
Others (Pl. specify)										
Total										
Pulses										
Greengram										
Blackgram										
Bengalgram										
Redgram										
Others (Pl. specify)										

Total										
Vegetable crops										
Zucchini	Yellow magic, Green magic	30	0.8 ha	55125	-	-	2,08,750	6,61,500.00	4,52,750	3.17
Bottle gourd										
Capsicum										
Cucumber										
Tomato										
Brinjal										
Okra										
Onion										
Potato										
Field bean										
Others (Pl. specify)										
Total										
Commercial crops										
Cotton										
Coconut										
Others (Pl. specify)										
Total		1								
Fodder crops										
Napier (Fodder)										
Maize (Fodder)										
Sorghum (Fodder)										
Others (Pl. specify)										
Total										

# Technical Feedback on the demonstrated technologies:

S. No	Crop	Feed Back
1	Mustard	Heavy soil moisture for prolonged period makes it difficult for the farmers to sow <i>Rabi</i> crops like wheat, rapeseed etc. in proper time. So, emphasis to be given to screen the late sown crop cultivars as well as to popularize Zero tillage cultivation.
2	pulse, oilseeds & vegetables	Correction of soil acidity is needed for growing pulse, oilseeds & vegetables crops
3	pulse, oilseeds & vegetables	Quality seeds of recommended varieties of different crops are not readily available in the local market. Measures to be taken for seed multiplication of the recommended varieties to make the same easily available to the farmers.
4	IPM	Bio-pesticides, traps, lures and new generation pesticides are now available in the local market. Farmers are now use the IPM technology
5	pulse, oilseeds & vegetables	Due to soil acidity several micronutrients are deficient in the soil causing severe loss in yield of crops. Extension Functionaries of the Govt. Departments and other organizations should be updated about the fact and they should recommend the application of micronutrients either in the soil or as foliar spray in different crops to mitigate the problem.
6	Malnourished children	Keeping in mind the nutritional management of farm families, low cost nutritional weaning food was given in FLD and well accepted by farm women to combat malnutrition among children and now provided to red children of whole district through DRDA.
7	Livestock	Backyard Azolla cultivation for cattle feed has got overwhelmed response from farm women. Near about 780 SHG members who are cultivating azolla in their backyards.
8	Farm women drudgery reducing technologies	To create general awareness on women friendly farm and non-farm tools and implements which were well accepted by farmwomen.
9.	Mushroom	Oyster mushroom cultivation was popularized by KVK under FLD programme for nutritional security as well as entrepreneurial activity. It has got an over whelming response from SHGs, FCs and even individual entrepreneur.
10.	Non conventional vegetables	Farmers are now interested in non-conventional crop cultivation like Strawberry, Broccoli, zucchini
11.	Plantation crops	Rural youths are interested in planting material production of fruit plants and plantation crops

# **Extension and Training activities under FLD:**

Sl.No.	Activity	Date	No. of activities organized	Number of participants	Remarks
1.	Field days	23/04/18,28/05/18,29/05/19, 15/06/18,june 18, 27/06/18,03/07/18, 14/09/18,04/10/18,12/10/18,29/10/18,02/11/18, 03/12/18,08/01/19,01/02/19,02/02/19,12/02/19,14/02/19,15/02/19, 07/03/19, 8/3/19, 26/03/19,	27	972	
2.	Farmers Training	23-25/05/19, 9-11/7/18, 12-14/9/18, 28-29/5/18, 8/6/18, 11/6/18, 16/7/18, 13-14/8/19,17/1/19, 17-18/5/18, 20- 22/6/18,6-8/8/19, 9-12/10/18, 14-16/11/18, 12-14/12/18, 6-8/12/18, 12-14/6/18, 11-13/9/18,6-8/6/18	19	499	
3.	Media coverage	06/04/18, 20/04/18, 10/05/18, 21/06/18, 21/06/18, 27/06/18, 30/06/18, 01/07/18, 07/07/18, 10/07/18, 11/07/18, 13/07/18, 25/07/18, 24/08/18, 31/08/18, 08/09/18, 27/09/19, 04/10/18,31/10/18, 31/10/18, 01/11/18, 26/11/18, 20/12/18,25/12/18,26/12/18,01/01/19, 16/01/19,31/01/19,02/02/19,06/02/19,15/02/19,18/02/19,21/02/19,25/02/19,06/03/19, 07/03/19, 11/03/19, 19/03/19, 20/03/19,23/03/19	40		
4.	Training for	27-28/06/18, 01-3/08/18, 11-13/09/18, 18/08/18, 27-28/09/18, 01-02/11/18, 26-29/11/18, 20/02/19, 18/03/19, 25-26/03/19	10	247	

extension		
functionaries		

## 3.2.B: Cluster frontline demonstration (2018-19):

#### PERFORMANCE OF THE DEMONSTRATION UNDER CFLD ON PULSE AND OILSEED CROPS DURING KHARIF 2018 AND RABI 2018-19:

# CLUSTER FRONTLINE DEMONSTRATION OF KHARIF PULSE- BLACKGRAM (2018-19) PERFORMANCE DATA REPORTING FORMAT KVK WISE

2. Year of establishment: 2005

4. Address: Chopra, Uttar Dinajpur

1. Name of KVK: Uttar Dinajpur Krishi Vigyan Kendra

3. Host Institution: Uttar Banga Krishi Vishwavidyalaya

5. District: Uttar Dinajpur

7. Performance of the demonstration:

r Dinajpur 6. State: West Bengal

A. Technical Parameters:

Ī	SI.	Crop	Existing	Existing	Yield gap (Kg/ha)		g/ha)	Name of Variety + Technology	Number	Area	Yield	obtaiı	ned	ed Yield gap			
	No.	demonstr	(Farmer's)	yield		w.r.to		w.r.to demonstrated		of	in ha	(	q/ha)		miı	nimize	d
		ated	variety	(q/ha)	District	District State Potential			farmers					(%)			
Ì			name		yield (D)	rield (D)   yield (S)   yield (P)					Max.	Min.	Av.	D	S	Р	
	1.	Blackgram	Local	7.6	80	160	540	Integrated Crop Management (ICM) with varietal replacement; INM with varietal replacement and IPM with varietal replacement.	194	50	11.4	9.8	10.6	(+) 126.2	(+) 115.2	81.5 4	

## Integrated Crop Management (ICM) with varietal replacement: 5 clusters

- > Replacement of old variety of seed
- > Application of lime 2.5 g/ha as per soil test value pH 4.8
- > seed treatment with Rhizobium @ 20 g/kg of seed followed by Trichoderma @ 4g/kg of seed at 7 days interval
- > Soil application of bio-fertilizer like Azotobacter, Azospirillum and PSB @ 2 kg/ acre
- > Application of Pendimathalin 30 EC @ 2.5 ml/L as pre-emergence herbicides
- > Application of boron as micronutrient @ 2.0 g/Lt of water at 25, 45-50 and 75-85 DAS

Application of chloropyriphos @ 2.5ml/L at 15 DAS and cholopyriphos + cypermethrin mixture @ 1.5 ml/L during pod formation for pest management

## INM with varietal replacement: 4 clusters

- Replacement of old variety of seed
- seed treatment with Rhizobium culture @ 20 g/kg of seed
- Soil application of bio-fertilizer like Azotobacter, Azospirillum and PSB @ 2 kg/ acre
- Application of boron as micronutrient @ 2.0 g/Lt of water at 25, 45-50 and 75-85 DAS
- Pest management as per requirement during pod formation

## IPM with varietal replacement: 3 clusters

- > Replacement of old variety of seed
- > Seed treatment with Rhizobium @ 20 g/kg of seed followed by Trichoderma viride @ 4g/kg of seed at 7 days interval
- > Application of Glyphosate (Roundup) @ 5ml/L for killing the grass 7 -10 days before sowing (without tillage condition) or Application of Pendimathalin30 EC @ 2.5 ml/L as pre emergence herbicides
- > Application of boron as micronutrient @ 2.0 g/Lt of water at 25, 45-50 and 75-85 DAS
- > Application of Chloropyriphos @ 2.5ml/L at 15 DAS and Propiconazole 25% EC 1.0 ml at 45-50 DAS and cholopyriphos + cypermethrin mixture @ 1.5 ml/L during pod formation for pest management

## **B.** Economic parameters

SI.	Variety		Farmer's Ex	isting plot			Demonstration	plot		
No.	demonstrated & Technology demonstrated	Gross Cost (Rs/ha)	Gross return (Rs/ha)	Net Return (Rs/ha)	B:C ratio	Gross Cost (Rs/ha)	Gross return (Rs/ha)	Net Return (Rs/ha)	B:C ratio	Farmers, feedback
1.	PU-31 Varietal replacement and Integrated Nutrient Management & Integrated Pest Management	27120	57000	29880	2.10	28570	79500	50930	2.78	Var. PU-31 is better than local variety and short duration, plant height - small

#### C. Socio-economic impact parameters

SI. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
1.	PU-31 Varietal replacement and Integrated Nutrient Management & Integrated Pest Management	53000	227	75.00	5480	3490	Household consumption, education purpose, medical purpose etc.	25.8 nos.

# D. Pulse Farmer's perception of the intervention demonstrated

SI.	Technologies			Farn	ners' Perception p	arameters	
No.	demonstrated (with name)	Suitability to their farming system	Likings (Preference)	Affordability	Any negative effect	Is Technology acceptable to all in the group/village	Suggestions, for change/improvement, if any
1.	PU-31 Varietal replacement and Integrated Nutrient Management & Integrated Pest Management	As Blackgram is traditionally grown in the district, the crop is readily suitable in the farming system	Farmers' are well acquainted with Blackgram cultivation. Improved variety and Technology of cultivation is readily preferred by the farmers	Very good	No	Yes	This year farmers preferred the PU- 31. They are ready to cultivate this variety. Also they are interested to cultivate new variety.

# E. Specific Characteristics of Technology and Performance

Specific Characteristic	Performance	Performance of Technology vis-a vis Local Check	Farmers Feedback
Crop canopy	Medium	Very good	PU – 31 the variety crop canopy are
			medium
No of pod formation	High	Very good	The variety showed huge no of pods
			in a single plant.
Grain size	High and bold	Very good	Grain size bolder that local variety
No of nodules	Medium to high	Very good	-

## F. Extension activities under FLD conducted till dates

Sl. No.	Extension Activities organized	Date and place of activity	Number of farmer attended
Blackgra	m (Kharif)		
		06/07/2018, Machol, Karandighi	46
		25-26/07/2018, KVK Training Hall	39
1.	Training	07/08/2018, KVK Training Hall	21
1.	Hailing	18/09/2018 , Baharail , Hemtabad	55
		04/10/2018, Machol, Karandighi	27
		Total: 5 nos.	188
		01/08/2018 , Dhuliagachh, Goalgachh, Lalitgachh, Chopra	35
		03/08/2018 , Baharail , Bishnupur, Hemtabad	23
		08/08/2018 , Baharail , Bishnupur, Hemtabad	52
		23/08/2018 , Machol , Raghabpur, Kuitor , Karandighi	21
	Field Visit	28/08/2018 , Machol , Raghabpur, Kuitor, Karandighi	29
		17/09/2018, Dhuliagachh, Goalgachh, Lalitgachh, Chopra	42
		18/09/2018 , Baharail , Hemtabad	33
2.		24/09/2018 , Dhuliagachh, Goalgachh, Lalitgachh, Chopra	40
		27/09/2018 , Suchiani, Islampur	32

Sl. No.	Extension Activities organized	Date and place of activity	Number of farmer attended
		04/10/2018, Machol, Raghabpur, Kuitor, Karandighi	28
		27/10/2018, Baharail, Bishnupur, Hemtabad	43
		30/10/2018, Dhuliagachh, Goalgachh, Lalitgachh, Chopra	25
		Total: 12 nos.	403
		02/11/2018 , Machol , Karandighi	52
	Field Day	29/11/2018 , Lalitgachh , Chopra	36
3.	Field Day	Total: 2 nos.	88
<b>J</b> .		Grand Total	679

8. Sequential good quality photographs (as per crop stages i.e. growth & development)







9. Farmers' training photographs





















10. Quality Photographs of field visits/field days and technology demonstrated.











# 11. Details of budget utilization:

Crop (provide crop wise information )	Items	Budget Received (Rs.)	Budget Utilization (Rs.)	Balance (Rs.)
	i) Critical input	405000.00	403870.00	1130.00
	ii) TA/DA/POL etc. for monitoring			
	iii) Extension Activities (Field day)	45000.00	44820.00	180.00
	iv)Publication of literature			
	Total	4,50,000.00	4,48,690.00	1310.00

## 12. List of Farmer under FLD (Crop wise):

				Eathers Name	Fathers Name	Fathers Name					GPS Coor		Soil	Recomm endation	Brief		Are		Dei	mo yield (	q/ha)	Yield of	%
SI. No.	Farmers Name	Fathers Name	Village	Block	Mobile No	Aadhar No	Latitude	Longitude	Testing done (Yes/No)	based on soil test value	technology intervention	Var.	a (ha)	Seed used	н	L	A	local change	incre ased				
1	Nasem Khan	Jalfakar	Goalgach h	Chopra	98724623 22	4467419151 67	26 32' 36.1" N	88 11' 15.60" E	N		INM & Varietial replacement	PU - 31	0.4	12	11. 80	10.20	11.00	7.6	44.74				
2	Jahidul	Naseraddin	Goalgach h	Chopra	89724622 81		26 32' 36.1" N	88 11' 15.60" E	N		INM & Varietial replacement	PU - 31	0.2	6	11. 60	9.45	10.53	7.6	38.49				
3	Haydar Ali	Amir	Goalgach h	Chopra	80161346 26	3253485974 97	26 32' 36.1" N	88 11' 15.60" E	N		IPM & Varietial replacement	PU - 31	0.2	6	11. 90	9.58	10.74	7.6	41.32				
4	Ansar	Md Khrmaddin	Goalgach h	Chopra	99327265 50	2969350572 53	26 32' 36.1" N	88 11' 15.60" E	N		IPM & Varietial replacement	PU - 31	0.3	9	10. 20	10.40	10.30	7.6	35.53				
5	Md Naseruddin	Khrmddin	Goalgach h	Chopra	81169426 37		26 32' 36.1" N	88 11' 15.60" E	N		INM & Varietial replacement	PU - 31	0.2	6	10. 60	8.25	9.43	7.6	24.01				
6	Khairul	Jalu	Goalgach h	Chopra	90027201 25	6926966531 37	26 32' 36.1" N	88 11' 15.60" E	N		ICM & Varietial replacement	PU - 31	0.4	12	11. 90	8.12	10.01	7.6	31.71				
7	Amear	Lafejaddin	Goalgach h	Chopra	96358590 75	6911078857 77	26 32' 36.1" N	88 11' 15.60" E	N		INM & Varietial replacement	PU - 31	0.1	3	11. 60	10.30	10.95	7.6	44.08				

							GPS Cool		Soil	Recomm endation	Brief				De	mo yield (	q/ha)	Yield of	%
SI. No.	Farmers Name	Fathers Name	Village	Block	Mobile No	Aadhar No	Latitude	Longitude	Testing done (Yes/No)	based on soil test value	technology intervention	Var.	Are a (ha)	Seed used	н	L	Α	local change	incre ased
8	Muktar	Apta	Goalgach h	Chopra	99334617 42		26 32' 36.1" N	88 11' 15.60" E	N		IPM & Varietial replacement	PU - 31	0.2	6	11. 90	10.20	11.05	7.6	45.39
9	Baitun Nesha	Lalful	Goalgach h	Chopra	90027201	2775393900 03	26 32' 36.1" N	88 11' 15.60" E	N		IPM & Varietial replacement	PU - 31	0.3	9	10. 50	9.80	10.15	7.6	33.55
10	Md Karimuddin	Naseriddin	Goalgach h	Chopra	99323284 85	2560212117 27	26 32' 36.1" N	88 11' 15.60" E	N		IPM & Varietial replacement	PU - 31	0.2	6	11. 60	10.30	10.95	7.6	44.08
11	Md Saleman	Khalih	Goalgach h	Chopra	89726812 83	3085920358 57	26 32' 36.1" N	88 11' 15.60" E	N		IPM & Varietial replacement	PU - 31	0.3	9	11. 20	10.40	10.80	7.6	42.11
12	Jabbar	Maser	Goalgach h	Chopra	98003747 13	8135666977 81	26 32' 36.1" N	88 11' 15.60" E	N		IPM & Varietial replacement	PU - 31	0.4	12	11. 60	10.50	11.05	7.6	45.39
13	Maseruddin	Md Khrmaddin	Goalgach h	Chopra	81166672 01		26 32' 36.1" N	88 11' 15.60" E	N		IPM & Varietial replacement	PU - 31	0.2	6	11. 30	10.20	10.75	7.6	41.45
14	Md Jamlluddin	Ramjan	Goalgach h	Chopra	98006157 31	4186033319 60	26 32' 36.1" N	88 11' 15.60" E	N		IPM & Varietial replacement	PU - 31	0.3	9	11. 50	10.60	11.05	7.6	45.39
15	Hasem	Khalil	Goalgach h	Chopra	75849297 41	9412964476 94	26 32' 36.1" N	88 11' 15.60" E	N		IPM & Varietial replacement	PU - 31	0.4	12	11. 30	10.30	10.80	7.6	42.11
16	Surjahan	Asharu	Goalgach h	Chopra	99324526 76	2379548472 31	26 32' 36.1" N	88 11' 15.60" E	N		IPM & Varietial replacement	PU - 31	0.3	9	11. 20	10.50	10.85	7.6	42.76
17	Tifiel Kujur	Choitono Kujur	Dhuliagac hh	Chopra		2372877533 48	26 23' 36.1" N	88 11' 15.60" E	N		IPM & Varietial replacement	PU - 31	0.2	6	11. 90	10.60	11.25	7.6	48.03
18	Prakash Kispotta	Stifen Kispotta	Dhuliagac hh	Chopra	96354135 76	8250237187 01	26 23' 36.1" N	88 11' 15.60" E	N		IPM & Varietial replacement	PU - 31	0.3	9	11. 90	8.60	10.25	7.6	34.87
19	Placidius Kerketta	Gabril Kerketta	Dhuliagac hh	Chopra	96351388 69	3262650252 35	26 23' 36.1" N	88 11' 15.60" E	N		IPM & Varietial replacement	PU - 31	0.1	3	11. 60	9.20	10.40	7.6	36.84
20	Bablu Tirkey	Luxhan Tirkey	Dhuliagac hh	Chopra	96797241 72	9136009586 72	26 23' 36.1" N	88 11' 15.60" E	N		IPM & Varietial replacement	PU - 31	0.3	9	11. 30	10.60	10.95	7.6	44.08
21	Plikar Lakra	Lt Mohan Lakra	Dhuliagac hh	Chopra	86705952 98	4370119210 88	26 23' 36.1" N	88 11' 15.60" E	N		IPM & Varietial replacement	PU - 31	0.4	12	11. 90	11.20	11.55	7.6	51.97
22	Jamesh Kerketta	Gabril Kerketta	Dhuliagac hh	Chopra			26 23' 36.1" N	88 11' 15.60" E	N		IPM & Varietial replacement	PU - 31	0.3	9	11. 60	8.65	10.13	7.6	33.22
23	Karlus Xolxo	Lt Domna Xolxo	Dhuliagac hh	Chopra		2877980760 43	26 23' 36.1" N	88 11' 15.60" E	N		IPM & Varietial	PU - 31	0.3	9	11. 90	9.20	10.55	7.6	38.82

							GPS Cool		Soil	Recomm endation	Priof		A==		De	mo yield (	q/ha)	Yield of	%
SI. No.	Farmers Name	Fathers Name	Village	Block	Mobile No	Aadhar No	Latitude	Longitude	Testing done (Yes/No)	based on soil test value	Brief technology intervention	Var.	Are a (ha)	Seed used	н	L	А	local change	incre ased
											replacement								
24	Nirmal Toppo	Lt Alexjendar Toppo	Dhuliagac hh	Chopra		8818613335 02	26 23' 36.1" N	88 11' 15.60" E	N		IPM & Varietial replacement	PU - 31	0.1	3	10. 50	8.25	9.38	7.6	23.36
25	Uttam Toppo	Lt Alexjendar Toppo	Dhuliagac hh	Chopra		5395787428 89	26 23' 36.1" N	88 11' 15.60" E	N		IPM & Varietial replacement	PU - 31	0.2	6	11. 80	9.80	10.80	7.6	42.11
26	Ajay Kispotta	Pitrus Kispotta	Dhuliagac hh	Chopra		5597394571 66	26 23' 36.1" N	88 11' 15.60" E	N		IPM & Varietial replacement	PU - 31	0.4	12	11. 20	10.50	10.85	7.6	42.76
27	Sule Minj	Lt Banday Minj	Dhuliagac hh	Chopra			26 23' 36.1" N	88 11' 15.60" E	N		IPM & Varietial replacement	PU - 31	0.2	6	11. 30	9.12	10.21	7.6	34.34
28	Lukash Ekka	Joseph Ekka	Dhuliagac hh	Chopra		6649695807 57	26 23' 36.1" N	88 11' 15.60" E	N		IPM & Varietial replacement	PU - 31	0.3	9	11. 60	9.25	10.43	7.6	37.17
29	Manual Kujur	Lt. Adwar Kujur	Dhuliagac hh	Chopra		6759960620 62	26 23' 36.1" N	88 11' 15.60" E	N		IPM & Varietial replacement	PU - 31	0.2	6	11. 30	9.60	10.45	7.6	37.50
30	Sanjip Toppo	Paskal Toppo	Dhuliagac hh	Chopra	86701830 58	6793585040 34	26 23' 36.1" N	88 11' 15.60" E	N		IPM & Varietial replacement	PU - 31	0.1	3	12. 60	9.25	10.93	7.6	43.75
31	Swapan Ray		Dhuliagac hh	Chopra	96141947 15		26 23' 36.1" N	88 11' 15.60" E	N		IPM & Varietial replacement	PU - 31	0.3	9	11. 90	8.22	10.06	7.6	32.37
32	Jhakur Singha		Dhuliagac hh	Chopra	84365760 90		26 23' 36.1" N	88 11' 15.60" E	Y	20:50:40	IPM & Varietial replacement	PU - 31	0.2	6	11. 90	9.30	10.60	7.6	39.47
33	Prasanta Das		Sitalgachh	Chopra			26 22' 22.53' N	88 18' 55.68' E	Y	20:50:40	IPM & Varietial replacement	PU - 31	0.2	6	11. 90	9.85	10.88	7.6	43.09
34	Biswajit Singha		Sitalgachh	Chopra	90649270 30		26 22' 22.53' N	88 18' 55.68' E	Y	20:50:40	IPM & Varietial replacement	PU - 31	0.3	9	11. 60	8.54	10.07	7.6	32.50
35	Poritosh Singha		Sitalgachh	Chopra	86708465 42		26 22' 22.53' N	88 18' 55.68' E	Y	20:50:40	IPM & Varietial replacement	PU - 31	0.4	12	11. 90	8.25	10.08	7.6	32.57
36	Sanjoy Singha		Sitalgachh	Chopra	95636626 78		26 22' 22.53' N	88 18' 55.68' E	Y	20:50:40	IPM & Varietial replacement	PU - 31	0.1	3	10. 50	9.15	9.83	7.6	29.28
37	Dhananjoy Singha		Sitalgachh	Chopra	90025066 78		26 22' 22.53' N	88 18' 55.68' E	Y	20:50:40	IPM & Varietial replacement	PU - 31	0.3	9	11. 60	9.25	10.43	7.6	37.17
38	Braja Singha	Hari Singha	Sitalgachh	Chopra	98510223 76		26 22' 22.53' N	88 18' 55.68' E	Y	20:50:40	IPM & Varietial replacement	PU - 31	0.2	6	11. 80	9.55	10.68	7.6	40.46
39	Kholaram Singah	Sukru Singha	Sitalgachh	Chopra	99323146 98		26 22' 22.53' N	88 18' 55.68' E	Y	20:50:40	IPM & Varietial replacement	PU - 31	0.3	9	10. 50	9.85	10.18	7.6	33.88

							GPS Cool		Soil	Recomm endation	Brief				Dei	mo yield (	q/ha)	Yield of	%
SI. No.	Farmers Name	Fathers Name	Village	Block	Mobile No	Aadhar No	Latitude	Longitude	Testing done (Yes/No)	based on soil test value	technology intervention	Var.	Are a (ha)	Seed used	н	L	А	local change	incre ased
40	Budhanlal Singha	Sukru Singha	Sitalgachh	Chopra	80169600 27		26 22' 22.53' N	88 18' 55.68' E	Y	20:50:40	IPM & Varietial replacement	PU - 31	0.2	6	10. 30	9.23	9.77	7.6	28.49
41	Md Rahimuddin	Nasiruddin	Goalgach h	Chopra	81163426 37		26 22' 22.53' N	88 18' 55.68' E	N		IPM & Varietial replacement	PU - 31	0.2	6	10. 30	8.55	9.43	7.6	24.01
42	Ersamuddin	Kholel	Goalgach h	Chopra	81580997 5		26 22' 22.53' N	88 18' 55.68' E	N		IPM & Varietial replacement	PU - 31	0.3	9	10. 80	8.52	9.66	7.6	27.11
43	Dulal Singha	Khetkhetu Singha	Suchiani	Islampur	97340402 46		26 19' 12.9" N	88 17' 28.932" E	N		ICM & Varietal replacement	PU - 31	0.3	9	12. 60	8.25	10.43	7.6	37.17
44	Bappy Mandal	Manindra Mandal	Suchiani	Islampur	73190691 86		26 19' 12.9" N	88 17' 28.932" E	N		ICM & Varietal replacement	PU - 31	0.2	6	11. 90	9.56	10.73	7.6	41.18
45	Chiranjit Mandal	Fani Mandal	Suchiani	Islampur	70014077 12		26 19' 12.9" N	88 17' 28.932" E	N		ICM & Varietal replacement	PU - 31	0.3	9	11. 90	9.36	10.63	7.6	39.87
46	Bishal Mandal	Manotosh Mandal	Suchiani	Islampur	85975142 47		26 19' 12.9" N	88 17' 28.932" E	N		ICM & Varietal replacement	PU - 31	0.2	6	12. 40	8.45	10.43	7.6	37.17
47	Swapan Mandal	Manotosh Mandal	Suchiani	Islampur			26 19' 12.9" N	88 17' 28.932" E	N		ICM & Varietal replacement	PU - 31	0.2	6	12. 80	9.88	11.34	7.6	49.21
48	Akhil Mandal	Manindra Mandal	Suchiani	Islampur	75868312 40		26 19' 12.9" N	88 17' 28.932" E	N		ICM & Varietal replacement	PU - 31	0.3	9	11. 90	10.60	11.25	7.6	48.03
49	Srinibash Mandal	Nimai Mandal	Suchiani	Islampur			26 19' 12.9" N	88 17' 28.932" E	N		ICM & Varietal replacement	PU - 31	0.2	6	11. 60	9.60	10.60	7.6	39.47
50	Sibananda Mandal	Sunil Mandal	Suchiani	Islampur	87689326 14		26 19' 12.9" N	88 17' 28.932" E	N		ICM & Varietal replacement	PU - 31	0.3	9	11. 90	9.58	10.74	7.6	41.32
51	Gour Mohan Sarkar	Satish Sarkar	Suchiani	Islampur			26 19' 12.9" N	88 17' 28.932" E	N		ICM & Varietal replacement	PU - 31	0.2	6	10. 50	10.90	10.70	7.6	40.79
52	Jogrndra Mandal	Bandhu Ram Mandal	Suchiani	Islampur			26 19' 12.9" N	88 17' 28.932" E	N		ICM & Varietal replacement	PU - 31	0.2	6	11. 80	10.40	11.10	7.6	46.05
53	Ratan Sarkar	Nil Chad Sarkar	Suchiani	Islampur			26 19' 12.9" N	88 17' 28.932" E	N		ICM & Varietal replacement	PU - 31	0.1	3	10. 70	10.60	10.65	7.6	40.13
54	Soma Mandal	Biren Mandal	Suchiani	Islampur			26 19' 12.9" N	88 17' 28.932" E	N		ICM & Varietal replacement	PU - 31	0.4	12	12. 60	10.50	11.55	7.6	51.97
55	Chandra Mandal	Sunil Mandal	Suchiani	Islampur	96098598 78		26 19' 12.9" N	88 17' 28.932" E	N		ICM & Varietal replacement	PU - 31	0.2	6	12. 80	8.25	10.53	7.6	38.49
56	Dipu Mandal	Sachindra Mandal	Suchiani	Islampur	80169079 04		26 19' 12.9" N	88 17' 28.932" E	N		ICM & Varietal	PU - 31	0.2	6	12. 40	10.20	11.30	7.6	48.68

			Fathers Name					GPS Coor		Soil	Recomm endation	Brief				De	mo yield (	q/ha)	Yield of	%
SI. No.	Farmers Name	Fathers Name	Village	Block	Mobile No	Aadhar No	Latitude	Longitude	Testing done (Yes/No)	based on soil test value	technology intervention	Var.	Are a (ha)	Seed used	н	L	Α	local change	incre ased	
											replacement									
57	Madhusudan Mandal	Panchanan Mandal	Suchiani	Islampur			26 19' 12.9" N	88 17' 28.932" E	N		ICM & Varietal replacement	PU - 31	0.4	12	12. 80	9.80	11.30	7.6	48.68	
58	Rakesh Mandal	Ratan Sarkar	Suchiani	Islampur			26 19' 12.9" N	88 17' 28.932" E	N		ICM & Varietal replacement	PU - 31	0.3	9	11. 90	10.30	11.10	7.6	46.05	
59	Subhas Mandal	Ramananda Mandal	Suchiani	Islampur			26 19' 12.9" N	88 17' 28.932" E	N		ICM & Varietal replacement	PU - 31	0.2	6	11. 60	10.40	11.00	7.6	44.74	
60	Uttam Toppo	Lt. Alekgender Toppo	Suchiani	Islampur			26 19' 12.9" N	88 17' 28.932" E	N		ICM & Varietal replacement	PU - 31	0.3	9	11. 90	10.50	11.20	7.6	47.37	
61	Bappa Mandal	Naresh Mandal	Suchiani	Islampur			26 19' 12.9" N	88 17' 28.932" E	N		ICM & Varietal replacement	PU - 31	0.1	3	10. 50	10.20	10.35	7.6	36.18	
62	Nadiya Singha		Suchiani	Islampur			26 19' 12.9" N	88 17' 28.932" E	N		ICM & Varietal replacement	PU - 31	0.3	9	11. 80	8.66	10.23	7.6	34.61	
63	Placidius Kerketta	Gabril Kerketta	Dhuliagac hh	Chopra			26 23' 36.1" N	88 11' 15.60" E	N		IPM & Varietial replacement	PU - 31	0.4	12	12. 20	9.85	11.03	7.6	45.07	
64	Badla Orow	Lakhan Tirkey	Dhuliagac hh	Chopra	81163929 76		26 23' 36.1" N	88 11' 15.60" E	N		IPM & Varietial replacement	PU - 31	0.1	3	12. 60	10.52	11.56	7.6	52.11	
65	Jiten Tiggya	Gandla Tiggya	Dhuliagac hh	Chopra			26 23' 36.1" N	88 11' 15.60" E	N		IPM & Varietial replacement	PU - 31	0.4	12	12. 80	9.50	11.15	7.6	46.71	
66	Sanjay Toppo	Paskal Toppo	Dhuliagac hh	Chopra	90834049 46		26 23' 36.1" N	88 11' 15.60" E	N		IPM & Varietial replacement	PU - 31	0.3	9	12. 40	9.25	10.83	7.6	42.43	
67	Alphones Kerketta	Garbir Kerketta	Dhuliagac hh	Chopra			26 23' 36.1" N	88 11' 15.60" E	N		IPM & Varietial replacement	PU - 31	0.2	6	12. 60	9.25	10.93	7.6	43.75	
68	Susnu singha		Lalitgachh	Chopra	98515796 79		26 22' 42.53" N	88 18' 55 68" E	N		IPM & Varietial replacement	PU - 31	0.4	12	11. 90	9.55	10.73	7.6	41.12	
69	Iswar Ch. Singha	Gajendra Nath Singha	Lalitgachh	Chopra	97333140 73		26 22' 42.53" N	88 18' 55 68" E	N		IPM & Varietial replacement	PU - 31	0.2	6	11. 90	9.30	10.60	7.6	39.47	
70	Matonga Paul	Veket Paul	Lalitgachh	Chopra	76026028 50		26 22' 42.53" N	88 18' 55 68" E	N		IPM & Varietial replacement	PU - 31	0.1	3	11. 90	9.23	10.57	7.6	39.01	
71	Subhash Singha	Changai Singha	Lalitgachh	Chopra	97349290 42		26 22' 42.53" N	88 18' 55 68" E	N		IPM & Varietial replacement	PU - 31	0.4	12	11. 60	8.55	10.08	7.6	32.57	
72	Md Yash Ali	Sarjan Ali	Mariya	Karandig hi	97350103 51	9306728365 90	26 46' 38.51" N	87 59' 00.62" E	N		INM & Varietal replacement	PU - 31	0.4	12	11. 90	8.45	10.18	7.6	33.88	

