ANNUAL REPORT

(January, 2023 to December, 2023)

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.	9434241001	NA	nadiakvk@gmail.com

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, 2023)

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	Agricultural Extension	Research Level 13A Present Basic 1,81,800/-	23.11.2005	Permanent	Others)
2	Subject Matter Specialist	Dr. Malay Kumar Samanta	Subject Matter Specialist/T6	Horticulture	Level 10 Present Basic 90,000/-	25.10.2005	Permanent	Others
3	Subject Matter Specialist	Dr. Malabika Debnath	Subject Matter Specialist/T6	Plant Protection	Level 10 Present Basic 90,000/-	26.10.2005	Permanent	Others
4	Subject Matter Specialist	Dr. Shubhra Jyoti Pramanik	Subject Matter Specialist/T6	Seed Science	Level 10 Present Basic 90,000/-	26.10.2005	Permanent	Others
5	Subject Matter Specialist	Dr. Kaushik Mukhopadhyay	Subject Matter Specialist/T6	Soil Science	Level 10 Present Basic 65,000/-	22.06.2018	Permanent	Others
6	Subject Matter Specialist	Vacant	-	Agronomy	-	-	-	-
7	Subject Matter Specialist	Vacant	-	Animal Husbandary	-	-	-	-
8	Farm Manager	Dr. Sukhen Chandra Dhang	Farm Manager/T4	Horticulture	Level 6 Present Basic 56,900/-	07.09.2006	Permanent	Others
9	Computer Programmer	Mr. Jharnendu Hembram	Programme Assistant (Computer)/T4	Information Technology	Level 6 Present Basic 44,900/-	06.06.2014	Permanent	ST
10	Programme Assistant (Lab. Technician)	Mr. Saidul Islam	Programme Assistant (Lab. Tech.)/T4	Plant Pathology	Level 6 Present Basic 39,900/-	01.08.2018	Permanent	OBC (A)

Sl. No.	Sanctioned post	Name of the incumbent	Designation	Discipline	Pay Scale with present basic	Date of joining	Permanent /Temporary	Category (SC/ST/ OBC/ Others)
11	Assistant	Mr. Kumares Das	Assistant	Biology	Level 6 Present Basic 53,600/-	05.12.2008	Permanent	SC
12	Stenographer	Vacant	-	-	-	-	-	-
13	Driver	Mr. Kalyan Kumar Thakur	Driver/ T1	-	Level 3 Present Basic 36,100/-	24.10.2005	Permanent	Others
14	Driver	Mr. Sukharanjan Nath	Driver/ T1	-	Level 3 Present Basic 36,100/-	30.08.2006	Permanent	OBC(B)
15	Supporting staff	Mr. Prasanta Biswas	Skill Supporting staff	-	Level 1 Present Basic 30,600/-	26.10.2005	Permanent	SC
16	Supporting staff	Mr. Biswajit Hansda	Skill Supporting staff	-	Level 1 Present Basic 30,600/-	24.10.2005	Permanent	ST

1.6 **Total land with KVK (in ha)** :

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

Total area should be matched with breakup

1.7 Infrastructure Development:

A) Buildings and others

Sl. No.	Name of infrastructure	Not yet started	Completed up to plinth level	Completed up to lintel level	Completed up to roof level	Totally completed	Plinth area (sq. m)	Under use or not*	Source of funding
1.	Administrative Building					Yes	550.0	√	ICAR
2.	Farmers Hostel					Yes	300.0	√	ICAR
3.	Staff Quarters (6)					-	-	-	-
4.	Piggery unit					Yes	121.0	√	RKVY
5	Fencing					Yes	-	√	ICAR
6	Rain Water harvesting structure					Yes	500.0	√	SASMIRA
7	Threshing floor					Yes	357.0	√	ICAR
8	Farm godown					Yes	189.5	√	ICAR
9.	Dairy unit					Yes	28.4	√	ATMA
10.	Poultry unit					Yes	14.2	√	ATMA
11.	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	76,000.00 km	Working
Tractor	March, 2005	4,29,440.00	1045.00 hr	Working
Motor Bike I	June, 2016	60,000.00	12411.00 km	Working
Motor Bike II	June, 2016	60,000.00	15082.00 km	Working

C) Equipment & AV aids

Name of equipment	Year of purchase	Cost (Rs.)	Present status	Source of fund
a. Lab equipment				
Lux meter	2008	4,500.00	Working	NHM
Thermometer (Min & Max)	2008	9,00.00	Working	NHM
Hair Hygrometer	2008	9,00.00	Working	NHM
Spectrophotometer	2011	30,588.00	Working	ICAR
Flame photometer	2011	25.027.00	Working	ICAR
P.H meter (3)	2011	10.896.00	Working	ICAR & ATMA
E.C.meter	2011	6.333.00	Working	ICAR
Digital balance	2011	36,000.00	Working	ICAR & ATMA
B.O.D (2)	2011	98,000.00	Working	ICAR
Hot air oven	2011	9,000.00	Working	ICAR
Dryer	2011	9,000.00	Working	ICAR
Desiccator	2011	12,000.00	Working	ICAR
Laminar air flow(2)	2011	80,000.00	Working	ICAR
Autoclave	2011	38,000.00	Working	ICAR
Mechanical shaker (2)	2011	43,240.00	Working	ICAR
Water distillation unit (2)	2011	23,800.00	Working	ICAR
Microscope (3)	2011	5,12,000.00	Working	ICAR
Tissue culture rack (3)	2012	60,000.00	Working	ICAR
Soil moisture meter	2012	8,000.00	Working	ICAR
Carrier culture mixture machine	2012	25,000.00	Working	ICAR
Microwave	2012	4,800.00	Working	ICAR
b. Farm machinery				
Tractor	2005	4,30,000.00	Working	ICAR
Grafting/budding knife	2008	720.00	Working	ICAR
Plastic pipe	2008	2,844.00	Working	ICAR
Henso	2008	1,200.00	Working	ICAR
Da	2008	412.00	Working	ICAR
Polythene	2008	6,550.00	Working	ICAR
Secature	2008	1,575.00	Working	ICAR
Rose Cane	2008	1,300.00	Working	ICAR
Van Rickshaw	2008	7,780.00	Working	ICAR
Shabol	2008	1,120.00	Working	ICAR
Khurpi	2008	975.00	Working	ICAR
Belcha	2008	544.00	Working	ICAR

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

D) Farm implements

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

1.8 Details SAC meeting conducted in the year

Sl. No.	Date	Number of Participants	Salient Recommendations	Action taken	If not conducted, state reason
1.	31.01.2023	18	Time of marketable maturity may be informed.	Six trainings on time of marketable maturity of important vegetable crops including cucumber have been imparted.	
			Effective no. of shoots instead of average effective tillers in Paddy varietal trail may be taken into account.	Appropriate action has already been taken while collection of data, both in OFT and FLD.	
			In situ residue decomposition on impact of different microbial consortium may be emphasized.	One OFT on this issue has been conducted by using Pusa decomposer and Waste decomposer.	
			Utilization of SCSP fund may be increased.	Almost 75% of fund under SCSP has already been utilized upto the reporting time.	
			Proper time of cutting/ incorporation of Dhaincha may be suggested.	It has already been followed in FLD programme on 5.3 ha of land involving 40 farmers.	
			More Soil Health Cards may be issued and distributed among the farmers.	Soil Health cards have been distributed among 125 farmers during World Soil Day programme on 05th December, 2023	
			Programme on natural farming may be taken up.	Seven number of training programmes on Natural farming are being conducted till date SMS (Plant Protection) and SMS (Soil Science) attended one Doordarshan programme on Natural farming. SMS (Soil Science) will be participating in a training cum exposure visit at EEI, Anand, Gujrat during 18-22 March, 2024.	
			Drone technology may be used in pest management.	Both awareness programme and demonstration on its use in pest management	

Sl. No.	Date	Number of Participants	Salient Recommendations	Action taken	If not conducted, state reason
				has been conducted in 4 places of Nadia district.	

** Salient recommendation of SAC in bullet form*

Proceeding of 17th Scientific Advisory Committee meeting held at Nadia KVK, BCKV on 31.01.2023

Venue : Conference Hall, Nadia KVK, Gayeshpur
Date : 31.01.2023

Initially every member present at SAC meeting were welcomed by Dr. Malabika Debnath, SMS (Plant Protection) on behalf of Nadia KVK and Honourable Vice-Chancellor was felicitated by Dr. Subhrajyoti Pramanik, ATARI- Director was felicitated by Dr. Malabika Debnath and Director, DEE, BCKV was felicitated by Dr. Malay Kumar Samanta. In welcome address, DEE, BCKV explained the purpose and utility of SAC meeting for the farming community. He also asked the line Departments for discussion on reports. He further asked Dr. K. K. Goswami, Sr. Scientist & Head, Nadia KVK for presentation of Reports.

