ANNUAL REPORT

(January, 2020 to December, 2020)

NADIA KRISHI VIGYAN KENDRA

Bidhan Chandra Krishi Viswavidyalaya

Indian Council of Agricultural Research

Gayeshpur, Nadia, West Bengal
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C O N T E N T

ANNUAL REPORT-2020

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	
Nadia Krishi Vigyan Kendra P.O. Gayeshpur, Dist. Nadia, West Bengal PIN - 741 234.	033-25891271	NA	nadiakvk@gmail.com Website: www.nadiakvk.org

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

Address	Telephone		E mail
	Office	FAX	
Bidhan Chandra Krishi Viswavidyalaya P.O. Mohanpur, Dist. Nadia, West Bengal, PIN – 741 252	033-25876048	033-25870523 033-25820465	deebckv@gmail.com Website: www.bckv.edu.in

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

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. S. H. Ansary		7980878576	samsulhaqueansary@gmail.com

1.4. Year of sanction of KVK: F.No.2-3/93-A.E.-I dated Feb. 05, 2004

1.5. Staff Position (as on 1st April, 2019)

Sl. 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 and Head	Dr. Samsul Haque Ansary	Senior Scientist & Head	Horticulture	37400-67000(GP-9000) 48,690.00	17.09.2019	Permanent	OBC(A)
2	Subject Matter Specialist	Dr. Malabika Debnath	Subject Matter Specialist/ T9	Plant Protection	15600-39100(GP-7600) 36,520.00	26.10.2005	Permanent	Others
3	Subject Matter Specialist	Dr. Shubhra Jyoti Pramanik	Subject Matter Specialist/ T6	Seed Science	15600-39100(GP-5400) 31,820.00	26.10.2005	Permanent	Others
4	Subject Matter Specialist	Dr. Kaushik Mukhopadhyay	Subject Matter Specialist/ T6	Soil Science	15600-39100(GP-5400) 23,640.00	22.06.2018	Permanent	Others
5	Subject Matter Specialist	Mr. MilanKanti Kundu	Subject Matter Specialist/ T6	Agronomy	15600-39100(GP-5400) 21,630.00	22.06.2018	Permanent	OBC(B)
6	Subject Matter Specialist	Mr. SaikatSaha	Subject Matter Specialist/ T6	Agrilcultural Extension	15600-39100(GP-5400) 21,000.00	17.09.2019	Permanent	Others
7	Subject Matter Specialist	Vacant	-	Animal Husbandary	-	-	-	-
8	Programme Assistant	Mr. Saidul Islam	Programme Assistant (Lab. Tech.)/ T4	Plant Pathology	9300-34800 (GP-4200) 13,910.00	01.08.2018	Permanent	OBC (A)
9	Computer Programmer	Mr. JharnenduHembram	Programme Assistant (Computer)/ T5	Information Technology	9300-34800 (GP-4600) 16,570.00	06.06.2014	Permanent	ST
10	Farm Manager	Dr. Sukhen Chandra Dhang	Farm Manager/ T6	Horticulture	15600-39100(GP- 5400) 23,640.00	07.09.2006	Permanent	Others

Sl. No.	Sanctioned post	Name of the incumbent	Designation	Discipline	Pay Scale with present basic	Date of joining	Permanent /Temporary	Category (SC/ST/ OBC/ Others)
11	Accountant / Superintendent	Mr. Arpan Mandal	Assistant	Marketing & Human Resource	9300-34800 (GP-4200) 13,500.00	18.06.2019	Permanent	Others
12	Stenographer	Mrs. Swati Sow	Stenographer Grade III	Sanskrit	5200-20200(GP-2400) 9,910.00	18.06.2019	Permanent	SC
13	Driver	Mr. Kalyan Kumar Thakur	Driver/ T3	-	5200-20200(GP-2800) 14,680.00	24.10.2005	Permanent	Others
14	Driver	Mr. Sukharanjan Nath	Driver/ T3	-	5200-20200(GP-2800) 14,250.00	30.08.2006	Permanent	SC
15	Supporting staff	Mr. Prasanta Biswas	Skill Supporting staff	-	5200-20200(GP-2000) 11,200.00	26.10.2005	Permanent	SC
16	Supporting staff	Mr. Biswajit Hansda	SkillSupporting staff	-	5200-20200(GP-2000) 11,200.00	24.10.2005	Permanent	ST

1.6. Total land with KVK (in ha) :

Sl. No.	Item	Area (ha)
1	Under Buildings	0.085
2.	Under Demonstration Units	0.0477
3.	Under Crops	4.76
4.	Orchard/Agro-forestry	2.50
5.	Others with details	2.00
	Total	**9.3927**

Total area should be matched with breakup

1.7. Infrastructure Development:

A) Buildings and others

Sl. 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					Yes	550.0	√	ICAR
2.	Farmers Hostel					Yes	300.0	√	ICAR
3.	Staff Quarters (6)					-	-	-	-
4.	Piggery unit					Yes	121.0	√	RKVY
5	Fencing					Yes	-	√	ICAR
6	Rain Water harvesting structure					Yes	500.0	√	SASMIRA
7	Threshing floor					Yes	357.0	√	ICAR
8	Farm godown					Yes	189.5	√	ICAR
9.	Dairy unit					Yes	28.4	√	ATMA
10.	Poultry unit					Yes	14.2	√	ATMA
11.	Goatary unit					Yes	14.2	√	RKVY
12.	Mushroom Lab					Yes	13.4	√	ATMA
13.	Mushroom production unit					Yes	33.7	√	ATMA
14.	Shade house					Yes	1,000	√	NHM SASMIRA
15.	Soil test Lab					Yes	18.6	√	ICAR
16	Plant Diagnostic Unit					Yes	17.4	√	ICAR
17	Farm Cottage					Yes	102.3	√	RKVY

* 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
Jeep	Feb, 2005	4,71,856.00	1,92,112 km	Condemned
Tractor	March, 2005	4,29,440.00	950.00 hr	Working
Motor Bike I	June, 2016	60,000.00	9666 km	Working
Motor Bike II	June, 2016	60,000.00	9754 km	Working

C) Equipment & AV aids

Name of equipment	Year of purchase	Cost (Rs.)	Present status	Source of fund
a. Lab equipment				
Lux meter	2008	4,500.00	Working	NHM
Thermometer (Min & Max)	2008	9,00.00	Working	NHM
Hair Hygrometer	2008	9,00.00	Working	NHM
Spectrophotometer	2011	30,588.00	Working	ICAR
Flame photometer	2011	25.027.00	Working	ICAR
P.H meter (3)	2011	10.896.00	Working	ICAR & ATMA
E.C.meter	2011	6.333.00	Working	ICAR
Digital balance	2011	36,000.00	Working	ICAR & ATMA
B.O.D (2)	2011	98,000.00	Working	ICAR
Hot air oven	2011	9,000.00	Working	ICAR
Dryer	2011	9,000.00	Working	ICAR
Desiccator	2011	12,000.00	Working	ICAR
Laminar air flow(2)	2011	80,000.00	Working	ICAR
Autoclave	2011	38,000.00	Working	ICAR
Mechanical shaker (2)	2011	43,240.00	Working	ICAR
Water distillation unit (2)	2011	23,800.00	Working	ICAR
Microscope (3)	2011	5,12,000.00	Working	ICAR
Tissue culture rack (3)	2012	60,000.00	Working	ICAR
Soil moisture meter	2012	8,000.00	Working	ICAR
Carrier culture mixture machine	2012	25,000.00	Working	ICAR
Microwave	2012	4,800.00	Working	ICAR
b. Farm machinery				
Tractor	2005	4,30,000.00	Working	ICAR
Grafting/budding knife	2008	720.00	Working	ICAR
Plastic pipe	2008	2,844.00	Working	ICAR
Henso	2008	1,200.00	Working	ICAR
Da	2008	412.00	Working	ICAR
Polythene	2008	6,550.00	Working	ICAR
Secature	2008	1,575.00	Working	ICAR
Rose Cane	2008	1,300.00	Working	ICAR
Van Rickshaw	2008	7,780.00	Working	ICAR
Shabol	2008	1,120.00	Working	ICAR
Khurpi	2008	975.00	Working	ICAR

Belcha	2008	544.00	Working	ICAR
Spade	2008	1,950.00	Working	ICAR
Harrow	2009	65,000.00	Working	ICAR
Sprayer(2)	2009	5,000.00	Working	ICAR
Heavy duty rotavator	2013	1,20,000.00	Working	ICAR
Paddy thresher	2013	3,900.00	Working	ICAR
Sprinkler	2010	45,000.00	working	RKVY
Lawn mower	2013	29,000.00	Working	ICAR
Brush cutter	2013	27,000.00	Working	ICAR
c. AV Aids				
Microphone	2008	29,900.00	Working	
Amplifier	2008	10,200.00	Working	
Microphone for podium	2008	3,050.00	Working	
Sound Box	2008	7,500.00	Working	
Collar microphone with cord	2008	1,700.00	Working	
Cordless collar microphone	2008	5,800.00	Working	
Mixture	2008	4,300.00	Working	

D) Farm implements

Name of equipment	Year of purchase	Cost (Rs.)	Present status	Source of fund
Tractor	2005	4,30,000.00	Working	ICAR
Grafting/budding knife	2008	720.00	Working	ICAR
Plastic pipe	2008	2,844.00	Working	ICAR
Henso	2008	1,200.00	Working	ICAR
Da	2008	412.00	Working	ICAR
Polythene	2008	6,550.00	Working	ICAR
Secature	2008	1,575.00	Working	ICAR
Rose Cane	2008	1,300.00	Working	ICAR
Van Rickshaw	2008	7,780.00	Working	ICAR
Shabol	2008	1,120.00	Working	ICAR
Khurpi	2008	975.00	Working	ICAR
Belcha	2008	544.00	Working	ICAR
Spade	2008	1,950.00	Working	ICAR
Pump	2009	2,00,000.00	working	RKVY
Harrow	2009	65,000.00	Working	ICAR
Sprayer(2)	2009	5,000.00	Working	ICAR
Heavy duty rotavator	2013	1,20,000.00	Not Working	ICAR
Paddy thresher	2013	3,900.00	Working	ICAR
Sprinkler	2010	45,000.00	working	RKVY
Lawn mower	2013	29,000.00	Working	ICAR
Brush cutter	2013	27,000.00	Working	ICAR

1.8. Details SAC meeting conducted in the year

Sl. No.	Date	Number of Participants	Salient Recommendations	Action taken	If not conducted, state reason
1.	06.03.2021	24	It is suggested to identify the background information of a locality and proper need of the farming community before setting up of a technology testing in case of OFT-4.	It will be done	
			It has been suggested to go through an intensive review processes before setting up of short term research projects from ATMA.	It has been done on the basis of needs of the farmers and to develop some innovative demonstration units for dissemination among the farming community	
			It is recommended to identify the local need of different villages across the district through baseline socio-economic survey particularly by PRA and the need of the local people before setting of OFTs and FLDs by the scientists of the KVK.	The formulation of OFT and FLD are done on the basis of local need of the farmers	
			It is advised to identify different agro-ecological niches associated with various cropping system especially the orchard crops like mango, banana etc. across the district and the KVK personnel should intervene through proper management practices and market linkages coupled with various strategies to promote the area specific agricultural commodity.	It will be done accordingly	
			It is recommended to disseminate the recently developed technologies from the university research system especially from the AICRPs (i.e. disease resistant varieties of different vegetables like Chilli, Tomato etc.)	We have taken some technologies for from AICRPs for formulation of action plan	
			It is advised for effective utilization of Revolving fund of KVK.	We already utilized some fund for renovation of demonstration units.	
			It is suggested to assess the market prospect of the Kadaknath chicks taken under FLD programme.	The FLD will be done accordingly	
			It is suggested to use the term Plug tray instead of pot culture in OFT-6.	It is rectified	

Proceedings of 15th Scientific Advisory Committee Meeting

The 15th Scientific Advisory Committee (SAC) Meeting of Nadia Krishi Vigyan Kendra held on March 06, 2021 at the Training Hall of this Kendra through physical and also virtual mode. The meeting was conducted under the Chairmanship of Prof. B.S. Mahapatra, Hon'ble Vice-Chancellor, Bidhan Chandra Krishi Viswavidyalaya. The majority of the members of the SA Committee were present in the meeting and some of them were joined through online mode. Prof. U. Thapa, Hon'ble Director, Directorate of Extension Education, BCKV started the meeting with a warm welcome to all the members and highlighted the objectives and importance of SAC meeting for formulation of Action Plan of the KVK. All the present members of the SAC including the KVK staffs shared a brief introduction among themselves on request of the Chairman.

Thereafter, the Hon'ble Chairman invited Dr. S.H. Ansary, Senior Scientist and Head, Nadia KVK to present the Reports and Action Plan. At first action taken Report of previous SAC meeting was presented and then Progress Report of 2020-21 and Action Plan for 2021-22 were presented by the Senior Scientist and Head of Nadia KVK. During the process all SMSs participated for interacting and presenting their relevant technical activities before the house. The Chairman, thereupon, invited valuable suggestions and inputs from the members.

- Hon'ble Vice-Chancellor suggested to mention total number of members in FPCs formed under Nadia KVK instead of only mentioning the numbers of FPCs. He also suggested that after evaluation of 1st year results of OFT-1 if a satisfactory result obtained then it should be continued for next year.
- Hon'ble Vice-Chancellor suggested to investigate the background information and proper need before setting up of OFT-3.
- Hon'ble Vice-Chancellor also recommended to identify the background information of a locality and proper need of the farming community before setting up of a technology testing in case of OFT-4. He also suggested to use the term Plug tray instead of pot culture in OFT-6.
- Hon'ble Vice-Chancellor also suggested to go through an intensive review processes before setting up of short term research projects from ATMA. He also advised the concerned scientist to walk through for an intensive literature study before setting up of the Azolla production unit from ATMA short term research project.
- Hon'ble Vice-Chancellor also recommended to identify the local need of different villages across the district through baseline socio-economic survey particularly by

PRA and the need of the local people before setting of OFTs and FLDs by the scientists of the KVK. He also suggested to identify different agro-ecological niches associated with various cropping system especially the orchard crops like mango, banana etc. across the district and the KVK personnel should intervene through proper management practices and market linkages coupled with various strategies to promote the area specific agricultural commodity.

- During the discussion DEE, BCKV, emphasized on the Coordination of different line departments toward the development of farmers of the district. He asked the officials of line departments present in the meeting for valuable suggestions and inputs.
- DEE, BCKV recommended to take other parameters instead of B:C ratio in OFT-5. He opined that there is no considerable variation in B:C ratio between different technology options in OFT-5.
- DEE, BCKV recommended to disseminate the recently developed technologies from the university research system especially from the AICRPs (i.e. disease resistant varieties of different vegetables like Chilli, Tomato etc.)
- Dr. Amrita Chattapadayay, DDM, NABARD, Nadia, opined to assess the market prospect of the Kadaknath chicks taken under FLD programme. He also suggested to promote the breed like Banaraj. But, at the same time he also suggested to ensure the need of the locality before replacement of the breed. He also recommended that SMS (Animal Science) must be in the KVK, and more animal health camps may be organized by taking help from different institutes and organizations across the district for the betterment of farming community.
- Dr. K. S. Das, Principal Scientist, ATARI, Kolkata, recommended to identify the problems block wise and formulate programmes accordingly. He recommended to mention the term recommendation in place of results in the OFT reporting. He also emphasized on effective utilization of revolving fund.
- Farmers present in the meeting were also put their views asking some new and innovative technologies for increasing profit from the farming.

Members and other representative present in 15th SAC meeting:

1. Prof. B.S. MahaPatra, Vice- Chancellor, BCKV
2. Prof. Umesh Thapa, Director, Directorate of Extension Education, BCKV
3. Dr. Kalyan Sundar Das, Principal Scientist, ATARI, Kolkata (Online)
4. Mr. Arun Bose, DDA (WBP) & PD ATMA, Krishnagar Nadia (Online)
5. Dr. Asif Mohammad, Scientist & I/C, Extension section. NDRI, Eastern Region (Online)
6. Dr.Bimalendu Mondal, Principal Scientist, ICAR-IVRI, ERS Kolkata
7. Dr.Samiran Bandyopadhyay, Senior Scientist, ICAR-IVRI, ERS Kolkata
8. Dr. Amrita Chattapadayay, DDM, NABARD, Nadia
9. Mr. Tapu Dutta, LDM, Punjab National Bank, Nadia Zone
10. Prof. Sushanta Kumar Dey, In-charge, RRS, NAZ, BCKV
11. Mr. Pratap Ch. Ghosh, District Fishery Officer, Govt. Of WB, Krishnagar, Nadia
12. Dr. Samir Kumar Hembram, Asst. Agronomist, WMRS, Ranaghat, Nadia
13. Dr. Piu Bose, Asst. Agronomist, ZARS, Krishnagar, Nadia (Online)
14. Mrs. Kalpana Sarkar, Demonstrator, Dept. of Sericulture, Krishnagar, Nadia
15. Sri. Sujit Biswas, Farmer Representative, Krishnagar – I, Nadia
16. Sri. Tapan Kumar Bain, Farmer Representative, Bhayna, Hanskhali, Nadia
17. Smt. Soma Das Mondal, Women Representative, Badkulla, Krishnagar I, Nadia
18. Smt. Rupa Majumdar, Women Representative, Bishnupur, Chakdaha, Nadia
19. Dr.Samsul Haque Ansary, Senior Scientist & Head, Nadia KVK.
20. Dr.Malabika Debnath, SMS (Plant Protection), Nadia KVK.
21. Mr. Milan Kanti Kundu, SMS (Agronomy), Nadia KVK.
22. Mr. SaikatSaha, SMS (Agril. Extension), Nadia KVK.
23. Dr. Shubhra Jyoti Pramanik, SMS (Seed Science), Nadia KVK
24. Dr. Kaushik Mukhopadhyay, SMS (Soil Science), Nadia KVK

2. DISTRICT LEVEL DATA ON AGRICULTURE, LIVESTOCK AND FARMING SITUATION (2020)

Sl. no.	Item	Information
1	**Major Farming system/enterprise**	**Agriculture and Horticulture-based farming system:** Stagnation in farm income efficiency due to fast reducing profit potential,Deteriorating soil health in the face of no or extremely low rate of application of organicmanure coupled with imbalanced application of chemical fertilizers. Inefficient crop husbandry restricting the scope of augmenting productivity under existing level of inputs management. Instability in yielddue to increasing pest problem in the four most important vegetable enterprises. Inefficient nursery management for early vegetables in particular. Occasional glut during peak season due to extremely sluggish rate of value addition. **Fish based production system:** Mass mortality and poor growth performance leading to less profit due to lackof knowledge in maintaining appropriate stock ratiosandskillin scientific pond management. Dereliction of productive area due to continuous neglect in the face of poor knowledge on fishery management in an enterprising mode. **Livestock based production system:** Poor management condition under courtyard and backyard situation leadingto poor system out-turns. Poor overall system performance due to lack of awareness and motivation on timely health coverage.
2	**Agro-climatic Zone**	
	New AlluvialZone	Soilshere are moderately well drained, deep and medium textured with pH varies from 6.5 – 7.5 with a good base saturation.Annualrainfallinthesituationvariesfrom1,401-1,671mm; maximum and minimum temperature ranges between 25.2 –37.9°C and 9.8 – 26.7°C respectively. So far as the physiographic and irrigation facility is concerned, thisdistrict leaves scope to grow a wide variety of agricultural and horticultural crops.
3	**Agro ecological situation**	
	Medium and low land situation	The soilsof New AlluvialZone (NAZ) have got developed on recent alluviumofmainriversystem of theGanges. Soilsofthisflatalluvialplainvary from sandy loam to heavy clayin texture possessing high water retention capacity, good porosity and generally higher permeability for the surface soils. Depending upon theirtypical geomorphic situations, nature of alluviumand typical land use in cropping practices, thisNAZ may further be sub-divided intofour situations viz,i)Low-lying flood plain*(Tal)* includingbackwater swamps, ii)Recent Alluvial high flood plain*(Diara)*,iii) Recent alluvialfloodplain,andiv)Delticalluvialplain.Theclimateofthislargestagro-climatic zone in the state is sub-tropical in nature with an average annual rainfall of 1,467.5mm.The minimum and maximum temperature ranges from 9.0 – 26.8 ^{O}C and 20.4 – 39.0 ^{O}C respectively. Sunshinehours in NAZ generally vary between 8.5 –10.5 hrs. per day excepting during monsoon months when average sunshinehours come down to around 5.5 hrs. per day. Irrigation facility,one of themost critical factors for the growth of agriculture, is also in existence in an appreciable form at NAZ and covers an area of about 50 percent as against only25.3 percent for the whole state. Endowed withcongenialagro-ecological situation, the NAZ of West Bengal has established itselfto be thecore productive zone and granary of the state.

4	**Soil type**	
	Sandy loam (a) Up land (b) Medium land **Clay** (a) Low land	Soilshere are moderately well drained, deep and medium textured with pH varies from 6.5 – 7.5 with a good base saturation.

5 **Productivity of major 2-3 crops under cereals, pulses, oilseeds, vegetables, fruits and others:**

Sl. No.	Crop	Area (ha)	Production (MT)	Productivity (Kg /ha)
Cereals				
1.	Aus paddy	30,140	124687.673	4136.95
2.	Kharif paddy	94,631	461245.6033	4873.206
3.	*Boro* paddy	70,083	404991.606	5775.184444
4.	Wheat	5,596	18512	3308
5.	Maize (Rabi)	7,820	58384.700	4852.5722
Oilseeds				
1.	Mustard	79599	127554	1602.457719
2.	Sesame	32840	29936.010	911.5715469
3.	Ground nut (Rabi)	750	1624.000	2165.3333
4.	Linseed	95	76.858	809.031578
5.	Sunflower	56	79.334	1416.678571
Pulses				
1.	Gram	10115	13330.522	1317.896391
2.	Lentil	29617	37734.170	1274.07131
3.	Pea	4095	6761.440	1443.89011
4.	Lathyrus	1616	2969.425	1048.81975
5.	Green gram	824	485.615	589.3385922
6.	Black gram	855	388.535	454.4269006
7.	Red gram	102		1185
Others				
1.	Jute	93520	1333600	14.2600556
2.	Potato	6025	164272.4	27.2651286307
3.	Sugarcane	1805	148.01	82.00
4.	*Source: Deptt. of Agriculture, Nadia (2019-20)*			
Vegetables				
1.	Tomato	4731.160434	123629.4121	26131
2.	Cabbage	121.243212	2380.961309	19638
3.	Cauliflower	119.239192	3423.872488	28716
4.	Peas (Green)	2817.432618	28819.19131	10229
5.	Brinjal	2634.284343	53146.06396	20175
6.	Onion	101.203012	1439.604396	1423
7.	Okra	4616.26162	66052.37802	14309
8.	Elephant foot yam	1645.300453	34296.87047	20845
Fruits				
1.	Mango	5675.01619	56076.9309	9881
2.	Banana	11983.98602	429240.7847	35818

	3.	Papaya	995.564001	13745.0468	13806
	4.	Guava	1417.498291	26557.5092	18735
	5.	Pineapple	13.059871	23.495893	1799
	6.	Jackfruit	1286.899582	17123.9032	13306
	7.	Litchi	1319.046957	12455.9451	9443
	8.	Sapota	19.388885	220.55724	11375
	Flower				
	1.	Rose	304.243558	14231.30294	46776
	2.	Tube rose	3320.572425	72680.25616	21888
	3.	Chrysenthemum	109.174416	9137.149624	83693
	4	Marigold	105.168016	29404.62617	279597
	Spices				
	1.	Turmeric	890.560454	13556.49415	15222
		Source: Deptt. of FPI & Horticulture, Nadia (2019-20)			

6 **Mean yearly temperature, rainfall, humidity of the district**

Month	Rainfall (mm)	Temperature ^{0}C		Relative Humidity (%)	
		Maximum	Minimum	Maximum	Minimum
January, 20	21.6	23.4	11.3	93	62
February, 20	2.9	26.8	12.8	90	48
March, 20	74.7	32.0	18.9	90	49
April,20	17.4	35.2	23.0	88	50
May, 20	244.2	34.0	24.6	88	64
June, 20	206.1	33.6	26.2	94	74
July, 20	367.1	33.1	26.4	94	77
August, 20	375.1	32.1	26.6	95	81
September, 20	164.4	32.9	26.2	94	78
October, 20	108.6	32.6	24.8	93	71
November, 20	0.3	30.0	17.5	89	48
December, 20	0.0	25.6	12.2	91.9	50.5

Source: AICRP on Agro Metrology, BCKV

7 **Production of major livestock products like milk, egg, meat etc.**

Category	Population	Remarks	Production	Remarks
Cattle				
Crossbred	3,39,016	As per 20th Livestock Census, 2019	Milk-4,41,931 MT	Production data of 2020-21
Indigenous	3,21,034			
Buffalo	16,851		Meat-3,47,09,147 Kg	
Sheep	24,669			
Goats	9,20,014		Egg- 43,50,69,720 Nos.	
Pigs	4,920		Wool- 6,585 Kg	
Rabbits	5,799			
Poultry				
Fowl & Hen	11,20,051	As per 19th Livestock Census, 2012		
Duck	2,29,009			
Turkey and others	4,866			

Source: Deptt. of ARD, Nadia

2. b. Details of operational area/villages (2020)

Sl. No.	Name of Taluk	Name of the block	Name of the villages	Major crops & enterprises	Major problems identified (crop-wise)	Identified Thrust Areas
1	Kalyani	Chakdaha	Ghoragachha Banamalipara Srinagar Silinda Majhdiah Madanpur Mahaswarpur Rautari Babudanga Madandanga Taligachha Chapatala Pitulitala Shantinagar Parari Bardhanpara Hingnara Kadambagachi Gontra Rassullapur Jaykrishnapur, Harekrishnapur, Dakshin Panchpota, Kugachi, Narkeldanga, Narayanpur, Mondalhat, Mitrapur	Paddy, jute, mustard, winter & summer vegetables, pulse crop, fruits mainly guava, banana & citrus, goatery, poultry, cattle Flower, fodder	*Bio physical* Yield plateaning of major crops *Improper crop husbandry *Non availability of quality seed and planting material *Soil health deterioration *High disease pest incidence Low productivity of horticultural crops. *nondescript variety *improper management practices Low productivity of existing live stock. * Indigenous breed. *Improper feed management. *High disease incidence of livestock. Ill management of backyard *lack of awareness. *Socio-economic* Inadequacy of women led vocation. Inadequate hand on skill on crop husbandry and backyard system management. Lack of market support. Lack of awareness on export oriented horticulture. Inadequate credit flow.	1. Judicious application of inputs under existing production system. 2. Introduction of farmer-led branded seed production grid. 3. Improvement of pulse based cropping system 4. Judicious plant protection 5. Crop diversification 6. Value addition and post harvest management of crops 7. Performance improvement of livestock based backyard system. 8. Increased economic mainstreaming of women through capacity building and capability up gradation.

