ANNUAL REPORT

(January, 2022 to December, 2022)

NADIA KRISHI VIGYAN KENDRA

Bidhan Chandra Krishi Viswavidyalaya

Indian Council of Agricultural Research

Gayeshpur, Nadia, West Bengal,PIN – 741 234

☎: 9434241001

✉: nadiakvk@gmail.com

C O N T E N T

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 9434241001	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. K.K.Goswami		9434241001	kkgag2005@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 January, 2022**)

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. Krisna Kishor Goswami	Senior Scientist & Head	Agrilcultural Extension	Research Level 13A Present Basic 1,76,500/-	23.11.2005	Permanent	Others)
2	Subject Matter Specialist	Dr. Malay Kumar Samanta	Subject Matter Specialist	Horticulture	Research Level 10 Present Basic 98,200/-	25.10.2005	Permanent	Others
3	Subject Matter Specialist	Dr. Malabika Debnath	Subject Matter Specialist	Plant Protection	Research Level 12 Present Basic 1,04,100/-	26.10.2005	Permanent	Others
4	Subject Matter Specialist	Dr. Shubhra Jyoti Pramanik	Subject Matter Specialist	Seed Science	Research Level 10 Present Basic 98,200/-	26.10.2005	Permanent	Others
5	Subject Matter Specialist	Dr. Kaushik Mukhopadhyay	Subject Matter Specialist/T6	Soil Science	Level 10 Present Basic 63,100/-	22.06.2018	Permanent	Others
6	Subject Matter Specialist	Mr. MilanKanti Kundu	Subject Matter Specialist/T6	Agronomy	Level 10 Present Basic 63,100/-	22.06.2018	Permanent	OBC(B)
7	Subject Matter Specialist	Vacant	-	Animal Husbandary	-	-	-	-
8	Farm Manager	Dr. Sukhen Chandra Dhang	Farm Manager/T6	Horticulture	Level 10 Present Basic 65,000/-	07.09.2006	Permanent	Others
9	Computer Programmer	Mr. JharnenduHembram	Programme Assistant (Computer)/T5	Information Technology	Level 7 Present Basic 49,000/-	06.06.2014	Permanent	ST
10	Programme Assistant (Lab. Technician)	Mr. Saidul Islam	Programme Assistant (Lab. Tech.)/T4	Plant Pathology	Level 6 Present Basic 38,700/-	01.08.2018	Permanent	OBC (A)
11	Assistant	Mr. Arpan Mandal	Assistant	Marketing & Human Resource	Level 6 Present Basic 38,700/-	18.06.2019	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)
12	Stenographer	Mrs. Swati Sow	Stenographer Grade III	Sanskrit	Level 4 Present Basic 27,900/-	18.06.2019	Permanent	SC
13	Driver	Mr. Kalyan Kumar Thakur	Driver/ T3	-	Level 5 Present Basic 39,200/-	24.10.2005	Permanent	Others
14	Driver	Mr. Sukharanjan Nath	Driver/ T3	-	Level 5 Present Basic 39,200/-	30.08.2006	Permanent	OBC(B)
15	Supporting staff	Mr. Prasanta Biswas	Skill Supporting staff	-	Level 3 Present Basic 31,100/-	26.10.2005	Permanent	SC
16	Supporting staff	Mr. Biswajit Hansda	Skill Supporting staff	-	Level 3 Present Basic 31,100/-	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

A) 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.	Goatery 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	June 2021	8,00,000.00	5200.00 km	working
Tractor	March, 2005	4,29,440.00	950.00 hr	Working
Motor Bike I	June, 2016	60,000.00	10398 km	Working
Motor Bike II	June, 2016	60,000.00	10977 km	Working

B)

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	20	Weed control, Zero tillage, POP on pest control of crop, Organic farming, Demonstration of natural farming should be emphasized.	Emphasis has been given and 12 nos. of training in total have been conducted during the reporting period.	
			Drone technology should be demonstrated.	Communication has been made by the dedicated company for demonstration of Drone.	
			Mushroom production may be emphasized.	During the reporting period, 7 no of training comprising 210 rural youths have been conducted. Value addition of Mushroom has also been initiated.	
			Training on project formulation procedure may be organized in collaboration with the Bank.	Three programmes on Project formulation have conducted involving 80 no Rural youths.	
			Cultural program including Quiz may be conducted while observing special day programs.	Quiz programme was conducted on Vigilance Awareness programme, Swachta Awareness, World Soil Day.	
			Particular Chilli Variety as Farmers' practice should be mentioned in case of OFT on Chilli.	The referred variety has been mention as Bullet.	
			Training on Poultry and Goatery may be done in collaboration with ARD, Nadia.	Two training on Poultry and Goatery have been conducted.	
			Mostly SC population should be addressed while utilizing SCSP fund.	Till now SC population have been addressed exclusively while conducting field programmes.	
			Revolving fund of KVK should be utilized for generation of fund.	Fund has been utilized for planting 100 no of Malta orange plant and half acre of Papaya & Banana planting. Two thousand Black pepper seedlings	

Sl. No.	Date	Number of Participants	Salient Recommendations	Action taken	If not conducted, state reason
				have also been produced which are ready to sell.	
			Bee keeping may be taken as an enterprise for the marginal farmers.	Will be conducted as soon as the fund is available.	

** Salient recommendation of SAC in bullet form*

Proceedings of 16th Scientific Advisory Committee Meeting

The 16th Scientific Advisory Committee (SAC) Meeting of Nadia Krishi Vigyan Kendra held on May 11, 2022 at the Conference Hall of this Kendra.

At first, Prof. B. S. Mahapatra, Vice-Chancellor of BCKV, Dr. (Prof.) U. Thapa, Director, DEE and Dr. S.K. Roy, Director, ICAR-ATARI, Kolkata were welcomed by Dr. K. K. Goswami, Sr. Scientist & Head, Nadia KVK. At the same time, all the members of the committee were welcomed by the Sr. Scientist & Head. Subsequently, all the present members introduced themselves.

In welcome address, DEE, BCKV thanked everyone for their gracious presence in this meeting. He also made directions of discussion at meeting infront of line departments in the way to formulate Action Plan of KVK for next year.

Hon'ble Vice Chancellor inaugurated newly published Pustika on "Vermi-compost production and Mushroom production".

Dr. K.K. Goswami Sr. Scientist & Head, presented recommendations of precious SAC meeting, Action taken report, Annual report- 2021-22 and Action plan- 2022-2023.

Dr. S. K. Roy, Director, ICAR- ATARI , Kolkata Suggested to utilize revolving fund for farming community to generate more fund for Nadia KVK.

KVK should be worked with involvement of more than 50% SC population as told by ICAR-ATARI Director. Director, DEE, BCKV suggested to mention name of F1 hybrids during framing OFT-3. DEE, BCKV also told to use resistant variety under polytunnel in rainy season during recommendation of OFT-4. In view to recommend for OFT-7, DEE suggested to use particular chilli var. for farmer's practice. ICAR-ATARI, Kolkata Director expressed that the KVKs were the main source of planting materials. Also he suggested to conduct quiz as special programme on agriculture at KVK on particular days. Vice-Chancellor expressed that an Animal Scientist was needed for KVK. DEE asked line departments to express their views. ICAR-ATARI Director suggested to say views in vernacular language. He also informed that list name of farmers of DFI had been sent and subsequently farmers were interviewed by Doordarshan.

Dr. S.M. Deb, ICAR-NDRI, ERS, Kalyani, Nadia appreciated the works done by Nadia KVK. He also suggested that a training module on animal production could be developed especially for marginal farmers and ICAR-NDRI could extend their help regarding this matter. Dr. Debasis Jana, Assiatant Director, ARD, Nadia emphasized on conducting training on vector transmitted diseases of animals by KVK where they could

provide expertise. He also told on PPR vaccination of goats, training on Kadaknath poultry and distribution of Black Bengal goat through KVK.

DDM, NABARD, Nadia reported that lack of quality project report hampered loan sanctioning itself. NABARD could provide expertise regarding this matter if farmers approached to them. GM, DIC, Nadia emphasized on to practice Beekeeping by farmers. DDH, Nadia recommended to practice mushroom production and Bee Keeping.

DPD, ATMA informed that a composite Radio station at Fulia of 15 km radius initially started to broadcast programme for farming community of Nadia District. He described problems on sucking pests in farmers field, Gerbera production problem in polyhouse, Banana disease problem, In-situ decomposing of paddy straw, Border agriculture i.c. Production of Malta orange, Dragon fruits and Colour cauliflowers.

Mr. Dipak Mondal, A farmer representative, now turned an entrepreneur, emphasized on how he got information from KVK during his crop & seedlings production from time to time. Mr. Pintu Mondal recalled that how he got assistance from KVK during soil testing & soil health management programme in his area. DDA (Admin.) univocally told for profit making and sustainable agriculture. DEE requested to conclude the SAC meeting. ICAR-ATARI Director told that technologies from different parts of India had been disseminated through KVKs. Drone technology would be demonstrated in KVKs.

Vice Chancellor delivered that he was present for second time in SAC meeting held in Nadia KVK. He emphasized on growing more quality seed and seedlings. He told on necessity for an Animal Scientist in Nadia KVK. He told to increase linkage with farmers more. He pointed out that CD value is not needed to publish. He emphasized on weed control, Zero tillage, publishing full package of practices of pest control of a crop, organic farming, natural farming demonstration and using of specific chemicals during plant growing. He told that PRA must be needed before doing any work at village level.

Members and other representative present in 16th SAC meeting:

1. Prof. B. S. Mahapatra, Vice Chancellor, BCKV
2. Dr. (Prof.) U. Thapa, Director, DEE, BCKV
3. Dr. S. K. Roy, Director, ICAR-ATARI, Kolkata
4. Dr. S.M. Deb, ICAR- NDRI, ERS, Kalyani, Nadia
5. Mr. Jayanta Pal, PD, ATMA Nadia
6. Dr. Aniruddha Datta, DPD, ATMA Nadia
7. Sri Ranjan Roy Choudhuri, DDA (Admin.), Nadia
8. Sri. Hrishikesh Khanra, DDH, Nadia
9. Dr. Debasis Jana, Assiatant Director, ARD, Nadia
10. Dr. Amrita Chattopadhya, DDM, NABARD, Nadia
11. Prof. Susanta Kumar De, In-charge, RRS, Nadia
12. Sri. Satya Charan Das, General Manager, DIC, Nadia
13. Mr. Saiyad ali Tarafdar, IDO, DIC, Nadia
14. Mr. Dipak Mondal, Farmer's Representative, Nadia KVK
15. Mr. Pintu Mondal, Farmer's Representative, Nadia KVK
16. Ms. Soma Das Mondal, Women Farmer's Representative, Nadia KVK
17. Dr. K. K. Goswami, Sr. Scientist & Head, Nadia KVK.
18. Dr.Malabika Debnath, SMS (Plant Protection), Nadia KVK.
19. Dr. Malay Kumar Samanta, SMS (Horticulture), Nadia KVK.
20. Dr. Shubhra Jyoti Pramanik, SMS (Seed Science), Nadia KVK

2.a. District level data on agriculture, livestock and farming situation (2022)

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 organic manure coupled with imbalanced application of chemical fertilizers. Inefficient crop husbandry restricting the scope of augmenting productivity under existing level of inputs management. Instability in yield due 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 lack of knowledge in maintaining appropriate stock ratios and skill in 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 leading to poor system out-turns. Poor overall system performance due to lack of awareness and motivation on timely health coverage.
2	**Agro-climatic Zone**	
	New Alluvial Zone	Soil share are moderately well drained, deep and medium textured with pH varies from 6.5 – 7.5 with a good base saturation.Annualrainfall inthesituationvariesfrom1,401-1,671mm; 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, this district leaves scope to grow a wide variety of agricultural and horticultural crops.
3	**Agro ecological situation**	
	Medium and low land situation	The soils of New Alluvial Zone (NAZ) have got developed on recent alluvium of main river system of the Ganges. Soils of this flat alluvial plain vary from sandy loam to heavy clay in texture possessing high water retention capacity, good porosity and generally higher permeability for the surface soils. Depending upon their typical geomorphic situations, nature of alluvium and typical land use in cropping practices, this NAZ may further be sub-divided into four situations viz, i)Low-lying flood plain*(Tal)* including backwater 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. Sunshine hours in NAZ generally vary between 8.5 –10.5 hrs. per day excepting during monsoon months when average sunshine hours come down to around 5.5 hrs. per day. Irrigation facility, one of the most 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 with congenial agro-ecological situation, the NAZ of West Bengal has established itself to be the core productive zone and granary of the state.
4	**Soil type**	

	Sandy loam (a) Up land (b) Medium land **Clay** (a) Low land	Soils here 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)			

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				

Mean yearly temperature, rainfall, humidity of the district

Month	Rainfall (mm)	Temperature ^{0}C		Relative Humidity (%)	
		Maximum	Minimum	Maximum	Minimum
January, 21	0.00	24.81	11.89	91.30	52.04
February, 21	0.04	29.35	13.86	89.11	39.21
March, 21	0.00	35.98	20.78	86.54	33.14
April,21	0.86	37.01	24.63	84.23	41.16
May, 21	11.37	34.24	24.73	89.61	66.04
June, 21	11.94	32.67	25.85	93.53	77.69
July, 21	8.18	32.60	26.28	94.48	79.42
August, 21	7.36	32.88	26.39	94.93	77.35
September, 21	8.51	31.76	25.61	93.90	77.68
October, 21	5.66	31.29	23.32	93.24	69.40
November, 21	0.69	28.41	17.62	90.07	57.04
December, 21	4.86	24.48	14.11	91.79	62.60

Source: Crop Weather Outlook.in/Agro-met advisory

2.b. Details of operational area / villages (2022)

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 2021 for its development and action plan

Name of village	Block	Action taken for development
Sutragarhchar	Santipur	Lentil seed production, FLD, Training, Input distribution
Nobla		Greengram seed production, FLD, Training, Input distribution
Arbolda		Blackgram seed production, FLD, Training, Input distribution
Ballabpur		Training
Anandanagar	Krishnanagar-II	Lentil seed production, FLD, OFT, Training, Input distribution Greengram seed production, FLD, Training, Input distribution Blackgram seed production, FLD, Training, Input distribution Groundnut seed production, FLD, Training, Input distribution
Hatisala(N)	Krishnanagar-I	Lentil seed production, FLD, OFT, Training, Input distribution

		Greengram seed production, FLD, Training, Input distribution Blackgram seed production, FLD, Training, Input distribution FLD on fruit fly management and orchard management Sesame seed production, FLD, Training, Input distribution
Kaya		Sesame seed production, FLD, Training, Input distribution
Udispur Dakkhinpara		Groundnut seed production, FLD, Training, Input distribution
Bhaduri	Ranaghat-I	OFT on summer tomato
Doluigram	Hanskhali	Lentil seed production, FLD, OFT, Training, Input distribution Chickpea seed production, FLD, Training, Input distribution
Naduria		Blackgram seed production, FLD, Training, Input distribution
Ramnagar		Sesame seed production, FLD, Training, Input distribution
		FLD on NOVCOM composting and Training
		FLD on panama wilt management of banana
Bhyna		OFT on paddy, residue management, FLD and Training
Bagula		FLD and Training
Kaikhali		FLD and Training
Chapatala	Chakdah	Chickpea seed production, FLD, Training, Input distribution
Mitrapur		OFT on blast management of paddy
		OFT on residue management and Training
Kadambagachi		Training
Khaldharpara		Training
Satyapole	Haringhata	OFT on Chilli, paddy, FLD, Training FLD on fruit fly management of guava FLD on fruit fly management of cucurbitacious crops
Kastadanga		OFT on paddy, residue management, FLD and Training
Bhabanipur		FLD and Training
Maniktala Dakshin		FLD and Training
Dahakula	Nakashipara	Training on and FLD on protected cultivation
Nalupur	Krishnaganj	FLD on fruit fly management of mango, training
Malighata		Training
Durgapur		OFT on downy management of cucumber, training

Raghunathpur		FLD on fruit fly management of mango, training
Putithali		Training
Malighata		Training

2.1 Priority thrust areas

Sl. No	Thrust area
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 crop –fish-livestock based backyard system
8.	Increased economic mainstreaming of women through capacity building and capability up gradation.

3. TECHNICAL ACHIEVEMENTS

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

OFT												FLD										
No. of technologies tested:												No. of technologies demonstrated:										
Number of OFTs		Number of farmers										Number of FLDs		Number of farmers								
Target	Achievement	Target	Achievement									Target	Achievement	Target	Achievement							
			SC		ST		Others		Total						SC		ST		Others		Total		
			M	F	M	F	M	F	M	F	T				M	F	M	F	M	F	M	F	T
10	**08**	**70**	28	2	0	0	30	1	58	3	**61**	**17**	**22**	**510**	218	28	12	0	285	34	515	62	**577**

Training												Extension activities										
Number of Courses		Number of Participants										Number of activities		Number of participants								
Target	Achievement	Target	Achievement									Target	Achievement	Target	Achievement							
			SC		ST		Others		Total						SC		ST		Others		Total		
			M	F	M	F	M	F	M	F	T				M	F	M	F	M	F	M	F	T
162	**180**	**4500**	2363	396	80	19	2132	335	4575	750	**5325**	**100**	**123**	**4000**	1892	256	78	16	1942	627	3942	899	**4841**

Impact of capacity building											Impact of Extension activities										
Number of Participants trained		Number of Trainees got employment (self/ wage/ entrepreneur/ engaged as skilled manpower)									Number of Participants attended		Number of participants got employment (self/ wage/ entrepreneur/ engaged as skilled manpower)								
Target	Achievement	SC		ST		Others		Total			Target	Achievement	SC		ST		Others		Total		
		M	F	M	F	M	F	M	F	T			M	F	M	F	M	F	M	F	T

Seed production (q)		Planting material (in Lakh)	
Target	Achievement	Target	Achievement

Livestock strains and fish fingerlings produced (in lakh)*		Soil, water, plant, manures samples tested (in lakh)	
Target	Achievement	Target	Achievement

Publication by KVKs

Item	Number	No. circulated	No. of Research papers in NAAS rated Journals	Highest NAAS rating of any publication	Average NAAS rating of the publications	Details of awarded publication, if any	Details of Award given to the publication
Research paper							
Seminar/conference/ symposia papers							
Books							
Bulletins							
News letter							
Popular Articles							
Book Chapter							
Extension Pamphlets/ literature							
Technical reports							
Electronic Publication (CD/DVD etc)							
TOTAL							

3.1. Achievements on technologies assessed and refined

OFT-1

1.	Title of On farm Trial	**Assessment of efficiency of integrated approach against collar rot of chilli**
2.	Problem diagnosed	Heavy loss in chilli due to collar rot particularly during heavy rain. This disease can damage 80-90% of total crop production.
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	**Technology option 1:** Deep ploughing during land preparation**,**Seed treatment with Thiram 75% @ 2.5 g/ Kg of seed, pit filling with organic manute treated with *Trichoderma viride* and need based application of Chlirothalonil 2 g+ Thiophenate methyl 1 g/ l of water **Technology option 2:** Deep ploughing during land preparation , Seed treatment with Thiram 75% @ 2.5 g/ Kg of seed, pit filling with organic manute treated with *Trichoderma harzianum* and need based application of Chlirothalonil 2 g+ Thiophenate methyl 1 g/ l of water **Farmers' practice:** Deep ploughing during land preparation, Indiscriminate use of fungicide like carbendazim, mancozeb, propiconazole etc.
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

Technology option	% infected plants after 30 DAT	% infected plants after 60 DAT	% infected plants after 90 DAT	Average yield (q/ha)	Gross cost (Rs./ha)	Gross return (Rs./ha)	BC Ratio
Technology option 1: Deep ploughing during land preparation**,**Seed treatment with Thiram 75% @ 2.5 g/ Kg of seed, pit filling with organic manute treated with *Trichoderma viride* and need based application of Chlirothalonil 2 g+ Thiophenate	-	0.52	0.84	80.69	90000/-	201725/-	2.24

		methyl 1 g/ l of water							
		Technology option 2: Deep ploughing during land preparation , Seed treatment with Thiram 75% @ 2.5 g/ Kg of seed, pit filling with organic manute treated with *Trichoderma harzianum* and need based application of Chlirothalonil 2 g+ Thiophenate methyl 1 g/ l of water	-	0.46	0.93	81.53	90000/-	203825/-	2.26
		Farmers' practice: Deep ploughing during land preparation, Indiscriminate use of fungicide like carbendazim, mancozeb, propiconazole etc.	-	3.01	7.59	76.24	88000/-	196000/-	2.22
		SEm+		**0.31**	**0.35**	**0.87**			
		CD(P=0.05)		**1.1**	**1.066**	**2.81**			
7.	Final recommendation for micro level situation	From the result it is clear that the Technology option 1 and Technology option 2 were better than farmer's practice and there is no significant difference in the performance of both the technology options. But due to less rainfall , the disease incidence is less in this year. **The experiment should be repeated in next year.**							
8.	Constraints identified and feedback for research	Deep ploughing is a problem now a days.							
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. Though disease incidence is less in this year but the health conditions of the plants of Technology option 1 & 2 were much better than farmers practice.							