Dr. K. K. Goswami delivered salient achievements of 2022 Action Report. For OFT 3 on "Assessment of efficiency of some chemicals for management of Downy mildew in cucumber", DEE, BCKV told to mention the date of marketable maturity of cucumber. In OFT 4 on "Assessment of efficiency of integrated approach against collar rot of chilli", it was reported that collar rot in chilli is a problem. In OFT 7 on "Paddy Varieties", Vice-Chancellor advised to consider average effective number of shoots instead of average effective tillers in Paddy. Also, it was emphasized on in situ residue decomposition in OFT 9 on "Evaluation on impact of different microbial consortium on in situ crop residue decomposition". Vice –Chancellor provided some observations on organic carbon presence in fields. DEE, BCKV suggested to make viable seed packet for distribution to farmers and told to make documentation.

During discussion of Action Report, ATARI Director raised questions on expenditure of SCSP fund. ATARI Director asked on number of year of trial of OFT 3 on "Assessment of efficiency of some chemicals for management of Downy mildew in cucumber". VC told to conduct trial in onstation keeping a replication in farmer's field. VC suggested to make a correction in OFT 7 on "Paddy Varieties".

In FLD 8 on "Green manuring with Dhaincha" it was a discussion on proper time of cutting the green manure crops in the field. DEE, BCKV asked about the year of demonstration of FLD 17 on "Seedling raising in plug tray". ATARI Director suggested to organize effective extension programme even with less participating farmers. He also pointed out that to provide more soil health card to the farmers and to provide soil health card analysis data to Report. DEE, BCKV asked line Departments to deliver any suggestions or any addition on

earlier discussion. ADA told to give hand out of achievement slides. VC told to submit a copy of Annual Report before SAC meeting. ADA told to provide information on summer cauliflower, problem in mustard sclerotinia and leaf curling of pointed gourd. ARD told that they will provide expertise during training programme on animal production. ADH told on sea weed extract. Representative of AIR, Kolkata mentioned to deliver a programme schedule in advance to their office. VC asked about the status of RKVY project. ATARI Director told that a lot of programme will be held in coming days. All programmes should be organized keeping in mind on the local requirements. He also suggested to do work on natural farming. He also added that drone technology would be followed in coming days. He reported that a community radio station is being operated in Maharashtra.

VC pointed out that PRA must be done in doing any work at village level. He also advised to maintain documents in every meeting and asked to make resolutions in every meeting and do act accordingly. DEE, BCKV advised to do work with line Departments according to necessity. VC emphasized on to do on natural farming.

Members present in the SAC meeting –

1. Prof. B. S. Mahapatra Vice – Chancellor, BCKV
2. Dr. S. K. Roy, Director, ICAR – ATARI
3. Prof. U. Thapa, DEE, BCKV
4. Mr. Barun Kumar Bhattacharya Joint Director of Agriculture (Fertilizer) ,Nadia
5. Dr. Sudeshna Kar, ADA, Kalyani
6. Dr. Sarikul Islam, Asst. Director, ARD (Admin.)
7. Tapu Dutta LDM, Nadia
8. Debabrata Roy, G.M, DIC, Nadia.
9. Surav Kumar Roy, Manager & O.C., DIC, Nadia
10. Chitrasree Mondal, Vermicompost maker
11. Tuhin Kumar Chatterjee, O.B. Producer, AIR
12. Dr. Swapan Kumar Mukhopadhyay, In-charge, RRS, Gayeshpur, BCKV
13. Pintu Mandal, Farmer
14. Tarun Kumar Pal, Dy. Director of Sericulture, Krishnanagar, Nadia
15. Sanjay Kumar Roy, In charge, ICAR – KVK, Nadia, NDRI- ERS, Kalyani
16. Bithika Biswas, Woman Farmer
17. Anisha Mondal, Vermicompost Entrepreneur
18. Jahirul Mondal, Farmer

2. 2.1.District level data on agriculture, livestock and farming situation (2023)

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 skillin 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 AlluvialZone	Soil share are moderately well drained, deep and medium textured with pH varies from 6.5 – 7.5 with a good base saturation.Annualrainfallinthesituationvariesfrom1,401-1,671mm; maximum and minimum temperature ranges between 25.2 –37.9°C and 9.8 – 26.7°C respectively. So far as the physiographic and irrigation facility is concerned, 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 alluvial flood plain, and iv) Deltic alluvial plain. The climate of this largest agro-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	Soils here are moderately well drained, deep and medium textured with

	(a) Up land (b) Medium land **Clay** (a) Low land	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				

Month	Rainfall (mm)	Temperature ^{0}C	
		Maximum	Minimum
January, 23	0	23.4	7.2
February, 23	0	27.8	9.5
March, 23	68.7	34.2	15.0
April, 23	36.4	32.6	19.0
May, 23	89.9	30.8	19.6
June, 23	133.8	32.8	22.5
July, 23	167.1	34.2	25.0
August, 23	230.4	27.8	23.0
September, 23	199.5	30.0	23.8
October, 23	252.9	30.8	18.6
November, 23	6.0	29.2	14.2
December, 23	67.3	24.6	9.6

2.2. Details of operational area / villages (2023)

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, Charsarati	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 livestock. * 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 Bhaduri, Taherpur			
		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,		

Sl. No.	Name of Taluk	Name of the block	Name of the villages	Major crops & enterprises	Major problems identified (crop-wise)	Identified Thrust Areas
				poultry, cattle 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, Mayurhat	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-I	Usidpur	Groundnut	Poor yield performance of oil seed crop	Promotion of pulse and oil seed crops

2.3. 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, Training and FLD
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
Mayurhat		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
Charsarati	Kalyani	FLD and 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

2.4. Priority thrust areas

Sl. No	Thrust area
1.	Promotion of Natural Farming
2.	Introduction of farmer-led branded seed production grid
3.	Improvement of pulse based cropping system
4.	Judicious crop management
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
8	**8**	**54**	38	4	0	1	12	2	50	7	**57**	**16**	**18**	**654**	487	26	2	2	202	4	691	30	**721**

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
119	**172**	**3242**	2287	525	54	19	2012	370	4353	914	**5267**	**100**	**167**	**4000**	2305	752	151	51	2546	638	5002	1441	**6443**

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
		0.0028	0.00183

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	-	1.69	5.89	78.56	96000/-	235680/-	2.45

		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	-	1.46	6.32	76.44	96000/-	229320/-	2.38
		Farmers' practice: Deep ploughing during land preparation, Indiscriminate use of fungicide like carbendazim, mancozeb, propiconazole etc.	-	4.36	11.63	72.15	99000/-	216450/-	2.18
		SEm+		**0.47**	**0.56**	**0.64**			
		CD(P=0.05)		**1.44**	**1.69**	**1.95**			
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. The rainfall was less in the beginning of monsoon season, but heavy rainfall in the later stage caused the damage due to the disease.							
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	% 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 methyl 1 g/ l of water	7	-	1.69	5.89	78.56	96000/-	235680/-	2.45
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		-	1.46	6.32	76.44	96000/-	229320/-	2.38
Farmers' practice: Deep ploughing during land preparation, Indiscriminate use of fungicide like carbendazim, mancozeb, propiconazole etc.		-	4.36	11.63	72.15	99000/-	216450/-	2.18
SEm±			**0.47**	**0.56**	**0.64**			
CD(P=0.05)			**1.44**	**1.69**	**1.95**			

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

Recommendation: 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 is recommended for eggective management of collar rot of chilli.

OFT-2

1.	**Title of On farm Trial**	**Assessment of efficiency of IPM for management of Bacterial blight of paddy**							
2.	**Problem diagnosed**	Paddy is the most important field crop of Nadia District. Now a days this crop face huge loss due to bacterial blight disease. It reduces 15-55% yield and it sometime becomes difficult to manage the infestation.							
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:** leaf colour chart based nitrogen application, spraying with Streptocycline @ 1 g/10 l. **Technology option 2:** leaf colour chart based nitrogen application, spraying with raw caw dang @ 2 kg/ 10 l, spraying with Streptocycline @ 1 g/10 l.							
4.	**Source of Technology (ICAR/ AICRP/SAU/other, please specify)**	BCKV							
5.	**Production system and thematic area**	Paddy 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 (15 days after spray)**	**Average yield (q/ha)**	**Gross cost (Rs./ha)**	**Gross return (Rs./ha)**	**BC Ratio**
		Technology option 1 = leaf colour chart based nitrogen application, spraying with Streptocycline @ 1 g/10 l	10.53	6.34	6.94	49.5	63830/-	108059/-	1.69
		Technology option 2 = leaf colour	10.43	6.19	6.86	49.8	63830/-	108713/-	1.70