Sl. No.	Name of Taluk	Name of the block	Name of the villages	Major crops & enterprises	Major problems identified (crop-wise)	Identified Thrust Areas
		Haringhata	Mollabelia Nischintapur Kastodanga Bhabanipur Satyapole DhakhinBrahmapur Panchkahania Ganguria Bhabanipur, Satyapole, Dakshin Duttapara, Maliadanga, Chada, Jhikhra,			
2	Ranaghat	Ranaghat-I	Nandighat, Bidyanandapur, Gosaichar, Sarkarpur, Nutanpara, Paschim Simulia, Sahebdanga			
		Ranaghat-II	Dhantala puritan chapra Panchberia			
3	Ranaghat	Shantipur	ChotoKulia BoroKulia Laxminathpur Charpanpara Bagdebitala Charsutragar	Paddy, jute, mustard, winter & summer vegetables, pulse crop, fruits mainly mango, guava, banana, goatery, poultry, cattle		

Sl. No.	Name of Taluk	Name of the block	Name of the villages	Major crops & enterprises	Major problems identified (crop-wise)	Identified Thrust Areas
				flower		
4	Krishnanagar	Chapra	Charatala	Maize		
		Kaligang	Dingal	Bee keeping		
		Nakashipara	Dahakhali Dahakula Jugpur	High value crops		
		Krishnagar I	Hatisala North (Bahadurpur) Mahishdanga Chakdignagar	Pulse and oilseed crops		
		Krishnagar II	Anandanagar	Pulse and oilseed crops		
		Hanskhali	Gopalpur Mumjoan Ghosh kamalpur Itaberia, daluigram Jaipur, Ramnagar, Bhayna, majdiya	Pulse and oilseed crops Composting, Banana, Mango, Cucumber		
5	Tehatta	Karimpur-I	Baliasisha Pattabuka Shikarpur, harekrishnapur, gandharajpur Harekrishnapur, Jayrampur,	Paddy, wheat, pulses, jute, betel vine		

Sl. No.	Name of Taluk	Name of the block	Name of the villages	Major crops & enterprises	Major problems identified (crop-wise)	Identified Thrust Areas
			Arabpur, Kuchaidanga, Madhya Gopalpur, Uttar Krishnapur,			
		Karimpur-II	Mahishakhola, Piarpur	Paddy, wheat, pulses, jute, betel vine		
6	Krishnagar	Hanskhali	Bairampur, Bhayna	Banana	Panama wilt of banana	
7	Krishnagar	Krishnagar-I	Kaya	Seasame	Poor yield performance of oil seed crop	Promotion of pulse and oil seed crops
	Krishnagar	Krishnagar-I	Usidpur	Groundnut	Poor yield performance of oil seed crop	Promotion of pulse and oil seed crops

2. c. Details of village adoption programme:

Name of the villages adopted by PC and SMS in 2020 for its development and action plan

Name of village	Block	Action taken for development
Fatehpur	Hanskhali	Organic production system
Dahakula	Nakashipara	On farm trail, front line demonstration and training of Various horticultural crops.
Champatala	Chakdah	Pest and disease management programme on various vegetables carried out.
Narkeldanga		OFT on disease management of paddy
Banamalipara		OFT on Downy Mildew management on Cucumber
Srinagar		FLD on fruit fly management in Cucurbitaceous crops
Narayanpur		FLD on composting
Mitrapur		FLD on Zinc application in paddy
Mondalhat		FLD on Zinc application in paddy
Gopalpur	Hanskhali	Krishi mela, training trail and demonstration.
Bairampur		FLD of Panama wilt management of banana
Majdaya		FLD on fruit fly management in Mango and Cucumber
Ramnagar		FLD of Panama wilt management of banana
Bhayna		FLD of Panama wilt management of banana
Kadambagachi	Chakda	Pest and disease management programme on various vegetables carried out
Mahishdanga	Krishnagar - I	Pest and disease management programme on various vegetables carried out
Satyapole and Bhabanipore	Haringhata	Pest and disease management programme on various vegetables carried out
Bidyanandapur	Ranaghat-I	FLD of Panama wilt management of banana
Gosaichar		FLD of Panama wilt management of banana
Sarkarpur		FLD of Panama wilt management of banana
Nutanpara		FLD of Panama wilt management of banana
Paschim Simulia		FLD of Panama wilt management of banana
Sahebdanga		FLD of Panama wilt management of banana
Panchberia	Ranaghat -II	On farm trail, front line demonstration and training of Various horticultural crops
PuratanChapra	Ranaghat -II	On farm trail, front line demonstration and training of Various horticultural crops
Bhabanipur,	Haringhata	On farm trial, front line demonstration and training on organic production system
Satyapole		On farm trial, front line demonstration and training on organic production system
Dakshin Duttapara,		Training and field day on organic production system

Maliadanga		Training and field day on organic production system
Chada		Training and demonstration on organic production system
Jhikhra		Training on organic production system
Jaykrishnapur,	Chakdah	Training on organic production system
Harekrishnapur		Training on organic production system
Dakshin Panchpota		Training on organic production system
Kugachi		Training on organic production system
Harekrishnapur	Karimpur I	Training on organic production system
Jayrampur		Training on organic production system
Arabpur		Training on organic production system
Kuchaidanga		Training on organic production system
Madhya Gopalpur		Training on organic production system
Uttar Krishnapur,		Training on organic production system
Mahishakhola,	Karimpur II	Training on organic production system
Piarpur		Training on organic production system
Chakdignagar	Krishnanagar I	Training on organic production system
Kaya	Krishnagar-I	CFLD program
Usidpur		CFLD program

3. TECHNICAL ACHIEVEMENTS

3.1. Achievements on technologies assessed and refined

OFT-1

1.	**Title of On farm Trial**	**Assessment of efficiency of some chemicals in management of blast of paddy**
2.	**Problem diagnosed**	Heavy loss in kharif paddy due to blast
3.	**Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)**	**Farmers' practice:** Use of fungicide like carbendazim, mancozeb **Technology option 1:** seed treatment with Thiram 75% @ 2.5 g/ Kg of seed, Spraying with Tricyclozole 75 WP @ 1.5 g/L after initiation of infestation **Technology option 2:** seed treatment with Thiram 75% @ 2.5 g/ Kg of seed, Spraying with Azoxystrobin 25 Sc @ 1.5 ml/L after initiation of infestation Assessment
4.	**Source of Technology (ICAR/ AICRP/SAU/other, please specify)**	BCKV
5.	**Production system and thematic area**	Paddy based production system. Plant Protection: Integrated disease management
6.	**Performance of the Technology with performance indicators**	From the result it is clear that the Technology option 1 and Technology option 2 were better than farmer's practice and. Technology option 1 that is seed treatment with Thiram 75% @ 2.5 g/ Kg of seed, Spraying with Tricyclozole 75 WP @ 1.5 g/L after initiation of infestationexhibited the best result. Where as performance of Technology option 2 that is seed treatment with Thiram 75% @ 2.5 g/ Kg of seed, Spraying with Azoxystrobin 23% Sc @ 1.5 ml/L after initiation of infestation was not so promising. Azoxystrobin 23% Sc is also a very costly chemical.
7.	**Final recommendation for micro level situation**	The OFT will be conducted for another year for final recommendation.
8.	**Constraints identified and feedback for research**	Cost of the chemicals used in Technology option 2 is very high.
9.	**Process of farmers participation and their reaction**	Active participation of farmer from planning to execution. Encouraging response from the farmer end as they got higher yield in both the technology options. Farmers also mentioned that it is a very simple technology, easy to carry out and effective also, but the cost of both the chemical used in Technology option 2 was very high.

Thematic area: **Plant Protection: Integrated disease management**

Problem definition: Heavy loss in kharif paddy due to blast.

Technology assessed: Efficiency of two fungicides.

Table:

Technology option	No. of trials	PDI (before spray)	PDI (5 days after spray)	PDI (10 days after spray)	Average yield (q/ha)	Gross cost (Rs./ha)	Gross return (Rs./ha)	BC Ratio
Farmers' practice: Use of fungicide like carbendazim, mancozeb	7	9.77	8.75	8.22	45.3	51375.00	79275.00	1.54
Technology option 1 =seed treatment with Thiram 75% @ 2.5 g/ Kg of seed, Spraying with Tricyclozole 75 WP @ 1.5 g/L after initiation of infestation		11.10	6.16	4.62	49.6	52570.00	86800.00	1.65
Technology option 2 =seed treatment with Thiram 75% @ 2.5 g/ Kg of seed, Spraying with Azoxystrobin 23%Sc @ 1.5 ml/L after initiation of infestation		10.87	6.18	6.04	48.1	53520.00	84175.00	1.57
SEm±		**1.28**	**1.05**	**0.31**	**0.56**			
CD(P=0.05)		**4.64**	**3.96**	**1.14**	**1.79**			

PDI- Percent Disease Index, measured in 1-5 scale

Results: From the result it is clear that the Technology option 1 and Technology option 2 were better than farmer's practice and. Technology option 1 that is seed treatment with Thiram 75% @ 2.5 g/ Kg of seed, Spraying with Tricyclozole 75 WP @ 1.5 g/L after initiation of infestationexhibited the best result. Where as performance of Technology option 2 that is seed treatment with Thiram 75% @ 2.5 g/ Kg of seed, Spraying with Azoxystrobin 23% Sc @ 1.5 ml/L after initiation of infestation was not so promising. Azoxystrobin 23% Sc is also a very costly chemical.

OFT-2

1.	Title of On farm Trial	**Assessment of efficiency of some chemicals for management of Downy mildew in cucumber**
2.	Problem diagnosed	Heavy loss of yield in cucumber due downy mildew disease infestation. This disease can cause 30-50 % loss in the yield of cucumber
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	**Farmers' practice:** Indiscriminate use of pesticide fungicide like carbendazim, mancozeb, propiconazole **Technology option 1:** Spraying with cymoxanil 8% + Mancozeb 50% @ 2.0 g/L after initiation of infestation. **Technology option 2:** Spraying with Azoxystrobin 23% SC @ 1.5ml/L after initiation of infestation.
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	BCKV
5.	Production system and thematic area	Vegetable based production system. **Intrgrated disease management**
6.	Performance of the Technology with performance indicators	From the result it is clear that the Technology option 1 and Technology option 2 were better than farmer's practice and. Technology option 2 that is Spraying with Azoxystrobin 23% SC @ 1.5ml/L after initiation of infestation exhibited the best result. Where as performance of Technology option 1 that is Spraying with cymoxanil 8% + Mancozeb 50% @ 2.0 g/L after initiation of infestation was not so promising. Azoxystrobin 23% Sc is also a very costly chemical.
7.	Final recommendation for micro level situation	The OFT will be conducted for another year for final recommendation.
8.	Constraints identified and feedback for research	Azoxystrobin 23% Sc is also a very costly chemical. This year Super cyclone Amphan damaged the crop in the later stage.
9.	Process of farmers participation and their reaction	Active participation of farmer from planning to execution. Encouraging response from the farmer end as they got higher yield in both the technology options. Farmers also mentioned that it is a very simple technology, easy to carry out and effective also, but the cost of both the chemical used in Technology option 2 was very high

PDI- Percent Disease Index, measured in 1-5 scale

Thematic area: **Integrated disease management**

Problem definition: Heavy loss of yield in cucumber due downy mildew disease infestation. This disease can cause 30-50 % loss in the yield of cucumber

Technology assessed: Efficiency of two fungicides.

Table:

Technology option	No. of trials	PDI (before spray)	PDI (5 days after spray)	PDI (10 days after spray)	Average yield (q/ha)	Gross cost (Rs./ha)	Gross return (Rs./ha)	BC Ratio
Farmers' practice: Indiscriminate use of pesticide fungicide like carbendazim, mancozeb, propiconazole	7	7.17	14.83	14.75	206.73	0.97 lakh	1.86 lakh	1.91
Technology option 1 =Spraying with cymoxanil 8% + Mancozeb 50% @ 2.0 g/L after initiation of infestation.		7.91	10.30	11.47	256.05	1.08 lakh	2.30 lakh	2.12
Technology option 2 =Spraying with Azoxystrobin 23% SC @ 1.5ml/L after initiation of infestation.		7.33	5.86	5.63	301.54	1.11 lakh	2.71 lakh	2.44
SEm±		**0.58**	**0.99**	**1.07**	**2.97**			
CD(P=0.05)		**2.11**	**3.57**	**3.87**	**10.75**			

PDI- Percent Disease Index, measured in 1-5 scale

Results: From the result it is clear that the Technology option 1 and Technology option 2 were better than farmer's practice and. Technology option 2 that is Spraying with Azoxystrobin 23% SC @ 1.5ml/L after initiation of infestation exhibited the best result. Where as performance of Technology option 1 that is Spraying with cymoxanil 8% + Mancozeb 50% @ 2.0 g/L after initiation of infestation was not so promising. Azoxystrobin 23% Sc is also a very costly chemical.

OFT-3

1.	Title of On farm Trial	**Performance evaluation of improved varieties of tuberose**
2.	Problem diagnosed	Declining market return from tuberose
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	**Farmer Practice :** ArkaPrajjwal **Technology option1 :** Sigma **Technology option 2:** ArkaNirantara
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	BCKV
5.	Production system and thematic area	Flower based (mainly tuberose) production system. Horticulture: Cultivation of flower
6.	Performance of the Technology with performance indicators	Both Sigma and Arkanirantara varieties are not at all suitable for this location. No flowering was observed in sigma variety. In ArkaNirantara Variety production is very less and stock length is very less though the flower colour is white.
7.	Final recommendation for micro level situation	As the performance of the new varieties is not promising at all so these varieties can not be recommended.
8.	Constraints identified and feedback for research	Availability of bulbs of improved varieties of tuberose is a real problem and cost is also high. Above all the new varieties are not performing well.
9.	Process of farmers participation and their reaction	Farmers are not satisfied with the performance of new varieties of tuberose.

Thematic area: Horticulture: Cultivation of flower

Problem definition: Declining market return from tuberose.

Technology assessed: Performance of two new tuberose varieties.

Table:

Technology option	No. of trials	Average length of stock	Average no. of florates / stock	Average yield (q/ha)	Gross cost (Rs./ha)	Gross return (Rs./ha)	BC Ratio
Farmer Practice : Arka Prajwal	7	119.8	54.14	74.56	3.49 lakh	5.21 lakh	1.49
Technology option1 : Sigma		-	-	-	1.09 lakh	-	-
Technology option 2: ArkaNirantara		56.77	31.14	4.87	1.59 lakh	43.830	0.27
SEm+		**2.63**	**2.35**	**0.76**			
CD(P=0.05)		**9.53**	**8.51**	**2.75**			

Results: Both Sigma and Arkanirantara varieties are not at all suitable for this location. No flowering was observed in sigma variety. In ArkaNirantara Variety production is very less and stock length is very less though the flower colour is white.

OFT-4

1.	Title of On farm Trial	**Assessment of different bio products for increasing summer tomato production**
2.	Problem diagnose	Low profitability due to poor production of summer tomato (Var. Himsona/ Himshikhar) because of several adverse effect in summer season
3.	Details of technologies selected for assessment/refinement	**Farmers Practice:** Traditional practice without application of Bio products **Technology option-I:** Application of Arka Microbial Consortium as soil drenching mixed with water @ 20 g/Lapplied near to the root zone at 10th day after transplanting **Technology option-II:** Application of Activzyme @ 1 ml/L during vegetative, flowering, fruit-set and fruit development stages **Technology option-III:** Application of Agri Gold @ 2 g/L during vegetative, flowering, fruit-set and fruit development stages ****Spraying of Vegetable special (Zn, B, Mo) @ 1.5 g/L during flowering and fruiting is common to all treatments**
4.	Source of Technology	ICAR-IIHR, Modicare, Vestige
5.	Production system and thematic area	Vegetable based cropping system, Horticulture
6.	Performance of the Technology with performance indicators	From the results it is found that TO-1 i.e. application of Arka Microbial Consortium resulted best effect in terms of fruit set, fruit weight and yield than other treatments and farmers' practice.
7.	Final recommendation for micro level situation	Considering effectiveness of bioproducts in terms of fruit set and yield of summer tomato, there is a necessity of these products to combat adverse effect of high temperature. The OFT will be conducted for another year for final recommendation.
8.	Constraints identified and feedback for research	No constraint have been faced while conducting the OFT.
9.	Process of farmers participation and their reaction	The farmers face the problem of low production in summer tomato due to high flower drop and low fruiting.They are now convinced with the results of bio-products.

Thematic area: Horticulture

Problem definition: Low productivity of summer tomato due to poor fruit set, high flower & fruit drop, owing to prevailing high temperature during sping-summer months in Nadia district

Table: Efficacy of different bio-products to increase yield in summer tomato

Technology option	No. of trials	No. of fruits/ plant	Avg. fruit Weight (g)	Yield (t/ ha)	Cost of cultivation (Rs / ha)	Gross Return (Rs / ha)	Net Return (Rs / ha)	BC Ratio
Farmers' Practice: Traditional practice without application of Bio products	7	17.2	57.5	38.62	2,05,500	2,77,425	71,925	1.35
Technology option-I: Application of Arka Microbial Consortium as soil drenching mixed with water @ 20 g/Lapplied near to the root zone at 10th day after transplanting		24.7	71.5	53.75	2,18,500	3,86,745	1,68,245	1.77
Technology option-II: Application of Activzyme @ 1 ml/L during vegetative, flowering, fruit-set and fruit development stages		20.3	63.8	45.62	2,21,600	3,65,640	1,44,040	1.65
Technology option-III: Application of Agri Gold @ 2 g/L during vegetative, flowering, fruit-set and fruit development stages		18.8	62.5	44.35	2,29,800	3,63,084	1,33,284	1.58
SEm±		1.95	4.89	3.07				
CD(P=0.05)		**17.2**	**57.5**	**38.62**				

Results: From the results it is found that TO-1 i.e. application of Arka Microbial Consortium resulted best effect in terms of fruit set, fruit weight and yield than other treatments and farmers' practice.

OFT-5

1.	Title of On farm Trial	**Evaluation of different sowing process for increasing the productivity of jute**
2.	Problem diagnosed	Decreasing productivity of jute associated with proper sowing process
3.	Details of technologies selected for assessment/refinement	**Farmers' practice:** Improper sowing method (Broadcasting) **Technology option 1:** Line sowing **Technology option 2 :** Line sowing with seed drill
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	BCKV
5.	Production system and thematic area	Paddy-lentil-jute
6.	Performance of the Technology with performance indicators	Technology option 2 **(**Line sowing with seed drill) performed better than other treatments in terms yield, other yield components and BC ratio.
7.	Final recommendation for micro level situation	Technology option 2recommendation will be done.
8.	Constraints identified and feedback for research	Lack of awareness about proper sowing process.
9.	Process of farmers participation and their reaction	Active participation of farmers from sowing process execution. Encouraging response from the farmer end as they got better price due to high yield.

Thematic area:

Problem definition: Sowing Method

Technology assessed: Best sowing method

Table:

Technology option	No. of trials	Plant Height (ft)		Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
Farmers' practice: Improper sowing methods (Broadcasting)	7	10		28.10	9,500	28,000	18,500	2.94
Technology option 1: Line sowing with tine		11		30.36	10,000	33,000	23,000	3.3
Technology option 2 : Line sowing with seed dril		12.5		36.50	10,000	35,000	25,000	3.5

Results:

Technology option 2 (Line sowing with seed dril) performed better than other treatments.

OFT- 6

1.	**Title of On farm Trial**	**Evaluation efficiency of different organic inputs on growth and yield components of *aromatic rice***
2.	**Problem diagnosed**	Decreasing productivity of kharif paddy associated with environmental hazard.
3.	**Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)**	**Farmers' practice:** Imbalanced and indiscriminate fertilization **Technology option 1:**Foliar application of *Panchagavya*3% at 15 days interval **Technology option 2:**Foliar application of *Sanjivani* 10% solution at 15 days interval (****Panchagavya*****-** Cowdung- 5 part, Cow urine-3 part, Milk- 2 part, Curd- 2 part, Ghee-1 par; 3kg/100 lit water * ***Sanjivani***-Cowdung-1 part, Cow urine-1 part; 1 lit/2lit water) * Fertilizer used @ 75% of general recomendation
4.	**Source of Technology (ICAR/ AICRP/SAU/other, please specify)**	RMVU, Belur
5.	**Production system and thematic area**	Paddy-vegetables-vegetables Crop production
6.	**Performance of the Technology with performance indicators**	From the experimental results it is found that the Technology option 1 **(**Foliar application of *Panchagavya*3%at 15 days interval**)** performed better than other treatments in terms of yield, aroma index, others vegetative parameters and BC ratio.
7.	**Final recommendation for micro level situation**	The OFT will be conducted for another 1 year for final recommendation
8.	**Constraints identified and feedback for research**	Lack of awareness about nutrient management
9.	**Process of farmers participation and their reaction**	Active participation of farmers from proper organic components application planning execution. Encouraging response from the farmer end as they got better price due to quality yield.

Thematic area:**Nutrient Management**

Problem definition: Application of improper nutrient management

Technology assessed: Application of proper dose of nutrient

Table:

Technology option	No. of trials	Plant Height (cm)	No. of effective tillers/ hill	No. of filled grains per panicle	Test wt. (1000 grain wt.)	Aroma index	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ ha)	BC ratio
Farmers' practice (Imbalanced and indiscriminate fertilization**)**	7	125	7	106	10.66	1 to 2	24.2	52500	67500	15000	1.28
Technology option 1 (Foliar application of *Panchagavya*3% at 15 days interval**)**		138	11	120	11.40	2 to 3	29.6	51000	78750	27750	1.54
Technology option 2 (Foliar application of *Sanjivani* 10% solution at 15 days interval**)**		130	8.5	114	11.22	2 to 3	28.5	48750	71250	22500	1.46

Results:

From the experimental results it is found that the Technology option 1 **(**Foliar application of *Panchagavya*3%at 15 days interval**)** performed better than other treatments in terms of yield, aroma index, others vegetative parameters and BC ratio.

OFT-7

1.	**Title of On farm Trial**	**Evaluation of nitrogen application method for Increasing Nitrogen Use Efficiency for Kharif paddy**
2.	**Problem diagnosed**	Decreasing productivity of kharif paddy associated with imbalanced fertilization particularly indiscriminate use of nitrogenous fertilizer.
3.	**Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)**	**Farmers' practice:** Imbalanced and indiscriminate nitrogen use **Technology option 1:** Nitrogen application through soil test based values **Technology option 2:**Need based N application through Leaf Colour Chart (LCC)* *Source of Leaf Colour Chart: Developed by NRRI, ICAR, Cuttack; Marketed by: Nitrogen Parameter (4 panel)
4.	**Source of Technology (ICAR/ AICRP/SAU/other, please specify)**	BCKV
5.	**Production system and thematic area**	Paddy-Mustard-Sesame Nutrient Management
6.	**Performance of the Technology with performance indicators**	Technology option 2 i.e need based application of nitrogenous fertilizer through Leaf Colour Chart was found effective in terms of Nitrogen Use Efficiency, Partial factor productivity and Benefit cost ratio, and comparable yield was found both Technology option 1 (nitrogen applied through soil test based values) and 2.
7.	**Final recommendation for micro level situation**	Technology option 2
8.	**Constraints identified and feedback for research**	Farmers were very much reluctant in using the tool during the first phase of the trial as they were not aware of the methodology.
9.	**Process of farmers participation and their reaction**	The farmers participated in this trial with great interest as Leaf Colour Chart is a new tool to them. They found that how indiscriminate use of nitrogenous fertilizer could easily be controlled through this simple methodology. They were also surprised to notice that reduced rate of nitrogenous fertilizer as they were used to apply more amount of nitrogenous fertilizer particularly during paddy cultivation.

Thematic area: **Nutrient Management**

Problem definition: Indiscriminate use of chemical fertilizers particularly the use of nitrogenous fertilizer is a serious threat towards sustaining soil health. In addition to deterioration of soil health and the natural resistance within the plant system the practice of using excessive amount of nitrogenous fertilizers are also increasing the cost of cultivation of our farming community.

Technology assessed: Use of Leaf colour chart and soil testing results were used for assessing Nitrogen Use Efficiency of Kharif paddy.

Table:

Technology option	No. of trials	Yield component			Yield (q/ha)	Nitrogen Use efficiency	Partial factor productivity	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		No. of effective tillers/ hill	No. of spikelet per panicle	Test wt. (1000 grain wt.)							
Farmer's practice: Imbalanced and indiscriminate nitrogen use	7	12.7	141.9	26.8	41.7	10.5	45.9	53095.0	75399.9	22304.9	1.42
Technology option 1: Nitrogen application through soil test based values		14.9	157.1	30.8	50.2	25.8	75.1	54575.5	90476.5	35901.0	1.66
Technology option 2: Need based N application through Leaf Colour Chart (LCC)*		15.1	161.5	30.1	50.9	33.2	92.4	51175.5	91860.8	40685.3	1.80
SEm±		0.64	1.39	0.76	0.08						
CD (P=0.05)		2.32	5.03	2.77	0.30						

Results: Technology option 2 i.e need based application of nitrogenous fertilizer through Leaf Colour Chart was found effective in terms of Nitrogen Use Efficiency, Partial factor productivity and Benefit cost ratio. Though the yield was almost similar for both Technology option 1 (nitrogen applied through soil test based values) & 2.

OFT-8

1	Title of OFT	**Evaluation of different biological inputs for improving the soil health and productivity of lentil**
2	Problem diagnosed	Soil health, particularly the biological properties of the soil are degrading every moment with over use of synthetic products. Lentil is the most neglected crop with minimum management practices followed in this region therefore having low yield but having high potential.
3	Details of technologies selected for assessment/refinement (mention either assessed or refined)	**Farmers' practice:** Imbalanced or no use of fertilizer without any organic input **Technology option 1:**Application of Waste Decomposer solution (During each irrigation @200L solution for 1 Acre + Foliar spray in 1:3 ratio with water at 15 days interval) **Technology option 2:** Application of Jiwamitra solution (During each irrigation @200L solution for 1 Acre + Foliar spray @10% solution at 15 days interval)
4	Source of Technology (ICAR/ AICRP/ SAU/ Other	National Centre of Organic Farming, Gaziabad, Zero Budget Natural Farming, ICAR
5	Production system and Thematic area	Jute-Kharif Paddy-lentil (Irrigated low-medium land.) Integrated Nutrient Management
6	Performance of the technology with performance indicators	Crop is in the field
7	Final recommendation for micro level situation	Crop is in the field
8	Constraints identified and feedback for research	The farmers are not totally aware of applying any biological inputs during the initial stage of the trial.
9	Process of farmers participation and their reaction	The farmers participated throughout the trial with great interest and involved in the process of preparation of the biological inputs.

OFT-9

1.	Title of On farm Trial	**Performance evaluation of foliar spray of Nutrients at flower initiation stage on Lentil**
2.	Problem diagnosed	Low productivity of local cultivars during *Rabi*season under irrigated farming situation of high humid New Alluvial Zone, Nadia.
3.	Details of technologies selected for assessment/refinement	**Farmer Practice:** No foliar Spray of Nutrients **Technology option1:** Foliar spray of 2g/ *l* Urea at flower initiation stage **Technology option 2:**Foliar spray of 2g/ *l*DAP + 0.2 % Boron at flower initiation stage **For Technology option 1 and Technology option 2: Seed treatment**- Inoculation of seed with ***Rhizobium*** (*Rizobium @ 0.75* kg / 22.5 kg of seed requiring for one hectare) **PSB** (Soil application of PSB with cow dung manure @ 1.9 *l* / ha during final land perparation) to T-1 & T-2 **450 *l of* water** is required for spraying one hectare of land
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	ATARI-Kolkata
5.	Production system and thematic area	Jute-Paddy-Lentil and Seed Production
6.	Performance of the Technology with performance indicators	**Technology option 2:**Foliar spray of 2g/ *l*DAP + 0.2 % Boron at flower initiation stage
7.	Final recommendation for micro level situation	From the result it is clear that the **Technology option 2** i.e., foliar spray of 2g/ *l*DAP + 0.2 % Boron at flower initiation stageexhibited higher yield than the farmer practice. It also fetch higher price in the market due to higher yield and uniform as well as bold grain quality. **Seed treatment**- Inoculation of seed with ***Rhizobium*** (*Rizobium @ 0.75* kg / 22.5 kg of seed requiring for one hectare) **PSB** (Soil application of PSB with cow dung manure @ 1.9 *l* / ha during final land perparation) **450 *l of* water** is required for spraying one hectare of land
8.	Constraints identified and feedback for research	DAP should be over night soaked in water and filtered by a sieve before final using. Boron (0.2%) should be mixed before spraying.

9.	Process of farmers participation and their reaction	PRA, GD, Training and Field day during CFLD programmes. Farmers are ready to accept the technology i.e. foliar spray of 2g/ *l*DAP + 0.2 % Boron at flower initiation stage.

Thematic area:

Problem definition:

Technology assessed:

Table:

Technology option	No. of trials	Yield component						Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		Plant Height (cm)	No. of primary branches /plant	Pod/ plant	Seed/ pod	1000 seed weight (g)	Seed yield (q/ha)				
Farmer Practice: No foliar Spray of Nutrients	7	40.2	6.0	64.2	1.4	20.0	9.2	30,750	59,800	29,050	1.9
Technology option1: Foliar spray of 2g/ *l* Urea at flower initiation stage		38.4	6.8	74.6	1.6	22.2	10.0	30,750	63,700	32,950	2.1
Technology option 2: Foliar spray of 2g/ *l*DAP + 0.2 % Boron at flower initiation stage		40.0	7.2	78.0	1.8	23.4	10.6	30,750	66,300	35,550	2.2
CD (5%)	-	3.68	0.561	6.02	0.133	1.862	0.8546	-	-	-	-

Results: From the result it is clear that the **Technology option 2:**Foliar spray of 2g/ *l*DAP + 0.2 % Boron at flower initiation stage exhibited higher yield than the other options.

OFT-10

1.	Title of On farm Trial	**Performance evaluation of improved high yielding varieties of Greengram in *Summer* season under irrigated farming situation of high humid New Alluvial Zone, Nadia**.
2.	Problem diagnosed	Low productivity of local cultivars during *Summer* season under irrigated farming situation of high humid New Alluvial Zone, Nadia.
3.	Details of technologies selected for assessment/refinement	**Farmer Practice:** No foliar Spray of Nutrients **Technology option1:** IPM-02-03 **Technology option 2:**Virat **For Technology option 1 and Technology option 2: Seed treatment**- Inoculation of seed with ***Rhizobium*** (*Rizobium @ 0.75* kg / 22.5 kg of seed requiring for one hectare) **PSB** (Soil application of PSB with cow dung manure @ 1.9 *l* / ha during final land perparation) to T-1 & T-2 **450 *l of* water** is required for spraying one hectare of land
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	AICRP-MULLARP, BCKV
5.	Production system and thematic area	Maize-Mustard-Greengram / Paddy-Greengram-Jute-Mustard
6.	Performance of the Technology with performance indicators	**Technology option 2:**Virat
7.	Final recommendation for micro level situation	From the result it is clear that the **Technology option 2** i.e., Viratexhibited higher yield than the farmer practice. It also fetch higher price in the market due to higher yield and uniform as well as bold grain quality. **Seed treatment**- Inoculation of seed with ***Rhizobium*** (*Rizobium @ 0.75* kg / 22.5 kg of seed requiring for one hectare) **PSB** (Soil application of PSB with cow dung manure @ 1.9 *l* / ha during final land perparation) **450 *l of* water** is required for spraying one hectare of land
8.	Constraints identified and feedback for research	Nil

9.	Process of farmers participation and their reaction	PRA, GD, Training and Field day during CFLD programmes. Farmers are ready to accept the variety i.e. Virat

Thematic area:

Problem definition:

Technology assessed:

Table:

Technology option	No. of trials	Yield component					Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		Plant Height (cm)	Pod/ plant	Seed/ pod	1000 seed weight (g)	Seed yield (q/ha)				
Farmer Practice: No foliar Spray of Nutrients	7	40.4	14.2	6.4	26.9	9.2	27,750	36,800	9,050	1.3
Technology option1: Foliar spray of 2g/ *l* Urea at flower initiation stage		50.2	15.6	6.6	30.4	10.1	27,750	40,400	12,650	1.5
Technology option 2: Foliar spray of 2g/ *l*DAP + 0.2 % Boron at flower initiation stage		54.6	16.8	7.2	34.5	10.8	27,750	43,200	15,450	1.6
CD (5%)	-	3.871	1.235	0.6219	2.553	0.8674	-	-	-	-

Results: **Results:** From the result it is clear that the **Technology option 2:**i.e. variety **Virat (IPM-205-7)** exhibited higher yield than the other options.