Thematic area: **Integrated disease management**

Problem definition: Heavy loss in chilli due to collar rot

Technology assessed: Integrated disease management.

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
Technology option 1: Deep ploughing during land preparation**,**Seed treatment with Thiram 75% @ 2.5 g/ Kg of seed, pit filling with organic manute treated with *Trichoderma viride* and need based application of Chlirothalonil 2 g+ Thiophenate methyl 1 g/ l of water	7	-	0.52	0.84	80.69	90000/-	201725/-	2.24
Technology option 2: Deep ploughing during land preparation , Seed treatment with Thiram 75% @ 2.5 g/ Kg of seed, pit filling with organic manute treated with *Trichoderma harzianum* and need based application of Chlirothalonil 2 g+ Thiophenate methyl 1 g/ l of water		-	0.46	0.93	81.53	90000/-	203825/-	2.26
Farmers' practice: Deep ploughing during land preparation, Indiscriminate use of fungicide like carbendazim, mancozeb, propiconazole etc.		-	3.01	7.59	76.24	88000/-	196000/-	2.22
SEm+		**0.35**	**0.31**	**0.35**	**0.87**			
CD(P=0.05)		**1.08**	**1.1**	**1.066**	**2.81**			

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

Recommendation: Seed treatment with Thiram 75% @ 2.5 g/ Kg of seed, Spraying with Tricyclozole 75 WP @ 1.5 g/L after initiation of infestation is recommended for eggective management of blast in paddy.

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:** seedling raising in poly packet under 60 mesh insect proof net, spraying with cymoxanil 8% + Mancozeb 50% @ 2.0 g/L after initiation of infestation. **Technology option 2:** seedling raising in poly packet under 60 mesh insect proof net, 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	**Technology option**	**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**
		Technology option 1 = seedling raising in poly packet under 60 mesh insect proof net, spraying with cymoxanil 8% + Mancozeb 50% @ 2.0 g/L after initiation of infestation.	9.43	5.97	5.67	289.17	1.15 lakh	2.89 lakh	2.51
		Technology option 2 = seedling raising in poly packet under 60 mesh insect proof net, spraying with Azoxystrobin 23% SC @ 1.5ml/L after initiation of infestation.	9.56	4.01	3.41	302.56	1.19 lakh	3.02 lakh	2.54
		Farmers' practice: Indiscriminate use of pesticide	9.49	10.46	10.63	209.46	1.20 lakh	2.09 lakh	1.74

		fungicide like carbendazim, mancozeb, propiconazole							
		SEm+	**0.59**	**0.97**	**1.56**				
		CD(P=0.05)	**2.11**	**3.41**	**4.61**				
7.	Final recommendation for micro level situation	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 seedling raising in poly packet under 60 mesh insect proof net, spraying with Azoxystrobin 23% SC @ 1.5ml/L after initiation of infestation exhibited the best result. So, Spraying with Azoxystrobin 23% SC @ 1.5ml/L after initiation of infestation is recommended for effective management of downy mildew of cucumber.							
8.	Constraints identified and feedback for research	Azoxystrobin 23% Sc is also a very costly chemical. This year due to covid, farmer faced problem of marketing							
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 fungicide.

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
Technology option 1 = seedling raising in poly packet under 60 mesh insect proof net, spraying with cymoxanil 8% + Mancozeb 50% @ 2.0 g/L after	7	9.43	5.97	5.67	289.17	1.15 lakh	2.89 lakh	2.51

initiation of infestation.								
Technology option 2 = seedling raising in poly packet under 60 mesh insect proof net, spraying with Azoxystrobin 23% SC @ 1.5ml/L after initiation of infestation.		9.56	4.01	3.41	302.56	1.19 lakh	3.02 lakh	2.54
Farmers' practice: Indiscriminate use of pesticide fungicide like carbendazim, mancozeb, propiconazole		9.49	10.46	10.63	209.46	1.20 lakh	2.09 lakh	1.74
SEm±		**0.59**	**0.97**	**1.56**				
CD(P=0.05)		**2.11**	**3.41**	**4.61**				

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

Recommendation: seedling raising in poly packet under 60 mesh insect proof net, spraying with Azoxystrobin 23% SC @ 1.5ml/L after initiation of infestation is recommended for effective management of downy mildew of cucumber. **It is also recommended to carry out this experiment for another year.**

OFT-3

1.	Title of On farm Trial	**Evaluation of integrated nutrient management practice through use of bio-fertilizer for Kharif paddy**
2.	Problem diagnosed	The soils of the area are lacking with organic matter content and the farmers are habituated with such a cultivation practice where there is no or minimum use of any organic inputs in soil. Fertilizers are used randomly without maintaining proper dose. Therefore, the yield of paddy crop is diminishing with deterioration of soil health.
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	**Farmers' practice:** Imbalanced and indiscriminate nitrogen use **Technology option 1:** Recommended dose of fertilizer **Technology option 2:** BIO-NPK liquid bio-fertilizer + 75% of the recommended dose of fertilizer **Technology option 3:** BIO-NPK liquid bio-fertilizer + 50% of the recommended dose of fertilizer
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	National Bureau of Agriculturally important Micro-organisms, ICAR
5.	Production system and thematic area	Paddy-Mustard-Sesame Nutrient Management

6.	Performance of the Technology with performance indicators	Technology option 2 i.e BIO-NPK liquid bio-fertilizer with 75% of the recommended dose of fertilizer was found more in terms of yield but in terms of Nitrogen Use Efficiency, Partial factor productivity and Benefit cost ratio better result was obtained from Technology option 3
7.	Final recommendation for micro level situation	Technology option 3 i.e BIO-NPK liquid bio-fertilizer with 50% of the recommended dose of fertilizer is recommended
8.	Constraints identified and feedback for research	Farmers were not very much interested in using the material during the first phase of the trial as they weren't aware of the content of the input.
9.	Process of farmers participation and their reaction	After mobilizing the farmers' awareness regarding usefulness of bio-fertilizer they participated in the trial with great enthusiasm. They found that how indiscriminate use of nitrogenous fertilizer could easily be controlled through this 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 BIO-NPK liquid bio-fertilizer during sowing 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. (100 grain wt.)							
Farmer's practice: Imbalanced and	5	10.9	137.7	24.9	38.6	9.7	45.2	53240.0	75270.0	22030.0	1.41

indiscriminate nitrogen use											
Technology option 1: Recommended dose of fertilizer (NPK: 60:30:30 kg/ha)		15.1	160.2	30.6	48.9	26.2	76.8	57702.0	95355.0	37653.0	1.65
Technology option 2: BIO-NPK liquid bio-fertilizer + 75% of the recommended dose of fertilizer		15.8	162.5	32.4	51.5	31.8	85.5	53250.0	100425.0	47175.0	1.89
Technology option 3: BIO-NPK liquid bio-fertilizer + 50% of the recommended dose of fertilizer		14.9	161.7	31.9	50.6	34.7	88.2	51350.0	98670.0	47320.0	1.92
SEm±		0.56	1.66	0.95	1.62						
CD (P=0.05)		1.73	5.13	2.93	5.00						

Results: Very meager increase in terms of yields was found from Technology option 2 i.e BIO-NPK liquid bio-fertilizer with 75% of the recommended dose of fertilizer in comparison with Technology option 3. But in terms of Nitrogen Use Efficiency, Partial factor productivity

and Benefit cost ratio better result was obtained from Technology option 3. Therefore, considering all the attributes Technology option 3 is recommended at the micro level.

OFT-4

1.	**Title of On farm Trial**	**Evaluation on impact of different microbial consortium on in situ crop residue decomposition**
2.	**Problem diagnosed**	Timely management of crop residue after harvesting of Kharif paddy is a serious concern for the farmers. They are compelled to burn the stubbles of the paddy crop which creates serious soil health deterioration and environmental hazard.
3.	**Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)**	**Farmers' practice:** Burning of crop residues after harvest **Technology option 1:** Use of waste decomposer solution @500 lt/ha **Technology option 2:** Use of IARI microbial inoculant capsule solution @525 lt/ha
4.	**Source of Technology (ICAR/ AICRP/SAU/other, please specify)**	National Centre of Organic Farming, Gaziabad, ICAR and IARI, Pusa
5.	**Production system and thematic area**	Paddy-Mustard-Sesame Natural Resource Management
6.	**Performance of the Technology with performance indicators**	Among the technologies Technology option 2 i.e use of IARI microbial inoculant capsule solution found to be the best as it decomposes the crop residues within 25-30 days and soil quality also enhanced under the practice.
7.	**Final recommendation for micro level situation**	Second year trial.
8.	**Constraints identified and feedback for research**	The farmers were not willing to prepare the solutions as it requires few steps and they even didn't aware regarding the new input also.
9.	**Process of farmers participation and their reaction**	After involving the farmers in the programme and explaining the benefits of the technology they were very much keen to prepare the solutions and waited with great interest for judging the result after using the technology.

Thematic area: **Natural Resource Management**

Problem definition: Timely management of crop residue after harvesting of Kharif paddy is a serious concern for the farmers. They are compelled to burn the stubbles of the paddy crop which creates serious soil health deterioration and environmental hazard.

Technology assessed: Use of different microbial consortium solutions for in-situ crop residue decomposition.

Table:

Technology option	No. of trials	No. of days to decomposition	Soil quality indicators								
			Soil Physico-chemical Properties						Soil Biological Properties		
			pH	EC (ds/m)	Organic carbon (%)	Ava. N (kg/ha)	Ava. P (kg/ha)	Ava. K (kg/ha)	MBC[1] (µg.CO_2.C/gm dry soil)	SMR[2](mg.CO_2.C/gm dry soil/day)	FDA[3] (µg/gm dry soil)
Farmers' practice: Burning of crop residues after harvest.	7	-	6.12	0.08	0.47	252.4	75.8	300.3	205.6	0.506	29.56
Technology option 1: Use of waste decomposer solution @500 lt/ha.		35-40	6.34	0.13	0.51	384.6	84.9	355.5	387.2	0.685	49.50
Technology option 2: Use of IARI microbial inoculant capsule		25-30	6.22	0.16	0.55	405.6	90.3	349.9	399.6	0.744	50.10

solution @525 lt/ha.											

[1]MBC : Soil microbial biomass carbon; [2]SMR : Soil microbial respiration; [3]FDA : Fluorescein Diacetate Hydrolysis.

Results: Best result was obtained under Technology option 2 with use of IARI microbial inoculant capsule solution for in-situ crop residue degradation.

OFT-5

1.	Title of On farm Trial	**Performance evaluation of foliar spray of Nutrients at flower initiation stage on Greengram**
2.	Problem diagnosed	Low productivity of local cultivars during *Summer* season under irrigated farming situation of high humid New Alluvial Zone, Nadia. Low production potentiality of Greengram is due to neglected cultivation.
3.	Details of technologies selected for assessment/refinement	**Farmer Practice:** No foliar Spray of Nutrients **Technology option1:** Foliar spray of water soluble fertilizers 18:18:18 @ 2g/ *l* of water at flower initiation stage (25-30 DAS) + Micronutrients @ 2g/ *l* of water at 35-40 DAS **Technology option 2:** Foliar spray of water soluble fertilizers 12:61:0 and 13:0:45 both @ 1g/ *l* of water at flower initiation stage (total 2g/*l*) (25-30 DAS) + Micronutrients @ 2g/ *l* of water at 35-40 DAS **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	Greengram-Vegetables and Seed Production
6.	Performance of the Technology with performance indicators	**Technology option 2:** Foliar spray of water soluble fertilizers 12:61:0 and 13:0:45 both @ 1g/ *l* of water at flower initiation stage (total 2g/*l*) (25-30 DAS) + Micronutrients @ 2g/ *l* of water at 35-40 DAS

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 stage exhibited 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: Low productivity of local cultivars during *Summer* season under irrigated farming situation of high humid New Alluvial Zone, Nadia. Low production potentiality of Greengram is due to neglected cultivation.

Technology assessed: **Farmer Practice:** No foliar Spray of Nutrients

Technology option1: Foliar spray of water soluble fertilizers 18:18:18 @ 2g/ *l* of water at flower initiation stage (25-30 DAS) + Micronutrients @ 2g/ *l* of water at 35-40 DAS

Technology option 2: Foliar spray of water soluble fertilizers 12:61:0 and 13:0:45 both @ 1g/ *l* of water at flower initiation stage (total 2g/*l*) (25-30 DAS) + Micronutrients @ 2g/ *l* of water at 35-40 DAS

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	38.8	5.8	68.4	1.0	21.6	8.6	31,750	51,600	19,850	1.6
Technology option1: Foliar spray of 2g/ *l* Urea at flower initiation stage		40.4	6.8	75.8	1.6	22.8	10.2	32,500	61,200	28,700	1.9
Technology option 2: Foliar spray of 2g/ *l*DAP + 0.2 % Boron at flower initiation stage		44.6	7.2	82.8	1.8	24.2	10.8	32,500	64,800	32,300	2.0
CD (5%)	-	3.46	0.518	6.04	0.092	NS	0.752	-	-	-	-

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-6

1	Title of On farm Trial	**Effect of Mulching, border crops and application of sea weed extract on seed quality of Chilli (Variety: Bidhan Chilli-4) under irrigated farming situation of high humid New Alluvial Zone, Nadia**.
2	Problem diagnosed	Chilli is an often cross pollinated crop, where the extend of cross pollination is upto 7 to 36 %.Farmers save their own seed for OP varieties like Chilli, which are not 100% genetically pure. Minimum isolation distance required for Chilli is 400 m for foundation and hybrid seed and 200 m for certified seed production are necessary. But in Farmers field condition it's very tough to maintain such long isolation. To solve this problem we use 40 mesh sieve net cover for individual plant along with double row maize border. Seed quality plays an important role in the production

		of any crops. Characteristics such as 100% genetically pure seeds with high germination percentage, purity, vigor, and appearance are important to farmers. Achieving and maintaining high seed quality is the goal of this simple technical intervention.
3	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	**Farmer Practice : ** Variety: Bidhan Chilli-4 with normal cultivation practices generally followed by the farmers. **Technology option1 :** 25 micron poly mulch + Crop border + 40 mesh sieve net cover for individual plant (10-15 plants only). **Technology option 2:** 25 micron poly mulch + Crop border + 40 mesh sieve net cover for individual plant (10-15 plants only) + two foliar spray of sea weed extract @ 2ml / *l* of water at 15 DAT and at flower initiation stage. **For Technology option 1 and Technology option 2:** Seed treatment- Carbendazim @ 2g per kg of seed. 450 *l of* water is required for spraying one hectare of land. In double row Maize border the Maize seed will be sown on the same day of Chilli seed sowing i.e. in 1st week of August. Date of sowing 1st week of August and transplanting 1st week of September. Spacing: 50 cm X 50 cm Seed rate: 300-350 g/ ha Fertilizer : 60:60:60 basal and Water soluble fertilizer (18-18-18) @ 4 g/ *l* of water at 30-35 DAT and 50-55 DAT. Sea weed extract @ 2ml / *l* of water at 15 DAT and at flower initiation stage.
4	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	AICRP on Vegetable Crops, BCKV
5	Production system and thematic area	Vegetable based production system and Seed quality enhencement
6	Performance of the Technology with performance indicators	**Technology option 2:** 25 micron poly mulch + Crop border + 40 mesh sieve net cover for individual plant (10-15 plants only) + two foliar spray of sea weed extract @ 2ml / *l* of water at 15 DAT and at flower initiation stage.
7	Final recommendation for micro level situation	From the result it is clear that the **Technology option 2** i.e., 25 micron poly mulch + Crop border + 40 mesh sieve net cover for individual plant (10-15 plants only) + two foliar spray of sea weed extract @ 2ml / *l* of water at 15 DAT and at flower initiation stage. Seed treatment- Carbendazim @ 2g per kg of seed.

		450 *l of* water is required for spraying one hectare of land. In double row Maize border the Maize seed will be sown on the same day of Chilli seed sowing i.e. in 1st week of August. Date of sowing 1st week of August and transplanting 1st week of September. Spacing: 50 cm X 50 cm Seed rate: 300-350 g/ ha Fertilizer : 60:60:60 basal and Water soluble fertilizer (18-18-18) @ 4 g/ *l* of water at 30-35 DAT and 50-55 DAT. Sea weed extract @ 2ml / *l* of water at 15 DAT and at flower initiation stage.
8	Constraints identified and feedback for research	Nil
9	Process of farmers participation and their reaction	PRA, GD, Training programmes. Farmers are ready to accept the technology

Thematic area:

Problem definition: Chilli is an often cross pollinated crop, where the extend of cross pollination is upto 7 to 36 %.Farmers save their own seed for OP varieties like Chilli, which are not 100% genetically pure. Minimum isolation distance required for Chilli is 400 m for foundation and hybrid seed and 200 m for certified seed production are necessary. But in Farmers field condition it's very tough to maintain such long isolation. To solve this problem we use 40 mesh sieve net cover for individual plant along with double row maize border. Seed quality plays an important role in the production of any crops. Characteristics such as 100% genetically pure seeds with high germination percentage, purity, vigor, and appearance are important to farmers. Achieving and maintaining high seed quality is the goal of this simple technical intervention.Technology assessed: **Farmer Practice:** No foliar Spray of Nutrients

Technology assessed:**Farmer Practice :** Variety: Bidhan Chilli-4 with normal cultivation practices generally followed by the farmers.
Technology option1 : 25 micron poly mulch + Crop border + 40 mesh sieve net cover for individual plant (10-15 plants only).
Technology option 2: 25 micron poly mulch + Crop border + 40 mesh sieve net cover for individual plant (10-15 plants only) + two foliar spray of sea weed extract @ 2ml / *l* of water at 15 DAT and at flower initiation stage.