		chart based nitrogen application, spraying with raw caw dang @ 2 kg/ 10 l, spraying with Streptocycline @ 1 g/10 l							
		Farmers' practice: Indiscriminate use of fungicide like carbendazim, mancozeb, propiconazole	16.94	17.36	19.46	43.6	65650/-	95179/-	1.44
		SEm±	**0.43**	**0.83**	**1.03**	**1.69**			
		CD(P=0.05)	**1.29**	**2.52**	**3.14**	**5.13**			
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 the effect of cowdang is not visible and it is slightly problematic. The experiment should be repeated for next year.							
8.	**Constraints identified and feedback for research**	Effect of cowdang is not visible and spraying of cowdang is slightly problematic							
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 (15 days after spray)	Average yield (q/ha)	Gross cost (Rs./ha)	Gross return (Rs./ha)	BC Ratio
Technology option 1 = leaf colour chart based nitrogen application, spraying with Streptocycline @ 1 g/10 l	7	10.53	6.34	6.94	49.5	63830/-	108059/-	1.69
Technology option 2 = leaf colour chart based nitrogen application, spraying with raw caw dang @ 2 kg/ 10 l, spraying with Streptocycline @ 1 g/10 l .		10.43	6.19	6.86	49.8	63830/-	108713/-	1.70
Farmers' practice: Indiscriminate use of pesticide fungicide like carbendazim, mancozeb, propiconazole		16.94	17.36	19.46	43.6	65650/-	95179/-	1.44
SEm+		**0.43**	**0.83**	**1.03**	**1.69**			
CD(P=0.05)		**1.29**	**2.52**	**3.14**	**5.13**			

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

Recommendation: leaf colour chart based nitrogen application, spraying with Streptocycline @ 1 g/10 l. ***It is also recommended to carry out this experiment for another year.***

OFT-3

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 0.2 % urea at flower initiation stage (25-30 DAS) + Micronutrients @ 2g/ *l* of water at 35-40 DAS **Technology option 2:**Foliar spray of 0.2 % DAP at flower initiation stage (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*** *@ 1.5* kg / 30 kg of seed requiring for one hectare) **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 0.2 % DAP at flower initiation stage (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 0.2 % DAP at flower initiation stage (25-30 DAS) + Micronutrients @ 2g/ *l* of water at 35-40 DAS 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 @ 1.5* kg / 30 kg of seed requiring for one hectare) **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.
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 0.2 % DAP at flower initiation stage (25-30 DAS) + Micronutrients @ 2g/ *l* of water at 35-40 DAS 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 0.2 % urea at flower initiation stage (25-30 DAS) + Micronutrients @ 2g/ *l* of water at 35-40 DAS

Technology option 2: Foliar spray of 0.2 % DAP at flower initiation stage (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	32.0	4.6	65.6	1.6	20.6	8.9	32,550	52,200	34,100	1.6
Technology option1: Foliar spray of 0.2 % urea at flower initiation stage (25-30 DAS) + Micronutrients @ 2g/ *l* of water at 35-40 DAS		42.5	6.0	72.2	2.2	23.6	9.6	33,750	57,400	36,150	1.7
Technology option 2: Foliar spray of 2g/ *l* DAP + Micronutrients @ 2g/ *l* of water at 35-40 DAS		48.0	6.8	79.6	2.8	24.0	10.2	33,750	59,100	36,400	1.8
CD (5%)	-	3.682	0.546	7.650	0.192	2.404	0.911	-	-	-	-

Results: From the result it is clear that the **Technology option 2:** Foliar spray of 0.2 % DAP at flower initiation stage (25-30 DAS) + Micronutrients @ 2g/ *l* of water at 35-40 DAS

OFT-4

1	**Title of On farm Trial**	**Effect of sea weed extract on seed quality of Brinjal (Variety: Muktokeshi) under irrigated farming situation of high humid New Alluvial Zone, Nadia**.
2	**Problem diagnosed**	The following experiment is conceived on the background of one of the major constrains in getting higher yield potential in brinjal using farmers own seed which were produced unscientifically. Some technical knowhow along with few newly introduced inputs for treating farmers own seed could bring about a drastic breakthrough in the production potential of brinjal when sown for the next season. 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. So the following treatments are taken into consideration to enhance the quality of brinjal seed including high germination percentage, purity, vigor, and appearance etc.
3	**Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)**	Normal cultivation practices generally followed by the farmers. One foliar spray of sea weed extract @ 2ml / *l* of water at 15 DAT. Two foliar spray of sea weed extract @ 2ml / *l* of water at 15 DAT and at flower initiation stage. **<u>For Technology option 1 and Technology option 2:</u>** Seed treatment- Carbendazim @ 3g per kg of seed. 450 *l of* water is required for spraying one hectare of land. 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 Sea weed extract @ 2ml / *l* of water. 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**	wo 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**	r that the **Technology option 2** i.e., 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: The following experiment is conceived on the background of one of the major constrains in getting higher yield potential in brinjal using farmers own seed which were produced unscientifically.
Some technical knowhow along with few newly introduced inputs for treating farmers own seed could bring about a drastic breakthrough in the production potential of brinjal when sown for the next season.
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. So the following treatments are taken into consideration to enhance the quality of brinjal seed including high germination percentage, purity, vigor, and appearance etc.

Technology assessed: **Farmer Practice : N**ormal cultivation practices generally followed by the farmers.
Technology option1 : one foliar spray of sea weed extract @ 2ml / *l* of water at 15 DAT.
Technology option 2: 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)	Avg fruit weight/plant (g)	Seed yield/plant (g)	No of seed/fruit	1000 seed weight (g)	Yield of fresh fruit (q/ha)	Yield of Seed (kg/ha)	Seed germination (%)
Farmer Practice	**7**	75.2	165	132	1497	4.0	192	202	90.8
Technology option1		82.8	174	145	1558	4.4	205	241	91.8
Technology option 2		88.2	195	158	1590	4.6	223	255	92.2
CD (5%)		8.798	19.399	15.432	NS	0.477	22.554	23.368	NS

Results: From the result it is clear that the **Technology option 2** i.e., 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-5

1.	**Title of On farm Trial**	**Evaluation of nitrogen use efficiency through Nano nitrogenous fertilizer in Kharif paddy under New Alluvial Zone of West Bengal**
2.	**Problem diagnosed**	The farmers are using nitrogenous fertilizer without considering the proper dose of application. Thus nitrogen use efficiency for Kharif paddy is becoming considerably low day by day and cost of cultivation of the farmers is also increasing. In addition to this imbalanced use of nitrogenous fertilizer is causing an alarming situation in polluting the nature by means of high GHG emission also. The yield of paddy crop is also 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:** Full recommended basal dose of fertilizer + Nano N spray @4ml/lt two times (1st during15-20 DAS and 2nd 45-50 DAS) **Technology option 3:** 75% of the recommended basal dose of fertilizer + Nano N spray @4ml/lt two times (1st during15-20 DAS and 2nd 45-50 DAS)
4.	**Source of Technology (ICAR/ AICRP/SAU/other, please specify)**	BCKV, ICAR
5.	**Production system and thematic area**	Paddy-Mustard-Paddy Nutrient Management
6.	**Performance of the Technology with performance indicators**	In terms of yield and B:C ratio Technology option 1 shown best result but according to Nitrogen Use efficiency in terms of Agronomic efficiency and Partial Factor Productivity Technology option 2 and 3 showed much better result.
7.	**Final recommendation for micro level situation**	1st Year trial
8.	**Constraints identified and feedback for research**	Farmers were not very much interested in using Nano Urea during the first phase of the trial as they weren't aware of the fact regarding efficacy of Nano N in place of normal nitrogeneous fertilizer like urea.
9.	**Process of farmers participation and their reaction**	After mobilizing the farmers' awareness regarding usefulness of Nano-N 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: The farmers are using nitrogenous fertilizer without considering the proper dose of application. Thus nitrogen use efficiency for Kharif paddy is becoming considerably low day by day and cost of cultivation of the farmers is also increasing. In addition to this imbalanced use of nitrogenous fertilizer is causing an alarming situation in polluting the nature by means of high GHG emission also. The yield of paddy crop is also diminishing with deterioration of soil health.

Technology assessed: Efficacy of nano nitrogenous fertilizer.