Achievements of Frontline Demonstrations

A) Details of FLDs conducted during the year

Sl. No.	Crop	Thematic area	Technology Demonstrated with detailed treatments	Area (ha)		No. of farmers/ demonstration									Reasons for shortfall in achievement
				Proposed	Actual	SC		ST		Others		Total			
						M	F	M	F	M	F	M	F	T	
1	Mango	Fruit fly management	Methyl euzenol trap	10.0	10.0	10	04	0	0	09	03	19	07	26	NA
2	Cucumber (Cucurbitaceous crop)	Fruit fly management	Cuelure trap	5.0	7.0	17	05	3	0	14	02	34	07	41	NA
3	Guava	Fruit fly management	Methyl euzenol trap	5.0	10.0	12	04	0	0	11	02	23	06	29	NA
4	Chilli	Mite management	Spraying with spiromesifen	3.0	3.0	11	01	1	0	08	03	20	04	24	NA
5	Banana	Panama wilt management	Sucker treatment with Carbendazim @ 2 g/ L of water, & pit treatment with *Trichoderma spp.*	2.0	4.0	11	05	0	0	12	02	23	07	30	NA
6	Vegetables (Solanaceous and cole crops)	Horticulture	Seedlings raising in plug trays	20 nos	25 nos	4	11	0	0	4	6	8	17	25	NA
7	Banana	Horticulture	Polypropelene bunch cover	3.0 ha	2.5 ha	12	0	0	0	8	0	20	0	20	Due to Pandemic situation
8	Leafy vegetables	Horticulture	Use low cost protected structure	20 units	12 units	5	0	0	0	7	0	12	0	12	Due to Pandemic situation
9	Black pepper	Horticulture	Multi-tier crop model	20 units (400 sq.m.)	15 units	6	0	2	0	7	0	15	0	15	Due to Pandemic situation
10	Elephant foot yam	Horticulture	Improved Variety: Bidhan Kusum	1.0 ha	0.6	5	0	2	0	8	0	15	0	15	Due to Pandemic situation

Sl. No.	Crop	Thematic area	Technology Demonstrated with detailed treatments	Area (ha)		No. of farmers/ demonstration									Reasons for shortfall in achievement
				Proposed	Actual	SC		ST		Others		Total			
						M	F	M	F	M	F	M	F	T	
11	Sesame	Nutrient Management	Seed treatment, PSB, Micronutrient, (Boron), PPC	4	4	22	3	0	0	5	0	27	3	30	NA
12	Mustard	Nutrient Management	Seed treatment, PSB, Micronutrient, (Boron), PPC	4	4	23	0	0	0	7	0	30	0	30	NA
13	Lentil	Nutrient Management	Seed treatment, PSB, Micronutrient, (Molybdenum), PPC	2	2.66	13	0	0	0	7	0	20	0	20	NA
14	Paddy	INM	Spraying of Zn micronutrient	5.0	5.0	29	2	0	0	5	0	34	2	36	NA
15	Paddy	INM	Green manuring	2.0	2.0	5	0	0	0	15	0	20	0	20	NA
16	Vegetables	Production of inputs at site	Production and use of organic inputs (Composting techniques and use of organic inputs)	4 units	7 units	24	0	0	0	26	5	50	5	55	NA
17	Vegetable (Cauliflower)	INM	Boron application	2.0	2.0	10	0	0	0	28	0	38	0	38	NA

Details of farming situation

Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil (Kg/ha)			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
				N	P_2O_5	K_2O					
Mango	Summer	Irrigated	Loamy	1.29	17.65	108.56	Mango	Old orchard	May- july	-	-
Cucumber (Cucurbitacious crop)	Summer	Irrigated	Loam to Sandy loam	1.37	16.35	135.69	Vegetable	1st week of march	April - july	-	-
Guava	Round the year	Irrigated	Loamy	1.56	18.56	157.48	Guava	Old orchard	Through out the year	-	-
Chilli	Summer	Irrigated	Loamy	1.63	19.86	109.65	vegetables	June	August onwards	-	-
Banana	Round the year	Irrigated	Loamy	1.56	17.56	118.35	Banana	March	Next year may onwards	-	-
Vegetables (Solanaceous and cole crops)	Kharif	Irrigated	Loamy sand	287.5	54.7	177.6	Paddy	April-May	July onwards	-	-
Banana	Pre and post Kharif	Irrigated	Loam	216.8	47.5	212.5	Same crop	Round the year	Round the year	-	-
Leafy vegetables	Pre-kharif and kharif	Irrigated	Loam	214.9	42.5	202.8	Potato/ vegetables	February onwards	April onwards	-	-
Black pepper	Kharif	Irrigated	Clay loam to loam	236.4	50.5	276.8	On Arecanut/ coconut	July	November onwards	-	-
Elephant foot yam	Pre-kharif and kharif	Irrigated	Sandy loam	218.5	53.8	238.9	Vegetables	April-May	November onwards	-	-
Sesame	Summer	Irrigated	Loam to Sandy Loam	189.3	44.2	221.3	Potato	March	July	-	
Mustard	Rabi	Irrigated	Loam to Sandy Loam	277.8	68.6	300.4	Paddy	Novomber	February	-	
Lentil	Rabi	Irrigated	Sandy loam	196.5	49.3	159.2	Paddy	Novomber	March	-	
Paddy	Rabi	Irrigated	Loamy to clay	188.5	51.2	180.9	Mustard	4th week of	4th week of April	-	-

Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil (Kg/ha)			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
				N	P_2O_5	K_2O					
			loam					January			
Paddy	Kharif	Rainfed	Clay loam	208.6	62.3	201.8	Sesame	3rd week of July	3rd week of October		
Vegetables	All	Irrigated	Loam to clay loam	226.4	41.9	214.5	Vegetable	Year round	Year round		
Vegetables	Rabi	Irrigated	Loam	250.1	53.6	268.8	Pointed gourd	1st week of October	4th week of December		

Performance of FLD

Oilseeds:

Frontline demonstrations on oilseed crops

Crop	Thematic Area	Name of the technology demonstrated	No. of Farmers	Area (ha)	Yield (q/ha)		% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demo	Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Mustard	New variety	New variety (YSH-0401) with improved package of practice	30	4.40	15	12.75	17	29000	46000	17000	1.58	27000	38000	11000	1.40
Sesamum	Crop production	Improve package of practice	30	4	12	11	9	29000	54000	25000	1.86	27750	50000	22250	1.80
Mustard	Crop production	Improve package of practice	30	4	15.25	12.50	22	29500	46500	17000	1.57	27500	37500	10000	1.37
Total			**90**	**12.40**											

* 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

Pulses

Frontline demonstration on pulse crops

Crop	Thematic Area	Name of the technology demonstrated	No. of Farmers	Area (ha)	Yield (q/ha)		% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demo	Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Blackgram	Seed Production	Seed Production (Variety-IPU-02-43)	40	5.3	11.8	10.7	10.2	30250	56640	26390	1.9	29500	51360	21860	1.7
Lentil	Crop production	Improve package of practice	20	2.66	12.25	10.20	20	28500	49000	20500	1.71	26000	41000	15000	1.57
Total			**60**	**7.93**											

* 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

Other crops

Crop	Thematic area	Name of the technology demonstrated	No. of Farmer	Area (ha)	Yield (q/ha)		% change in yield	Other parameters		*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demonstration	Check		Demo	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Paddy	Integrated nutrient management	Effect of Zn on paddy	36	5.0	62.5	56.6	10.4	-	-	75258	112812	37554	1.50	72382	102163	29781	1.41
Paddy	Integrated nutrient management	Green manuring	20	2.0	51.2	43.5	17.7 (33% reduction in N-fertilizer)	-	-	61125	92416	31291	1.51	62136	78158	16022	1.26
Vegetables (Cauliflower)	INM	Boron application	38	2.0	330.1	305.6	8.01	-	-	115250	260540	145290	2.26	111298	235689	124391	2.12
Mango*	Fruit fly management	Methyl euzenol trap	26	10	347.56	321.52	8.09	5.3% less insecticide	-	117320	347560	230240	2.96	109500	321520	212020	2.93
Cucumber * (Cucurbitacious crop)	Fruit fly management	Cuelure trap	41	7	247.82	201.32	23.09	13.46 % less insecticide spray	-	104600	223038	118438	2.13	101500	181188	79688	1.78
Guava*	Fruit fly management	Methyl euzenol trap	29	10	436.27	392.64	11.1	9.46% less pesticide spray	-	179500	741659	562159	4.13	177600	667488	489888	3.75
Chilli	Mite management	Spraying with spiromesifen	24	3	81.46	73.63	10.63	Control on thrips also	-	117550	179212	61662	1.52	113700	161986	48286	1.42

Crop	Thematic area	Name of the technology demonstrated	No. of Farmer	Area (ha)	Yield (q/ha)		% change in yield	Other parameters		*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demonstration	Check		Demo	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Banana	Panama wilt management	Sucker treatment with Carbendazim @ 2 g/ L of water, & pit treatment with *Trichoderma spp.*	30	4	Result awaited												
Leafy vegetables	Horticulture	Use low cost protected structure	12	12 units	137	71	93	-	-	82,000	1,98,500	1,16,000	2.42	46,000	65,000	19,000	1.4
Black pepper	Horticulture	Multi-tier crop model	15	15 units	Results are awaited												
Elephant foot yam	Horticulture	Day length management	15	0.6	400	340	17.6	-	-	1,92,000	4,80,000	2,65,500	2.5	1,88,000	3,91.000	1,45,000	2.1
Total			**286**	**43.6 ha**													

Livestock

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No.of units	Major parameters		% change in major parameter	Other parameter		*Economics of demonstration (Rs.)				*Economics of check (Rs.)			
					Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Dairy																	
Cow																	
Buffalo																	
Poultry																	
Rabbitry																	
Pigerry																	
Sheep and goat																	
Duckery																	

Others (pl.specify)																	
Total																	

* 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

Fisheries

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No.of units	Major parameters		% change in major parameter	Other parameter		*Economics of demonstration (Rs.)				*Economics of check (Rs.)			
					Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Common carps																	
Mussels																	
Ornamental fishes																	
Others (pl.specify)																	
Total																	

* 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

Other enterprises

Category	Name of the technology demonstrated	No. of Farmer	No.of units	Major parameters		% change in major parameter	Other parameter		*Economics of demonstration (Rs.) or Rs./unit				*Economics of check (Rs.) or Rs./unit			
				Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Composting	NOVCOM composting	26	4		-	-	-	-	-	-	-	-	-	-	-	-
	Composting with Waste Decomposer	29	3		-	-	-	-	-	-	-	-	-	-	-	-
Vegetable Nursery	Seedling production in plug tray	25	25 nos	95 % success	65 % success	46%	Crop harvested in 60 DAP	Crop harvested in 76DAP	36,700/- per bigha	63,000/- ,per bigha	26,300/- per bigha	1.72	28,700/- per bigha	43,500/- per bigha	14,800/- per bigha	1.52

Vegetable nursery	Seedling rising of cucurbits in poly bags.	20	20 nos	84 % success	67% success	25%	Crop harvested in 53 DAP	Crop harvested in 70 DAP	23,600/- per bigha	47,000/- per bigha	23,400/- per bigha	1.99	20,500/- per bigha	37,500/- per bigha	17,000/- per bigha	1.83
Banana value addition	bunch cover (polypropelene)	20	2.5 ha	96.5 % scar free finger	54.0 % scar free finger	78.7 %	Ave. Sale value Rs. 300/bunch	Ave. Sale value Rs. 160/bunch	2,76,000 /- per ha	7,10,500 /- per ha	4,34,500 /- per ha	2.57	2,32,000 /- per ha	5,08,000 /- per ha	2,76,000 /- per ha	2.19
Total		**120**	**2.5 ha**													

* 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

Women empowerment

Category	**Name of technology**	**No. of demonstrations**	**Observations**		**Remarks**
			Demonstration	**Check**	
Farm Women					
Pregnant women					
Adolescent Girl					
Other women					
Children					
Neonatal					
Infants					

Farm implements and machinery

Name of the implement	**Crop**	**Name of the technology demonstrated**	**No. of Farmer**	**Area (ha)**	**Filed observation (output/man hour)**		**% change in major parameter**	**Labor reduction (man days)**				**Cost reduction (Rs./ha or Rs./Unit)**			
					Demonstration	**Check**									

*** 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

Crop	Name of the Hybrid	No. of farmers	Area (ha)	Yield (kg/ha) / major parameter			Economics (Rs./ha)			
				Demo	Local check	% change	Gross Cost	Gross Return	Net Return	BCR
Cereals										
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										
Cauliflower										
Cabbage										
Cucumber										
Tomato										
Brinjal										
Okra										
Onion										
Potato										
Field bean										
Others (pl.specify)										
Total										
Commercial crops										
Cotton										
Coconut										
Others (pl.specify)										
Total										
Fodder crops										
Napier (Fodder)										
Maize (Fodder)										
Sorghum (Fodder)										
Others (pl.specify)										
Total										

Technical Feedback on the demonstrated technologies

Sl. No	Crop	Feed Back
1	Mango	Fruit fly management with methyl euzenol trap is a very effective method. It is easy and cost effective technique. Pesticide application reduced at least 5.3%. It is most effective when large area covered by the trapping method. But in the year 2020 super cyclone Amphan and lockdown badly damaged the cultivation of mango
2	Cucumber (Cucurbitacious crop)	Fruit fly management with cuelure trap is a very effective method. It is easy and cost effective technique. Pesticide application reduced at least 13.46%. It is most effective when large area covered by the trapping method. But in the year 2020 super cyclone Amphan and lockdown badly damaged the cultivation of cucumber
3	Guava	Fruit fly management with methyl euzenol trap is a very effective method. It is easy and cost effective technique. Pesticide application reduced at least 9.46%. It is most effective when large area covered by the trapping method. But in the year 2020 super cyclone Amphan and lockdown badly damaged the cultivation of guava.
4	Chilli	Mite management by spiromesifen is highly accepted by the farmer.
5	Banana	Panama wilts management by Sucker treatment with Carbendazim @ 2 g/ L of water, & pit treatment with *Trichoderma spp.*is accepted by the farmers. Continuous demonstration is needed for effective management of the disease.
6	Mustard	Technology is accepted by the farmers
7	Groundnut	Technology is accepted by the farmers
8	Sesame	Technology is accepted by the farmers
9	Lentil	Technology is accepted by the farmers
10	Chickpea	Technology is accepted by the farmers
11	Blackgram	Technology is accepted by the farmers
12	Greengram	Technology is accepted by the farmers
13	Mango	Fruit fly management with methyl euzenol trap is a very effective method. It is easy and cost effective technique. Pesticide application reduced at least 12.3%. It is most effective when large area covered by the trapping method
14	Cucumber (Cucurbitacious crop)	Fruit fly management with cuelure trap is a very effective method. It is easy and cost effective technique. Pesticide application reduced at least 15.7%. It is most effective when large area covered by the trapping method
15	Guava	Fruit fly management with methyl euzenol trap is a very effective method. It is easy and cost effective technique. Pesticide application reduced at least 15%. It is most effective when large area covered by the trapping method
16	Chilli	Mite management by spiromesifen is highly accepted by the farmer.
17	Banana	Panama wilt management by Sucker treatment with Carbendazim @ 2 g/ L of water, & pit treatment with *Trichoderma spp.*is accepted by the farmers. Continuous demonstration is needed for effective management of the disease.
18	Vegetables	Technology is accepted by the farmers
19	Vegetables (Solanaceous and	Farmers are highly convinced by high tech seedling raising process due to several advantages and less mortality of the

	cole crops)	vegetable seedlings
20	Elephant fooy yam	The variety BidhanKusm is highly adopted in this region and yield performance and market acceptability is also high
21	Banana	Quality finger, scar free, high market acceptability of banana are accepted by the famers
22	Leafy vegetables	Off season cultivation under low cost protection fetches low volume but high value return
23	Black pepper	The production system is highly accepted

Extension and Training activities under FLD

Sl. No.	Extension Activities	Date	No. of Activities organised	Number of farmer attended	Remarks
Lentil					
1	Field day	01.03.2020	2	25	Anandanagar, Krishnanagar-II
2	Farmers Training	08.02.2020	1	29	Anandanagar, Krishnanagar-II
3	Farmers Training	22.02.2020	1	31	Anandanagar, Krishnanagar-II
4	Farmers Training	29.02.2020	1	28	Anandanagar, Krishnanagar-II
5	Farmers Training	19.03.2020	1	30	Nadia KVK, BCKV
Sesame					
6	Farmers Training	13.02.2020	2	45	Chapatala, Chakdaha
7	Farmers Training	21.03.2020	2	32	Chapatala, Chakdaha
Groundnut					
8	Farmers Training	20.03.2020	1	41	R anaghat-II
9	Farmers Training	23.03.2020	1	42	Ranaghat-II
Mango & Guava					
10	Field Day	19.11.2020,30.09.2020	2	37	Satyapole
Chilli					
11	Farmers training	24.06.2020	1	20	Chapatala
Banana					
12	Farmers training	31.08.2020	1	27	Ramnagar
Paddy					
13	Farmers training	02.01.2020, 14.06.2020,	4	131	Narayanpur, Bhayna

		19.11.2020			
14	Field visit	19.09.2020, 22.09.2020	2	70	Satyapole, Kastodanga

Performance of the demonstration under CFLD on Pulse and Oilseed Crops during *Kharif* 2020 and *Rabi* 2019-2020 and 2020-21 summers 2019-2020 and 2020-21:

A. Technical Parameters:

Sl No	Crop demonstrated	Existing (Farmer's) variety name	Existing yield (q/ha)	Yield gap (Kg/ha) w.r.to			Name of Variety + Technology demonstrated	Number of farmers	Area in ha	Yield obtained (q/ha)			Yield gap minimized (%)		
				District yield (D)	State yield (S)	Potential yield (P)				Max	Min	Avg	D	S	P
1	Lentil (*Rabi* 2019-2020)	Local	10.3	11.21	9.59	15.0	**Moitree** Variety, Seed treatment, Bio-fertilizer, PSB, Micronutrient, PPC	40	10.0	13.1	10.5	11.6	3.4	20.9	-29.3
2	Sesame (Summer 2019-2020)	Rama	11.3	12.2	9.6	15.0	Variety, Seed treatment, Micronutrient, PPC	45	10.0	12.9	10.9	12.1	0	26.0	-23.9
3	Ground nut (Summer 2019-2020)	TAG-24	21.0	21.0	25.6	26.5	Variety, Seed treatment, Micronutrient, PPC	42	10.0	19.8	26.1	25.2	20.0	-1.6	-5.1

4	Lentil (*Rabi* 2020-2021)	Local	-	-	-	-	**Moitree& IPL-316** Variety, Seed treatment, Bio-fertilizer, Micronutrient, Amino Acid, PPC	50	10.0	-	-	-	-	-	-
5	Chickpea (*Rabi* 2020-2021)	Local	-	-	-	-	**NBEG-49** Variety, Seed treatment, Bio-fertilizer,	70	10.0	-	-	-	-	-	-
6	Greengram (Summer 2020-2021)	Virat	-	-	-	-	**Virat (IPM-205-7)** Variety, Seed treatment, Bio-fertilizer, Micronutrient, Humic& Fulvic Acid, PPC	38	10.0						
7	Sesame (Summer 2020-2021)	Rama					**Savitri** Variety, Seed treatment, Sea weed extract,Sulpher, Micronutrient, PPC	70	20.0						
8	Groundnut (Summer 2020-2021)	TAG-24					**Dharani** Variety, Seed treatment, Sulpher, Micronutrient, PPC	44	10.0						

B. Economic parameters

Sl. No.	Variety demonstrated & Technology demonstrated	Farmer's Existing plot				Demonstration plot			
		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
1	**Moitree** Variety, Seed treatment, Bio-fertilizer, PSB, Micronutrient, PPC	26,500	43,260	16,760	1.6	28,500	48,270	20,220	1.7
2	**Savitri** Variety, Seed treatment, Micronutrient, PPC	27,750/-	50,850/-	23,100/-	1.8	29,250/-	55,800/-	26,550/-	1.9
3	**TG-51** Variety, Seed treatment, Micronutrient, PPC	52,300	88,200	35,900	1.7	54,500	1,05,840	51,340	1.9

C. Socio-economic impact parameters

Sl. 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	**Lentil** Moitree	11,600	290	42/-	20	Nil	To fulfill the household need	16-17
2	**Sesame** Savitri	12,100	269	46/-	10	Nil	To fulfill the household need	14-15
3	**Groundnut** TG-51	25,200	600	42/-	20	Nil	To fulfill the household need	28-30

D. Oilseed Farmers' perception of the intervention demonstrated

Sl. No.	Technologies demonstrated (with name)	Farmers' Perception parameters					
		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	**Moitree** Variety, Seed treatment, Bio-fertilizer, PSB, Micronutrient, PPC	Befitting with the existing farming system	Timely supply of quality seed	Seed treatment,Bio-fertilizer, PSB, Micronutrient, PPC all are very low cost inputs, so technology may sustain.	High rain fall during harvesting	Yes	Farmers are happy with the total packages. They want to replace *Boro* Paddy with Lentil.
2	**Savitri** Variety, Seed treatment, Micronutrient, PPC	Befitting with the existing farming system	Timely supply of quality seed	Seed treatment, Micronutrient, PPC all are very low cost inputs, so technology may sustain.	Nil	Yes	Farmers are happy with the total packages
3	**TG-51** Variety, Seed treatment, Micronutrient, PPC	Befitting with the existing farming system	Timely supply of quality seed	Seed treatment, Micronutrient, PPC all are very low cost inputs, so technology may sustain.	Nil	Yes	Farmers are happy with the total packages

E. Specific Characteristics of Technology and Performance

Specific Characteristic	Performance	Performance of Technology vis-a vis Local Check	Farmers Feedback
Variety : **Moitree**	Varieties are very good and befitting with the existing farming system	**12.6 %** yield increased of the variety **Moitree** than the locally used variety by the farmers	Varieties are accepted by the farmers
Seed treatment: Inoculation of seed with ***Rhizobium***	Nitrogen fixation @ 20-30 kg / ha Yield increase upto 15.6 %	Highly recommended (***Rizobium****@ 0.75* kg / 30 kg of seed requiring for one hectare)	Very low cost imput
PSB	Better root growth	Highly recommended (Soil application of PSB with cow dung manure @ 2 *l* / ha during final land perparation)	Very low cost imput
$MgSO_4$	Increase photosynthetic activity, reduce flower drops and increase yield	Highly recommended (2 kg / ha, i.e. 2g / *l* of water with two sprays 21 DAS and before flowering)	Very low cost but highly effective imput
Imidacloprid	Systemic insecticide effective for controlling Sucking pests and aphids (Applied @ 1.0 ml/ l)	Reduces various sucking pests and aphid attack	Very low cost but highly effective input
Carbendazim	Fungicide effective for controlling diseases (Applied @ 2 g/ l)	Reduces various diseases	Very low cost but highly effective input

F. Extension activities under FLD conducted:

Lentil (*Rabi* 2019-2020)

Sl. No.	Extension Activities organized	Date and place of activity		Number of farmer attended
		Date	Place	
1	Farmers Training	08.02.2020	Anandanagar, Krishnanagar-II	29
2		22.02.2020	Anandanagar, Krishnanagar-II	31
3		29.02.2020	Anandanagar, Krishnanagar-II	28
4		19.03.2020	Nadia KVK, BCKV	30
1	Field day	01.03.2020	Anandanagar, Krishnanagar-II	25

Sesame (Summer 2019-2020)

Sl. No.	Extension Activities organized	Date and place of activity		Number of farmer attended
		Date	Place	
1	Farmers Training	13.02.2020	Chapatala	22
2		13.02.2020	Chakdaha	23
3		21.03.2020	Chapatala	18
4		21.03.2020	Chakdaha	14

Groundnut (Summer 2019-2020)

Sl. No.	Extension Activities organized	Date and place of activity		Number of farmer attended
		Date	Place	
1	Farmers Training	20.03.2020	Ranaghat-II	41
2		23.03.2020	Ranaghat-II	42

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

C. Farmers' training photographs

D. Quality ActionPhotographs of field visits/field days and technology demonstrated.

E. Details of budget utilization

Crop (provide crop wise information)	Items	Budget Received (Rs.)	Budget Utilization (Rs.)	Balance (Rs.)
Lentil (*Rabi* 2019-2020)	i) Critical input	81,000.00	72,957.00	8,043.00
	ii) TA/DA/POL etc. for monitoring	9,000.00	8,843.00	157.00
	iii) Extension Activities (Field day)			
	iv)Publication of literature			
	Total	**90,000.00**	**81,800.00**	**8,200.00**
Sesame (Summer 2019-2020)	i) Critical input	45,000.00	45,000.00	0.00
	ii) TA/DA/POL etc. for monitoring	5,000.00	4,810.00	190.00
	iii) Extension Activities (Field day)			
	iv)Publication of literature			
	Total	**50,000.00**	**49,810.00**	**190.00**
Ground nut (Summer 2019-2020)	i) Critical input	1,08,000.00	1,06,263.00	1,737.00
	ii) TA/DA/POL etc. for monitoring	12,000.00	9,758.00	2,242.00
	iii) Extension Activities (Field day)			
	iv)Publication of literature			
	Total	**1,20,000.00**	**1,16,021.00**	**3,979.00**
Lentil	i) Critical input	81,000.00		

(*Rabi* 2020-2021)	ii) TA/DA/POL etc. for monitoring	9,000.00		
	iii) Extension Activities (Field day)			
	iv)Publication of literature			
	Total	**1,20,000.00**		
Chickpea (*Rabi* 2020-2021)	i) Critical input	81,000.00		
	ii) TA/DA/POL etc. for monitoring	9,000.00		
	iii) Extension Activities (Field day)			
	iv)Publication of literature			
	Total	**1,20,000.00**		
Greengram (Summer 2020-2021)	i) Critical input	81,000.00		
	ii) TA/DA/POL etc. for monitoring	9,000.00		
	iii) Extension Activities (Field day)			
	iv)Publication of literature			
	Total	**1,20,000.00**		
Sesame (Summer 2020-2021)	i) Critical input	90,000.00		
	ii) TA/DA/POL etc. for monitoring	10,000.00		
	iii) Extension Activities (Field day)			
	iv)Publication of literature			
	Total	**1,00,000.00**		
Groundnut (Summer 2020-2021)	i) Critical input	1,08,000.00		
	ii) TA/DA/POL etc. for monitoring	12,000.00		

	iii) Extension Activities (Field day)			
	iv)Publication of literature			
	Total	**1,20,000.00**		