Table:

Technology option	No. of trials	Plant Height (cm)	Fresh fruit weight (g)	Dry fruit weight (g)	1000 seed weight (g)	Seed yield/fruit (g)	Yield of fresh fruit (q)	Seed germination (%)
Farmer Practice	**7**	90.4	1.4	0.45	0.2	72.4	90	90.4
Technology option1		91.6	1.5	0.47	0.22	79.2	92	91.6
Technology option 2		93.2	1.7	0.51	0.25	86.5	94	93.2
CD (5%)		NS	0.1123	0.038009	0.017638	6.397012	NS	NS

Results: From the result it is clear that the **Technology option 2** i.e., 25 micron poly mulch + Crop border + 40 mesh sieve net cover for individual plant (10-15 plants only) + two foliar spray of sea weed extract @ 2ml / *l* of water at 15 DAT and at flower initiation stage exhibited better performance than the other options.

OFT- 7

1.	Title of On farm Trial	Climate resilient vegetable production (Cabbage) with adaptation of plug tray seedlings and double row planting
2.	Problem diagnosed	Frequent occurrence of erratic and heavy rainfall causing huge loss to vegetable cultivation and subsequent low availability of harvestable produce
3.	Details of technologies selected for assessment/refinement	Farmers' practice: Cultivation of cabbage by seed bed grown seedling with single row transplanting Technology option 1: Cultivation of cabbage by plug tray grown seedling with single row planting. Technology option 2: Cultivation of cabbage by plug tray grown seedling with double row planting.
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	BCKV

5.	Production system and thematic area	Vegetable based & Crop Diversification
6.	Performance of the Technology with performance indicators	From the results it is found that Technology option 2 (Cultivation of cabbage by plug tray grown seedling with double row planting) performed better than other treatments.
7.	Final recommendation for micro level situation	From the table, it is clear that technology option 2 i.e. cultivation of cabbage by plug tray grown seedling with double row planting performed better than the other option. Plug tray grown seedlings with double row planting has resulted higher yield of cabbage i.e. 47.4 t/ha with 90% seedling survival. Return from technology option 2 is higher than the other, which is Rs. 4.57/- per rupee invested. Double row planting has helped to harvest about 96% of the planted population of cabbage, whereas it is only 86% and 75% in option 1 and farmers' practice respectively.
8.	Constraints identified and feedback for research	Waterlogged resistant varieties of cabbage may performed better, development of such type of varieties are required.
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: Non-adaptation of climate resilient cultivation methods

Technology assessed: Climate resilient cultivation methods

Table:

Technology option	Yield /ha (t/ha)	Seedling survival rate (%)	% of harvestable plant	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	B:C Ratio
Farmers' practice: Cultivation of cabbage by seed bed grown seedling with single row transplanting.	31.5	65	75	150000	447300	297300	2.98
Technology option 1: Cultivation of cabbage by plug tray grown seedling with single row planting.	40.5	89	86	165000	599400	434400	3.63
Technology option 2: Cultivation of cabbage by plug tray grown seedling with double row planting.	47.4	90	96	165000	754256	589256	4.57
CD (P=0.05)	4.4						

Results:
From the table, it is clear that technology option 2 i.e. cultivation of cabbage by plug tray grown seedling with double row planting performed better than the other option. Plug tray grown seedlings with double row planting has resulted higher yield of cabbage i.e. 47.4 t/ha with 90% seedling survival. Return from technology option 2 is higher than the other, which is Rs. 4.57/- per rupee invested. Double row planting has helped to harvest about 96% of the planted population of cabbage, whereas it is only 86% and 75% in option 1 and farmers' practice respectively.

OFT-8

1.	Title of On farm Trial	**Introduction of low cost poly walking tunnel for year round off season vegetable cultivation**
2.	Problem diagnosed	Seasonal glut is causing very low return and results the venture as huge loss. Micro-climatic adjustment by use of low cost poly cover may favours off season (Dec. to Feb.) harvest and subsequent higher market price
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	Farmers' practice: Rabi: Cauliflower- Summer/kharif: pointed gourd Technology option 1: Rabi: Pointed Gourd in Bed– Summer/kharif: Cauliflower. Technology option 2: Rabi: Pointed gourd in trellis- Summer/kharif: Cauliflower.
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	BCKV
5.	Production system and thematic area	Vegetable based (Cucurbits-solanaceous-cole crops). Off season / high tech cultivation
6.	Performance of the Technology with performance indicators	

Technology option	Yield of Pointed Gourd (q/ha)	Pointed Gourd Equivalent Yield of Cauliflower (q/ha)	System Productivity (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	B:C Ratio
Farmers' practice: Rabi: Cauliflower- Summer/kharif: pointed gourd	**405.0**	**23.4**	**428.4**	**348750**	**829125**	**480375.0**	**2.38**
Technology option 1: Rabi: Pointed Gourd in Bed– Summer/kharif: Cauliflower	**356.3**	**105.9**	**462.1**	**330000**	**866250**	**536250.0**	**2.63**

		Technology option 2 : Rabi: Pointed gourd in trellis- Summer/kharif: Cauliflower	**468.8**	**98.8**	**567.6**	**431250**	**1222875**	**791625.0**	**2.84**
		CD (P=0.05)	**11.4**	**4.9**					
7.	Final recommendation for micro level situation	From the result it is clear that the Technology option II i.e. Pointed gourd in trellis under poly walking tunnel cover in Rabi + Summer cultivation of cauliflower as intercrop has perform significantly superior than the other option as well as the farmers' practice with respect to total productivity (567.6 q/ha) and net return (7,91,625/- /ha) with highest BCR i.e. 2.84. Though the T.O. I has lower net return i.e. Rs. 5,36,250/- but the BCR is 2.63, which is nearly at par with T.O. II. Considering two years of field trial, it may be suggested that both the Technology options have showed efficacy over the existing farmer's practice, the packages of cultivation for both optioned may be recommended for FLD programme considering huge demand of cucurbits in winter and subsequent premium price.							
8.	Constraints identified and feedback for research	OFT conducted by "Kajli" variety, other varieties may be evaluated in Technology options.							
9.	Process of farmers participation and their reaction	PRA, GD and training and Field Day.							

Thematic area: Off season / high tech cultivation of Vegetable
Problem definition: Seasonal glut is causing very low return and results the venture as huge loss.
Technology assessed: Micro-climatic adjustment by use of low cost poly cover may favours off season (Dec. to Feb.) harvest and subsequent higher market price

Table:

Technology option	Yield of Pointed Gourd (q/ha)	Pointed Gourd Equivalent Yield of Cauliflower (q/ha)	System Productivity (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	B:C Ratio
Farmers' practice: Rabi: Cauliflower-Summer/kharif: pointed gourd	**405.0**	**23.4**	**428.4**	**348750**	**829125**	**480375.0**	**2.38**
Technology option 1: Rabi: Pointed Gourd in Bed–Summer/kharif: Cauliflower	**356.3**	**105.9**	**462.1**	**330000**	**866250**	**536250.0**	**2.63**
Technology option 2 : Rabi: Pointed gourd in trellis-Summer/kharif: Cauliflower	**468.8**	**98.8**	**567.6**	**431250**	**1222875**	**791625.0**	**2.84**
CD (P=0.05)	**11.4**	**4.9**					

Recommendation:

Technology option II i.e. Pointed gourd in trellis under poly walking tunnel cover in Rabi + Summer cultivation of cauliflower as intercrop has perform significantly superior than the other option as well as the farmers' practice with respect to total productivity (567.6 q/ha) and net return (7,91,625/- /ha) with highest BCR i.e. 2.84. Though the T.O. I has lower net return i.e. Rs. 5,36,250/- but the BCR is 2.63, which is nearly at par with T.O. II.

Considering two years of field trial, it may be suggested that both the Technology options have showed efficacy over the existing farmer's practice, the packages of cultivation for both optioned may be recommended for FLD programme considering huge demand of cucurbits in winter and subsequent premium price.

3.2 **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	12				8		20		20	NA
2	Pointed gourd (Cucurbitacious crop)	Fruit fly management	Cuelure trap	5.0	5.0	28				13		41		41	NA
3	Guava	Fruit fly management	Methyl euzenol trap	5.0	10.0	18				3		21		21	NA
4	Banana	Panama wilt management	Sucker treatment with Carbendazim @ 2 g/ L of water, & pit treatment with *Trichoderma spp.*	2.0	4.0	16				14		30		30	NA
5	Paddy	INM	Spraying of Zn micronutrient	2.0	5.0	38	0	0	0	8	0	46	0	46	NA
6	Paddy	INM	Green manuring	3.0	6.3	28	0	0	0	37	0	65	0	65	NA
7	Paddy	INM	Leaf Colour Chart	3.0	3.0	9	0	0	0	15	0	24	0	24	NA
8	All	Production of inputs at site	Novcom composting (Composting techniques and use of organic inputs)	10 units	11 units	51	3	0	0	69	5	120	8	128	NA
9	Vegetable (Cauliflower & Cabbage)	INM	Boron application	2.0	5.0	17	2	0	0	19	2	36	4	40	NA
10	Kharif Paddy	Intriduction of new variety	DDR-44	3.0	3.0	-	-	-	-	12	2	12	2	14	NA
11	Tomato	Horticulture	Improved production	2	2	12	0	0	0	21	0	33	0	33	NA

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	
			technology with var. Arka Samrat												
12	Bitter Gourd	Horticulture	Improved production technology with var. Meghnad-2	1	1	6	0	1	5	12	7	19	12	31	NA
13	Solanaceous & Cole crops	Vegetable nursery management	Seedling production in plug tray	20 units	20 units	2	4	0	0	2	12	4	16	20	NA
14	Mango	Horticulture	Improved production technology through use of mango special and planofix to control flower & fruit drop and increase yield	5	5	6	0	0	0	19	0	25	0	25	NA
15	Banana	Value Addition	bunch cover (polypropelene)	1	2	7	0	0	0	11	1	18	1	19	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	1.21	16.35	105.53	Mango	Old orchard	May- july		
Pointed gourd (Cucurbitacious crop)	Summer	Irrigated	Loam to Sandy loam	1.86	17.58	102.56	Vegetable	1st week of march	April - july		
Guava	Round the year	Irrigated	Loamy	1.59	18.23	111.63	Guava	Old orchard	Throughout the year		

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					
Banana	Round the year	Irrigated	Loamy	1.46	18.54	110.64	Banana	February	January		
Paddy	Rabi	Irrigated	Loamy clay	277.5	50.3	301.4	Mustard	3rd week of January	4th week of April	-	-
Paddy	Kharif	Rainfed	Clay loam	315.2	80.2	220.1	Sesame	4th week of July	3rd week of October	-	-
Paddy	Kharif	Rainfed	Clay loam	188.2	78.3	285.7	Sesame	3rd week of July	3rd week of October	-	-
Vegetables	Rabi	Irrigated	Sandy Clay Loam	355.3	49.6	178.9	Pointed gourd	1st week of October	4th week of December	-	-
Paddy	Kharif	Irrigated	Clay loam	208.6	62.3	201.8	Sesame	3rd week of July	1st week of December	-	-
Tomato	Rabi	Irrigated	Sandy loam, Clayey loam	278.3	68.3	297.3	Paddy	02.10.22-12.10.22	19.01.23-10.03.23	-	-
Bitter Gourd	Summer & Kharif	Irrigated & Rainfed	Clayey loam	232-286	22-31	220-248	Potato / Vegtables	08.09.22-16.09.22	12.11.22-15.01.23	-	-
Solanaceous & Cole crops	Rabi	Irrigated	Loam to Sandy loam	229-375	25-28	210-250	Vegetable	Sept.,22	From 2nd week of Nov.		
Mango	Rabi& Summer	Irrigated	Sandy loam/Clayey loam	228-280	20-26	218-248	Sole crop (Mango)	N.A.	Continuing		
Banana	Round the year	Irrigated	Loamy	239.6	59.4	247.3	Banana	February	January		

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
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

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
Black gram	Seed production	**PU-31** Variety, Seed treatment, Bio-fertilizer, Humic and Fulvic acid, PPC	121	20.0	11.4	10.1	12.9	33,500	59,280	25,780	1.8	32,400	52,520	20,120	1.6

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
Mango	Fruit fly management	Methyl euzenol trap	30	10	326.24	297.56	9.63	6% less insecticide	-	167000	526890	359890	3.15	162800	468840	306040	2.87
Pointed gourd (Cucurbitacious crop)	Fruit fly management	Cuelure trap	36	7	227.58	205.14	10.93	10.2% less insecticide spray	-	135000	248690	113690	1.84	139000	224630	85630	1.61
Guava	Fruit fly management	Methyl euzenol trap	23	5	270.89	230.46	17.54	10 % less pesticide spray	-	179500	534720	355220	2.97	179600	462820	283220	2.57
Banana	Panama wilt management	Sucker treatment with Carbendazim @ 2 g/ L of water, & pit treatment with *Trichoderma spp.*	28	3.7	250 bunch	224 bunch	11.6	26% less infestation in treated plants	-	262500	527260	264760	2.01	279300	482300	203000	1.72
Paddy	Integrated nutrient management	Effect of Zn on paddy	46	5.0	59.5	55.4	7.4		-	79530	116025	36495	1.46	79452	108030	28578	1.34
Paddy	Integrated nutrient management	Green manuring	65	6.3	50.2	43.1	16.5	(34% reduction in N-fertilizer)	-	62540	97890	35350	1.57	64510	84045	19535	1.26
Paddy	Integrated nutrient management	Leaf Colour Chart	24	3.0	48.8	41.3	18.2	(32% reduction in N-fertilizer)	-	59550	95160	35610	1.60	62450	80535	18085	1.29
Vegetables (Cauliflower)	INM	Boron application	40	5.0	339.3	310.1	9.4		-	117500	288405	170905	2.45	115500	279090	163590	2.42

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
Tomato	Horticulture	Improved production technology with var. Arka Samrat	33	2	645.3	565.2	18			1,95,800	3,97,600	2,01,800	2.03	1,80,700	3,20,400	1,39,700	1.77
Tomato	Vegetable Nursery	Seedling production in plug tray	10	-	97 % success	73 % success	24%	Crop harvested in 60 DAP	Crop harvested in 74 DAP	31,700/- per bigha	58,000/- ,per bigha	26,300/- per bigha	1.83	27,700/- per bigha	42,500/- per bigha	14,800/- per bigha	1.53
Cucumber	Vegetable nursery	Seedling rising of cucurbits in poly bags.	10	-	86 % success	70% success	16%	Crop harvested in 55 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
Mango	Improved crop production Practices	Improved production technology through use of mango special and planofix	25	5	279	180	55%	-	-								
Banana	Banana value addition	bunch cover (polypropelene)	19	2 ha	2.73% scarred finger	42.78 % scared finger	40.05 %	Ave. Sale value Rs. 240/bunch	Ave. Sale value Rs. 150/bunch	2,61,000 /- per ha	7,12,500 /- per ha	4,51,500 /- per ha	2.73	2,25,000 /- per ha	5,13,000 /- per ha	2,88,000 /- per ha	2.28

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
Oyster mushroom	Enterprise development															
Button mushroom																
Composting	Production of input at site	Novcom Composting	128	11	-	-	-	-	-	-	-	-	-	-	-	-
Sericulture																
Apiculture																
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

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)			
Cereals				Demo	Local check	% change	Gross Cost	Gross Return	Net Return	BCR
Bajra										
Maize										
Paddy										
Sorghum										
Wheat										
Others (Pl.specify)										
Total										
Oilseeds										
Castor										
Mustard										
Safflower										
Sesame										
Sunflower										
Groundnut										
Soybean										
Others (Pl.specify)										

Total										
Pulses										
Greengram										
Blackgram										
Bengalgram										
Redgram										
Others (Pl.specify)										
Total										
Vegetable crops										
Bottle gourd										
Capsicum										
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 6 %. It is most effective when large area covered by the trapping method. But in the year 2021 due to lockdown mango farmers faced huge loss
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 10.2%. It is most effective when large area covered by the trapping method.
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 10 %. It is most effective when large area covered by the trapping method.
4	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.
5	Paddy	The areas having deficiency in terms of Zn and affected with Khaira disease are well managed with the technology of application of foliar chelated Zn and crop yield increased over 7%.
6	Paddy	The soils of the district are lacking in terms of organic matter content. Practice of growing green manured crops like dhaincha adopted by the farmers and following the technology of green manuring they are able to produce 16.5% more yield and they also reduces the cost of cultivation by reducing the use of nitrogenous fertilizer to a tune of 34%. So, nitrogen use efficiency also increased following the technology.
7	Paddy	The farmers are habituated with indiscriminate use of nitrogenous fertilizer leading to low nitogen use efficiency. The technology of using leaf colour chart during different growth phases of paddy helped the farmers to reduce their nitrogenous fertilizer use and ulitmatly they achived 18% more yield with reduction of 32% nitrogeneous fertilizer.
8	Vegetable (Cole crops)	A great portion of the soils of the area are lacking with boron availability and deficiency symptoms of boron is profound particularly for the cole crops like cabbage, cauliflower etc. Application of boron fertilizer twice during the crop cycle is helpful to mitigate the problem of boron deficiency and an increase of more than 9% crop yield is noticed following the technology.
9	Composting	The method demonstrated is popularized as it is an effective technology for producing good quality matured compost only within 21-25 days with very less input cost. No permanent structure is needed for accomplishing the process and the farmers are astonished to notice the effect of using the technology both in

		terms of greater yield and reduced disesase-pest incidence.
10	Seedling production in plug tray	Caused early harvest, less disease problems, highly accepted by the farmer.
11	Seedling rising of cucurbits in poly bags.	Caused early harvest, less disease problems, highly accepted by the farmer.
12	Bunch cover (polypropelene)	Quality finger, scar free, high market acceptance.
13	Seedling production in plug tray	Caused early harvest, less disease problems, highly accepted by the farmer.