Table:

Technology option	No. of trials	Yield component			Yield (q/ha)	Nitrogen Use efficiency in terms of AE (Agronomic 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 indiscriminate nitrogen use	5	12.8	168.3	26.2	43.0	12.10	47.50	64650	93869	29219	1.45
Technology option 1: Recommended dose of fertilizer (NPK: 60:30:30 kg/ha, ¼ N + Full P + 1/2 K as basal, ½ N+ ¼ K at 1st TDR, rest ¼ N + ¼ K 2nd TDR)		16.1	215.0	32.1	52.5	34.20	87.70	60180	114608	54428	1.90
Technology option 2: (Full recommended		16.3	190.0	31.9	51.0	125.30	93.00	61320	111333	50013	1.82

basal dose of fertilizer + Nano N spray @4ml/lt two times (1st during15-20 DAS and 2nd 45-50 DAS)											
Technology option 3: (75% of the recommended basal dose of fertilizer + Nano N spray @4ml/lt two times (1st during15-20 DAS and 2nd 45-50 DAS)		15.1	213.3	30.2	45.0	113.90	103.20	60728	98235	37507	1.62
SEm±		0.53	0.91	0.60	0.57						
CD (P=0.05)		1.64	2.46	1.84	1.77						

* Yield of control plot: 3225 kg/ha (For calculation of NUE)

Results: Very meager increase in terms of yield and B: C ratios were found in Technology option 1 i.e with recommended dose of fertilizer in comparison with Technology option 2. But in terms of Nitrogen Use Efficiency and Partial factor productivity much better result was obtained from Technology option 2 and 3. Therefore, considering all the attributes Technology option 2 may be recommended at the micro level in terms of its N use efficiency and considerable contribution on reducing emission of GHG like nitrous oxide vis-à-vis its comparable performance with respect to yield and B: C ratio.

OFT-6

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	-	6.88	0.05	0.47	244.2	65.1	288.6	195.8	0.497	28.23
Technology option 1: Use of waste decomposer solution @500 lt/ha.		35-42	6.70	0.11	0.50	303.7	77.9	352.8	372.4	0.652	47.91
Technology option 2: Use of IARI microbial inoculant capsule solution @525 lt/ha.		22-25	6.51	0.14	0.52	355.8	80.3	336.7	388.8	0.701	49.53

[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 in terms of time of decomposition and improvement particularly in terms of soil biological properties.

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. 495.9 q/ha with 93% seedling survival. Return from technology option 2 is higher than the other, which is Rs. 2.50/- 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 (q/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.	441.0	64	75	285000	626220	341220	2.20
Technology option 1: Cultivation of cabbage by plug tray grown seedling with single row planting.	477.0	92	86	315000	705960	390960	2.24
Technology option 2: Cultivation of cabbage by plug tray grown seedling with double row planting.	495.9	93	96	315000	788541	473541	2.50
CD (P=0.05)	13.15						

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. 495.9 q/ha with 93% seedling survival. Return from technology option 2 is higher than the other, which is Rs. 2.50/- 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 additional off season harvest of Pointed Gourd.**
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: Kharif planting of pointed gourd in bed + rabi cauliflower as intercrop Technology option 1: Kharif planting of pointed gourd in bed with straw mulch in winter + pre-kharif early cauliflower. Technology option 2: Kharif planting of pointed gourd in trellis with low poly tunnel cover in winter
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: Kharif planting of pointed gourd in bed	390.0	0.0	390.0	300000	663000	363000	2.21
Technology option 1: Kharif planting of pointed gourd in bed with straw mulch in winter + pre-kharif early cauliflower.	408.8	103.2	512.0	370500	951000	580500	2.57
Technology option 2 : Kharif planting of pointed gourd in trellis with low poly tunnel cover in winter	386.3	0.0	386.3	356250	914625	558375	2.57
CD (P=0.05)	**11.7**	**-**					

7.	Final recommendation for micro level situation	From the result it is clear that the Technology option I i.e. Kharif planting of pointed gourd in bed with straw mulch in winter + pre-kharif early cauliflower has perform better than the other option as well as the farmers' practice with respect to total productivity (512.0 q/ha) and net return (5,80,500/- /ha) with BCR i.e. 2.57. Though the T.O. II has lower net return i.e. Rs. 5,58,375/- with the BCR of 2.57, which is at par with T.O. I. Considering the 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 refined as per the farmer preference considering huge demand of cucurbits in winter and subsequent premium price.
8.	Constraints identified and feedback for research	Here in **T.O. II i.e.** Kharif planting of pointed gourd in trellis with low poly tunnel cover in winter is not preferred by the farmer due to initial higher cost involvement and region specific varietal choice etc. But the bed method with kharif planting is most preferred by the farmers. Considering farmer feedback and region specificity the OFT once again proposed as below for final recommendation. **Farmer's Practice (FP):** Pointed gourd in ground (planting time July-August) Var. Bombai (HY derived from Kajli Bombai). **Technology option-I (TO-I):** Pointed gourd in ground (planting time July-August) with straw mulch in winter months + pre-kharif and kharif cultivation of leafy vegetables (coriander), 2 harvest. **Te Technology option-II (TO-II):** Pointed gourd in ground (planting time July-August) with straw mulch and poly tunnel cover in winter months + pre-kharif and kharif cultivation of cauliflower as intercrop (var. dawn/monsoon queen)
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: Kharif planting of pointed gourd in bed	390.0	0.0	390.0	300000	663000	363000	2.21
Technology option 1: Kharif planting of pointed gourd in bed with straw mulch in winter + pre-kharif early cauliflower.	408.8	103.2	512.0	370500	951000	580500	2.57
Technology option 2 : Kharif planting of pointed gourd in trellis with low poly tunnel cover in winter	386.3	0.0	386.3	356250	914625	558375	2.57
CD (P=0.05)	**11.7**	**-**					

Recommendation: From the result it is clear that the Technology option I i.e. Kharif planting of pointed gourd in bed with straw mulch in winter + pre-kharif early cauliflower has perform better than the other option as well as the farmers' practice with respect to total productivity (512.0 q/ha) and net return (5,80,500/- /ha) with BCR i.e. 2.57. Though the T.O. II has lower net return i.e. Rs. 5,58,375/- with the BCR of 2.57, which is at par with T.O. I.
Considering the 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 refined as per the farmer preference considering huge demand of cucurbits in winter and subsequent premium price.

3.2. Achievements of Frontline Demonstrations

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	15						15		15	NA
2	Pointed gourd (Cucurbitacious crop)	Fruit fly management	Cuelure trap	5.0	5.0	37						37		37	NA
3	Guava	Fruit fly management	Methyl euzenol trap	5.0	6.0	18						18		18	NA
4	Banana	Panama wilt management	Sucker treatment with Carbendazim @ 2 g/ L of water, & pit treatment with *Trichoderma spp.*	2.0	13.33	100						100		100	NA
5	Paddy	INM	Spraying of Zn micronutrient	2.0	7.4	54	0	0	0	8	0	62	0	62	NA
6	Paddy	INM	Green manuring	3.0	5.3	30	0	0	0	10	0	40	0	40	NA
7	Paddy	INM	Leaf Colour Chart	3.0	6.0	50	0	0	0	0	0	50	0	50	NA
8	Jute	Jute retting	Advanced retting technology with use of NINFET Sathi	2.0	10.6	80	0	0	0	0	0	80	0	80	NA
9	All	Production of inputs at site	Novcom composting (Composting techniques and use of organic inputs)	07 units	07 units	42	0	0	0	14	0	56	0	56	NA
10	Cole crops	INM	Boron application	2.0	5.5	30	2	0	0	25	0	55	2	57	NA
11	Tomato	Horticulture	Improved production	2	2	22	0	0	0	9	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. ArkaSamrat												
12	Vegetable (Rainy cole crops)	Horticulture	Double row planting replacing single row planting	1	1	18	2	5	0	0	0	18	2	20	NA
13	Solanaceous& Cole crops	Vegetable nursery management	Seedling production in plug tray	10 units Of 10,000	20 units	2	16	0	0	0	2	2	18	20	NA
14	Mango	Horticulture	Growing of Black Cumin in Mango orchard for better yield	5	5	25	0	0	0	0	0	25	0	25	NA
15	Banana	Value Addition	bunch cover (polypropelene)	1	2	10	0	0	0	4	0	14	0	14	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	348.8	56.0	259.7	Mango	Old orchard	May- July		
Pointed gourd (Cucurbitacious crop)	Summer	Irrigated	Loam to Sandy loam	288.6	47.8	318.4	Vegetable	1st week of march	April - July		
Guava	Round the year	Irrigated	Loamy	185.1	69.2	257.1	Guava	Old orchard	Throughout the year		
Banana	Round the	Irrigated	Loamy	111.5	54.1	289.5	Banana	February	January		