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

A) Farmers and farm women (on campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
I. Crop Production													
Weed Management	1	14	0	14	8	0	8	0	0	0	22	0	22
Resource Conservation Technologies													
Cropping Systems													
Crop Diversification													
Integrated Farming													
Water management													
Seed production													
Nursery management	1	12	4	16	16	2	18	0	0	0	28	6	34
Integrated Crop Management													
Fodder production													
Production of organic inputs													
Others, (cultivation of crops)	2	18	0	18	13	2	15	5	12	17	36	14	50
II. Horticulture													
a) Vegetable Crops													
Integrated nutrient management													
Water management													
Enterprise development													
Skill development													
Yield increment													
Production of low volume and high value crops	1	8	2	10	8	3	11	0	4	4	16	9	25
Off-season vegetables													
Nursery raising													
Export potential vegetables													
Grading and standardization	1	6	1	7	8	2	10	0	0	0	14	3	17
Protective cultivation (Green Houses, Shade Net etc.)													
Others, if any (Cultivation of Vegetable)	6	76	28	104	55	7	62	8	0	8	139	35	174
Training and Pruning													
b) Fruits													
Layout and Management of Orchards													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Cultivation of Fruit	1	16	2	18	11	2	13	0	0	0	27	4	31
Management of young plants/orchards													
Rejuvenation of old orchards													
Export potential fruits													
Micro irrigation systems of orchards													
Plant propagation techniques													
Others, if any(INM)													
c) Ornamental Plants													
Nursery Management													
Management of potted plants													
Export potential of ornamental plants													
Propagation techniques of Ornamental Plants													
Others (Cultivation of flowers)	1	6	26	32	0	4	4	0	0	0	6	30	36
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 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 Fertility Management													
Soil fertility management													
Soil and Water Conservation													
Integrated Nutrient Management													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Production and use of organic inputs													
Management of Problematic soils													
Micro nutrient deficiency in crops													
Nutrient Use Efficiency	1	5	0	5	4	0	4	0	0	0	9	0	9
Soil and Water Testing													
Others, if any	2	20	0	20	6	0	6	0	0	0	26	0	26
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 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 care													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Others, if any													
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 Pest Management													
Integrated Disease Management													
Bio-control of pests and diseases	2	26	0	26	19	0	19	3	0	3	48	0	48
Production of bio control agents and bio pesticides													
Others, if any													
VIII. Fisheries													
Integrated fish farming													
Carp breeding and hatchery management													
Carp fry and fingerling rearing													
Composite fish 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													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Others, if any													
IX. Production of Inputs at site													
Seed Production	3	30	2	32	29	3	32	3	0	3	62	5	67
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 capital	1	15	0	15	27	0	27	0	0	0	42	0	42
Entrepreneurial development of farmers/youths	2	19	3	22	36	1	37	0	0	0	55	4	59
WTO and IPR issues													
Others, if any													
XI Agro-forestry													
Production technologies													
Nursery management													
Integrated Farming Systems													
XII. Others (Pl. Specify)													
TOTAL	**25**	**271**	**68**	**339**	**240**	**26**	**266**	**19**	**16**	**35**	**530**	**110**	**640**

B) Rural Youth (on campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Mushroom Production													
Bee-keeping	1	21	1	22	13	0	13	2	0	2	36	1	37
Integrated farming	2	1	26	27	0	21	21	0	0	0	1	47	48
Seed production	2	10	38	48	9	43	52	0	0	0	19	81	100
Production of organic inputs	3	36	12	48	33	9	42	4	1	5	73	22	95
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	1	0	0	0	0	40	40	0	0	0	0	40	40
Production of quality animal products													
Dairying													
Sheep and goat rearing													
Quail farming													
Piggery													
Rabbit farming													
Poultry production													
Ornamental fisheries													
Enterprise development	2	10	19	29	2	21	23	0	0	0	12	40	52
Para vets													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
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													
Pest management in horticulture	1	13	0	13	7	0	7	0	0	0	20	0	20
Climate effect of crops	1	9	3	12	15	0	15	2	0	2	26	3	29
TOTAL	**13**	**100**	**99**	**199**	**79**	**134**	**213**	**8**	**1**	**9**	**187**	**234**	**421**

C) Extension Personnel (on campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Productivity enhancement in field crops	3	35	1	36	38	10	48	0	0	0	73	11	84
Weed Mangement	1	12	2	14	8	2	10	0	0	0	20	4	24
Value addition													
Integrated Pest Management	2	29	4	33	19	2	21	0	0	0	48	6	54
Integrated Nutrient management	3	53	6	59	35	2	37	0	0	0	88	8	96
Nursery Mangement	2	24	6	30	38	5	43	0	0	0	62	11	73

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
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	1	1	0	1	0	0	0	0	0	0	1	0	1
Care and maintenance of farm machinery and implements													
WTO and IPR issues													
Management in farm animals													
Livestock feed and fodder production													
Household food security													
Women and Child care													
Low cost and nutrient efficient diet designing													
Production and use of organic inputs													
Gender mainstreaming through SHGs													
Basics of soil science	3	49	7	56	46	3	49	0	0	0	95	10	105
Climate change on cultivation crops	1	18	3	21	14	0	14	2	0	2	34	3	37
Seed Production	2	29	4	33	44	3	47	0	0	0	73	7	80
TOTAL	**18**	**250**	**33**	**283**	**242**	**27**	**269**	**2**	**0**	**2**	**494**	**60**	**554**

D) Farmers and farm women (off campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
I. Crop Production													
Weed Management													
Resource Conservation Technologies	2	18	0	18	11	0	11	0	0	0	29	0	29

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Cropping Systems													
Crop Diversification													
Integrated Farming													
Water management													
Seed production													
Nursery management	4	44	3	47	48	0	48	0	0	0	92	3	95
Integrated Crop Management													
Fodder production	1	0	0	0	0	0	0	0	45	45	0	45	45
Production of organic inputs	3	14	0	14	24	0	24	0	0	0	38	0	38
Cultivation of crops	9	92	8	100	80	3	83	0	1	1	172	12	184
Others	2	21	0	21	22	0	22	0	0	0	43	0	43
II. Horticulture													
a) Vegetable Crops													
Integrated nutrient management	1	14	0	14	27	2	29	3	0	3	44	2	46
Water management													
Enterprise development													
Skill development													
Yield increment													
Production of low volume and high value crops													
Off-season vegetables													
Nursery raising													
Export potential vegetables													
Grading and standardization	1	0	27	27	0	1	1	0	0	0	0	28	28
Protective cultivation (Green Houses, Shade Net etc.)													
Others, if any (Cultivation of Vegetable & Kitchen garden)	5	37	23	60	48	32	80	4	4	8	89	59	148
Training and Pruning													
b) Fruits													
Layout and Management of Orchards													
Cultivation of Fruit	3	23	4	27	27	9	36	4	1	5	54	14	68
Management of young plants/orchards													
Rejuvenation of old orchards													
Export potential fruits													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Micro irrigation systems of orchards													
Plant propagation techniques													
Others, if any(INM)													
c) Ornamental Plants													
Nursery Management													
Management of potted plants													
Export potential of ornamental plants													
Propagation techniques of Ornamental Plants													
Others (Cultivation of flowers)	1	29	0	29	2	0	2	0	0	0	31	0	31
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 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 Fertility Management													
Soil fertility management	4	69	2	71	20	2	22	0	0	0	89	4	93
Soil and Water Conservation													
Integrated Nutrient Management	5	88	8	96	45	5	50	0	0	0	133	13	146
Production and use of organic inputs	8	101	10	111	83	6	89	5	0	5	189	16	205
Management of Problematic soils													
Micro nutrient deficiency in crops	2	47	1	48	41	0	41	0	0	0	88	1	89
Nutrient Use Efficiency	1	9	0	9	7	1	8	0	0	0	16	1	17

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Soil and Water Testing	2	13	1	14	10	2	12	0	0	0	23	3	26
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 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 care													
Others, if any													
VI.Agril. Engineering													
Installation and maintenance of micro irrigation systems													
Use of Plastics in farming practices													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
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	6	73	4	77	79	9	88	2	0	2	154	13	167
Integrated Disease Management	6	87	10	97	87	7	94	6	0	6	180	17	197
Bio-control of pests and diseases	2	19	7	26	19	7	26	0	0	0	38	14	52
Production of bio control agents and bio pesticides													
Others, if any	4	50	7	57	42	3	45	9	1	10	101	11	112
VIII. Fisheries													
Integrated fish farming													
Carp breeding and hatchery management													
Carp fry and fingerling rearing													
Composite fish 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													
IX. Production of Inputs at site													
Seed Production	19	243	14	257	222	97	319	4	0	4	469	111	580
Planting material production													
Bio-agents production													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
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	2	19	2	21	30	7	37	0	0	0	49	9	58
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	**93**	**1110**	**131**	**1241**	**974**	**193**	**1167**	**37**	**52**	**89**	**2121**	**376**	**2497**

E) RURAL YOUTH (Off Campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Mushroom Production													
Bee-keeping													
Integrated farming	3	30	7	37	21	8	29	0	0	0	51	15	66
Seed production	1	0	8	8	0	13	13	0	0	0	0	21	21
Production of organic inputs													
Integrated Farming													
Planting material production													
Vermi-culture													
Sericulture													
Protected cultivation of vegetable crops													
Commercial fruit production	1	7	1	8	0	0	0	3	1	4	10	2	12
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													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
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	2	1	19	20	0	12	12	0	6	6	1	37	38
Post Harvest Technology													
Tailoring and Stitching													
Rural Crafts													
Weed Mangement	2	29	4	33	28	4	32	2	1	3	59	9	68
Cultivation practices	2	20	5	25	26	6	32	0	0	0	46	11	57
Programmes related to agriculture	5	74	8	82	86	7	93	0	0	0	160	15	175
Group formation	2	30	2	32	20	8	28	0	0	0	50	10	60
Leadership trait development	3	39	6	45	72	3	75	0	0	0	111	9	120
TOTAL	**21**	**230**	**60**	**290**	**253**	**61**	**314**	**5**	**8**	**13**	**488**	**129**	**617**

F) Extension Personnel (Off Campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Productivity enhancement in field crops													
Integrated Pest Management	3	63	3	66	36	0	36	0	0	0	99	3	102
Weed Mangement	1	22	3	25	11	2	13	0	0	0	33	5	38
Integrated Disease Managemnt	3	69	9	78	49	6	55	0	0	0	118	15	133
Integrated Nutrient management	2	42	6	48	21	2	23	0	0	0	63	8	71
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	1	12	2	14	15	3	18	0	0	0	27	5	32
Gender mainstreaming through SHGs													
Crop intensification	1	8	1	9	15	2	17	0	0	0	23	3	26
Seed Production	6	132	12	144	85	6	91	0	0	0	217	18	235
TOTAL	**17**	**348**	**36**	**384**	**232**	**21**	**253**	**0**	**0**	**0**	**580**	**57**	**637**

G) Consolidated table (ON and OFF Campus)

i. Farmers & Farm Women

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
I. Crop Production													
Weed Management	1	14	0	14	8	0	8	0	0	0	22	0	22
Resource Conservation Technologies	2	18	0	18	11	0	11	0	0	0	29	0	29
Cropping Systems													
Crop Diversification													
Integrated Farming													
Water management													
Seed production													
Nursery management	5	56	7	63	64	2	66	0	0	0	120	9	129
Integrated Crop Management													
Fodder production	1	0	0	0	0	0	0	0	45	45	0	45	45
Production of organic inputs	3	14	0	14	24	0	24	0	0	0	38	0	38
Others, (cultivation of crops)	11	110	8	118	93	5	98	5	13	18	208	26	234
Others	2	21	0	21	22	0	22	0	0	0	43	0	43
TOTAL	**25**	**233**	**15**	**248**	**222**	**7**	**229**	**5**	**58**	**63**	**460**	**80**	**540**
II. Horticulture													
a) Vegetable Crops													
Integrated nutrient management	1	14	0	14	27	2	29	3	0	3	44	2	46
Water management													
Enterprise development													
Skill development													
Yield increment													
Production of low volume and high value crops	1	8	2	10	8	3	11	0	4	4	16	9	25

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Off-season vegetables													
Nursery raising													
Exotic vegetables like Broccoli													
Export potential vegetables													
Grading and standardization	2	6	28	34	8	3	11	0	0	0	14	31	45
Protective cultivation (Green Houses, Shade Net etc.)													
Others, if any (Cultivation of Vegetable & Kitchen Garden)	11	113	51	164	103	39	142	12	4	16	228	94	322
TOTAL	**15**	**141**	**81**	**222**	**146**	**47**	**193**	**15**	**8**	**23**	**302**	**136**	**438**
b) Fruits													
Training and Pruning													
Layout and Management of Orchards													
Cultivation of Fruit	4	39	6	45	38	11	49	4	1	5	81	18	99
Management of young plants/orchards													
Rejuvenation of old orchards													
Export potential fruits													
Micro irrigation systems of orchards													
Plant propagation techniques													
Others, if any(INM)													
TOTAL	**4**	**39**	**6**	**45**	**38**	**11**	**49**	**4**	**1**	**5**	**81**	**18**	**99**
c) Ornamental Plants													
Nursery Management													
Management of potted plants													
Export potential of ornamental plants													
Propagation techniques of Ornamental Plants													
Others, if any	2	35	26	61	2	4	6	0	0	0	37	30	67
TOTAL	**2**	**35**	**26**	**61**	**2**	**4**	**6**	**0**	**0**	**0**	**37**	**30**	**67**

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
d) Plantation crops													
Production and Management technology													
Processing and value addition													
Others, if any													
TOTAL													
e) Tuber crops													
Production and Management technology													
Processing and value addition													
Others, if any													
TOTAL													
f) Spices													
Production and Management technology													
Processing and value addition													
Others, if any													
TOTAL													
g) Medicinal and Aromatic Plants													
Nursery management													
Production and management technology													
Post harvest technology and value addition													
Others, if any													
TOTAL													
HORTICULTURE TOTAL	**21**	**215**	**113**	**328**	**186**	**62**	**248**	**19**	**9**	**28**	**420**	**184**	**604**
III. Soil Health and Fertility Management													
Soil fertility management	4	69	2	71	20	2	22	0	0	0	89	4	93
Soil and Water Conservation													
Integrated Nutrient Management	5	88	8	96	45	5	50	0	0	0	133	13	146
Production and use of organic inputs	8	101	10	111	83	6	89	5	0	5	189	16	205

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Management of Problematic soils													
Micro nutrient deficiency in crops	2	47	1	48	41	0	41	0	0	0	88	1	89
Nutrient Use Efficiency	2	14	0	14	11	1	12	0	0	0	25	1	26
Soil and Water Testing	2	13	1	14	10	2	12	0	0	0	23	3	26
Others, if any	2	20	0	20	6	0	6	0	0	0	26	0	26
TOTAL	**25**	**352**	**22**	**374**	**216**	**16**	**232**	**5**	**0**	**5**	**573**	**38**	**611**
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 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													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
rural Women													
Location specific drudgery reduction technologies													
Rural Crafts													
Capacity building													
Women and child care													
Others, if any													
TOTAL													
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 Management	6	73	4	77	79	9	88	2	0	2	154	13	167
Integrated Disease Management	6	87	10	97	87	7	94	6	0	6	180	17	197
Bio-control of pests and diseases	4	45	7	52	38	7	45	3	0	3	86	14	100
Production of bio control agents and bio pesticides													
Others, if any	4	50	7	57	42	3	45	9	1	10	101	11	112
TOTAL	**18**	**236**	**21**	**257**	**227**	**19**	**246**	**20**	**1**	**21**	**483**	**41**	**524**
VIII. Fisheries													
Integrated fish farming													
Carp breeding and hatchery management													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Carp fry and fingerling rearing													
Composite fish 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													
TOTAL													
IX. Production of Inputs at site													
Seed Production	22	273	16	289	251	100	351	7	0	7	531	116	647
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													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Others, if any													
TOTAL	**22**	**273**	**16**	**289**	**251**	**100**	**351**	**7**	**0**	**7**	**531**	**116**	**647**
X. Capacity Building and Group Dynamics													
Leadership development													
Group dynamics	2	19	2	21	30	7	37	0	0	0	49	9	58
Formation and Management of SHGs													
Mobilization of social capital	1	15	0	15	27	0	27	0	0	0	42	0	42
Entrepreneurial development of farmers/youths	2	19	3	22	36	1	37	0	0	0	55	4	59
WTO and IPR issues													
Others, if any													
TOTAL	**5**	**53**	**5**	**58**	**93**	**8**	**101**	**0**	**0**	**0**	**146**	**13**	**159**
XI Agro-forestry													
Production technologies													
Nursery management													
Integrated Farming Systems													
TOTAL													
XII. Others (Pl. specify)													
TOTAL	**116**	**1362**	**192**	**1554**	**1195**	**212**	**1407**	**56**	**68**	**124**	**2613**	**472**	**3085**

ii. RURAL YOUTH (On and Off Campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Mushroom Production													
Bee-keeping	1	21	1	22	13	0	13	2	0	2	36	1	37
Integrated farming	5	31	33	64	21	29	50	0	0	0	52	62	114
Seed production	3	10	46	56	9	56	65	0	0	0	19	102	121
Production of organic inputs	3	36	12	48	33	9	42	4	1	5	73	22	95
Planting material production													
Vermi-culture													
Sericulture													
Protected cultivation of vegetable crops													
Commercial fruit production	1	7	1	8	0	0	0	3	1	4	10	2	12
Repair and maintenance of farm machinery and implements													
Nursery Management of Horticulture crops													
Training and pruning of orchards													
Value addition	1	0	0	0	0	40	40	0	0	0	0	40	40
Production of quality animal products													
Dairying													
Sheep and goat rearing													
Quail farming													
Piggery													
Rabbit farming													
Poultry production													
Ornamental fisheries													
Para vets													
Para extension workers													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
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	2	1	19	20	0	12	12	0	6	6	1	37	38
Post Harvest Technology													
Tailoring and Stitching													
Rural Crafts													
Enterprise development	2	10	19	29	2	21	23	0	0	0	12	40	52
Others if any (ICT application in agriculture)													
Others (Pest management in horticulture)	1	13	0	13	7	0	7	0	0	0	20	0	20
Others (Climate effect of crops)	1	9	3	12	15	0	15	2	0	2	26	3	29
Others (Weed Management)	2	29	4	33	28	4	32	2	1	3	59	9	68
Others (Cultivation practices)	2	20	5	25	26	6	32	0	0	0	46	11	57
Others (Programmes related to agriculture)	5	74	8	82	86	7	93	0	0	0	160	15	175
Others (Group formation)	2	30	2	32	20	8	28	0	0	0	50	10	60
Others (Leadership trait development)	3	39	6	45	72	3	75	0	0	0	111	9	120
TOTAL	**34**	**330**	**159**	**489**	**332**	**195**	**527**	**13**	**9**	**22**	**675**	**363**	**1038**

iii. Extension Personnel (On and Off Campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Productivity enhancement in field crops	3	35	1	36	38	10	48	0	0	0	73	11	84
Integrated Pest Management	5	92	7	99	55	2	57	0	0	0	147	9	156
Integrated Disease Management	3	69	9	78	49	6	55	0	0	0	118	15	133
Integrated Nutrient management	5	95	12	107	56	4	60	0	0	0	151	16	167
Weed Management	2	34	5	39	19	4	23	0	0	0	53	9	62
Nursery Mangement	2	24	6	30	38	5	43	0	0	0	62	11	73
Rejuvenation of old orchards													
Value addition													
Protected cultivation technology													
Formation and Management of SHGs													
Group Dynamics and farmers organization													
Information networking among farmers													
Capacity building for ICT application	1	1	0	1	0	0	0	0	0	0	1	0	1
Care and maintenance of farm machinery and implements													
WTO and IPR issues													
Management in farm animals													
Livestock feed and fodder production													
Household food security													
Women and Child care													
Low cost and nutrient efficient diet designing													
Production and use of organic inputs													
Gender mainstreaming through SHGs													
Crop intensification													
Others (Seed Production)	8	161	16	177	129	9	138	0	0	0	290	25	315
Others (Basics of soil science)	3	49	7	56	46	3	49	0	0	0	95	10	105
Others (Climate change on cultivation crops)	1	18	3	21	14	0	14	2	0	2	34	3	37
Others (Production and use of organic inputs)	1	12	2	14	15	3	18	0	0	0	27	5	32
Others (Crop intensification)	1	8	1	9	15	2	17	0	0	0	23	3	26
TOTAL	**35**	**598**	**69**	**667**	**474**	**48**	**522**	**2**	**0**	**2**	**1074**	**117**	**1191**

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

Discipline	Clientele (PF/ RY/ EF)	Title of Training	Duration (in days)	Venue (On/ Off/ Skil)	No. of Participants			No. of SC/ST		
					M	F	T	M	F	T
Agronomy	EF	Seed bed preparation of Kharif rice (Online)	1	ON	32	8	40	18	5	23
Agronomy	RY	Cultivation practices of Kharif Rice (Online)	1	OFF	28	7	35	16	4	20
Agronomy	RY	Intregrated farming system (Online)	1	OFF	22	0	22	8	0	8
Agronomy	EF	Weed Management of Kharif rice (Online)	1	ONLINE	33	5	38	11	2	13
Agronomy	PF	Preparation of vermicompost (Online)	1	ONLINE	10	0	10	3	0	3
Agronomy	RY	Structure of Intregrated farming system & their management	1	ONLINE	21	0	21	9	0	9
Agronomy	PF	Interculture operation of Kharif Rice	1	ONLINE	16	1	17	7	1	8
Agronomy	PF	Interculture operation of Kkharif rice	1	ONLINE	20	0	20	12	0	12
Agronomy	RY	Integrated farming system in relation with kitchen garden	1	ON	1	39	40	0	21	21
Agronomy	RY	Cultivation practice of mustard	1	ONLINE	18	4	22	10	2	12
Agronomy	PF	Cultivation practice of mustard	1	ONLINE	24	1	25	14	0	14
Agronomy	RY	Weed management of rabi crops	1	ONLINE	25	2	27	14	2	16
Agronomy	PF	Cultivation practice of Lentil	1	OFF	16	3	19	8	2	10
Agronomy	RY	Nutritional garden in relation with intregrated farming system	1	OFF	8	15	23	4	8	12
Agronomy	EF	Cropping system	1	ONLINE	23	3	26	15	2	17
Agronomy	PF	Seedbed preparation and cultivation practice of boro rice	1	OFF	17	7	24	0	1	1
Agronomy	PF	Inter culture operation of mustard and seedbed preparation of boro rice	1	OFF	8	0	8	6	0	6
Agronomy	EF	Cultivation practice of Jute & different oilseed crops	1	ON	22	3	25	8	2	10

Agronomy	PF	Training Program on different seed bed preparation of rice and cultivation practice of boro rice	1	OFF	32	3	35	7	0	7
Agril. Extension	PF	Extension intervensions towards high tech farming	1	ON	42	0	42	27	0	27
Agril. Extension	PF	Marketing channel, price spread for mushroom growers	1	ON	23	1	24	15	0	15
Agril. Extension	PF	Marketing channels and Cost:benefit analysis for open field floriculture	1	ON	32	3	35	21	1	22
Agril. Extension	RY	Strategies to develop Farmers' Producing Organization for mushroom growers: Web training class	1	OFF	23	1	24	6	1	7
Agril. Extension	RY	Schemes related to agriculture in India and West Bengal: Web conference: Web training class	1	OFF	37	3	40	24	1	25
Agril. Extension	RY	Development of communication skills among input dealers: Web conference: Web training class	1	OFF	37	3	40	24	1	25
Agril. Extension	RY	Methods of communication and impact of Kisan Mela in technology difussion: Web training class	1	OFF	37	3	40	24	1	25
Agril. Extension	RY	Importance of micro-finance for small and marginal farmers in agriculture: web training	1	OFF	31	2	33	20	1	21
Agril. Extension	RY	Importance of micro-finance for small and marginal farmers in agriculture: web training	1	OFF	29	5	34	17	3	20
Agril. Extension	RY	Traditional cultutre of Nadia district and importance of home garden	1	ON	1	39	40	0	21	21
Agril. Extension	RY	Impact of chemical pesticides on environment: web training	1	OFF	37	3	40	24	1	25
Agril. Extension	RY	FPC Formation: Processes and Prospect	1	ON	11	1	12	2	0	2
Agril. Extension	RY	Krishi Bill 2020	1	ONLINE	32	3	35	19	1	20
Agril. Extension	RY	Krishi Bill 2020	1	ONLINE	31	2	33	6	1	7
Agril. Extension	RY	Prospect of FPC formation and rules, regulation related to FPC formation	1	OFF	27	9	36	14	7	21

Agril. Extension	EF	Extension methods such as training, demonstration, exhibition and kisan melas	1	ONLINE	34	2	36	20	0	20
Agril. Extension	EF	Market led Extension:meaning and role input dealers in promoting forward and backward linkages	1	ONLINE	34	2	36	20	0	20
Agril. Extension	PF	Prospect of FPC formation and rules, regulation related to FPC formation and Krishi Bill 2020	1	OFF	21	4	25	13	4	17
Soil Science	PF	Zinc deficiency in paddy & its management	1	OFF	50	1	51	28	0	28
Soil Science	PF	INM for potato	1	OFF	10	0	10	5	0	5
Soil Science	EF	Basics of soil science, profile, characteristics, functions of soil	1	ON	31	4	35	15	1	16
Soil Science	EF	INM of soil	1	ON	32	1	33	14	0	14
Soil Science	EF	Types and importance of soil physical properties	1	ON	33	3	36	16	1	17
Soil Science	PF	Importance of zero budget natural farming	1	OFF	26	0	26	6	0	6
Soil Science	EF	Soil chemical & biological properties	1	ON	31	3	34	15	1	16
Soil Science	PF	Importance of soil health management through organic inputs	1	OFF	17	4	21	9	1	10
Soil Science	PF	Method of preparation of waste decomposer and it's use	1	OFF	19	4	23	9	1	10
Soil Science	RY	Practical class on preparation of NOVCOM compost	1	SKILL	30	6	36	12	2	14
Soil Science	PF	Different easy methods for preparation of compost	1	OFF	13	3	16	6	1	7
Soil Science	PF	Different tools of Zero Budget Natural Farming	1	OFF	18	3	21	9	2	11
Soil Science	PF	Preparation of different bio agents	1	OFF	19	2	21	9	1	10
Soil Science	RY	Practical class on Vermicompost	1	ON	30	10	40	18	5	23
Soil Science	RY	Method of preparation of waste decomposer and it's use	1	ON	13	6	19	7	3	10
Soil Science	PF	Importance of Integrated Nutrient Management	1	OFF	20	5	25	10	2	12
Soil Science	PF	Fertilizer management schedule of differnt crops (Online)	1	OFF	8	0	8	2	0	2
Soil Science	PF	Fertilizer management schedule of differnt crops (Online)	1	OFF	8	0	8	3	0	3

Soil Science	EF	Basics of Fertilizer recommention	1	ON	28	3	31	11	1	12
Soil Science	EF	Integrated Nutrient Management	1	ON	28	4	32	10	1	11
Soil Science	EF	Integrated Nutrient Management	1	ONLINE	27	4	31	11	1	12
Soil Science	PF	Fertilizer management schedule of kharif paddy	1	ONLINE	10	0	10	3	0	3
Soil Science	PF	Use of Leaf colour chart for nitrogen management in paddy	1	ON	9	0	9	4	0	4
Soil Science	PF	Methods of increasing fertilizer use efficiency	1	ONLINE	16	1	17	7	1	8
Soil Science	EF	Management of Agricultural wastes	1	ONLINE	27	5	32	15	3	18
Soil Science	PF	Basics of Good Agricultural Practices for crop production	1	ON	13	0	13	3	0	3
Soil Science	PF	Management to produce clean and safe food	1	ON	13	0	13	3	0	3
Soil Science	PF	Organic farming for safe food	1	ONLINE	39	0	39	22	0	22
Soil Science	PF	Organic farming for safe food	1	ONLINE	38	0	38	18	0	18
Soil Science	PF	Basics of Soil Health management	1	ONLINE	22	0	22	10	0	10
Soil Science	PF	Role of micronutrients in vegetable crop	1	OFF	38	0	38	13	0	13
Soil Science	PF	Importance of soil testing and sample collection methods	1	OFF	16	3	19	8	2	10
Soil Science	PF	Importance of Internation Soil Day	1	ONLINE	63	4	67	12	2	14
Soil Science	EF	Basics of soils testing	1	ONLINE	36	4	40	10	1	11
Soil Science	PF	Soil health management	1	OFF	18	4	22	8	1	9
Soil Science	PF	Methods of soil collection	1	OFF	7	0	7	2	0	2
Seed Science	PF	Seed production of Greengram	1	OFF	36	0	36	14	0	14
Seed Science	PF	Seed production of Greengram	1	OFF	27	2	29	9	0	9
Seed Science	EF	Seed Classification	1	ON	36	4	40	20	2	22
Seed Science	RY	Seed Production of Annual Flowers	1	ON	17	3	20	9	1	10
Seed Science	PF	Seed Production of Sesame	1	OFF	29	0	29	21	0	21
Seed Science	PF	Seed Production of Sesame	1	OFF	31	8	39	19	5	24
Seed Science	PF	Seed Production of Groundnut	1	OFF	31	6	37	14	4	18