							GPS Coo		Soil	Recomm endation	Brief		A==		De	mo yield (	q/ha)	Yield of	%
SI. No.	Farmers Name	Fathers Name	Village	Block	Mobile No	Aadhar No	Latitude	Longitude	Testing done (Yes/No)	based on soil test value	technology intervention	Var.	Are a (ha)	Seed used	н	L	Α	local change	incre ased
73	Jiyaur Rahaman	Kurban Ali	Mariya	Karandig hi	81161700 18	7567599066 85	26 46' 38.51" N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.2	6	10. 50	8.25	9.38	7.6	23.36
74	Amar Ch Singha	Suren Singha	Datipara	Karandig hi	97350938 65	3583153608 64	26 46' 38.51" N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.3	9	11. 60	9.56	10.58	7.6	39.21
75	Naren Singha	Nakuk Singha	Datipara	Karandig hi	81161210 30	3031495852 09	26 46' 38.51" N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.4	12	10. 30	9.25	9.78	7.6	28.62
76	Rajen Singha	Chandri Tudu	Mahes Pur	Karandig hi	96351830 22	3006220924 13	26 46' 38.51" N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.2	6	10. 80	8.21	9.51	7.6	25.07
77	Hamanta Singha	Suren Singha	Dhatiprar	Karandig hi	95635258 90	9652055771 70	26 46' 38.51" N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.2	6	12. 60	9.88	11.24	7.6	47.89
78	Jagat Singha	Suren Singha	Dhatiprar	Karandig hi	80161233 14	3568455336 21	26 46' 38.51" N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.3	9	11. 20	10.90	11.05	7.6	45.39
79	Takur Hamram	Siyalmavli	Dhatiprar	Karandig hi	83121860 44	9081505789 81	26 46' 38.51" N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.2	6	10. 20	10.40	10.30	7.6	35.53
80	Nimu Murmu	Thakur Murmu	Balia	Karandig hi	79084968 45	8086416302 28	26 46' 38.51' N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.2	6	11. 20	9.15	10.18	7.6	33.88
81	Chandra Soren	Laiseu Soren	Balia	Karandig hi	96095055 04	3950296547 20	26 46' 38.51' N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.3	9	11. 90	10.50	11.20	7.6	47.37
82	Mina Ali	Jamidar Seakh	Machal	Karandig hi	84367579 14		26 46' 38.51' N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.4	12	11. 60	10.30	10.95	7.6	44.08
83	Matlu Singha	Satanu Singha	Sadipur	Karandig hi		2613054425 53	26 46' 38.51' N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.2	6	11. 90	10.20	11.05	7.6	45.39
84	Jogen Shil	Gana Shil	Sadipur	Karandig hi	79080875 53	5634828168 86	26 46' 38.51' N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.3	9	10. 50	9.80	10.15	7.6	33.55
85	Md Qalam Rasul	Abdul Hoque	Raghabpu r	Karandig hi	77979859 17	2948618793 55	26 46' 38.51' N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.4	12	11. 80	10.30	11.05	7.6	45.39
86	Majibar Rahaman	lyasin Ali	Raghabpu r	Karandig hi	77979859 17	6581906881 09	26 46' 38.51' N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.3	9	12. 20	10.40	11.30	7.6	48.68
87	Badsha Khan	Nagir Hussain	Kalitala	Karandig hi	97331038 10	8872272566 92	26 46' 38.51' N	87 59' 00.62" E	Υ	20:50:30	INM & Varietal replacement	PU - 31	0.4	12	12. 60	10.50	11.55	7.6	51.97
88	Chandnal Soren	Raisen Saren	Balia	Karandig hi		3950296547 20	26 46' 38.51' N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.2	6	11. 00	10.20	10.60	7.6	39.47
89	Raise Soren	Randan Soren	Balia	Karandig hi		2243540628 42	26 46' 38.51' N	87 59' 00.62" E	Υ	20:50:30	INM & Varietal	PU - 31	0.2	6	11. 20	8.65	9.93	7.6	30.59

							GPS Coo		Soil	Recomm endation	Brief		A==		De	mo yield (	q/ha)	Yield of	%
SI. No.	Farmers Name	Fathers Name	Village	Block	Mobile No	Aadhar No	Latitude	Longitude	Testing done (Yes/No)	based on soil test value	technology intervention	Var.	Are a (ha)	Seed used	н	L	Α	local change	incre ased
											replacement								
90	Samai Kisku	Raghu Kisku	Balia	Karandig hi		3010835118 59	26 46' 38.51' N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.3	9	11. 20	9.85	10.53	7.6	38.49
91	Garbhu Besra	Baghrai Besra	Balia	Karandig hi		3119385660 60	26 46' 38.51' N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.2	6	10. 30	8.55	9.43	7.6	24.01
92	Bagral Besra	Ram Besra	Balia	Karandig hi		2779929181 64	26 46' 38.51' N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.4	12	10. 20	9.65	9.93	7.6	30.59
93	Tala Tudu	Chote Tudu	Balia	Karandig hi		7285855763 03	26 46' 38.51' N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.1	3	11. 10	10.30	10.70	7.6	40.79
94	Hajrat Ali	Posiruddin	Kurki	Karandig hi	97349204 75	6726295031 08	26 46' 38.51' N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.2	6	10. 50	9.15	9.83	7.6	29.28
95	Mansur Rahaman		Kurki	Karandig hi	97350583 85	8644368207 33	26 46' 38.51' N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.3	9	11. 80	9.55	10.68	7.6	40.46
96	Mithun Mahato	Lakhan Mahato	Machol	Karandig hi			26 46' 38.51" N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.2	6	10. 30	10.33	10.32	7.6	35.72
97	Nitai Mahato	Sohen Mahato	Machol	Karandig hi			26 46' 38.51" N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.4	12	12. 60	9.23	10.92	7.6	43.62
98	Jubeda Bibi	Toimur Hoque	Machol	Karandig hi			26 46' 38.51" N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.3	9	11. 00	9.66	10.33	7.6	35.92
99	Bechan Kumar Das	Lalu Das	Machol	Karandig hi			26 46' 38.51" N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.2	6	11. 40	11.22	11.31	7.6	48.82
100	Fagulal Singha	Anil Singha	Machol	Karandig hi			26 46' 38.51" N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.2	6	12. 60	9.55	11.08	7.6	45.72
101	Mudin Singha	Sarjamahan Singha	Machol	Karandig hi			26 46' 38.51" N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.3	9	11. 90	10.33	11.12	7.6	46.25
102	Md Jalaluddin	Fokir Mahammad	Machol	Karandig hi			26 46' 38.51" N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.3	9	11. 90	9.23	10.57	7.6	39.01
103	Somai Lal Singha	Samai Lal Singha	Machol	Karandig hi			26 46' 38.51" N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.2	6	11. 90	8.55	10.23	7.6	34.54
104	Shishulal Singha	Mahilal Singha	Machol	Karandig hi			26 46' 38.51" N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.1	3	11. 60	9.12	10.36	7.6	36.32
105	Dinesh Mahato	Manoj Mahato	Machol	Karandig hi			26 46' 38.51" N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.2	6	11. 60	8.25	9.93	7.6	30.59

							GPS Cool		Soil	Recomm endation	5.4				Dei	no yield (	q/ha)	Yield of	2
SI. No.	Farmers Name	Fathers Name	Village	Block	Mobile No	Aadhar No	Latitude	Longitude	Testing done (Yes/No)	based on soil test value	Brief technology intervention	Var.	Are a (ha)	Seed used	н	L	А	local change	% incre ased
106	Jogen Mahato	Tulen Mahato	Machol	Karandig hi			26 46' 38.51" N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.2	6	11. 10	9.56	10.33	7.6	35.92
107	Gopal Mahato	Suhen Mahato	Machol	Karandig hi			26 46' 38.51" N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.2	6	10. 50	8.25	9.38	7.6	23.36
108	Shyam Ch. Lala	Kamal Chandra Lala	Machol	Karandig hi			26 46' 38.51" N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.3	9	11. 80	8.74	10.27	7.6	35.13
109	Subham Lala	Shyam Ch. Lala	Machol	Karandig hi			26 46' 38.51" N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.2	6	12. 20	9.88	11.04	7.6	45.26
110	Shashi Mohan Singha	Subhash Singha	Machol	Karandig hi			26 46' 38.51" N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.4	12	10. 70	10.90	10.80	7.6	42.11
111	Khitish Mahato	Lalu Mahato	Machol	Karandig hi			26 46' 38.51" N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.3	9	10. 30	10.40	10.35	7.6	36.18
112	Raja Mahato	Dilip Mahato	Machol	Karandig hi			26 46' 38.51" N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.2	6	10. 80	8.25	9.53	7.6	25.33
113	Krishna Singha	Jhatu Singha	Machol	Karandig hi			26 46' 38.51" N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.2	6	10. 50	10.50	10.50	7.6	38.16
114	Ramji Singha	Ratul Singha	Machol	Karandig hi			26 46' 38.51" N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.3	9	11. 90	10.30	11.10	7.6	46.05
115	Mainul Hoque	Pesker Ali	Machol	Karandig hi	77976967 72		26 46' 38.51" N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.4	12	11. 90	10.20	11.05	7.6	45.39
116	Esrtab Ali	Pesker Ali	Machol	Karandig hi	97333489 35		26 46' 38.51" N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.2	6	11. 90	9.80	10.85	7.6	42.76
117	Samser Ali	Kolimuddin Ali	Machol	Karandig hi	97359962 23	2649092067 41	26 46' 38.51" N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.3	9	11. 60	10.30	10.95	7.6	44.08
118	Kayesh Uddin	Sekh Abdul	Machol	Karandig hi	77972720 20		26 46' 38.51" N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.2	6	11. 90	10.40	11.15	7.6	46.71
119	Khairul Hoque	Jar Md.	Jijarpur	Karandig hi	95932167 69	5320106612 89	26 46' 38.51" N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.3	9	10. 50	10.50	10.50	7.6	38.16
120	Esmail Hoque	Abul Jalil	Kalitola	Karandig hi	97331963 85	6412829760 87	26 46' 38.51" N	87 59' 00.62" E	Υ	20:50:30	INM & Varietal replacement	PU - 31	0.2	6	10. 90	10.20	10.55	7.6	38.82
121	Nunu Alam	Abul Jalil	Kalitola	Karandig hi	96099255 14		26 46' 38.51" N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.2	6	11. 80	9.20	10.50	7.6	38.16
122	Tarikul	Nusi Alam	Kalitola	Karandig hi	70768687 20		26 46' 38.51" N	87 59' 00.62" E	Υ	20:50:30	INM & Varietal	PU - 31	0.1	3	10. 70	9.85	10.28	7.6	35.20

							GPS Coo (DDMMS		Soil	Recomm endation	Brief		Are		De	mo yield (	q/ha)	Yield of	%
SI. No.	Farmers Name	Fathers Name	Village	Block	Mobile No	Aadhar No	Latitude	Longitude	Testing done (Yes/No)	based on soil test value	technology intervention	Var.	a (ha)	Seed used	н	L	А	local change	incre ased
											replacement								
123	Mubarak Ali	Viku Ali	Kalitola	Karandig hi	97884082 80		27 46' 38.51" N	88 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.2	6	10. 80	9.25	10.03	7.6	31.91
124	Mainul Hoque	Pesker Ali	Machol	Karandig hi	77976467 72		26 46' 38.51" N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.4	12	10. 20	10.30	10.25	7.6	34.87
125	Estab Ali	Pesker Ali	Machol	Karandig hi	97333489 35		26 46' 38.51" N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.2	6	12. 40	10.20	11.30	7.6	48.68
126	Samser Ali	Kalimuddin Ali	Machol	Karandig hi	97359965 23	2649012067 41	26 46' 38.51" N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.2	6	12. 60	10.60	11.60	7.6	52.63
127	Kasimuddin	Shek Bhadu	Machol	Karandig hi	77972720 20		26 46' 38.51" N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.4	12	11. 90	9.25	10.58	7.6	39.14
128	Khairul Hoque	Jer Md	Ibramim Pur	Karandig hi	95932167 69	5320106612 84	26 46' 38.51" N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.3	9	11. 60	10.40	11.00	7.6	44.74
129	Moknul Hassan	Anesh Shek	Machol	Karandig hi	97754654 48	9552601186 36	26 46' 38.51" N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.2	6	11. 90	10.50	11.20	7.6	47.37
130	Astab Ali	Lt. Shek Soleman	Machol	Karandig hi	97332171 81		26 46' 38.51" N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.3	9	10. 50	10.20	10.35	7.6	36.18
131	Jahanur Bibi	Abdul Rahim	Machol	Karandig hi		3544680859 95	26 46' 38.51" N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.2	6	11. 80	8.76	10.28	7.6	35.26
132	Pulak Singha	Pradip Singha	Kalitola	Karandig hi	85380078 58	4940471750 98	26 46' 38.51" N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.2	6	12. 20	9.85	11.03	7.6	45.07
133	Choton Ali	Najir Hussain	Kalitola	Karandig hi	97331038 10		26 46' 38.51" N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.3	9	10. 50	9.50	10.00	7.6	31.58
134	Jafar Ali	Najir Hussain	Kalitola	Karandig hi	97331038 10		26 46' 38.51" N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.2	6	10. 60	9.60	10.10	7.6	32.89
135	Ismail Hoque	Abdul Jalil	Kalitola	Karandig hi	97331963 85	6412829760 87	26 46' 38.51" N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.3	9	11. 90	10.80	11.35	7.6	49.34
136	Nunu Alam	Abdul Jalil	Kalitola	Karandig hi	96099255 14		26 46' 38.51" N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.2	6	11. 60	9.30	10.45	7.6	37.50
137	Arikul	Nunu Alam	Kalitola	Karandig hi	70768687 20		26 46' 38.51" N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.2	6	10. 80	9.55	10.18	7.6	33.88
138	Makul Hassain	Anesh Shek	Machol	Karandig hi	97754654 48	9552601186 36	26 46' 38.51" N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.1	3	10. 20	10.50	10.35	7.6	36.18

							GPS Cool		Soil	Recomm endation	Brief				Dei	no yield (	q/ha)	Yield of	%
SI. No.	Farmers Name	Fathers Name	Village	Block	Mobile No	Aadhar No	Latitude	Longitude	Testing done (Yes/No)	based on soil test value	technology intervention	Var.	Are a (ha)	Seed used	Н	L	А	local change	incre ased
139	Astal Ali	Shok Soleman	Machol	Karandig hi	97332171 81		26 46' 38.51" N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.4	12	10. 60	9.22	9.91	7.6	30.39
140	Jahanar Bibi	Abdul Rahim	Machol	Karandig hi		3544680859 95	26 46' 38.51" N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.3	9	10. 40	11.60	11.00	7.6	44.74
141	Pulak Singha	Pradip Singha	Machol	Karandig hi	85380078 58	4940471750 98	26 46' 38.51" N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.2	6	11. 60	10.80	11.20	7.6	47.37
142	Choton Ali	Najir Hussain	Kalitola	Karandig hi	97331038 10		26 46' 38.51" N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.1	3	11. 90	9.56	10.73	7.6	41.18
143	Jafar Ali	Najir Hussain	Kalitola	Karandig hi	97331038 10		26 46' 38.51" N	87 59' 00.62" E	Y	20:50:30	INM & Varietal replacement	PU - 31	0.2	6	10. 50	10.20	10.35	7.6	36.18
144	Mubarak	Bhiku Ali	Kalitola	Karandig hi	97334082 30		26 46' 38.51" N	87 59' 00.62" E	Υ	20:50:30	INM & Varietal replacement	PU - 31	0.1	3	10. 50	9.25	9.88	7.6	29.93
145	Asgar Ali	Nurul Hoque	Baharail	Hemtab ad	95936285 75		25 40' 40.872" N	88 12' 49.86" E	Υ	20:50:40	IWM & Varietal replacement	PU - 31	0.3	9	0.0 0	0.00	0.00	0	0.00
146	Raisul Islam	Jomiruddin Sarkar	Baharail	Hemtab ad	62949933 91		25 40' 40.872" N	88 12' 49.86" E	Υ	20:50:40	IWM & Varietal replacement	PU - 31	0.4	12	0.0 0	0.00	0.00	0	0.00
147	Prahallad Sarkar	Mahendra Nath Sarkar	Baharail	Hemtab ad	89184948 23		25 40' 40.872" N	88 12' 49.86" E	Υ	20:50:40	IWM & Varietal replacement	PU - 31	0.3	9	0.0 0	0.00	0.00	0	0.00
148	Mojbur Rahaman	Lt. Haidar Ali	Baharail	Hemtab ad	97334780 13		25 40' 40.872" N	88 12' 49.86" E	Υ	20:50:40	IWM & Varietal replacement	PU - 31	0.4	12	0.0 0	0.00	0.00	0	0.00
149	Ansar Ali	Mojibuddin	Baharail	Hemtab ad	81451939 89		25 40' 40.872" N	88 12' 49.86" E	Υ	20:50:40	IWM & Varietal replacement	PU - 31	0.2	6	0.0 0	0.00	0.00	0	0.00
150	Mojibur Rahaman		Baharail	Hemtab ad	73845471 54		25 40' 40.872" N	88 12' 49.86" E	Υ	20:50:40	IWM & Varietal replacement	PU - 31	0.2	6	0.0 0	0.00	0.00	0	0.00
151	Tapsara Ali	Samsuddin	Baharail	Hemtab ad			25 40' 40.872" N	88 12' 49.86" E	Υ	20:50:40	IWM & Varietal replacement	PU - 31	0.3	9	0.0 0	0.00	0.00	0	0.00
152	Nittyananda Saha	Dherendra Nath Saha	Baharail	Hemtab ad		9571722198 84	25 40' 40.872" N	88 12' 49.86" E	Υ	20:50:40	IWM & Varietal replacement	PU - 31	0.2	6	0.0 0	0.00	0.00	0	0.00
153	Asgar Ali	Norul Hoque	Baharail	Hemtab ad	62956567 91		25 40' 40.872" N	88 12' 49.86" E	Υ	20:50:40	IWM & Varietal replacement	PU - 31	0.4	12	0.0 0	0.00	0.00	0	0.00
154	Moknul Hassan	Abdul Mannan	Baharail	Hemtab ad			25 40' 40.872" N	88 12' 49.86" E	Υ	20:50:40	IWM & Varietal replacement	PU - 31	0.2	6	0.0 0	0.00	0.00	0	0.00
155	Saidur Rahaman	Ajijur Rahaman	Baharail	Hemtab ad	83718632 08	9083261800 79	25 40' 40.872" N	88 12' 49.86" E	Υ	20:50:40	IWM & Varietal	PU - 31	0.2	6	0.0	0.00	0.00	0	0.00

							GPS Cool		Soil	Recomm endation	2.1				Dei	mo yield (	(q/ha)	Yield of	24
SI. No.	Farmers Name	Fathers Name	Village	Block	Mobile No	Aadhar No	Latitude	Longitude	Testing done (Yes/No)	based on soil test value	Brief technology intervention	Var.	Are a (ha)	Seed used	н	L	А	local change	% incre ased
											replacement								
156	Rastom Ali		Bishnupur	Hemtab ad			25 40' 40.872" N	88 12' 49.86" E	Y	20:50:40	IWM & Varietal replacement	PU - 31	0.3	9	0.0 0	0.00	0.00	0	0.00
157	Altaf Hussain		Bishnupur	Hemtab ad			25 40' 40.872" N	88 12' 49.86" E	Y	20:50:40	IWM & Varietal replacement	PU - 31	0.1	3	0.0 0	0.00	0.00	0	0.00
158	Majnu Mahammad		Bishnupur	Hemtab ad			25 40' 40.872" N	88 12' 49.86" E	Y	20:50:40	IWM & Varietal replacement	PU - 31	0.4	12	0.0 0	0.00	0.00	0	0.00
159	Rafikul Islam		Bishnupur	Hemtab ad			25 40' 40.872" N	88 12' 49.86" E	Y	20:50:40	IWM & Varietal replacement	PU - 31	0.3	9	0.0 0	0.00	0.00	0	0.00
160	Tujamul Hoque Pradhan		Bishnupur	Hemtab ad			25 40' 40.872" N	88 12' 49.86" E	Y	20:50:40	IWM & Varietal replacement	PU - 31	0.2	6	0.0 0	0.00	0.00	0	0.00
161	Godal Turi	Lt Basanta Turi	Baharail	Hemtab ad			25 40' 40.872" N	88 12' 49.86" E	Y	20:50:40	IWM & Varietal replacement	PU - 31	0.2	6	0.0 0	0.00	0.00	0	0.00
162	Monmohan Debsharma		Baharail	Hemtab ad			25 40' 40.872" N	88 12' 49.86" E	Y	20:50:40	IWM & Varietal replacement	PU - 31	0.1	3	0.0 0	0.00	0.00	0	0.00
163	Samsul Alam	Abdul Gaffur	Baharail	Hemtab ad		5506694607 35	25 40' 40.872" N	88 12' 49.86" E	Y	20:50:40	IWM & Varietal replacement	PU - 31	0.3	9	0.0 0	0.00	0.00	0	0.00
164	Tintalu Debsharma	Tadan Debsharma	Baharail	Hemtab ad		6954770257 55	25 40' 40.872" N	88 12' 49.86" E	Y	20:50:40	IWM & Varietal replacement	PU - 31	0.2	6	0.0 0	0.00	0.00	0	0.00
165	Jillur Rahaman	Abdul Suran	Baharail	Hemtab ad	97333085 00	4345262062 42	25 40' 40.872" N	88 12' 49.86" E	Y	20:50:40	IWM & Varietal replacement	PU - 31	0.4	12	0.0 0	0.00	0.00	0	0.00
166	Mustahak Ali		Dhantor	Hemtab ad			25 40' 40.872" N	88 12' 49.86" E	Y	20:50:40	IWM & Varietal replacement	PU - 31	0.2	6	0.0 0	0.00	0.00	0	0.00
167	Dezar Ali		Dhantor	Hemtab ad			25 40' 40.872" N	88 12' 49.86" E	Y	20:50:40	IWM & Varietal replacement	PU - 31	0.2	6	0.0 0	0.00	0.00	0	0.00
168	Akbar Ali		Dhantor	Hemtab ad			25 40' 40.872" N	88 12' 49.86" E	Y	20:50:40	IWM & Varietal replacement	PU - 31	0.2	6	0.0 0	0.00	0.00	0	0.00
169	Ranju Barman	Mohesh Baraman	Baharail	Hemtab ad	89067868 31		25 40' 40.872" N	88 12' 49.86" E	Υ	20:50:40	IWM & Varietal replacement	PU - 31	0.3	9	0.0 0	0.00	0.00	0	0.00
170	Bikash Ch Ghosh	Manik Ch Ghosh	Baharail	Hemtab ad	97331229 82	4097815426 94	25 40' 40.872" N	88 12' 49.86" E	Υ	20:50:40	IWM & Varietal replacement	PU - 31	0.2	6	0.0 0	0.00	0.00	0	0.00
171	Prabitra Debsharma	Bhogen Debsharama	Baharail	Hemtab ad	81457480 45		25 40' 40.872" N	88 12' 49.86" E	Υ	20:50:40	IWM & Varietal replacement	PU - 31	0.4	12	0.0 0	0.00	0.00	0	0.00

							GPS Cool		Soil	Recomm endation	Brief		Aro		Der	no yield (	q/ha)	Yield of	%
SI. No.	Farmers Name	Fathers Name	Village	Block	Mobile No	Aadhar No	Latitude	Longitude	Testing done (Yes/No)	based on soil test value	technology intervention	Var.	Are a (ha)	Seed used	Н	L	А	local change	incre ased
172	Animesh Ghosh	Prakash Ch Ghosh	Baharail	Hemtab ad	97350915 21		25 40' 40.872" N	88 12' 49.86" E	Y	20:50:40	IWM & Varietal replacement	PU - 31	0.2	6	0.0 0	0.00	0.00	0	0.00
173	Mojibur Rahaman	Akbar Ali	Malon	Hemtab ad			25 40' 40.872" N	88 12' 49.86" E	Y	20:50:40	IWM & Varietal replacement	PU - 31	0.3	9	0.0 0	0.00	0.00	0	0.00
174	Aha Jalaluddin	Tabul Ali	Malon	Hemtab ad	95936285 41		25 40' 40.872" N	88 12' 49.86" E	Y	20:50:40	IWM & Varietal replacement	PU - 31	0.2	6	0.0 0	0.00	0.00	0	0.00
175	Taiyab Ali	Faijul Hoque	Malon	Hemtab ad			25 40' 40.872" N	88 12' 49.86" E	Y	20:50:40	IWM & Varietal replacement	PU - 31	0.3	9	0.0 0	0.00	0.00	0	0.00
176	Tapan Roy	Sambhu Ray	Malon	Hemtab ad			25 40' 40.872" N	88 12' 49.86" E	Y	20:50:40	IWM & Varietal replacement	PU - 31	0.4	12	0.0 0	0.00	0.00	0	0.00
177	Deben Deb Sharma	Surendra Nath Debsharma	Baharail	Hemtab ad			25 40' 40.872" N	88 12' 49.86" E	Υ	20:50:40	IWM & Varietal replacement	PU - 31	0.2	6	0.0 0	0.00	0.00	0	0.00
178	Jiaul Hoque		Baharail	Hemtab ad			25 40' 40.872" N	88 12' 49.86" E	Y	20:50:40	IWM & Varietal replacement	PU - 31	0.3	9	0.0	0.00	0.00	0	0.00
179	Jamrul Hoque		Baharail	Hemtab ad			25 40' 40.872" N	88 12' 49.86" E	Υ	20:50:40	IWM & Varietal replacement	PU - 31	0.4	12	0.0	0.00	0.00	0	0.00
180	Raju Mahammad	Abdul Salam	Baharail	Hemtab ad			25 40' 40.872" N	88 12' 49.86" E	Υ	20:50:40	IWM & Varietal replacement	PU - 31	0.3	9	0.0	0.00	0.00	0	0.00
181	Abdul Mannnan Sarkar		Dhantair	Hemtab ad			25 40' 40.872" N	88 12' 49.86" E	Y	20:50:40	IWM & Varietal replacement	PU - 31	0.4	12	0.0 0	0.00	0.00	0	0.00
182	Abu Said Ahammad	Lakibuddin Ahammad	Dhantair	Hemtab ad	62962077 69		25 40' 40.872" N	88 12' 49.86" E	Y	20:50:40	IWM & Varietal replacement	PU - 31	0.2	6	0.0 0	0.00	0.00	0	0.00
183	Abdul Kalam Azad	Lt. Hyder Ali	Dhantair	Hemtab ad			25 40' 40.872" N	88 12' 49.86" E	Υ	20:50:40	IWM & Varietal replacement	PU - 31	0.2	6	0.0 0	0.00	0.00	0	0.00
184	Mastafa Ali	Khirat Ali	Dhantair	Hemtab ad	96146311 72		25 40' 40.872" N	88 12' 49.86" E	Υ	20:50:40	IWM & Varietal replacement	PU - 31	0.3	9	0.0	0.00	0.00	0	0.00
185	Mamiruddin Sarkar	Abdul Mannan	Baharail	Hemtab ad			25 40' 40.872" N	88 12' 49.86" E	Υ	20:50:40	IWM & Varietal replacement	PU - 31	0.2	6	0.0	0.00	0.00	0	0.00
186	Kusal Ghosh	Gakul Ch Ghosh	Baharail	Hemtab ad			25 40' 40.872" N	88 12' 49.86" E	Y	20:50:40	IWM & Varietal replacement	PU - 31	0.4	12	0.0	0.00	0.00	0	0.00
187	Mangor Alam	Moslim Ali	Baharail	Hemtab ad			25 40' 40.872" N	88 12' 49.86" E	Y	20:50:40	IWM & Varietal replacement	PU - 31	0.2	6	0.0	0.00	0.00	0	0.00
188	Abdul Ali	Sarufuddin	Baharail	Hemtab ad			25 40' 40.872" N	88 12' 49.86" E	Υ	20:50:40	IWM & Varietal	PU - 31	0.2	6	0.0	0.00	0.00	0	0.00

							GPS Cool		Soil	Recomm endation	Duick				Der	no yield (	(q/ha)	Yield of	0/
SI. No.	Farmers Name	Fathers Name	Village	Block	Mobile No	Aadhar No	Latitude	Longitude	Testing done (Yes/No)	based on soil test value	Brief technology intervention	Var.	Are a (ha)	Seed used	Н	L	А	local change	% incre ased
											replacement								
189	Peyar Saha	Tarun	Malon	Hemtab ad			25 40' 40.872" N	88 12' 49.86" E	Y	20:50:40	IWM & Varietal replacement	PU - 31	0.3	9	0.0 0	0.00	0.00	0	0.00
190	Soleman Ali Pradhan	Tomijuddin	Malon	Hemtab ad	97341278 99		25 40' 40.872" N	88 12' 49.86" E	Y	20:50:40	IWM & Varietal replacement	PU - 31	0.3	9	0.0 0	0.00	0.00	0	0.00
191	Budrai Hasda	Raghu Hasda	Malon	Hemtab ad			25 40' 40.872" N	88 12' 49.86" E	Y	20:50:40	IWM & Varietal replacement	PU - 31	0.4	12	0.0 0	0.00	0.00	0	0.00
192	Abdul Malik	Khursed Ali	Malon	Hemtab ad	97341199 26		25 40' 40.872" N	88 12' 49.86" E	Y	20:50:40	IWM & Varietal replacement	PU - 31	0.2	6	0.0 0	0.00	0.00	0	0.00
193	Anuarul Hussain	Tayeb Ali	Baharail	Hemtab ad			25 40' 40.872" N	88 12' 49.86" E	Y	20:50:40	IWM & Varietal replacement	PU - 31	0.2	6	0.0 0	0.00	0.00	0	0.00
194	Khabsed Ali		Baharail	Hemtab ad			25 40' 40.872" N	88 12' 49.86" E	Υ	20:50:40	IWM & Varietal replacement	PU - 31	0.2	6	0.0 0	0.00	0.00	0	0.00

### **CLUSTER FRONTLINE DEMONSTRATION OF RABI OIL SEED (2018-19) OF LINSEED**

1. Name of KVK: Uttar Dinajpur Krishi Vigyan Kendra

3. Host Institution: Uttar Banga Krishi Viswavidyalaya

5. District: Uttar Dinajpur

7. Performance of the demonstration:

B. Technical Parameters:

2. Year of establishment: 2005

4. Address: Chopra, Uttar Dinajpur

6. State: West Bengal

SI.	Crop	Existing (Farmer's)	Existing yield	Yie	eld gap (Ka w.r.to	g/ha)	Name of Variety	Number of	Area	Yield o	btained	(q/ha)	Yield	gap mini	mized
No.	demonstrated	variety name	(q/ha)	District yield (D)	State yield (S)	Potential yield (P)	+ Technology demonstrated	farmers	in ha	Max.	Min.	Av.	D	(%) S	P
1.	Linseed	Local	6.9	60+	80+	510	Sekhar **	60	15	9.48	8.93	9.21	146.2	151.0	76.8

<sup>\*\*</sup> Varietal Replacement and Integrated crop Management (VR with ICM): Improved variety + Seed treatment through *Trichodema Viredi* + application of PSB and Azetobector @ 2.0 kg/ha as basal + Spray of Pendimethalin @ 2.5 ml/ L as pre emergence herbicides + spray of 20 % boron @ 1.5 gm/ L at 25, 45 and 60 DAS + Spray propiconazole @ 1.0 ml/L just before flowering + Sulphar 80% WGD @ 5gm/ L during pod formation. In 3

#### clusters

\*\* Varietal Replacement with Integrated Nutrient & weed Management (INM & IWM): Improved variety + Seed treatment through *Trichodema Viredi* + application of PSB and Azetobector @ 2.0 kg/ha as basal + Spray of Pendimethalin @ 2.5 ml/ L as pre emergence herbicides + spray of 20 % boron @ 1.5 gm/L at 25, 45 and 60 DAS. In 1 clusters

#### **G.** Economic parameters

SI.			Farmers' Exist	ing plot			Demonstr	ation plot		
No	Variety demonstrated & Technology demonstrated	Gross Cost (Rs/ha)	Gross return (Rs/ha)	Net Return (Rs/ha)	B:C ratio	Gross Cost (Rs/ha)	Gross return (Rs/ha)	Net Return (Rs/ha)	B:C ratio	Farmers, feedback
1.	Sekhar **	16360	27600	11240	1.69	17580	36840	19260	2.09	

\*\* Varietal Replacement and Integrated crop Management (VR with ICM): Improved variety + Seed treatment through *Trichodema Viredi* + application of PSB and Azetobector @ 2.0 kg/ha as basal + Spray of Pendimethalin @ 2.5 ml/ L as pre emergence herbicides + spray of 20 % boron @ 1.5 gm/ L at 25, 45 and 60 DAS + Spray propiconazole @ 1.0 ml/L just before flowering + Sulphar 80% WGD @ 5gm/ L during pod formation. In 3 clusters.