Extension and Training activities under FLD

Sl.No.	Activity	Date	No. of activities organized	Number of participants	Remarks
1.	Field days	29.10.2022, 10.11.2022	2	75	
2.	Farmers Training	18.04.2022, 26.05.2022, 06.07.2022, 30.11.2022, 08.04.2022, 10.07.2022, 12.08.2022, 09.06.2022, 29.07.2022, 16.08.2022, 02.09.2022, 06.12.2022, 17.01.2022, 11.02.2022, 16.02.2022, 17.03.2022, 12.04.2022, 15.04.2022, 17.05.2022, 20.05.2022, 25.05.2022, 01.06.2022, 08.06.2022, 11.07.2022, 18.08.2022, 15.09.2022, 08.12.2022, 13.12.2022	28	546	
3.	Media coverage				
4.	Training for extension functionaries	Throughout the year	2	80	DAESI

Performance of the demonstration under CFLD on Pulse and Oilseed Crops during Kharif 2022 and Rabi 2021-2022:

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.	Av.	D	S	P
1	Black gram	Sarada	10.1	7.8	7.7	15.0	**PU-31** Variety, Seed treatment, Bio-fertilizer, Humic and Fulvic acid, PPC	121	20.0	12.4	10.1	11.4	46	54	-24

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	**PU-31,** Variety, Seed treatment, Bio-fertilizer, Humic and Fulvic acid, Micronutriens, PPC	32,400/-	52,520/-	20,120/-	1.6	33,500/-	59,280/-	25,780/-	1.8

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/ household)
1	Blackgram **PU-31**	22,800	188	52.00	15	Nil	To fulfill the household need	13-14

D. Pulse 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	**PU-31,** Variety, Seed treatment, Bio-fertilizer, Humic and Fulvic acid, Micronutriens, PPC	Befitting with the existing farming system.	-	Seed treatment and Bio-fertilizer both are very low cost inputs, so technology may sustain.	High rain fall adversely affect the crop in some cases	Yes	Nil

E. Specific Characteristics of Technology and Performance

Specific Characteristic	Performance	Performance of Technology vis-a vis Local Check	Farmers Feedback
Variety- **PU-31**	Good	12.9 % yield increased than the locally used variety Sarada.	Variety is accepted by the farmers
Seed treatment: Inoculation of seed with Bio-fertilizers ***(Rhizobium)***	Nitrogen fixation @ 20-30 kg / ha Yield increase upto 16%	Highly recommended (***Rhizobium*** *@ 0.75* kg / 22.5kg of seed requiring for one hectare)	Very low cost imput
Humic and Fulvic acid	Better root growth	Highly recommended (Soil application of Humic and Fulvic acid with cow dung manure @ 1.9 *l* / ha during final land perparation)	Very low cost imput
PPC	Reduce insect pest and increase yield	Highly recommended	Very much usefull
Micronutrients	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

F. Extension activities under FLD conducted:

Sl. No.	Extension Activities organized	Date and place of activity		Number of farmer attended
		Date	Place	
1	Farmers Training	28.07.2022	Hatishala, Krishnanagar-II	10
2		04.08.2022	Arbolda,Santipur	10
3		10.08.2022	Gontra, Chakdaha	09
4		17.08.2022	Kadambogachi, Chakdaha	07
5		19.08.2022	Satsimulia,Haringhata	09
6		01.09.2022	Nadia KVK	40
7		19.09.2022	Hatishala, Krishnanagar-II	10
8		26.09.2022	Arbolda,Santipur	10

Seed distribution

Off-campus training

Field day

Initial stage

Input distribution

Pod development stage

J. Details of budget utilization

Crop (provide crop wise information)	Items	Budget Received (Rs.)	Budget Utilization (Rs.)	Balance (Rs.)
Lentil (*Rabi* 2021-2022)	i) Critical input	82,000.00	81,840.00	160.00
	ii) TA/DA/POL etc. for monitoring	3,000.00	-	3,000.00
	iii)Extension Activities (Field day)	2,500.00	-	2,500.00
	iv) Publicity materials	1,500.00	1,500.00	-
	v) Contingency	1,000.00	1,000.00	-
	Total	**90,000.00**	**84,340.00**	**5,660.00**
Blackgram (*Kharif* 2022-2023)	i) Critical input	1,64,000.00	1,63,753.00	247.00
	ii) TA/DA/POL etc. for monitoring	6,000.00	-	6,000.00
	iii)Extension Activities (Field day)	5,000.00	1,500.00	3,500.00
	iv) Publicity materials	3,000.00	3,000.00	-
	v) Contingency	2,000.00	1,848.00	152.00
	Total	**1,80,000.00**	**1,70,101.00**	**9,899.00**

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			ST			SC					
		M	F	T	M	F	T	M	F	T	M	F	T
I. Crop Production													
Weed Management													
Resource Conservation Technologies													
Cropping Systems													
Crop Diversification													
Integrated Farming													
Micro irrigation/irrigation													
Seed production													
Nursery management													
Integrated Crop Management													
Soil & water conservation													
Integrated nutrient Management													
Production of organic inputs													
Productivity enhancement in field crops													
Others													
Total													
II. Horticulture													
a) Vegetable Crops													
Production of low volume and high value crops													
Off0season vegetables													
Nursery raising													
Exotic vegetables													
Export potential vegetables													
Grading and standardization													
Protective cultivation													
Water Management													
Others													
Total (a)													
b) Fruits													
Training and Pruning													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			ST			SC					
		M	F	T	M	F	T	M	F	T	M	F	T
Layout and Management of Orchards													
Cultivation of Fruit													
Management of young plants/orchards													
Rejuvenation of old orchards													
Export potential fruits													
Micro irrigation systems of orchards													
Plant propagation techniques													
Others													
Total (b)													
c) Ornamental Plants													
Nursery Management													
Management of potted plants													
Export potential of ornamental plants													
Propagation techniques of Ornamental Plants													
Others													
Total I													
d) Plantation crops													
Production and Management technology													
Processing and value addition													
Others													
Total (d)													
e) Tuber crops													
Production and Management technology													
Processing and value addition													
Others													
Total (e)													
f) Spices													
Production and Management technology													
Processing and value addition													
Others													
Total (f)													
g) Medicinal and Aromatic Plants													
Nursery management													
Production and management technology													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			ST			SC					
		M	F	T	M	F	T	M	F	T	M	F	T
Post harvest technology and value addition													
Others													
Total (g)													
Total(a-g)													
III. Soil Health and Fertility Management													
Soil fertility management													
Integrated water management													
Integrated Nutrient Management													
Production and use of organic inputs													
Management of Problematic soils													
Micro nutrient deficiency in crops													
Nutrient Use Efficiency													
Balance Use of fertilizer													
Soil & water testing													
Integrated crop Management													
Crop diversification													
Others (Resource Conservation Technologies)	1	24	3	27	0	0	0	35	2	37	59	5	64
Total	**1**	**24**	**3**	**27**	**0**	**0**	**0**	**35**	**2**	**37**	**59**	**5**	**64**
IV. Livestock Production and Management													
Dairy Management													
Poultry Management													
Piggery Management													
Rabbit Management													
Animal Nutrition Management													
Disease Management													
Feed & fodder technologies													
Production of quality animal products													
Others													
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													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			ST			SC					
		M	F	T	M	F	T	M	F	T	M	F	T
efficiency diet													
Minimization of nutrient loss in processing													
Processing & cooking													
Gender mainstreaming through SHGs													
Storage loss minimization techniques													
Value addition													
Women empowerment													
Location specific drudgery reduction technologies													
Rural Crafts													
Women and child care													
Others													
Total													
VI. Agril. Engineering													
Farm machinery & its maintenance													
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													
Total													
VII. Plant Protection													
Integrated Pest Management													
Integrated Disease Management													
Bio0control of pests and diseases													
Production of bio control agents and bio pesticides													
Others (Low cost and nutrient efficient diet designing)	1	18	3	21	0	0	0	17	37	54	35	40	75
Total	**1**	**18**	**3**	**21**	**0**	**0**	**0**	**17**	**37**	**54**	**35**	**40**	**75**
VIII. Fisheries													
Integrated fish farming													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			ST			SC					
		M	F	T	M	F	T	M	F	T	M	F	T
Carp breeding and hatchery management													
Carp fry and fingerling rearing													
Composite fish culture													
Hatchery management and culture of freshwater prawn													
Breeding and culture of ornamental fishes													
Portable plastic carp hatchery													
Pen culture of fish and prawn													
Shrimp farming													
Edible oyster farming													
Pearl culture													
Fish processing and value addition													
Others													
Total													
IX. Production of Input at site													
Seed Production	2	11	0	11	0	0	0	14	0	14	25	0	25
Planting material production													
Bio0agents production													
Bio0pesticides production													
Bio0fertilizer production													
Vermi0compost production													
Organic manures production													
Production of fry and fingerlings													
Production of Bee0colonies and wax sheets													
Small tools and implements													
Production of livestock feed and fodder													
Production of Fish feed													
Mushroom production													
Apiculture													
Others (Resource Conservation Technologies)	1	11	5	16	2	0	2	34	0	34	47	5	52
Total	**3**	**22**	**5**	**27**	**2**	**0**	**2**	**48**	**0**	**48**	**72**	**5**	**77**
X. Capacity Building and Group Dynamics													
Leadership development													
Group dynamics													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			ST			SC					
		M	F	T	M	F	T	M	F	T	M	F	T
Formation and Management of SHGs													
Mobilization of social capital													
Entrepreneurial development of farmers/youths													
WTO and IPR issues													
Others													
Total													
XI. Agro forestry													
Production technologies													
Nursery management													
Integrated Farming Systems													
Others													
Total													
XII. Others (Pl. Specify)													
GRAND TOTAL	**5**	**64**	**11**	**75**	**2**	**0**	**2**	**100**	**39**	**139**	**166**	**50**	**216**

B) Rural Youth (on campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			ST			SC					
		M	F	T	M	F	T	M	F	T	M	F	T
Nursery Management of Horticulture crops	9	42	11	53	2	0	2	90	22	112	134	33	167
Training and pruning of orchards													
Protected cultivation of vegetable crops	3	70	21	91	8	5	13	36	31	67	114	57	171
Commercial fruit production													
Integrated farming													
Integrated Pest Management	2	12	6	18	0	0	0	10	2	12	22	8	30
Seed production	10	137	25	162	0	0	0	162	32	194	299	57	356
Production of organic inputs	6	40	1	41	0	0	0	47	2	49	87	3	90
Planting material production	1	5	2	7	1	0	1	4	3	7	10	5	15
Vermiculture	1	6	0	6	0	0	0	9	0	9	15	0	15
Mushroom Production													
Beekeeping	3	20	4	24	0	0	0	46	5	51	66	9	75

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			ST			SC					
		M	F	T	M	F	T	M	F	T	M	F	T
Sericulture													
Repair and maintenance of farm machinery and implements													
Value addition													
Small scale processing													
Post Harvest Technology													
Tailoring and Stitching													
Rural Crafts													
Production of quality animal products													
Dairying													
Sheep and goat rearing													
Quail farming													
Piggery													
Rabbit farming													
Poultry production													
Ornamental fisheries													
Composite fish culture													
Freshwater prawn culture													
Shrimp farming													
Pearl culture													
Cold water fisheries													
Fish harvest and processing technology													
Fry and fingerling rearing													
Crop Diversification	3	37	3	40	3	0	3	59	6	65	96	9	108
Others (Seed production)	1	28	2	30	0	0	0	7	0	7	35	2	37
Total	**39**	**397**	**75**	**472**	**14**	**5**	**19**	**470**	**103**	**573**	**881**	**183**	**1064**

C) Extension Personnel (on campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			ST			SC					
		M	F	T	M	F	T	M	F	T	M	F	T
Productivity enhancement in field crops													
Integrated Pest Management													
Integrated Nutrient management	16	253	41	294	0	0	0	250	37	287	503	78	581
Integrated Crop Management	6	81	16	97	0	0	0	107	16	123	188	32	220
Rejuvenation of old orchards													
Protected cultivation technology													
Production and use of organic inputs													
Care and maintenance of farm machinery and implements													
Gender mainstreaming through SHGs													
Formation and Management of SHGs													
Women and Child care													
Low cost and nutrient efficient diet designing													
Group Dynamics and farmers organization													
Information networking among farmers													
Capacity building for ICT application													
Management in farm animals													
Livestock feed and fodder production													
Enterprise development	1	32	3	35	0	0	0	35	3	38	67	6	73
Household food security													
Nursery management	6	59	12	71	8	0	8	96	21	117	163	33	196
Commercial fruit production	1	12	2	14	0	0	0	19	3	22	31	5	36
Planting material production	1	5	2	7	1	0	1	4	3	7	10	5	15
Resource Conservation Technologies	2	23	4	27	0	0	0	43	5	48	66	9	75
Seed Production	3	70	6	76	0	0	0	31	1	32	101	7	108
Crop Diversification	7	79	18	97	11	3	14	116	27	143	206	48	254
Others (cultivation of crops)	1	28	2	30	0	0	0	7	0	7	35	2	37
Total	**44**	**642**	**106**	**748**	**20**	**3**	**23**	**708**	**116**	**824**	**1370**	**225**	**1595**

D) Farmers and farm women (off campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			ST			SC					
		M	F	T	M	F	T	M	F	T	M	F	T
I. Crop Production													
Weed Management													
Resource Conservation Technologies													
Cropping Systems													
Crop Diversification													
Integrated Farming	1	16	0	16	0	0	0	63	0	63	79	0	79
Micro irrigation/irrigation													
Seed production													
Nursery management													
Integrated Crop Management													
Soil & water conservation													
Integrated nutrient Management													
Production of organic inputs													
Cultivation practices													
Post Harvest Technology													
Others													
Total	**1**	**16**	**0**	**16**	**0**	**0**	**0**	**63**	**0**	**63**	**79**	**0**	**79**
II. Horticulture													
a) Vegetable Crops													
Production of low volume and high value crops													
Off0season vegetables													
Nursery raising													
Exotic vegetables													
Export potential vegetables													
Grading and standardization													
Protective cultivation	2	16	2	18	1	0	1	21	0	21	38	2	40
Others (Nursery management)	2	27	3	30	3	0	3	14	9	23	44	12	56
Integrated Farming	1	3	1	4	1	0	1	16	3	19	20	4	24
Total (a)	**5**	**46**	**6**	**52**	**5**	**0**	**5**	**51**	**12**	**63**	**102**	**18**	**120**
b) Fruits													
Training and Pruning													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			ST			SC					
		M	F	T	M	F	T	M	F	T	M	F	T
Layout and Management of Orchards													
Cultivation of Fruit													
Management of young plants/orchards													
Rejuvenation of old orchards													
Export potential fruits													
Micro irrigation systems of orchards													
Crop Diversification	3	28	5	33	10	0	10	26	13	39	64	18	82
Others (Commercial fruit production)	1	19	0	19	0	0	0	13	0	13	32	0	32
Total (b)	**4**	**47**	**5**	**52**	**10**	**0**	**10**	**39**	**13**	**52**	**96**	**18**	**114**
c) Ornamental Plants													
Nursery Management													
Management of potted plants													
Export potential of ornamental plants													
Propagation techniques of Ornamental Plants													
Others													
Total (c)													
d) Plantation crops													
Production and Management technology													
Processing and value addition													
Others													
Total (d)													
e) Tuber crops													
Production and Management technology													
Processing and value addition													
Others													
Total (e)													
f) Spices													
Production and Management technology													
Processing and value addition													
Others													
Total (f)													
g) Medicinal and Aromatic Plants													
Nursery management													
Production and management technology													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			ST			SC					
		M	F	T	M	F	T	M	F	T	M	F	T
Post harvest technology and value addition													
Others													
Total (g)													
Total(a-g)													
III. Soil Health and Fertility Management													
Soil fertility management													
Integrated water management	1	12	25	37	0	0	0	12	14	26	24	39	63
Integrated Nutrient Management	15	219	22	241	0	0	0	182	19	201	401	41	442
Production and use of organic inputs	5	44	1	45	8	2	10	76	1	77	128	4	132
Management of Problematic soils													
Micro nutrient deficiency in crops													
Nutrient Use Efficiency													
Balance Use of fertilizer													
Soil & water testing													
Resource Conservation Technologies	1	19	1	20	0	0	0	16	1	17	35	2	37
Others (cultivation of crops)	2	19	0	19	0	0	0	25	0	25	44	0	44
Total	**24**	**313**	**49**	**362**	**8**	**2**	**10**	**311**	**35**	**346**	**632**	**86**	**718**
IV. Livestock Production and Management													
Dairy Management													
Poultry Management													
Piggery Management													
Rabbit Management													
Animal Nutrition Management													
Disease Management													
Feed & fodder technologies													
Production of quality animal products													
Others													
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													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			ST			SC					
		M	F	T	M	F	T	M	F	T	M	F	T
Minimization of nutrient loss in processing													
Processing & cooking													
Gender mainstreaming through SHGs													
Storage loss minimization techniques													
Value addition													
Women empowerment													
Location specific drudgery reduction technologies													
Rural Crafts													
Women and child care													
Others													
Total													
VI. Agril. Engineering													
Farm machinery & its maintenance													
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													
Total													
VII. Plant Protection													
Integrated Pest Management	20	256	32	288	8	4	12	217	26	243	481	62	543
Integrated Disease Management													
Integrated crop Management													
Bio0control of pests and diseases													
Production of bio control agents and bio pesticides													
Integrated farming													
Others													
Total	**20**	**256**	**32**	**288**	**8**	**4**	**12**	**217**	**26**	**243**	**481**	**62**	**543**
VIII. Fisheries													
Integrated fish farming													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			ST			SC					
		M	F	T	M	F	T	M	F	T	M	F	T
Carp breeding and hatchery management													
Carp fry and fingerling rearing													
Composite fish culture													
Hatchery management and culture of freshwater prawn													
Breeding and culture of ornamental fishes													
Portable plastic carp hatchery													
Pen culture of fish and prawn													
Shrimp farming													
Edible oyster farming													
Pearl culture													
Fish processing and value addition													
Others													
Total													
IX. Production of Input at site													
Seed Production	22	181	27	208	2	0	2	148	9	157	331	36	367
Planting material production													
Bio0agents production													
Bio0pesticides production													
Bio0fertilizer production													
Vermi0compost production													
Organic manures production													
Production of fry and fingerlings													
Production of Bee0colonies and wax sheets													
Small tools and implements													
Production of livestock feed and fodder													
Production of Fish feed													
Mushroom production													
Apiculture													
Others													
Resource Conservation Technologies													
Total	**22**	**181**	**27**	**208**	**2**	**0**	**2**	**148**	**9**	**157**	**331**	**36**	**367**
X. Capacity Building and Group Dynamics													
Leadership development													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			ST			SC					
		M	F	T	M	F	T	M	F	T	M	F	T
Group dynamics													
Formation and Management of SHGs													
Mobilization of social capital													
Entrepreneurial development of farmers/youths													
WTO and IPR issues													
Others													
Total													
XI. Agro forestry													
Production technologies													
Nursery management													
Integrated Farming Systems													
Others													
Total													
XII. Others (Pl. Specify)													
GRAND TOTAL	**76**	**859**	**119**	**978**	**33**	**6**	**39**	**829**	**95**	**924**	**1721**	**220**	**1941**