Seed Science	PF	Seed Production of Groundnut	1	OFF	32	8	40	17	3	20
Seed Science	EF	Seed production of vegetables	1	ONLINE	33	1	34	11	0	11
Seed Science	PF	Tip cutting methods of jute seed production	1	ONLINE	23	0	23	12	0	12
Seed Science	EF	Seed certification procedure	1	ONLINE	34	1	35	13	0	13
Seed Science	PF	Seed treatment of Paddy	1	ONLINE	32	0	32	15	0	15
Seed Science	EF	Stored grain pest management procedure	1	ONLINE	32	1	33	12	0	12
Seed Science	EF	Seed production of Blackgram	1	ONLINE	33	5	38	11	2	13
Seed Science	PF	Seed treatment procedures	1	ONLINE	44	2	46	23	1	24
Seed Science	PF	PPVFRA	1	ON	13	0	13	5	0	5
Seed Science	EF	Seed production of Pulses	1	ONLINE	52	5	57	27	2	29
Seed Science	EF	Seed production of Blackgram	1	ONLINE	33	5	38	11	2	13
Seed Science	PF	scientist farmer interaction on vegetables seed production	1	ONLINE	30	0	30	16	0	16
Seed Science	PF	scientist farmer interaction on vegetables seed production	1	ONLINE	30	1	31	13	0	13
Seed Science	RY	Crop selection and seed saving techniques of home garden	1	ON	1	39	40	0	21	21
Seed Science	RY	Traditional cultutre of Nadia district and importance of home garden	1	ON	1	39	40	0	21	21
Seed Science	PF	Seed production of Lentil	1	OFF	17	21	38	5	21	26
Seed Science	PF	Seed production of Chickpea	1	OFF	20	21	41	7	21	28
Seed Science	PF	Seed production of Chickpea	1	OFF	21	21	42	4	21	25
Seed Science	PF	Seed production of Lentil	1	OFF	19	21	40	9	21	30
Seed Science	PF	Seed production of Pulses	1	ON	14	5	19	10	3	13
Seed Science	PF	Seed storage for nutrition garden	1	ON	35	0	35	17	0	17
Seed Science	PF	Importance of Internation Soil Day	1	ONLINE	63	4	67	12	2	14
Seed Science	PF	Zero Tillage Technology for Chickpea	1	OFF	15	0	15	5	0	5
Seed Science	PF	Zero Tillage Technology for Chickpea	1	OFF	14	0	14	6	0	6

Plant Protection	PF	Pest & disease management in seed bed of boro paddy	1	OFF	19	1	20	12	0	12
Plant Protection	PF	Pest & disease management in seed bed of boro paddy	1	OFF	55	0	55	13	0	13
Plant Protection	RY	Pest management in open field horticulture	1	ON	20	0	20	7	0	7
Plant Protection	RY	Information in honey bee production units	1	ON	36	1	37	15	0	15
Plant Protection	PF	pest and disease management of winter vegetables	1	OFF	21	4	25	18	3	21
Plant Protection	PF	farm school class on importance of biological pest management	1	OFF	19	6	25	6	2	8
Plant Protection	PF	disease and pest management in main field of boro paddy	1	OFF	18	4	22	12	3	15
Plant Protection	PF	training on technique of spraying and input distribution to farmers under SCSPprogeamme	1	OFF	19	8	27	13	5	18
Plant Protection	PF	pest and disease management under SCSP programme	1	OFF	18	4	22	14	3	17
Plant Protection	EF	pest and disease management in nursery of vegetables	1	ONLINE	33	1	34	11	0	11
Plant Protection	PF	pest and disease management of jute	1	ONLINE	23	0	23	12	0	12
Plant Protection	EF	prsticide calculation procedures	1	ONLINE	34	1	35	13	0	13
Plant Protection	PF	pest and disease management of paddy	1	ONLINE	32	0	32	15	0	15
Plant Protection	EF	stored grain pest management of crops	1	ONLINE	32	1	33	12	0	12
Plant Protection	EF	pest and disease management of pulse crops	1	ONLINE	33	5	38	11	2	13
Plant Protection	PF	pest and disease management of kharif vegetable crops	1	ONLINE	44	2	46	23	1	24

Plant Protection	PF	PPVFRA	1	ON	13	0	13	5	0	5
Plant Protection	EF	pest and disease management of pulse and oilseed crops	1	ONLINE	52	5	57	27	2	29
Plant Protection	EF	pest and disease management of pulse and oilseed crops	1	ONLINE	33	5	38	11	2	13
Plant Protection	PF	scientist farmer interaction on IPM of kharif vegetables	1	ONLINE	30	0	30	16	0	16
Plant Protection	PF	pest and disease management of banena	1	ONLINE	32	4	36	18	1	19
Plant Protection	PF	scientist farmer interaction on IPM of kharif vegetables	1	ONLINE	30	1	31	13	0	13
Plant Protection	PF	pest and disease management in nursery bed of rabi vegetables	1	ONLINE	28	1	29	15	0	15
Plant Protection	PF	pest and disease management of early winter vegetables	1	ONLINE	25	3	28	13	1	14
Plant Protection	PF	IPM in vegetables for production of clean food	1	ON	35	0	35	17	0	17
Plant Protection	PF	pest and disease management in winter vegetables	1	ONLINE	19	7	26	9	4	13
Plant Protection	PF	scientist farmer interaction on IPM of winter vegetables	1	ONLINE	17	4	21	10	1	11
Plant Protection	PF	scientist farmer interaction on IPM of winter vegetables	1	ONLINE	24	6	30	12	3	15
Plant Protection	EF	Disease and pest management in banana	1	ON	24	3	27	10	1	11
Plant Protection	EF	procedure for preparation of pheromone trap for fruit fly management	1	ON	24	3	27	9	1	10
Horticulture	PF	Improved production technology of vegetables	1	On	33	0	33	3	0	3
Horticulture	PF	Value addition and marketing of vegetables and fruits	1	On	14	3	17	8	2	10
Horticulture	PF	Nutritional Gardening	1	On	6	30	36	0	4	4

Horticulture	PF	Cutivation of major flowers in Nadia district	1	On	6	30	36	0	4	4
Horticulture	PF	Profitable Horticulture technology for FPO/FPC	1	On	15	0	15	9	0	9
Horticulture	PF	Cultivation of early winter vegetables	1	On	21	2	23	11	1	12
Horticulture	PF	Production technology of rabi vegtables	1	On	39	3	42	24	2	26
Horticulture	PF	Use of growth regulators in Horticultural crops	1	On	25	0	25	16	0	16
Horticulture	PF	Doubling Fermares Income	1	On	16	9	25	8	7	15
Horticulture	PF	Cultivation fruit crops	1	On	27	4	31	11	2	13
Horticulture	PF	Packaging of fruits and vegetables	1	OFF	0	28	28	0	1	1
Horticulture	RY	Production technology of strawberry	1	OFF	10	2	12	3	1	4
Horticulture	PF	Prospects, problems and way out strategies of flower cultivation	1	OFF	31	0	31	2	0	2
Horticulture	PF	Profitable vegetable cultivation during Kharif season	1	ONLINE	38	6	44	26	4	30
Horticulture	PF	Nutrient management of Kharif vegetable crops	1	ONLINE	44	2	46	30	2	32
Horticulture	PF	Improved production technology of Banana	1	ONLINE	22	8	30	14	6	20
Horticulture	PF	Mushroom Cultivation	1	OFF	0	25	25	0	18	18
Horticulture	PF	Cultivation of Nutritious Fruit crops	1	ONLINE	23	4	27	16	3	19
Horticulture	PF	Organic vegetable cultivation	1	OFF	22	14	36	9	7	16
Horticulture	PF	Nutrional garden with school children	1	OFF	5	7	12	3	4	7
Horticulture	PF	Improved production technology of strawberry	1	OFF	9	2	11	1	1	2
Horticulture	PF	Improved production technology of summer vegetables	1	ONLINE	24	7	31	14	3	17

H) Vocational training programmes for Rural Youth

a) Details of training programmes for Rural Youth

Crop / Enterprise	Identified Thrust Area	Training title*	Duration (days)	No. of Participants			Self employed after training			Number of persons employed else where
				M	F	Total	Type of units	Number of units	Number of persons employed	
Mushroom Cultivation	Increased economic main streaming of rural youth through capacity building	Mushroomproduction technology	5 days	38	14	52		19	27	

b) Details of participation

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Crop production and management													
Commercial floriculture													
Commercial fruit production													
Commercial vegetable production													
Integrated crop management													
Organic farming													
Other													
Total													
Post harvest technology and value addition													
Value addition													
Other													
Total													
Livestock and fisheries													
Dairy farming													
Composite fish culture													
Sheep and goat rearing													
Piggery													
Poultry farming													

Other													
Total													
Income generation activities													
Vermicomposting													
Production of bioagents, biopesticides,													
biofertilizers etc.													
Repair and maintenance of farm machinery &imlements													
Rural Crafts													
Seed production													
Sericulture													
Mushroom cultivation	2	21	13	34	8	4	12	4	2	6	38	14	52
Nursery, grafting etc.													
Tailoring, stitching, embroidery, dying etc.													
Agril. Para-workers, para0vet training													
Other													
Total	**2**	**21**	**13**	**34**	**8**	**4**	**12**	**4**	**2**	**6**	**38**	**14**	**52**
Agricultural Extension													
Capacity building and group dynamics													
Other													
Total													
Grand Total	**2**	**21**	**13**	**34**	**8**	**4**	**12**	**4**	**2**	**6**	**38**	**14**	**52**

I) Sponsored Training Programmes

a) Details of Sponsored Training Programme

Sl. No	Title	Thematic area	Month	Duration (days)	Client	No. of courses	No. of Participants									Sponsoring Agency
					PF/RY/EF		Male			Female			Total			
							Others	SC	ST	Others	SC	ST	Others	SC	ST	Total	
1	Diploma in Agriculture Extension Services for Input Dealers (DAESI)	Agricultural Extension	January-December	52	EF	2	38	36	0	4	2	0	42	38	0	80	MANAGE
2	Profitable vegetable cultivation during Kharif season	Horticulture	June	1	PF	1	12	24	2	2	4	0	14	28	2	44	Reliance Foundation
3	Nutrient management of Kharif vegetable crops	Horticulture	July	1	PF	1	14	27	3	0	2	0	14	29	3	46	Reliance Foundation
4	Improved production technology of Banana	Horticulture	August	1	PF	1	8	12	2	2	6	0	10	18	2	30	Reliance Foundation
5	Cultivation of nutritious fruit crops	Horticulture	November	1	PF	1	7	14	2	1	2	1	8	16	3	27	Reliance Foundation
6	Pest and disease management of jute	IPM	May	1	PF	1	11	12	0	0	0	0	11	12	0	23	Relience Foundation

7	Pest and disease management of paddy	IPM	June	1	PF	1	17	15	0	0	0	0	17	15	0	32	Relience Foundation
8	Pest and disease management of kharif vegetables	IPM	July	1	PF	2	21	23	0	1	1	0	22	24	0	46	Relience Foundation
9	Scientist farmer interaction on IPM of kharif vegetables	IPM	August	1	PF	1	14	13	3	0	0	0	14	13	3	30	Relience Foundation
10	Pest and disease management of banana	IPM	August	1	PF	1	14	16	2	3	1	0	17	17	2	36	Relience Foundation
11	Scientist farmer interaction on IPM of kharif vegetables	IPM	september	1	PF	1	17	12	1	1	0	0	18	12	1	31	Relience Foundation
12	Pest and disease management of nursery bed of rabi vegetables	IPM	September	1	PF	1	13	13	2	1	0	0	14	13	2	29	Relience Foundation
13	Pest and disease management of early winter vegetables	IPM	October	1	PF	1	12	13	0	2	1	0	14	14	0	28	Relience Foundation

14	pest and disease management in winter vegetables	IPM	November	1	PF	1	10	7	2	3	4	0	13	11	2	26	Relience Foundation
15	IPM in vegetables for production of clean food	IPM	November	1	PF	1	18	14	3	0	0	0	18	14	3	35	INNAHA
16	scientist farmer interaction on IPM of winter vegetables	IPM	December	1	PF	1	7	8	2	3	1	0	10	9	2	21	Relience Foundation
17	scientist farmer interaction on IPM of winter vegetables	IPM	December	1	PF	1	12	9	3	3	2	1	15	11	4	30	Relience Foundation

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

Nature of Extension Activity	No. of activities	Farmers				Extension Officials			Total		
		M	F	T	SC/ ST (% of total)	Male	Female	Total	Male	Female	Total
Field Day	5	106	46	152	36	1	1	2	107	47	154
KisanMela	3	448	176	624	34	45	3	48	493	179	672
KisanGhosthi											
Exhibition	4	288	128	416	35	6	2	8	294	130	424
Film Show	4	80	35	115	33	10	1	11	90	36	126
Method Demonstrations											
Farmers Seminar	12	112	41	153	35	13	2	15	125	43	168
Workshop											
Group meetings	20	186	52	238	37	24	6	30	210	58	268
Lectures delivered as resource persons	18	334	87	421	32	15	3	18	349	90	439
Advisory Services	750	680	70	750	32	7	1	8	687	71	758
Scientific visit to farmers field	60	290	91	381	36	50	10	60	340	101	441
Farmers visit to KVK	36	484	152	636	33	8	2	10	492	154	644
Diagnostic visits	23	50	19	69	34	20	3	23	70	22	92
Exposure visits	36	484	152	636	33	8	2	10	492	154	644
Ex-trainees Sammelan											
Soil health Camp	2	190	21	211	32	4	1	5	194	22	216
Animal Health Camp											
Agri mobile clinic											
Soil test campaigns	2	190	21	211	32	4	1	5	194	22	216
Farm Science Club Conveners meet											
Self Help Group Conveners meetings											
MahilaMandals Conveners meetings											

Nature of Extension Activity	No. of activities	Farmers				Extension Officials			Total		
		M	F	T	SC/ ST (% of total)	Male	Female	Total	Male	Female	Total
Celebration of important days (specify)	5	150	28	178	31	8	2	10	158	30	188
Sankalp Se Siddhi											
Swatchta Hi Sewa	2	41	23	64	35	6	1	7	47	24	71
MahilaKisan Divas	1	40	5	45	33	9	2	11	49	7	56
Any Other (Specify)											
Total	**983**	**4153**	**1147**	**5300**	**573**	**238**	**43**	**281**	**4391**	**1190**	**5577**

B. Other Extension activities

Nature of Extension Activity	No. of activities
Newspaper coverage	1
Radio talks	1
TV talks	1
Popular articles	-
Extension Literature	4
Other, if any	1
Development of film on KVK activities	

3.5 a. Production and supply of Technological products

Village seed

Crop	Variety	Quantity of seed (q)	Value (Rs)	No. of farmers involved in village seed production	Number of farmers to whom seed provided			
					SC	ST	Other	Total
Blackgram	IPU-02-43	62.5	3,12,500.00	40	-	-	-	-
Lentil	Moitree	55.3	2,76,500.00	40	-	-	-	-
Sesame	Savitri	60.0	3,00,000.00	45	-	-	-	-
Groundnut	TG-51	125.0	8,75,000.00	42	-	-	-	-
Total	**-**	**302.8**	**17,63,000.00**	**167**	**-**	**-**	**-**	**-**

KVK farm

Crop	Variety	Quantity of seed (q)	Value (Rs)	Number of farmers to whom seed provided							
				SC		ST		Other		Total	
				M	F	M	F	M	F	M	F
Crop	Variety	Quantity of seed (q)	Value (Rs)	Number of farmers to whom seed provided	Crop	Variety	Quantity of seed (q)	Value (Rs)	Number of farmers to whom seed provided	Crop	Variety
				SC					SC		
Lentil	*Moitree*	1.5	9000.00	3	Lentil	*Moitree*	1.5	9000.00	3	Lentil	*Moitree*
Elephant Foot Yam	*Bidhan Kusum*	60	1,80,000.00	4	Elephant Foot Yam	*Bidhan Kusum*	60	1,80,000.00	4	Elephant Foot Yam	*Bidhan Kusum*
Black gram	*IPU-02-43*	1.0	5,000.00	1	Black	*IPU-02-*	1.0	5,000.00	1	Black	*IPU-02-*

					gram	*43*				gram	*43*
Aman Paddy	*MTU 7029, MTU 1153, Ajit, CR Dhan 800*	10	20,000.00	-	Aman Paddy	*MTU 7029, MTU 1153, Ajit, CR Dhan 800*	10	20,000.00	-	Aman Paddy	*MTU 7029, MTU 1153, Ajit, CR Dhan 800*
Lentil	*Moitree*	-	-	-	Lentil	*Moitree*	-	-	-	Lentil	*Moitree*
Winter vegetables	Different crop varieties	Fresh vegetables	7,000.00	5	Winter vegetables	Different crop varieties	Fresh vegetables	7,000.00	5	Winter vegetables	Different crop varieties
Green gram	*Virat*	-	-	-	Green gram	*Virat*	-	-	-	Green gram	*Virat*
Sesame	*Sabitri*	-	-	-	Sesame	*Sabitri*	-	-	-	Sesame	*Sabitri*
Grand Total		**72.5**	**2,21,000.00**	**13**	**Grand Total**		**72.5**	**2,21,000.00**	**13**	**Grand Total**	

Production of planting materials by the KVKs

Crop	Variety	No. of planting materials	Value (Rs)	Number of farmers to whom planting material provided							
				SC		ST		Other		Total	
				M	F	M	F	M	F	M	F
Vegetable seedlings											
Cauliflower	*Mareet 010 F1*	5000	7,500.00	10		5		15			30
Cabbage	*NS-43*	5000	7,500.00	5		3		12			20
Tomato	*Arka Samrat, Heemraj*	7000	10,000.00	20		10		40			70
Brinjal	*Black Diamond, JK 8031*	7500	7500.00	15		10		25			50
Chilli	*Bullet, Daiya 619 F1*	9000	9,000.00	10		5		25			40
Onion	*Agrifound Dark Red*	48,000	4000.00	-		-		1			1

Broccoli	*Saki F1*	2500	5,000.00	6		6		18			20
Lettuce	*Grishma, Falbala*	5000	7,500.00	5		15		30			50
Colour cauliflower	*Valentina, Carotina*	500	1000.00	1		1		2			4
Capsicum	*Fiza, Delisha*	5000	15,000.00	3		1		4			8
Others											
Fruits											
Mango	*Himsagar, Amrapalli*	500	20,000.00	-		-		2			2
Guava											
Lime											
Papaya	*Ranchi*	500	5,000.00	1		1		3			5
Banana											
Others											
Ornamental plants											
Orchid	*Dendrobium, Mokara*	200	1000.00	4		2		6			12
Flowering plants	Different crops	10,000	20,000.00	25		15		80			120
Medicinal and Aromatic											
Plantation											
Spices											
Black Pepper	*Panniyur -5*	1000	20,000.00	1		1		2			4
Turmeric											
Tuber											
Elephant yams	*Bidhan Kusum*	60	1,80,000.00	1		1		10			12
Fodder crop saplings											
Forest Species											
Others, pl.specify											
Total		**1,06,700**	**3,21,000.00**	**107**		**76**		**275**			**448**

Production of Bio- product by KVKs

Bio - product	Name of the Bio - product	Quantity (no.)	Quantity (Kg.)	Value (Rs.)	Number of farmers	Quantity (no.)	Quantity (Kg.)	Value (Rs.)	Number of farmers	Quantity (no.)	Quantity (Kg.)	Value (Rs.)	Number of farmers	Quantity (no.)	Quantity (Kg.)	Value (Rs.)	Number of farmers
Bio-fertilisers		**A&N Islands**				**Odisha**				**West bengal**				**Total**			
Non Symbiotic Azotobacter																	
Vermi compost											600.0	3600.00	60				
Azolla																	
Earth worms																	
Compost											5500.0	16,500.00	-				
Worms																	
Blue green algae																	
NADEP																	
Azatobactor																	
Azospirillum																	
PSB																	
Rhizobium																	
Azolla culture																	
Total																	
Bio-pestisides																	
Neem extract																	
Tobacco extract																	
Trichoder-maviride																	
Panchagavya																	
Trichoderma																	
Total																	

Bio - product	Name of the Bio - product	Quantity (no.)	Quantity (Kg.)	Value (Rs.)	Number of farmers	Quantity (no.)	Quantity (Kg.)	Value (Rs.)	Number of farmers	Quantity (no.)	Quantity (Kg.)	Value (Rs.)	Number of farmers	Quantity (no.)	Quantity (Kg.)	Value (Rs.)	Number of farmers
Bio-fertilisers		**A&N Islands**				**Odisha**				**West bengal**				**Total**			
Worms																	
Eudriluseuniae																	
Total																	
Earth worm																	
Eiseniafoetida																	
Earth worm																	
Total																	
Bio-fungicides																	
Trichodermaviridae											90.0	13,500.00	50				
Total																	
others																	
Vermicultur e																	
Mushroom-spawn																	
Cuelure																	
Mineral mixture																	
Cow dung(dry)											6000.0	3000.00	-				
Cow dung(wet)																	
Total																	
Grand Total											12,190.0	36,600.00	110				

Production of livestock materials

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	No. of Farmers benefitted			
				SC	ST	Other	Total
Dairy animals							
Cows	Desi	3	1,25,000.00				
Buffaloes							
Calves							
Others (Pl. specify)							
Small ruminants							
Sheep							
Goat	Black Bengal	20	50,000.00				
Other, please specify							
Poultry							
Broilers							
Layers							
Duals (broiler and layer)							
Japanese Quail							
Turkey							
Emu							
Ducks							
Others (Pl. specify)							
Piggery							
Piglet							
Hog							
Others (Pl. specify)							
Fisheries							
Indian carp							
Exotic carp							

Mixed carp				
Fish fingerlings				
Spawn				
Others (Pl. specify)				
Grand Total		23	1,75,000.00	

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 :	
Address :	
e-mail :	
Phone No. : Mobile :	

ii) Quality Seed Production Reports

Season	Crop	Variety	Production (q)			
			Target	Area sown (ha)	Production	Category of Seed (F/S, C/S)
Kharif 2017						
Rabi 2017-18						
Summer/Spring 2018						

iii) Financial Progress

Fund received (2016-17 and 2017-18)	Expenditure (Rs. in lakhs)		Unspent balance (Rs. in lakhs)	Remarks
	Infrastructure	Revolving fund		
2016-17				
2017-18				

iv) Infrastructure Development

Item	Progress
Seed processing unit	
Seed storage structure	

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

Item	Title	Author's name	Number	Circulation
Research paper	Effect of different organic manure and concentration of Gibberalic acid on growth and yield of straberry	S.H. Ansary*et al.*	1	-
	Integrated nutrient management of potato with compost made through different bio-degradation processes- a case study from Nadia district	K.Mukhopadhyay*et al.*	1	-
Seminar/conference/ symposia papers	Comparative studies of late planted capsicum (Capsicum annum) for growth and yield under polyhouse and open field condition as influenced by different growth regulators	S.H. Ansary*et al.*	1	-
Books	Zero Budget on Natural farming	All Scientists	1	
Bulletins				
News letter				
Popular Articles	Sharing Cultural Opulence of Nadia District: A Time-Honoured Heritage in West Bengal	S.H. Ansary Saikat Saha K.Mukhopadhyay, S. J. Pramanik, M.K. Kundu, M. Debnath, S.C. Dhang Saidul Islam	1	-
Book Chapter				
Extension Pamphlets/ literature	Production technology of Strawberry Production technology of Capsicum	S.H. Ansary S.H. Ansary	400 400	- -
Technical reports	ATMA Compendium	All Scientists	1	
Electronic Publication (CD/DVD etc)	Technology on ATMA Projects	All Scientists	1	-
TOTAL				

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

Sl. No.	Name of programme	Name of course	Name of KVK personnel and designation	Date and Duration	Organized by
1.	HRD programme	DFI- A way out with respect to contribution of Various agricultural disciplines	Dr. S.H. Ansary, Sr. Scientist & Head Dr. S.J. Pramanick, SMS (Seed Science) Dr. M. Debnath, SMS, (Plant Protection) Dr. K. Mukhopadhaya, SMS (Soil Science) Mr. M.K. Kundu, SMS (Agronomy) Mr. S. Saha, SMS (Agril. Extension) Dr. S.C. Dhang, Farm Manager Mr. S. Islam, Programme Assistant (Lab. Tech.)	11-13 Feb., 2020	DEE, BCKV
2.	Workshop cum training	Technology Inovations under consortia research platform on natural fibres	Shri Milan Kanti Kundu, SMS (Agronomy)	21.02.2020	ICAR-NINFET

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

Success story -1: Development of Livelihood Status of Small and Marginal Farmers through 'Clean Food Production'

Food is more basic of human than shelter and clothing. It provides adequate nutrients for the body's growth, repair, maintenance and reproduction. India is the second most populous country in the world and its economic scenario predominated by agriculture. Recent statistics indicated that nearly 64% of its population directly or indirectly depends on agriculture. Food security is one of the major concerns for the country. But modern agriculture practices reveal an increase in use of agrochemicals to meet the food demand of increasing population which results in contamination of the environment. In India, crop production increased to 100%, but the cropping area has increased marginally by 20%. Agrochemicals have played a major role in achieving the maximum crop production. These chemicals have become an inevitable input and constitute an integral part of modern crop-management practices. Agrochemicals may have helped in enhancing agricultural production, but at the same time these chemicals

have caused significant adverse effects not only on environment. The indiscriminate, unscientific and non-judicious application of Agrochemicals mainly has affected the soil, air and water adversely and brought down significant environmental impact and moreover health hazards for the farming community. Besides, haphazard use of these chemical inputs increases the cost of cultivation many fold and after engaging an extra cost for production, due to lack of proper marketing channels the farmers are forced to distress sale of their produces. All these phenomena also dramatically hamper the socio-economic well-being of the farmers. Keeping all these things under consideration, Nadia KrishiVigyan Kendra in conjunction with Inhana Organic Research Foundation (IORF), a Kolkata based not for profit (a Section 8 Company) research organization- portrayed the idea of clean food production in reality with active participation of the local farming community members of Haringhata Block, Nadia District, West Bengal.

Objective of the programme:

The basic aim of the programme is to establish an efficient and well-functioning safe food production system along with creation of an assured marketing linkage emphasizing on value addition of the farm produces. This in turn, leads to enhance the economic stability of the farmer, encourage sustainable agricultural practices and the product will also ensure public health safety of the consumer.

Good Agricultural Practices assure sustenance of agricultural system and chemical free produces

Activity:

Food production by using of obnoxious chemicals, especially the harmful one is the biggest threat for developing nations like India. The health safety index of common people has drastically decreased after the green revolution era due to intensification of agricultural production by using chemical inputs non-judiciously. Therefore, offering Clean Food to the society is the fundamental duty of the agriculturists in today's world. Besides, price assurance to the farming community of their produces is also the basic responsibility. Towards achieving the goal, Nadia Krishi Vigyan Kendra in collaboration with Inhana Organic Research Foundation has been successfully producing clean food from Haringhata Block and ensures the marketing channel through 'Sufal Bangla'.

The programme was initiated just before the COVID 19 pandemic situation enters. The experts from both the institution visit the place many a times. Baseline survey and Participatory Rural Appraisal were done to identify the thrust areas before scheduling the training programmes for the farmers. Some awareness meetings were also arranged to raise consciousness among the farmers and their family members about the relevance, importance of safe food production. The scope of better economic returns under safe and sustainable food production is also discussed in several sessions in front of the farmers. The ground level work was started with the testing of soil samples, where the samples were collected in a grid pattern and tested for physicochemical, fertility and most importantly, the soil biological properties. Later on, several training programmes were organized in the area to uplift the skill of the farmers towards clean food production.

In order to assist the farmers in marketing their - Clean Food; two innovative steps were taken. The first is Standardization of the Colorometric Assay testing protocol for screening the Clean Food in respect of the 5 most important pesticide groups (Organo chlorine, organo phosphate, carbamate, synthetic pyrethroidand Nicotinoid) which comprise about 95 % of the total pesticide used in agriculture. A standard certification system module is under the process of development to authenticate the clean food producers and to attract a better consumer appeal of the products. The Scientists of KVK guided the farmers in respect of sustainable farm management while IORF supported the farmers by providing organic solutions for healthy plant development encompassing all the phases of crop production starting from seed treatment up until the harvest period. In this respect, demonstrations were also given for on- field production of organic soil and plant energizing concoctions and Novcom compost development.

Nadia KVK in association with IORF has played a significant role in group formation and group dynamics among the performing farmers in that area. A Farmers Producer Company (FPC) named “MANOBJOMIN” has been initiated to create awareness among the farmers regarding the importance of reducing the dependency on chemical inputs and need for adopting Good Agricultural Practices for food safety. The FPC is also helping the clean food producers to earn a remunerative price from their produces by placing the farm produces in an efficient marketing channel through “SUFAL BANGLA”. The “MANOBJOMIN” FPC has already started their work in installation of stalls at various places in Kolkata to sell the chemical free products in a remunerative price to the consumers. The FPC also creates awareness on clean food consumption and health safety among the metropolitan citizens.

Thus Clean Food Movement is not only a program for socio-economically empowering the small and marginal farmers but also an initiative to enable Safe food for the consumers, which is affordable to all and a sustainable agricultural production system for the farmers also.

Resource Persons are creating awareness of clean food production among the farmers

Case Study-1

i) **Title:** Understanding Livelihood Diversification through Mushroom Farming: A Case Study of Nadia District of West Bengal

ii) **Summary:** Mushroom cultivation has been identified as an important livelihood strategy that fits in very well with sustainable farming. This farming effectively utilizes agricultural waste products and it works like a quick cash crop with no use of land. A case study was conducted in a mushroom enterprise of Nadia district of West Bengal by Nadia Krishi Vigyan Kendra to identify the determinants and constraints to livelihood diversification. The study comprises of flow chart (production process) along with impact evaluation of mushroom cultivation among the small and marginal farmers. The successful farming is earning an annual net return of Rs. 2,72,000.00 from a small unit with engagement of 12 workers regularly.

iii) **Introduction:** The global mushroom industry has expanded very rapidly in the last two decades by the addition of newer types of mushrooms for commercial cultivation. However, mushroom as a vegetable is yet to find regular place among the Indian consumers (Sharma *et al.*, 2017). Despite of favourable agro-climate, abundance of agro wastes, relatively low-cost labour and a rich fungal biodiversity, India has witnessed a lukewarm response in its growth. At present, the total mushroom production in India is approximately 0.13 million tons. From 2010-2017, the mushroom industry in India has registered an average growth rate of 4.3% per annum. Out of the total mushroom produced, white button mushroom share is 73% followed by oyster mushroom (16%), paddy straw mushroom (7%) and milky mushroom (3%). Compared to other states across the country West Bengal shares a small quantity of production (Bose, 2016). Therefore, there is a huge scope to amplify the mushroom production across the state especially in Nadia district to cope up with the increasing demand of mushroom as well as provide livelihood security to a widest part of destitute population lives in rural areas of the district.