\*\* Varietal Replacement with Integrated Nutrient & weed Management (INM & IWM): Improved variety + Seed treatment through *Trichodema Viredi* + application of PSB and Azetobector @ 2.0 kg/ha as basal + Spray of Pendimethalin @ 2.5 ml/ L as pre emergence herbicides + spray of 20 % boron @ 1.5 gm/ L at 25, 45 and 60 DAS. **In 1 clusters** 

#### H. Socio-economic impact parameters

SI. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	• •
		12015	470	10	2780 including 1500 kg for	Till now 690 kg distributed to the farmers and again 1500 kg	Household purpose, Medical,	42.52
1.	Linseed Sekhar	13815	172	40	distribution next	may be distributed during the	Education, Social	12.62
					year sowing	time of sowing	pupose	

#### I. Oilseed Farmer's perception of the intervention demonstrated

SI.				Farmers' Perception parameter	'S		
No.	Technologies demonstrated (with name)	Suitability to their farming system	Likings (Preference)	Affordability	Any negative effect	Is Technology acceptable to all in the group/village	Suggestions, for change/improvem ent, if any
1.	Varietal Replacement and	Yes for Rice-fallow	Situation with po	or Farmers are comfortable with	No	Yes	

SI.				Farmers' Perception paramete	rs		
No.	Technologies demonstrated (with name)	Suitability to their farming system	Likings (Preference)	Affordability	Any negative effect	Is Technology acceptable to all in the group/village	Suggestions, for change/improvem ent, if any
	Integrated crop Management (VR with ICM **	systems or rice- linseed0-jute cropping systems	proffered the crop using	the technology with dully available of seeds in time and less management practices			
	and Azetobector @ 2.0 kg/h	a as basal + Spray of P	endimethalin @ 2.5 ml/ L as	mproved variety + Seed treatn pre emergence herbicides + sp 5 Sgm/ L during pod formation.	oray of 20 %	boron @ 1.5 gm/ L a	* *

#### J. Extension activities under FLD conducted till dates:

SI. No.	Extension Activities organized	Date and place of activity	Number of farmer attended
Linseed	(Rabi)		
		11/12/18, Fadilpur, Raiganj	40
		15-17/12/18, On campus, KVK Training Hall	18
1.	Training	17-18/12/18, On campus, KVK Training Hall	20
1.	Trailing	03/12/18, Machol, Karandighi	60
		28-29/02/19, Raghabpur, Karandighi	28
		Total: 5 nos.	166
		03/12/18, Machol, Raghabpur, Karandighi	38
		03/01/19, Machol, Raghabpur, Karandighi	41
		04/01/19, Kuitor, Charkadangi, Bilashpur, Karandighi	46
		23/01/19, Machol. Bilashpur, Karandighi	28
2.	Field Visit	24/01/19, Machol, Satveti, Karandighi	36
		10/01/19, Goalcachh, Chopra	35
		12/02/19, Goalcachh, Chopra	34
		13/02/19, Goalcachh, Chopra	30
		Total:8 nos	288
3.	Field Days	18/03/2019 Goalcachh, Chopra	64

8. Sequential good quality photographs (as per crop stages i.e. growth & development)



















# 9. Farmers' training photographs







10. Photographs of field visits/field days







### 11. Details of budget utilization up to-----

Crop	Itama	Budget	Budget	Balance
(provide crop wise information )	Items	Received (Rs.)	Utilization (Rs.)	(Rs.)
	i) Critical input	67500.00	67420.00	80.00
Lincond	ii) TA/DA/POL etc. for monitoring			
Linseed	iii) Extension Activities (Field day)	7500.00	7460.00	40.00
	iv)Publication of literature			
	Total :	75,000.00	74,880.00	120.00

## **List of Farmers under CFLD Linseed:**

SI.	_									Area	Seed		mo y (q/ha		Yield of	% of
No.	Farmers Name	Fathers Name	Village	Block	Mobile No.	Aadhar No.	Latitude	Longitude	Var.	(ha.)	(Kg.)	Ħ	L	А	local check (q/ha)	increa se
1	Ansar	Fogiruddin	Goalgachh	Chopra	9932726550	296935057253	26 32' 36.1" N	88 11' 15.60" E	Sekhor	0.2	4	9.4	8.9	9.15	6.9	32.6
2	Nasiruddin	Ashiruddin	Goalgachh	Chopra	8116942637	269093631379	26 32' 36.1" N	88 11' 15.60" E	Sekhor	0.2	4	9.6	9.1	9.35	6.9	35.5
3	Khoirul Hoque	Md Jhalu	Goalgachh	Chopra	2002720125	652696653137	26 32' 36.1" N	88 11' 15.60" E	Sekhor	0.3	6	9.2	8.9	9.05	6.9	31.2
4	Amir	Lafejoddin	Goalgachh	Chopra	9635859075	691107885777	26 32' 36.1" N	88 11' 15.60'' E	Sekhor	0.2	4	9.4	9.2	9.30	6.9	34.8
5	Muktar	Atabuddin	Goalgachh	Chopra		335230745451	26 32' 36.1" N	88 11' 15.60'' E	Sekhor	0.4	8	9.5	8.6	9.05	6.9	31.2
6	Sahabaj	Abdul Motin	Goalgachh	Chopra	9547764287	296640743786	26 32' 36.1" N	88 11' 15.60'' E	Sekhor	0.3	6	9.3	8.7	9.00	6.9	30.4
7	Mohibul	Thuru Mahammad	Goalgachh	Chopra	9932452676	771258870707	26 32' 36.1" N	88 11' 15.60" E	Sekhor	0.2	4	9.4	8.8	9.10	6.9	31.9
8	Sahanabaj	Abdul Motin	Goalgachh	Chopra	9932429478	223076246104	26 32' 36.1" N	88 11' 15.60'' E	Sekhor	0.2	4	9.6	9.3	9.45	6.9	37.0
9	Motibul	Thuru Mahammad	Goalgachh	Chopra	8972662322	326184249379	26 32' 36.1" N	88 11' 15.60" E	Sekhor	0.3	6	9.7	9.2	9.45	6.9	37.0
10	Khotela Khatun	Sofiruddin	Goalgachh	Chopra	8116942637	668569211372	26 32' 36.1" N	88 11' 15.60" E	Sekhor	0.4	8	9.8	8.9	9.35	6.9	35.5
11	Nazir	Nasiruddin	Goalgachh	Chopra	9635754341	985924071066	26 32' 36.1" N	88 11' 15.60" E	Sekhor	0.2	4	9.4	9.2	9.30	6.9	34.8

SI.										Area	Seed		mo yi (q/ha		Yield of	% of
No.	Farmers Name	Fathers Name	Village	Block	Mobile No.	Aadhar No.	Latitude	Longitude	Var.	(ha.)	(Kg.)	н	L	Α	local check (q/ha)	increa se
												Н	L	Α		
12	Sultan	Md Jhalu	Goalgachh	Chopra	8001329646	600396905229	26 32' 36.1" N	88 11' 15.60" E	Sekhor	0.3	6	9.5	8.9	9.20	6.9	33.3
13	Baitun Nesha	Khairul Hoque	Goalgachh	Chopra	9932538940	615446030600	26 32' 36.1" N	88 11' 15.60'' E	Sekhor	0.2	4	9.8	9.1	9.45	6.9	37.0
14	Soleman	Kholel Mahammad	Goalgachh	Chopra	9002720125	277539390003	26 32' 36.1" N	88 11' 15.60'' E	Sekhor	0.2	4	9.4	9.2	9.30	6.9	34.8
15	Zabbar	Masiruddin	Goalgachh	Chopra	9932328485	256021211727	26 32' 36.1" N	88 11' 15.60'' E	Sekhor	0.2	4	9.8	8.9	9.35	6.9	35.5
16	Mosiruddin	Tharu Md	Goalgachh	Chopra	8972681283	308592035857	26 32' 36.1" N	88 11' 15.60" E	Sekhor	0.1	2	9.6	8.8	9.20	6.9	33.3
17	Jahiruddin	Amir Box	Goalgachh	Chopra	9800374713	813566697781	26 32' 36.1" N	88 11' 15.60" E	Sekhor	0.2	4	9.4	9.2	9.30	6.9	34.8
18	Hasim	Kholel Mahammad	Goalgachh	Chopra	8116667201	568500485277	26 32' 36.1" N	88 11' 15.60'' E	Sekhor	0.3	6	9.7	8.6	9.15	6.9	32.6
19	Surjahan	Md Habibul Hoque	Goalgachh	Chopra	9800615731	418603331960	26 32' 36.1" N	88 11' 15.60'' E	Sekhor	0.3	6	9.2	8.7	8.95	6.9	29.7
20	Fojiruddin	Asiruddin	Goalgachh	Chopra	7584929741	941296447694	26 32' 36.1" N	88 11' 15.60'' E	Sekhor	0.2	4	9.4	8.8	9.10	6.9	31.9
21	Mojru Hoque	Amir Box	Goalgachh	Chopra	9932452676	237954847231	26 32' 36.1" N	88 11' 15.60" E	Sekhor	0.2	4	9.5	9.3	9.40	6.9	36.2
22	Nasim Khan	Md Faizbox	Goalgachh	Chopra		351108119517	26 32' 36.1" N	88 11' 15.60'' E	Sekhor	0.3	6	9.3	9.2	9.25	6.9	34.1
23	Jahidul	Karimuddin	Goalgachh	Chopra		531931196554	26 32' 36.1" N	88 11' 15.60'' E	Sekhor	0.2	4	9.4	8.9	9.15	6.9	32.6
24	Hyder Ali	Nasiruddin	Goalgachh	Chopra	8972462322	446741915167	26 32' 36.1" N	88 11' 15.60'' E	Sekhor	0.3	6	9.6	9.2	9.40	6.9	36.2
25	Purno Chandra Singha	Lt.Yasu Singha	Satveti	Karandighi	9635121294	589022601474	26 46' 38.51" N	87 59' 00.62'' E	Sekhor	0.4	8	9.7	8.9	9.30	6.9	34.8
26	Bharat Singha	Lt.Yasu Singha	Satveti	Karandighi	9002355540	668395741162	26 46' 38.51" N	87 59' 00.62'' E	Sekhor	0.2	4	9.8	9.1	9.45	6.9	37.0
27	Bimal Singha	Lt. Prabhat Singha	Gosai Para	Karandighi	6295465040	300370757476	26 46' 38.51" N	87 59' 00.62'' E	Sekhor	0.4	8	9.4	9.2	9.30	6.9	34.8
28	Vamal Singha	Syamal Singha	Satveti	Karandighi	8972962738	831513514294	26 46' 38.51" N	87 59' 00.62'' E	Sekhor	0.3	6	9.5	8.9	9.20	6.9	33.3
29	Dulal Singha	Dhiren Singha	Satveti	Karandighi	9382007353	637518304104	26 46' 38.51" N	87 59' 00.62" E	Sekhor	0.4	8	9.6	9.1	9.35	6.9	35.5
30	Kashi Singha	Gora Singha	Satveti	Karandighi	6295465040		26 46' 38.51" N	87 59' 00.62'' E	Sekhor	0.2	4	9.5	9.2	9.35	6.9	35.5
31	Rupen Singha	Kashi Singha	Lahutara	Karandighi	8972962738		26 46' 38.51" N	87 59' 00.62'' E	Sekhor	0.2	4	9.9	8.9	9.40	6.9	36.2
32	Haran Singha	Gora Singha	Kashidangi	Karandighi	9382007353		26 46' 38.51" N	87 59' 00.62" E	Sekhor	0.3	6	9.4	8.8	9.10	6.9	31.9

61											C I		mo yi (q/ha	1	Yield of	% of
SI. No.	Farmers Name	Fathers Name	Village	Block	Mobile No.	Aadhar No.	Latitude	Longitude	Var.	Area (ha.)	Seed (Kg.)	Н	L	A	local check (q/ha)	increa se
33	Ajay Mahato	Samay Mahato	Kuitor	Karandighi			26 46' 38.51" N	87 59' 00.62" E	Sekhor	0.2	4	9.8	9.2	9.50	6.9	37.7
34	Shibam Matato	Samay Mahato	Kuitor	Karandighi	9734225226		26 46' 38.51" N	87 59' 00.62" E	Sekhor	0.3	6	9.6	8.6	9.10	6.9	31.9
35	Gopal Mahato	Samay Mahato	Kuitor	Karandighi	7797908406		26 46' 38.51" N	87 59' 00.62" E	Sekhor	0.2	4	9.4	8.7	9.05	6.9	31.2
36	Habibur Rahaman	Mansur Ali	Mahanpur	Karandighi	8016448870		26 46' 38.51" N	87 59' 00.62" E	Sekhor	0.2	4	9.7	8.8	9.25	6.9	34.1
37	Md Ali	Habibur Rahaman	Bilashpur	Karandighi	9734937146		26 46' 38.51" N	87 59' 00.62" E	Sekhor	0.3	6	9.2	9.3	9.25	6.9	34.1
38	Rofijuddin	Lt. Tamijuddin	Kuitor	Karandighi	9735397776		26 46' 38.51" N	87 59' 00.62" E	Sekhor	0.2	4	9.4	9.2	9.30	6.9	34.8
39	Asraful Hoque	Lt. Zabbar Ali	Bilashpur	Karandighi	9794937146	828478098366	26 46' 38.51" N	87 59' 00.62" E	Sekhor	0.3	6	9.5	8.6	9.05	6.9	31.2
40	Sofir Mahato	Kajal Mahato	Machol	Karandighi			26 46' 38.51" N	87 59' 00.62" E	Sekhor	0.4	8	9.3	8.7	9.00	6.9	30.4
41	Solaman Ali	Md. Bakkar	Altapur	Karandighi	7063441271	884619560190	26 46' 38.51" N	87 59' 00.62" E	Sekhor	0.2	4	9.4	8.8	9.10	6.9	31.9
42	Manaranjan Singha	Lt. Kalipada Singha	Kuitor	Karandighi		345726549028	26 46' 38.51" N	87 59' 00.62'' E	Sekhor	0.2	4	9.6	9.3	9.45	6.9	37.0
43	Shyam Ch. Lala	Kamal Chandra Lala	Machol	Karandighi	9932609342	351456818258	26 46' 38.51" N	87 59' 00.62'' E	Sekhor	0.4	8	9.3	9.2	9.25	6.9	34.1
44	Kamal Barman	Sankar Barman	Runiya	Karandighi	8016448070		26 46' 38.51" N	87 59' 00.62'' E	Sekhor	0.2	4	9.4	8.9	9.15	6.9	32.6
45	Dipankar Barman	Sankar Barman	Runiya	Karandighi	7076615999		26 46' 38.51" N	87 59' 00.62'' E	Sekhor	0.1	2	9.8	9.2	9.50	6.9	37.7
46	Khoirul Hoque	Md. Jhalu	Bilashpur	Karandighi	7076615999		26 46' 38.51" N	87 59' 00.62'' E	Sekhor	0.2	4	9.7	8.9	9.30	6.9	34.8
47	Pintu Saha	Bikash Saha	Machol	Karandighi	9932163312		26 46' 38.51" N	87 59' 00.62" E	Sekhor	0.4	8	9.6	9.1	9.35	6.9	35.5
48	Karim Ali	Rahim Ali	Machol	Karandighi	7972562770		26 46' 38.51" N	87 59' 00.62'' E	Sekhor	0.2	4	9.4	9.2	9.30	6.9	34.8
49	Choton Ali	Najir Hussian	Kalitala	Karandighi	9733103810		26 46' 38.51" N	87 59' 00.62'' E	Sekhor	0.3	6	9.5	8.9	9.20	6.9	33.3
50	Jafar Ali	Najir Hussian	Kalitala	Karandighi	9733103810		26 46' 38.51" N	87 59' 00.62'' E	Sekhor	0.2	4	9.1	9.1	9.10	6.9	31.9
51	Ismail Hoque	Abdul Jali	Kalitala	Karandighi	9733196385	641282976087	26 46' 38.51" N	87 59' 00.62'' E	Sekhor	0.3	6	9.5	8.7	9.10	6.9	31.9
52	Nunu Alam	Abdul Jali	Kalitala	Karandighi	9609925514		26 46' 38.51" N	87 59' 00.62" E	Sekhor	0.2	4	9.2	8.9	9.05	6.9	31.2

SI.			ven	B					.,	Area	Seed		mo y (q/ha		Yield of	% of
No.	Farmers Name	Fathers Name	Village	Block	Mobile No.	Aadhar No.	Latitude	Longitude	Var.	(ha.)	(Kg.)	н	L	А	local check (q/ha)	increa se
53	Arikul	Nunu Alam	Kalitala	Karandighi	7076868720		26 46' 38.51" N	87 59' 00.62" E	Sekhor	0.2	4	9.4	8.8	9.10	6.9	31.9
54	Mubarak	Bhiku Alam	Kalitala	Karandighi	9733408230		26 46' 38.51" N	87 59' 00.62" E	Sekhor	0.3	6	9.1	8.7	8.90	6.9	29.0
55	Khitish Mahato	Lalu Mahato	Machol	Karandighi			26 46' 38.51" N	87 59' 00.62'' E	Sekhor	0.2	4	9.2	8.6	8.90	6.9	29.0
56	Mithun Mahato	Lakhan Mahato	Kurki	Karandighi	9735058385	864436820733	26 46' 38.51" N	87 59' 00.62'' E	Sekhor	0.3	6	9.4	8.5	8.95	6.9	29.7
57	Hajrat Ali	Posiruddin	Kurki	Karandighi	9734920475	672629503108	26 46' 38.51" N	87 59' 00.62'' E	Sekhor	0.2	4	9.7	8.4	9.05	6.9	31.2
58	Tala Tudu	Chote Tudu	Balia	Karandighi		728585576303	26 46' 38.51" N	87 59' 00.62" E	Sekhor	0.1	2	9.4	8.7	9.05	6.9	31.2
59	Bagril Beshra	Ram Beshra	Balia	Karandighi		277992918164	26 46' 38.51" N	87 59' 00.62" E	Sekhor	0.2	4	9.2	8.6	8.90	6.9	29.0
60	Gabru Beshra	Bagril Beshra	Balia	Karandighi		311938566060	26 46' 38.51" N	87 59' 00.62" E	Sekhor	0.2	4	9.3	8.5	8.90	6.9	29.0

#### **CLUSTER FRONTLINE DEMONSTRATION OF RABI OIL SEED (2018-19) OF MUSTARD**

1. Name of KVK: Uttar Dinajpur Krishi Vigyan Kendra

4. Host Institution: Uttar Banga Krishi Viswavidyalaya

5. District: Uttar Dinajpur

7. Performance of the demonstration:

C. Technical Parameters:

2. Year of establishment: 2005

4. Address: Chopra, Uttar Dinajpur

6. State: West Bengal

SI. No.	Crop demonstrated	Existing (Farmer's) variety	Existing yield (q/ha)	Pistrict yield (D)	ld gap (K w.r.to State yield		Name of Variety + Technology demonstrated	Number of farmers	Area in ha	Yield o	obtained	(q/ha)	Yield	gap minim (%)	iized
		name		yieiu (D)	(S)	yieid (P)				Max.	Min.	Av.	D	S	Р
1.	Mustard	B-9	9.8	60	120	820	**	82	20	14.20	12.42	13.31	127.89	120.91	73.89

<sup>\*\*</sup> Varietal Replacement (VR) with Integrated crop Management (ICM): Improved variety (NC-1 Jhumka) + Seed treatment through *Trichodema Viredi* + application of PSB and Azetobector @ 2.0 kg/ha as basal + Spray of Pendimethalin @ 2.5 ml/ L as pre emergence herbicides + spray of 20 % boron @ 1.5 gm/ L at 25,45 and 60 DAS + installation of yellow sticky trap @ 60 nos/ ha at 25 DAS above the 6 inch crop canopy + application of Sulphar 80% WDG @ 5 gm/ L during siliqua formation. In 4 clusters

<sup>\*\*</sup> Varietal Replacement (VR) with Integrated Nutrient Management (INM & IPM): Improved variety + Seed treatment through *Trichodema Viredi* + application of PSB and Azetobector @ 2.0 kg/ha as basal + spray of 20 % boron @ 1.5 gm/ L at 25,45 and 60 DAS+ installation of yellow sticky trap @ 60 nos/ ha

at 25 DAS above the 6 inch crop canopy + few field applied imidachloprid 17.8 SL @ 0.5 ml/ L as per requirement.. In 2 clusters

VR with Integrated weed Management (IWM): Improved variety + Seed treatment through *Trichodema Viredi* + application of PSB and Azetobector @ 2.0 kg/ha as basal + Spray of Pendimethalin @ 2.5 ml/ L as pre emergence herbicides + spray of 20 % boron @ 1.5 gm/ L at 25,45 and 60 DAS. In 2 clusters.

#### K. Economic parameters:

SI.		Fa	rmers' Existi	ing plot		I	Demonstra	tion plot		
No.	Variety demonstrated & Technology demonstrated	Gross Cost	Gross	Net	B:C	Gross	Gross	Net	B:C	Farmers,
NO.		(Rs/ha)	return	Return	ratio	Cost	return	Return	ratio	feedback
		(KS/IId)	(Rs/ha)	(Rs/ha)	ratio	(Rs/ha)	(Rs/ha)	(Rs/ha)	Tatio	
1.	NC-1 and **	24270	40050	15780	1.65	25940	59895	33955	2.31	

- \*\* Varietal Replacement (VR) with Integrated crop Management (ICM): Improved variety (NC-1 Jhumka) + Seed treatment through *Trichodema Viredi* + application of PSB and Azetobector @ 2.0 kg/ha as basal + Spray of Pendimethalin @ 2.5 ml/ L as pre emergence herbicides + spray of 20 % boron @ 1.5 gm/ L at 25,45 and 60 DAS + installation of yellow sticky trap @ 60 nos/ ha at 25 DAS above the 6 inch crop canopy + application of Sulphar 80% WDG @ 5 gm/ L during siliqua formation. In 4 clusters.
- \*\* Varietal Replacement (VR) with Integrated Nutrient Management (INM & IPM): Improved variety + Seed treatment through *Trichodema Viredi* + application of PSB and Azetobector @ 2.0 kg/ha as basal + spray of 20 % boron @ 1.5 gm/L at 25,45 and 60 DAS+ installation of yellow sticky trap @ 60 nos/ ha at 25 DAS above the 6 inch crop canopy + few field applied imidachloprid 17.8 SL @ 0.5 ml/L as per requirement.. In 2 clusters

VR with Integrated weed Management (IWM): Improved variety + Seed treatment through *Trichodema Viredi* + application of PSB and Azetobector @ 2.0 kg/ha as basal + Spray of Pendimethalin @ 2.5 ml/ L as pre emergence herbicides + spray of 20 % boron @ 1.5 gm/ L at 25,45 and 60 DAS. In 2 clusters.

#### L. Socio-economic impact parameters:

SI. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)		Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Men days/house hold)
1.	Mustard ( Variety: NC-1 (Jhumka)	26620	261	45	3480 kg for won and may be distributed to the other farmers		Household Purpose	20.26

## M. Oilseed Farmer's perception of the intervention demonstrated

			Farmers'	Perception parame	eters		
SI. No.	Technologies demonstrated (with name)	Suitability to their farming system	Likings (Preference)	Affordability	Any negative effect	Is Technology acceptable to all in the group/village	Suggestions, for change/improve ment, if any
1.	Varietal Replacement (VR) with Integrated crop Management (ICM) Varietal Replacement (VR) with Integrated Nutrient Management (INM & IPM) Varietal Replacement (VR) with Integrated weed Management (IWM)	Yes	Farmers of Karandighi, Islampur and Chopra block preferred the variety with the technology very well due to time of sowing and duration of the crop; but in Chopra block acceptance was moderate.	Farmers are interested with the variety and they are agree with the technology	Negative	Yes	

#### E. Extension activities under FLD conducted till dates:

Sl. No.	Extension Activities organized	Date and place of activity	Number of farmer attended
Mustard (Ra	abi)		
		03/12/18, Off campus Machol, Karandighi	60
		11/12/18, Off campus Fadilpur, Raiganj	40
		15-17/12/18, On campus, KVK Training Hall	18
1.	Training	17-18/12/18, On campus, KVK Training Hall	20
		17/01/19, Off campus Molanigachh, Chopra	21
		24/01/19, Off campus Satveti, Karandighi	42
		Total 6 nos.	201
		14/11/18, Molanigachh, Dhuliagachh, Golagachh, Chopra	37
		03/01/19, Machol, Raghabpur, Karandighi	38
		04/01/19, Kuitor, Charkadangi, Bilashpur, Karandighi	45
2.	Field Visit	17/01/19, Molanigachh, Dhuliagachh, Golagachh, Chopra	40
	Field Visit	22/01/19, Suchiani, Islampur	28
		24/01/19 Machol, Satveti, Karandighi	42
		13/02/19, Goalgachh, Chopra	36
		Total: 7 nos.	266
		13/02/19, Goalgachh, Chopra	35
3.	Field Days	15/02/2019 Machole, Karandighi	35
		Total: 2 nos.	70

## 8. Sequential good quality photographs (as per crop stages i.e. growth & development)









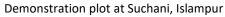
**Seed Distribution** 

Demonstration plot at Suchani, Islampur

Demonstration plot at Machol, Karandighi

Demonstration plot at Malanigachh, Chopra







Demonstration plot at Machol, Karandighi



Demonstration plot at Malanigachh, Chopra



Demonstration plot at Satveti, Karandighi



Long view Demonstration plot at Machol, Karandighi



Demonstration plot at Goalgachh, Chopra



Demonstration plot at Satveti, Karandighi



Demonstration plot at Machol, Karandighi

## 9. Farmers' training photographs:













# 10. Photographs of field visits/field days:



## 11. Details of budget utilization up to:

Crop (provide crop wise information )	Items	Budget Received (Rs.)	Budget Utilization (Rs.)	Balance (Rs.)
	i) Critical input	1,08,000.00	1,07,864.00	136.00
Mustard	ii) TA/DA/POL etc. for monitoring			
Widstard	iii) Extension Activities (Field day)	12000.00	11980.00	20.00
	iv)Publication of literature			
	Total :	1,20,000.00	1,19,844.00	156.00

## **List of Farmers under CFLD Mustard:**

SI.	Farmers Name	Fathers Name	Village	Block	Mobile No.	Aadhar No.	Latitude	Longitude	Var.	Area	Seed		emo yie (q/ ha)		Yield of Local	% of Increa
No.	, anners name	Tutile s vuine	- Timage	Diocik	iniobile ito:	, radiidi itoi	2411444	zongitude		(ha)	(Kg.)	Н	L	Α	Check (q/ha)	60
1	Shibananda Mandal	Sunil Mandal	Suchiani	Islam pur	876893261 4	681781875 488	26 19' 12.9'' N	88.17' 28.932'' E	NC- 1	0.2	1.5	14.2	12.8	13.5	9.8	37.8
2	Ramprasad Mandal	Naresh Mandal	Suchiani	Islam pur	747786433 0	516074952 229	26 19' 12.9'' N	88.17' 28.932'' E	NC- 1	0.2	1.5	13.9	12.9	13.4	9.8	36.7
3	Ratan Sarkar	Nilchand Sarkar	Suchiani	Islam pur	867040756 2		26 19' 12.9'' N	88.17' 28.932'' E	NC- 1	0.3	2.3	14.6	12.3	13.5	9.8	37.2
4	Animesh Sarkar	Ganendra Sarkar	Suchiani	Islam pur	985122453 7	777599708 991	26 19' 12.9'' N	88.17' 28.932'' E	NC- 1	0.2	1.5	14.2	12.6	13.4	9.8	36.7
5	Palash Mandal	Rupchand Mandal	Suchiani	Islam pur	890642999 8	605828710 427	26 19' 12.9'' N	88.17' 28.932'' E	NC- 1	0.4	3	13.9	12.4	13.2	9.8	34.2
6	Madhu Sudan Sarkar	Premchand Sarkar	Suchiani	Islam pur	707666176 4	207914743 995	26 19' 12.9'' N	88.17' 28.932'' E	NC- 1	0.2	1.5	14.2	12.5	13.4	9.8	36.2
7	Jogendra Mandal	Bandu Mandal	Suchiani	Islam pur		617264467 538	26 19' 12.9'' N	88.17' 28.932'' E	NC- 1	0.3	2.3	14.6	12.3	13.5	9.8	37.2
8	Braja Sarkar	Bandu Mandal	Suchiani	Islam pur	960973629 9	712104570 305	26 19' 12.9'' N	88.17' 28.932'' E	NC- 1	0.2	1.5	14.5	12.6	13.6	9.8	38.3
9	Sushil Sarkar	Sunil Sarkar	Suchiani	Islam pur	876893261 4	681781875 488	26 19' 12.9'' N	88.17' 28.932'' E	NC-	0.2	1.5	14.7	12.8	13.8	9.8	40.3
10	Ranjit Biswas	Gopal Biswas	Suchiani	Islam pur	900231148 4		26 19' 12.9'' N	88.17' 28.932'' E	NC-	0.2	1.5	14.5	12.7	13.6	9.8	38.8
11	Narayan Sarkar	Muluk Ch. Sarkar	Suchiani	Islam pur	993221270 5	673295585 217	26 19' 12.9'' N	88.17' 28.932'' E	NC-	0.3	2.3	13.8	12.8	13.3	9.8	35.7
12	Sibu Mandal	Sachindra Nath Mandal	Suchiani	Islam pur	894488321 8	735987890 849	26 19' 12.9'' N	88.17' 28.932'' E	NC-	0.4	3	14.2	12.6	13.4	9.8	36.7
13	Chandra Mandal	Sunil Mandal	Suchiani	Islam pur	960985987 8	632180591 124	26 19' 12.9'' N	88.17' 28.932'' E	NC-	0.2	1.5	13.8	12.3	13.1	9.8	33.2
14	Soma Mandal	Dhiren Mandal	Suchiani	Islam pur	876882003 1	813063662 934	26 19' 12.9'' N	88.17' 28.932'' E	NC- 1	0.3	2.3	14.2	12.9	13.6	9.8	38.3

SI.	Farmers Name	Fathers Name	Village	Block	Mobile No.	Aadhar No.	Latitude	Longitude	Var.	Area	Seed		emo yie (q/ ha)		Yield of	% of
No.								0		(ha)	(Kg.)	Н	L	Α	Check (q/ha)	
15	Rita Mandal	Manotosh Mandal	Suchiani	Islam pur	963588556 4	312070061 013	26 19' 12.9'' N	88.17' 28.932'' E	NC- 1	0.1	0.8	14.5	12.9	13.7	9.8	39.8
16	Ramananda Mandal	Ganesh Mandal	Suchiani	Islam pur	779785021 2	909150931 128	26 19' 12.9'' N	88.17' 28.932'' E	NC- 1	0.4	3	14.3	12.3	13.3	9.8	35.7
17	Placidius kerketta	Gabril kerketta	Dhuliagach h	Chopr a	963513886 9	326265025 235	26 23' 36.1" N	88 11' 15.60'' E	NC- 1	0.3	2.3	14.2	12.6	13.4	9.8	36.7
18	Prakash Kispotta	Stephen Kerketta	Dhuliagach h	Chopr a	963541357 6	825023718 701	26 23' 36.1" N	88 11' 15.60'' E	NC- 1	0.2	1.5	14.2	12.4	13.3	9.8	35.7
19	Uttam Toppo	Lt. Alekgender Toppo	Dhuliagach h	Chopr a	859719446 5	539578742 889	26 23' 36.1" N	88 11' 15.60'' E	NC- 1	0.4	3	14.6	12.5	13.6	9.8	38.3
20	Paulush Xolxo	Lt. Domna Xolxo	Dhuliagach h	Chopr a		639018466 289	26 23' 36.1" N	88 11' 15.60'' E	NC- 1	0.2	1.5	13.8	12.3	13.1	9.8	33.2
21	Sule Minj	Lt. Bandy Minj	Dhuliagach h	Chopr a		234227761 341	26 23' 36.1" N	88 11' 15.60'' E	NC- 1	0.2	1.5	14.3	12.6	13.5	9.8	37.2
22	Pulikar Lakra	Lt. Mohon Lakra	Dhuliagach h	Chopr a	629563152 6	437011921 088	26 23' 36.1" N	88 11' 15.60'' E	NC- 1	0.3	2.3	14.2	12.5	13.4	9.8	36.2
23	Manual Kujur	Lt. Adword Kujur	Dhuliagach h	Chopr a	993287039 9	675996062 062	26 23' 36.1'' N	88 11' 15.60'' E	NC- 1	0.2	1.5	14.6	12.7	13.7	9.8	39.3
24	Nirmal Toppo	Lt. Alekgender Toppo	Dhuliagach h	Chopr a		462485693 286	26 23' 36.1" N	88 11' 15.60'' E	NC- 1	0.1	0.8	14.5	12.3	13.4	9.8	36.7
25	Ropen Mardi	Dewon Mardi	Molanigac hh	Chopr a	963537148 8	546579159 200	26 23' 15.801'' N	88 16' 50.831	NC- 1	0.3	2.2	13.8	12.4	13.1	9.8	33.7
26	Atul Mardi	Pancham Mardi	Molanigac hh	Chopr a	973239985 9	883235028 982	26 23' 15.801'' N	88 16' 50.831	NC- 1	0.2	1.5	14.1	12.4	13.3	9.8	35.2
27	Santosh Mardi	Pancham Mardi	Molanigac hh	Chopr a	704793245 4	574538484 815	26 23' 15.801'' N	88 16' 50.831	NC- 1	0.2	1.5	13.8	12.6	13.2	9.8	34.7
28	Bishu Hasda	Ramka Hasda	Molanigac hh	Chopr a	900254005 0	739116819 268	26 23' 15.801'' N	88 16' 50.831	NC- 1	0.3	2.2	14.2	12.3	13.3	9.8	35.2
29	Muthi Kisku	Bablu Kisku	Molanigac hh	Chopr a		458698614 994	26 23' 15.801" N	88 16' 50.831	NC- 1	0.3	2.3	14.1	12.3	13.2	9.8	34.7