E) RURAL YOUTH (Off Campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			ST			SC					
		M	F	T	M	F	T	M	F	T	M	F	T
Nursery Management of Horticulture crops													
Training and pruning of orchards													
Protected cultivation of vegetable crops	1	12	3	15	2	1	3	19	6	25	33	10	43
Commercial fruit production	2	30	7	37	5	1	6	30	8	38	65	16	81
Integrated farming	2	9	4	13	2	3	5	19	9	28	30	16	46
Seed production	1	19	2	21	0	0	0	17	2	19	36	4	40
Production of organic inputs	1	0	0	0	0	0	0	10	0	10	10	0	10
Planting material production													
Vermiculture													
Mushroom Production													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			ST			SC					
		M	F	T	M	F	T	M	F	T	M	F	T
Beekeeping	3	27	3	30	0	0	0	39	6	45	66	9	75
Sericulture													
Repair and maintenance of farm machinery and implements													
Value addition													
Small scale processing													
Post Harvest Technology													
Tailoring and Stitching													
Rural Crafts													
Production of quality animal products													
Dairying													
Sheep and goat rearing													
Quail farming													
Piggery													
Rabbit farming													
Poultry production													
Ornamental fisheries													
Composite fish culture													
Freshwater prawn culture													
Shrimp farming													
Pearl culture													
Cold water fisheries													
Fish harvest and processing technology													
Fry and fingerling rearing													
Others (cultivation of crops)	1	20	2	22	0	0	0	4	0	4	24	2	26
Total	**11**	**117**	**21**	**138**	**9**	**5**	**14**	**138**	**31**	**169**	**264**	**57**	**321**

F) Extension Personnel (Off Campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			ST			SC					
		M	F	T	M	F	T	M	F	T	M	F	T
Productivity enhancement in field crops													
Integrated Pest Management													
Integrated Nutrient management													
Integrated crop management	1	12	1	13	0	0	0	17	2	19	29	3	32
Rejuvenation of old orchards													
Protected cultivation technology													
Production and use of organic inputs													
Care and maintenance of farm machinery and implements													
Gender mainstreaming through SHGs													
Formation and Management of SHGs													
Women and Child care													
Low cost and nutrient efficient diet designing													
Group Dynamics and farmers organization													
Information networking among farmers													
Capacity building for ICT application													
Management in farm animals													
Livestock feed and fodder production	1	15	1	16	0	0	0	19	1	20	34	2	36
Household food security													
Identification of diseases for sketch	1	8	0	8	0	0	0	28	4	32	36	4	40
Mushroom Production	2	18	1	19	2	0	2	54	5	59	74	6	80
Other													
Total	**5**	**53**	**3**	**56**	**2**	**0**	**2**	**118**	**12**	**130**	**173**	**15**	**188**

G) Consolidated table (ON and OFF Campus)

i. Farmers & Farm Women

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			ST			SC					
		M	F	T	M	F	T	M	F	T	M	F	T
I. Crop Production													
Weed Management													
Resource Conservation Technologies													
Cropping Systems													
Crop Diversification													
Integrated Farming	1	16	0	16	0	0	0	63	0	63	79	0	79
Micro irrigation/irrigation													
Seed production													
Nursery management													
Integrated Crop Management													
Soil & water conservation													
Integrated nutrient Management													
Production of organic inputs													
Productivity enhancement in field crops													
Cultivation practices													
Post Harvest													
Others													
Total	**1**	**16**	**0**	**16**	**0**	**0**	**0**	**63**	**0**	**63**	**79**	**0**	**79**
II. Horticulture													
a) Vegetable Crops													
Production of low volume and high value crops													
Off0season vegetables													
Nursery raising													
Exotic vegetables													
Export potential vegetables													
Grading and standardization													
Protective cultivation													
Protective cultivation	2	16	2	18	1	0	1	21	0	21	38	2	40
Others (Nursery management)	2	27	3	30	3	0	3	14	9	23	44	12	56

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			ST			SC					
		M	F	T	M	F	T	M	F	T	M	F	T
Integrated Farming	1	3	1	4	1	0	1	16	3	19	20	4	24
Total (a)	**5**	**46**	**6**	**52**	**5**	**0**	**5**	**51**	**12**	**63**	**102**	**18**	**120**
b) Fruits													
Training and Pruning													
Layout and Management of Orchards													
Cultivation of Fruit													
Management of young plants/orchards													
Rejuvenation of old orchards													
Export potential fruits													
Micro irrigation systems of orchards													
Crop Diversification	3	28	5	33	10	0	10	26	13	39	64	18	82
Others (Commercial fruit production)	1	19	0	19	0	0	0	13	0	13	32	0	32
Total (b)	**4**	**47**	**5**	**52**	**10**	**0**	**10**	**39**	**13**	**52**	**96**	**18**	**114**
c) Ornamental Plants													
Nursery Management													
Management of potted plants													
Export potential of ornamental plants													
Propagation techniques of Ornamental Plants													
Others													
Total (c)													
d) Plantation crops													
Production and Management technology													
Processing and value addition													
Others													
Total (d)													
e) Tuber crops													
Production and Management technology													
Processing and value addition													
Others													
Total (e)													
f) Spices													
Production and Management technology													
Processing and value addition													
Others													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			ST			SC					
		M	F	T	M	F	T	M	F	T	M	F	T
Total (f)													
g) Medicinal and Aromatic Plants													
Nursery management													
Production and management technology													
Post harvest technology and value addition													
Others													
Total (g)													
Total(a-g)													
III. Soil Health and Fertility Management													
Soil fertility management													
Integrated water management	1	12	25	37	0	0	0	12	14	26	24	39	63
Integrated Nutrient Management	15	219	22	241	0	0	0	182	19	201	401	41	442
Production and use of organic inputs	5	44	1	45	8	2	10	76	1	77	128	4	132
Management of Problematic soils													
Micro nutrient deficiency in crops													
Nutrient Use Efficiency													
Balance Use of fertilizer													
Soil & water testing													
Resource Conservation Technologies	2	43	4	47	0	0	0	51	3	54	94	7	101
Others (cultivation of crops)	2	19	0	19	0	0	0	25	0	25	44	0	44
Total	**25**	**337**	**52**	**389**	**8**	**2**	**10**	**346**	**37**	**383**	**691**	**91**	**782**
IV. Livestock Production and Management													
Dairy Management													
Poultry Management													
Piggery Management													
Rabbit Management													
Animal Nutrition Management													
Disease Management													
Feed & fodder technologies													
Production of quality animal products													
Others													
Total													
V. Home Science/Women empowerment													
Household food security by kitchen gardening													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			ST			SC					
		M	F	T	M	F	T	M	F	T	M	F	T
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													
Processing & cooking													
Gender mainstreaming through SHGs													
Storage loss minimization techniques													
Value addition													
Women empowerment													
Location specific drudgery reduction technologies													
Rural Crafts													
Women and child care													
Others													
Total													
VI. Agril. Engineering													
Farm machinery & its maintenance													
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													
Total													
VII. Plant Protection													
Integrated Pest Management	20	256	32	288	8	4	12	217	26	243	481	62	543
Integrated Disease Management													
Integrated Crop Management													
Bio-control of pests and diseases													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			ST			SC					
		M	F	T	M	F	T	M	F	T	M	F	T
Production of bio control agents and bio pesticides													
Integrated farming													
Others (Low cost and nutrient efficient diet designing)	1	18	3	21	0	0	0	17	37	54	35	40	75
Total	**21**	**274**	**35**	**309**	**8**	**4**	**12**	**234**	**63**	**297**	**516**	**102**	**618**
VIII. Fisheries													
Integrated fish farming													
Carp breeding and hatchery management													
Carp fry and fingerling rearing													
Composite fish culture													
Hatchery management and culture of freshwater prawn													
Breeding and culture of ornamental fishes													
Portable plastic carp hatchery													
Pen culture of fish and prawn													
Shrimp farming													
Edible oyster farming													
Pearl culture													
Fish processing and value addition													
Others													
Total													
IX. Production of Input at site													
Seed Production	24	192	27	219	2	0	2	162	9	171	356	36	392
Planting material production													
Bio0agents production													
Bio0pesticides production													
Bio0fertilizer production													
Vermi0compost production													
Organic manures production													
Production of fry and fingerlings													
Production of Bee0colonies and wax sheets													
Small tools and implements													
Production of livestock feed and fodder													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			ST			SC					
		M	F	T	M	F	T	M	F	T	M	F	T
Production of Fish feed													
Mushroom production													
Apiculture													
Resource Conservation Technologies	1	11	5	16	2	0	2	34	0	34	47	5	52
Others													
Total	**25**	**203**	**32**	**235**	**4**	**0**	**4**	**196**	**9**	**205**	**403**	**41**	**444**
X. Capacity Building and Group Dynamics													
Leadership development													
Group dynamics													
Formation and Management of SHGs													
Mobilization of social capital													
Entrepreneurial development of farmers/youths													
WTO and IPR issues													
Others													
Total													
XI. Agro forestry													
Production technologies													
Nursery management													
Integrated Farming Systems													
Others													
Total													
XII. Others (Pl. Specify)													
GRAND TOTAL	**81**	**923**	**130**	**1053**	**35**	**6**	**41**	**929**	**134**	**1063**	**1887**	**270**	**2157**

ii. RURAL YOUTH (On and Off Campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			ST			SC					
		M	F	T	M	F	T	M	F	T	M	F	T
Nursery Management of Horticulture crops	9	42	11	53	2	0	2	90	22	112	134	33	167
Training and pruning of orchards													
Protected cultivation of vegetable crops	4	82	24	106	10	6	16	55	37	92	147	67	214

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			ST			SC					
		M	F	T	M	F	T	M	F	T	M	F	T
Commercial fruit production	2	30	7	37	5	1	6	30	8	38	65	16	81
Integrated farming	2	9	4	13	2	3	5	19	9	28	30	16	46
Integrated Pest Management	2	12	6	18	0	0	0	10	2	12	22	8	30
Seed production	12	184	29	213	0	0	0	186	34	220	370	63	466
Production of organic inputs	7	40	1	41	0	0	0	57	2	59	97	3	100
Planting material production	1	5	2	7	1	0	1	4	3	7	10	5	15
Vermiculture	1	6	0	6	0	0	0	9	0	9	15	0	15
Crop Diversification	3	37	3	40	3	0	3	59	6	65	99	9	108
Mushroom Production													
Beekeeping	6	47	7	54	0	0	0	85	11	96	132	18	150
Sericulture													
Post Harvest Technology													
Tailoring and Stitching													
Rural Crafts													
Production of quality animal products													
Dairying													
Sheep and goat rearing													
Quail farming													
Piggery													
Rabbit farming													
Poultry production													
Ornamental fisheries													
Composite fish culture													
Freshwater prawn culture													
Shrimp farming													
Pearl culture													
Cold water fisheries													
Fish harvest and processing technology													
Fry and fingerling rearing													
Others (cultivation of crops)	1	20	2	22	0	0	0	4	0	4	24	2	26
Total	**50**	**514**	**96**	**610**	**23**	**10**	**33**	**608**	**134**	**742**	**1145**	**240**	**1385**

iii. Extension Personnel (On and Off Campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			ST			SC					
		M	F	T	M	F	T	M	F	T	M	F	T
Productivity enhancement in field crops													
Integrated Crop Management	7	93	17	110	0	0	0	124	18	142	217	35	252
Integrated Pest Management													
Integrated Nutrient management	16	253	41	294	0	0	0	250	37	287	503	78	581
Rejuvenation of old orchards													
Protected cultivation technology													
Production and use of organic inputs													
Care and maintenance of farm machinery and implements													
Gender mainstreaming through SHGs													
Formation and Management of SHGs													
Women and Child care													
Low cost and nutrient efficient diet designing													
Group Dynamics and farmers organization													
Resource Conservation Technologies	2	23	4	27	0	0	0	43	5	48	66	9	75
Seed Production	3	70	6	76	0	0	0	31	1	32	101	7	108
Crop Diversification	7	79	18	97	11	3	14	116	27	143	206	48	254
Management in farm animals													
Identification of diseases for sketch	1	8	0	8	0	0	0	28	4	32	36	4	40
Mushroom Production	2	18	1	19	2	0	2	54	5	59	74	6	80
Commercial fruit production	1	12	2	14	0	0	0	19	3	22	31	5	36
Nursery management	6	59	12	71	8	0	8	96	21	117	163	33	196
Livestock feed and fodder production	1	15	1	16	0	0	0	19	1	20	34	2	36
Enterprise development	1	32	3	35	0	0	0	35	3	38	67	6	73
Planting material production	1	5	2	7	1	0	1	4	3	7	10	5	15
Household food security													
Others (cultivation of crops)	1	28	2	30	0	0	0	7	0	7	35	2	37
Total	**49**	**695**	**109**	**804**	**22**	**3**	**25**	**826**	**128**	**954**	**1543**	**240**	**1783**

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

Discipline	Clientele (PF/RY/EF)	Title of the training programme	Duration in days	Venue (Off / On Campus)	Number of participants			Number of SC/ST		
					M	F	T	M	F	T
Agronomy	EF	Cultivation practice of fodder crops	1	OFF	34	2	36	15	1	16
Agronomy	RY	Seed Bed preparation of Boro rice	1	OFF	24	2	26	20	2	22
Agronomy	EF	Cultivation practice of Jute	1	ON	35	2	37	28	2	30
Agronomy	EF	Seed Bed preparation of rice in dapog method	1	ON	34	4	38	10	2	12
Agronomy	PF	Natural Farming	1	OFF	79	0	79	16	0	16
Agronomy	EF	Agroclimatic zones of West Bengal	1	ON	33	5	38	11	2	13
Agronomy	EF	Agroclimatic zones of West Bengal	1	ON	33	4	37	12	2	14
Seed Science	PF	Effect of Chilli seed (Variety Bidhan Chilli-4) by use of mulching, maize border and net	1	OFF	7	0	7	0	0	0
Seed Science	RY	Importance of Honey Bees in Pollination	1	ONLINE	21	4	25	7	2	9
Seed Science	RY	Effect of cross pollination in crop growth	1	ONLINE	21	4	25	7	2	9
Seed Science	RY	Seed Storage and its Management	1	ON	35	2	37	28	2	30
Seed Science	RY	Introduction to Skill Development Training Programme on “Nursery Management of Horticultural Crops” Under STRY	1	ON	12	3	15	3	1	4
Seed Science	RY	Identification of ornamental plants	1	ON	12	3	15	3	1	4
Seed Science	RY	Identification of different nursery structures at Nadia KVK	1	ON	12	3	15	3	1	4
Seed Science	RY	Nursery Management of Annual Flowering Plants	1	ON	12	3	15	3	1	4
Seed Science	RY	Establishment of model nursery	1	ON	12	3	15	3	1	4
Seed Science	RY	Identification and growing of ornamental plants	1	ON	12	3	15	3	1	4
Seed Science	EF	Hybridisation Techniques	1	ON	31	3	34	14	2	16
Seed Science	EF	Seed Act	1	ON	35	2	37	28	2	30
Seed Science	EF	PPVFRA	1	ON	35	2	37	28	2	30
Seed Science	PF	Climate Smart Agriculture	1	ON	47	5	52	13	5	18
Seed Science	PF	Role of seed savings in natural farming	1	OFF	34	3	37	17	2	19
Seed Science	RY	Seed Treatment-Importance and Procedures	1	ON	33	7	40	16	3	19
Seed Science	RY	Seed Treatment-Importance and Procedures	1	ON	36	4	40	14	2	16
Seed Science	RY	Importance of quality seeds in crop production	1	ON	33	7	40	16	3	19
Seed Science	RY	Seed Storage and its management	1	ON	36	4	40	14	2	16

Seed Science	RY	Seed Production Procedures	1	OFF	36	4	40	19	2	21
Seed Science	PF	Seed Production of Paddy (IRRI FLD, Variety: DRR 44)	1	OFF	16	0	16	2	0	2
Seed Science	PF	Seed Production of Paddy (IRRI OFT, Variety: R14L572, BRRI-75, MTU-1010, UTTAR SONA, BINA-17, NLR-3354, CO-51)	1	OFF	25	0	25	12	0	12
Seed Science	PF	Seed Production of Paddy (IRRI OFT, Variety: R14L572, BRRI-75, MTU-1010, UTTAR SONA, BINA-17, NLR-3354, CO-51)	1	OFF	19	0	19	11	0	11
Seed Science	PF	Seed Production of Paddy (IRRI FLD, Variety: DRR 44)	1	OFF	13	0	13	0	0	0
Seed Science	PF	Seed Treatment of Paddy	1	ONLINE	27	8	35	19	8	27
Seed Science	PF	Seed treatment and nursery management of paddy	1	ONLINE	25	0	25	10	0	10
Seed Science	PF	OFT Training on Seed treatment and nursery management of paddy	1	OFF	11	0	11	3	0	3
Seed Science	PF	OFT Training on Seed treatment and nursery management of paddy	1	OFF	16	0	16	11	0	11
Seed Science	PF	Vegetable seed production and management	1	OFF	19	0	19	12	0	12
Seed Science	PF	Seed treatment and storage of blackgram	1	OFF	10	0	10	9	0	9
Seed Science	PF	Seed treatment and storage of blackgram	1	OFF	10	0	10	8	0	8
Seed Science	PF	Seed treatment and storage of blackgram	1	OFF	9	0	9	8	0	8
Seed Science	PF	Seed treatment and storage of blackgram	1	OFF	7	0	7	0	0	0
Seed Science	PF	Seed treatment and storage of blackgram	1	OFF	9	0	9	2	0	2
Seed Science	RY	Seed Storage and its management	1	ON	33	7	40	16	3	19
Seed Science	PF	Seed production of blackgram	1	OFF	8	2	10	8	2	10
Seed Science	PF	Seed production of blackgram	1	OFF	9	1	10	9	1	10
Seed Science	RY	Seed production of pulses	1	ON	33	7	40	16	3	19
Seed Science	RY	Seed production of pulses	1	ON	33	7	40	16	3	19
Seed Science	PF	Seed production of paddy	1	ON	25	0	25	11	0	11
Seed Science	RY	Principle and Practices of Seed Production	1	ON	31	7	38	15	3	18
Seed Science	PF	Seed production of Lentil	1	OFF	12	0	12	10	0	10
Seed Science	PF	Seed production of Lentil	1	OFF	11	0	11	9	0	9
Seed Science	RY	Principle and Practices of Seed Production	1	ON	31	7	38	14	3	17
Seed Science	PF	Seed production of Lentil	1	OFF	18	15	33	12	10	22
Seed Science	PF	Seed production of Lentil	1	OFF	16	7	23	11	4	15
Seed Science	PF	Seed production of Mustard	1	ON	0	0	30	0	0	0
Seed Science	RY	Seed Quality Management	1	ON	0	0	33	0	0	0
Horticulture	PF	Nursery management of kharif vegetables	1	OFF	25	2	27	14	0	14