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					
	year										
Paddy	Rabi	Irrigated	Clay loam	350.5	60.1	198.5	Mustard	3rd week of January	4th week of April	-	-
Paddy	Kharif	Rainfed	Clay loam	187.4	44.7	280.5	Sesame	4th week of July	3rd week of October	-	-
Paddy	Kharif	Rainfed	Clay loam	199.3	70.2	330.1	Sesame	3rd week of July	3rd week of October	-	-
Vegetables	Rabi	Irrigated	Sandy Clay Loam	200.5	50.6	178.9	Pointed gourd	1st week of October	4th week of December	-	-
Paddy	Kharif	Irrigated	Clay loam	321.4	60.3	216.5	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	-	-
Vegetable (Rainy cole crops)	Kharif and Rabi	Irrigated &Rainfed	Clayey loam	232-286	22-31	220-248	Vegetables	08.09.23-16.09.23	12.11.23-15.01.24	-	-
Solanaceous& Cole crops	Rabi	Irrigated	Loam to Sandy loam	229-375	25-28	210-250	Vegetable	Sept.,23	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
Lentil (*Rabi* 2022)	Seed production	L-4717 (Pusa Ageti) Seed Bio-fertilizer Micronutriens Humic and Falvic Acid PPC	56	10.0	10.5	11.3	7.6	28,400/-	56,500/-	28,100/-	2.0	27,600/-	52,500/-	24,900/-	1.9
Black Gram (*Kharif* 2023)	Seed production	**PU-31** Variety, Seed treatment, Bio-fertilizer, Nano Urea, Micronutrients, PPC	112	20.0	11.2	10.2	9.8	34,500/-	59,360/-	24,860/-	1.7	33,300/-	54,060/-	20,760/-	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	15	10.0	374.23	342.46	9.27	7% less insecticide	-	170000	561345	391345	3.30	168000	513690	345690	3.05
Pointed gourd (Cucurbitacious crop)	Fruit fly management	Cuelure trap	37	5.0	231.53	211.14	9.65	10 less insecticide spray	-	165000	463060	298060	2.80	162000	422280	260280	2.60
Guava	Fruit fly management	Methyl euzenol trap	18	6.0	283.44	237.46	19.36	10 % less pesticide spray	-	195500	1133760	938260	5.79	194600	949840	755240	4.88
Banana	Panama wilt management	Sucker treatment with Carbendazim @ 2 g/ L of water, & pit treatment with *Trichoderma spp.*	100	13.33	1807 bunch	1582 bunch	14.2	17% less infestation in treated plants	-	273000	993850	720850	3.64	280000	870100	590100	3.12
Paddy	Integrated nutrient management	Effect of Zn on paddy	62	7.4	57.4	52.3	9.8	-	-	80578	125304	44726	1.55	79550	114171	34621	1.43
Paddy	Integrated nutrient management	Green manuring	40	5.3	50.1	45.2	10.8	(35% reduction in N-fertilizer)	-	65300	109368	44068	1.67	66500	98672	32172	1.48
Paddy	Integrated nutrient management	Leaf Colour Chart	50	6.0	49.5	43.6	13.5	(33% reduction in N-fertilizer)	-	63830	108059	44229	1.69	65650	95179	29529	1.45
Cole crops	INM	Boron application	57	5.5	342.5	315.2	8.7	-	-	122300	295600	173300	2.42	120400	280350	159950	2.33

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. ArkaSamrat	33	2	624.2	537.2	16%			1,92,700	3,93,700	2,01,000	2.04	1,80,700	3,20,400	1,39,700	1.77
Vegetable (Rainy cole crops)	Climate resilience	Double row planting replacing single row planting	20	1	488.2	432.8	12.8%			315000	788541	473541	2.50	285000	626220	341220	2.20
Tomato	Vegetable Nursery	Seedling production in plug tray	20	10 units of 10,000	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
Mango	Horticulture	Growing of Black Cumin in Mango orchard for better yield	25	5	Result awaited												
Banana	Banana value addition	bunch cover (polypropelene)	14	1	2.23% scarred finger	53.54 % scared finger	-	Ave. Sale value Rs. 270/bunch	Ave. Sale value Rs. 160/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																
Button mushroom																
Production of input at site (Composting)	Novcom Composting	56	07	-	-	-	-	-	-	-	-	-	-	-	-	-
Jute retting	Use of NINFET Sathi	80	Jute retted for 10.6 ha													
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 7 %. It is most effective when large area covered by the trapping method.
2	Pointed gourd (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%. 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. Fungicide application reduced at least 17 %. 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 9%.
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 11% more yield and they also reduces the cost of cultivation by reducing the use of nitrogenous fertilizer to a tune of 35%. 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 14% more yield with reduction of 33% 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 8.5% 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	Jute retting with NINFET Sathi	It is observed that the accelerated retting has completed within 8-12 days with better fibre quality (1-2 grade improvement), lowering of root content, diminishing defects in fibres, and improvement in strength, fineness and colour.
11	Seedling production in plug tray	Caused early harvest, less disease problems, highly accepted by the farmer.

12	Improved production technology with var. ArkaSamrat	Arka Samrat, an ICAR-IIHR variety gaining acceptance as summer tomato by the growers.
13	Double row planting replacing single row planting	This methods is highly accepted by the farmers concerning with erratic rain fall and disease management.
14	Bunch cover (polypropelene)	Quality finger, scar free, high market acceptance.

Extension and Training activities under FLD

Sl.No.	Activity	Date	No. of activities organized	Number of participants	Remarks
1.	Field days	21.08.2023, 04.09.2023	2	41	
2.	Farmers Training	02.02..23, 20.07.2023, 17.08.2023, 15.09.2023, 21.11.2023, 04-04-2023, 2023-05-09, 24-07-2023, 23-08-2023, 05-12-2023, 2023-08-08, 2023-08-14, 2023-08-14, 2023-08-14, 2023-12-04, 2023-12-04, 25-01-2023, 27-01-2023, 07-02-2023, 20-02-2023, 29-03-2023, 2023-03-29, 2023-05-12, 2023-05-29, 2023-05-31, 2023-07-18, 2023-07-18, 2023-07-19, 2023-09-04, 2023-09-11, 2023-10-03, 2023-11-20, 2023-12-11, 2023-12-17	33	721	
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 Kharif2022 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	Lentil	Local	10.5	11.1	9.7	15.0	L-4717 (Pusa Ageti) Seed Bio-fertilizer Micronutriens Humic and Falvic Acid PPC	56	10.0	12.0	10.6	11.3	1.8	16.5	-24.6
2	Blackgram	Sarada	10.2	7.8	7.7	15.0	PU-31 Variety, Seed treatment, Bio-fertilizer, Nano Urea, Micronutrients, PPC	112	20.0	12.2	10.4	11.2	43.6	45.4	-23.3

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	**L-4717 (Pusa Ageti)** *Seed *Bio-fertilizer *Micronutriens *Humic and Falvic Acid *PPC	27,600	52,500	24,900	1.9	28,400	56,500	28,100	2.0
2	**PU-31** *Variety *Seed treatment *Bio-fertilizer *Nano Urea *Micronutrients *PPC	33,300/-	54,060/-	20,760/-	1.6	34,500/-	59,360/-	24,860/-	1.7

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	Lentil **L-4717 (Pusa Ageti)**	11,300	201	50	20	Nil	To fulfill the household need	14-16
2	Blackgram **PU-31**	22,400	200	53.00	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	**L-4717 (Pusa Ageti)** *Seed *Bio-fertilizer *Micronutriens *Humic and Falvic Acid *PPC	Befitting with the existing farming system	Timely supply of quality seed	Seed treatment, Bio-fertilizer, Micronutrient, PPC all are very low cost inputs, so technology may sustain.	No	Yes	*Farmers are happy with the total packages. They want to replace *Boro* Paddy with Lentil.
2	**PU-31** Variety, Seed treatment, Bio-	Befitting with the existing farming	-	Seed treatment and Bio-fertilizer both	High rain fall adversely affect	Yes	Nil

	fertilizer, Nano Urea, Micronutrients, PPC	system.		are very low cost inputs, so technology may sustain.	the crop in some cases		

E. Specific Characteristics of Technology and Performance

Crop: Lentil

Specific Characteristic	Performance	Performance of Technology vis-a vis Local Check	Farmers Feedback
Variety : **L-4717 (Pusa Ageti)**	Varieties are very good and befitting with the existing farming system	**7.6 %** yield increased of the variety **Pusa Ageti** than the locally used variety by the farmers	Varieties are accepted by the farmers
Seed treatment: Inoculation of seed with ***Rhizobium***	Nitrogen fixation @ 20-30 kg / ha Yield increase upto 15.6 %	Highly recommended (***Rizobium*** @ *0.75* kg / 30 kg of seed requiring for one hectare)	Very low cost imput
Humic and Fulvic acid	Soil application of **Humic and Fulvic acid** with cow dung manure @ 1.9 *l* / ha during final land preparation	Gets quickly absorbed in plants and participates in the nutritional bio-chemical process as well as develops the inherent strength to fight against adverse weather conditions and increase the yield.	*Very low cost imput *Compatible with other agrochemicals and safe for environment *Also suitable for foliar application (@ 2 to 3 ml / *l* of water) and seed treatment (@ 10 ml / kg of seed)
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
Chlorothalonil	Fungicide effective for controlling diseases (Applied @ 2 g/ l)	Reduces Fungal Diseases	Very low cost but highly effective input
Thiophanate-methyl	Fungicide effective for controlling diseases (Applied @ 2 g/ l)	Reduces Fungal Diseases	Very low cost but highly effective input
Thiamethoxam	Systemic insecticide effective for controlling Sucking pests and aphids (Applied @ 1.0 ml/ l)	Reduces various sucking pests and aphid attack	Very low cost but highly effective input