SI.	Farmers Name	Fathers Name	Village	Block	Mobile No.	Aadhar No.	Latitude	Longitude	Var.	Area	Seed		emo yie (q/ ha)		Yield of Local	% of Increa
No.				2.00				20.18.00.00		(ha)	(Kg.)	н	L	Α	Check (q/ha)	se
30	Surajmuni Tudu	Raju Mardi	Molanigac hh	Chopr a		842010774 511	26 23' 15.801" N	88 16' 50.831	NC- 1	0.2	1.5	14.2	12.1	13.2	9.8	34.2
31	Raska Mardi	Dhurpu Mardi	Molanigac hh	Chopr a		385501489 123	26 23' 15.801'' N	88 16' 50.831	NC- 1	0.1	0.8	13.6	12.3	13.0	9.8	32.1
32	Ramlal Tudu	Dhupay Tudu	Molanigac hh	Chopr a		957757935 745	26 23' 15.801'' N	88 16' 50.831	NC- 1	0.2	1.5	14.2	12.6	13.4	9.8	36.7
33	Ansar	Fogiruddin	Goalgachh	Chopr a	993272655 0	296935057 253	26 32' 36.1'' N	88 11' 15.60'' E	NC- 1	0.2	1.5	13.9	12.4	13.2	9.8	34.2
34	Nasiruddin	Ashiruddin	Goalgachh	Chopr a	993272655 0	269093631 379	26 32' 36.1" N	88 11' 15.60'' E	NC- 1	0.3	2.2	14.6	12.6	13.6	9.8	38.8
35	khoirul Hoque	Md Jhalu	Goalgachh	Chopr a	900272012 5	692696653 137	26 32' 36.1" N	88 11' 15.60'' E	NC- 1	0.2	1.5	13.8	12.3	13.1	9.8	33.2
36	Amir	Lafejoddin	Goalgachh	Chopr a	963585907 5	691107885 777	26 32' 36.1" N	88 11' 15.60'' E	NC- 1	0.4	3	13.9	12.2	13.1	9.8	33.2
37	Muktar	Atabuddin	Goalgachh	Chopr a		335230745 45	26 32' 36.1'' N	88 11' 15.60'' E	NC- 1	0.3	2.2 5	14.2	12.3	13.3	9.8	35.2
38	Jahidul	Karimuddin	Goalgachh	Chopr a	954776428 7	296640743 786	26 32' 36.1'' N	88 11' 15.60'' E	NC- 1	0.2	1.5	14.6	12.6	13.6	9.8	38.8
39	Mohibul	Lofijuddin	Goalgachh	Chopr a	993245267 6	771258870 707	26 32' 36.1'' N	88 11' 15.60'' E	NC- 1	0.2	1.5	14.5	12.3	13.4	9.8	36.7
40	Sahanabaj	Abdul Motin	Goalgachh	Chopr a	993242947 8	223076246 104	26 32' 36.1'' N	88 11' 15.60'' E	NC- 1	0.2	1.5	13.8	12.4	13.1	9.8	33.7
41	Motibul	Thuru Mahammad	Goalgachh	Chopr a	897266232 2	326184249 379	26 32' 36.1'' N	88 11' 15.60'' E	NC- 1	0.3	2.2 5	13.6	12.6	13.1	9.8	33.7
42	Khotela Khatun	Sofiruddin	Goalgachh	Chopr a	811694263 7	668569211 372	26 32' 36.1'' N	88 11' 15.60'' E	NC- 1	0.2	1.5	14.6	12.3	13.5	9.8	37.2
43	Nazir	Nasiruddin	Goalgachh	Chopr a	963575434 1	985924071 066	26 32' 36.1'' N	88 11' 15.60'' E	NC- 1	0.4	3	14.8	12.6	13.7	9.8	39.8
44	Sultan	Md Jhalu	Goalgachh	Chopr a	800132964 6	600396905 229	26 32' 36.1" N	88 11' 15.60'' E	NC- 1	0.3	2.2 5	13.8	12.4	13.1	9.8	33.7

SI.	Farmers Name	Fathers Name	Village	Block	Mobile No.	Aadhar No.	Latitude	Longitude	Var.	Area	Seed		emo yie (q/ ha)		Yield of Local	% of
No.	r armers rrame	Tutile statile	- Timage	Diocik	iniobile ito:	, radiidi ito	2011000	zongituuc	l	(ha)	(Kg.)	н	L	Α	Check (q/ha)	
45	Baitun Nesha	Khairul Hoque	Goalgachh	Chopr a	993253894 0	615446030 600	26 32' 36.1'' N	88 11' 15.60'' E	NC- 1	0.2	1.5	13.9	12.1	13.0	9.8	32.7
46	Soleman	Kholel Mahammda	Goalgachh	Chopr a	900272012	277539390 003	26 32' 36.1'' N	88 11' 15.60'' E	NC- 1	0.2	1.5	13.9	12.3	13.1	9.8	33.7
47	Zabbar	Masiruddin	Goalgachh	Chopr a	993232848 5	256021211 727	26 32' 36.1" N	88 11' 15.60'' E	NC- 1	0.3	2.2 5	14.3	12.6	13.5	9.8	37.2
48	Mosiruddun	Thuru Box	Goalgachh	Chopr a	897268128 3	308592035 857	26 32' 36.1'' N	88 11' 15.60'' E	NC- 1	0.2	1.5	14.3	12.3	13.3	9.8	35.7
49	Chittya Ranjan Singha	Dukhia Singha	Kurigaon	Karan dighi	959362747 6	441105233 693	26 46' 38.51'' N	87 59' 00.62'' E	NC- 1	0.4	3	14.2	12.7	13.5	9.8	37.2
50	Dipen Singha	Dukhia Singha	Kurigaon	Karan dighi	964793738 2	718436874 390	26 46' 38.51'' N	87 59' 00.62'' E	NC- 1	0.2	1.5	13.6	12.3	13.0	9.8	32.1
51	Kamal Singha	Krishna Singha	Kurigaon	Karan dighi	900279485 8	325030308 586	26 46' 38.51'' N	87 59' 00.62'' E	NC- 1	0.3	2.2 5	14.2	12.2	13.2	9.8	34.7
52	Sadananda Mahato	Khitish Singha	Kuitor	Karan dighi	954767179 8		26 46' 38.51'' N	87 59' 00.62'' E	NC- 1	0.2	1.5	14.2	12.1	13.2	9.8	34.2
53	Paresh Mahato	Khitish Singha	Kuitor	Karan dighi	954767179 8		26 46' 38.51'' N	87 59' 00.62'' E	NC- 1	0.3	2.2 5	14.6	12.6	13.6	9.8	38.8
54	Balen Mahato	Dheren Singha	Kuitor	Karan dighi	843623170 7		26 46' 38.51'' N	87 59' 00.62'' E	NC- 1	0.2	1.5	14.5	12.3	13.4	9.8	36.7
55	Dhawal Singha	Vegel Singha	Kuitor	Karan dighi			26 46' 38.51'' N	87 59' 00.62'' E	NC- 1	0.2	1.5	13.8	12.4	13.1	9.8	33.7
56	Jubeda Bibi	Muklesur Rahaman	Machol	Karan dighi		488799112 940	26 46' 38.51'' N	87 59' 00.62'' E	NC- 1	0.1	0.7 5	14.3	12.5	13.4	9.8	36.7
57	Agathu Tirkey	Sunil Buskey	Altapur	Karan dighi	891855764 6	215733789 517	26 46' 38.51'' N	87 59' 00.62'' E	NC- 1	0.2	1.5	14.3	12.3	13.3	9.8	35.7
58	Dilip Singha	Dinesh Singha	Dukhivita	Karan dighi	629722557 8		26 46' 38.51'' N	87 59' 00.62'' E	NC- 1	0.2	1.5	14.2	12.6	13.4	9.8	36.7
59	Sambhu Singha	Nibaran Singha	Dukhivita	Karan dighi	629722557 8		26 46' 38.51'' N	87 59' 00.62'' E	NC- 1	0.3	2.2 5	14.2	12.2	13.2	9.8	34.7

SI.	Farmers Name	Fathers Name	Village	Block	Mobile No.	Aadhar No.	Latitude	Longitude	Var.	Area	Seed		emo yie (q/ ha)		Yield of Local	% of Increa
No.										(ha)	(Kg.)	Н	L	Α	Check (q/ha)	se
60	Sonaram Mahato	Deben Mahato	Kuitor	Karan dighi			26 46' 38.51'' N	87 59' 00.62'' E	NC- 1	0.2	1.5	14.2	12.1	13.2	9.8	34.2
61	Harinarayan Barman	Manandra Barman	Jharbari	Karan dighi	867082978 0	544941369 140	26 46' 38.51'' N	87 59' 00.62'' E	NC- 1	0.4	3	14.4	12.2	13.3	9.8	35.7
62	Motirul Hoque	Lofijuddin	Machol	Karan dighi			26 46' 38.51'' N	87 59' 00.62'' E	NC- 1	0.3	2.2 5	13.9	12	13.0	9.8	32.1
63	Purna Ch. Singha	Uyasu Singha	Satveti	Karan dighi	963512129 4		26 46' 38.51'' N	87 59' 00.62'' E	NC- 1	0.2	1.5	14	12.1	13.1	9.8	33.2
64	Kasi Singha	Gora Singha	Satveti	Karan dighi	676240201 8		26 46' 38.51'' N	87 59' 00.62'' E	NC- 1	0.2	1.5	14.5	12.6	13.6	9.8	38.3
65	Rahim Ali	Md. Jhalu	Machol	Karan dighi		686543203 975	26 46' 38.51'' N	87 59' 00.62'' E	NC- 1	0.2	1.5	14.2	12.3	13.3	9.8	35.2
66	Husen Ali	Boyara	Machol	Karan dighi	959313877 8	686543203 975	26 46' 38.51'' N	87 59' 00.62'' E	NC- 1	0.3	2.2 5	14.5	12.2	13.4	9.8	36.2
67	Koushik Lala	Shyam Chandra Lala	Machol	Karan dighi			26 46' 38.51'' N	87 59' 00.62'' E	NC- 1	0.2	1.5	13.8	12.4	13.1	9.8	33.7
68	Binandalla Singha	Sadagar Singha	Kuitor	Karan dighi		346307778 767	26 46' 38.51'' N	87 59' 00.62'' E	NC- 1	0.3	2.2 5	14.8	12.3	13.6	9.8	38.3
69	Aful Majid	Ashiruddin	Machol	Karan dighi		903998064 284	26 46' 38.51'' N	87 59' 00.62'' E	NC- 1	0.2	1.5	14.6	12.6	13.6	9.8	38.8
70	Tafanu Das	Bhabani Das	Machol	Karan dighi		410309007 062	26 46' 38.51'' N	87 59' 00.62'' E	NC- 1	0.3	2.2 5	14.5	12.4	13.5	9.8	37.2
71	Shanti Das	Sankar Das	Machol	Karan dighi		517311330 387	26 46' 38.51'' N	87 59' 00.62'' E	NC- 1	0.2	1.5	13.8	12.6	13.2	9.8	34.7
72	Satish Singha	Dhamu Singha	Machol	Karan dighi		789425491 036	26 46' 38.51'' N	87 59' 00.62'' E	NC- 1	0.2	1.5	14.1	12.3	13.2	9.8	34.7
73	Prabhu Singha	Panchanan Singha	Machol	Karan dighi	793461069 7		26 46' 38.51'' N	87 59' 00.62'' E	NC- 1	0.1	0.7 5	14.6	12.7	13.7	9.8	39.3
74	Dil Mahammad	Atabuddin	Machol	Karan dighi		417115826 216	26 46' 38.51" N	87 59' 00.62'' E	NC- 1	0.2	1.5	13.9	12.2	13.1	9.8	33.2

SI.	Farmers Name	Fathers Name	Village	Block	Mobile No.	Aadhar No.	Latitude	Longitude	Var.	Area	Seed		emo yie (q/ ha)		Yield of Local	% of Increa
No.										(ha)	(Kg.)	Н	L	Α	Check (q/ha)	se
75	Latika Singha	Premlal Singha	Machol	Karan dighi	793461069 7		26 46' 38.51'' N	87 59' 00.62'' E	NC- 1	0.2	1.5	14	12.6	13.3	9.8	35.7
76	Mukhlesur Rahaman	Abdul Motin	Mohanpur	Karan dighi		728546763 870	26 46' 38.51'' N	87 59' 00.62'' E	NC- 1	0.3	2.2 5	13.8	12.3	13.1	9.8	33.2
77	Satish Singha	Dinesh Singha	Machol	Karan dighi		789425491 636	26 46' 38.51'' N	87 59' 00.62'' E	NC- 1	0.2	1.5	13.9	12.2	13.1	9.8	33.2
78	Krishna Singha	Charaklal Singha	Charkadan gi	Karan dighi		323918457 638	26 46' 38.51'' N	87 59' 00.62'' E	NC- 1	0.4	3	13.9	12.1	13.0	9.8	32.7
79	Khirod Singha	Santalal Singha	Bihinagar	Karan dighi		716543909 239	26 46' 38.51'' N	87 59' 00.62'' E	NC- 1	0.2	1.5	14.4	12.7	13.6	9.8	38.3
80	Balen Singha	Dhiren Singha	Kuitor	Karan dighi	843623170 7		26 46' 38.51'' N	87 59' 00.62'' E	NC- 1	0.3	2.2	14.3	12.3	13.3	9.8	35.7
81	Ananda Oraw	Basi Orawn	Baspara	Karan dighi		368251459 477	26 46' 38.51'' N	87 59' 00.62'' E	NC- 1	0.2	1.5	14.2	12.2	13.2	9.8	34.7
82	Chandra Oraw	Suren Orawn	Baspara	Karan dighi		779067343 107	26 46' 38.51" N	87 59' 00.62'' E	NC- 1	0.2	1.5	14.6	12.3	13.5	9.8	37.2

## 3.3 Achievements on Training (Including the sponsored and FLD training programmes):

## A) Farmers and farm women (on campus):

	No of				No. of	Partic	ipants	5			C	d T-	4-1
Thematic Area	No. of Courses		Othe	r		SC			ST		Gra	and To	tai
	Courses	M	F	T	М	F	T	M	F	T	М	F	T
I. Crop Production													
Weed Management													
Resource													
Conservation													
Technologies													
Cropping Systems													
Crop Diversification													
Integrated Farming													
Water management													
Seed production													
Nursery management	1	3	0	3	1	0	1	11	0	11	15	0	15
Integrated Crop	4	26	6	32	70	14	84	13	5	18	109	25	134
Management													
Fodder production													
Production of organic													
inputs													
Others, (cultivation of													
crops )													
II. Horticulture													
a) Vegetable Crops													
Integrated nutrient													
management													
Water management													
Enterprise													
development													
Skill development													
Yield increment													
Production of low													
volume and high value													
crops													
Off-season vegetables													
Nursery raising	1	4	2	6	11	2	13	1	0	1	16	4	20
Export potential													
vegetables													
Grading and													
standardization													
Protective cultivation													
(Green Houses, Shade													
Net etc.)													
Others, if any													
(Cultivation of													
Vegetable)													
Cultivation of	2	20	9	29	0	9	9	0	2	2	20	20	40
Vegetable													
Micro nutrient	1	6	0	6	12	0	12	2	0	2	20	0	20

	N				No. of	Partic	ipants	<u> </u>					
Thematic Area	No. of		Othe			SC	•		ST		Gr	and To	ital
	Courses	М	F	Т	М	F	Т	М	F	Т	М	F	Т
deficiency													
Resource	1	6	0	6	3	0	3	6	11	17	15	11	26
Conservation													
Technologies													
Post harvest handling	1	6	1	7	14	0	14	0	0	0	20	1	21
Training and Pruning													
b) Fruits													
Layout and													
Management of													
Orchards													
Cultivation of Fruit	1	3	0	3	19	0	19	0	0	0	22	0	22
Management of young													
plants/orchards													
Rejuvenation of old													
orchards													
Export potential fruits													
Micro irrigation													
systems of orchards													
Plant propagation	1	0	0	0	0	0	0	12	13	25	12	13	25
techniques	_			_									
Others, if any													
Non conventional fruit	1	29	1	30	3	1	4	0	0	0	32	2	34
c) Ornamental Plants	_										- 52	_	<u> </u>
Nursery Management													
Management of													
potted plants													
Export potential of													
ornamental plants													
Propagation													
techniques of													
Ornamental Plants													
Others, if any													
Flower production and	1	2	0	2	18	0	18	0	0	0	20	0	20
management	_	_		_	10		10				20		
d) Plantation crops													
Production and													
Management	1	14	2	16	9	3	12	2	0	2	25	5	30
technology	_	<u> </u>		-0				_			23		
Processing and value													
addition													
Others, if any													
e) Tuber crops													
Production and													
Management													
technology													
Processing and value													
addition													
Others, if any			<u> </u>		<u> </u>	<u> </u>		<u> </u>	<u> </u>	<u> </u>	<u> </u>	ļ	

					No. of	Partic	cipants	<b>.</b>					
Thematic Area	No. of		Othe			SC			ST		Gr	and To	otal
	Courses	M	F	T	М	F	Т	М	F	Т	М	F	Т
f) Spices													
Production and													
Management													
technology													
Processing and value													
addition													
Others, if any													
g) Medicinal and													
Aromatic Plants													
Nursery management													
Production and													
management													
technology													
Post harvest													
technology and value													
addition													
Others, if any													
III. Soil Health and													
<b>Fertility Management</b>													
Soil fertility													
management	2	16	4	20	19	1	20	7	0	7	42	5	47
Soil and Water													
Conservation													
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													
Others, if any													
IV. Livestock													
Production and													
Management													
Dairy Management													
Poultry Management													
Piggery Management													
Rabbit Management													
Disease Management													
Feed management													
Production of quality													
animal products													
Others, if any Goat													
farming													
V. Home													
	<u> </u>		<u> </u>		<u> </u>	Ь	ļ		1	<u> </u>	<u> </u>	L	ļ

	No. of				No. of	Partic	ipants	5			<b>C</b> **	and To	
Thematic Area	Courses		Othe	r		SC			ST		Gr	and ic	rtai
	Courses	M	F	Т	M	F	Т	M	F	Т	M	F	Т
Science/Women													
empowerment													
Household food	6	13	13	26	12	67	79	3	18	21	28	98	126
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													
Enterprise													
development													
Value addition													
Income generation													
activities for													
empowerment of rural													
Women													
Location specific													
drudgery reduction													
technologies													
Rural Crafts													
Capacity building													
Women and child care													
Others, if any													
Vermicompost	1	5	8	13	2	6	8	0	5	5	7	19	26
production													
VI.Agril. Engineering								İ					
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													
macililery and	I				102	L	L	<u> </u>					<u> </u>

					No. of	Partic	ipants	<u> </u>					
Thematic Area	No. of		Othe			SC	•		ST		Gr	and To	otal
	Courses	М	F	Т	М	F	Т	М	F	Т	М	F	Т
implements													
Small scale processing													
and value addition													
Post Harvest													
Technology													
Others, if any													
VII. Plant Protection													
Integrated Pest													
Management	11	138	20	158	102	35	137	49	22	71	289	77	366
Integrated Disease	5	29	0	29	33	0	33	30	4	34	92	4	96
Management	3	23	U	23	33		33	30		34	32		30
Bio-control of pests													
and diseases													
Production of bio													
control agents and bio													
pesticides													
Others, if any													
Integrated Nutrient	3	13	2	15	19	7	26	17	0	17	49	9	58
Management													
Seed treatment of	2	11	0	11	21	0	21	26	2	28	58	2	60
different crops													
VIII. Fisheries									_				
Integrated fish farming	3	32	0	32	22	0	22	3	0	3	57	0	57
Carp breeding and													
hatchery management													
Carp fry and fingerling													
rearing Composite fish culture													
& fish disease	1	0	0	0	6	1	6	16	2	18	22	3	25
Fish feed preparation													
& its application to													
fish pond, like nursery,													
rearing & stocking													
pond													
Hatchery management													
and culture of													
freshwater prawn													
Breeding and culture													
of ornamental fishes		<u> </u>				<u> </u>							
Portable plastic carp													
hatchery													
Pen culture of fish and													
prawn													
Shrimp farming													
Edible oyster farming													
Pearl culture													
Fish processing and													
value addition													

	N C				No. of	Partic	ipants	5			Grand Total					
Thematic Area	No. of		Othe			SC	•		ST		Grand Total					
	Courses	М	F	T	М	F	Т	М	F	Т	М	F	T			
Others, if any																
Air breathing fish																
culture	2	0	0	0	20	0	20	21	0	21	41	0	41			
Common fish disease	1	2	0	2	8	1	9	1	0	1	11	1	12			
& their control																
Culture of indigenous	1	0	6	6	0	5	5	0	2	2	0	13	13			
fishes																
Fish rearing and	1	9	0	9	0	0	0	6	0	6	15	0	15			
management																
Residential training on	1	0	13	13	0	5	5	0	2	2	0	20	20			
different aspects of																
modern agriculture																
Leadership	1	7	0	7	8	0	8	1	0	1	16	0	16			
development																
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																
Others, if any																
X. Capacity Building																
and Group Dynamics																
Leadership																
development																
Group dynamics																
Formation and																
Management of SHGs  Mobilization of social																
INIODIIIZALIOTI OF SOCIAL		<u> </u>					<u> </u>				I					

	No. of				No. of	Partic	ipants	5			Grand Total				
Thematic Area	Courses	Other			SC				ST		Gi	anu ro	ıtaı		
		М	F	Т	М	F	Т	М	F	T	М	F	T		
capital															
Entrepreneurial															
development of															
farmers/youths															
WTO and IPR issues															
Others, if any															
XI Agro-forestry															
Production															
technologies															
Nursery management															
Integrated Farming															
Systems															
XII. Others (Pl.															
Specify)															
TOTAL	57	394	87	481	432	157	588	227	88	315	1053	332	1385		

## B) Rural Youth (on campus)

Thomatic Area	No of			N	o. of	Parti	icipan	its			Cus	and Ta	
Thematic Area	No. of	(	Othe	r		SC			ST		Gra	ind To	otai
	Courses	М	F	Т	М	F	Т	М	F	Т	М	F	Т
Mushroom Production													
Bee-keeping													
Integrated farming													
Seed production	2	22	3	25	16	1	17	0	0	0	38	4	42
Production of organic inputs													
Integrated Fish Farming	1	10	0	10	6	0	6	0	0	0	16	0	16
Fish breeding & nursery pond management	1	3	0	3	1	0	1	14	4	18	18	4	22
Fish rearing and	1	9	0	9	0	0	0	6	0	6	15	0	15
management													
Planting material production	1	1	0	1	1	1	2	10	12	22	12	13	25
Vermi-culture													
Sericulture													
Protected cultivation of vegetable crops													
Commercial fruit production													
Repair and maintenance of farm machinery and implements													
Nursery Management of Horticulture crops	1	0	0	0	4	8	12	0	3	3	4	11	15
Training and pruning of orchards													
Value addition	1	0	4	4	0	13	13	0	8	8	0	25	25

Thomatic Area	No of			N	o. of	Part	icipan	ts			C ==	and Ta	
Thematic Area	No. of Courses	(	Othe	r		SC			ST		Gra	and To	)tai
Production of quality animal products	Courses	M	F	Т	M	F	Т	M	F	Т	M	F	Т
Dairying													
Sheep and goat rearing													
Quail farming													
Piggery	2	14	10	24	16	2	18	4	4	8	34	16	50
Rabbit farming													
Poultry production													
Ornamental fisheries													
Enterprise development													
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													
Soil testing	1	1	5	6	12	3	15	1	0	1	14	8	22
Mushroom cultivation	3	8	4	12	16	22	38	4	11	15	28	37	65
Off season vegetable cultivation	1	5	0	5	14	0	14	1	0	1	20	0	20
TOTAL	15	73	26	99	86	50	136	40	42	82	199	118	31 7

# C) Extension Personnel (on campus):

Thematic Area	No. of Courses			C.	and Te	n+al							
		Other			SC			ST			Grand Total		
		М	F	Т	М	F	Т	М	F	Т	М	F	Т
Productivity enhancement in													
field crops													

	No. of			N	o. of	Partic	ipants	3			Grand Total			
Thematic Area	Courses	(	Othe	ŕ		SC			ST		Gi	and re	Jiai	
	Courses	М	F	T	М	F	T	М	F	Т	М	F	T	
Value addition														
Integrated Pest Management	2	20	0	20	10	0	10	4	0	4	34	0	34	
Integrated Nutrient														
management														
Rejuvenation of old orchards														
Protected cultivation														
technology														
Formation and Management of														
SHGs														
Group Dynamics and farmers	4	4	11	15	7	80	87	2	13	15	13	104	117	
organization	4	4	11	13	′	80	67		13	13	13	104	11/	
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	1	0	0	0	0	10	10	0	2	0	0	12	12	
Low cost and nutrient efficient														
diet designing														
Production and use of organic	1	1	17	18	0	3	3	0	0	0	1	20	21	
inputs														
Gender mainstreaming through	1	3	5	8	4	13	17	0	0	0	7	18	25	
SHGs														
Water quality management	1	3	0	3	19	0	19	0	0	0	22	0	22	
TOTAL	10	31	33	64	40	106	146	6	15	19	77	154	231	

# D) Farmers and farm women (off campus):

	No. of				Grand Total									
Thematic Area	Courses	Other			SC				ST		Grand Total			
		М	F	Т	М	F	Т	М	F	Т	М	F	T	
I. Crop Production														
Weed Management														
Resource														
Conservation														
Technologies														
Cropping Systems														
Crop Diversification														
Integrated Farming														
Water management														
Seed production	1	45	0	45	8	0	8	2	0	2	55	0	55	
Nursery														

	No. of				No. o	f Parti	cipant	s			6	I T	
Thematic Area	No. of Courses		Other			SC			ST		Gi	and To	otai
	Courses	M	F	Т	M	F	Т	М	F	Т	M	F	T
management													
Integrated Crop	12	74	20	94	170	69	239	50	54	104	294	153	447
Management													
Fodder production													
Production of													
organic inputs													
Others, (cultivation													
of crops )													
II. Horticulture													
a) Vegetable Crops													
Integrated nutrient													
management													
Water management													
Enterprise													
development													
Skill development													
Yield increment													
Production of low													
volume and high	1	0	0	0	18	0	18	17	0	17	35	0	35
value crops													
Off-season	1	15	18	33	0	0	0	0	0	0	15	18	33
vegetables													
Nursery raising													
Export potential													
vegetables													
Grading and													
standardization													
Protective cultivation													
(Green Houses,													
Shade Net etc.)													
Others, if any													
(Cultivation of													
Vegetable)													
Production and		40		40									
Management	2	13	0	13	37	9	46	0	0	0	50	9	59
technology													
Exotic vegetable	1	5	7	12	9	20	29	0	0	0	14	27	41
cultivation													
Cultivation of	2	0	0	0	18	13	31	16	10	26	34	23	57
vegetables													
Training and Pruning													
b) Fruits													
Layout and													
Management of								<u> </u>					

	No. of				No. o	f Parti	cipant	S				and T	
Thematic Area	Courses		Othe			SC			ST	ı	G	and To	
	Courses	M	F	Т	M	F	Т	M	F	Т	M	F	Т
Orchards													
Cultivation of Fruit	3	4	0	4	58	28	86	12	1	13	74	29	103
Management of				_		_							
young	1	9	0	9	15	8	23	0	0	0	24	8	32
plants/orchards													
Rejuvenation of old orchards													
Export potential													
fruits													
Micro irrigation													
systems of orchards													
Plant propagation													
techniques													
Others, if any													
Nursery	1	0	0	0	19	11	30	0	0	0	19	11	30
Management	_	_											
c) Ornamental Plants													
Nursery													
Management													
Management of													
potted plants													
Export potential of													
ornamental plants													
Propagation													
techniques of													
Ornamental Plants													
Others, if any													
d) Plantation crops													
Production and													
Management													
technology													
Processing and value													
addition													
Others, if any													
e) Tuber crops													
Production and													
Management													
technology													
Processing and value													
addition													
Others, if any													
f) Spices													
Production and	1	0	0	0	31	0	31	0	0	0	31	0	31
Management													

	No of				No. o	f Parti	cipant	:s				ood T	-4-1
Thematic Area	No. of Courses		Other			SC			ST	ı	GI	and To	otai
	Courses	M	F	T	M	F	Т	M	F	Т	M	F	Т
technology													
Processing and value													
addition													
Others, if any g) Medicinal and													
Aromatic Plants													
Nursery													
management													
Production and													
management													
technology													
Post harvest													
technology and value													
addition													
Others, if any													
III. Soil Health and													
Fertility													
Management													
Soil fertility													
management													
Soil and Water													
Conservation													
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													
Others, if any													
IV. Livestock													
Production and													
Management													
Dairy Management													
Poultry Management													
Pabbit Management													
Rabbit Management Disease													
Management													
ivialiagement	l .							<u> </u>					

	No. of				No. o	f Parti	cipant	S				T	
Thematic Area	No. of Courses		Other			SC			ST		GI	and To	otai
	Courses	М	F	Т	M	F	Т	М	F	Т	M	F	Т
Feed management													
Production of quality													
animal products													
Others, if any Goat													
farming													
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													
Enterprise													
development													
Value addition													
Income generation													
activities for													
empowerment of													
rural Women													
Location specific													
drudgery reduction													
technologies													
Rural Crafts													
Capacity building Women and child					-								
	1	0	2	2	0	3	3	0	14	14	0	19	19
Care :f any													
Others, if any			4.5	2.1	_	2.1	-		42	40			
Backyard Azolla	2	5	16	21	3 112	21	24	0	13	13	8	50	58