Horticulture	RY	High value and off season vegetable production	1	ON	34	3	37	27	3	30
Horticulture	RY	Vegetable Seedling production technology	1	ON	10	5	15	6	2	8
Horticulture	RY	Seed bed preparation and plug tray methods	1	ON	10	5	15	6	2	8
Horticulture	EF	Plant propagation methods	1	ON	10	5	15	6	2	8
Horticulture	EF	Production technology of fruit saplings	1	ON	10	5	15	6	2	8
Horticulture	PF	Integrated Farming system: principals and managements.	1	OFF	20	4	24	4	1	5
Horticulture	RY	Basic principles of vegetables production	1	ON	37	3	40	14	2	16
Horticulture	RY	Production technologies of summer vegetables	1	ON	30	3	33	13	0	13
Horticulture	RY	Production technologies of cucurbits, beans and leafy vegetables	1	ON	32	3	35	13	1	14
Horticulture	RY	Seedling Production methods and types of vegetative propagation.	1	ON	33	3	36	13	2	15
Horticulture	EF	Production technologies of early cole crops	1	ON	32	5	37	15	1	16
Horticulture	PF	Protected cultivation of vegetable crops	1	OFF	24	0	24	6	0	6
Horticulture	EF	Recent technological advancement of major fruit crops	1	ON	31	5	36	12	2	14
Horticulture	RY	High tech and off season horticulture	1	ONLINE	57	30	87	45	14	59
Horticulture	EF	Different methods of seedlings production	1	ON	35	8	43	14	3	17
Horticulture	EF	Nursery management.	1	ON	26	6	32	11	2	13
Horticulture	EF	Seedling Production methods and types of vegetative propagation.	1	ON	29	4	33	12	1	13
Horticulture	PF	Nursery management.	1	OFF	19	10	29	16	3	19
Horticulture	PF	Advance agro technique of Banana	1	OFF	28	3	31	13	2	15
Horticulture	RY	Basic principles and management of fruit nursery	1	ON	19	7	26	7	1	8
Horticulture	PF	Canopy management of fruit crops	1	OFF	20	1	21	11	0	11
Horticulture	RY	Development and intregation concept of fish based IFS	1	OFF	12	5	17	4	2	6
Horticulture	RY	Development and intregation concept of horticulture based IFS	1	OFF	18	11	29	7	5	12
Horticulture	EF	Development of coconut based cropping system	1	ON	25	6	31	10	4	14
Horticulture	EF	Betelvine production practices and value addition	1	ON	24	6	30	7	2	9
Horticulture	RY	High tech intervention in horticultural crops	1	ON	23	24	47	6	9	15
Horticulture	EF	Advance agro technique of Winter Vegetables	1	ON	31	8	39	18	4	22
Horticulture	PF	Plantation crops based multi-tier cropping systems	1	OFF	16	14	30	14	3	17
Horticulture	EF	Advance agro technique of Winter leafy Vegetables	1	ON	32	7	39	21	4	25
Horticulture	RY	Advance production managements of some major fruits	1	OFF	27	9	36	18	5	23
Horticulture	EF	Cultivation of Aromatic and Medicinal Plants	1	ON	26	9	35	9	4	13
Horticulture	PF	Cultivation of banana with its value addition	1	OFF	32	0	32	19	0	19
Horticulture	RY	Cultivation of major fruit crops	1	OFF	38	7	45	17	3	20
Horticulture	EF	Cultivation of Aromatic and Medicinal Plants	1	ON	36	7	43	10	2	12

Horticulture	RY	Protected cultivation of vegetables crops	1	OFF	33	10	43	14	4	18
Horticulture	PF	Off season vegetable cultivation using poly cover	1	OFF	14	2	16	11	2	13
Horticulture	EF	Planting material production of fruit crops	1	ON	29	6	35	14	2	16
Soil Science	RY	Introduction to modern composting techniques and overview of different processes	1	ON	15	0	15	7	0	7
Soil Science	RY	Novcom Composting and associated components regarding the process	1	ON	15	0	15	7	0	7
Soil Science	RY	Preparation of compost heap with Novcom solution	1	ON	15	0	15	7	0	7
Soil Science	RY	Preparation of different biological concoctions	1	ON	15	0	15	7	0	7
Soil Science	RY	Different other methods of composting	1	ON	15	0	15	7	0	7
Soil Science	PF	Effect of Zn in boro paddy	1	OFF	18	1	19	16	1	17
Soil Science	EF	Fertilizer recommendation and calculation	1	ON	32	4	36	17	2	19
Soil Science	EF	Problem Soil and its management	1	ON	33	4	37	18	2	20
Soil Science	EF	Soil sampling procedure	1	ON	33	4	37	18	2	20
Soil Science	PF	Soil management with integrated approach	1	OFF	12	0	12	9	0	9
Soil Science	RY	Improved composting methods	1	ON	12	3	15	5	1	6
Soil Science	PF	Novcom composting	1	OFF	8	2	10	8	2	10
Soil Science	EF	Fertilizer recommendation and calculation	1	ON	30	5	35	15	3	18
Soil Science	PF	Natural Farming and its components	1	OFF	79	0	79	16	0	16
Soil Science	EF	Soil Profile, types and characteristics	1	ON	32	4	36	14	2	16
Soil Science	EF	Soil Profile, types and characteristics	1	ON	31	6	37	13	3	16
Soil Science	PF	Integrated nutrient management for jute	1	OFF	37	4	41	15	2	17
Soil Science	PF	Basics of soil health management	1	OFF	15	0	15	9	0	9
Soil Science	EF	Soil physical properties	1	ON	32	5	37	13	3	16
Soil Science	EF	Soil physical properties	1	ON	31	5	36	15	2	17
Soil Science	EF	Soil chemical and biological properties	1	ON	32	6	38	14	3	17
Soil Science	EF	Soil chemical and biological properties	1	ON	30	6	36	12	3	15
Soil Science	PF	Natural Farming concepts	1	ON	59	5	64	24	3	27
Soil Science	PF	Importance of Natural Farming and it's components	1	OFF	35	2	37	19	1	20
Soil Science	EF	Importance of soil testing, methods of soil sampling, interpretations	1	ON	29	3	32	14	2	16
Soil Science	PF	Composting with water hyacinth	1	OFF	11	0	11	7	0	7
Soil Science	PF	Green manuring in kharif paddy	1	OFF	13	0	13	6	0	6
Soil Science	PF	Importance of green manuring in kharif paddy	1	OFF	17	0	17	10	0	10

Soil Science	EF	Flagship programmes on agriculture	1	ON	67	6	73	32	3	35
Soil Science	PF	Methodology of scientific kharif paddy cultivation	1	OFF	15	0	15	9	0	9
Soil Science	RY	Novcom composting with poultry litter	1	OFF	10	0	10	0	0	0
Soil Science	EF	Integrated Nutrient Management	1	ON	33	5	38	16	3	19
Soil Science	PF	Use of Leaf Colour Chart in Kharif paddy	1	OFF	16	0	16	6	0	6
Soil Science	PF	Soil sampling procedure for soil testing	1	ONLINE	25	0	25	10	0	10
Soil Science	PF	Use of Leaf Colour Chart in Kharif paddy	1	OFF	21	0	21	4	0	4
Soil Science	PF	Soil health camp with method of measuring soil pH	1	OFF	17	0	17	10	0	10
Soil Science	EF	Methods of soil testing with measurement of soil pH and EC	1	ON	31	4	35	16	2	18
Soil Science	EF	Integrated Nutrient Management	1	ON	33	5	38	17	3	20
Soil Science	EF	Interpretation of soil test values and calculation of fertilizer recommendation	1	ON	32	6	38	16	4	20
Soil Science	EF	Interpretation of soil test values and calculation of fertilizer recommendation	1	ON	32	6	38	17	3	20
Soil Science	EF	Methods of soil testing with measurement of soil pH and EC	1	ON	32	5	37	16	2	18
Soil Science	PF	Soil health management of kharif paddy	1	OFF	19	6	25	3	2	5
Soil Science	EF	Macro and micro nutrients, their deficiency symptoms and management	1	ON	29	6	35	14	3	17
Soil Science	PF	Importance of organic matter in improvement of soil health and easy method of improved compost preparation	1	OFF	11	2	13	2	1	3
Soil Science	PF	Soil health management of banana	1	OFF	17	0	17	14	0	14
Soil Science	PF	Soil health card and it's use	1	OFF	92	7	99	52	4	56
Soil Science	EF	Soil profile, types and characteristics	1	OFF	29	3	32	12	1	13
Soil Science	EF	Macro and micro nutrients, their deficiency symptoms and management	1	ON	30	6	36	14	3	17
Soil Science	EF	Problem Soils and their managements	1	ON	29	7	36	12	4	16
Soil Science	EF	Problem Soils and their management	1	ON	32	5	37	15	1	16
Soil Science	EF	Importance of soil testing and basics of soil test based recommendation	1	OFF	33	3	36	18	2	20
Soil Science	PF	Importance of water conservation in agriculture	1	OFF	24	39	63	12	25	37
Soil Science	PF	Importance of soil health management	1	OFF	15	10	25	10	8	18
Soil Science	PF	Methods of Novcom composting	1	OFF	19	0	19	19	0	19
Soil Science	PF	Soil Health Management and use of soil health card	1	OFF	67	13	80	45	5	50
Soil Science	PF	Cultivation practices of Boro rice	1	OFF	29	0	29	10	0	10
Plant Protection	RY	Seven days residential training on scientific bee keeping	1	ON	24	1	25	6	0	6

Plant Protection	RY	Role of organic manure in soil borne disease management	1	ON	15	0	15	6	0	6
Plant Protection	PF	Pest and disease management of vegetable crops	1	ONLINE	16	7	23	10	4	14
Plant Protection	EF	Pesticide calculation procedures	1	ON	35	4	39	17	3	20
Plant Protection	RY	Identification of different species and casts of honey bee	1	ONLINE	22	3	25	9	1	10
Plant Protection	RY	Queen bee rearing method	1	ONLINE	22	3	25	9	1	10
Plant Protection	RY	Seasonal management of bee colony	1	ONLINE	22	3	25	9	1	10
Plant Protection	EF	Microscopic identification of small insects- mite, thrips, aphids	1	ON	37	0	37	18	0	18
Plant Protection	PF	Pest management depending on weather parameters	1	OFF	15	1	16	9	1	10
Plant Protection	RY	Insect pest management in nursery bed	1	ON	11	4	15	6	3	9
Plant Protection	EF	Identification of different disease and pests of brinjal, cabbage and tomato	1	ON	35	4	39	17	3	20
Plant Protection	RY	Disease management in nursery bed	1	ON	11	4	15	6	3	9
Plant Protection	EF	Method of pesticide dose calculation	1	ON	31	3	34	14	2	16
Plant Protection	EF	Practical class and assignments of DAESI course	1	ON	30	9	39	12	5	17
Plant Protection	PF	Disease and pest management of mango and litchi	1	OFF	15	0	15	8	0	8
Plant Protection	PF	Disease and pest management of chilli	1	OFF	25	0	25	12	0	12
Plant Protection	EF	Basic principles of integrated pest management	1	ON	29	8	37	12	5	17
Plant Protection	PF	Pest and disease management of chilli	1	OFF	16	1	17	7	1	8
Plant Protection	EF	Classification of insecticides	1	ON	29	9	38	12	5	17
Plant Protection	PF	Pest and disease management of kharif paddy	1	OFF	22	0	22	13	0	13
Plant Protection	PF	Pest and disease management of paddy for seed production	1	OFF	15	0	15	3	0	3
Plant Protection	PF	Pest and disease management in kharif paddy	1	ONLINE	20	15	35	11	9	20
Plant Protection	EF	Classification of insecticides	1	ON	28	9	37	12	5	17
Plant Protection	PF	Pest and disease management of kharif paddy	1	OFF	20	0	20	9	0	9
Plant Protection	PF	Pest and disease management of kharif paddy	1	OFF	32	0	32	13	0	13
Plant Protection	PF	Soil bourn disease management procidures	1	OFF	21	0	21	12	0	12
Plant Protection	EF	IPM of jute and sugarcane	1	OFF	45	0	45	24	0	24
Plant Protection	EF	IPM of jute and paddy	1	ON	29	9	38	11	5	16
Plant Protection	EF	IPM of jute and paddy	1	ON	30	5	35	12	5	17
Plant Protection	EF	Identification of pests and disease of brinjal and chilli	1	ON	29	9	38	11	5	16
Plant Protection	EF	Identification of pests and disease of brinjal and chilli	1	ON	29	7	36	12	4	16
Plant Protection	EF	Pest and disease management in pulse crops	1	ON	28	8	36	12	5	17
Plant Protection	PF	Pest and disease management of kharif paddy	1	OFF	13	0	13	13	0	13
Plant Protection	PF	Pest and disease management of kharif paddy	1	OFF	19	6	25	3	2	5

Plant Protection	PF	Importance of kitchen garden in balanced diet preparation	1	ON	35	40	75	18	3	21
Plant Protection	PF	Panama wilt management in banana	1	OFF	17	0	17	14	0	14
Plant Protection	PF	Proper management procedure for production of residue free crop	1	OFF	92	7	99	52	4	56
Plant Protection	EF	Pest and disease management of solanacious vegetables	1	ON	29	8	37	12	5	17
Plant Protection	EF	Pest and disease management of cucurbitaceous and cruciferous vegetables	1	ON	27	8	35	12	5	17
Plant Protection	EF	Concept and beneficial and harmful incecet in IPM	1	ON	29	8	37	11	4	15
Plant Protection	EF	Pest and disease management of cucurbitaceous and cruciferous vegetables	1	ON	27	8	35	11	4	15
Plant Protection	EF	Pest and disease management of solanacious vegetables	1	ON	29	7	36	12	4	16
Plant Protection	PF	Pest and disease management in banana	1	OFF	25	0	25	9	0	9
Plant Protection	PF	Pest and disease management in mustard	1	OFF	31	16	47	15	9	24
Plant Protection	PF	Pest and disease management in mustard	1	OFF	18	9	27	14	6	20
Plant Protection	PF	Soil borne disease management through soil health management	1	OFF	16	0	16	16	0	16
Plant Protection	EF	Stored grain pest management	1	ON	29	7	36	12	4	16
Plant Protection	EF	Identification of pests and diseases of cabbage, cauliflower, onion, tomato	1	ON	31	6	37	13	3	16
Plant Protection	PF	Pest and disease management of boro paddy nursery bed	1	OFF	33	0	33	21	0	21
Others	EF	Oyester mushroom production technology	1	OFF	34	6	40	8	5	13
Others	EF	Diseases indentification of Rice, Guava and coconut	1	OFF	34	6	40	8	5	13
Others	EF	Oyester mushroom production technology	1	OFF	6	34	40	2	10	12

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
				Male	Female	Total	Type of units	Number of units	Number of persons employed	

*training title should specify the major technology /skill transferred

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													
Mushroom													
Bee keeping													
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													
Nursery, grafting etc.													
Tailoring, stitching, embroidery, dying etc.													
Agril. Para-workers, para0vet training													
Other													
Total													
Agricultural Extension													
Capacity building and group dynamics													
Other													
Total													
Grand Total													

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			
1	DAESI	Agriculture extension	-	365	EF	2	80	Trainees

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													

Increasing production and productivity of crops													
Commercial production of vegetables													
Production and value addition													
Fruit Plants													
Ornamental plants													
Spices crops													
Soil health and fertility management													
Production of Inputs at site													
Methods of protective cultivation													
Mushroom													
Bee keeping													
Total													
Post harvest technology and value addition													
Processing and value addition													
Other													
Total													
Farm machinery													
Farm machinery, tools and implements													
Other													
Total													
Livestock and fisheries													
Livestock production and management													
Animal Nutrition Management													
Animal Disease Management													
Fisheries Nutrition													
Fisheries Management													
Other													
Total													
Home Science													

Household nutritional security													
Economic empowerment of women													
Drudgery reduction of women													
Other													
Total													
Agricultural Extension													
Capacity Building and Group Dynamics													
Other													
Total													
Grant Total													

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	2	57	18	75	24	2	1	3	59	19	78
KisanMela	2	380	20	400	32	13	7	20	393	27	420
KisanGhosthi											
Exhibition	3	1115	320	1435	22	9	4	13	1124	324	1448
Film Show	1	42	6	48	14	4	3	7	46	9	55
Method Demonstrations	2	7	3	10	70	0	0	0	7	3	10
Farmers Seminar	14	574	188	762	62	6	5	11	580	193	773
Workshop											
Group meetings	8	145	28	173	32	14	2	16	159	30	189
Lectures delivered as resource persons	1	15	13	28	20	17	3	20	32	16	48
Advisory Services	4	75	3	78	34	16	3	19	91	6	97
Scientific visit to farmers field	23	172	29	201	68	3	2	5	175	31	206

Nature of Extension Activity	No. of activities	Farmers				Extension Officials			Total		
		M	F	T	SC/ ST (% of total)	Male	Female	Total	Male	Female	Total
Farmers visit to KVK											
Diagnostic visits	15	280	28	308	64	2	3	5	282	31	313
Exposure visits	1	29	7	36	18	2	0	2	31	7	38
Ex-trainees Sammelan	4	141	16	157	25	2	3	5	143	19	162
Soil health Camp	1	20	0	20	22	4	1	5	24	1	25
Animal Health Camp											
Agri mobile clinic											
Soil test campaigns	1	78	22	100	33	2	3	5	80	25	105
Farm Science Club Conveners meet											
Self Help Group Conveners meetings											
MahilaMandals Conveners meetings											
Celebration of important days (specify)	3	189	64	253	45	7	2	9	196	66	262
Sankalp Se Siddhi											
Swatchta Hi Sewa											
MahilaKisan Divas											
Any Other (Phone Call)	38	520	92	612	49	0	0	0	520	92	612
Total	**123**	**3839**	**857**	**4696**	**634**	**103**	**42**	**145**	**3942**	**899**	**4841**

B. Other Extension activities

Nature of Extension Activity	No. of activities
Newspaper coverage	3
Radio talks	3

TV talks	-
Popular articles	-
Extension Literature	-
Other, if any	-

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	
					M	F	M	F	M	F	M	F
Lentil	Moitree	57.0		40	25	-	-	-	15	-	40	-
Green gram	Virat	59.0		37	19	-	-	-	18	-	37	-
Black gram	PU 31	58.5		55	28	-	-	-	27	-	55	-
Sesame	Sabitri	61.8		70	30	-	-	-	40	-	70	-
Total		**457.1**		**381**	**183**	**-**	**-**	**-**	**198**	**-**	**381**	**-**

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
Lentil	*Maitree*	0.5	3000.00	-	-	-	-	1	-	1	-
Elephant Foot Yam	*Bidhan Kusum*	21.2	53,000.00	-	-	-	-	1	-	1	-
Kharif paddy	*IET 4786*	5.0	10,000.00	-	-	-	-	1	-	1	-
Grand Total		26.7	66,000.00	-	-	-	-	-	-	3	-

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											
Cabbage	*Mohor*	500	Used in KVK farm								
Tomato	*Arka Apeksha, Arka Samrat, Arka Rakshak*	3000	-do-								
Brinjal	*Brinjal no. 704*	700	-do-								
Chilli	*Daya, Majum*	500	-do-								
Onion	*Agrifound Dark Red*	30000	-do-								
Broccoli	*Centauro*	1500	-do-								
Capsicum	*California Wonder*	1000	-do-								
Others											
Fruits											
Mango											
Guava											
Lime											
Papaya	*Local*	300	-do-								
Banana	*Bagda*	350	3500.00	-	-	-	-	5	-	5	-
Others											
Ornamental plants	*Duranta*, Winter annuals, Summer annuals	20,000	-do-								
Medicinal and Aromatic											
Plantation											
Spices	Black pepper	5000	10,000.00	2	-	-	-	6	-	8	-
Turmeric											
Tuber											
Elephant yams	*Bidhan Kusum*	2120 kg	53,000.00	-	-	-	-	4	-	4	-
Fodder crop saplings											

Forest Species											
Others, pl. specify											
Total		62,850	66,500.00	2	-	-	-	15	-	17	-

Production of Bio-Products

Name of product	Quantity (Kg)	Value (Rs.)	No. of Farmers benefitted							
			SC		ST		Other		Total	
			M	F	M	F	M	F	M	F
Bio-fertilizers										
Bio-pesticide										
Bio-fungicide	40	8000.00	12	0	0	0	8	2	20	2
Bio-agents										
Vermicompost	300	1500.00	-	-	-	-	-	-	-	-
Waste Decomposer Compost	200	600.00	-	-	-	-	-	-	-	-
NOVCOM compost	300	600.00	-	-	-	-	-	-	-	-
Total										

Production of livestock materials

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	No. of Farmers benefitted							
				SC		ST		Other		Total	
				M	F	M	F	M	F	M	F
Dairy animals											
Cows	*Desi*	2	-								
Buffaloes											
Calves	*Desi*	2	-								
Others (Pl. specify)											
Small ruminants											
Sheep											
Goat	*Black Bengal*	13	-								
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)	*Telapia*	100	-								
Fish											
Grand Total		**117**	**-**								

3.5. b. Seed Hub Programme: N.A.