Crop: Blackgram

Specific Characteristic	Performance	Performance of Technology vis-a vis Local Check	Farmers Feedback
Variety- **PU-31**	Good	9.8 % yield increased than the locally used variety Sarada.	Variety is accepted by the farmers
Seed treatment: Inoculation of seed with *Bio-fertilizers* Consortia (*Rhizobium, Azotobacter, Azospirillum, Phosphobacteria, Potash Solubilizing Bacteria)*	Nitrogen fixation @ 20-30 kg / ha Yield increase upto 9.8%	Highly recommended (Liquid Biofertilizer Consortia @ 2 *l* and make a solution with 2-3 *l* of water (for 1 ha of land). Mix this solution slowly with 30 kg of seed, so that a homogenous layer evenly mixes with all the seed. After drying under shade, sow the seed as early as possible. Use of sticker increase its efficiency) *Safe for environment *Also suitable for soil application of 1 ha of land (@ 2 *l* of Liquid Biofertilizer Consortia mix with 250 kg of well rotten cow dung manure and spread homogenouly in field before final land prepatation	Very low cost imput
Nano Urea	Supply required nitrogen during flowering and reduced flower drop	Highly recommended (will be applied @ 4ml/*l* of water before flowering) *Nano Urea contains 4% total nitrogen (w/v). *Nano nitrogen particle size varies from 20-50 nm. These particles are evenly dispersed in water. *More surface area (10,000 times over 1mm urea prill) *they are nontoxic and less harmful to environment and humans, they minimize cost and maximize profit	Very low cost imput
PPC (Acetamiprid 20% SP and Emamectin Benzoate)	Reduce insect pest and increase yield	Highly recommended	Very much usefull
Micronutrients Boron (B), Copper (Cu), Iron (Fe), Manganese (Mn), Molybdenum (Mo), Zinc (Zn), Sulphur (S) and Potassium (K).	Micronutrients are important for plant growth, as plants require a proper balance of all the essential nutrients for normal growth and	Highly recommended 1 kg / ha, i.e. 2g / *l* of water with one sprays at 21 DAS)	Very low cost but highly effective imput

	optimum yield. It increase photosynthetic activity, reduce flower drops and increase yield		

F. Extension activities under FLD conducted:

Crop: Lentil

Sl. No.	Extension Activities organized	Date and place of activity		Number of farmer attended
		Date	Place	
1	Farmers Training	15.11.2022	Arbolda, Santipur	12
2		16.11.2022	Kadampur, Santipur	11
3		12.12.2022	Bhaduri Chakdah	33
4		12.12.2022	Bhaduri Chakdah	23
5		13.02.2023	Arbolda, Santipur	22
6		25.04.2023	Arbolda, Santipur	15

Crop: Blackgram

Sl. No.	Extension Activities organized	Date and place of activity		Number of farmer attended
		Date	Place	
1	Farmers Training	03.08.2023	Kastodanga, Haringhata	21
2		10.08.2023	Arbolda,Santipur	11
3		10.08.2023	Kadampur, Santipur	10
4		12.09.2023	Satsimulia, Haringhata	13
5		19.09.2023	Arbolda,Santipur	15

Input distribution

At flowering stage

Initial growth stage

Growth stage

Field Day

Seed distribution

Seed distribution

Off-campus training

Initial stage

Input distribution

Field day

Pod development stage

Demondtration of Krishi Mapper App with RAWE Students

J. Details of budget utilization

Crop (provide crop wise information)	Items	Budget Received (Rs.)	Budget Utilization (Rs.)	Balance (Rs.)
Lentil (*Rabi* 2022-2023)	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* 2023-2024)	i) Critical input	1,64,000.00	Programme has been completed but total fund is yet to received.	
	ii) TA/DA/POL etc. for monitoring	6,000.00		
	iii) Extension Activities (Field day)	5,000.00		
	iv) Publicity materials	3,000.00		
	v) Contingency	2,000.00		
	Total	**1,80,000.00**		

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

A) Farmers and farm women (on campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			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	1	20	0	20	0	0	0	22	4	26	42	4	46
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													
Value Addition	1	5	0	5	0	0	0	20	0	20	25	0	25
Crop diversification													
Others (Natural Resource Management)	1	15	0	15	0	0	0	7	0	7	22	0	22
Total	**3**	**40**	**0**	**40**	**0**	**0**	**0**	**49**	**4**	**53**	**89**	**4**	**93**
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													

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
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													
Integrated Disease Management													
Bio0control of pests and diseases													
Production of bio control agents and bio pesticides													
Others (Low cost and nutrient efficient diet designing)													
Total													

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
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													
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													
X. Capacity Building and 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
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	**3**	**40**	**0**	**40**	**0**	**0**	**0**	**49**	**4**	**53**	**89**	**4**	**93**

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													
Training and pruning of orchards													
Protected cultivation of vegetable crops													
Commercial fruit production													
Integrated farming													
Integrated Pest Management													
Seed production													
Production of organic inputs													
Planting material production													
Vermiculture													

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
Mushroom Production													
Beekeeping													
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	2	25	4	29	1	0	1	34	5	39	60	9	69
Others (Seed production)													
Total	**2**	**25**	**4**	**29**	**1**	**0**	**1**	**34**	**5**	**39**	**60**	**9**	**69**

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													
Weed Management	1	15	3	18	0	0	0	18	3	21	33	6	39
Integrated Pest Management	19	289	38	327	0	0	0	339	37	376	628	75	703
Integrated Nutrient management	14	218	37	255	0	0	0	239	37	276	457	74	531
Integrated Crop Management	2	33	0	33	4	0	4	39	2	41	76	2	78
Rejuvenation of old orchards													
Protected cultivation technology	2	27	4	31	4	0	4	29	10	39	60	14	74
Production and use of organic inputs	2	30	6	36	0	0	0	34	6	40	64	12	76
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													
Livestock feed and fodder production													
Vermi-culture	2	30	5	35	0	0	0	33	5	38	63	10	73
Household food security													
Nursery management	1	13	2	15	2	1	3	17	3	20	32	6	38
Commercial fruit production	1	16	5	21	1	0	1	9	2	11	26	7	33
Planting material production													
Value Addition	2	31	6	37	0	0	0	38	3	41	69	9	78
Resource Conservation Technologies	2	29	5	34	0	0	0	33	4	37	62	9	71
Seed Production	4	20	0	20	0	0	0	120	10	130	140	10	150
Crop Diversification	10	130	20	150	13	0	13	188	22	210	331	42	373
Bee Keeping	2	25	7	32	0	0	0	31	11	42	56	18	74
Total	**64**	**906**	**138**	**1044**	**24**	**1**	**25**	**1167**	**155**	**1322**	**2097**	**294**	**2391**

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													
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													
II. Horticulture													
a) Vegetable Crops													
Production of low volume and high value crops													
Off season vegetables													
Nursery raising													
Exotic vegetables													
Export potential vegetables													
Grading and standardization													
Protective cultivation													
Others (Nursery management)	3	4	21	25	2	4	6	18	27	45	24	52	76
Pest Management of horticulture crops	1	30	0	30	0	0	0	0	0	0	30	0	30
Total (a)	**4**	**34**	**21**	**55**	**2**	**4**	**6**	**18**	**27**	**45**	**54**	**52**	**106**
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	8	97	28	125	11	1	12	92	16	108	200	45	245
Others (Commercial fruit production)	3	32	7	39	5	1	6	38	12	50	75	20	95
Total (b)	**11**	**129**	**35**	**164**	**16**	**2**	**18**	**130**	**28**	**158**	**275**	**65**	**340**
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	1	0	17	17	0	0	0	0	5	5	0	22	22
Others (Planting material production)	2	8	26	34	0	5	5	4	17	21	12	48	60
Total (d)	**3**	**8**	**43**	**51**	**0**	**5**	**5**	**4**	**22**	**26**	**12**	**70**	**82**
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													

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 and management technology													
Post harvest technology and value addition													
Others													
Total (g)													
Total(a-g)	**18**	**171**	**99**	**270**	**18**	**11**	**29**	**152**	**77**	**229**	**341**	**187**	**528**
III. Soil Health and Fertility Management													
Soil fertility management													
Integrated water management													
Integrated Nutrient Management	7	39	5	44	0	0	0	87	2	89	126	7	133
Production and use of organic inputs	1	10	0	10	0	0	0	0	0	0	10	0	10
Management of Problematic soils													
Micro nutrient deficiency in crops													
Nutrient Use Efficiency													
Balance Use of fertilizer													
Soil & water testing													
Resource Conservation Technologies	3	13	2	15	0	0	0	11	2	13	24	4	28
Others (cultivation of crops)	4	44	11	55	0	1	1	20	1	21	64	13	77
Total	**15**	**106**	**18**	**124**	**0**	**1**	**1**	**118**	**5**	**123**	**224**	**24**	**248**
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													