Thematic Area   Courses   Course   Co						No. o	f Parti	cipant	S					
Cultivation   Companies   Co	Thematic Area	No. of		Other	•			•		ST		Gı	and To	otal
Production of Organic Input Organic Input Organic Input 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 maintenance of farm machinery and distinct of the processing and value addition Post Harvest Technology VII. Plant Protection Integrated Pest Management  3		Courses	М	F	Т	М	F	Т	М	F	Т	M	F	Т
Organic Input  1	cultivation													
Organic Input 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 Others, if any VII. Plant Protection Integrated Disease Management Integrated Disease Management Bio-control of pests and diseases Production of bio control agents and bio pesticides Others, if any III. Fisheries Integrated fish farming Carp breeding and hatchery management	Production of	1		1	7	10	1.4	24	_	_	_	16	20	26
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 Others, if any VII. Plant Protection Integrated Disease Management Bio-control of pests and diseases Production of bio control agents and bio pesticides Others, if any Integrated Nutrient Management Compatibility of pest(ide) Carp breeding and hatchery Management Integrated fish farming Carp breeding and hatchery Management Integrated fish farming Carp breeding and hatchery management	Organic Input	1 1	О	1	,	10	14	24	0	) 5	)	10	20	30
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 Others, if any VII. Plant Protection Integrated Disease Management Bio-control of pests and diseases Production of bio control agents and bio pesticides Others, if any Integrated Nutrient Management Compatibility of pest(ide) Carp breeding and hatchery Management Integrated fish farming Carp breeding and hatchery Management Integrated fish farming Carp breeding and hatchery management	VI.Agril. Engineering													
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 Others, if any VII. Plant Protection Integrated Disease Management Bio-control of pests and diseases Production of bio control agents and bio pesticides Others, if any Integrated Nutrient Management Compatibility of pesticide VIII. Fisheries Integrated fish farming Carp breeding and hatchery management	Installation and													
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 Others, if any VII. Plant Protection Integrated Pest Management 3 30 0 30 0 0 0 32 10 42 62 10 72 Integrated Oisease Management Bio-control of pests and bio pesticides Others, if any Integrated Nutrient Management Compatibility of pesticide VIII. Fisheries Integrated fish farming Carp breeding and hatchery management Integrated fish farming Carp breeding and hatchery management  Technology  UII. Fisheries Integrated Nutrient Management Integrated Nutrient Management Integrated Routrient Management Management Integrated Routrient Management M	maintenance of													
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  Others, if any  VII. Plant Protection lintegrated Pest Management  Integrated Disease Management  Bio-control of pests and diseases  Production of bio control agents and bio pesticides  Others, if any  Integrated Nutrient Management  Compatibility of pestsicide  VIII. Fisheries  Integrated fish farming  Carp breeding and hatchery management  Integrated Integrated Rest Integrated Res	micro irrigation													
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 Others, if any VII. Plant Protection Integrated Disease Management Bio-control of pests and bio pesticides Production of bio control agents and bio pesticide Compatibility of pesticide VIII. Fisheries Integrated fish farming Carp breeding and hatchery management  Integrated fish farming Carp breeding and hatchery management  Integrated fish farming Carp breeding and hatchery management  Integrated fish farming	systems													
Production of small tools and implements Repair and maintenance of farm machinery and implements Small scale processing and value addition Post Harvest Technology Others, if any VII. Plant Protection Integrated Pest Management Bio-control of pests and diseases Production of bio control agents and bio pesticides Others, if any Integrated Nutrient Management Compatibility of pesticides Integrated fish farming Carp breeding and hatchery management  I	Use of Plastics in													
Production of small tools and implements Repair and maintenance of farm machinery and implements Small scale processing and value addition Post Harvest Technology Others, if any VII. Plant Protection Integrated Pest Management Bio-control of pests and diseases Production of bio control agents and bio pesticides Others, if any Integrated Nutrient Management Compatibility of pesticides Integrated fish farming Carp breeding and hatchery management  I	farming practices													
implements         Impleme	Production of small													
Repair and maintenance of farm machinery and implements Small scale processing and value addition Post Harvest Technology Others, if any VII. Plant Protection Integrated Pest Management Integrated Disease Management Bio-control of pests and bio pesticides Others, if any Integrated Nutrient Management  2 7 1 7 11 4 15 8 7 15 26 12 38 Compatibility of pesticide Carp breeding and hatchery management  Integrated fish farming Carp breeding and hatchery management  Integrated fish farming  Integrated Sisses Integrated Nutrient Integrated Fish farming Integrated Rish farming Integra	tools and													
maintenance of farm machinery and implements  Small scale processing and value addition  Post Harvest Technology  Others, if any  VII. Plant Protection  Integrated Pest Management  Bio-control of pests and bio pesticides  Others, if any  Integrated Nutrient Management  2 7 1 7 11 4 15 8 7 15 26 12 38  VIII. Fisheries  Integrated fish farming  Carp breeding and hatchery management	implements													
maintenance of farm machinery and implements  Small scale processing and value addition  Post Harvest Technology  Others, if any  VII. Plant Protection  Integrated Pest Management  Bio-control of pests and bio pesticides  Others, if any  Integrated Nutrient Management  2 7 1 7 11 4 15 8 7 15 26 12 38  VIII. Fisheries  Integrated fish farming  Carp breeding and hatchery management	Repair and													
Small scale processing and value addition         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4	maintenance of farm													
Small scale processing and value addition         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4	machinery and													
processing and value addition	implements													
Addition   Post Harvest   Technology   Post Harvest   Technology   Post Harvest	Small scale													
Post Harvest Technology Others, if any VII. Plant Protection Integrated Pest Management Integrated Disease Management Bio-control of pests and bio pesticides Others, if any  Integrated Nutrient Management  Integrated Nutrient Management  Integrated Nutrient Integrated Disease Integrated Disease Integrated Nutrient Integrated	processing and value													
Technology	addition													
Others, if any  VII. Plant Protection  Integrated Pest Management  Integrated Disease Management  Bio-control of pests and diseases  Production of bio control agents and bio pesticides  Others, if any  Integrated Nutrient Management  Compatibility of pesticide  VIII. Fisheries  Integrated fish farming  Carp breeding and hatchery management  3 30 0 30 0 0 0 0 32 10 42 62 10 72  3 45 83 0 0 0 0 38 45 83  O 0 0 0 38 45 83  O 0 0 0 38 45 83  O 0 0 0 0 38 45 83  O 0 0 0 0 38 45 83  O 0 0 0 0 25 12 37	Post Harvest													
Others, if any  VII. Plant Protection  Integrated Pest Management  Integrated Disease Management  Bio-control of pests and diseases  Production of bio control agents and bio pesticides  Others, if any  Integrated Nutrient Management  Compatibility of pesticide  VIII. Fisheries  Integrated fish farming  Carp breeding and hatchery management  3 30 0 30 0 0 0 0 32 10 42 62 10 72  3 45 83 0 0 0 0 38 45 83  O 0 0 0 38 45 83  O 0 0 0 38 45 83  O 0 0 0 0 38 45 83  O 0 0 0 0 38 45 83  O 0 0 0 0 25 12 37	Technology													
VII. Plant Protection         Integrated Pest Management         3         30         0         30         0         0         0         0         32         10         42         62         10         72           Integrated Disease Management         3         0         0         0         38         45         83         0         0         0         38         45         83           Management         3         0         0         0         38         45         83         0         0         0         38         45         83           Bio-control of pests and diseases         9         0         0         38         45         83         0         0         0         38         45         83           Production of bio control agents and bio pesticides         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         1         0         0         0         0         0         0         0         0         0         1         38         0         0														
Management         3         30         0         30         0         0         0         32         10         42         62         10         72           Integrated Disease Management         3         0         0         0         38         45         83         0         0         0         38         45         83           Bio-control of pests and diseases         9         0         0         38         45         83         0         0         0         38         45         83           Production of bio control agents and bio pesticides         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         1         4         0         4         21         12         25         0         0         0         25         12         37           VIII. Fisheries         1         4         0         4         21         12         25         0         0         0         25         12         37           VIII. Fisheries         1	VII. Plant Protection													
Management         3         30         0         30         0         0         0         32         10         42         62         10         72           Integrated Disease Management         3         0         0         0         38         45         83         0         0         0         38         45         83           Bio-control of pests and diseases         9         0         0         38         45         83         0         0         0         38         45         83           Production of bio control agents and bio pesticides         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         1         4         0         4         21         12         25         0         0         0         25         12         37           VIII. Fisheries         1         4         0         4         21         12         25         0         0         0         25         12         37           VIII. Fisheries         1	Integrated Pest						_							
Integrated Disease   3	Management	3	30	0	30	0	0	0	32	10	42	62	10	/2
Management Bio-control of pests and diseases  Production of bio control agents and bio pesticides Others, if any Integrated Nutrient Management  Compatibility of pesticide  VIII. Fisheries Integrated fish farming  Carp breeding and hatchery management  Manag			_		_		4-					20		
Bio-control of pests and diseases Production of bio control agents and bio pesticides Others, if any Integrated Nutrient Management Compatibility of pesticide VIII. Fisheries Integrated fish farming Carp breeding and hatchery management  Individual series is a simple of the control of the c	Management	3	U	0	U	38	45	83	0	0	0	38	45	83
and diseases  Production of bio control agents and bio pesticides  Others, if any  Integrated Nutrient Management  Compatibility of pesticide  VIII. Fisheries  Integrated fish farming  Carp breeding and hatchery management  New York of the series of the	Bio-control of pests													
control agents and bio pesticides  Others, if any  Integrated Nutrient Management  Compatibility of pesticide  VIII. Fisheries  Integrated fish farming  Carp breeding and hatchery management  Menagement  Description  Descripti	and diseases													
bio pesticides Others, if any Integrated Nutrient Management  Compatibility of pesticide  VIII. Fisheries Integrated fish farming  Carp breeding and hatchery management  Integrated Sutrieur	Production of bio													
bio pesticides Others, if any Integrated Nutrient Management  Compatibility of pesticide  VIII. Fisheries Integrated fish farming  Carp breeding and hatchery management  Integrated Sutrieur	control agents and													
Others, if any Integrated Nutrient Management  Compatibility of pesticide  VIII. Fisheries Integrated fish farming  Carp breeding and hatchery management  Others, if any  1	_													
Integrated Nutrient Management 2 7 1 7 11 4 15 8 7 15 26 12 38  Compatibility of pesticide 1 4 0 4 21 12 25 0 0 0 0 25 12 37  VIII. Fisheries Integrated fish farming Carp breeding and hatchery management Integrated Integ														
Management         2         7         1         7         11         4         13         8         7         13         26         12         38           Compatibility of pesticide         1         4         0         4         21         12         25         0         0         0         25         12         37           VIII. Fisheries         Integrated fish farming         5         5         6         6         6         6         6         7         13         26         12         38         37         37         37         37         37         37         37         37         37         37         37         37         37         37         37         37         37         37         37         37         37         37         37         37         37         37         37         37         37         37         37         37         37         37         37         37         37         37         37         37         37         37         37         37         37         37         37         37         37         37         37         37         37         37         37         3			_		_					_				
Compatibility of pesticide  1	Management	2	7	1	7	11	4	15	8	7	15	26	12	38
pesticide VIII. Fisheries Integrated fish farming Carp breeding and hatchery management			_				4.5		_				4-	
VIII. Fisheries  Integrated fish farming Carp breeding and hatchery management	pesticide	1	4	0	4	21	12	25	0	0	0	25	12	37
Integrated fish farming Carp breeding and hatchery management	VIII. Fisheries													
farming Carp breeding and hatchery management														
Carp breeding and hatchery management														
hatchery management														
management	hatchery													
	•													
	Carp fry and													

Course		No of				No. o	f Parti	cipant	S			C.,	o o ol T	
M	Thematic Area	No. of		Other			SC			ST		Gr	and 10	otai
Composite fish culture & fish disease   2   18   0   18   3   4   7   6   10   16   27   14   41		Courses	M	F	T	M	F	Т	M	F	Т	М	F	T
culture & fish disease         2         15         0         18         3         4         7         6         10         12         27         14         41           Fish feed preparation & kits application to fish pond, like nursery, rearing & stocking pond         18         3         4         7         6         10         27         14         41           Hatchery management and culture of freshwater prawn         8         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9         9														
culture & fish disease Fish feed preparation & its application to fish pond, like nursery, rearing & stocking pond 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 Others, if any Pond preparation and water quality management Culture of indigenous fishes Common fish disease & their control Monosex culture of Inapita at site Seed Production Bio-agents		2	18	0	18	3	4	7	6	10	16	27	14	41
& its application to fish pond, like nursery, rearing & stocking pond 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 Others, if any Pond preparation and water quality a 2 23 0 23 4 0 4 16 0 16 43 0 43 management Culture of indigenous fisheses & their control Monosex culture of I 17 0 17 1 0 1 2 0 2 2 20 0 20 IX. Production of Inputs at site Seed Production Bio-agents		_					·							
fish pond, like nursery, rearing & stocking pond 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 Others, if any Pond preparation and water quality management Culture of indigenous fishes Common fish disease & their control  Monosex culture of Inputs at site Seed Production Planting material production Bloagents	Fish feed preparation													
nursery, rearing & stocking pond 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 Others, if any Pond preparation and water quality 2 23 0 23 4 0 4 16 0 16 43 0 43 management Culture of indigenous fishes Common fish disease & their control  Monosex culture of Inapia IX. Production of Inputs at site Seed Production Planting material production Bio-agents														
Stocking pond 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 Others, if any Pond preparation and water quality 2 23 0 23 4 0 4 16 0 16 43 0 43 management Culture of indigenous 1 4 0 4 6 0 6 10 0 10 20 0 20 Common fish disease & their control Monosex culture of Indigenous 1 17 0 17 1 0 1 2 0 2 20 0 20 Monosex culture of Indigenous 1 17 0 25 7 0 7 3 0 3 35 0 35 IX. Production of Inputs at site Seed Production Bio-agents	· ·													
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 Others, if any Pond preparation and water quality Pond preparation and water quality Culture of indigenous fishes  1	·													
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  Others, if any  Pond preparation and water quality 2 23 0 23 4 0 4 16 0 16 43 0 43 management  Culture of indigenous 1 4 0 4 6 0 6 0 6 10 0 10 20 0 20  Common fish disease & their control  Monosex culture of Tilapia  IX. Production of Inputs at site  Seed Production  Bio-agents														
culture of freshwater prawn         Breeding and culture of ornamental fishes	•													
prawn         Breeding and culture of ornamental fishes         Breeding and culture of sish and prawn shripped family and prawn shripped family fam	_													
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 Others, if any Pond preparation and water quality amanagement Culture of indigenous fishes Common fish disease & their control Monosex culture of Injust at site Seed Production Planting material production Bio-agents														
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  Others, if any  Pond preparation and water quality management  Culture of indigenous fishes  Common fish disease & their control  Monosex culture of indigenous fishes  I 17 0 17 1 0 1 2 0 2 20 0 20  Monosex culture of indigenous fishes  IX. Production of Inputs at site  Seed Production  Planting material production  Bio-agents	prawn													
Portable plastic carp hatchery  Pen culture of fish and prawn  Shrimp farming  Edible oyster farming  Pearl culture  Fish processing and value addition  Others, if any  Pond preparation and water quality 2 23 0 23 4 0 4 16 0 16 43 0 43	_													
hatchery         Pen culture of fish and prawn         Image: square of fish and prawn														
Pen culture of fish and prawn  Shrimp farming  Edible oyster farming  Pearl culture  Fish processing and value addition  Others, if any  Pond preparation and water quality 2 23 0 23 4 0 4 16 0 16 43 0 43 management  Culture of indigenous fishes  Common fish disease & their control  Monosex culture of Indigenous Fishes  I 17 0 17 1 0 1 2 0 2 20 0 20  Monosex culture of Indigenous Fishes  II. Production of Inputs at site  Seed Production  Planting material production  Bio-agents														
and prawn         Image: square s	· · · · · · · · · · · · · · · · · · ·													
Shrimp farming         Edible oyster farming         Image: Company of the production of linguts at site         Image: Company of the production of linguts at site         Image: Company of the production of linguts at site         Image: Company of the production of linguts at site         Image: Company of the production of linguts at site         Image: Company of the production of linguts at site         Image: Company of the production of linguts at site         Image: Company of the production of linguts at site         Image: Company of the production of linguts at site         Image: Company of the production of linguts at site         Image: Company of the production of linguts at site         Image: Company of the production of linguts at site         Image: Company of the production of linguts at site         Image: Company of the production of linguts at site         Image: Company of the production of linguts at site         Image: Company of the production of linguts at site         Image: Company of the production of linguts at site         Image: Company of the production of linguts at site         Image: Company of the production of linguts at site         Image: Company of the production of linguts at site         Image: Company of the production of linguts at site         Image: Company of the production of linguts at site         Image: Company of the production of linguts at site         Image: Company of the production of linguts at site         Image: Company of the production of linguts at site         Image: Company of the production of linguts at site         Image: Company of the production of linguts at site         Image: Company of the production of linguts at site         Image: Company of th														
Edible oyster farming														
Pearl culture         Image: culture of indigenous fishes         Image: culture of indigenous fishes         Image: culture of indigenous fishes         Image: culture of indigenous final fishes         Image: culture of indigenous fishes         Image: culture of indigen														
Fish processing and value addition  Others, if any  Pond preparation and water quality 2 23 0 23 4 0 4 16 0 16 43 0 43 management  Culture of indigenous fishes  Common fish disease & their control  Monosex culture of Tilapia  IX. Production of Inputs at site  Seed Production  Bio-agents														
value addition         Image: Common fish disease at their control         1         4         0         25         7         0         7         3         0         3         35         0         35           IX. Production of Inputs at site Seed Production         Image: Common fish disease and the site of the														
Others, if any         Description														
Pond preparation and water quality management         2         23         0         23         4         0         4         16         0         16         43         0         43           Culture of indigenous fishes         1         4         0         4         6         0         6         10         0         10         20         0         20           Common fish disease & their control         1         17         0         17         1         0         1         2         0         2         20         0         20           Monosex culture of Tilapia         2         25         0         25         7         0         7         3         0         3         35         0         35           IX. Production of Inputs at site         5         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         35         0         35         0         35         0         35         0         0         0         0         0         0         0         <														
and water quality management         2         23         0         23         4         0         4         16         0         16         43         0         43           Culture of indigenous fishes         1         4         0         4         6         0         6         10         0         10         20         0         20           Common fish disease & their control         1         17         0         17         1         0         1         2         0         2         20         0         20           Monosex culture of Tilapia         2         25         0         25         7         0         7         3         0         3         35         0         35           IX. Production of Inputs at site         5         0         0         0         0         0         0         0         0         0         0         0         0         35         0         35         0         35         0         35         0         35         0         35         0         35         0         35         0         35         0         35         0         35         0         35         0	Others, if any													
management         Image: Culture of indigenous fishes         Image: Culture of indigenous fishe	Pond preparation													
Culture of indigenous fishes         1         4         0         4         6         0         6         10         0         10         20         0         20           Common fish disease & their control         1         17         0         17         1         0         1         2         0         2         20         0         20           Monosex culture of Tilapia         2         25         0         25         7         0         7         3         0         3         35         0         35           IX. Production of Inputs at site         Seed Production         0         0         0         0         0         0         0         0         0         0         0         35         0         35         0         35         0         35         0         35         0         35         0         35         0         35         0         35         0         35         0         35         0         35         0         35         0         35         0         35         0         35         0         35         0         35         0         35         0         35         0 <t< td=""><td>and water quality</td><td>2</td><td>23</td><td>0</td><td>23</td><td>4</td><td>0</td><td>4</td><td>16</td><td>0</td><td>16</td><td>43</td><td>0</td><td>43</td></t<>	and water quality	2	23	0	23	4	0	4	16	0	16	43	0	43
fishes  Common fish disease & their control  Monosex culture of Tilapia  IX. Production of Inputs at site  Seed Production  Planting material production  Bio-agents	management													
Common fish disease & their control	Culture of indigenous	1	4	0	4	6	0	6	10	0	10	20	0	20
& their control       1       17       0       17       1       0       1       2       0       2       20       0       20         Monosex culture of Tilapia       2       25       0       25       7       0       7       3       0       3       35       0       35         IX. Production of Inputs at site       Seed Production       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9 <t< td=""><td>fishes</td><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td><td>10</td><td></td><td>10</td><td>20</td><td>Ů</td><td>20</td></t<>	fishes	1							10		10	20	Ů	20
Monosex culture of Tilapia  IX. Production of Inputs at site  Seed Production Planting material production Bio-agents	Common fish disease	1	17	١	17	1	0	1	2	_	2	20	0	20
Tilapia         2         25         0         25         7         0         7         3         0         3         35         0         35           IX. Production of Inputs at site         Seed Production         Image: Continuous of the production of the	& their control	1	1,		17	_	- O	_				20	U	20
Tilapia  IX. Production of Inputs at site  Seed Production Planting material production Bio-agents	Monosex culture of	2	25	١	25	7	0	7	2	_	2	35	0	35
Inputs at site  Seed Production  Planting material production  Bio-agents	Tilapia	2	23	U	23	,	U	,	3	0	3	33	U	33
Seed Production  Planting material production  Bio-agents	IX. Production of													
Planting material production Bio-agents	Inputs at site													
production Bio-agents	Seed Production													
Bio-agents Bio-agents	Planting material													
	production													
	Bio-agents													
·	production													
Bio-pesticides	Bio-pesticides													
production														
Bio-fertilizer	Bio-fertilizer													
production	production													

	No. of	of No. of Participants							G.	and T	otal		
Thematic Area	Courses		Othe			SC			ST		Gi		Ulai
	Courses	M	F	Т	М	F	Т	М	F	Т	M	F	Т
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													
Others, if any													
X. Capacity Building													
and Group Dynamics													
Leadership													
development													
Group dynamics													
Formation and													
Management of													
SHGs													
Mobilization of social													
capital													
Entrepreneurial													
development of													
farmers/youths													
WTO and IPR issues													
Others, if any													
XI Agro-forestry													
Production													
technologies													
Nursery													
management													
Integrated Farming													
Systems													
XII. Others (Pl.													
Specify)													
TOTAL	47	304	65	368	487	261	740	174	124	298	965	460	1425

## E) RURAL YOUTH (Off Campus):

Thematic Area	No. of	No. of Participants	<b>Grand Total</b>
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	Courses		Oth	er		SC			ST				
		М	F	Т	М	F	Т	М	F	Т	M	F	Т
Mushroom Production													
Bee-keeping													
Integrated farming													
Seed production													
Production of organic													
inputs													
Integrated Farming													
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													
Production of quality													
animal products													
Dairying													
Sheep and goat													
rearing													
Quail farming													
Piggery													
Rabbit farming													
Poultry production													
Ornamental fisheries													
Para vets													
Para extension													
workers					1								
Composite fish culture					1								
Freshwater prawn													
culture					1								
Shrimp farming					1								
Pearl culture					1								
Cold water fisheries					1								
Fish harvest and													
processing technology					1	<u> </u>	L			<u> </u>		ļ	

	No of			No.	of P	artic	ipan	ts			<u> </u>	and 1	rotol .
Thematic Area	No. of		Othe	er		SC			ST		G	anu	lotai
	Courses	М	F	T	М	F	Т	М	F	Т	М	F	Т
Fry and fingerling													
rearing													
Small scale processing													
Post Harvest													
Technology													
Tailoring and Stitching													
Rural Crafts													
Others, if any													
TOTAL			•										

# F) Extension Personnel (Off Campus):

	No.			No.	of Pa	rtici	pants	;			C.	d T	-4-1
Thematic Area	of		Othe	r		SC			ST		Gr	and To	otai
mematic Area	Cours es	М	F	т	М	F	Т	М	F	Т	М	F	Т
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	1	0	0	0	5	28	33	0	0	0	5	28	33

	No.			No.	of Pa	rtici	oants	3			C ==	T	-t-1
Thematic Area	of		Othe	r		SC			ST		Gra	and To	Jlai
mematic Area	Cours es	М	F	Т	М	F	Т	М	F	Т	М	F	Т
through SHGs													
Crop intensification													
TOTAL	1	0	0	0	5	28	33	0	0	0	5	28	33

# G) Consolidated table (ON and OFF Campus):

#### i. Farmers & Farm Women:

No.			ſ	No. of	Partic	ipants	;			C	al T	-4-1
of		Othe	r		SC			ST		Gra	ina i	otai
Cou rses	М	F	Т	М	F	Т	М	F	Т	М	F	т
1	45	0	45	8	0	8	2	0	2	55	0	55
1	3	0	3	1	0	1	11	0	11	15	0	15
											17	
16	100	26	126	240	83	323	63	59	122	403	8	581
18	148	26	174	249	83	332	76	59	135	473	17 8	651
1	0	0	0	10	0	10	17	0	17	35	0	35
1	U	U	U	10	U	10	1/	U	1/	33		33
1	15	18	33	0	0	0	0	0	0	15	18	33
1	4	2	6	11	2	13	1	0	1	16	4	20
	1 1 16 18	of Cou M M	of Courses         M         F           m         I           m         I           m         I           m         I           m         I           m         I           m         I           m         I           m         I           m         I           m         I           m         I           m         I           m         I           m         I           m         I           m         I           m         I           m         I           m         I           m         I           m         I           m         I           m         I           m         I           m         I           m         I           m         I           m         I           m         I           m         I           m         I           m         I           m         I	Of Courses         M         F         T           Image: Course of the Course o	Of Courses         M         F         T         M           Image: Course of the Cou	Of Courses         M         F         T         M         F           I         I         I         I         I         I           I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I	Of Courses         M         F         T         M         F         T           Image:	Courses         M         F         T         M         F         T         M           1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1 </td <td>Of Courses         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         T         T         T         T         T</td> <td>Of Courses         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T</td> <td>Of Courses         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T</td> <td>Of Courses   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   T   M   F   T   T   T   T   T   T   T   T   T</td>	Of Courses         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         T         T         T         T         T	Of Courses         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T	Of Courses         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T         M         F         T	Of Courses   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   M   F   T   T   M   F   T   T   T   T   T   T   T   T   T

	No.			1	No. of	Partic	ipants	<u> </u>					
Thematic Area	of		Othe			SC	•		ST		Gra	nd T	otal
mematic Area	Cou rses	М	F	Т	М	F	т	М	F	Т	М	F	т
Export potential vegetables													
Grading and standardization													
Protective cultivation													
(Green Houses, Shade Net													
etc.)													
Others, if any													
Cultivation of Vegetable	4	20	9	29	18	22	40	16	12	28	54	43	97
Resource Conservation	1	6	0	6	3	0	3	6	11	17	15	11	26
Technologies													
Post harvest handling	1	6	1	7	14	0	14	0	0	0	20	1	21
Micro nutrient deficiency	1	6	0	6	12	0	12	2	0	2	20	0	20
Production and	2	13	0	13	37	9	46	0	0	0	50	9	59
Management technology				40			20				1.		14
Exotic vegetable cultivation	1	5	7	12	9	20	29	0	0	0	14	27	41
TOTAL	13	75	37	112	122	53	175	42	23	65	239	11 3	352
b) Fruits													
Training and Pruning													
Layout and Management of													
Orchards													
Cultivation of Fruit	4	7	0	7	77	28	105	12	1	13	96	29	125
Management of young plants/orchards	1	9	0	9	15	8	23	0	0	0	24	8	32
Rejuvenation of old													
orchards													
Export potential fruits													
Micro irrigation systems of													
orchards													
Plant propagation	1	0	0	0	0	0	0	12	13	25	12	13	25
techniques													
Others, if any													
Non conventional fruit	1	29	1	30	3	1	4	0	0	0	32	2	34
Nursery Management	1	0	0	0	19	11	30	0	0	0	19	11	30
TOTAL	8	45	1	46	114	48	162	24	14	38	183	63	246
c) Ornamental Plants													
Nursery Management													
Management of potted													
plants													
Export potential of													
ornamental plants													
Propagation techniques of													
Ornamental Plants													
Others, if any	1	2	0	2	10	0	10	0	0		20	0	20
Flower production and	1	2	0	2	18	0	18	0	0	0	20	0	20

	No.				No. of	Partic	ipants	5					
Thematic Area	of		Othe			SC			ST		Gra	nd T	otal
Thematic Area	Cou rses	М	F	т	М	F	т	М	F	т	М	F	т
management													
TOTAL	1	2	0	2	18	0	18	0	0	0	20	0	20
d) Plantation crops													
Production and	1	14	2	16	9	3	12	2	0	2	25	5	30
Management technology													
Processing and value													
addition													
Others, if any	_		_			_			_				
TOTAL	1	14	2	16	9	3	12	2	0	2	25	5	30
e) Tuber crops													
Production and													
Management technology													
Processing and value													
addition													
Others, if any													
TOTAL f) Spices													
f) Spices Production and	1	0	0	0	31	0	31	0	0	0	31	0	31
Management technology	_						31						
Processing and value													
addition													
Others, if any													
TOTAL	1	0	0	0	31	0	31	0	0	0	31	0	31
g) Medicinal and Aromatic													
Plants													
Nursery management													
Production and													
management technology													
Post harvest technology and													
value addition													
Others, if any													
TOTAL													
III. Soil Health and Fertility													
Management													
Soil fertility management	2	16	4	20	19	1	20	7	0	7	42	5	47
Soil and Water Conservation													
Integrated Nutrient													
Management													
Production and use of													
organic inputs													
Management of Problematic soils													
Micro nutrient deficiency in													

	No.			ı	No. of	Partic	ipants	5					
Thematic Area	of		Other	•		SC			ST		Gra	nd T	otai
mematic Area	Cou rses	М	F	т	М	F	Т	М	F	Т	М	F	Т
crops													
Nutrient Use Efficiency													
Soil and Water Testing													
Others, if any													
TOTAL	2	16	4	20	19	1	20	7	0	7	42	5	47
IV. Livestock Production													
and Management													
Dairy Management													
Poultry Management													
Piggery Management													
Rabbit Management													
Disease Management													
Feed management													
Production of quality animal													
products													
Others, if any (Goat farming)													
TOTAL													
V. Home Science/Women													
empowerment													
Household food security by kitchen gardening and	6	13	13	26	12	67	79	3	18	21	28	98	126
nutrition gardening		13	13	20	12	07	73	3	10	21	20	96	120
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													
Enterprise development													
Value addition													
Income generation activities													
for empowerment of rural													
Women													
Location specific drudgery													
reduction technologies													
Rural Crafts													
Capacity building		_				_	_	_				4.5	1.5
Women and child care	1	0	2	2	0	3	3	0	14	14	0	19	19

	No.			ſ	No. of	Partic	ipants	5			Gra	and T	otal
Thematic Area	of		Othe	r		SC			ST	ı	Gra	ina i	Jlai
	Courses	М	F	Т	М	F	т	М	F	Т	М	F	Т
Others, if any													
Vermicompost production	1	5	8	13	2	6	8	0	5	5	7	19	26
Production of Organic Input	1	6	1	7	10	14	24	0	5	5	16	20	36
Backyard Azolla cultivation	2	5	16	21	3	21	24	0	13	13	8	50	58
TOTAL	11	29	40	69	27	111	138	3	55	58	59	20 6	265
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													
Others, if any													
TOTAL													
VII. Plant Protection													
Integrated Pest	14	168	20	188	102	35	137	8	32	113	351	87	43
Management	0	20	_	20	71	45	116	1	4	24	120	40	170
Integrated Disease	8	29	0	29	/1	45	116	30	4	34	130	49	179
Management  Dia control of posts and													
Bio-control of pests and diseases													
Production of bio control													
agents and bio pesticides													
Others, if any													
Integrated Nutrient								2					
Management	5	20	3	22	30	11	41	5	7	32	75	21	96
Seed treatment of different													
crops	2	11	0	11	21	0	21	26	2	28	58	2	60
Compatibility of pesticide	1	4	0	4	21	12	25	0	0	0	25	12	37
TOTAL	30	232	23	255	245	103	348	162	45	207	639	171	810
VIII. Fisheries													
Integrated fish farming	3	32	0	32	22	0	22	3	0	3	57	0	57
Carp breeding and hatchery													
management													
Carp fry and fingerling													
rearing													

	No.			ſ	No. of	Partic	ipants	;			6	Т	
Thematic Area	of		Othe	r		SC	•		ST		Gra	nd T	otal
mematic Area	Cou rses	М	F	Т	М	F	т	М	F	Т	М	F	т
Composite fish culture &	3	18	0	18	9	5	13	22	12	34	49	17	66
fish disease	3	10	U	10	9	5	13	22	12	34	49	1/	00
Fish feed preparation & its													
application to fish pond, like													
nursery, rearing & stocking													
pond													
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													
Others, if any													
Leadership development	1	7	0	7	8	0	8	1	0	1	16	0	16
Air breathing fish culture	2	0	0	0	20	0	20	21	0	21	41	0	41
Common fish disease &													
their control	2	19	0	19	9	1	10	3	0	3	31	1	32
Culture of indigenous fishes	2	4	6	10	6	5	11	10	2	12	20	13	33
Fish rearing and	1	9	0	9	0	0	0	6	0	6	15	0	15
management													
Residential training on	1	0	13	13	0	5	5	0	2	2	0	20	20
different aspects of modern													
agriculture													
Pond preparation and water	2	23	0	23	4	0	4	16	0	16	43	0	43
quality management			Ů		-	Ů							
Monosex culture of Tilapia	2	25	0	25	7	0	7	3	0	3	35	0	35
TOTAL	19	137	19	156	85	16	100	85	16	101	307	51	358
IX. Production of Inputs at													
site													
Seed Production													<u> </u>
Planting material production													<u> </u>
Bio-agents production													
Bio-pesticides production													
Bio-fertilizer production													
Vermi-compost production													
Organic manures production													

	No.			1	No. of	Partic	ipants	5			6	al T	
Thematic Area	of		Othe	٢		SC			ST	1	Gra	nd T	otai
mematic Area	Cou rses	М	F	T	М	F	т	М	F	Т	М	F	Т
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													
Others, if any													
TOTAL													
X. Capacity Building and													
Group Dynamics													
Leadership development													
Group dynamics													
Formation and													
Management of SHGs													
Mobilization of social capital													
Entrepreneurial													
development of													
farmers/youths													
WTO and IPR issues													
Others, if any													
TOTAL													
XI Agro-forestry													
Production technologies													
Nursery management													
Integrated Farming Systems													
TOTAL													
XII. Others (Pl. specify)													
TOTAL													

# ii. RURAL YOUTH (On and Off Campus):

	No. of			ſ	No. of	Partio	ipants				-	irand T	otal
Thematic Area	Courses		Othe	r		SC			ST			iranu i	Otal
	Courses	М	F	T	М	F	T	М	F	T	М	F	T
Mushroom													
Production													
Bee-keeping													
Integrated													
farming													
Seed production	2	22	3	25	16	1	17	0	0	0	38	4	42
Production of													
organic inputs													

	No. of			[	No. of	Partic	ipants					Grand T	otal
Thematic Area	Courses		Othe			SC			ST	1			
	Courses	M	F	Т	M	F	Т	М	F	Т	М	F	Т
Integrated Fish	1	10	0	10	6	0	6	0	0	0	16	0	16
Farming	_												
Fish breeding &													
nursery pond	1	3	0	3	1	0	1	14	4	18	18	4	22
management													
Fish rearing and	1	9	0	9	0	0	0	6	0	6	15	0	15
management													
Vermi-culture													
Sericulture													
Protected													
cultivation of													
vegetable crops													
Commercial fruit													
production													
Repair and													
maintenance of													
farm machinery													
and implements													
Nursery													
Management of	1	0	0	0	4	8	12	0	3	3	4	11	15
Horticulture	1	U	0	U	4	0	12	0	3	3	4	11	15
crops													
Training and													
pruning of													
orchards													
Value addition	1	0	4	4	0	13	13	0	8	8	0	25	25
Production of													
quality animal													
products													
Dairying													
Sheep and goat													
rearing													
Quail farming													
Piggery	2	14	10	24	16	2	18	4	4	8	34	16	50
Rabbit farming													
Poultry													
production													
Ornamental													
fisheries													
Para vets													
Para extension													
workers													
Composite fish													
culture													
cartaic	<u> </u>							<u> </u>		<u>l</u>			

	No. of				No. of	Partio	cipants						-+-!
Thematic Area	No. of Courses		Othe	r		SC			ST		٠	Grand T	otai
	Courses	М	F	Т	M	F	Т	М	F	Т	М	F	T
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													
Enterprise													
development													
Others if any													
(ICT application													
in agriculture)													
Income													
generation													
through	3	8	4	12	16	22	38	4	11	15	28	37	65
Mushroom													
cultivation													
Off season													
vegetable	1	5	0	5	14	0	14	1	0	1	20	0	20
cultivation													
Planting material	1	1	0	1	1	1	2	10	12	22	12	13	25
production	1	1	U			1		10	12		12	13	
Soil sample	1	1	5	6	12	3	15	1	0	1	1/	8	22
collected	1	1	3	0	12	3	12	_ <u>_</u>	U	1	14	٥	22
TOTAL	15	73	26	99	86	50	136	40	42	82	199	118	317

# iii. Extension Personnel (On and Off Campus):

	No of			ı	No. of	Partic	ipants	5			C.	and To	otal
Thematic Area	No. of		Othe	r		SC			ST		Gi	anu re	Jlai
	Courses	М	F	Т	М	F	Т	М	F	Т	М	F	Т
Productivity													
enhancement in field													
crops													

	No. of			Г	No. of	Partic	ipants	5			<u> </u>	and To	.+
Thematic Area	Courses		Other			SC			ST		GI	and 10	otai
	Courses	М	F	Т	M	F	Т	М	F	Т	М	F	T
Integrated Pest	2	20	0	20	10	0	10	4	0	4	34	0	34
Management		20		20	10		10				37		5
Integrated Nutrient													
management													
Rejuvenation of old													
orchards													
Value addition													
Protected cultivation													
technology													
Formation and													
Management of SHGs													
Group Dynamics and	4	4	11	15	7	80	87	2	13	15	13	104	117
farmers organization	4	4	11	13	,	80	67	2	13	13	13	104	117
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	1	0	0	0	0	10	10	0	2	0	0	12	12
Low cost and nutrient													
efficient diet designing													
Production and use of	_												
organic inputs	1	1	17	18	0	3	3	0	0	0	1	20	21
Gender mainstreaming	_	_	_	_	_			_	-	_			
through SHGs	2	3	5	8	9	41	50	0	0	0	12	46	58
Crop intensification													
Others if any													
Water quality	1	3	0	3	19	0	19	0	0	0	22	0	22
management													
TOTAL	11	31	33	64	45	134	179	6	15	19	82	182	264