Many farmers are not getting sufficient returns from agriculture in Nadia district and want to adopt other agriculture related activities to maintain their livelihood status. Maximum farmers of the district belong to the category of small and marginal farmers and landless labourers. Their income level is quite low for a sustained livelihood. So, mushroom cultivation is one of the best options to make a good return in a short duration. Keeping this background under consideration Nadia Krishi Vigyan Kendra during 2016-17 onwards got engaged in developing mushroom entrepreneurs through providing updated training methods and technical backstopping to the needed ones. Mr. Ramesh Biswas, address: Village-Raghabpur, Ranaghat-I block, Nadia District budding mushroom unit and became a successful grower after getting expert knowledge of mushroom production and technical assistance along with time to time proper market information from Nadia KVK.

iv) **Proposed Solution/ Changes Needed:** Mushroom production is a lucrative and profitable cottage industry for low income rural households (Lelley, 1988) and this industry is providing full or part time employment to rural and urban poor and marginal people in many developing countries like India (Ferchak and Croucher, 2001). Therefore, market linkage is the key factor in the context of the farmer's involvement and the market to supply goods to consumers (KIT et al., 2006 & Shepherd, 2006). Usually, marketing channel links the producers and consumers,

and there by supplying goods from producers to consumers. A large number of intermediaries are involved in the marketing channels and they earn their daily livelihoods. Mr. Biswas also pointed out the traditional food habit of local people. Besides, mushroom is neglected due to its unfamiliarity's in Bengali dishes across the state and especially in Nadia district also. Consequently, the major challenge is now to transfer farm fresh produces to multi cuisines, simply in one word 'Farm to Fork' and making habit of consuming mushrooms in regular dishes (yourstory.com, retrieved on: 12.04.2020). The study was done on methodology and economic analysis of the farmer.

v) **Work done:** Mushroom cultivation has been identified as one of the easiest technology in farming and a grower must follow the steps to make a profitable harvest from mushroom. The KVK provided hands on training and practical demonstration to the farmers for successful development of the entrepreneur.

Details of the technology:

Raw material requirement: (i) Paddy straw (ii) Polythene bags (iii) Spawn

Process:

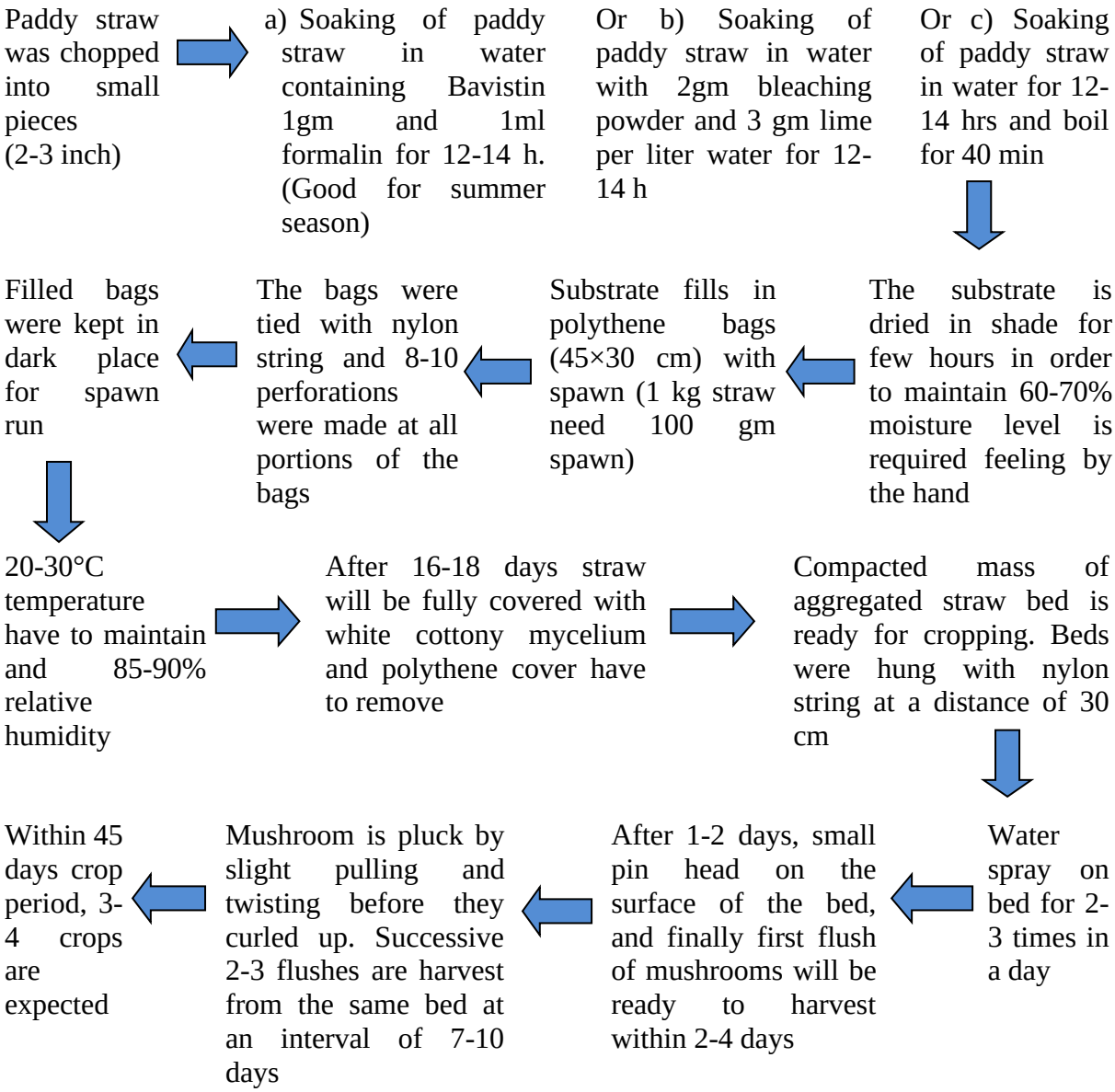


Fig 1: Flow chart of mushroom cultivation process

vi) Impact/ Evaluation of the Case: Mr. Ramesh Biswas was formerly practicing agriculture and suddenly felt that his income is not sufficient to maintain the livelihood standard of his family. At the time he came to Nadia KVK and got trained on mushroom production technology. He gained proper knowledge, understanding on technical knowhow and acquired practical skills on mushroom production after the training and set the goal of starting the mushroom farming venture. An economics of mushroom production in 900 square feet area is portrayed in Table 1.

Salient features of Mushroom unit of Ramesh Biswas:

Unit size	: 900 square feet
Monthly production	: Avg. 417 kg
Cost of production (Including labour and marketing cost)	: Rs. 40,000.00/ month
Gross income per month	: Rs. 62,500.00
Net profit per month	: Rs. 22,500.00
Number of labours engaged in his farm	: Male- 4, Female- 8

Table 1: Economics of mushroom production

Cost of Production per year (in 900 sq.ft. Unit)	**Profit in 1st Year**	**Profit in 2nd Year (Excluding the unit cost)**
Cost of Low cost unit : Rs. 1,10,000.00 Cost of materials : Rs. 60,000.00 Cost of Labour : Rs. 3,70,000.00 Marketing cost : Rs. 48,000.00 **Total cost : Rs. 5,88,000.00**	Total annual production : 5000 Kg Avg. selling price: Rs. 150/Kg Gross return : Rs. 7,50,000.00 Net annual return: Rs. (7,50,000.00 - 5,88,000.00) **= Rs. 1,62,000.00**	Total annual production : 5000 Kg Avg. selling price: Rs. 150/Kg Gross return : Rs. 7,50,000.00 Net annual return: Rs. (7,50,000.00 - 4,78,000.00) **= Rs. 2,72,000.00**

Production economics showed that mushroom cultivation is a profitable venture among different farming activities. Mushroom cultivation is also a labour intensive practice and creates an immense sum of man days in rural areas. This opportunity helps in promoting livelihood dimensions of rural dwellers. Apart from that, Mr. Biswas also working as a master trainer of mushroom cultivation in his local area and trained a number of 80-90 persons. Therefore, mushroom production in his local area created a mass awareness along with provides an alternative way of income generation for small and marginal famers. Seeing the success of Mr. Biswas, people of neighbouring areas are now enthusiastic in producing mushroom in large scale. KVK is instrumental in imparting technical support in this regard.

vii) Conclusion: Mushroom cultivation has helped in reducing vulnerability to poverty and strengthens livelihoods through the generation of a fast yielding and nutritious source of food and a reliable source of income. Since it does not require access to land, mushroom cultivation is a viable and attractive activity for both rural farmers and peri-urban dwellers. Small-scale growing does not include significant capital investment also. Apart from, mushroom substrate can be prepared from any clean agricultural waste material and mushrooms can be produced in temporary clean shelters. They can be cultivated on a part-time basis and require little maintenance. Indirectly, mushroom cultivation also provides opportunities for improving the sustainability of small farming systems through the recycling of organic matter, which can be used as a growing substrate, and then returned to the land as fertilizer. On the other hand, mushroom industry can provide a huge amount of mandays for rural people and can promote small to large entrepreneurs across the state. Therefore, interventions in up scaling viable technologies for mushroom production coupled with proper government policies will encourage the farmers/ agri-preneurs in becoming a successful mushroom grower.

viii) Recommendations: Marketing agricultural products is considered to be very challenging and complex effort. It involves moving of products from farm gate to retail consumers. It is a dynamic process and involves a number of ownership activities such as harvesting, processing, storage, transporting and retailing. Furthermore, the marketing of agriculture food products require some public rules such as grading and standards, food-safety policies, market information and future markets. The marketing of agriculture food products is very different from marketing of agriculture commodities in general. So, proper marketing of mushroom can make the enterprise as profitable one. The following salient recommendations can be made for widening its opportunity-

- The small and marginal farmers can take up mushroom cultivation as a major income generating activity throughout the year due to its increasing demand among the people
- There is a need to develop organized markets in the locality for efficient and rapid disposal
- There is a vast scope to involve women workers for mushroom growing, harvesting and packaging
- Local level spawn production should be encouraged with proper training
- Credit facilities should be ascertained
- More emphasis is to be given for value added products to reduce post harvest loss

ix) Photos of the farmer and farming

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

Sl. No.	Name/ Title of the technology	Name/ Details of the Innovator(s)	Brief details of the Innovative Technology
1.	Production of High value crops under protected cultivation through pressurized micro-irrigation system	Mr. Tapan Kumar Bain Vill + P.O.- Bhayna, Bagula 1 no. Gram Panchayet, P.S.- Hanskhali, Dist.- Nadia, Pin- 741502, West Bengal, India. Contact: 9749245465	Mr. Tapan Kumar Bain practiced pressurized micro irrigation system especially sprinkler and fog irrigation system. He gained the knowledge of normal traditional use of these types of micro-irrigation systems for open as well as in protected condition from Nadia Krishi Vigyan Kendra during a training programme. But, he modified the system according to his need and locally available resources in a low cost manner. He used the system even in small poly-tunnels for raising different vegetable seedlings and leafy vegetables particularly during off-season. Water with pressurized pumps go through the channels and easily sprinkle over the crops. The technology increased water productivity by increasing yield. The technology has been proved as labour and time saving technique.

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)

Sl. No.	Crop / Enterprise	ITK Practiced	Purpose of ITK
1	Seed production	Use of cotton net for seed drying	Seed drying is a very important aspect of seed production. Small farmers cultivate with their own seeds for some crops like paddy, mustard, sesame, pulses etc. most of them do not have a clean cemented floor for drying of seeds, apart from that collection of seeds from the floor also takes huge time. Some seeds also get wested everytime it exposed for drying, because some seeeds mix with dust, some enters the cracks etc. To overcome this problem farmers use cotton net for seed drying. The net is very light in weight, easy to fold, and chief also. Farmers can dry seeds in any clean dry place, even in the grass land. There is no chance of westage of seeds. And collection of seeds after drying is also very easy.

Seed drying in cotton net

b. Give details of organic farming practiced by the farmer

Sl. 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

Sl. No.	Brief details of the tool/ methodology followed	Purpose for which the tool was followed
1.	Participatory Rural Apprisal	This tool aims to incorporate the knowledge and opinions of rural people for the proper planning and management of development programmes
2.	Rapid Rural Apprisal	This tool aims at maximum participation of local people which positively affects the planning, documentation and implementation of a programme
3.	Baseline Survey	Baseline survey provides an information base against which to monitor and assess the training need of the locality
4.	Training Needs Assessment	Training Needs Assessment is the method of determining if a training need among the farmers exist or not and, if it does, what training is required to fill the gap. In this method, there is a provision for demand based knowledge dissemination.

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

Sl. No	Name of the Equipment	Qty.
1	Thermometer (Min & Max)	1
2	Hair Hygrometer	1
3	Spectrophotometer	1
4	pH meter	2
5	Digital balance	2
6	Hot air oven	1
7	Dryer	1
8	Desiccators	2
9	Autoclave	1
10	Mechanical shaker	2
11	Water distillation unit	2
12	Soil moisture meter	1
13	Microwave	1
14	Fume hood	1
15	Pusa STFR mini soil testing lab	1

3.11.b.Details of 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			
48	17	82	211	9	-

3.11.c. Details on World Soil Day

Sl. No.	Activity	No. of Participants	No. of VIPs	Name (s) of VIP(s)	Number of Soil Health Cards distributed	No. of farmers benefitted
1	Training Awareness generation Soil health card distribution	65	01	Mr. Arindam Sarkar Asst. Professor Deptt. of Ag Chem and Soil Sc., BCKV	-	352

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
01	01	NA	40	05

3.13. Technology week celebration

Type of activities	No. of activities	Number of participants	Related crop/livestock technology
farmer's training, farmers-scientists interface, exposure visit, crop exhibition cum competition, farmer's quiz, video show on different agricultural activities, media reporting, cultural programme	8	570	AICRPs on Potato, Tuber crops, Floriculture, Tropical and sub tropical fruits, IFS, Vegetables, Medicinal plants, Nematode, Water management and different wings of the University displayed their technologies.

3.14. RAWE/ FETprogramme– is KVK involved? (Y)

No of student trained	No of days stayed
10	120
1	90
ARS trainees trained	**No of days stayed**
-	-

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

Date	Name of the person	Purpose of visit
19.02.2020	Dr. D. D. Patra, Hon'ble Vice-Chancellor, BCKV Prof. M. Pramanick, DEE, BCKV Dr. S. Sarkar, Director of Research, BCKV	Krishi Parbon-2020 (Technology Week-2020)
24.07.2020	Prof. M. Pramanick, DEE, BCKV Dr. K. K. Goswami, Sr. Scientist & Head, PMKVK Dr. K. Barui, Sr. Scientist & Head, HKVK	PPV&FRA Certificate distribution
17.09.2020	Prof. Umesh Thapa, DEE, BCKV Dr. Subrata Acharya, Chief Manager, IFFCO	PoshanMaah (Poshan Abhijan-2020)
26.09.2020	Shri Sajal Ghose, Hon'ble Vice-Chancellor, BCKV	Nadia KVK farm visit
12.11.2020	Shri Snehasish Datta, IMC – Member, ATARI-Kolkata Zone-V	Visit of KVK and interactions with staffs

4. IMPACT

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

Name of specific technology/skill transferred	No. of participants	% of adoption	Change in income (Rs.)	
			Before (Rs./Unit)	After (Rs./Unit)
Protected cultivation technology	322	73%	40,000/- per 1000 sq.m.	2,40,000/- per 1000 sq. m.
Adoption of banana bunch cover in G- 9 variety	589	19%	4.7 lakh/ha	8.3 lakh/ha
Cultivation of nematode resistant variety of tuberose- prajjal	1,653	49%	3.27 lakh/ha	7.3 lakh/ha
Seed production of pulses	193	26%	31,500/- per ha	58,500/- per ha
Fruit fly management in fruit crops	650	70%	4.7 lakh/ha	5.2 lakh/ha
Orchard development	302	65%	1.3 lakh/ ha	2.8 lakh/ ha

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**
Protected cultivation technology	243 units of protected structures covering nearly 1,90,000 sq.m. area.
Adoption of banana bunch cover in G- 9 variety	More than 127 ha of land
Cultivation of nematode resistant variety of tuberose- prajjal	More than 1000 ha of land
Fruit fly management in fruit crops- like Mango, Guava and ber and vegetables like cucurbits.	More than 122 ha of land
Green gram variety samrat	More than 129 ha of land
Lentil variety moitree	More than 212 ha of land

Production of *Trichoderma spp.* at Nadia KVK for soil borne disease control at farmer's field.	More than 80 ha of land
Production of Mushroom as well as spawn production for sustainable mushroom cultivation in Nadia district	More than 65entreprenureships developed under the technical support of Nadia KVK

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

Under various mandates, training as well as conducting frontline demonstrations (FLDs) along with on farm trials (OFTs) is the major activities of a KVK system. The impact of these activities of Nadia KVK is categorically presented.

- **Capacity Building Programmes:**

Among the different mandated activities of Krishi Vigyan Kendras the major one is the capacity building programmes of different groups of stake holders viz. farmers and farm women, rural youth an extension functionaries. Training programmes are designed according to the needs of the specific area with respect to different seasons and conducted in both on and off campus mode.

Nadia KVK has conducted various types of training programmes including long term and short term courses during its journey for the last 10 years. A sum total of 1118 training programmes were conducted with an involvement of 28,018 participants from different sections of the farm society which includes the normal mandated training programmes along with vocational and sponsored courses. Training courses on number of areas including management of field crops, traditional horticultural crops, high value crops, seed production and storage, seed certification process, planting material production, disease-pest and weed management, animal husbandry, forage crop production, nutrition gardening, food preservation, vermin-composting, soil health management, protected cultivation, Integrated Nutrient Management, Integrated Pest Management etc. were conducted with an average of 112 number of trainings per year. Table 1 shows the distribution of training programmes for farmers and farm women, rural youth and extension functionaries over the last ten years from 2009-10 to 2019-20. Critically examining the nature of the training progrmmes it has been found that both number of total training progrmmes and participant number increased very sharply particularly over the last three years (Fig. 1).

Table 1: Distribution of training programmes over the last ten years

No. of capacity development programmes												Total number capacity development programmes			
Farmers/Farm women				Rural youth				Extension personnel							
TC	No. of Participants			TC	No. of Participants			TC	No. of Participants			TC	No. of Participants		
	M	F	Total		M	F	Total		M	F	Total		M	F	Total
846	20708	3851	24554	321	5932	2030	7962	126	3830	1083	4913	1293	30470	6964	37429

TC= Training Course, M=Male, F=Female

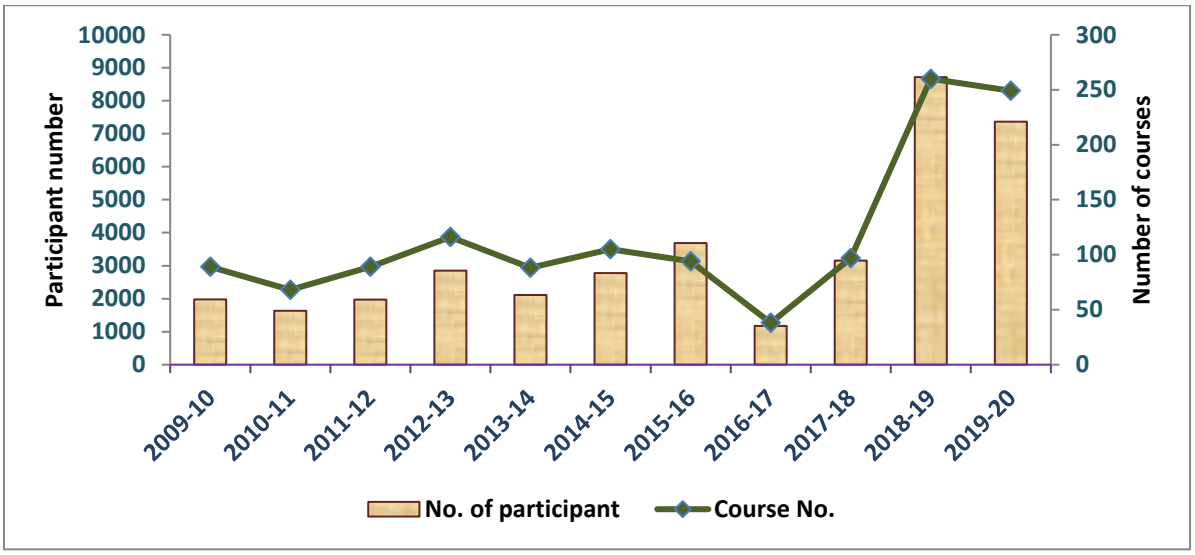
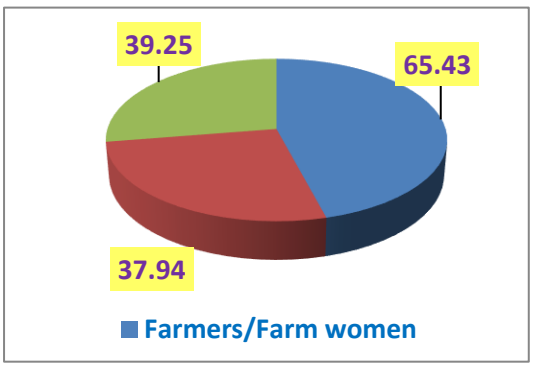


Fig. 1: Distribution of training programmes according to number of participant and course over the last ten years

Among different training programmes majority of the programmes were conducted for the farmers and farm women (65.43%) followed by extension personnel (39.25%) and rural youth (37.94%) [Fig. 2].



It has been found after data analysis that in case of rural youth the percentage of female trainees (25.50%) was comparatively higher than the other two categories (Fig. 3). Majority of male trainees were observed for farmers and farm women category.

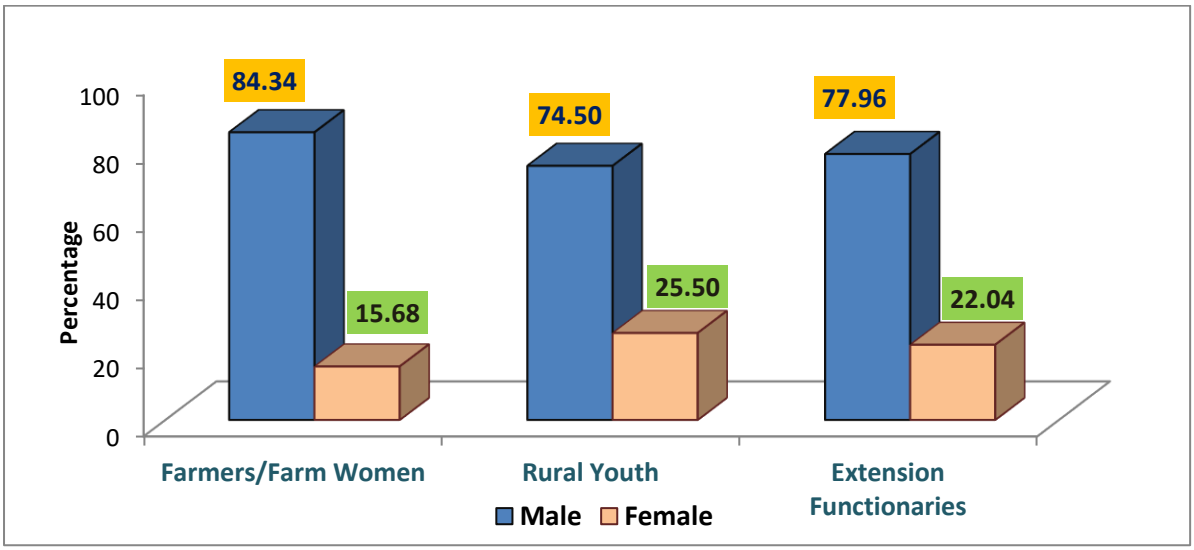


Fig. 3: Distribution of training programmes according to gender under different

- **Training programmes for farmers and farm women:**

It has been noticed that number of trainees under farmers and farm women category varied from as low as 1515 in 2010-11 to as high as 4343 in 2018-19. Overall there is steady growth in the number of courses for this category except a unusual decline in 2016-17 (Fig. 4).

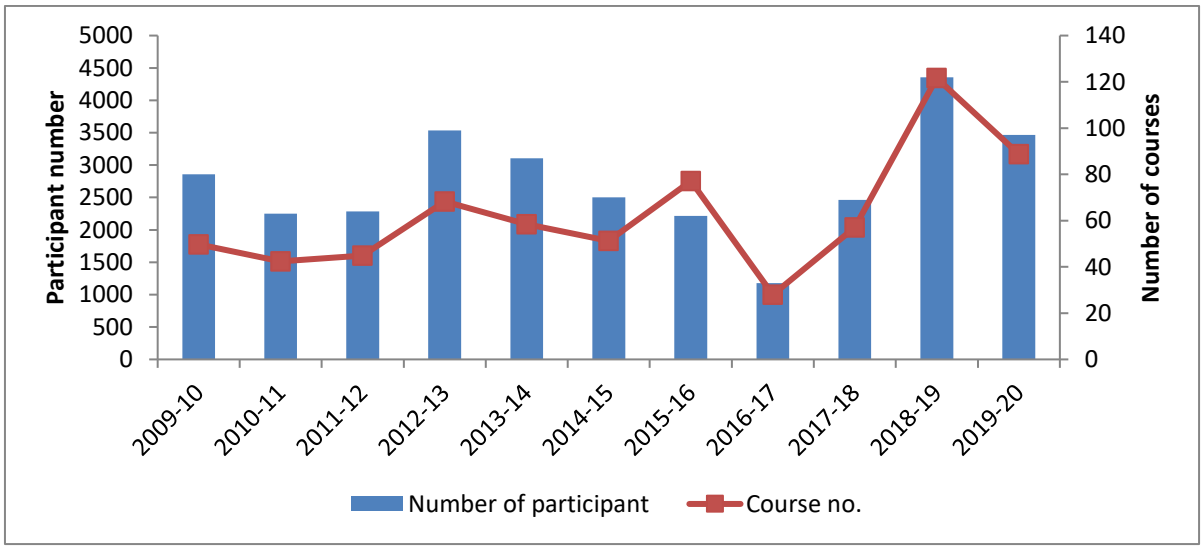


Fig. 4: Distribution of training programmes for farmers and farm women

Among the training programmes conducted during the last ten years for farmers and farm women, highest number of total participant was observed for the training programmes on

horticultural crops followed by seed technology, plant protection, live stock management and soil health management (Fig. 5).

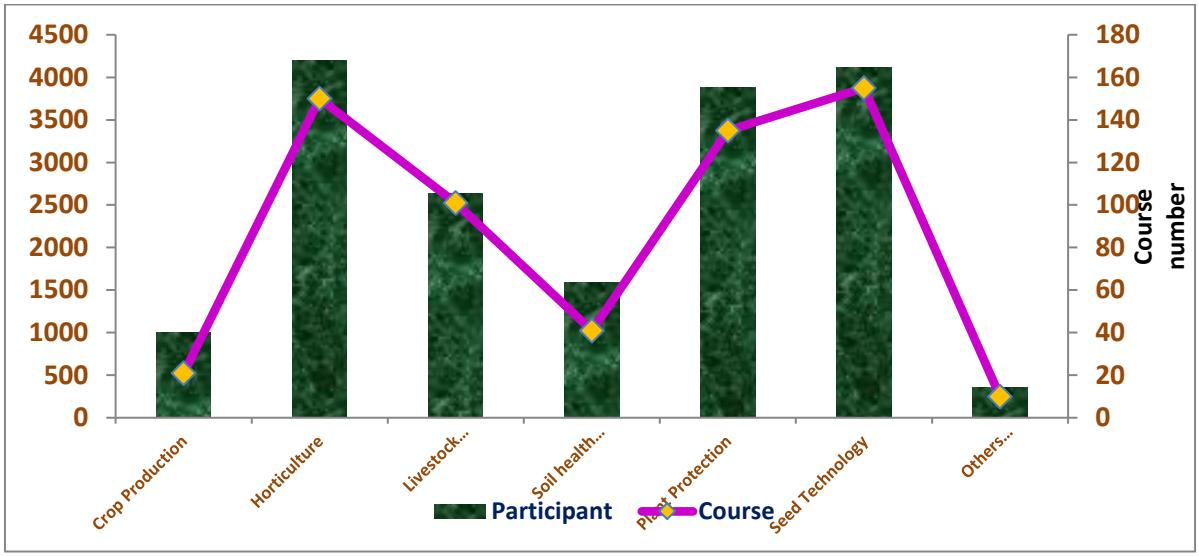


Fig. 5: Training programmes under different subjects for farmers/farm women

- **Training programmes for rural youths:**

Different training programmes for the rural youths of the district were conducted in order to develop small scale entrepreneurs from the farming community as well as to develop hand on skills. Number of training programmes for the rural youths increased particularly from 2014-15 and it increased more than ten times during the last couple of years compared to the initial years (Fig. 6).