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
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	15	252	60	312	6	0	6	153	20	173	411	80	491
Integrated Disease Management													
Integrated crop Management													
Natural resource management	1	15	0	15	0	0	0	7	0	7	22	0	22
Biocontrol of pests and diseases													
Production of bio control agents and bio pesticides													
Integrated 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
Others (Fodder production)	1	17	2	19	0	0	0	9	4	13	26	6	32
Total	**17**	**284**	**62**	**346**	**6**	**0**	**6**	**169**	**24**	**193**	**459**	**86**	**545**
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	23	146	12	158	0	0	0	94	8	102	240	20	260
Planting material production													
Bioagents production													
Biopesticides production													
Biofertilizer production													
Vermicompost production													
Organic manures production													
Production of fry and fingerlings													
Production of Bee colonies and wax sheets													
Small tools and implements													
Production of livestock feed and fodder													
Production of Fish feed													
Mushroom production	2	5	40	45	0	0	0	0	0	0	5	40	45
Apiculture													
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
Resource Conservation Technologies													
Total	**25**	**151**	**52**	**203**	**0**	**0**	**0**	**94**	**8**	**102**	**245**	**60**	**305**
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 (Drone Demonstration)	**6**	**155**	**26**	**181**	**0**	**0**	**0**	**0**	**0**	**0**	**155**	**26**	**181**
GRAND TOTAL	**81**	**867**	**257**	**1124**	**24**	**12**	**36**	**533**	**114**	**647**	**1424**	**383**	**1807**

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	1	4	1	5	0	0	0	6	5	11	10	6	16
Training and pruning of orchards													
Protected cultivation of vegetable crops	1	15	3	18	2	0	2	27	13	40	44	16	60
Commercial fruit production													
Integrated crop management	2	5	9	14	2	3	5	19	12	31	26	24	50
Seed production													
Production of organic inputs	1	0	15	15	0	3	3	0	12	12	0	30	30
Planting material production													
Vermiculture													
Mushroom Production													
Beekeeping	2	30	0	30	0	0	0	14	0	14	44	0	44
Sericulture													
Repair and maintenance of farm machinery and implements													
Crop diversification	1	3	1	4	1	0	1	7	3	10	11	4	15
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													

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
Shrimp farming													
Pearl culture													
Cold water fisheries													
Fish harvest and processing technology													
Fry and fingerling rearing													
Others (cultivation of crops)													
Total	**8**	**57**	**29**	**86**	**5**	**6**	**11**	**73**	**45**	**118**	**135**	**80**	**215**

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	6	94	16	110	0	0	0	101	13	114	195	29	224
Integrated crop management													
Rejuvenation of old orchards													
Protected cultivation technology													
Production and use of organic inputs	2	31	5	36	0	0	0	33	7	40	64	12	76
Seed Production	2	6	16	22	0	0	0	8	20	28	14	36	50
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													
Household food security													
Identification of diseases for sketch													
Mushroom Production													
Drone Demonstration	4	261	60	160	0	0	0	14	7	0	275	67	342
Total	**14**	**392**	**97**	**328**	**0**	**0**	**0**	**156**	**47**	**182**	**548**	**144**	**692**

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													
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													
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													
Others (Nursery management)	3	4	21	25	2	4	6	18	27	45	24	52	76
Pest Management of horticulture crops	1	30	0	30	0	0	0	0	0	0	30	0	30

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 (a)	**4**	**34**	**21**	**55**	**2**	**4**	**6**	**18**	**27**	**45**	**54**	**52**	**106**
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	8	97	28	125	11	1	12	92	16	108	200	45	245
Others (Commercial fruit production)	3	32	7	39	5	1	6	38	12	50	75	20	95
Total (b)	**11**	**129**	**35**	**164**	**16**	**2**	**18**	**130**	**28**	**158**	**275**	**65**	**340**
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	1	0	17	17	0	0	0	0	5	5	0	22	22
Others (Planting material production)	2	8	26	34	0	5	5	4	17	21	12	48	60
Total (d)	**3**	**8**	**43**	**51**	**0**	**5**	**5**	**4**	**22**	**26**	**12**	**70**	**82**
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)	**18**	**171**	**99**	**270**	**18**	**11**	**29**	**152**	**77**	**229**	**341**	**187**	**528**
III. Soil Health and Fertility Management													
Soil fertility management													
Integrated water management													
Integrated Nutrient Management	8	59	5	64	0	0	0	109	6	115	168	11	179
Value Addition	1	5	0	5	0	0	0	20	0	20	25	0	25
Production and use of organic inputs	1	10	0	10	0	0	0	0	0	0	10	0	10
Management of Problematic soils													
Micro nutrient deficiency in crops													
Natural resource management	1	15	0	15	0	0	0	7	0	7	22	0	22
Nutrient Use Efficiency													
Balance Use of fertilizer													
Soil & water testing													
Resource Conservation Technologies	3	13	2	15	0	0	0	11	2	13	24	4	28
Others (cultivation of crops)	4	44	11	55	0	1	1	20	1	21	64	13	77
Total	**18**	**146**	**18**	**164**	**0**	**1**	**1**	**167**	**9**	**176**	**313**	**28**	**341**
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													

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													
V. Home Science/Women empowerment													
Household food security by kitchen gardening and nutrition gardening													
Design and development of low/minimum cost diet													
Designing and development for high nutrient efficiency diet													
Minimization of nutrient loss in processing													
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	15	252	60	312	6	0	6	153	20	173	411	80	491

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 Disease Management													
Integrated Crop Management													
Bio-control of pests and diseases													
Production of bio control agents and bio pesticides													
Natural resource management	1	15	0	15	0	0	0	7	0	7	22	0	22
Others (Fodder production)	1	17	2	19	0	0	0	9	4	13	26	6	32
Total	**17**	**284**	**62**	**346**	**6**	**0**	**6**	**169**	**24**	**193**	**459**	**86**	**545**
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	23	146	12	158	0	0	0	94	8	102	240	20	260
Planting material production													
Bioagents production													
Biopesticides production													
Biofertilizer production													
Vermicompost production													
Organic manures production													
Production of fry and fingerlings													

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 Bee colonies and wax sheets													
Small tools and implements													
Production of livestock feed and fodder													
Production of Fish feed													
Mushroom production	2	5	40	45	0	0	0	0	0	0	5	40	45
Apiculture													
Resource Conservation Technologies													
Others													
Total	**25**	**151**	**52**	**203**	**0**	**0**	**0**	**94**	**8**	**102**	**245**	**60**	**305**
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 (Drone Demonstration)	**6**	**155**	**26**	**181**	**0**	**0**	**0**	**0**	**0**	**0**	**155**	**26**	**181**
GRAND TOTAL	**84**	**907**	**257**	**1164**	**24**	**12**	**36**	**582**	**118**	**700**	**1513**	**387**	**1900**

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	1	4	1	5	0	0	0	6	5	11	10	6	16
Training and pruning of orchards													
Protected cultivation of vegetable crops	1	15	3	18	2	0	2	27	13	40	44	16	60
Commercial fruit production													
Integrated crop management	1	5	9	14	2	3	5	19	12	31	26	24	50
Integrated Pest Management													
Seed production													
Production of organic inputs	1	0	15	15	0	3	3	0	12	12	0	30	30
Planting material production													
Vermiculture													
Crop Diversification	3	28	5	33	2	0	2	41	8	49	71	13	84
Mushroom Production													
Beekeeping	2	30	0	30	0	0	0	14	0	14	44	0	44
Sericulture													
Post Harvest Technology													
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													
Cold water fisheries													
Fish harvest and processing technology													
Fry and fingerling rearing													
Others (cultivation of crops)													
Total	**9**	**82**	**33**	**115**	**6**	**6**	**12**	**107**	**50**	**157**	**195**	**89**	**284**

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													
Weed Management	1	15	3	18	0	0	0	18	3	21	33	6	39
Integrated Pest Management	19	289	38	327	0	0	0	339	37	376	628	75	703
Integrated Nutrient management	20	312	53	365	0	0	0	340	50	390	652	103	755
Integrated Crop Management	2	33	0	33	4	0	4	39	2	41	76	2	78
Rejuvenation of old orchards													
Protected cultivation technology	2	27	4	31	4	0	4	29	10	39	60	14	74
Production and use of organic inputs	4	61	11	72	0	0	0	67	13	80	128	24	152
Gender mainstreaming through SHGs													
Formation and Management of SHGs													
Women and Child care													
Low cost and nutrient efficient diet designing													
Drone Demonstration	4	261	60	160	0	0	0	14	7	0	275	67	342
Information networking among farmers													
Capacity building for ICT application													
Livestock feed and fodder production													
Vermi-culture	2	30	5	35	0	0	0	33	5	38	63	10	73
Household food security													
Nursery management	1	13	2	15	2	1	3	17	3	20	32	6	38
Commercial fruit production	1	16	5	21	1	0	1	9	2	11	26	7	33
Planting material production													
Value Addition	2	31	6	37	0	0	0	38	3	41	69	9	78
Resource Conservation Technologies	2	29	5	34	0	0	0	33	4	37	62	9	71
Seed Production	7	26	16	42	0	0	0	128	30	158	154	46	200
Crop Diversification	10	130	20	150	13	0	13	188	22	210	331	42	373
Bee Keeping	2	25	7	32	0	0	0	31	11	42	56	18	74
Total	**79**	**1298**	**235**	**1372**	**24**	**1**	**25**	**1323**	**202**	**1504**	**2645**	**438**	**3083**