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

Di sc ip li	Clie ntel	Title of the training programme	Dur atio n in	Venu e (Off / On Camp	N	lumber articipar	of	_	mber of SC	/ST
n e	e		days	us)	М	F	т	М	F	Т
	PF	Scientific management of tuber crops	3	Off	26	2	28	22	2	24
	PF	Management Practices of Coconut & Arecanut	3	On	25	5	30	11	3	14
	PF	Management of fruit Orchard	3	Off	24	8	32	15	8	23
	PF	Plant propagation technique of fruit crops	3	On	12	13	25	12	13	25
	PF	Scientific management practices of Off-season vegetables	3	Off	15	18	33	0	0	0
<u>r</u> e	PF	Better spacement for higher profitability in horticulture	3	On	15	11	26	9	11	20
Horticulture	PF	More profit with high value crops	3	Off	35	0	35	35	0	35
Hor	PF	Nursery management for healthy seedling	3	Off	19	11	30	19	11	30
	PF	Nursery management for healthy seedling	3	On	16	4	20	12	2	14
	PF	Scientific management of non- conventional fruit	3	ON	32	2	34	3	1	4
	PF	Post harvest handling of vegetables	3	On	20	1	21	14	0	14
	PF	Scientific management of non- conventional fruit	3	OFF	14	27	41	9	20	29
	PF	Scientific Management of winter Vegetable	3	On	20	0	20	0	0	0
	PF	Scientific Management of winter Vegetable	3	Off	14	13	27	14	13	27
	PF	Improved cultivation technique of Papaya	3	OFF	34	8	42	34	8	42
	PF	Disorder management of vegetables	3	On	20	0	20	14	0	14
	PF	Improved cultivation technique on chilli	3	Off	24	7	31	15	7	22
	PF	More income through Spice cultiviation	3	Off	31	0	31	31	0	31
	PF	More income through Guava cultiviation	3	Off	18	14	32	18	14	32
	PF	Pine apple cultivation	2	Off	22	7	29	18	7	25
	PF	Summer Vegetable cultivation	2	Off	20	10	30	20	10	30

Di sc ip li	Clie ntel e	Title of the training programme	Dur atio n in	Venu e (Off / On Camp		lumber articipar		Nu	mber of SC	/ST
n e	•		days	us)	М	F	Т	М	F	Т
	PF	Scientific management practices of watermelon	3	On	0	20	20	0	11	11
	PF	Scientific management of flower crops	2	On	20	0	20	18	0	18
	PF	Integrated Disease Management of Jute	3	On	17	0	17	11	0	11
	PF	Improve package & Practice of Groundnut	1	Off	15	5	20	9	4	13
	PF	Integrated Disease Management of Groundnut	1	Off	8	25	33	8	25	33
	PF	Seed Treatment of different cropes	3	On	18	2	20	17	2	19
	PF	Integrated Pest Management of Kharif Rice	2	Off	30	0	30	0	0	0
	PF	Seed Treatment of different cropes	1	On	40	0	40	30	0	30
	PF	Integrated Disease Management of Kharif Rice	2	On	16	4	20	15	4	19
u.	PF	Integrated Pest Management of Kharif Rice	1	On	21	4	25	16	4	20
nt Protection	PF	Integrated Pest & Disease Management of Paddy	1	On	13	12	25	13	12	25
Plant P	PF	Interaction & Production Practice of Pulse crops	1	On	32	7	39	28	5	33
_	PF	Improvement Management Practice of Pulse Crop (Blacgram)	1	Off	31	15	46	27	11	38
	PF	Improved package and practices for Pulse Production of Blackgram Production (CFLD)	1	On	16	5	21	10	4	14
	PF	Judicial Nitrogen Management of rice using LCC	2	On	18	4	22	17	3	20
	PF	Integrated Nutrient and Weed Management for higher producitivity of Kharif rice	2	Off	40	1	41	37	1	38
	PF	Improved Pulse Production on Blackgram	1	OFF	55	0	55	21	12	33
	PF	Compatibility of pestisides	2	Off	25	12	37	21	12	33

Di sc p li	Clie ntel	Title of the training programme	Dur atio n in	Venu e (Off / On		lumber articipai		Nu	mber of SC	:/ST
n e	PF PF		days	Camp us)	М	F	Т	М	F	Т
	PF	Integrated Soil Health Management	3	ON	20	3	23	19	0	19
	PF	Improved Pulse Production on Blackgram	1	Off	17	0	17	1	0	1
	PF	Improved cultivation and practices of Lentil	1	Off	9	27	36	9	27	36
	PF	Integrated nutrient management of Lentil	1	On	15	0	15	9	0	9
	PF	Integrated pest management of Mustard and potato	3	On	18	0	18	15	0	15
	PF	Integrated crop management	1	On	25	14	39	34	14	48
	PF	Seed bed preparation of Boro Paddy and Integrated pest management	2	On	15	0	15	12	0	12
	PF	Improve production technology of oil seed crops	1	Off	27	33	60	23	33	56
	PF	Improve techology of pulse and oilseed production	1	Off	36	4	40	36	4	40
	PF	Integrated pest management of Mustard	1	Off	16	5	21	16	5	21
	PF	Integrated disease management of Potato	1	Off	15	10	25	15	10	25
	PF	Integrated crop management of Boro Paddy	1	Off	28	14	42	28	14	42
	PF	Integrated crop management of Boro Paddy	2	Off	28	0	28	2	0	2
	PF	Integrated pest management of different crops	1	On	16	4	20	10	1	11
	PF	Integrated crop management of Moogh bean(Greengram)	1	Off	15	16	31	0	0	0
	PF	Integrated crop management of Lentil( Pulse)	1	Off	18	12	30	18	12	30
	PF	Integrated nutrient management of Lentil	1	Off	11	7	18	10	7	17
	PF	Integrated crop management of Greengram (Moong)	1	On	28	0	28	27	0	27
	PF	Integrated pest management of strawberry and other fruits	1	On	22	0	22	13	0	13

Di sc ip li	Clie ntel e	Title of the training programme	Dur atio n in	Venu e (Off / On Camp		lumber articipar		Nu	mber of SC	/ST
n e	6		days	us)	M	F	Т	М	F	Т
	PF	Integrated pest management of summer vegetables	1	On	0	20	20	0	11	11
	PF	Integrated crop management of Greengram	1	Off	20	7	27	15	7	22
	PF	Drying of vegetable using sundrying method	3	On	0	23	23	0	21	21
nce	PF	Nutritional Kitchen Garden	3	On	5	22	27	2	21	23
Home Science	PF	Backyard Azolla Cultivation	2	Off	8	20	28	3	8	11
Hom	PF	Package of practice of mushroom Cultivation	3	On	15	7	22	8	5	13
	PF	Establishment and management aof nutritional kitchen gargen	3	On	0	19	19	0	14	14
	PF	Nutritional weaning food preparation	3	Off	0	19	19	0	17	17
	PF	Backyard Azolla Cultivation by SHG Member	3	Off	0	30	30	0	26	26
	PF	Package of practices of vermicimpost production	4	ON	7	19	26	2	11	13
	PF	Package of practices of mushroom cultuvation	3	ON	0	20	20	0	20	20
	PF	Package of practice of mushroom production technology	3	ON	8	7	15	3	4	7
	PF	Vermicompost production technology	3	Off	16	20	36	10	19	29
	PF	Improved package and practices for Mushroom cultivation	3	On	11	11	22	9	8	17
	PF	Prepration and Water Quality Management of Ponds	4	Off	23	0	23	0	0	0
<b>ance</b>	PF	Prepration and Water Quality Management of Ponds	3	Off	20	0	20	20	0	20
s Scie	PF	Culture practices of Pabda	3	Off	20	0	20	16	0	16
Fisheries Science	PF	Composit fish culture	3	On	32	3	35	26	2	28
Fis	PF	Composit fish culture	3	Off	7	14	21	7	14	21
	PF	Leadership Development amongst Farmers Club	1	On	16	0	16	9	0	9

Di sc ip li	Clie ntel e	Title of the training programme	Dur atio n in	Venu e (Off / On Camp	l	lumber articipai		Nu	mber of SC	/ST
n e	U	Integrated Fish Duck Vegetable Cultivation	days	us)	М	F	Т	M	F	Т
	PF		3	On	20	0	20	13	0	13
	PF	Air breathing culture	3	On	21	0	21	21	0	21
	PF	Integrated Fish Duck Vegetable Cultivation	3	On	15	0	15	6	0	6
	PF	Composit fish culture	3	Off	20	0	20	2	0	2
	PF	Air breathing fish culture	2	On	20	0	20	20	0	20
	PF	Common fish disease and their control  Common fish disease and their control	3	Off	20	0	20	3	0	3
	PF		3	On	11	1	12	9	1	10
	PF	Monosex culture of Tilapia	5	Off	35	0	35	10	0	10
	PF	Culture practices of Mourala	3	On	0	13	13	0	7	7
	PF	Establishment of IFS model in village	3	On	22	0	22	6	0	6
Farm Manager	PF	Utilization of Soil Health Card	1	On	22	2	24	7	1	8
(Lab)	PF	Disease management of Boro Paddy	1	On	15	0	15	12	0	12
Prog. Asstt. (Lab)	PF	Integrated pest management of Mustard	1	Off	16	5	21	16	5	21
Prog.	PF Integrated diseases management of potato		1	Off	15	10	25	15	10	25
		Total	206		1710	718	2428	1190	599	1789

# H) Vocational training programmes for Rural Youth:

Details of training programmes for Rural Youth

				No. o	f Particip	ants	Self emplo	yed after	training	Nos. of
Crop / Enterprise	Identified Thrust Area	Training title*	Duration (days)	М	F	т	Type of units	Numb er of units	Nos. of persons employe d	persons employ ed else where
Piggary & Duckery	Piggery Managemen t	Improved manageme nt and reasing of Piggary & Duckery	5	17	8	25	Ducker y	3	6	
Piggary & Duckery	Piggery & Ducckery Managemen	Improved cultivation of Piggery	5	17	8	25	Ducker y	2	5	

				No. o	of Particip	ants	Self emplo	yed afte	r training	Nos. of
Crop / Enterprise	Identified Thrust Area	Training title*	Duration (days)	М	F	т	Type of units	Numb er of units	Nos. of persons employe d	persons employ ed else where
	t	& Duckery								
High value crops	Off season cultivation	Protected cultuvation of high value crops	5	20	0	20	Capsicu m	3	3	
Nursery	Planting material produdtion	Planting material produdtion & nursery manageme nt	5	12	13	25	Nursery	4	4	
Mushro om	Income Generation (Entreprenur ial Activity)	Package of Practices of Mushroom cultivation	5	10	15	25	Mushro om	3	15 (SHG Mem bers)	
Value addition	Income Generation	Value addition of clothes	8	0	25	25	Embroi dery	2	17 (SHG Mem bers)	
Fish	Fish breeding & Nursery pond management	Induced Breediang and Carp Fry Production	5	18	4	22	Carp Product ion	1	6	
Mushro om	Income Generation (Entreprenur ial Activity)	Package of Practices of Mushroom cultivation	5	10	15	25	Mushro om units	1	10 nos. wome n farme rs	
Fish	Integrated fish farming	Complete package of different integrated fish farming	5	16	0	16	IFS unit	1	5	
Soil	Soil testing	Soil sample collection and soil testing through Soil Testing Kit	5	14	8	22	Soil Testing	3	16	
Nursery	Nursery management	Nursery manageme nt	6	4	11	15	Nursery (Lime)	2	9	
Mushro	Income	ASCI	30	9	11	20	Mushro	3	12	

				No. o	f Particip	ants	Self emplo	yed afte	training	Nos. of
Crop / Enterprise	Identified Thrust Area	Training title*	Duration (days)	М	F	Т	Type of units	Numb er of units	Nos. of persons employe d	persons employ ed else where
om	generation	training on					om			
		Mushroom								
		growers								
Fish	Fish rearing	Fish rearing and manageme nt practices	6	15	0	15	Pond cultivati on	1	4	
Seed	Seed production	Quality seed production	29	16	4	20	Seed Product ion	3	16 (Rice & Pulse)	
Total			150	177	118	295				

<sup>\*</sup>training title should specify the major technology /skill transferred

# I) Sponsored Training Programmes:

SI.		Thema	Мо	Dura tion	Cli en t	No . of				No. o	of Parti	cipan	ts				Spon sorin g
No	Title	tic area	nth	(day s)	PF /R	urs		Male		Fe	emale			To	tal		Agen
		alea		3)	Y/ EF	es	Oth ers	sc	ST	Othe rs	sc	S T	Oth ers	sc	ST	Tot al	су
1	Integrat ed Pest Manage ment of Jute	Integrat ed Pest Manage ment	Sep. 18	1	EF	1	10	5	2	0	0	0	10	5	2	17	NFSM, Uttar Dinajp ur
2	Integrat ed Pest Manage ment of Kharif Paddy	Integrat ed Pest Manage ment	Oct. 18	1	PF	1	22	16	10	2	1	0	24	17	10	51	IPM, Asstt.D irector of Agri., Karend higi
3	Integrat ed Pest Manage ment of Kharif Paddy	Integrat ed Pest Manage ment	Oct. 18	1	PF	1	47	3	2	0	0	0	47	3	2	52	IPM, Asstt.D irector of Agri., Chopra
4	Integrat ed Pest Manage ment of Kharif	Integrat ed Pest Manage ment	Oct. 18	2	PF	2	37	29	11	6	24	4	43	53	15	111	IPM, Asstt.D irector of Agri., Islamp

61		Thema	Мо	Dura tion	Cli en t	No . of				No. o	of Parti	cipan	ts				Spon
SI. No	Title	tic	nth	(day	PF	co urs		Male		Fe	emale			Tot	tal		g Agen
		area		s)	/R Y/ EF	es	Oth ers	sc	ST	Othe rs	sc	S T	Oth ers	sc	ST	Tot al	су
	Paddy																ur
5	Improv ed technol ogy of pulse product ion	Integrat ed crop manage ment	Dec . 18	1	PF	1	5	19	3	4	12	2	9	31	5	45	Integra ted crop manag ement
6	Fish rearing and manage ment practice	Fish rearing	Feb -19	6	PF	1	9	0	6	0	0	0	9	0	6	15	Fish rearing and manag ement
7	Strawbe rry cultivati on	Exotic crop	Mar -19	2	PF	1	3	19	0	0	0	0	3	19	0	22	ATMA, Kishan gunj
8	Emergin g trend and strategi es in Agricult ure	Integrat ed crop manage ment	Mar -19	2	PF	1	16	6	0	0	0	0	16	6	0	22	Integra ted crop manag ement
9	Integrat ed pest manage ment of strawbe rry and other fruits	Integrat ed pest manage ment	Mar -19	1	PF	1	9	13	0	0	0	0	9	13	0	22	Integra ted pest manag ement
10	Residen tial training on differen t aspects of modern agricult ure		Mar -19	5		1	0	0	0	13	5	2	13	5	2	20	ATMA, Kishan gunj
11	Quality seed product ion technol ogy for cereal crops	Seed product ion	Mar -19	1	RY	1	16	6	0	0	0	0	16	6	0	22	Seed produc tion
12	Recent disease manage ment technol ogy of differen t crops	Integrat ed disease manage ment	Mar -19	1	PF	1	3	19	0	0	0	0	3	19	0	22	ATMA, Kishan gunj

SI.	Title	Thema tic	Mo nth	Dura tion (day	Cli en t	No . of co urs		Male		I	of Parti	cipan	ts	Tot	:al		Spon sorin g
		area		s)	/R Y/ EF	es	Oth ers	sc	ST	Othe rs	sc	S T	Oth ers	sc	ST	Tot al	Agen cy
13	Recent disease manage ment technol ogy of differen t crops	Integrat ed disease manage ment	Mar -19	1	PF	1	16	6	0	0	0	0	16	6	0	22	ATMA, Kishan gunj
		T	otal	25		14	193	141	34	25	42	8	218	183	42	443	

# 3.4. A. Extension Activities (including activities of FLD programmes)

			Farn	ners		Ext	ension O	fficials		Total	
Nature of Extension Activity	No. of activiti es	М	F	т	SC/ ST (% of total	М	F	т	М	F	Т
Field Day	27	547	425	972	66	02	00	02			
Kisan Mela	5	1800	1177	2977	60	22	03	25			
Kisan Ghosthi						00	00	00			
Exhibition	4	1596	936	2532	71	03	01	04			
Film Show	40	291	141	432	55	02	01	03			
Method Demonstrations	37	475	218	693	64	02	01	03			
Farmers Seminar	3	324	142	466	57	04	01	05			
Workshop	2	15	22	37	84	00	00	00			
Group meetings	1	24	2	26	35						
Lectures delivered as resource persons	10	152	280	432	69	15	02	17			
Advisory Services	119	375	48	423	55						
Scientific visit to farmers field	183	1279	564	1843	51						
Farmers visit to KVK	1664	1137	527	1664	28						
Diagnostic visits	25	513	106	619	47	02	01	03			
Exposure visits	19	565	402	967	50	21	05	26			
Ex-trainees Sammelan	1	38	1	39	38						
Soil health Camp	2	45	3	48	35	2	1	3			
Animal Health Camp											
Agri mobile clinic	5	123	32	155	77						

			Farn	ners		Ext	ension O	fficials		Total	
Nature of Extension Activity	No. of activiti es	М	F	Т	SC/ ST (% of total	М	F	Т	М	F	т
Soil test					,						
campaigns											
Farm Science Club	1	11	1	12	83						
Conveners meet				12	03						
Self Help Group											
Conveners	2	2	68	70	69						
meetings											
Mahila Mandals											
Conveners											
meetings											
Water testing	72	72	0	72	74						
Soil testing	218	213	5	218	33						
Awareness	10	367	241	608	26	8	2	10			
programme	10	307	241	008	20	0	2	10			
Celebration of											
important days											
(specify)											
Sankalp Se Siddhi											
Swatchta Hi Sewa	2	31	43	74	45	3	2	5			
Mahila Kisan	1	2	48	50	60	1	2	3			
Divas	_	_	10	30		_		<u> </u>			
Any Other											
(Specify)											
World	1	54	5	59	83	2	1	3			
Environment Day	-	J.					-				
International Yoga Diwas	1	75	10	85	60	3	2	5			
Independence	_	4.5	_	22	2.0						
Day	1	15	7	22	36						
Fish Farmers Day	1	32	0	32	78	2	1	3			
Adivasi Diwas	1	10	35	45	100	1	0	1			
Republic Day	1	16	9	25	44						
Vigilance	2		22		60						
Awareness week	3	87	33	120	60						
World soil day	1	250	25	275	46	5	3	8			
International	4	10	120	140	00		2	_			
Nutritional Week	1	19	130	149	80	2	3	5			
Kishan Diwas	1	14	26	40	83	4	3	7			
Total	2463	10524	5709	16233	1967						

## **B.** Other Extension activities

Nature of Extension Activity	No. of activities				
Newspaper coverage	23				
Radio talks	04				
TV talks	02				

Popular articles	05
Extension Literature	12
Other, if any	

# a. Production and supply of Technological products

# Village seed

Crop	Variety	Quantity of seed	Value (Rs)	No. of farmers involved in village seed	Number of farmers to whom seed provided			
		(q)	(NS)	production	SC	ST	Other	Total
Paddy	MTU1010, Sahabaghi, Parijat, Pratiksha, SS-1	40	160000. 00	250	70	30	150	250
Lentil	HUL-57, IPL406	3.5	59500.00	30	9	4	17	30
BlackGram	PU-31, IPU-2-43	4	68000.00	45	21	8	16	45
Green Gram	IPM-2-3, IPM-2-14	4.5	76500.00	25	9	5	11	25
Mustard	NC-1, B-9	6	90000.00	150	32	12	106	150
Linseed	Sekhar	5	75000.00	75	28	14	33	75
Sesame	Tillotoma	2.5	37500.00	130	52	22	56	130
Total		65.5	112500.00	705	221	95	389	705

## KVK far:

Crop	Variety	Quantity of seed	Value	Number of farmers to whom seed provided			
		(q)	(Rs)	sc	ST	Other	Total
Paddy	MTU-1010, Parijat, Sahabaghi, IET- 4094, Pratiksha, Dhiren, Puspa, RaniDhan, MTU7029, GB-3 Sukh Samrat, Swarna Sub-1,	101	404000	160	65	225	450
Buckwheat	Local, VL-7	4	24000	20	11	9	40
Blackgram	PAU – 31, Sulata (WBU-109),PU-35, IPU-2-43	5	85000	56	25	34	115
Greengram	IPM-2-14, IPM-2-3, Samrat	7	119000	81	52	67	200
Lentil	HUL-57, IPL406, Moitree	3.5	59500	14	5	21	40
Mustard	NC-1, B-9, NRCYS-05-02, YSH4001, P. Mahak,	6.5	97500	75	65	140	280
Linseed	Sekhar	5.5	60500	25	12	38	75
Sesame	Tillotoma	3.5	52500	45	20	170	235
Dhaincha	Local	3	15000	6	5	19	30
Grand Total		139	917000	482	260	723	1465

# **Production of planting materials by the KVKs:**

Crop	Variety	No. of planting materials	Value (Rs)	Number of farmers to whom planting material provide			
				SC	ST	Other	Total
Vegetable seedling	S						
Cauliflower	Snowball	9300	4500.00	8	5	5	18
Cabbage	Pusa Drumhead	9700	4700.00	7	7	14	28

Crop	Variety	No. of planting materials	Value (Rs)	to wi	_	mber of farr	ners rial provided
				sc	ST	Other	Total
Tomato	Pusa Ruby	8200	4200.00	11	9	0	20
Brinjal	Bansloi Local	1700	850.00	6	2	2	10
Chilli	Pusa Jwala	2100	1000.00	6	6	3	15
Onion	Nasik Red	7100	990.00	4	0	6	10
Others							
Broccoli	Green Magic	4200	4100.00	8	5	7	20
Capsicum	Indra	300	4500.00	9	4	12	25
Cherry tomato	-	200	600.00	9	6	5	20
Bottle Gourd	Local	300	1500.00	12	5	15	32
Fruits							
Mango							
Guava	Allahabad Safed, Kafri, Baruipur Local ,Bhagalpur, L-49 etc.	500	20000.00	15	5	20	40
Lime	Kagzi, Pati, Elaichi	300	9000.00	19	6	25	50
Papaya							
Banana							
Others							
Litchi	China, Bedana, Purbi	25	1000.00	6	4	10	20
Drumstick	Local	100	500.00	8	2	15	25
Ornamental plants							
Marigold, Chrysanthemum, Seasonal flowers, indoor plants	- beautification of office garden	2500	6300.00				
Medicinal and							
Aromatic							
Neem	Local	150	1500	11	9	15	35
Plantation							
Arecanut	Mohitnagar	1500	12000.00	6	6	8	20
Spices							
Turmeric	Suranjana	1.8q	5200.00				
Bay leaf	Local Yet to be distributed	200	6000.00				
Tuber							
Elephant yams	Kavour	1.6q	5600.00				
Fodder crop							
saplings							
Forest Species							
Others, pl.specify							
Grand Total		48375 nos. &3.4		145	81	162	388
		qui.					

#### **Production of Bio-Products:**

Name of product	Quantity Kg	Value (Rs.)	No. of Farmers benefitted				
			SC	ST	Other	Total	
Bio-fertilizers							
P.S.B	120	14400.00	26	15	19	60	
Azitobector,	124	14880.00	22	18	12	52	
Azospirillum	10	1080.00	4	3	7	14	
Bio-pesticide							
Bio-fungicide							
Bio-agents							
Others, please specify.		_					
Total		30360.00					

#### **Production of livestock materials:**

Particulars of Live stock	Name of the	Number	Value (Rs.)	No. of Farmers benefitted				
	breed			SC	ST	Other	Total	
Dairy animals								
Cows								
Buffaloes								
Calves								
Others (Pl. specify)								
Small ruminants								
Sheep								
Goat	Black Bengal	10	50000	0	0	0	0	
Other, please specify								
Poultry								
Broilers								
Layers								
Duals (broiler and layer)								
Japanese Quail								
Turkey								
Emu								
Ducks	Khaki Campbell	20	10000	3	4	3	10	
Others (Pl. specify)								
Piggery								
Piglet								
Hog								
Others (Pl. specify)								
Fisheries								
Indian carp	Raikhar Bata	64000	72000	30	15	35	80	
Exotic carp								
Mixed carp								

Particulars of Live stock	ck Name of the Num		Value (Rs.)	No. of Farmers benefitted				
	breed			SC	ST	Other	Total	
Fish fingerlings								
Spawn								
Others (Pl. specify)								
Grand Total		64030	132000	33	19	38	90	

# 3.5. b. Seed Hub Programme - "Creation of Seed Hubs for Increasing Indigenous Production of Pulses in India"

## i) Name of Seed Hub Centre:

Name of Nodal Officer :	Dr. Dhananjoy Mandal
Address:	Uttar Dinajpur Krishi Vigyan Kendra, UBKV, Chopra, Uttar Dinajpur,
	West Bengal
e-mail :	Dhananjoy17@rediffmail.com/udpkvk@gmail.com
Phone No. :	9475164047/9064389475
Mobile :	

## ii) Quality Seed Production Reports

				Pro	oduction (q)	
	Crop	Variety	Target	Area sown (ha)	Production	Category of Seed (F/S, C/S)
Kharif 2018		PU- 31	120	25	102	C/S
	Black gram	WBU – 109 (Sulata	225	45	144.5	C/S
		IPU-2-43	25	5	40.2	F/S
Rabi 2018-	Lentil	HUL-57	140	25	120.6	F/S
19		IPL406	260	25	75.2	F/S
Summer/ Spring 2019	Green gram	IPM-2-14	1.0	0.60	on field	F/S
968 2013		IPM-2-3	4.5	0.50	on field	F/S
		Virat	1.0	0.06	on field	F/S
		IPM-2-3	96	12.0	on field	C/S
		IPM-2-14	115	15.0	on field	C/S

## iii) Financial Progress

Fund received	Expenditure (Rs. in lakhs)		Unspent		
(2016-17, 2017- 18 and 2018-19)	Infrastructure	Revolving fund	balance (Rs. in lakhs)	Remarks	
2016-17	0.00	0.80	39.20		
2017-18	33.31	20.40	76.99 (16.69 for infrastructure, 60.30 for revolving fund)		

2018-19 19.78 24	24.40 101.06	* Within infrastructure ar unit was not Therefore extra been taken frofund of KVK.	nd process complet 3.10 lakh	ted. has
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# iv) Infrastructure Development:

Item	Progress
Seed processing unit	Completed
Seed storage structure	Completed

# 3.6. (A) Literature Developed/ Published (with full title, author & reference):

Item	Title	Author's name	Number	Circulation
Research paper	Market linked technology of Mushroom production for subsidiary income and nutritional security of farm families of Uttar Dinajpur district of West Bengal – A success story.	Dr. Anjali sharma	1	0
Seminar/conference/	,		0	0
symposia papers				
Books			0	0
Bulletins	Technology inventory		1	35
News letter	KVK news letter		6	72
Popular Articles			5	88
Book Chapter			0	0
Extension Pamphlets/ literature	<ol> <li>Broccoli chas         (Cultivation of Brocolli)</li> <li>Narikel ghacher         aricharya(Management         of Coconut tree)</li> <li>Anaras Chas         (Cultivation of         Pineapple)</li> <li>Beguner doga o phal         phuto kora pokar         akraman theke         baneher upai (IPM of         BFSB)</li> <li>Azolla: Ekti utkrishta         griyapalita pasu khadya         (Azalia: A high quality of         fodder)</li> <li>Kala Chas (Cultivation</li> </ol>	<ol> <li>Dr. Moutusi         Dey, SMS         (Horticulture)</li> <li>Dr. Dhananjoy         Mandal, SMS         (Plant         Protection)</li> <li>Dr. Anjali         Sharma, SMS         (Home         Science)</li> <li>Mr. Debdas         Sekhar, SMS         (Fishery         Science)</li> </ol>	12	322

Item	Title	Author's name	Number	Circulation
	of Banana)			
	7. Susanghata Maeh-			
	Hans-			
	Sabjichas (Integrated			
	Farming systems)			
	8. Mati Parikshar Guruta			
	o Tar			
	Padhuti ( <i>Importance of</i>			
	Soil Testing and its			
	Process)			
	9. Matir Susasthe Matir			
	Jibanur			
	Bhumika ( <i>Importance</i>			
	of Soil Bacteria for			
	Healthy Soil)			
	10. Sabjir Charar Adarsha			
	11. Beejtala Tairi			
	(Importance of Soil			
	Bacteria for Healthy			
	Soil)			
	12. Atur Pukure Dimponer			
	Chash ( <i>Nursery Pond</i>			
	Management)			
	13. Bhaighanik padhyatite			
	kalo kolaier ehas o rog-			
	pokar sampurita			
	pratikar Bhabasthya			
	(Scientific cultivation of			
	Black gram and IPM )			
	14. Gharowa Sabji Bagan			
	(Kitchen Garden)			
	Ghare Tairi Pustikar Sishu			
	Khadyo (Home Made			
	Nutritional Baby Food)			
Technical reports	Annual reports		2	8
Electronic Publication			0	0
(CD/DVD etc)				
TOTAL			27	525

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

#### 3.6.(B) Details of HRD programmes undergone by KVK personnel:

	oron(=) = oranic or rine programmes unuorgene xy nen personnen								
SI.	Name of	Name of course		Name of KVK personnel and	Urgar (Organ		Organ	nized by	
No.	programme			designation	Dura	tion	O.Buii	,	
1	Zonal Workshop,	Zonal Workshop		Dr. Dhananjay Mandal, SMS,	26-28 <sup>th</sup>	May,	ICAR,	OUAT,	
1.	Zone IV & V			Plant Protection, (In-charge)	2018, 3	days	Bhuban	ieswar	
2	ICAR Sponsored	Enhancing	Farmers'	Dr. Anjali Sharma, SMS, Home	07-16 <sup>th</sup>	May,	ICAR, C	ollage of	
۷.	Short Course	income	and	Science	2018,	10	Home	Science,	

SI.	Name of	Name of course	Name of KVK personnel and	Date and	Organized by
No.	programme	Name of Course	designation	Duration	Organized by
		promoting health using value addition of locally availability fruits & vegetable		days	Tura, Meghalaya
3.	Write Workshop for DAESI study material Preparation	Workshop for DAESI study material Preparation	Dr. Moutusi Dey, SMS, Horticulture,	25-28 <sup>th</sup> ,June, 2018	SAMETI, Narendrapur
4.	Training of Trainees (TOT)	Training of Trainees (TOT)	Dr. Anjali Sharma, SMS, Home Science	18-20 <sup>th</sup> ,Sep., 2018	BidhanChandra Krishi Viswavidyalaya, Mohanpur & ICAR-ATARI, Kolkata
5.	Geo-tagged monitoring system	Geo-tagged monitoring system on FLD& OFT	Dr. Dhananjay Mandal, SMS, Plant Protection, Dr. Anjali Sharma, SMS, Home Science, Dr. Moutusi Dey, SMS, Horticulture, Dr. Debdas Sekhar, SMS, Fishery Sc., Dr. Dabasis Mahanta , SMS, Agronomy,	18/11/2018, 1 day	Darjeeling KVK
6	Winter School	Dynamics of Entrepreneurial Development for empowering Rural Y Youth in Agriculture	Dr. Moutusi Dey, SMS, Horticulture,	07-27 <sup>th</sup> Feb. 2019	OUAT, Bhubaneswar
7	Workshop	Workshop on PPV&FR	Dr. Debdas Sekhar, SMS, Fishery Sc.,	15.03.19	WBUAFS, Belgachia
8	Workshop	Launching workshop of ARYA	Dr. Debdas Sekhar, SMS, Fishery Sc.,	28.03.19	ATARI, Kolkata
9	HRD Training	HRD Training	Mr. Sudpita Debnath(Computer programmer), Mr. Palash Das, Sr. Stenographer, Mr.Himanish Sarkar, Driver, Mr. Kanak Mandal, Supporting Staff, Dr. Dhananjay Mandal, Sr. Scientist & Head (Actg.), Dr. Moutusi Dey, SMS, Horticulture	28/03/2019	HRD training at Dhakhin Dinajpur KVK.
10	Review workshop	Review workshop	Dr. Dhananjay Mandal, Sr. Scientist & Head (Actg.), Dr. Moutusi Dey, SMS, Horticulture	29/03/2019	Review workshop at Malda KVK, Malda

# 3.7. Success stories/Case studies, if any (two or three pages write-up on 1-2 best case(s) with suitable action photographs) Success story-I:

Name of farmer	Shushila Tudu
	Sardi- Sabon SHG,
Address	Gulamigachh, P.O Ghorugach, Uttar Dinajpur
Contact details (Phone, mobile, email Id)	Mob. No. 8116666073
Landholding (in ha.)	1.0
	Oyster mushroom Cultivation.
Name and description of the farm/ enterprise	Since last 3 years Smt. Shushila Tudu is englossed in this enterprise. By running two small units continuously she is able to give unintrupped supply in market. Mushroom Production unit was constructed under asset creation in Tribal Sub Plan Project.
Economic impact	From tea garden labourer to an enterprenurer, Shushila Tudu is earning net profit of Rs.7,000 - 9,000 per month by selling mushrooms. This year in the month of January she has been nominated for Mahindra Samrridhi Awards 2017-18 and has been selected National nominee under youth category on march 6 <sup>th</sup> , 2018, she has been awarded by honourable Union Agri minister, Shri Radha Mohan Singh ji at new Delhi and remunerated with 2.16 Lakhs. This was a pride moment for Shushila Tudu her family members, whole locality as well as pride moment for Uttar Dinajpur KVK. She is now stepping towards better livelihood.
Social impact	Shushila Tudu is source of inspiration for so many other farmers not only in chopra block but in whole district. People know her and after getting National award from Mahindra Samridhi she has been interviewed by many TV channels and local newspaper now, She is role model for many other farms women especially among tribal farm families. Farmers form distant placs visit KVK for different training purpose and many of them were interested in mushroom cultivation always interested in visiting her mushroom unit in gulamigachh village. Shushila's family gained a prestigeous position in the village. Her husband always helped her in her work, morally supports her and encouraged her in difficult times. She has been acting as catalyst for mushroom cultivation promotion program of KVK.
Environmental impact	During training mushroom cultivation, farmers and farm women were instructed and made cautions about proper use of chemical and its impact on environment if it is unjudiciously used. As per instructions, Shushila Tudu is also making judicial use of chemical when and where it is required and above all she is not dumping the spent here and there, but making quality vermicompost along with her fellow SHG members in a vermicompost production unit provided by KVK under Tribal sub plan in the year 2016-17 in her village.