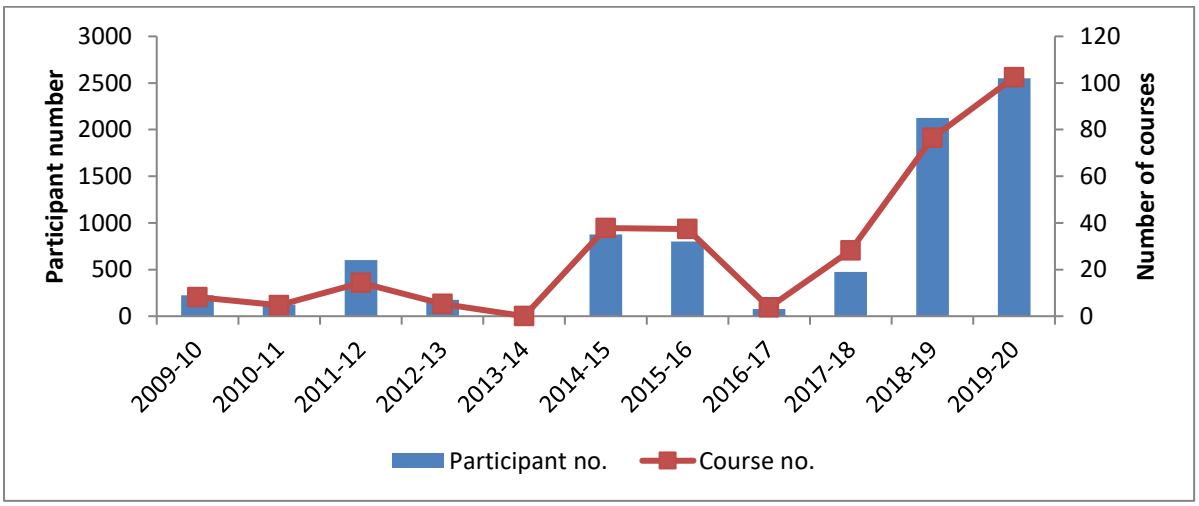


Fig. 6: Distribution of training programmes for rural youth

Information revealed at the time of data analysis that according to the subjects the rural youths of the district got most of their trainings under seed production technology followed by commercial fruit production and nursery management (Fig. 7).

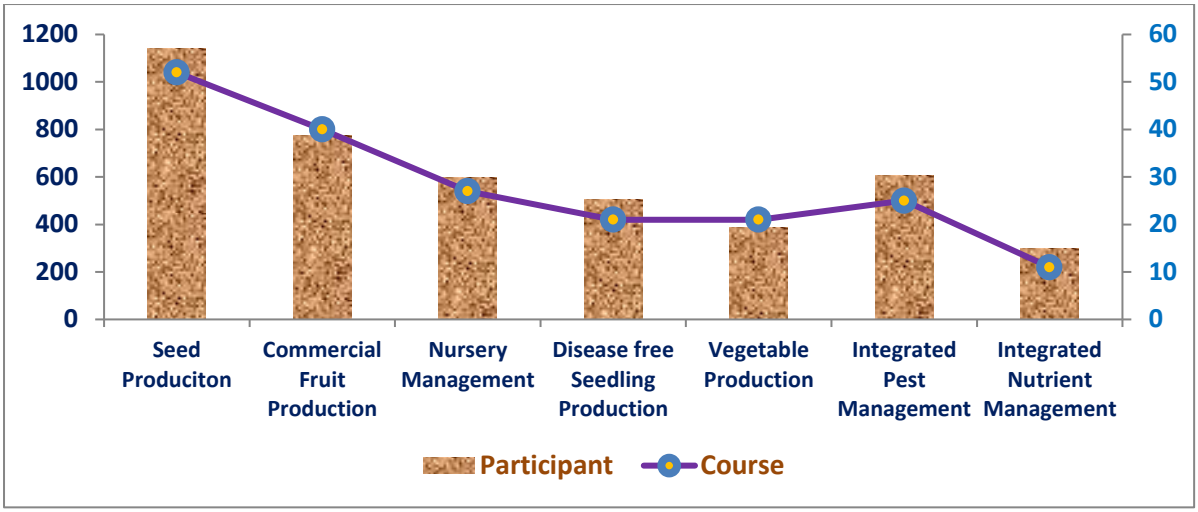


Fig. 7: Distribution of training programmes under different subjects for rural

- **Training programmes for extension functionaries**

Training programmes for extension functionaries were regularized Nadia KVK since the last three years, basically the last two years (Fig. 8). Maximum number of courses was done during 2018-19 with maximum participation.

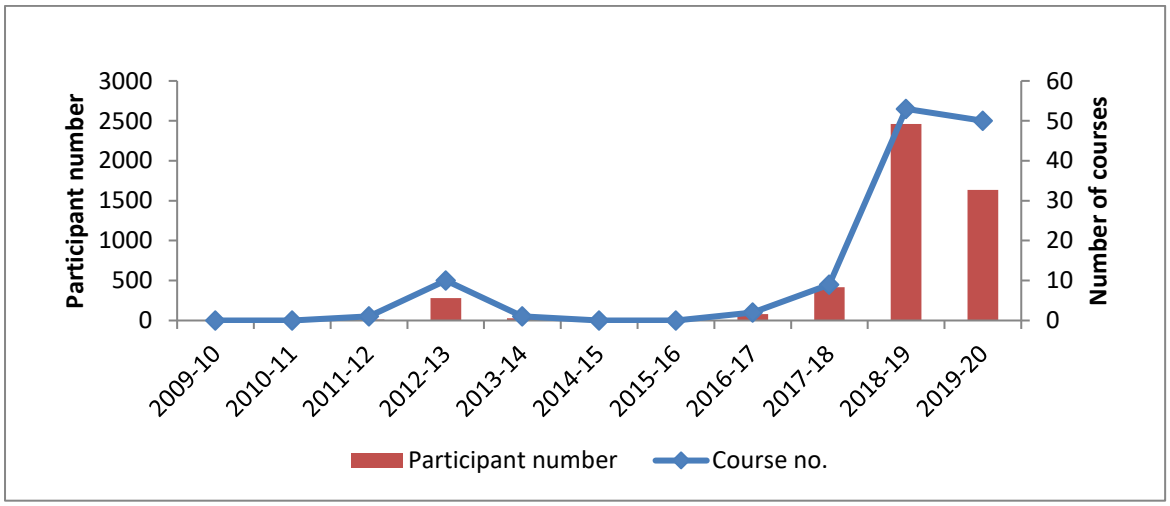


Fig 8: Distribution of training programmes for Extension Functionaries

Data revealed after analysis that, among different subjects most of the training programmes for extension functionaries were conducted under integrated pest management followed by field crop production and integrated nutrient management (Fig. 9).

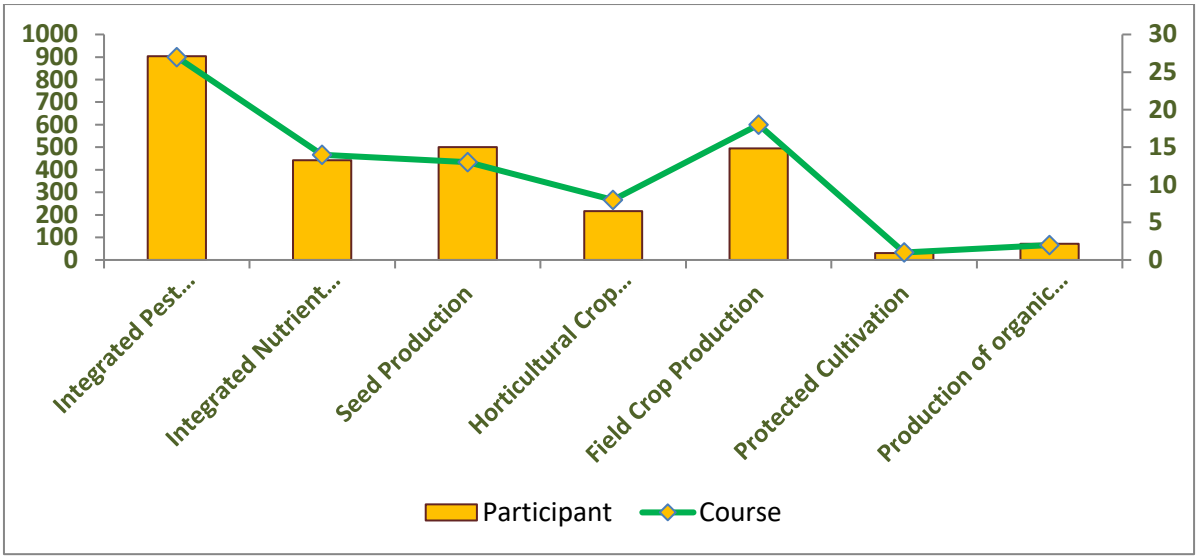


Fig. 9: Distribution of training programmes under different subjects for extension

- **Training under vocational and sponsored programmes**

In addition to different mandated training programmes Nadia KVK is also involved in conducting various vocational and sponsored training programmes particularly for the rural youths during the last few years (Table 2).

Table 2: Distribution of vocational and sponsored training programmes over the last ten years

Vocational Training Programmes				Sponsored Training Programmes			
Training Courses	No. of Participants			Training Courses	No. of Participants		
	Male	Female	Total		Male	Female	Total
23	914	225	1139	249	1393	932	2325

It has been identified that a major portion of the trainees under sponsored training programmes are female (40.09%) while the same is 19.75% under the vocational trainees (Fig.10).

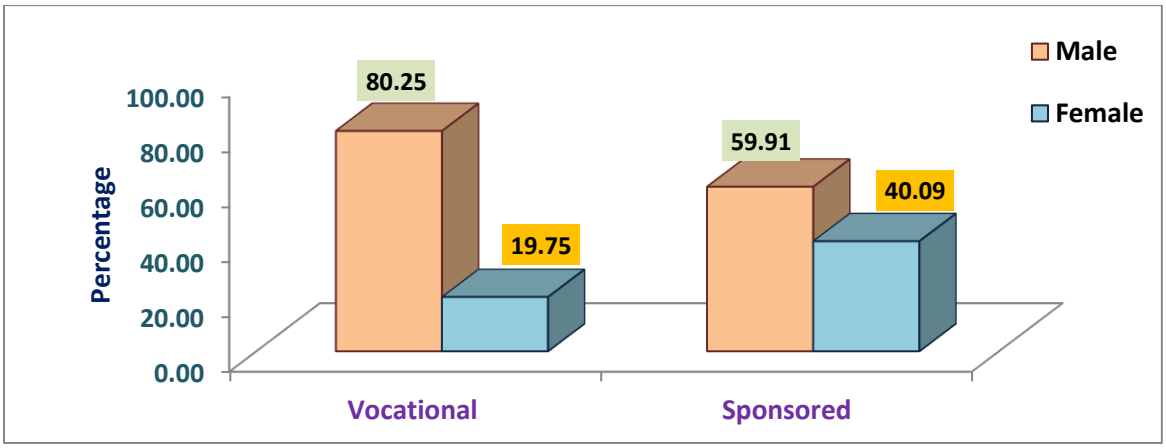


Fig. 10: Distribution of training programmes according to gender for vocational and sponsored

➢ **Front Line Demonstrations (FLD):**

Front Line demonstrations (FLDs) are a unique approach to provide a direct interface between scientists and farmers. FLDs are being conducted by the concerning scientists of KVK at farmers' field to show the potentiality of certain technologies which are new to a particular area and which have a positive bearing on production system. Special emphasis is being given for demonstration of pulse and oil seed crops.

Front line demonstrations were conducted under different disciplines, but maximum emphasis was given on pulse and oil seed crops. It has been found that 185 FLDs were conducted during the last 10 years with active participation of 10332 farmers covering 1658 ha land area distributed over different parts of the district. On an average 1033 farmers per year were involved with FLDs conducted by Nadia KVK covering 166 ha of land per year. Trend of conducted FLDs shows that there is marked increase in number of farmers and coverage area particularly over the last five years due to CFLD (Cluster Front Line Demonstration) progrmme (Fig 11).

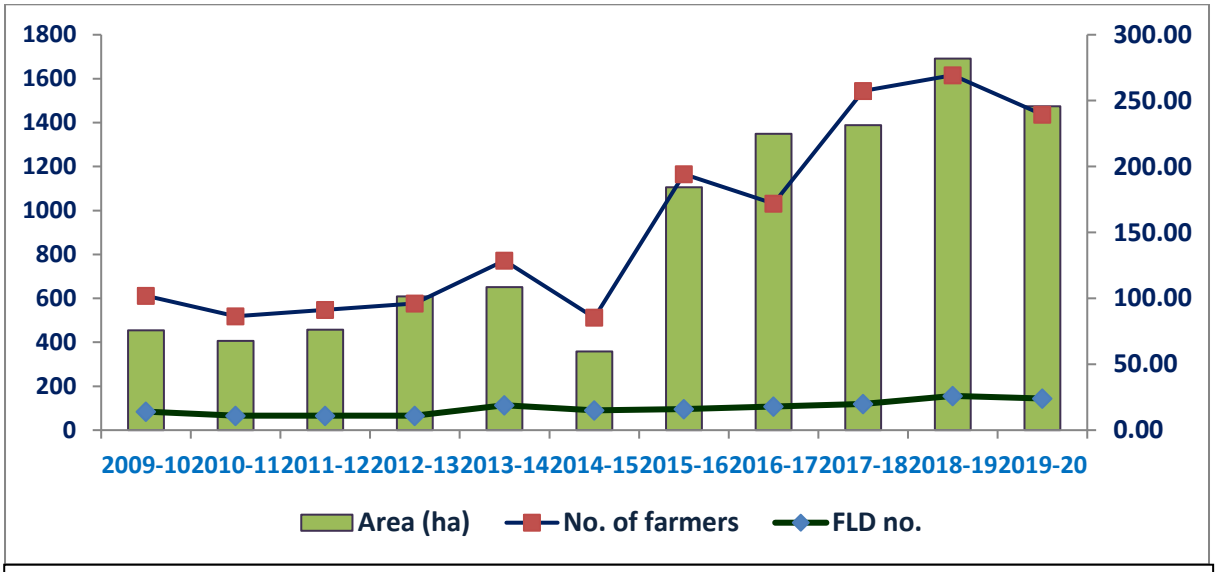


Fig. 11: Distribution of FLDs over the last ten years

It has been identified that coverage under pulses and oil seed crops increase particularly over the last 4 to 5 years while the same was reduced for cereals and millets during these years (Fig. 12).

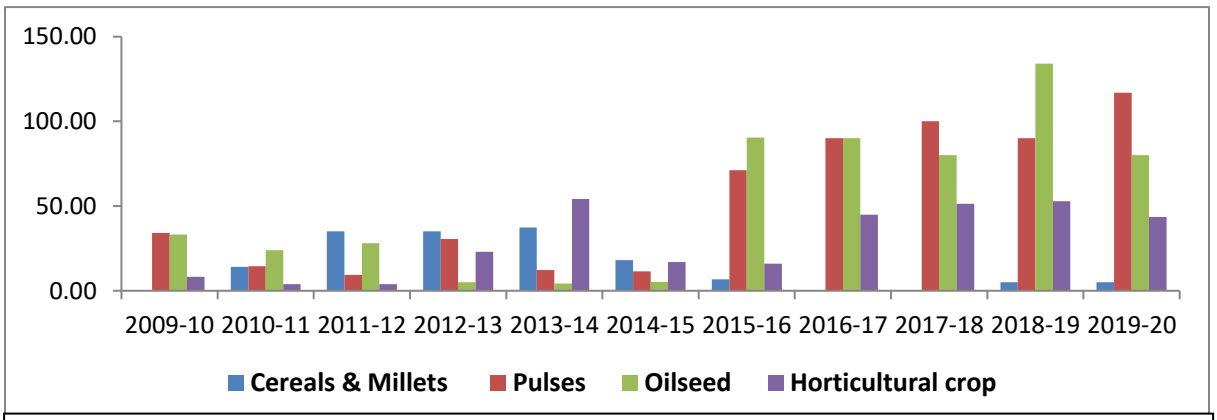


Fig. 12: Distribution of different category of crops over the last ten years

Overall pattern regarding coverage of area under front line demonstration programmes shows that maximum area were found for pulse crop (35.01%) and oil seed crop (34.66%) followed by horticultural crops (19.24%) and cereals and millets (9.43%) [Fig. 13].

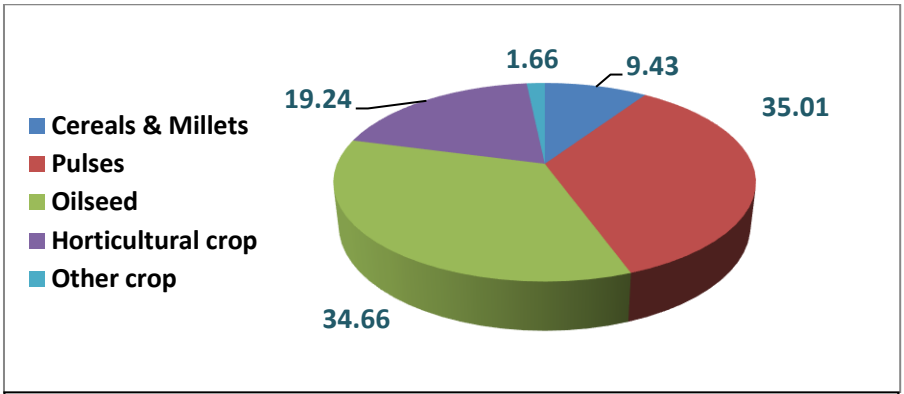


Fig. 13: Distribution of different group of crops

Details of innovations recorded by the KVK

Innovation 1:

Thematic area	Protected cultivation through micro-irrigation system
Name of the Innovation	Production of High value crops under protected cultivation through pressurized micro-irrigation system
Details of Innovator	Mr. Tapan Kumar Bain Vill + P.O.- Bhayna, Bagula 1 no. Gram Panchayet, P.S.- Hanskhali, Dist.- Nadia, Pin- 741502, West Bengal, India. Contact: 9749245465
Back ground of innovation	Irrigation scheduling for off-season cultivation of high value crops (e.g. leafy vegetables, vegetable seedlings) under protected cultivation practice plays a vital role to make good return from the produce. Considering the factor Mr. Tapan Kumar Bain gained the knowledge of micro irrigation system from Nadia Krishi Vigyn Kendra and practiced pressurized micro irrigation system technology with slight need based modification through locally available resources.
Technology details	Mr. Tapan Kumar Bain practiced pressurized micro irrigation system especially sprinkler and fog irrigation system. He gained the knowledge of normal traditional use of these types of micro-irrigation systems for open as well as in protected condition from Nadia Krishi Vigyan Kendra during a training programme. But, he modified the system according to his need and locally available resources in a low cost manner. He used the system even in small poly-tunnels for raising different vegetable seedlings and leafy vegetables particularly during off-season. Water with pressurized pumps go through the channels and easily sprinkle over the crops. The technology increased water productivity by increasing yield. The technology has been proved as labour and time saving technique.
Practical utility of innovation	The technology increased water productivity by increasing yield. The technology has been proved as labour and time saving technique.

4.4. Details of entrepreneurship development

Entrepreneurship development	
Name of the enterprise	**Mushroom cultivation**
Name & complete address of the entrepreneur	**Mr. Swarup Biswas,** Age 28, Male, VILL-Kanthalpuli, P.O. -Chakdaha, DIST.- Nadia, West Bengal, Pin- 741222 (Ph. No. 07872086984). **Education level:** Graduate
Role of KVK with quantitative data support:	He has got training on Mushroom production technology and all technical support from Nadia KVK.
Timeline of the entrepreneurship development	Mr. Biswas was very marginal farmers used to work very hard for agricultural production. He was very interested to cultivate mushroom. However, the situation started changing when he came in contact with Nadia KVK and took training for mushroom production technology. After getting the training he gained confidence and started mushroom cultivation in low scale by his own.
Technical Components of the Enterprise	Paddy straw was chopped into small pieces (2-3 inch). ↓ a. Soaking of paddy straw in water containing Bavistin 1gm and 2ml formalin for 12-14 h. (Good for summer season) **or** b. Soaking of paddy straw in water with 2gm bleaching powder and 3 gm lime per liter water for 12-14 h. **or** c. Soaking of paddy straw in water for 12-14 hrs and boil for 40 min. ↓ The substrate is dried in shade for few hours in order to maintain 60-70% moisture level is required feeling by the hand. ↓ Substrate fills in polythene bags (45×30 cm) with spawn (1 kg straw need 100 gm spawn). ↓ The bags were tied with nylon string and 8-10 perforations were made at all portions of the bags. ↓ Filled bags were kept in dark place for spawn run. ↓ 20-30°C temperature have to maintain and 85-90% relative humidity. ↓ After 16-18 days straw will be fully covered with white cottony mycelium and polythene cover have to remove. ↓ Compacted mass of aggregated straw bed is ready for cropping. Beds were hung with nylon string at a distance of 30 cm. ↓ Water spray on bed for 2-3 times in a day. ↓ After 1-2 days, small pin head on the surface of the bed, and finally first flush of mushrooms will be ready to harvest within 2-4 days. ↓ Mushroom is plucking by slight pulling and twisting before they curled up. Successive 2-3 flushes are harvest from the same bed at an interval of 7-10 days. ↓ Within 45 days crop period, 3-4 crops are expected.

Status of entrepreneur before and after the enterprise	Mr. Biswas was facing problems through the economic stress and looking for profitable enterprise. When he started mushroom cultivation, situation is changing slowly. Now he is fully focused on it and became a successful grower.
	Cost of cultivation = (Low cost Unit + Material cost): Rs 110,000.00 + Rs. 55000.00 = 165,000.00
	Total production –1850 Kg.
	Sale price- Rs. 150/-per Kg Mushroom. Total sale price = Rs. 150/-per Kg. X 1850=Rs.277,500/-
	Wastage of Mushroom materials produces very good quality Vermi-compost side by side.
Present working condition of enterprise in terms of raw materials availability, labour availability, consumer preference, marketing the product etc. (Economic viability of the enterprise):	Mr. Biswas producing mushroom in very large scale and evolving rural youth also. Male and female labourersbothare engaged for mushroom cultivation. He is also acting as rural entrepreneur and master trainer to create much awareness among others. Now He supplies raw and dry mushroom both in the market and different private companies. Recently He is going to prepare a mushroom processing unit to solve the marketing problems.
Horizontal spread of enterprise	Mr. Biswas playing a master trainer roll in his local area and he already trained more 40 farmers. Now his activity is encouraging other farmers to envolved on Mushroom cultivation and improves their livelihood.

4.6. Any other initiative taken by the KVK

5. LINKAGES

5.1. Functional linkage with different organizations

Name of organization	Nature of linkage
Directorate of Research, BCKV	Technological backup
Directorate of Farm, BCKV	Supply of inputs
All India Coordinated Project on Sub-tropical Fruits, BCKV	Technical and plant material support
All India Coordinated Project on Tuber Crops other than potato, BCKV	Technical and plant material support
All India Coordinated Project on Soil Test Crop Response, BCKV	Technical and plant material support
All India Coordinated Project on Nematode, BCKV	Technical and plant material support
All India Coordinated Project on Vegetables, BCKV	Technical and plant material support
All India Coordinated Project on Forage Crop, BCKV	Technical and plant material support
All India Coordinated Project on Tropical fruits, BCKV	Technical and plant material support
Office of the Dy. Director of Agriculture, Nadia	Formulation of Action Plan
ATMA, Nadia	Fund support & Technology dissemination partner
Dept. of Animal Resource Development	Technical support &m Formulation of Action Plan
Dept. of Fishery	Technical support &m Formulation of Action Plan

Zonal Adaptive Research Station (ZARS), Krishnanagar	Technical support &m Formulation of Action Plan
NABARD	Formulation of Action Plan, Celebration of Krishi Mela
NHM, Nadia	Fund support & Technology dissemination partner
IFFCO	Fund Support, Training
Zilla Parishad	Formulation of Action Plan & Fund Support
District Horticulture Office	Formulation of Action Plan
ICAR-NINFET	Training and Demonstration
RKVY	Fund support & Technology dissemination partner
MGNERA Cell	Fund support & Technology dissemination partner

5.2. List of special programmes undertaken during 2019 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 based demonstration unit development	April, 2020	ATMA	4.5 Lakh
SCSP project	Development of SC farmers	March, 2020	IIPR, Kanpur though ATARI	5.7 lakh

(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.)
Farmers-Scientist Interaction	Training	December, 2020	ATMA	40,000.00
NFSM/NMOOP	Demonstration on pulse and oilseeds	October, 2020	Govt. of WB	-
Stall in Gaighata Krishi Mela	Agriculture information dissemination	January, 2020	-	-

6. PERFORMANCE OF INFRASTRUCTURE IN KVK

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

Sl. No.	Name of demo Unit	Year of estt.	Area(Sq.mt)	Details of production			Amount (Rs.)		Remarks
				Variety/ breed	Produce	Qty.	Cost of inputs	Gross income	
1	Protected cultivation unit Poly house Shed net	2010-2017	1050 sq. m.		Orchid, Black pepper, Seedling	1100 no saplings	12,000.00	30,000.00	-
2	Bio pesticide production unit	2012	8.0	*Trichoderma viride*	*Trichoderma viride* Frmulation	90 Kg	13,500.00	-	Distributed to farmers for soil health management
3	Mushroom Unit	2018	20.0	*Oyester*	*Mushroom*	50 kg	5,000.00	-	-
4	Plant Materials production unit	2008	198.8	-	-	-	1,50,000.00	3,00,000.00	-
5	Seed production unit	2008	-	-	-	-	1,00,000.00	1,40,000.00	
6	Animal Unit	2018	56.8	-	-	-	20,000.00	44,000.00	
7	Water harvesting cum fish unit	2014	500	-	-	-	3000.00	4,500.00	
8	Vermicopost and other compost unit	2018	21.6	-	-	-	12,000.00	23,100.00	
Total									

6.2. Performance of Instructional Farm (Crops)

Name Of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty.(q)	Cost of inputs	Gross income	
Lentil	20.11.2019	10.04.20	0.13	*Maitree*	Seed	1.5	4000.00	9000.00	
Elephant Foot Yam	12 – 15.4.20	08 - 20.12.20	0.3	*Bidhan Kusum*	Seed tuber	60	80,000.00	1,80,000.00	
Black Gram	05.07. 20	13-15.11. 20	0.13	*IPU -02-43*	Seed	1.0	5000.00	6000.00	
Aman Paddy	19.06.20	24.11.20 – 10.12.20	0.27	*MTU 7029, MTU 1153, Ajit, CR Dhan 800*	Seed	10	12,000.00	20,000.00	
Lentil	20.12.20	Yet to harvest	0.2	*Moitree*	seed	-	6000.00	-	
Green gram	02.03.21	Crop in the field	0.33	*Virat*	Seed	-	-	-	
Sesame	08.03.21	Crop in the field	0.4	*Sabitri*	Seed	-	-	-	
Cauliflower	15.10.20	20.02 – 05.03.21	0.03	*Mareet 010 F1, Valentina, Carotina*	Vegetables	500 nos	2000.00	2500.00	
Cabbage	15.10.20	26.02 – 15.03.21	0.03	*NS 43*	Vegetables	400 nos	2000.00	Mostly destroyed by birds	
Tomato	15.10.20	08.02 – 31.02.20	0.03	*Arka Samrat, Heemraj*	Vegetables	1.0	1500.00	2500.00	
Brinjal	15.10.20	20.01.21 to onwards	0.03	*Black Diamond, JK 8031*	Vegetables	1.0	3000.00	4000.00	
Chilli	15.10.20	02.01.21 to onwards	0.03	*Daiya 619 F1, Bullet*	Vegetables	0.3	1500.00	3000.00	
Onion	12.06.20	13.11.20	0.03	*Agrifound Dark Red*	Vegetables	1.0	3000.00	4000.00	
Others									

Broccoli	15.10.20	05.01.21 – 10.02.21	0.03	*Saki F1*	Vegetables	600 nos	2000.00	Mostly destroyed by birds	
Lettuce	10.11.20	10.02.21 – 25.02.21	0.03	*Falbala*	Vegetables	700 nos	1500.00	2000.00	
Capsicum	15.10.20	23.01.21 – 25.02.21	0.03	*Fiza, Delisha*	Vegetables	0.25	1500.00	2500.00	
Fruits									
Mango		20.07.20	0.03	*Himsagar, amrapalli*	saplings	500	10,000.00	20000.00	
Papaya		20.04.20	0.03	*Ranchi*	seedlings	500	2500.00	5000.00	
Orchid		10.02.21 – 25.03.21	0.10	*Dendrobium, Mokara*	saplings	100	4000.00	10,000.00	
Flowering plants		12.08.20	0.03	Different crops	saplings	10,000	12,000.00	20,000.00	
Black pepper		18.07.20	0.02	Panniyur -5	saplings	1000	8000.00	20,000.00	

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

Sl. No.	Name of the Product	Qty. (Kg)	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	
1.	Vermicompost	600.0	1000.00	3600.00	
2.	Compost (NOVCOM & Waste Decomposer compost)	5500.0	3000.00	16500.00	
3.	*Trichoderma viridae*	90.0	3500.00	13500.00	

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

Sl. No	Name of the animal / bird / aquatics	Details of production			Amount (Rs.)		Remarks
		Breed	Type of Produce	Qty.	Cost of inputs	Gross income	
1.	Cows	Desi	Milk	1200 lit	25,000.00	36,000.00	
2.	Goats	Black Bengal	Live goat	20 nos	20,000.00	40,000.00	
3.							