"Creation of Seed Hubs for Increasing Indigenous Production of Pulses in India"

i) Name of Seed Hub Centre:

ii)

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 2020						
Rabi 2020-21						
Summer/Spring 2021						
Kharif 2021						
Rabi 2021-2022						

iii) Financial Progress

Fund received (2017-18, 2018-19, 2019-20, 2020-21, 2021-22)	Expenditure (Rs. in lakh)		Unspent balance (Rs. in lakhs)	Remarks
	Infrastructure	Revolving fund		
2017-18				
2018-19				
2019-20				
2020-2021				
2021-2022				

iii) 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	1. Farmers' participatory programme for development of clean food through adoption of an innovative farming technology at Nadia district, West Bengal, India in *Asian Journal of Advances in Research*, 6(2): 34-50 (2021). 2. Integrated nutrient management in potato with compost made through different bio-degradation processes in *Journal of Experimental Biology and Agricultural Sciences*, 9(spl.3): 306-313. (2021).	1. K.Mukhopadhyay, S.H. Ansary, M. Debnath, S. Saha, M.K. Kundu, S.J. Pramanik, S.C. Dhang, S. Islam 2. K. Mukhopadhyay, S.H. Ansary, S. Saha, M. Debnath, M.K. Kundu, S.J. Pramanick, S. C. Dhang and S. Islam		
Seminar/conference/ symposia papers	1.Clean Food through adoption of ecologically and economically sustainable farming technology with special focus on soil & plant health management in 3rd International Conference on "Global Initiatives in Agricultural, Forestry and Applied Sciences for Food Security, Environmental Safety and Sustainable Development.	1. K. Mukhopadhyay, S.H. Ansary, M. Debnath, S. Saha, M.K. Kundu, S.J. Pramanick, S. C. Dhang and S. Islam		
Books	Organic Vegetables Seed Production	K. Mukhopadhyay, S.J. Pramanick, M.K. Samanta, M. Debnath, M.K. Kundu, S. Saha, S. C. Dhang and S. Islam		
	Innovative Technologies Developed by Nadia Krishi Vigyan Kendra	S.J. Pramanick, M. Debnath, M.K. Samanta, K. Mukhopadhyay,S.H. Ansary , M.K. Kundu, S. Saha, S. C. Dhang and S. Islam		
	Hydrophonic/Soilless Culture	U. Thapa, S.H. Ansary, S.J. Pramanick		

	KVK: The Extension Window of the Viswavidyalaya (Published by Extension Directorate, BCKV)	K.K.Goswami, S.H. Ansary M.K. Samanta S.J. Pramanick, M. Debnath, , K. Mukhopadhyay, , M.K. Kundu, S. Saha and others		
	Rabi Agro Advisories: Intervention of KVKs of BCKV (Published by Extension Directorate, BCKV)	K.K.Goswami, S.H. Ansary M.K. Samanta S.J. Pramanick, M. Debnath, , K. Mukhopadhyay, , M.K. Kundu, S. Saha and others		
Bulletins				
News letter				
Popular Articles				
Book Chapter				
Extension Pamphlets/ literature	1. Use of Leaf Colour Chart in paddy 2. Homestead method of Azolla cultivation 3. Sowing methods and nursery bed management of paddy *4.* Production technology of *Trichoderma Viride* 5. Mushroom production technology 6. Production technology of tropical orchids 7. Cultivation of paddy in SRI technology 8. Organic die production technology 9. Seedling raising and management of black bepper 10. Cultivation method of strawberry 11. Alternative methods of jute rating 12. Modern technigy of capcicum cultivation 13. Fruit fly management technology 14. Blackgram production technology 15. Green gram production technology		500 each	
Technical reports	Compendium of Technologies Developed by Nadia Krishi Vigyan Kendra under ATMA Project	M. Debnath ,M.K. Samanta S.J. Pramanick, , , K. Mukhopadhyay, ,		

		M.K. Kundu, S. C. Dhang and S. Islam		
Electronic Publication (CD/DVD etc)				
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 on doubling farmers' income	HRD Training Programme on " Novel Pragmatic Approaches for Crops Improvement , Production and Management"	1. Dr. Malay Kumar Samanta, SMS (Hort.) 2. Dr. Kaushik Mukhopadhyayay, SMS (Soil Science) 3. Mr. Milank Kanti Kundu, SMS (Agronomy) 4. Mr. Saikat Saha, SMS (Agril. Extension) 5. Dr. Sukhen Chandra Dhang, Farm Manager 6. Mr. Saidul Islam, Programme Assistant	22.03.2021 to 24.03.2021 (3 days)	Directorate of Extension Education, BCKV
2.	HRD for augmenting small farmers' income		1. Dr. Kaushik Mukhopadhyayay, SMS (Soil Science) 2. Dr. Sukhen Chandra Dhang, Farm Manager	07.12.2021 to 09.12.2021 (3 days)	Directorate of Extension Education, WBUAFS, Kolkata
3.	HRD programme on trainers training programme for scientists of KVK		Dr. Malabika Debnath SMS (Plant Protection)	13.09.21-17.09.21 (5 days)	Central Sericulture Research and Training Institute
4.	3 days workshop-cum training programme to the SMSs of South	"Transfer of ready-to-use & farmer's friendly technologies" developed	1. Dr. Malay Kumar Samanta, SMS (Hort.) 2. Dr. Shubhra Jyoti Pramanik SMS (Sedd	29th Sept. - 1st Octo., 2021	Directorate of Extension Education, BCKV

	Bengal KVKs	by BCKV	Science)		
5.	Webinar on "Entrepreneurship Development through Hi-Tech Horticulture"		1. Dr. Malay Kumar Samanta, SMS (Hort.) 2. Dr. Shubhra Jyoti Pramanik SMS (Sedd Science	6-7th August, 2021	Directorate of Extension Education, BCKV

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

Name and contacts of farmer: Asim Biswas, 7602639355, Address: Vill.- Ramnagar, P.O. Bagula, Block- Hanskhali, DIST. Nadia, West Bengal	
Name and contacts of KVK: Dr. Kaushik Mukhopadhyay, SMS (Soil Science) and Dr. Malabika Debnath, SMS (Plant Protection), Nadia KVK, Mob: 9231625971 and 9474739266, nadiakvk@gmail.com	

Title: Integration in combating vulnerability, journey of a successful banana grower

Background information of the farmer: Asim Biswas, a 45 year old farmer used to cultivate banana in his land with traditional knowledge and experience. But, he was continuously suffering from yield loss and crop damage particularly due to panama wilt infestation during the last couple of years before Nadia KVK intervened. Wilted, drooping banana plants were the regular features of his 1 acre field and thus it was becoming quiet depressing and frustrating for Mr. Biswas to cope up with the situation.

Intervention of Nadia KVK: Incidentally he had a contact with Nadia Krishi Vigyan Kendra through a training programme in Bhyna under Hanskhali block during January, 2020. Nadia KVK got involved with him and introduced some successful ventures to mitigate his problem. He was guided with overall management system with introduction of sucker treatment, preparation of compost with banana pseudo-stem through NOVCOM composting method (a new composting method where compost can be made available only within 21-25 days) and its use with *Trichoderma viride*, use of balanced and proper fertilizer dose and other essential management practices.

Coverage/ impact of training: He was astonished to notice the growth and development of his banana garden after few months following the management protocol and continuous guidance of Nadia KVK. His wilted, dropping, pale garden became healthy and robust with increase in yield to a tune of 40-45%. Not only that his cost of cultivation particularly on account of synthetic fertilizer was also reduced by 40% and simultaneous introduction of self-prepared compost @3 ton per acre rejuvenated the overall soil health of his land.

Income: During the drastic economic and socially stressed vulnerable situation of covid pandemic, Mr. Biswas's destiny was directed towards a reverse direction. Income from his 1

acre of banana garden was reached a land mark of Rs. 1,00,000 and he gained a profit even upto Rs. 50,000 per acre.

Horizontal spread: Mr. Asim Biswas's banana garden is now an example of successful grower following integrated management system. He is also guiding other people regarding the easy technique of compost preparation with banana pseudo-stem and management of panama wilt. Many farmers in his locality adopted the technology and successful propagation of 'Waste to Wealth' slogan is now being easily evidenced in that area.

Success Story – 2

Name of the farmer: Bikash Biswas, 8918689362, Address: Vill- Uttar Aranghata, Block- Ranaghat-I, Nadia, Pin – 741501	
Name and contacts of KVK: Mr. Saidul Islam, Programme Assistant Mob: 9264692306 nadiakvk@gmail.com	

Title: Zero to Hero: Rural Entrepreneurship through Mushroom cultivation

Background information of the entrepreneur: Bikash Biswas, a 38 year old rural youth of Uttar Aranghata in Nadia district of West Bengal was just a daily paid worker under a railway contractor 3 years back. He was struggling with his livelihood and desperately searching an alternative way for maintaining his family.

Intervention of Nadia KVK: During the beginning of 2020, he got in touch with Nadia KVK and undergone the '***Mushroom grower***' course under ASCI (Agriculture Skill Council of India) programme conducted by the KVK. KVK provided him hands on training and practical demonstration on mushroom production along with spawn production technology, waste management etc. for becoming a successful entrepreneur.

Impact of KVK training: After getting the training from Nadia KVK, he extensively surveyed the marketing opportunities of mushroom in local, adjacent markets and also in different markets of Kolkata. And after having an assured marketing opportunities he initially started his low cost mushroom production unit of 900 sq. ft. with initial investment of approximately Rs. 6,00,000 and in the very first year of his business he got a profit of nearly about Rs. 1,50,000. By using the wastes of mushroom production unit he is also producing very good quality vermi-compost side by side. During the early phases of his establishment KVK experts continuously guided him and Bikash followed every aspects of scientific production technology.

Economic and social sustainability: Now, Bikash is one of the promising agri-entrepreneur of Ranaghat-I block producing mushroom in a very large scale and his profit level also raised to nearly Rs. 3,00,000 per annum. He supplies raw and dry mushroom both in the market and different private companies. Alongside he is involving other youths with this venture as it is a labour intensive practice and creates an immense sum of man days in rural areas. 5-6 rural women are engaged with this venture creating an opportunity towards economic sustainability of farm women also. The most heartening part of his venture is that, he has diversified the mushroom production and is now engaged in producing mushroom powder,

mushroom cakes, sweets, biscuits which are produced and marketed by the female workers engaged in his unit. Thus, it helps in promoting livelihood dimensions of rural dwellers.

Social impact and spread: Therefore, mushroom production in that local area created a mass awareness along with providing an alternative way of income generation for small and marginal famers. Mr. Biswas is also playing the role of master trainer in his local area and he already trained more than 80 farmers. Seeing the success of booming entrepreneur people of neighbouring areas are now enthusiastic in producing mushroom in large scale.

3.8. 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. 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	Bottle gourd	Bottle gourd is a cucurbitaceous crop and production is better and quality of the produce is higher if it is cultivated in scaffold. But scaffold preparation needs high initial investment. So the farmer used the dead plants of previous brinjal crop as scaffold. He planted the pregerminated seeds of bottle gourd in planted at the base of the dead brinjal plants and it automatically climbed over the dead brinjal tree.	Reduction in cost of cultivation. Soil conservation through zero tillage method

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)
1	Aromatic rice (Tulaipanji, Radhatilak)	4 .0	33 q/ha	15	Local market
2	Indigenous rice variety (Kerala sundari)	4.26	60 q/ha	22	Govt. purchase

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			
203	55	258	258	6	-

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.	Awareness programme and distribution of Soil Health Cards	80	1	Dr. P. Bhowmick, ADA, Haringhata Block, Nadia	60	135

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

No of training programme	No of demonstrations	No of plant material produced	Visit by the farmers	Visit by the officials
2	1	5000	60	2

3.13. Technology week celebration

Type of activities	No. of activities	Number of participants	Related crop/livestock technology

3.14. RAWE/ FET programme - is KVK involved? Yes

No of student trained	No of days stayed
30	120

ARS trainees trained	No of days stayed

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

Date	Name of the person	Purpose of visit
January,2021	Prof. B. S. Mahapatra, VC, BCKV	1st Visit of Hon'ble VC at KVK
06.03.2021	Prof. B. S. Mahapatra, VC, BCKV	To attend SAC meeting

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
Composting	131	56%		12000 / ha savings in cost of fertilizer, and soil health improvement
Use of leaf colour chart in paddy	300	64%		Increase in nitrogen use efficiency, 30% fertilizer cost reduction and soil health improvement
Mushroom production	105	31%		30000-100000 yearly imcome per unit

4.2. Cases of large scale adoption

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

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. In the year 2022 total of 180 training programmes were conducted with an involvement of 5325 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. Detailed study were conducted on Doubling farmers income programme in two village

Sl. No.	Brief details of technology	Impact of the technology in subjective terms	Impact of the technology in objective terms
1	Off season vegetable cultivation	It increased the farmers income upto 60%	Off season vegetable is available in the market
2.	Leafy vegetable cultivation	It increased the farmers income up to 25%	It increased the cropping intensity and crop diversification.

4.4. Details of innovations recorded by the KVK

Thematic area:	Climate resilient
Name of the Innovation:	Indigenous technology to avert storm
Details of Innovator:	Shri Dipak Mondal, Vill: Banamalipur, Chakdaha, Nadia
Background of the Innovation:	Due to abrupt change in climatic situation in recent decade, blowing strong wind, Cyclone is regular phenomenon in the district of South Bengal in general and Nadia district in particular. These cause maximum damage in the field crops and taller fruit crops, as a result of which maximum production loss is faced by the farmers. There is no technology or intervention available in the local area which can mitigate these problems of heights magnitude
Technological Details:	It is told that where there is a problem, there is a solution also. With vast agricultural experience Sri Mondal explored his own way of encountering the problem. He initially thought to reduce the biomass load from the upper portion of the plants like Banana, Papaya, Citrus etc. through pruning and leaf shedding. It intern reduces the trust of the wind flow resulting minimum crop damage. It is practiced based on short term weather forecasting provided by the Nadia KVK.
Practical utility of the innovation:	Since climatic hazard like Fani, Amphan has become a very regular feature and farmers are facing a chronic problem out of these hazards, fruit growers may adopt this technology which is not that much cost intensive and easy to operate. This technology/ innovation can protect up to 60% of the crop loss faced by the farmers of South Bengal

4.5. **Details of entrepreneurship development**

Entrepreneurship development	
Name of the enterprise	**Mushroom cultivation**
Name & complete address of the entrepreneur	**Mr. Nayan Majumder,** Age 26, Male, Address: Taltala ward no-5, Kalyani DIST.- Nadia, West Bengal, Pin- 741222 (Ph. No. 06291088545). **Education level:** 12th
Role of KVK with quantitative data support:	He has got training on Mushroom production technology and technical support from Nadia KVK.
Timeline of the entrepreneurship development	Mr. Majumder 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 got technical guidance on mushroom production technology & 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 for 12-14 hrs and boil

	for 45 min. **or** b. Soaking of paddy straw in water with 2gm bleaching powder and 3 gm lime per liter water for 12-14 h. ↓ 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 14-16 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. ↓ 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 21-23 days, small pin head on the surface of the bed, and finally first flush of mushrooms will be ready to harvest within 26-30 days. ↓ Mushroom is plucking by slight pulling and twisting before they curled up. Successive 2-3 times flushes are harvest from the same bed at an interval of 7-10 days. ↓ Within 45-50 days crop period, 3-4 crops are expected.
Status of entrepreneur before and after the enterprise	Mr. Majumder 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	Mr. Majumder producing mushroom in very large scale and

condition of enterprise in terms of raw materials availability, labour availability, consumer preference, marketing the product etc. (Economic viability of the enterprise):	evolving rural youth also. Male and female laborers both are 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. Recently He is going to produce mushroom spawn unit for good quality spawn.
Horizontal spread of enterprise	Mr. Majumder playing a master trainer rolls in his local area and he already trained more than 40 farmers. Now his activity is encouraging other farmers to involved 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 2022 by the KVK, which have been financed by ATMA/ Central Govt/ State Govt./NABARD/NHM/NFDB/Other Agencies.

a) Programmes for infrastructure development

Name of the programme/scheme	Purpose of programme	Date/ Month of initiation	Funding agency	Amount (Rs.)