#### Horizontal/ Vertical spread

Shushila Tudu is contracted by many farmers of near by village for her expertise in the field of mushroom cultivation. So, far 5 near by villages SHGs in 18 individual farmers has started this venture after learning from her.









#### Success story-II:

Name of farmer	Shakti Barman		
Address	Ravindera Nagar Colony P.O Chopra, Uttar Dinajpur		
Contact details (Phone, mobile, email Id)	Mob. No. 9932700177		
Landholding (in ha.)	landless		
Name and description of the farm/ enterprise	Fabrication of Tubular maize Shellar  Mr. Shakti Barman runs a weilding workshop at Tista more. Chopra. Now, he is master in fabricating Tubular hand maize shellars. In the year 2012-13 he has been contacted for making maize shellars of iron and trained in making them in different sizes under OFT program on refinement of tubular maize shellar. As area under maize in Uttar Dinajpur district is increasing day by day and KVK Uttar Dinajpur since 2009 conducting FLD an tubular maize shellars as a drudgery reduciing and time saving tool and is very useful for small maize growers. Gradually it catched the attention of large growers also as in North Bengal rains are very frequent during the time of maize harvesting and sun drying is the only solution for maize cobs drying so, it is very useful for shelling of small stocks and farmers need no further of seeds cleaning once there shelled with this shellar.		

	Actually, tubular maize shellars of falcon company are available in market and KVK use to procure it from siliguri market but from the year 2011-12 and2012-13 many farmers and farm women came to KVK and complained about the size of shellar and it is no more useful due to bigger size cobs I many cases. Then we conducted one OFT on refinement of this tool in which inner girth in standardize accordingly. Finally, we made it available to farmers through Shakti Barman as he worked on this tool and it came out very well.  Since 2014-2015 KVK is procuring tubular maize shellars for its FLD programmes from this fellow, named Shakti Barman. FLDs under tribal sub plans we are providing maize shellars from him only till now he has provided 2630 pieces of maize shellars @ Rs.100/per piece under FLDs of KVK as well as to the farmers clubs and SHGs according to there demand.  Surprisingly, this tool has also worked very well in our fodder seed prodution programme, as KVK produced 80 tonnes seeds through Farmer clubs of different villages and 250 maize shellars has been provided to FCs for seed shelling as shelling seeds with big vibrating machines resulted in reduction in germination percentage.
Economic impact	It is revealed that one can save in shelling cost upto 100 rupees per quitintal and 3mandays can be saved after shelling with tubular maize shellar.
Social impact	For small maize grower, tubular maize shellar is a boon. As it saves time and energy so farm women is able to shell cobs with less efforts and able to spend more time with their family members. After introduction of this tool many small growers started cultivation of maize as shelling with big machines is not a economic affair for them. Moreover tool is so small and handy and in any time of the day or evening whenever it is conveinent for them they just able to shell their maize cobs.
Environmental impact	There is no any adverse impact an environment as it is a manual tool made up of iron so, there is no chances of plastic waste or smoke etc.
Horizontal/ Vertical spread	Tubular maize shellar is popular throughout the district, as KVK is conducting frontline demonstration since 2008-09 on this tool. So far this tool is provided to 65 SHG and 14 farmers club and more then 500 individual farmers. Even many SHGs and FCs after completion of their work they provide the tool on hire basis to other farmers.



# **Success Story-III:**

Name of farmer	Avijit Ghosh			
Address	C/O Smar Chandra Ghosh Behind Samadhi School, Halder Para Vill. And PO Debinagar, Uttar Dinajpur-733123			
Contact details (Phone, mobile, email Id)	Mob. No. 7001243100			
Landholding (in ha.)	0.4			
Name and description of the farm/ enterprise	Mushroom Cultivation  Avijit Ghosh is one of the trainee of Rural Youth training conducted by Uttar Dinajpur KVK in the in year 2017-18. After getting training in the month of May, 2017 Avijit Started one small unit at Raiganj, his home town. He was very much interested in this cultivation and little support from KVK he has started this cultivation. He has used ICT tools for popularizing his product, with KVK support he called upon localprint media. Participated in different local fairs and as Raiganj is district headquarter and opportunities are more than in a interior villages. He supplied has product to BSF mess. In Railway station, nearby bus stands he managed to sell with his friends.  Nowadays his unit is model for farmers who are trainees of different line departments like agriculture and horticulture. Avijit is source of inspiration for many others, though his place is 175Km away from KVK but he has always in contact with KVK for various suggestions and promotions.			
Economic impact	Earlier Avijit Ghosh was an unemployed graduate but, now he is a successful agri-preneurer and with his wisdom and			

approaches he has attained very good place within 8 month which really appreciable. Avijit is earning 30,000 per month which include net profit of 10,000 to 12,000.			
Social impact	In society, Avijit has set his name as young mushroom grower. He use to give his stall in every local mala, fair and exhibition and popularized mushroom as a source of nutrients and fiber in daily diets of the local people.		
Environmental impact  There is no adverse impact on environment in relation to mushroom cultivation. As per suggestions of using chemicals of standard grade and using them judiciously. He is also converting mushroom spent into its further use.			
Horizontal/ Vertical spread	Though Raiganj is quite far from siliguri and Nepal market so he is selling fresh product in local market it is getting popular day by day as a small scale enterprise it has been adopted by 8 more youth, School teachers and 3 SHG come forward for it.		









# **Success Story IV:**

Name of farmer	Pagligachh Swarnirbhar Group	
Address	Pagligachh, Chopra, Uttar Dinajpur	
Contact details (Phone, mobile, email Id)	udpkvk@gmail.com	
Landholding (in ha.)	1.2 ha	
Name and description of	Herbal Gulal/Eco Holi colours preparation as an entrepreneurial activity by SHGs of Uttar Dinajpur district	

Name of farmer	Pagligachh Swarnirbhar Group
the farm/ enterprise	In the month of January, February 2017 and continued this year also with more number of SHGs at other parts of district. we have conducted four awareness camps for school children of different blocks of Uttar Dinajpur and in the same camps KVK has initiated a step on eco-Holi colours and its importance and made them aware of biodegradable products and safe chemicals. As the festival of colours Holi was coming so we had made them aware and requested them to use eco-holi colours and explained them the process of making Herbal Gulal at their home. Many of them were quite interested and very happy with this step. Few teachers who reside in urban localities has also showed their interest in purchasing the colours if available. Thereafter, KVK has imparted training to 3 Nos. SHGs viz.,Mahaprabhu SHG, Dolua and Paglilgacch, Swarnayanti Mahila dal (2 Nos.), Sonapur to start Gulal preparation as entrepreneurial activity. After taking training SHGs has immediately started working on this project with technical support from KVK, Chopra. In the process of making herbal Gulals main base ingredient is arrowroot which is coloured with different natural colours extracted from Turmeric, petals of marigold flowers, beetroot, leaves of different plants and petals of different flowers etc., to get particular shade. Specific colouring material extract has to be added like for yellow colour we need turmeric extract and to get pink colour we need beetroot extract.
Economic impact	SHGs engaged in herbal gulal preparation are earning good profit. After selling herbal gulal SHG members are earning net profit of Rs. 8000-9000 per quintal. As SHG members are cultivating vegetables own there own which are used in preparation of herbal gulal so, it is more profitable venture for them. Now, branding is need to reap more economic benefits from their product.
Social impact	In the mean time SHGs have given a stall on Herbal Gulals in Technology Week and Krishi Mela 2017 organized by Uttar Dinajpur KVK at Chopra, Uttar Dinajpur. This is the main turning point for them. Delegates as well as my participants has praised their move and till the last day of the mela they have already sold their whole stock and has orders in their hands for further preparation. They were profited and got lift for further task. Preparation of Herbal Gulal as entrepreneurial activity by SHGs is published by 4 Nos. Local papers and process documentation of Herbal Gulal preparation is done by Doordarshan, Jalpaiguri as well as private channels is News Time, Kolkata TV and CCN.
Environmental impact	Herbal Gulal preparation is also a step towards our health and environmental safety. Environmental safety is core concern of the world now. Our environment is degraded day by day mostly because of lack of awareness regarding its protection and safety. Uttar Dinajpur KVK has showed its interest in environmental safety and made farming community aware about the hazards of chemicals in our life.
Horizontal/ Vertical spread	In the year 2018 Herbal gulal was more in demand than last year our SHGs has supplied it in local schools, Panchayat office, local shops and even in UBKV Campus and everyone has showed enthusiasm in this new venture. Last year trained SHGs also acted as mater trainer in KVK organized workshops for herbal Gulals .  Uttar Dinajpur Krishi Vigyan Kendra acknowledge the effort of SHG members who were wholeheartedly involved in this activity and in a very short span worked hand to hand with KVK to make this endeavor a success. It is noteworthy that without any proper working place and modern equipment these women showed their presence in the society and made their

Name of farmer Pagligachh Swarnirbhar Group		
	own path for future business with technical support from KVK.	
	ERBAL GULAL STIS WITH	

# 3.8. Give details of innovative methodology or innovative technology of Transfer of Technology developed and used during the year

SI N o.	Name/ Title of the Methodol ogy	Name/ Details of the Innovator(s)	Brief details of the Innovative Technology	
	Formatio n of Farmer Interest Groups (FIGs)/Co mmon Interest Group (CIGs)	Dr. Anjali Sharma, SMS (H.Sc.)Utta r Dinajpur KVK	Farmers are being organized into Farmer Interest Groups (FIGs) at block level and are being organized to form Farmer Producer Company (FPC) in coming years. These FIGs are being organized around specific high value commodities with the goal of improving market access and capturing more value from their commodities. In short, these FIGs and future FPCs are expected to play as the marketing alliances. However, getting farmers organized is somewhat more problematic given that most small and marginal farmers lack of organizational experience. In addition, the marketing system in India is more highly structured and powerful traders tightly control these local and regional mundies (market-yards). Therefore, it will take time for these fledgling FIGs to gain sufficient skill and capacity to market directly to end-use markets and processors. However, farmers and farm women are already being trained under ASCI trainings in different aspects and KVK is linking them with proper certification agencies like organic certification, Fssai registration etc. This year KVK, Uttar Dinajpur has formed 2 FIG Group on organic inputs (Krishi Kalyan Jaib Sar), one FIG on nutritional weaning food (Sukriti Shishu Aahar Group).	

# 3.9. a. 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)

SI. No.	Crop / Enterprise	ITK Practiced	Purpose of ITK

#### b. Give details of organic farming practiced by the farmer

SI. No.	Crop / Enterprise	Area (ha)/ No. covered	Production	No. of farmers involved	Market available (Y/N)

#### 3.10. Indicate the specific training need analysis tools/methodology followed by KVKs:

SI. No.	Brief details of the tool/	Purpose for which the tool	
	methodology followed	was followed	

#### 3.11. a. Details of equipment available in Soil and Water Testing Laboratory

Sl. No	Name of the Equipment	Qty.
1.	Mridaparikshak	01
2.	Electronic Balance	01
3	pH Meter	01
4	UV Spectro Photo Meter	01
5	Flame Photo Meter	01
6	Mechanical Shaker	01
7	Nitrogen Analyzer (Kel Plus)	01
8	Elelctrical Conductivity Meter	01
9	Double Distilled Water Unit	01
10	Digestion Unit (Kel Plus)	01
11	Hot Air Oven	01
12	Water bath	01
13	Hot Plate	01
14	BOD Incubator	01
15	Lamina Airflow	01
16	Auto claves	01
17	Microscope	02

#### 3.11.b. Details of Soil samples analyzed so far:

Number of soil samples analyzed			No. of Farmers	No. of Villages	Amount realized (in Rs.)
Through mini soil testing kit/labs	Through soil testing laboratory	Total			
Nil	275	275	275	15	Nil

#### 3.11.c. Details on World Soil Day:

SI. N o.	Activity	No. of Participa nts	No. of VIPs	Name (s) of VIP(s)	Number of Soil Health Cards distributed	No. of farmers benefitted
1	Distribution of Soil Health Card for his own cultivated land and give suggestion about effective nutrient management	275	Nil	Nil	275	275

#### 3.12. Activities of rain water harvesting structure and micro irrigation system

No of training programme	No of demonstrations	No of plant material produced	Visit by the farmers	Visit by the officials
2	2	58	65	3

#### 3.13. Technology week celebration

Type of activities	No. of activities	Number of participants	Related crop/livestock technology
District Kisan Mela cum technology week	1	2256	15
Rabi Kisan Mela	1	598	9

#### 3.14. RAWE/ FET programme - is KVK involved? (Y/N)

No of student trained	No of days stayed
Nil	Nil

ARS trainees trained	No of days stayed
Nil	Nil

# 3.15. List of VIP visitors (Minister/ MP/MLA/DM/VC/Zila Sabhadipati/Other Head of Organization/Foreigners)

Date	Name of the person	Purpose of visit
10.04.18	Dr, Somnath Jha, S.D.P.O, Islampur, Uttar	KVK visit
	Dinajpur	
19.04.18	Director, Dr. S.S. Singh, ICAR-ATARI, Kolkata	KVK visit
26.04.18	Shri Saptarsho Nag, WBCS (Exc.), Observer,	KVK visit
	Panchayat Elections	
25.07.18	Dr. P.K. Saha, National Consultant, (NFSM)	KVK visit for Seed Hub Inspection
25.07.18	Shri G.K. Nandi, Additional D.A. (NBR), Jalpaiguri	KVK visit
31.08.18	Director, Dr. S.S. Singh, ICAR-ATARI, Kolkata	KVK visit
31.08.18	Dr. F.H. Rahaman, Principal Scientist, , ICAR-	KVK visit
	ATARI, Kolkata	
29.09.18	Dr. Jitendra Singh Chauhan, Advisor to	KVK visit
	Agriculture Minister, Govt. of India	
03.10.18	Dr. Subrata Roy, Principal Scientist, , ICAR-	Present as the representative from
	ATARI, Kolkata	ICAR, ATARI. 15th Scientific Advisory
		Committee Meeting
30.01.19	Dr. A.K.Sharma, Sr.Scientist , ICAR, Kolkara	KVK visit

#### 4. IMPACT

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

Name of specific technology/skill	No. of	% of adoption	Change in income (Rs.)		
transferred	participants		Before (Rs./Unit)	After (Rs./Unit)	
Mushroom cultivation	345	65	6940/unit	22485/unit	
Value added products from mushroom	35	50	5000/unit	9520/-	
Herbal Gulal (Introduced last two years)	95	61		20250/unit	
Weaning food	286	79		Reduced the malnourished children	
Backyard Azolla cultivation	245	77	3570/unit	9654/unit	

Name of specific technology/skill	No. of	% of	Chang	ge in income (Rs.)
transferred	participants	adoption	Before (Rs./Unit)	After (Rs./Unit)
Seed treatment (Rice)	750	76	7570/ha	115260/ha
RCT (Rice)	292	62	8312/ha	15380/ha
RCT (Wheat)	569	68	16302/ha	19990/ha
Paddy parboiling technique for			Nutritive	
drudgery reduction of women			value:	
(short soaking tempering			Amylase-	Nutritive value:
			19.94%	Amylase-18.75%
			Protein-	Protein- 7.50%
			7.34%	Carbohydrate- 77.32%
			Carbohydrate-	
			77.30%	
Boron application to enhance			25000	56000
the productivity of chilli				
leaf curl disease in tomato.			100076	170896
Eco-friendly management				
practices of brinjal fruit and			32350	80850
shoot borer.				
Fish–Duck–Dyke vegetables				
production system under			14000	F1F00
Mahananda Flood Plain			14000	51500
farming situation of terai zone				
soil polythene cover for Boro				
rice nursery raising healthy			24040	27500
seedlings during pick winter			31040	37500
months				
supplementary feed on fish			2000	F4F00
productivity			26000	54500
Pest Management of fruit fly				
in Cucurbitaceous crop				
(Cucumber/ Gourd)				
agrochemicals in weed control			1 70 07E/ha	2.42 E00/ba
of pineapple			1,78,875/ha	2,42,500/ha
Refinement of hand maize				
shellar to increase the output				
of the implement to overcome			2500	5000
the constraint of hybrid maize				
cob shelling				

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

#### 4.2. Cases of large scale adoption (Please furnish detailed information for each case)

Horizontal spread of technologies			
Technology		Horizontal spread	
	Mushroom cultivation	42 nos, youths cultivate mushroom and 30 SHGs cultivate the mushroom	

	and do its value addition for income generation and average daily production form all the units 1750 kgs under technical help of Uttar Dinajpur Krishi Vigyan Kendra.
Herbal Gulal	36 women SHG members from three different SHG produces 150 kg herbal gulal during the year. Technology was provided by Uttar Dinajpur Krishi Vigyan Kendra. The programme was broadcasted by Doordarshan Kendra Jallpaiguri and different nation news channels and also reported by different daily news paper.
Weaning food for malnourished childern	2995 nos childern/week and SHGs are supplying 1,58,844pkt/year of 500gm
Nutritional food for malnourished pregnant mother	2054 nos mothers/week and SHGs supplying 1,06,808 pkt/year of 500gm
Backyard Azolla Cultivation	85 working units benefitting 885 Farm families with average total production per month of 16,850kg
Resource conservation Technology (Zero	1668 ha cultivated under Rice and Wheat by more than 2745 nos. of
Tillage cultivation in Rice and Wheat)	farmers. Cost of cultivation saved Rs. 29,75,200/-
Integrated Pest Management	345 ha cultivated of different crops and vegetables through pheromone traps, sticky trap, fruit fly trap and neem oil and cost of cultivation saved Rs. 775400/-

Give information in the same format as in case studies

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

SI. No.	Brief details of technology	Impact of the technology in subjective terms	Impact of the technology in objective terms	
1.	Technology Of Mushroom cultivation	During reporting period total 10 trainings on mushroom cultivation and 02 trainings on value added products of mushrooms were imparted to PF, EF and rural youths. Many of them started their small scale production with average production of 35-40kg per day. ASCI for mushroom growers was also very effective. Successful cultivation trial on button mushroom was conducted in two adopted villages.	<ul> <li>Adoption rate is 80%.</li> <li>Fssai registration is done for value added products.</li> <li>Sales outlet was opened by farmwomen</li> <li>SHGs are earning additional income of Rs.4200/- per month.</li> <li>Mrs Anima Majumdar engaged in mushroom cultivation and its value addition awarded with Mahindra Samridhi National Award under Youth category.</li> </ul>	
2.	Low cost home-made nutritional weaning foods	Concept of nutritional weaning foods is getting popular gradually among families of Uttar Dinajpur. Hands on trainings were imparted within district as well as outside the district. Weaning food is quite popular among resource poor tribal families. One Common Interest Group (CIG) named "Sukriti Shishu Aahar Group"	<ul> <li>CIG on weaning food is earning profit of rs. 8000-10000 per month.</li> <li>Low cost weaning food is recommended by paediatricians of the locality and source of income for SHGs</li> <li>Malnutrition among</li> </ul>	

SI. No.	Brief details of technology	Impact of the technology in subjective terms	Impact of the technology in objective terms	
		of 70 women belonging to different SHGs is formed and totally dedicated to preparation and marketing of weaning foods.	children is also reduced to good extent.  • KVK provided technical support to projects on Ready to Eat (RTE) nutritional supplements in Uttar Dinajpur and Darjeeling districts	
3.	Production of Organic inputs (Vermicompost Production Group)	KVK has imparted 6 Nos trainings and 2 field days on vermi-compost technology. 2 FIG in two blocks Viz. Chopra and Karandighi surpassing more than 200 members in each group with future intention to form Farmer Producer Companies from these groups. Entrepreneurial activity of women is source of inspiration to many others	<ul> <li>are earning Rs. 5300-6000/- per month.</li> <li>KVK provided technical support to projects on vermicompost production</li> </ul>	

# **4.4.** Details of innovations recorded by the KVK Innovation 1:

Thematic area	Livestock and Fisheries			
Name of the	Integration of duck farming of native &Khanki Campbell variety with fish			
Innovation	farming			
Details of	Name: Mangal Soren			
Innovator	Address: Vill Machhol, P.O. Altapur			
	Dist. Uttar Dinajpur			
	Pin 733215			
	Mob No. 8436157858			
	Age: 36 yrs			
	Education level: Class IV std.			
	Size of land holding: 2 acres			
Back ground of	In pond based farming situation, comparatively less income from pond due to			
innovation single crop production. If fish culture is integrated with duck farming, the				
	income of farmers will be increased.			
Technology	This duck-cum-fish farming model was based on a total water area of 0.13 ha.			
details	Fish fingerlings were stocked @ 10000 nos./ ha. Stocking density of ducks was			
	maintained @ 300 nos/ ha. The main innovation is that the fisher stocked his			
	pond with ducks of native & khanki Campbell variety at a ratio of 1:1 due to			
	non availability of khanki Campbell in sufficient numbers.			

Thematic area	Livestock and Fisheries		
Practical utility of	Practically it was very difficult to collect requisite numbers of khanki Campbell		
innovation	at every corners Uttar Dinajpur district to integrate ducks in pond based		
	production system. This type of innovation may help to integrate ducks in pond		
	based production system at a local level.		

#### **Innovation 2:**

Thematic area	Income generation and nutritional security			
Name of the Innovation	Low cost indigenous technology for Button mushroom cultivation			
Details of	Mohammad Ali			
Innovator	Vill. Domapir			
	P.O. Jagdishpur			
	Raiganj, Uttar Dinajpur			
Dools arround of	Ph. No. 9002805026			
Back ground of innovation	Md. Ali of village Domapir, P.O. Jagadishpur, Raiganj, Uttar Dinajpur is a forty			
milovation	six years old farmer with a land holding of more or less one hectare. Main crops grown are paddy, maize and mustard along with button mushroom			
	cultivation. Mr. Ali is studied up to class nine and in very early age he has been			
	left his home and worked as migrated labour for near about 20 years. During			
	this period he has worked in a quality control lab at Haryana. After observing			
	Md. Ali's work perfection his firm send him for training of mushroom			
	cultivation and spawn preparation at GB Pant University of Agriculture and			
	Technology, Uttarakhand. After that for few years he worked in Haryana and			
	lastly in the year 2006 returned to his paternal village in West Bengal. With his			
	own wisdom and will he has started button mushroom cultivation in his village since 2009.			
Technology details	<b>Technology details:</b> A paddy straw thatched house of dimension of 50'x 30'x 6'			
details	was constructed on bamboo frame (Fig.1) for outlet there were three windows			
	and one small door. In the whole structure one window and door on the front			
	side and two windows on the back side of the room. The spawn run beds of			
	5'x3.5' size were prepared and supported with bamboo frames. In each room			
	there were four rows of mushroom production beds which vertically include			
	four shelves and horizontally included 15 shelves. It costs around 35,000.0			
	per unit.			
Practical utility of	Low cost technology.			
innovation	Keep inner temperature low			
	Keep moisture at optimum level			
	Easy to maintain			
	Can be easily adopted by the others			

# **4.5.** Details of entrepreneurship development:

1. Entrepreneurship development			
Name of the enterprise	Oyster and button mushroom cultivation		
Name & complete address of the entrepreneur	Manoranjan Sarkar mob no. 8617521091 Village: Dhondugach PO: Ghorugach, Uttar Dinajpur		
Role of KVK with quantitative data support:	Technological backstopping and critical input		
Time line of the entrepreneurship development	Manoranjan Sarkar was one of the participant of 8 days rural youth training on "Mushroom production technology" from Uttar Dinajpur KVK and started a small scale unit after training. As his unit was small and he use to sell his product locally and side wise side he cultivating button mushroom with technical support from KVK.		
Technical Components of the Enterprise	Mushroom production (Fresh mushroom and value added products)		
Status of entrepreneur before and after the enterprise	Before the establishment of mushroom unit, his income was very low,		
Present working condition of enterprise in terms of raw materials availability, labour availability, consumer preference, marketing the product etc. (Economic viability of the enterprise):	Selling fresh mushroom at Siliguri @Rs. 40-45/kg and also selling in local market. He is also selling mushroom powder and also creating awareness among SHGs and farmers clubs to take this avenue for income generation. He is selling about 25 Kg produce per day and getting net profit of Rs6,000 to 8,000 per month.		
Horizontal spread of enterprise	8 individual farmer and 4other SHGs of nearby village also started the same venture		

2. Entrepreneurship development			
Name of the enterprise	Vermicompost		
	Khairunesha Begum (Mamtamayee Swanirbhar Gosthi)		
Nama & complete address of the	Village-Uttar Chandagach		
Name & complete address of the	P.OChopra		
entrepreneur	Uttar Dinajpur		
	Contact no 09609251136		
Intervention of KVK with quantitative data	Technological backstopping and critical input		
support:			
Time line of the entrepreneurship development	Mamtamayee swanirbhar Gosthi was KVK formed SHG. Members were very active and used to come to kvk for various capacity building trainings. Mamtamayee SHG has taken 8 days rural youth training on "vermicompost production technology" from Uttar Dinajpur KVK and started a small scale unit within a month of training. All members are very hard working and earning well from compost production.		
Technical Components of the Enterprise	Vermicompost and vermiworm production		
Status of entrepreneur before and after the enterprise	Before the establishment of vermicompost unit, SHG income was nil,		

Present working condition of enterprise in	SHG is selling the product in their locality @Rs. 12/kg and also using		
terms of raw materials availability, labour	compost in their own field. SHG is also creating awareness among		
availability, consumer preference, marketing	their fellow SHGs to take this avenue for income generation. SHG is		
the product etc. ( Economic viability of the	earning net profit of Rs.2500 to 3000 per month.		
enterprise):			
Horizontal spread of enterprise	5 other SHGs of nearby village also started the same venture		

3. Entrepreneurship development			
Name of the enterprise	Oyster Mushroom Cultivation		
	Susila Tudu, Member of Gulamigach Sidhukano SHG		
Name & complete address of the	mob no. 811666073		
entrepreneur	Village: Gulamigach		
	PO: Ghorugach, Chopra, Uttar Dinajpur		
Intervention of KVK with quantitative data support:	Technological backstopping and critical input		
Time line of the entrepreneurship development	Shushila Tudu and her SHG members were participant of 8 days rural youth training on "Oyster mushroom production technology" from Uttar Dinajpur KVK and started a small scale unit after training. All members are very hard working and earning well from mushroom production.		
Technical Components of the Enterprise	Mushroom production		
Status of entrepreneur before and after the enterprise	Before the establishment of mushroom unit, Sushila Tudu was tea garden labourer and during slack period she stay at home, no source of regular income.		
Present working condition of enterprise in terms of raw materials availability, labour availability, consumer preference, marketing the product etc. ( Economic viability of the enterprise):	Selling fresh mushroom @Rs. 80-100/kg in local haats and also selling mushrooms in near by villages. She is also creating awareness among SHGs and farmers clubs to take this avenue for income generation. She is selling about 15-20 Kg produce per day and getting net profit of Rs.4,000 to 5,000 per month.		
Horizontal spread of enterprise	5 individual farmer and 4other SHGs of nearby village also started the same venture		

# 4.6. Any other initiative taken by the KVK

#### **5. LINKAGES**

# 5.1. Functional linkage with different organizations

Name of organization	Nature of linkage		
NABARD	Funding for training, projects, technology week etc.		
<b>Department of Agriculture</b> , Govt. of W.B.	Preparation of SREP and Joint implementation of programme, participation in meeting, conducting training programme and demonstration		
АТМА	Preparation of SREP and Joint implementation of programme, participation in meeting, conducting training programme and demonstration		
IFFCO	Collaborative demonstration, training and funding		
<b>Department of Horticulture,</b> Govt. of W.B.	<b>Joint implementation of programme</b> , participation in meeting, conducting training programme and demonstration		
Office of the <b>Deputy Director, Animal Resource Development</b> , Raiganj, Uttar Dinajpur	Joint Diagnostic Survey, joint implementation of programme, participation in meeting, conducting training programme, demonstration, and organizing village level vaccination camps,		

Name of organization	Nature of linkage		
	clinics.		
Office of the <b>Asst. Director of Fisheries</b> , Raiganj, Uttar Dinajpur	<b>Training</b> of the fish farmers and Fisheries in Uttar Dinajpur; formation and registration of fish production groups.		
Office of the <b>Panchayat Samity</b> , Chopra.	<b>Training</b> of Block Officials elected members of Panchayat Samities on Agriculture Development.		
Rice Research Station, Chinsurah	Supply of seed materials and research information.		
Pulses & Oil Seeds Research, Berhampore	Supply of seed materials and research information.		
Chopra Gram Panchyet	Infrastructural Development		
Office of the <b>Block Livestock Development Officer</b> , Chopra, Uttar Dinajpur	Trainings, health camp, vaccination camp and procurement of vaccines for livestocks		
District Rural Development Cell, Raiganj.	Collaborative training programme and funding		
Rastriya Krishi Vikas Yoyona	Research and infrastructural development		
Uttar Dinajpur Zilla Parishad	Infrastructural development		
Uttar Banga Unnayan Parshad	Infrastructural development		
State Bank of India	Formation of Farm Science Club		
AIR, Siliguri	Broadcasting and wide scale circulation		
Doordarshan, Jalpaiguri	Broadcasting KVK programme farmers-scientist interaction etc.		
SAMETI, Narendrapur	Programme formulation, training etc.		
CIAE, Bhopal	Fabrication of tools		
CFTRI, Mysore	Assessment of nutritive value of weaning foods		
CRRI, Orissa	Supply of Implements		
NRCSS, Ajmer, Rajasthan	Supply of seed materials and research information.		
National cooperative Union of india	Training, Seed Production		
SSB, Darjeeling Range	Training, Krishi Mela		
NIRJAFT	Training		
PPV&FRA	Orientation programme & crop registration		
CRRIJAF, Barrackpore	Supplying of jute seed		
CADC, Arangghata	Supply of seed materials and research information.		
RRS, Malda	<b>Supply</b> of seed materials and research information.		
RRS (OAZ), Majhian, Patiram, Dakshin Dinajpur	Supply of seed materials and research information.		
PCRA	For awareness generation programme		

# 5.2. List of special programmes undertaken during 2018-19 by the KVK, which have been financed by ATMA/ Central Govt/ State Govt./NABARD/NHM/NFDB/Other Agencies (information of previous years should not be provided):

# a) Programmes for infrastructure development:

Name of the programme/ scheme	Purpose of programme	Date/ Month of initiation	Funding agency	Amount (Rs.)
Short term Research	Short term Research for Soil health Management for Maize field.	January, 2019	ATMA	500000
ASCI	To make skill developed expert in Mushroom and quality seed grower	January, 2019	Central Govt.	300424

DAESI	To traine input dealers (fertilizers/pesticide) of the district		MANAGE, Hyderabad	800000
STRY	To train fishery farmers' of the district and acquented with new technological development.	June, 2018	SAMETY, Narendrapur	80000

# (b) Programme for other activities (training, FLD,OFT, Mela, Exhibition etc.)

Name of the programme/scheme	Purpose of programme	Date/ Month of initiation	Funding agency	Amount (Rs.)
Pradhan Mantri Fasal	Awareness Programme			
Bima Yojana	Awareness Programme			
Rabi Kisan Sammelan &	Information dissemination			
World Soil Day	information dissemination			
Technology Week	Technology Week			
PPV & FRA	Awareness Programme			
Training of farmers	Training			
Training and exposure visit	Training and Exposure visit			
Training of rural youths  – STRY	Training			
Training and demonstration on Azolla	Large scale adoption			
			•	

#### 6. PERFORMANCE OF INFRASTRUCTURE IN KVK

#### 6.1. Performance of demonstration units (other than instructional farm)

		Year		Details of	s of production		Amount (F	Rs.)	
SI. No.	Name of demo Unit	of estt.	Area(Sq. mt)	Variet y/bre ed	Produce Qty.	Cost of inputs	Gross income	Rema rks	
1.	Vermicompost	2008- 09	100	-	Vermicom post	32.2 q	21470.00	29730.00	
2.	Integrated fish farming	2009- 10	Pond- 0.13 ha, duckery unit-18 m <sup>2</sup>	Fish-IMC Duck- Khaki Campbel Goat- black bengal	Fish, egg, meat, kids	Goat-14 Kids Duck (Khaki Campbel) – 20 nos.	46820.00	97775.00	

#### **6.2.** Performance of Instructional Farm (Crops):

Name				Details of pro	duction		Amoun	t (Rs.)	
Of the crop	Date of sowing	Date of harvest	Area (ha)	Variety	Type of Produc e	Qty.(q )	Cost of inputs	Gross income	Rem arks
Greengram	25/02/2018	26/6/201 8	1.2	Sonali, PDM – 139, SML – 668	B-F, F- C,	9.5	63265	149550	
Sesame	25/02/2018	28/6/201 8	1.0	Tilottama	F-C,	3.57	12560	53550	
Paddy	15/6/17 – 8/7/2018	16/10/20 18 to 8/12/201 8	2.4	MTU-1010, MTU- 1001, Pratiksha, Swarna Sub-1, MTU - 7029, IET-4094, Parijat, Sahabhagi, Sukhsamrat	B-F, F- C,	99.28	218092	404034	
Dhaincha	24/05/18	12/10/18	1.0	Local	TL	3.0	15000	80000	
Black Gram	20.8.2018	28.11.201 8	0.2	Sulata, PU – 31	B-F & F-C	7.4	36146	111000	
Rapeseed & Mustard	14.11.2018	26.2.2019	1.5	NC-1, B9	B-F & F-C	8.5	53720	120000	
Lentil	16/11/2018	15.3.2019	0.8	IPL – 406, HUL – 57	F-C	5.2	78720	88400	
Linseed	22.11.2018	31.3.2019	1.4	Sekhar	F-C	3.0	10320	30000	
Sesame	25/3/2019	-	1.0	CUMS – 17, Tillotoma	Crop in the field				
Greengram	18.3.2019	-	1.0	IPM -2-3, IPM -2-14, Samrat	Crop in the field				
Groundnut	9/1/2019	-	0.5	Dharani, Narayani, GJG – 18		Cro	p in the fie	eld	

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

SI.	Name of	of Amount (Rs.)			<b>D</b>
No.	the Product	Qty. (Kg)	Cost of inputs	Gross income	Remarks
1.	Bio Fertilizers : PSB, Azitobector	380 & 357	48370.00	88440.00	

#### 6.4. Performance of instructional farm (livestock and fisheries production)

	Name	Detail	s of production	l	Amour		
SI. No	of the animal / bird / aquatics	Breed	Type of Produce	Qty.	Cost of inputs	Gross income	Remarks
1.	Fish	IMC	Table size fish	4.2 q	26,500.00	44,100.00	
2.	Duck	Khanki	Ducklings (2	28	6,750.00	14,000.00	
۷.	Duck	Campbell	months)	nos.			
3.	Goats	Blackbengal		12	27,950.00	60,000.00	
٥.	Juais	Diackbeligai		nos.			