6.5. Utilization of hostel facilities

Accommodation available (No. of beds): 35 Beds

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)

(For whole of the year)

6.6. Utilization of staff quarters: NA

Whether staff quarters has been completed:
No. of staffquarters:
Date of completion:
Occupancy details:

Months	Q I	QII	Q III	QIV	Q V	QVI

7. FINANCIAL PERFORMANCE

7.1. Details of KVK Bank accounts

Bank account	Name of the bank	Location	Account Number
Current account	State Bank of India	Kalyani	34601300680

7.2. Utilization of funds under CFLD on Oilseed *(Rs. In Lakhs):* NA

Crop (provide crop wise information)	Items	Budget Received (Rs.)	Budget Utilization (Rs.)	Balance (Rs.)
Lentil (*Rabi* 2019-2020)	i) Critical input	81,000.00	72,957.00	8,043.00
	ii) TA/DA/POL etc. for monitoring	9,000.00	8,843.00	157.00
	iii) Extension Activities (Field day)			
	iv)Publication of literature			
	Total	**90,000.00**	**81,800.00**	**8,200.00**
Sesame (Summer 2019-2020)	i) Critical input	45,000.00	45,000.00	0.00
	ii) TA/DA/POL etc. for monitoring	5,000.00	4,810.00	190.00
	iii) Extension Activities (Field day)			
	iv)Publication of literature			
	Total	**50,000.00**	**49,810.00**	**190.00**
Ground nut (Summer 2019-2020)	i) Critical input	1,08,000.00	1,06,263.00	1,737.00
	ii) TA/DA/POL etc. for monitoring	12,000.00	9,758.00	2,242.00
	iii) Extension Activities (Field day)			
	iv)Publication of literature			
	Total	**1,20,000.00**	**1,16,021.00**	**3,979.00**
Lentil (*Rabi* 2020-2021)	i) Critical input	81,000.00	81,000.00	0
	ii) TA/DA/POL etc. for monitoring	9,000.00	9,000.00	0
	iii) Extension Activities (Field day)			
	iv)Publication of literature			
	Total	**1,20,000.00**	**1,20,000.00**	**0**
Chickpea (*Rabi* 2020-2021)	i) Critical input	81,000.00	81,000.00	0
	ii) TA/DA/POL etc. for monitoring	9,000.00	9,000.00	0
	iii) Extension Activities (Field day)			
	iv)Publication of literature			
	Total	**1,20,000.00**	**1,20,000.00**	0

Greengram (Summer 2020-2021)	i) Critical input	81,000.00	81,000.00	0
	ii) TA/DA/POL etc. for monitoring	9,000.00	9,000.00	0
	iii) Extension Activities (Field day)			
	iv)Publication of literature			
	Total	**1,20,000.00**	**1,20,000.00**	0
Sesame (Summer 2020-2021)	i) Critical input	90,000.00	90,000.00	0
	ii) TA/DA/POL etc. for monitoring	10,000.00	10,000.00	0
	iii) Extension Activities (Field day)			
	iv)Publication of literature			
	Total	**1,00,000.00**	**1,00,000.00**	**0**
Groundnut (Summer 2020-2021)	i) Critical input	1,08,000.00	1,08,000.00	0
	ii) TA/DA/POL etc. for monitoring	12,000.00	12,000.00	0
	iii) Extension Activities (Field day)			
	iv)Publication of literature			
	Total	**1,20,000.00**	**1,20,000.00**	0

7.4. Utilization of KVK funds during the year 2020 (Upto 31st Dec., 2020) ***(Rs. In Lakhs)***

Sl. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	Pay & Allowances	175.00	175.00	174.19562
2	Traveling allowances	0.40	0.40	-
3	HRD	0.20	0.20	-
4	Contingencies			
A	Office Expences	23.00	23.00	18.30
B	Training			
C	FLD			
D	OFT			
E	Maintenance			
F	Swatchta Expenditure			
TOTAL (A)		**198.60**	**198.60**	**192.49562**
B. Non-Recurring Contingencies				
1	Office equipments, copier, computer etc	-	-	-
2	Library	0.10	0.10	0.10
3	Vehicle	8.00	8.00	8.00
4				
TOTAL (B)		**8.10**	**1.10**	**8.10**
REVOLVING FUND (C)		**-**	**-**	**4.34326**
GRAND TOTAL (A+B+C)		**117.40**	**89.21**	**204.93888**

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

Year	Opening balance as on 1st April	Income during the year	Expenditure during the year	Net balance in hand as on 1st April of each year (Kind + cash)
2017-18	13,87,245.00	10,48,808.00	2,19,937.00	22,16,115.00
2018-19	22,16,115.00	31,49,616.00	18,86,992.00	34,78,739.00
2019-20	34,78,739.00	7,28,142.00	5,56,381.00	36,50,500.00
2020-21	36,50,500.00	5,63,326.00	4,34,326.00	Cash: 36,75,500.00 Kind: 1,04,000.00

7.6. (i) Number of SHGs formed by KVKs : 09
(ii) Association of KVKs with SHGs formed by other organizations indicating the area of SHG activities : 28
(iii) Details of marketing channels created for the SHGs: 2

7.7. Joint activity carried out with line departments and ATMA

Name of activity	Number of activities	Season	With line department	With ATMA	With both
Short term research	5	Throughout the year	-	ATMA	-
Training and Demonstration under SCSP	4	Throughout the year	CIFA	-	-
Training and Demonstration under SCSP	4	Throughout the year	IVRI	-	-

8. OTHER INFORMATION

8.1. Prevalent diseases in Crops

Name of the disease	Crop	Date of outbreak	Area affected (in ha)	% Commodity loss	Preventive measures taken for area (in ha)
Panama disease	Banana	Kharif	1500 ha	50%	Sucker treatment with Carbendazim, water restriction and spaying of fungicides like Carbendazim @ 1%, tebuconazole and trifloxystrobin @ 2g/li.

8.2. Prevalent diseases in Livestock/Fishery

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 YuvaKendra(NYK) Training: NA

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

9.2. *mKisan*Portal (National Farmers' Portal/ SMSPortal):

Type of message	No. of messages	No. of farmers covered
Crop	18	53728
Livestock	-	-
Fishery	-	-
Weather	2	5932
Marketing	-	-
Awareness	1	2976
Training information	-	-
Other	2	5942
Total	**23**	**68578**

9.3.*KVK* Portal and Mobile App

Sl. No.	Particulars	Description
1.	No. of visitors visited the portal	98527
2.	No. of farmers registered in the portal	1185
3.	Mobile Apps developed by KVK	-
4.	Name of the App	-
5.	Language of the App	-
6.	Meant for crop/ livestock/ fishery/ others	-
7.	No. of times downloaded	-

9.4. a. Observation of Swacha Bharat Programme

Date of observation	Activities undertaken
23.09.2020	Awareness activities
02.10.2020	General Sharmadaan Activities
15.10.2020	Plastic waste management

b. Details of Swachhta activities with expenditure

Activities	Number	Expenditure (in Rs.)
1. Digitization of office records/ e-office	2	-
2. Basic maintenance	2	3,000.00
3. Digitization of office records/ e-office	3	-
4. Cleaning and beautification of surrounding areas	6	6,5 00.00
5. Vermicomposting/ Composting of biodegradable waste management & other activities on generate of wealth for waste	4	4,000.00
6. Used water for agriculture/ horticulture application	4	-
7. Swachhta Awareness at local level	12	1,000.00
8. Swachhta Workshops	-	-
9. Swachhta Pledge	-	-
10. Display and Banner	2	500.00
11. Foster healthy competition	1	-
12. Involvement of print and electronic media	-	-
13. Involving the farmers, farm women and village youth in the adopted villages (no of adopted village)	7	-
14. No of Staff members involved in the activities	16	-
15. No of VIP/VVIPs involved in the activities	2	-
16. Any other specific activity (in details)	-	-
Total	**61**	**15,000.00**

9.5. Observation of National Science day

Date of Observation	Activities undertaken
-	-

9.6. Programme with SeemaSurakshaBal (BSF)/ Indian Army

Title of Programme	Date	No. of participants

9.7. Agriculture Knowledge in rural school:

Name and address of school	Date of visit to school	Areas covered	Teaching aids used
Kantabele Primary School	04.12.2020	Nutritional garden	Projecter, screen, computer, microphone. Far practical all nursery equipments,and inputs like seeds, Seedlings
Rasulyapur High school, Rasulyapur, Chakdaha, Nadia	09.12.2020	Kitchen garden &Swatchata	Projecter, screen, computer, microphone. Far practical all nursery equipments and inputs like seeds, Seedlings

9.8. Details of '*Pre-Rabi Campaign'* Programme

Date of programme	No. of Union Ministers attended the programme	No. of Hon'ble MPs (Loksabha/ Rajyasabha) participated	No. of State Govt. Ministers	Participants (No.)							Coverage by Doordarshan (Yes/ No)	Coverage by other channels (Number)
				MLAs Attended the programme	Chairman ZilaPanchayat	Distt. Collector/ DM	Bank Officials	Farmers	Govt. Officials, PRI members etc.	Total		

9.9. Details of Swachhta Hi Sewaprogramme organized

Sl. No.	Activity	No. of villages Involved	No. of Participants	No. of VIPs	Name (s) of VIP(s)
1	Swachhta Hi Sewa campaign in villages	4	158	-	
2	Swachhta Hi Sewa campaign in school	3	176	-	

9.10. Details of MahilaKisan Divas programme organized

Sl. No.	Activity	No. of villages Involved	No. of Participants	No. of VIPs	Name (s) of VIP(s)
1	Women empowerment with respect to group formation, nutritional security and entreprenureship	-	45	-	-

9.11. No. of Progressive/Innovative/Lead farmer identified (category wise)

Sl. No.	Name of Farmer	Address of the farmer with contact no.	Innovation/ Leading in enterprise
1	Mr. Tapan Kumar Bain	Vill + P.O.- Bhayna, Bagula 1 no. Gram Panchayet, P.S.- Hanskhali, Dist.- Nadia, Pin- 741502, West Bengal, India. Contact: 9749245465	Production of High value crops under protected cultivation through pressurized micro-irrigation system
2	Mr. Asim Biswas	Vill + P.O.- Kadambagachi, Block: Chakdah, Dist.- Nadia, West Bengal, India. Contact: 9723614882	Leading extension worker having prominent role in disseminating new agriculture technologies to other farmers
3	Mr. Dipak Mondal	Vill.- Banamalipara, Block: Chakdah, Dist.- Nadia, West Bengal, India. Contact: 7478747309	Leading vegetable producer and having expertise in fishery
4	Mr. Kutubuddin Biswas	Vill + P.O.- Dhantala, Block: Ranaghat-II, Dist.- Nadia, West Bengal, India. Contact: 9064890383	Specialist in floriculture (Innovator of light & mulch in Chrysanthemum)
5	Mr. Swarup Biswas	Mr. Swarup Biswas, Age 28, Male, VILL-Kanthalpuli, P.O. –Chakdaha, DIST.- Nadia, West Bengal, Pin- 741222 Ph. No. 7872086984	Oyster& Milky mushroom cultivation
6	Mr. Bikash Biswas	Vill- Khosalpur, P.O.- Aranghata, Narayanpur, Dist.- Nadia, West Bengal, Pin – 741501 Ph. No.: 9800066361	Mushroom cultivation &spawn production
7	Mrs. Soma Das Mondal	Naduria, Block: Krishnagar -I, Dist: Nadia,West Bengal Ph:9933303964	High Value vegetable cultivation, Hi-tech seedling raising

9.12. Revenue generation

Sl. No.	Name of Head	Income(Rs.)	Sponsoring agency
1	Income from sale proceed of KVK farm	262,807.00	-
2	From ATMA projects	490,000.00	ATMA, Nadia
3	From external exposure visits	15,000.00	Diff. line dept., ATMA
Total		**767,807.00**	

9.13. Resource Generation

Sl.No.	Name of the programme	Purpose of the programme	Sources of fund	Amount (Rs. lakhs)	Infrastructure created
1	Short term Research	Short term need based Research	ATMA District fund	4,50,000.00	Mushroom spawn production demo unit
2	Support to Krishi Parban 2019	Krishi Mela	NABARD	50,000.00	-
4	Scientist Farmer Interaction	Scientist Farmer Interaction	ATMA	40,000.00	-
6	Different exposure visit	Exposure to farmers	ATMA and others	15,000.00	-
7	DAESI	Diploma course for input dealers	Participants	16,00,000.00	-
Total				**21,55,000.00**	

9.14. Performance of Automatic Weather Station in KVK

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

9.15. Contingent crop planning

Name of the state	Name of district/KVK	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:**

b) Introduction / General Information:

	Title	Objective	Treatment details	Date of sowing	Replication	Result with photographs

11. DETAILS OF TSP

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 2020-21 (Rs. In lakh):

c. (i) Achievements of physical outcome under TSP during 2020-21

Sl. 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	

(ii) Table:

Sl. No.	*Description*	*Unit*	*Achievements*
1	Number of Technologies Identified after Assessment	Number	
2	Upgraded Skills and Knowledge of	Number	

Sl. No.	*Description*	*Unit*	*Achievements*
	farmers		
3	Oriented extension personnel in frontier areas of agricultural technology	Number	
4	Increased availability of quality seed	Quintal	
5	Increased availability of quality Planting material	Number	
6	Increased availability of live-stock strains and fingerlings	Number	
7	Testing of Soil & water samples for balance fertilizer use	Number	

d. Location and Beneficiary Details during 2020-21

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

12. Schedule caste Output & Outcome achievements

Sl. No.	Indicator/Activities	Unit of Indicator	Achievements
1	Farmers, farm women trained by KVKs	2160	Most of them are practicing farmers and farm women, and they are applying the technology in the cultivation process. 3 women have started processing and preservation of fruits and vegetables.
2	Extension personnel trained by KVKs	-	
3	On-farm trials conducted by KVKs	8	Application of bio inputs in summer tomato was accepted by the darmers, benefits of line sowing in jute was accepted by the farmers, less time consuming composting is accepted by the farmers and they are practicing it, effective blast management technology in paddy was accepted by the farmers and importance of foliar spray of nutrients in lentil was established in the farmers field.
4	Frontline demonstrations conducted by KVKs	17	Improved varieties of pulse and oilseed crops produced higher return to the farmers. fruit fly trap in fruits

			(mango and guava) and vegetables (cucurbitacious vegetables) became very tool to manage the insect. Different composting methods das became popular in several pockets. More number of farmers is using banana bunch cover. Proper nutrient management in mustard and lentil is practiced by the farmers.
5	Quantity of seeds produced	-	
6	Planting materials Produced	56397	Vegetable seedlings were distributed among the SC women for kitchen garden, rural youths were trained for flower plant production and nursery business.
7	Livestock strains and fingerlings produced	-	
8	Soil & water samples tested	40	Soil samples were tested from FLD and OFT plots

13. Information pertaining to ARYA Project

2020-21							
Name of KVK	Year since ARYA is initiated in the KVK (specify year)	No. of Training programs	No. of rural youth trained		No. of youth established units		No. of entrepreneurial units established
			M	F	M	F	

14. PROGRESS REPORT OF NICRA KVK (TECHNOLOGY DEMONSTRATION COMPONENT) DURING THE PERIOD (APPLICABLE FOR KVKS IDENTIFIED UNDER NICRA)

Natural Resource Management

Name of intervention undertaken	Numbers under taken	No of units	Area (ha)	No of farmers covered / benefitted									Remarks
				SC		ST		Other		Total			
				M	F	M	F	M	F	M	F	T	

Crop Management

Name of intervention undertaken	Area (ha)	No of farmers covered / benefitted									Remarks
		SC		ST		Other		Total			
		M	F	M	F	M	F	M	F	T	

Livestock and fisheries

Name of intervention undertaken	Numbers animals covered	No of units	Area (ha)	No of farmers covered / benefitted									Remarks
				SC		ST		Other		Total			
				M	F	M	F	M	F	M	F	T	

Institutional interventions

Name of intervention undertaken	No of units	Area (ha)	No of farmers covered / benefitted									Remarks
			SC		ST		Other		Total			
			M	F	M	F	M	F	M	F	T	

Capacity building

Thematic Area	No of courses	No of farmers covered / benefitted								
		SC		ST		Other		Total		
		M	F	M	F	M	F	M	F	T

Extension activities

Thematic Area	No of activities	No of beneficiaries								
		SC		ST		Other		Total		
		M	F	M	F	M	F	M	F	T

Detailed report should be provided in the circulated Performa

15. AWARDS/RECOGNITION RECEIVED BY THE KVK

Sl. No.	Name of the Award	Year	Conferring Authority	Amount	Purpose

Award received by Farmers from the KVK district

Sl. No.	Name of the Award	Name of the Farmer	Year	Conferring Authority	Amount	Purpose
1	Mahindra Samridhi Award	Dipak Mandal	2019	Mahindra Trust	-	Excellence in vegetable, fishery etc.
2	Farm Innovator Meet	Kutubuddin Biswas	2019	ICAR	-	Farm Innovation on mulch & light management in Chrysanthemum

16. ANY SIGNIFICANT ACHIEVEMENT OF THE KVK WITH FACTS AND FIGURES AS WELL AS QUALITY PHOTOGRAPH

17. NUMBER OF COMMODITY BASED ORGANIZATIONS/ FARMERS' COOPERATIVE SOCIETY/ FPO FORMED/ ASSOCIATED WITH DURING LAST ONE YEAR (DETAILS OF THE GROUP/SOCIETY MAY BE INDICATED)

Sl. 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	Kastodanga SKUS	223/ 1963	1963	FLD, OFT, Farmers' training	Pulse, Oilseeds & Vegetables	500	-	-
2	Kadambagachi SKUS	66N/ 20.03.1961	1961	FLD, OFT, Farmers' training, Skill development training	Pulse, Oilseeds, Vegetables & Handicrafts items	592	-	-
3	Gontra SKUS			Seed and planting materials production, Demonstration	Seeds of paddy, pulses, oilseeds	572	-	-
4	Krishnagar Agro Farmers Producer Company Limited	CIN No. U01100WB2020PTC238757	2020	Production of remunerative agricultutral commodities	Brown rice production, Rabi vegetables and some sort of organic grower	406	-	-
5	Manobjomin Agro Producer Company Limited	CIN No. U01110WB2020PTC242246	2020	Livelihood development through clean food production	Cereals, pulses and vegetables	317	-	-

18. INTEGRATED FARMING SYSTEM (IFS)

Details of KVK Demo Unit

Sl. 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.	Elephant foot yam	2 ha	45.0 q	65,000/-	1,50,000/-	10	10.0%
2.	Blackgram		1.0 q	3,000/-	7,000/-		
3.	Mango sapling		500 no	20,000/-	40,000/-		
4.	Coconut sapling		200 no	11,000/-	16,000/-		
5.	Black pepper sapling		1000 no	10,000/-	20,000/-		
6.	Banana suckers		500 nos	2,500/-	5,000/-		
7.	Varmi compost		10 q	3,000/-	5,000/-		
8.	Paddy (Aman)		10 q	12,000/-	20,000/-		

19. TECHNOLOGIES FOR DOUBLING FARMERS' INCOME

Sl. No.	Name of technology	Brief details of technology (3-5 bullet points)	Net return to the farmer Rs. Per ha per year due to technology	No. of farmers adopted the technology in the district	One high resolution "Photo" in "jpg" format for each technology
1	High value vegetable cultivation under protected condition	Crop sequence Colour capsicum – spinach- spinach-spinach – spinach	Rs. 13.10 lakh/ha	45	***
2	High value flower cultivation under protected condition	Gerbera cultivation	Yearly Rs.9.6 lakh in 2000 sq m poly house	25	***
3	Nematode resistant tuberose cultivation	ARKA – Prajwal variety cultivation	Yearly Rs.12.16 lakh/ ha	1275	***
4	Cultivation of pulse crops	Green gram – variety Bireswar with improved package of practice	Rs.37285/- in three months	423	***
5	Cultivation of pulse crops	Gram – variety JAKI-9218 with improved package of practice	Rs.45750/- in four months	120	***

6	Mushroom production technology	Oyster mushroom cultivation throughout the year	Rs. 845,000.00 per year	65	***
7	Orchard development and fruit fly management of Guava	Productivity enhancement of Guava through Bending technology	Rs. 1,43,000/ ha	47	***

*** photographs are in photo pages

20. REPORT ON DIGITAL FARMING INITIATIVES IN AGRICULTURE/ DIGITAL AG. EXTENSION SERVICE

Phase	Database prepared/ covered for		KVK level Committee		Various activity conducted for farmers
	Total no. of villages	Total no. of farmers	Date of formation	Name of members	
I (up-to 15.03.2018)					
II (up-to 24.04.218)					
Total					

21. INFORMATION ON VISIT OF VIPs TO KVKS, IF ANY

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

22. a) Information on ASCI Skill Development Training Programme, if undertaken during 2020

Name of the Job role	Name of the certified Trainer of KVK for the Job role	Date of start of training	Date of completion of training	No. of participants						Whether uploaded to SIP Portal (Y/N)	Fund utilized for the training (Rs.)
				SC		ST		Other			
				M	F	M	F	M	F		
Floricultarist-open cultivation	Dr. S. C. Dhang	27.12..2019	26.03.2020	13	1	1	1	4	0	Y	160,000.00
Mushroom Grower	Mr. S. Islam	27.12..2019	26.03.2020	9	2	3	3	3	0	Y	160,000.00

b) Information on Skill Development Training Programme (Other than ASCI or less than 200 hrs., if any) if undertaken during 2020

Thematic area of training	Title of the training	Duration (in hrs.)	No. of participants									Fund utilized for the training (Rs.)
			SC		ST		Other		Total			
			M	F	M	F	M	F	M	F	T	
Women empowerment	Manufacture of Jute handicrafts	60	0	32	0	8	0	0	0	40	40	-
Alternative eco-friendly management practices	Zero budget natural farming	36	8	2	0	0	14	4	22	6	28	-

23. INFORMATION ON NARI PROJECT (IF APPLICABLE)

Name of Nodal Officer	No. of OFT on specified aspects	Title(s) of OFT	No. of FLD on specified aspects	No. of capacity development 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

24. INFORMATION ON KRISHI KALYAN ABHIYAN PHASE- I/ PHASE-II/ PHASE-III, IF APPLICABLE

Krishi Kalyan Abhiyan- I and II

A. Training

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

Distribution of seed/ planting materials/ input/ others

Name of programme	No. of Programme	Total quantity distributed				No. of farmers benefited									No. of other officials (except KVK) attended the programme
		Seed (q)	Planting material (lakh)	Input (kg)	Other (kg/ No.)	SC		ST		Others		Total			
						M	F	M	F	M	F	M	F	T	
KKA-I															
KKA-II															

B. Livestock and Fishery related activities

Name of programme	No. of Programme	Activities performed				No. of farmers benefited									No. of other officials (except KVK) attended the programme
		No. of animals vaccinated	No. of animals dewormed	Feed/ nutrient supplements provided (kg)	Any other (Distribution of animals/ birds/ fingerlings) [No.]	SC		ST		Others		Total			
						M	F	M	F	M	F	M	F	T	
KKA-I															
KKA-II															

C. Other activities

Name of programme	Activities	No. of farmers benefited									No. of other officials (except KVK) attended the programme
		SC		ST		Others		Total			
		M	F	M	F	M	F	M	F	T	
KKA-I											
KKA-II											

Krishi Kalyan Abhiyan- III

No. of villages covered	No. of animal inseminated	No. of farmers benefitted									Any other, if any (pl. specify)
		SC		ST		Others		Total			
		M	F	M	F	M	F	M	F	T	

25. Nutri-garden

Sl.no.	Name of KVK	Established in KVK Campus	No. of nutria-garden established in the village	Major vegetables production
1	Nadia KVK	1	3	Leafy vegetables, Cole crops, Solanaceous vegetables, Summer vegetables

Please provide one or two good quality photographs

26. Any other programme organized by KVK, not covered above

Sl. No.	Name of the programme	Date of the programme	Venue	Purpose	No. of participants
1	ATMA sponsored Short term research (Allotment Rs. 450,000.00)	April, 2020 to March, 2021	Nadia KVK	Short term research on Bio-manure application in Guava, Evaluation of vertical farming, Evaluation of Banana Macro-propagation, Varital evaluation of Paddy, Evaluation of Azolla production.	-
2	PM Kisan Samman Nidhi Yojona	25.12.2020	Nadia KVK	-	**87**
3	International Women's Day	08.03.2020	Nadia KVK	-	**55**
4	Vigilance Awerness Week	27.10.2020	Nadia KVK	Oath taken by employees	**28**
5	Vigilance Awerness Week	29.10.2020	Kantabelia Primary School	Awerness among students, Quiz compitition	**46**

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

28. SC SP quarter-wise

Table-I: Schedule Caste Output & Outcome Achievement/Indicators for 2020-21 (QUARTER-WISE)

Physical Output 2020-2021

Sl. No.	Indicator/Activities	Unit of Indicator	Quarterly Breakup (Target)	Targets Achieved	No. of Beneficiaries	Outcome
1	Farmers, farm women trained by KVKs	2160	Q-1-700 Q-2 -250 Q-3 - 500 Q-4- 650	Q-1 - 709 Q-2 - 278 Q-3 - 490 Q-4 -683	Q-1 - 709 Q- 2- 278 Q-3- 490 Q-4- 683	Most of them are practicing farmers and farm women, and they are applying the technology in the cultivation process. 3 women have started processing and preservation of fruits and vegetables.
2	Extension personnel trained by KVKs	-	Q-1 Q-2 Q-3 Q-4	Q-1 Q-2 Q-3 Q-4	Q-1 Q-2 Q-3 Q-4	
3	On-farm trials conducted by KVKs	8	Q-1 - 3 Q-2 - 2 Q-3 - 2 Q-4 - 1	Q-1 - 3 Q-2 - 2 Q-3 - 2 Q-4 - 1	Q-1 - 32 Q-2 - 20 Q-3 - 18 Q-2 - 11	Application of bio inputs in summer tomato was accepted by the darmers, benefits of line sowing in jute was accepted by the farmers, less time consuming composting is accepted by the farmers and they are practicing it, effective blast management technology in paddy was accepted by the farmers and importance of foliar spray of nutrients in lentil was established in the farmers field.
4	Frontline demonstrations conducted by KVKs	17	Q-1 - 7 Q-2 - 2 Q-3 - 3	Q-1 - 7 Q-2 -2 Q-3- 3	Q-1 - 186 Q-2 - 69 Q-3 - 81	Improved varieties of pulse and oilseed crops produced higher return to the farmers. fruit fly trap in fruits (mango

Sl. No.	Indicator/Activities	Unit of Indicator	Quarterly Breakup (Target)	Targets Achieved	No. of Beneficiaries	Outcome
			Q-4 - 5	Q-4 -5	Q-4 - 171	and guava) and vegetables (cucurbitacious vegetables) became very tool to manage the insect. Different composting methods das became popular in several pockets. More number of farmers is using banana bunch cover. Proper nutrient management in mustard and lentil is practiced by the farmers.
5	Quantity of seeds produced	-	Q-1 Q-2 Q-3 Q-4	Q-1 Q-2 Q-3 Q-4	Q-1 Q-2 Q-3 Q-4	
6	Planting materials Produced	56397	Q-1 - 20000 Q-2 - 7000 Q-3 - 7000 Q-4 - 20000	Q-1- 21600 Q-2 - 6930 Q-3 - 8570 Q-4 - 19297	Q-1 - 15 Q-2 - 7 Q-3 - 12 Q-4 - 31	Vegetable seedlings were distributed among the SC women for kitchen garden, rural youths were trained for flower plant production and nursery business.
7	Livestock strains and fingerlings produced	-	Q-1 Q-2 Q-3 Q-4	Q-1 Q-2 Q-3 Q-4	Q-1 Q-2 Q-3 Q-4	
8	Soil & water samples tested	40	Q-1 - 10 Q-2 - 10 Q-3 - 10 Q-4 - 10	Q-1 - 10 Q-2 - 10 Q-3 - 10 Q-4 - 10	Q-1 - 10 Q-2 - 10 Q-3 - 10 Q-4 - 10	Soil samples were tested from FLD and OFT plots

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