(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.)
DAESI	Training of extension functionaries	Throughout 2022	Trainees	16,00,000.00

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	7000.00	20000.00	
2	Bio pesticide production unit	2012	8.0	*Trichoderma viride*	*Trichoderma viride* Frmulation	40 Kg	2000.00	8000.00	
3	Mushroom Unit	2018	20.0	*Oyester*	*Mushroom*	10 kg	500.00	1000.00	
4	Plant Materials production unit	2008	198.8	-	-	-	-	-	
5	Seed production unit	2008	-	-	-	-	-	-	
6	Animal Unit	2018	56.8	-	-	-	-	-	
7	Water harvesting cum fish unit	2014	500	-	-	-	-	-	
8	Vermicompost and other compost unit	2018	21.6	-	-	-	-	-	
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	
Cabbage	12.10.22	2.2.23-15.2.23	0.03	Mohor	Vegetables	-	4000.00	-	Demonstration purpose
Tomato	15.10.22-20.10.22	10.12.22-3.2.23	0.03	Arka Apeksha, Arka Rakshak	-do-	-	4500.00	-	-do-
Okra	4.4.22	22.5.22-30.6.22	0.03	Hybrid Rohini	-do-	0.5	3500.00	500.00	-do-
Cowpea	4.4.22	2.6.22-13.7.22	0.03	Krishi Kanchan Barbati	-do-	0.4	3500.00	400.00	-do-
Brinjal	12.10.22	26.12.22-27.04.23	0.03	Brinjal no. 704	-do-	-	4500.00	-	-do-
Chilli	--do-	26.12.22-27.04.23	0.03	Daiya, Majum	-do-	-	3500.00	-	-do-
Onion	13.06.22	28.11.22	0.03	Arkafound Dark Red	-do-	Stored	4700.00	-	-do-
Broccoli	12.10.22	20.1.23-25.01.23	0.03	Centauro	-do-	-	3000.00	-	-do-
Capsicum	12.10.22	2.1.23-20.2.23	0.03	California Wonder	-do-	-	3400.00	-	-do-
Papaya	09.04.22	10.12.22-2.2.23	0.13	Local selection	Fruits	0.50	8000.00	500.00	
Banana	18.04.22	-	0.13	Bagda	-	-	20,000.00	-	-do-
Ornamental plants	15.07.22	-	0.03	Duranta, winter & Summer	Used in KVK	-	10000.00	-	-do-
Black pepper	24.06.22	-	For saplings	Pennyur 5	Saplings	5000 nos	6000.00	10,000.00	
Mango	11 years old	Off year	0.2	Himsagar, Amrapalli	-	-	2500.00	-	
Malta orange	2 years old	Crop not allowed	0.13	BARI 1	-	-	2500.00	-	

Guava	3 years old	-do-	0.4	Allahabad safeda, Baruipur, Khaja, VNR Bihi	-	-	2500.00	-	
Coconut	5 years old	Juvenile stage	0.27	Local Tall	-	-	3500.00	-	
Citrus	8 years old	Hard pruning done	0.2	Pati, Golpatti	-	-	6000.00	-	

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.	Bio Fungicide (*Trichoderma*)	139	20,000.00	Distributed among farmers	
2.	Vermicompost	700	3000.00	Used in KVK farm	
3.	Other compost	5000	3000.00	-do-	

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	500 lit	30,000.00	16,000.00	
2.	Goats	Black Bengal	Meat	13 nos	6000.00	19000.00	

6.5. Utilization of hostel facilities

Accommodation available (No. of beds)

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
September, 22	30	270	-
October, 22	30	240	
November, 22	30	630	
December, 22	30	300	
Total :	120	1440	

(For whole of the year)

6.6. Utilization of staff quarters: N.A.

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
Savings account	State Bank of India	Kalyani	30405569860

7.2. Utilization of funds under CFLD on Oilseed *(Rs. In Lakhs) (Fund not received)*

Item	Released by ICAR		Expenditure		Unspent balance as on 1st April, 2022
	Kharif	Rabi	Kharif	Rabi	

7.3. Utilization of funds under CFLD on Pulses *(Rs. In Lakhs) (Fund not received)*

Item	Released by ICAR		Expenditure (Committed)		Unspent balance as on 1st April 2022
	Kharif	Rabi	Kharif	Rabi	

7.4. Utilization of KVK funds during the year 2021-22 (Not audited- 01.04.2022 to 31.12.2022)

7.5.

Sl. No.	Particulars	Sanctioned	Released	Expenditure
A. RECURRING CONTINGENCIES				
1	Pay & Allowances	2,01,00,000.00	2,01,00,000.00	2,05,48,454.00
2	Traveling allowances	1,20,000.00	1,20,000.00	58,634.00
3	HRD	30,000.00	30,000.00	-
4	Contingencies			
A	Office Contingency	7,00,000.00	7,00,000.00	5,72,991.00
B	Training			
C	OFT			
D	FLD			
E	SCSP	20,00,000.00	20,00,000.00	4,40,011.00
F	Swachhta Expenditure/ SAP Fund			
TOTAL (A)		**2,29,50,000.00**	**2,29,50,000.00**	**2,16,20,090.00**
B. NON-RECURRING CONTINGENCIES				
1	Equipments & Furniture	65,000.00	65,000.00	-
2	Works	10,00,000.00	10,00,000.00	10,00,000.00
3	Vehicle	-	-	-
4	Library	10,000.00	10,000.00	-
TOTAL (B)		**10,75,000.00**	**10,75,000.00**	**10,00,000.00**
GRAND TOTAL (A+B)		**2,40,25,000.00**	**2,40,25,000.00**	**2,26,20,090.00**
C. REVOLVING FUND				

7.6. Status of revolving fund (Rs. in lakh) for last three years (Not audited- 01.04.2022 to 31.12.2022)

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)
2020-21	36.50500	5.63326	4.34326	Cash: 36.75500 Kind: 1.04
2021-22	37.79500	0.80212	3.06531	Cash: 33.46681 Kind: 2.06500 (As on 31.12.2021)
2022-23	33.46681	0.67000	7.70000	26.43681 (As on 31.12.2022)

7.6. (i) Number of SHGs formed by KVKs

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

(iii) Details of marketing channels created for the SHGs

7.7. Joint activity carried out with line departments and ATMA

Name of activity	Number of activity	Season	With line department	With ATMA	With both

8. Other information

8.1. Prevalent Pest and diseases in Crops

Name of the Pest/disease	Crop	Date of outbreak	Area affected (in ha)	% Commodity loss	Preventive measures taken for area (in ha)
Dead Heart of Rice	Paddy	2021	3000 ha	20%	IPM model and use new composition
Rugose white fly of Coconut	Coconut, Mango etc	2020	8000 ha	50%	IPM model
Fall Army Worm	Maize	2019	50 ha	15%	IPM model

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

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

9.2. PPV & FR Sensitization training Programme

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

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

Type of message	No. of messages	No. of farmers covered
Crop	27	90,401
Livestock		
Fishery		
Weather		
Marketing		
Awareness		
Training information		
Other		
Total	**27**	**90,401**

9.4. *KVK* Portal and Mobile App

Sl. No.	Particulars	Description
1.	No. of visitors visited the portal	5623
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	

9.5. a. Observation of Swachh Bharat Programme

Date/ Duration of Observation	**Activities undertaken**
23.08.2022	Awareness programme, Cleaning of the campus, sanitizing the office building
02. 10. 2022	Cleaning of the campus, sanitizing the office building

b. Details of Swachhta activities with expenditure

	Activities	**Number**	**Expenditure (in Rs.)**
1.	Digitization of office records/ e-office		
2.	Basic maintenance	2	
3.	Sanitation and SBM		
4.	Cleaning and beautification of surrounding areas	1	1200.00
5.	Vermicomposting/ Composting of biodegradable waste management & other activities on generate of wealth for waste	1	
6.	Used water for agriculture/ horticulture application		
7.	Swachhta Awareness at local level		
8.	Swachhta Workshops		

9.	Swachhta Pledge		
10.	Display and Banner		
11.	Foster healthy competition		
12.	Involvement of print and electronic media		
13.	Involving the farmers, farm women and village youth in the adopted villages (no of adopted village)		
14.	No of Staff members involved in the activities	12	
15.	No of VIP/VVIPs involved in the activities		
16.	Any other specific activity (in details)		
	Total		

9.6. Observation of National Science day

Date of Observation	Activities undertaken

9.7. Programme with SeemaSurakshaBal/ BSF

Title of Programme	Date	No. of participants

9.8. Agriculture Knowledge in rural school

Name and address of school	Date of visit to school	Areas covered	Teaching aids used

Give good quality 1-2 photograph(s)

9.9. 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		

9.10. Details of Swachhta Hi Suraksha programme organized

Sl. No.	Activity	No. of villages Involved	No. of Participants	No. of VIPs	Name (s) of VIP(s)

9.11. Details of Mahila Kisan Divas programme organized

Sl. No.	Activity	No. of villages Involved	No. of Participants	No. of VIPs	Name (s) of VIP(s)

9.12. 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	Bhairab Mandal	Vill- kastadanga Block- Haringhata, Dist- Nadia 9641532767	In situ decomposition of paddy stubble
2.	Nirmal Sarkar	Vill- Vayna Block- Hanskhali, Dist- Nadia 9674545585	Organic pest and disease management
3.	Ashim Biswas	Vill- ramnagar Block- Hanskhali, Dist- Nadia 7602639355	Banana cultivation

9.13. Revenue generation

Sl.No.	**Name of Head**	**Income(Rs.)**	**Sponsoring agency**
1.	Farm unit	92,392/-	
2.	Hostel unit	46,100/-	
Total		1,38,492/-	

9.14. Resource Generation:

Sl.No.	Name of the programme	Purpose of the programme	Sources of fund	Amount (Rs. Lakhs)	Infrastructure created
1	ATMA short term research	Need based short term research	ATMA Nadia	**4.50**	**Nil**
2	STRY	Skill training for rural youth	SAMETI	**1.26**	**Nil**
3	Bee Keeping	Skill training for Bee Keepers	National Bee Broad	**3.79**	**Nil**
4	DAESI	Diploma training for Input Dealers	Self Financed	**16.00**	**Nil**
Total				**25.55**	

9.15. Performance of Automatic Weather Station in KVK

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

9.16. 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
Experiment 1						
Experiment 2						
Experiment 3						
…						
..						
Others (If any)						

11. Details of TSP

a. Achievements of physical output under TSP during 2022-2023

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 2022-23 (Rs. In lakh):

c. Achievements of physical outcome under TSP during 2022-2023

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	

d. Location and Beneficiary Details during 2022-2023

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

12. 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	Number of 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 beneficiaries								
		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

13. 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

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

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

S.No	Period	Producer Company Name	Block (s)	District	Address	Date of Registration	Registration No.	Number of Farmers			Name of Chairman (mobile no)	Name of CEO (mobile no)	Total Groups formed	Main Business Activity of the Producer Company
								Male	Female	Total				
1	2014-2017	Nakashipara Farmers Producer Company Limited	Nakashipara	Nadia	Village Jugpur Colony, PO Nakashipara, Nakashipara-741126, West Bengal	12-Nov-15	U01403WB2015PTC208767	700	304	1004	Ramen Jaoy Dhar M. No-7699971013	Raju Das,Ph-9851788754, Mail Id-nakashiparafpcl@gmail.com	58	Jarbera,Orchid,Rose,Tuberose,Marrygold,Gadula,Chandramollika,Ladiesfinger,cauliflower,cabbage,Papaya,Raw Banana
2	2018-2021	Krishnaganj Farmers Producer Company Limited	Krishnaganj	Nadia	Vill + P.O+P.S-Krishnaganj, Near Krishak Mandi, Pin -741506, Dist -Nadia	29-Aug-19	U01100WB2019PTC233675	740	123	863	Bidyut Biswas -9609137108	Krishanu Mondal -7063661414 krishanumondal1414@gmail.com	51	Mustard,Mango(Himsagar,Amropali,Langra,Mallika), Lichi (Bomby), Jackfruit,Jute,Paddy,Pulse, Brinjal,Cabbage, Cauliflower,Banana,Bottlegourd,Cucumber,Onion,Bitter Gourd

3	2011-2013	Nadia Vegetable Producer Company Limited	Krishnanagar-I/II,Haringhata, Chakdaha	Nadia	Krishnanagar I no krishak bazar, Jahangirpur ,Krishnanagar 741103	13-Apr-13	U01400WB2013PTC192213	910	28	938	Asim Kumar Mondal - 9593495699	Gouranga Guin - 9681603292	69	Seed, Vermi Composed, All type of vegetables, Flower
4	2018-2021	Hanskhali Farmers Producer Company Ltd.	Hanskhali	Nadia	Vill-Radhashyam bazar,Kalamari,Hanskhali,Nadia, West Bengal,741102	22-Jan-20	U0110WB2020PTC236051	811	16	827	Banamali Tarafdar - 9932948200	Ratan Mondal 9153726074	48	Paddy, All type of vegetabels, Flower,Banana

16. 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.	Agriculture	0.4	Lentil seed Green gram seed	2000.00 2500.00	Crop in the field 4500.00	11 nos	40% monetary gain
2.	Horticulture		Vegetables seedlings	10,000.00	25,000.00		
3.	Diary		Milk – 528.5 lit Cowdung – 30 tonnes Waste decomposer compost – 3 tonnes NOVCOM compost – 3 tonnes	15,000.00	34,500.00		
4.	Goatery		Live goats – 70.2 kg	8,000.00	17,250.00		

17. Technologies for Doubling Farmers' Income

Sl. No.	**Name of the Technology**	**Brief Details of Technology (3- 5 bullet points)**	**Net Return to the farmer (Rs.) per ha per year due to adoption of the technology**	**No. of farmers adopted the technology in the district**	**One high resolution 'Photo' in 'jpg' format for each technology**
1	Bee keeping	*Apis mellifera* is reared in box Honey and bee wax is extracted	1,33,000.00	50	

2	Malta cultivation	This fruit is cultivated High demand in market	1,12,000.00	10	

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

	Database prepared/ covered for		KVK level Committee		Various activity conducted for farmers
Phase	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					

19. Information on Visit of Ministers 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)

20. a) Information on **ASCI** Skill Development Training Programme, if undertaken during 2022

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		

b) Information on Skill Development Training Programme (**Other than ASCI or less than 200 hrs**., if any) if undertaken during 2021

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	

21. 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

22. Information on Krishi Kalyan Abhiyan Phase-III, if applicable

a) Training achievements

Name of KVK	Period	No. of Training on diversified farming practices for doubling farmers' income organized	No. of farmers trained	
			Male	Female
	01.01.2022 to 31.12.2022			

b) Other achievements

Sl. No.	Particulars	January, 2022 to December, 2022
1	Number of demonstrations other than oilseeds and pulses	
2	Number of demonstrations on oilseed crops	
3	Number of demonstrations on pulse crops	
4	Number of farmers trained	
5	Number of participants in Extension activities	
6	Number of farmers for Mobile Advisory	
7	Production of seeds (in quintal)	
8	Production of planting material (Number)	
9	Number of soil sample tested	
10	Number of farmers covered in Climate Resilient villages	
11	Number of farm families covered in Farmer FIRST project	
12	ARYA project: Number of youth trained	
13	ARYA project: Number of entrepreneurial activities started	
14	Number of farm families in DFI villages	

23. Any other programme organized by KVK, (not covered above) N.A.

Sl. No.	Name of the programme	Date of the programme	Venue	Purpose	No. of participants
1	On Farm Trials, Cluster Demonstration and Crop Cafeteria programmes on *kharif* paddy	Kharif, 2022	Nadia KVK	Nadia KVK has conducted collaborative activities with IRRI	26

24. Good quality action photographs (with proper caption) of overall achievements of KVK during the year (best 10)

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ON & ONLINE Campus Training

OFF Campus Training

Front Line Demonstration (FLD)

On Farm Trail (OFT)

OFT on Climate resilient vegetable production (Cabbage) with adaptation of plug tray seedlings and double row planting.

OFT on Introduction of low cost poly walking tunnel for year round off season vegetable cultivation.

OFT on management of downy mildew of cucumber

OFT on management of Collar rot of chilli

OFT on foliar nutrient application in Green gram

OFT on effect of mulching, border crops and application of sea weed extract on seed quality of Chilli

OFT ON PADDY VARIETIES

Evaluation of integrated Nutrient Management practice through use of bio-fertilizer for Kharif paddy

Evaluation on impact of different microbial consortium on in situ crop residue decomposition

SPECIAL PROGRAMMES

Krishi Mela

Azadi ka amrit mahotsav

Vigilance Awareness

Kisan Samman Diwas

DAESI

RAWE

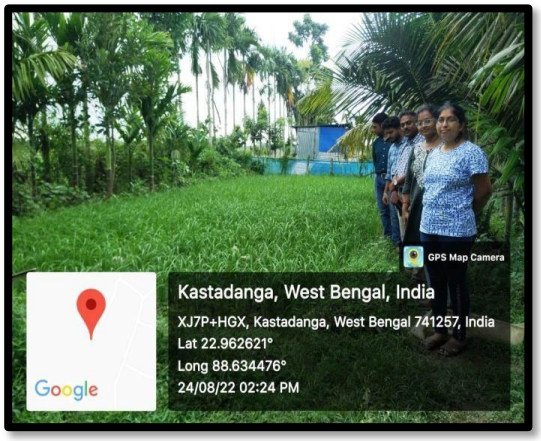
Poosan Maah

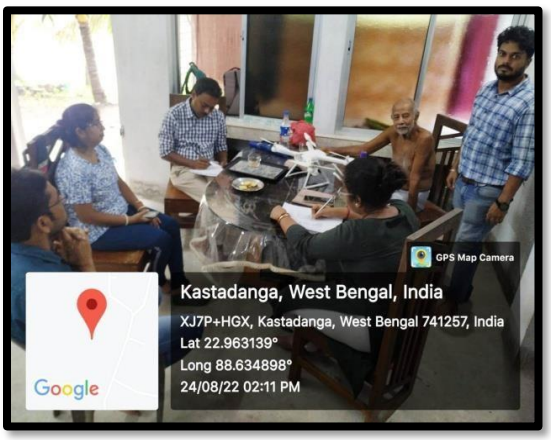
Natural Farming

PPV & FRA

World soil day

PM Kisan Samman Nidhi





Project Activities on Formulation of Area Development Scheme and Development of Area –Specific Software Based Model of IFS

NEWSPAPER CUTTINGS & VIDEOGRAPHY

গ্রামের কথা

ধান চাষের উন্নয়নে

ইরি, নদীয়া কৃষি বিজ্ঞান কেন্দ্র এবং বিধানচন্দ্র কৃষি বিশ্ববিদ্যালয়ের যৌথ প্রয়াস

KALANTOR, 02.11.2022

❖ সবুজ সোনা ❖১লা নভেম্বর, ২০২২ (পাঁচ) Five

কৃষক দিবস আয়োজনে
নদীয়া কৃষি বিজ্ঞান কেন্দ্র

সংবাদদাতা ঃ আন্তর্জাতিক ধান্য গবেষণা কেন্দ্র (IRRI) এক নদীয়া কৃষি বিজ্ঞান কেন্দ্র, বিধানচন্দ্র কৃষি বিশ্ব বিদ্যালয়ের যৌথ উদ্যোগে নদীয়া জেলার চাকদহ ব্লকের গোঁটরা ও ঘেঁটুগাছি গ্রামে এক হাঁসখালি ব্লকের ভায়না গ্রামের মোট ১৫ জন কৃষকের জমিতে ধানের বিভিন্ন প্রজাতির গবেষণা ও প্রদর্শন ক্ষেত্র করা হয়েছিল। ২৯ তারিখ নদীয়া কৃষি বিজ্ঞান কেন্দ্রের পক্ষ থেকে ড. কৃষ্ণ কিশোর গোস্বামী ও ড. শুভ্রজ্যোতি প্রামানিক আন্তর্জাতিক ধান্য গবেষণা কেন্দ্রের বিজ্ঞানীদের সেই প্রদর্শন ক্ষেত্র ঘুরিয়ে দেখালেন।

এছাড়াও নদীয়া কৃষি বিজ্ঞান কেন্দ্রের গয়েশপুর ফার্মে মোট ২৬টি ধানের প্রজাতির প্রদর্শন ক্ষেত্র ও ঘুরে দেখেন ইরির বিজ্ঞানীরা সঙ্গে ছিলেন নদীয়া জেলার বিভিন্ন প্রান্তের প্রায় ২০ জন কৃষক।তাদের নিয়ে পালিত হল 'কৃষক দিবস'। এই অনুষ্ঠানে ধানের বিভিন্ন উপযোগী জাত নিয়ে আলোচনাচক্রের আয়োজন করা হয়েছিল। এই গবেষণার আসল উদ্দেশ্য হল কৃষকের দ্বারা নির্বাচিত ধানের জাত গুলির উন্নতমানের বীজ ভবিষ্যতে কৃষকের হাতে তুলে দেওয়া।

SOBUJSONA, 01.11.2022

বদলে যাক আবহাওয়া, তবু ফলবে ধানঃ বিসিকেভি
Business Prime News
https://www.youtube.com/watch?v=VNTb0cQZLMA

Youtube Channel Link, 14.11.2022