#### 6.5. Utilization of hostel facilities Accommodation available (No. of beds)

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
April, 2018	38	9	
May, 2018	0	0	
June, 2017	41	6	
July, 2018	35	7	
August, 2018	34	10	
September, 2018	0	0	
October, 2018	0	0	
November, 2018	28	10	
December, 2018	20	4	
January, 2019	14	31	
February, 2019	14	65	
March, 2019	27	26	
Total :	251	168	

(For whole of the year)

#### 6.6. Utilization of staff quarters

Whether staff quarters has been completed: No

No. of staff quarters: Nil Date of completion: Nil Occupancy details: Nil

#### 7. FINANCIAL PERFORMANCE

#### 7.1. Details of KVK Bank accounts

Bank account	Name of the bank	Location	Account Number
KVK main A/c	SBI	Islampur, Uttar Dinajpur	11001862927
KVK R/F A/c	SBI	Islampur, Uttar Dinajpur	30156335888

#### 7.2. Utilization of funds under CFLD on Oilseed (Rs. In Lakhs)

	Released by ICAR		Expenditure		
Item	Kharif	Rabi	Kharif	Rabi	Unspent balance as on -
Rapeseed & Mustard		120000		119871	129
Linseed		75000		74690	310

#### 7.3. Utilization of funds under CFLD on Pulses (Rs. In Lakhs)

		•			
	Released	Released by ICAR		diture	Unspent
ltem	Kharif	Rabi	Kharif	Rabi	balance as on
					1 <sup>st</sup> April 2013
Blackgram	450000		449819		181
Lentil		180000		179670	330
Greengram		270000		269780	220
Technology Agent		60000		60000	00

#### 7.4. Utilization of KVK funds during the year 2018-19 (Not audited)

SI. No	Particulars	Sanctioned	Released	Expenditure					
A. Re	A. Recurring Contingencies								
1	Pay & Allowances		1110000						
		11100000	0	9490280					
2	Traveling allowances	75000	75000	74505					
3	Contingencies	00	00	00					
Α	Office Contingency (Stationary, POL, Hire Vehicle etc.)	440000	440000	439753					
В	Training	330000	330000	329460					
С	FLD								
D		220000	220000	219892					
Ε	OFT	110000	110000	109253					
J	Swachhta Expenditure	00	00	00					
	TOTAL (A)	12275000	1227500 0	10663143					
B. No	on-Recurring Contingencies								
1	Vehicle	800000	800000	00					
	TOTAL (B)	800000	800000	00					
C. RE	EVOLVING FUND	00	00	00					
	GRAND TOTAL (A+B+C)	13075000	1307500 0	10663143					

#### 7.5. Status of revolving fund (Rs. in lakh) for last three years

Year	Opening balance as on 1 <sup>st</sup> April	Income during the year	Expenditure during the year	Net balance in hand as on 1 <sup>st</sup> April of each year (Kind + cash)
2015-16	21.80	8.85	6.46	24.19
2016-17	24.19	11.99	6.98	29.20
2017-18	29.20	20.58	8.64	41.14
2018-19	41.14	22.22	10.56	52.80

#### 7.6. (i) Number of SHGs formed by KVKs: 05

(ii) Association of KVKs with SHGs formed by other organizations indicating the area of SHG activities:

SHG formed by other organization mainly coming for Training, Awareness, Exposure Visits (CADC, NGOs etc) and to know technical know how for different entrepreneurship development as well as Agriculture related works.

(iii) Details of marketing channels created for the SHGs: SHGs engaged in herbal gulal preparation are earning good profit. After selling herbal gulal SHG members are earning net profit of Rs. 8000-9000 per quintal. As SHG members are cultivating vegetables own there own which are used in preparation of herbal gulal so, it is more profitable venture for them. Now, branding is need to reap more economic benefits from their product.

In the mean time SHGs have given a stall on Herbal Gulals in Technology Week and Krishi Mela 2017 organized by Uttar Dinajpur KVK at Chopra, Uttar Dinajpur. This is the main turning point for them. Delegates as well as my participants has praised their move and till the last day of the mela they have already sold their whole stock and has orders in their hands for further preparation. They were profited and got lift for further task. Preparation of Herbal Gulal as entrepreneurial activity by SHGs is published by 4 Nos. Local papers and process documentation of Herbal Gulal preparation is done by Doordarshan, Jalpaiguri as well as private channels is News Time, Kolkata TV and CCN.







#### 7.7. Joint activity carried out with line departments and ATMA

Name of activity	Number of activity	Season	With line department	With ATMA	With both
Shor term Research	2	Round the year		ATMA	
Training	15	Round the year	Agriculture Department		
Training	05	Round the year		ATMA	
Exposure Visits	12	Round the year		ATMA	Both

#### 8. Other information

#### 8.1. Prevalent diseases in Crops: Nil

Name of the disease	Crop	Date of outbreak	Area affected (in ha)	% Commodity loss	Preventive measures taken for area (in ha)

#### 8.2. Prevalent diseases in Livestock/Fishery: Nil

Name of the disease	Species affected	Date of outbreak	Number of death/ Morbidity rate (%)	Number of animals vaccinated	Preventive measures taken in pond (in ha)

#### 9.1. Nehru Yuva Kendra (NYK) Training: Nil

Title of the training programme	Period		No. of the participant		Amount of Fund Received (Rs)
	From	То	М	F	

#### 9.2. PPV & FR Sensitization training Programme: Nil

Date of organizing the programme	Resource Person	No. of participants	Registration	(crop wise)
			Name of	No. of
			crop	registration

#### 9.3. mKisan Portal (National Farmers' Portal/ SMS Portal)

Type of message	No. of messages	No. of farmers covered
Crop	32	516288
Livestock	6	96804
Fishery	8	129072
Weather	11	177474
Marketing	11	177474
Awareness	8	129072
Training information	8	129072
Other	2	32268
Total	86	1387524

#### 9.4. KVK Portal and Mobile App

SI. No.	Particulars	Description
1.	No. of visitors visited the portal	548
2.	No. of farmers registered in the portal	16134
3.	Mobile Apps developed by KVK	Yes,( Android App)
4.	Name of the App	Uttar Dinajpur KVK
5.	Language of the App	English
6.	Meant for crop/ livestock/ fishery/ others	Crop, Home Science,
		Fishery, Horticulture,
7.	No. of times downloaded	412 nos.

#### 9.5. a. Observation of Swachh Bharat Programme:

Date/ Duration of Observation	Activities undertaken
11.04.18	Cleaning compound local of village Primary school
24.04.18	Sanitation drive in adoptive village
07.05.18	Cleaning of compound in front of huts, houses at adoptive village
05.06.18	Cleaning of bushes inside streets of adoptive village

26.06.18	Cleaning of plastic, unused papers at adoptive village
11.07.18	Cleaning of cattle shades at adoptive village
17.07.18	Cleaning of surroundings of leaving places of adoptive village dwellers.
01.08.18	Cleaning compound of village Primary school
19.09.18	Cleaning of class rooms of village Primary school
28.08.18	Cleaning of cattle shades at adoptive village
01.10.18	Cleaning of streets, drains at adoptive village
02.10.18	Cleaning of streets, drains at adoptive village
26.11.18	Cleaning of cattle shades at adoptive village
18.12.18	Sanitation drive in adoptive village
	For creating awareness on safe disposal of biodegradable and non-degradable waste
29.01.19	Sanitation drive in adoptive village
14.02.19	Sanitation drive in adoptive village
`14.03.19	For creating awareness on safe disposal of biodegradable and non-degradable waste

#### b. Details of Swachhta activities with expenditure

	Activities	Number	Expenditure (in Rs.)
1.	Digitization of office records/ e-office		0
2.	Basic maintenance	30	7500
3.	Sanitation and SBM	16	10000
4.	Cleaning and beautification of surrounding areas	27	8500
5.	Vermicomposting/ Composting of biodegradable waste management & other activities on generate of wealth for waste	12	2500
6.	Used water for agriculture/ horticulture application		0
7.	Swachhta Awareness at local level	13	6000
8.	Swachhta Workshops	0	0
9.	Swachhta Pledge	0	0
10	. Display and Banner	25	5000
11	. Foster healthy competition	0	0
12	. Involvement of print and electronic media	2	2200
13	. Involving the farmers, farm women and village youth in the adopted villages (no of adopted village)	10	8500

Activities	Number	Expenditure (in Rs.)
14. No of Staff members involved in the activities	8	0
15. No of VIP/VVIPs involved in the activities		0
16. Any other specific activity (in details)		0
Total	143	50200

#### 9.6. Observation of National Science day: Nil

# 9.7. Programme with Seema Suraksha Bal/ BSF

Title of Programme	Date	No. of participants
Nil	Nil	Nil

# 9.8. Agriculture Knowledge in rural school

Name and address of school	Date of visit to school	Areas covered	Teaching aids used
Bidhannagar Santosini	17.01.19	Agriculture knowledge	No. of students=100
Vidyachakra High School,			No. of teachers =4
Bidhannagar			

#### Give good quality 1-2 photograph(s):









# 9.9. Details of 'Pre-Rabi Campaign Programme:

	No. of Union	No. of Hon'				Participa	ınts (No.	.)					
Date of progra mme	Ministe rs attende d the progra mme	ble MPs (Loksab ha/ Rajyasa bha) particip ated	No. of State Govt. Minist ers	MLAs Attend ed the progra mme	Chairma n ZilaPanc hayat	Distt. Collect or/ DM	Bank Offici als	Farm ers	Govt. Official s, PRI memb ers etc.	Tot al	Coverage by Door Darshan (Yes/No)	Coverage by other channels (Number)	
08.02. 2019	Nil	Nil	Nil	Nil	Nil	Nil	DDM, NABA RD,	480	Sub- divisio nal Agricul ture officer, Islamp ur	48 2	Doordarsan, Siliguri	Regional print media, Uttar Banga Sangbad	

# 9.10. Details of Swachhta Hi Sewa programme organized:

SI. No.	Activity	No. of villages Involved	No. of Partici pants	No. of VIPs	Name (s) of VIP(s)
1	Toilet pit-digging exercise and other toilet construction activities	1	65	Nil	Nil
2	Organizing cleaning of streets, drains and bgack alleys through awareness drives	4	103	Nil	Nil
3	Organizing waste collection drives in households and common or shared spaces	4	54	Nil	Nil
4	Conducting door-to-door meetings to drive behaviour with respect to sanitation behaviours	3	29	Nil	Nil
5	Organizing awareness like campaigns around better sanitation practices using a toilet, hand washing, health and hygiene awareness, etc.	2	24	Nil	Nil
6	Conducting Village or School-level rallies to generate awareness about sanitation	3	22	Nil	Nil
7	Making wall paintings in public places on the theme of Swachhata	3	14	Nil	Nil
8	Volunteering for segregation of solid waste into non-biodegradable and biodegradable waste	1	7	Nil	Nil
9	Mobilizing community to build compost pits, where organic matter decomposes to form manure	1	17	Nil	Nil

# 9.11. Details of Mahila Kisan Divas programme organized

SI. No.	Activity	No. of villages Involved	No. of Participants	No. of VIPs	Name (s) of VIP(s)
1	<ol> <li>Demonstration on women friendly drudgery reduction on agricultural tools.</li> <li>Drawing completion on the theme "women in agriculture and family nutritional management.</li> </ol>	8	50	Nil	Nil

# 9.12. No. of Progressive/ Innovative/ Lead farmer identified (category wise):

SI. No.	Name of Farmer	Address of the farmer with contact no.	Innovation/ Leading in enterprise
1.	Sri. Shyama Machol, Karandighi, Uttar Dinajpur Chandra Lala Mobile: 9932609342		RCT, Pulse & Oil Seed Production, Organic cultivation
2.	Smt. Sushila Tudu	Golamigachh, chopra, mob. No. 811666073	Mushroom
3.	Smt. Pinki Debnath	Pagligachh, Chopra, Uttar Dinajpur, mob no. 9382488261	Weaning Food, Herbal Aabir
4.	Sri. Mangal Soren	Machol, Karandighi, Uttar Dinajpur	IFS unit
5.	Md. Ali	Raiganj, Uttar Dinajpur, mob no. 9002805026	Button Mushroom
6.	Sri. Niren Singh	Bilatibari, Chopra, Uttar Dinajpur Mobile: 8145218993	Crop production Technology
7.	Sri. Pabitra Roy	Chowgharia, Kanki, Goalpokher -2, Uttar Dinajpur, Mobile: 8759069338	Crop Diversification
8.	Sri. Srikanta Mandal	Kanki, Uttar Dinajpur, Mobile: 9563287457	Strawberry cultivation
9.	Sri. Soleman Ali	Hemtabad, Uttar Dinajpur Mobile: 9734127899	Tulaipanji Rice
10.	Smt. Ruma Basak	Sadhuramgachh, Chopra, Uttar Dinajpur, mob. No. 9932350450	Vermi-compost
11.	Smt. Anima Sarkar	Dhondugach, teenmile, mob no. 7047730381	Mushroom and its value added products
12.	Mr. Khairul Haque	Vill: Goalgachh. Block: Chopra Uttar Dinajpur,Mobile: 9002720125	Pineapple & Pulse cultivation
13.	Mr. taun Singha	Vill: Bilatibari,Block: Chopra Uttar Dinajpur	Organic cultivation
14.	Mr. Debasish Khan	Vill: Subandigachh, Block: Chopra Uttar Dinajpur Mobile:9547166551	Duckery & Poultry
15.	Mr. Amar Singha	Vill: Dhatipara, Rasakhowa Block: karandighi Uttar Dinajpur	Crop diversification (Off season vegetables).
16.	Mr. Prabir Das	Vill: Ramakrishnapally P.O. + P.S + Block: Islampur Uttar Dinajpur,Mobile: 8436358619	Off Season vegetables cultivation
17	Sandhya rani Roy	Vill: Nandajhar, Block- Goalpokher -1 Uttar Dinajpur Mobile 9932792168	

#### 9.13. Revenue generation

SL.No.	Name of Head	Income(Rs.)	Sponsoring agency
1.	KVK Instructional farm (crops & Allied vocations)	570000	Uttar Dinajpur KVK
2.	Exposure visit, Training,	72000	ATMA Uttar Dinajpur, STRY, DAESI, Kishanganj KVK,
3.	DAESI course	200000	Uttar Dinajpur KVK
	Total	842000	

#### 9.14. Resource Generation:

SL.No	Name of the programme	Purpose of the programme	Sources of fund	Amount (Rs. lakhs)	Infrastruct ure created
1.	Short Term Research	Validation Technology and Transfer of Technology	ATMA	5.00	
2.	Pre-Rabi Campaign	Awareness Programme	ICAR	0.80	
3.	Training	Trasfer of Technology and Capacity building	STRY	0.80	-
4.	ARYA	Capacity building & Entrepreneurship Development		6.84	
5.	ASCI	Capacity building	Skill council of India	3.30	
6.	CSISA	Production practices Survey work	ICAR_CIMMYT	1.60	
7.	Exposure visits and Training	Trasfer of Technology and Capacity building	Dept. of Agriculture, Govt. of W.B.,	1.30	-
8	CFLD — Pulse & Oil Seed	Promotion of area and Pulse, Oil Seed Production	DAC& FW, Ministry of Agri. Govt. India	11.55 (0.60 for 1 nos. Technology Agent)	-
9.	District Kisan Mela	Organization of Kisan Mela	DAC& FW, Ministry of Agri. Govt. India	4.0	-
10	DAESI Course	Diploma course		8.0	
			Total(Rs. lakhs)	43.19	

#### 9.15. Performance of Automatic Weather Station in KVK: Nil

Date of establishment	Source of funding i.e. IMD/ICAR/Others (pl. specify)	Present status of functioning

#### 9.16. Contingent crop planning:

Name of the state	Name of district/KV K	Thematic area	Number of programmes organized	Number of Farmers contacted	A brief about contingent plan executed by the KVK

#### 10. Report on Cereal Systems Initiative for South Asia (CSISA)

a) Year: 2018-19 (Survey work) yet to be started.

b) Introduction / General Information:

	Title	Objective	Treatment details	Date of sowing	Replication	Result with photographs
Experiment 1						
Experiment 2						
Experiment 3						
Others (If any)						

#### 11. Details of TSP: Nil

#### a. Achievements of physical output under TSP during 2017-18:

Programmes	Physical achievements
Asset creation (Number; Sprayer, ridge maker, pump set,	
weeder etc.)	
On-farm trials (Number)	
Frontline demonstrations (Number)	
Farmers training (in lakh)	
Extension personnel training (in lakh)	
Participants in extension activities (in lakh)	
Seed production (in tonnes)	
Planting material production (in lakh)	
Livestock strains and fingerlings production (in lakh)	
Soil, water, plant, manures samples testing (in lakh)	
Provision of mobile agro – advisory to farmers (in lakh)	
No. of other programmes (Swachha Bharat Abhiyaan,	
Agriculture knowledge in rural school, Planting material	
distribution, Vaccination camp etc.)	

#### b. Fund received under TSP in 2017-18 (Rs. In lakh): Nil

#### c. Achievements of physical outcome under TSP during 2017-18: Nil

SI. No.	Description	Unit	Achievements
1	Change in family income	%	
2	Change in family consumption level	%	
3	Change in availability of agricultural implements/ tools etc.	No. per household	

#### d. Location and Beneficiary Details during 2017-18: Nil

District	Sub-district	No. of	Name of	ST population benefitted					
		Village	village(s)		(No.)				
		covered	covered	M	F	T			

# 12. Progress report of NICRA KVK (Technology Demonstration component) during the period (Applicable for KVKs identified under NICRA): Nil

#### **Natural Resource Management: Nil**

Name of intervention undertaken	Number s under taken	No of units	Are a (ha)		No of farmers covered / benefitted				Remarks				
				SC		ST		Otl	her	To	tal		
				М	F	М	F	М	F	М	F	Т	

**Crop Management: Nil** 

Name of intervention undertaken	Area (ha)		No	o of		mers nefi			<b>/</b> k		Remarks
		S	С	S	Т	Ot	her	Т	ota	al	
		М	F	М	F	М	F	М	F	T	

Livestock and fisheries: Nil

Name of intervention undertaken	Number of animals covered	No of unit s	Area (ha)		No of farmers co benefitted							Remarks		
				SC		ST	1	Otl	her	To	tal			
				М	F	M	F	М	F	М	F	Т		

**Institutional interventions: Nil** 

Name of intervention undertaken	No of unit s	Area (ha)		No of farmers covered / benefitted						Remarks		
			S	С		ST	Ot	her	Т	ota	al	
			М	F	N	l F	M	F	М	F	Т	

**Capacity building: Nil** 

Thematic area	No of Courses			N	lo of	bene	ficiarie	es		
		SC	S	Т		Othe	er	T	otal	
		M	F	М	F	M	F	М	F	Т

**Extension activities: Nil** 

Thematic area	No of activities			N	lo of	bene	ficiarie	es		
		SC	SC ST Other				r	Total		
		М	F	М	F	М	F	М	F	Т

Detailed report should be provided in the circulated Performa

# 13. Awards/Recognition received by the KVK

SI. No.	Name of the Award	Year	Conferring Authority	Amount	Purpose
1.	Pandit Deen Dayal Upadhyay Rastriya Krishi Protsahan Puraskar, Zone – V	2016- 17	ICAR, New Delhi	2.25 lakh	For Excellect works towards farming communities of Uttar Dinajpur KVK

# $\label{prop:continuous} \textbf{Award received by Farmers from the KVK district}$

SI. No.	Name of the Award	Name of the Farmer	Year	Conferring Authority	Amount	Purpose
1.	Mahindra Samridhi Agri National Award in the best Youth Women Farmers' of India category 2017	Smt. Sushila Tudu	2017	Mahinda India	2.11 lakh	For her excellect contribution in Mushroom Production technology
2.	Mahindra Samridhi Agri National Award in the best Farmers' of North East Zone of India category 2017	Sri. Shyam Chandra Lala	2017	Mahinda India	0.25 lakh	For his excellect contribution in Resource Conservation technology in Agriculture, Pulse & Oil Seed Production.
3.	Mahindra Samridhi Agri National Award in the best Youth Women Farmers' of India category 2018	Smt. Anima Majumdar	2018	Mahinda India	2.11 lakh	For her excellect contribution in Mushroom Production, Value addition of Mushroom products, Mushroom Spwan production technology and Marketing Linkages.

#### 14. Any significant achievement of the KVK with facts and figures as well as quality photograph

Smt. Anima Majumdar, a farm woman working under technical guidance of Uttar Dinajpur *Krishi Vigyan Kendra* bagged the best Farm Woman Award of India – "Mahindra Samridhi Award – 2019" on Mushroom cultivation.

Smt. Anima Majumder a farm woman of Dandhugachh village of Chopra Block of Uttar Dinajpur district bagged the Best Farm Woman Award of India (National Level) i.e.

"Mahindra

Samridhi Award — 2019" for her contribution in the Mushroom cultivation sector and its value addition. Smt. Anima Majumder and her husband are marginal farmers having 1 acre land, due to which they had suffered a lot to earn their daily livelihood. It was very difficult for them to earn their daily bread and put up with expenses of their child's education. In the mean of time Smt. Anima Majumder came in touch with Dr. Anjali Sharma, Subject Matter Specialist (Home Science) of Uttar Dinajpur Krishi Vigyan Kendra, Uttar Banga Krishi Viswavidyalaya, Chopra, Uttar



Dinajpur. As per suggestion of Dr. Sharma, Smt. Anima Majumder started training on Mushroom cultivation. Within a few days her dedication and hard work reflected very well among the trainees and others. Then she was advised to take advanced training on Mushroom Spawn production in *Krishi Vigyan Kendra*'s Bio-input Laboratory. Along with that she started training on value addition of Mushroom like — preparation of Mushroom pickle, Mushroom added Daler Bori (Pulse chunk), Mushroom added Papad, etc. Then she made a Mushroom cultivation unit at her home with the technical help of Uttar Dinajpur *Krishi Vigyan Kendra*. Within few days with active support from her husband Smt. Anima Majumder was able to produce mass amount of raw Mushroom, Mushroom Pickle, Mushroom *Daler Bori*, Mushroom *Papad* which she sold in the adjoining market and Silliguri successfully. After one year of Mushroom cultivation practices it has been observed that her income generation from this sector has been raised up to Rupees 15,000.00 to 20,000.00/month excluding cultivation expenses.

Like other years, this year also famous India Company Mahindra announced nomination of best farmers/farm women category those who have contributed major agricultural advancement in the Agriculture sector through Agriculture Universities, KVKs and other organizations working for



Agricultural Development of India. This is a very recognized step is being taken by Mahindra Company to pay honour for the farming community of our country. Pursuant to their announcement, Uttar Dinajpur *Krishi Vigyan Kendra* sent the filled in nomination application form for Smt. Anima Majumder to get recognition of her work that she has taken in order to make an example of entrepreneurship development for the Mahindra Samridhi Award 2018-19. On 18<sup>th</sup> March, 2019 Mahindra Samridhi Award – 2019 ceremony has been organized at the Ashoka International Hotel in New Delhi, where India's

top Agricultural Scientists were appointed as jury member of the Award function. After several screening procedure Smt. Anima Majumder's name has been selected as the best young Women Farmer at the Nation Level for her contribution in Mushroom cultivation, spawn production and value added Mushroom products. As a result she was awarded by a prize money of ₹ 2.11 lakh,

Citation and a winner trophy memento. Mahindra company also provided their to and fro journey ticket for her all family members from her home to Delhi.



In addition to that, Mahindra Company also sent to and fro journey ticket for Smt. Majumder and her family from her home to Delhi to be present in the Mahindra Samridhi Award − 2019 ceremony who had won the same prize (prize money of ₹ 2.11 lakh, Citation and a winner trophy memento) for her significant contribution in the field of Mushroom cultivation in the form of Mahindra Samridhi Award −

2017-18 i.e., last year as an effort to make them more focused to do something new in the field of Agriculture and make them self sufficient in income generation.

# 15. Number of commodity based organizations/ farmers' cooperative society/ FPO formed/ associated with during last one year (Details of the group/society may be indicated):

SI. No.	Name of the organization/ Society	Trust Deed No.& date	Date of Trust Registration Address	Proposed Activity	Commodity Identified	No. of Members	Financial position (Rupees in lakh)	Success indicator
1.	Raiganj Tulaipanji Producers' organization	-	Raiganj	Production of scented rice from paddy through parboiling method technically guided by the KVK	Tulaipanji Rice	270 nos of farmers are presently engaged in the activity	12.75	Promising activity
2.	Ma laxmi Mushroom production society	-	Pagligachh, Chopra, Uttar Dinajpur	Production of oyster Mushroom cultivation	Mushroom	320 nos of individuals and women SHG groups	11.05	Good marketing chain
3.	Krishi Kalyan Jaibo Sar at Chopra Block	February, .2019	Bilatibari, Chopra, Uttar Dinajpur	Presently there are engaged in producing Krishi Kalyan Jaibo Sar and marketing it to different agencies.	Vermicompost, Organic Manure	200	0.32	Production of value added vermicompost and marketing.
4.	Krishi Kalyan Jaibo Sar at Karandighi Block	January, 2019	Machol, Karandighi, Uttar Dinajpur	Technical aspects like training, demonstration, hands on practices etc. that can help in organic crops, vegetables production.	Vermicompost, Organic Manure	400	0.56	Production of value added vermicompost and marketing.
5.	Sukriti Sishu Aahar Group	February, 2019	Islampur, Uttar Dinajpur	Production of low cost nutritious weaning food using locally available ingredients for malnourished children.	Low cost nutritious weaning food	50	0.25	Production of low cost nutritious weaning food and its marketing.

# 16. Integrated Farming System (IFS) Details of KVK Demo. Unit:

SI. No.	Module details (Component- wise)	Area under IFS (ha)	Production (Commodity-wise)	Cost of production in Rs. (Component-wise)	Value realized in Rs. (Commodity-wise)	No. of farmer adopted practicing IFS	% Change in adoption during the year
1.	KVK Module: Fish cum Dyke Vegeyables, Goatery, Duckery, Organic prosduction unit	1.2	i. Fish Fingerlings: 73000 & Table Fish production: 1.2 q  ii. Goatery: 8 nos. kids  iii. Duckery: 10 nos. ducklings & 800 eaggs/year which were distributed to the farmers  iv. Organic Production vegetable: 1.4 q	i. Fish Production: 30000 ii. Goatery: 5000 iii. Duckery: 5000 iv. Organic Production: 3000	i. Fish Production: 46000 ii. Goatery: 25000 iii. Duckery: 10000 Organic Production: 10000	8	33.33

# 17. Technologies for Doubling Farmers' Income

SI. No.	Name of the Technology	Brief Details of Technology (3- 5 bullet points)	Net Return to the farmer (Rs.) per ha per year due to adoption of the technology	No. of farmers adopted the technology in the district	One high resolution 'Photo' in 'jpg' format for each technology
1.	Integrated Pest (aphid and weed) Management of Rapeseed and Mustard	<ul> <li>Application of Pre-emergence         Herbicide</li> <li>Insolution of yellow sticky trap before         flowering for aphid management</li> </ul>	12000/ha	42	
2.	Introduction of Summer Squash as non conventional vegetable	<ul><li>Crop Diversification</li><li>Off season vegetables cultivation</li></ul>	52000/ha	20	
4.	Cultivation of Early ridge gourd	<ul><li>Crop Diversification</li><li>Off season vegetables cultivation</li></ul>	34000/ha	10	
5.	Backyard Azolla Cultivation	Supplimentary of cattle and poultry feed for milk and egg production	3000/unit/year	20	TOTAL PROBLEM OF PRINCIPLE ARMES  THE SERVICE OF THE SERVICE ARMES  THE SE

SI. No.	Name of the Technology	Brief Details of Technology (3- 5 bullet points)	Net Return to the farmer (Rs.) per ha per year due to adoption of the technology	No. of farmers adopted the technology in the district	One high resolution 'Photo' in 'jpg' format for each technology
6.	Nutritional Kitchen Garden	Organic production and nutritional food production	24000/unit/year	5	
7.	Low Cost Weaning Food	Supplimentary nutritional food for children	42000/unit/year	6 nos. SHG grous	
8.	Oyster Mushroom cultivation	<ul><li>Supplimentary nutritional food as entreprenership development</li></ul>	74000/Unit/year	8 nos. SHGs	
9.	Vermi-composting	Organic Input production	38000/Unit/Year	6 Nos. SHGs	
10.	Composite Fish Culture	Income generation and fish production	14000/Unit/Year	13 nos.	

#### 18. Report on Digital Farming Initiatives in Agriculture/ Digital Ag. Extension Service

	Database pr	epared/ covered for	KVK leve	el Committee	Various activity conducted for
Phase	Total no. of villages	Total no. of farmers	Date of formation	Name of members	farmers
I (up-to 15.03.2018)	370	3778	January, 2018	All Staff	SMSs service, Training. Diagnostic
II (up-to 24.04.218)	1600	16595			Service, Advisory
Total	1970	20373			Service etc.

#### 19. Information on Visit of Ministers to KVKs, if any

Date of	Name of Hon'ble	Name of	Salient points in his/ her observation (2-3 bulleted points)
Visit	Minister	Ministry	
Nil	Nil	Nil	Nil

# 20. a) Information on ASCI Skill Development Training Programme, if undertaken during 2017-18 and 2018-19

	4114 2010 23										
Year	Name of the Job role	Name of the Job role  Name of the certified  Trainer of KVK for the Job role		Date of completion of training	No. of participants	Whether uploaded to SDMS Portal (Y/N)	Fund utilized for the training (Rs.)				
2016- 17	N/A	N/A	N/A	N/A	N/A	N/A	N/A				
2017- 18	N/A	N/A	N/A	N/A	N/A	N/A	N/A				
2018-	Mushroom Growers	Dr. Anjali Sharma	16.01.19	15.02.19	20	Y					
19	Quality Seed Growers	Dr. Soumen Mahapatra	04.02.19	04.03.19	20	Υ					

# b) Information on Skill Development Training Programme (Other than ASCI or less than 200 hrs., if any) if undertaken during 2018-19: Nil

Thematic area of training	Title of the training	Duration (in hrs.)	No. of participants						Fund utilized for the training (Rs.)			
			S	С	ST Other		Total					
			М	F	М	F	М	F	М	F	T	

# 21. Information on NARI Project (if applicable): Fund not received. Fund was utilized from KVK revolving Fund.

Name of Nodal Officer	No. of OFT on specifie d aspects	Title(s) of OFT	No. of FLD on specified aspects	No. of capacity developmen t programme on specified aspects	Total no. of farm women/ girls involved in the project	Details of Issues related to gender mainstreaming addressed through the project
Dr. Anjali Sharma	01	Assessment of Nutricereal and millet based Ready To Eat (RTE) nutritional supplement on farmwome n and teenage girls.	01 (Nutritional kitchen Garden)	04	150	Though due to financial constraint programmes were not conducted in present report period. All our approaches are women friendly approaches which will definitely address gender mainstreaming issues.

#### 22. Information on Krishi Kalyan Abhiyan Phase-I/ Phase-II/ Phase-III, if applicable

#### Krishi Kalyan Abhiyan- I and II: Nil

#### A. Training

Name of programme	No. of programmes		No. of farmers benefitted								No. of officials
		SC ST			Others			Tota	I	attended the	
		М	F	М	F	М	F	М	F	T	programme
KKA-I											
KKA-II											

B. Distribution of seed/ planting materials/ input/ others: Nil

C. Livestock and Fishery related activities: Nil

D. Other activities: Nil

Krishi Kalyan Abhiyan- III: Nil

# 23. Any other programme organized by KVK, not covered above

SI. No.	Name of the programme	Date of the programme	Venue	Purpose	No. of participants	

#### 24. Good quality action photographs of overall achievements of KVK during the year (best 10):



















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