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
Horticulture	PF	Agro techniques for off season vegetable cultivation	1	OFF	28	5	33	19	3	22
Horticulture	PF	Advancement of solanaceous crop cultivation	1	OFF	27	16	43	16	9	25
Horticulture	EF	High tech cultivation of commercial flowers	1	ON	26	9	35	13	2	15
Horticulture	EF	HDP and structural canopy management of fruits	1	ON	26	7	33	17	5	22
Horticulture	EF	Horticulture Farm Management	1	ON	33	4	37	14	2	16
Horticulture	EF	Cultivation of Seed Spices	1	ON	35	4	39	12	1	13
Horticulture	PF	Problems and recent advancement of Vegetables	1	OFF	40	6	46	19	5	24
Horticulture	PF	Problems and recent advancement of Fruits	1	OFF	21	5	26	12	3	15
Horticulture	RY	Plantation based multi-tier crop production	1	ON	30	5	35	13	2	15
Horticulture	EF	Evaluation of trained functionaries and recent knowledge updation on crop and other enterprises	1	ON	34	4	38	17	2	19
Horticulture	PF	Management practices of summer vegetables	1	OFF	22	6	28	13	4	17
Horticulture	RY	Nursery Management of fruit crops	1	OFF	10	6	16	4	1	5
Horticulture	PF	Production technology of citrus special emphasis to malta	1	OFF	23	1	24	11	0	11
Horticulture	PF	Production technology of Banana	1	OFF	31	14	45	14	5	19
Horticulture	RY	High tech cultivation of commercial crops	1	OFF	44	16	60	17	3	20
Horticulture	RY	Tropical orchid cultivation at South Bengal	1	OFF	11	4	15	4	1	5
Horticulture	EF	Cultivation of commercial fruits	1	ON	41	4	45	13	1	14
Horticulture	EF	Cultivation of Mango, Banana and Guava	1	ON	41	5	46	18	2	20
Horticulture	EF	Climate resilient horticulture crop cultivation	1	ON	39	3	42	14	1	15
Horticulture	EF	Seedlings production of vegetables crops	1	ON	32	6	38	15	3	18
Horticulture	PF	Production management of cole crops	1	OFF	30	3	33	9	1	10
Horticulture	PF	Nursery Management of fruit crops	1	OFF	0	42	42	0	21	21
Horticulture	RY	Advancement of early winter vegetables	1	ON	30	4	34	13	2	15
Horticulture	RY	Horticultural technologies for rural employment	1	OFF	26	24	50	7	12	19
Horticulture	EF	Advancement of summer and rainy vegetables cultivation	1	ON	38	1	39	19	0	19
Horticulture	EF	Advancement of solanaceous crop cultivation	1	ON	38	1	39	18	0	18

Horticulture	PF	Development of mother fruit orchard for nursery.	1	OFF	12	5	17	3	2	5
Horticulture	PF	Sapling production of fruit crops	1	OFF	12	5	17	3	2	5
Horticulture	PF	Commercial planting materials production for hort. crops	1	OFF	7	23	30	5	15	20
Horticulture	PF	Efficient seedling production protocols and practice	1	OFF	5	25	30	3	16	19
Horticulture	EF	Profit making crop models and venture integration	1	ON	22	7	29	10	4	14
Horticulture	EF	Profit making crop models and venture integration	1	ON	27	3	30	10	3	13
Horticulture	PF	Crop management after heavy rainfall	1	OFF	19	4	23	12	3	15
Horticulture	PF	Nutritional value addition in leafy vegetables under backyard cultivation	1	OFF	0	22	22	0	17	17
Horticulture	PF	Fruit orchard planning with new crops	1	OFF	23	2	25	15	1	16
Horticulture	EF	High tech production technology for commercial hort. crops	1	ON	34	5	39	18	2	20
Horticulture	EF	Profitable horticulture interventions	1	ON	30	4	34	19	2	21
Horticulture	PF	Low tunnel utilization for off season cultivation	1	OFF	11	3	14	5	3	8
Horticulture	EF	Cultivation of spice crops	1	ON	29	4	33	16	2	18
Seed Science	PF	Seed production of paddy	1	OFF	13	0	13	13	0	13
Seed Science	PF	Seed production of paddy	1	OFF	8	0	8	6	0	6
Seed Science	PF	Seed production of Lentil	2	OFF	17	5	22	11	2	13
Seed Science	PF	Effect of foliar spray of nutrients on Greengram seed quality	1	OFF	7	0	7	4	0	4
Seed Science	PF	Effect of foliar spray of nutrients on Greengram seed quality	1	OFF	7	0	7	4	0	4
Seed Science	PF	Seed Storage of Lentil	2	OFF	15	0	15	8	0	8
Seed Science	PF	Seed Storage of Greengram	1	OFF	15	0	15	4	0	4
Seed Science	PF	Seed Storage of Greengram	2	OFF	21	0	21	9	0	9
Seed Science	EF	Difference between seeds and grains, importance of quality seeds in production and types of seeds.	1	ON	34	5	39	4	0	4
Seed Science	EF	Difference between seeds and grains, importance of quality seeds in production and types of seeds.	1	ON	38	0	38	6	0	6
Seed Science	EF	Seed storage and maintenance.	1	ON	32	5	37	4	0	4
Seed Science	EF	Seed storage and maintenance.	1	ON	36	0	36	6	0	6
Seed Science	PF	Seed Storage of Blackgram	2	OFF	21	0	21	12	0	12
Seed Science	PF	Seed Storage of Blackgram	1	OFF	10	1	11	8	1	9
Seed Science	PF	Seed Storage of Blackgram	1	OFF	10	0	10	7	0	7
Seed Science	PF	Seed production of Maize	2	OFF	28	7	35	18	3	21
Seed Science	PF	Seed production of Blackgram	1	OFF	13	0	13	2	0	2
Seed Science	PF	Seed production of Blackgram	2	OFF	14	1	15	12	1	13

Seed Science	SKILL	Seed production technologies for nursery plants.	2	OFF	7	18	25	3	8	11
Seed Science	SKILL	Preservation and maintenance of healthy seeds.	1	OFF	7	18	25	3	8	11
Seed Science	PF	Seed production of Lentil	1	OFF	15	2	17	11	2	13
Seed Science	PF	Seed production of Lentil	1	OFF	13	2	15	8	1	9
Seed Science	PF	Seed production of Lentil	1	OFF	13	2	15	9	2	11
Plant Protection	PF	Pest and disease management of winter vegetables	1	OFF	28	0	28	19	0	19
Plant Protection	PF	Pest and disease management of vegetables	1	OFF	27	15	42	15	9	24
Plant Protection	EF	Importance of honey bee in agriculture	1	ON	29	9	38	13	3	16
Plant Protection	EF	Importance of honey bee in agriculture	1	ON	27	9	36	12	4	16
Plant Protection	EF	Pesticide calculation procedure	1	ON	29	8	37	13	3	16
Plant Protection	PF	Nursery pest management of summer vegetables	1	ONLINE	43	5	48	36	4	40
Plant Protection	PF	Pest and disease management of vegetable crops	1	OFF	22	5	27	13	3	16
Plant Protection	PF	Pest and disease management of mango	1	OFF	23	4	27	17	4	21
Plant Protection	RY	Life cycle and seasonal management of honey bee	1	OFF	22	0	22	15	0	15
Plant Protection	RY	Disease and pest management in bee colony	1	OFF	22	0	22	15	0	15
Plant Protection	PF	Fruit fly management in cucurbitacious crops	1	OFF	18	0	18	9	0	9
Plant Protection	PF	Pest and disease management of jute	1	OFF	22	0	22	6	0	6
Plant Protection	EF	Importance of harmful and beneficial organisms in agriculture	1	ON	32	5	37	14	2	16
Plant Protection	EF	Importance of harmful and beneficial organisms in agriculture	1	ON	32	5	37	15	3	18
Plant Protection	PF	Pest and disease management of kharif paddy	1	OFF	25	0	25	13	0	13
Plant Protection	EF	Bio pesticides and its importance in agriculture	1	ON	32	5	37	15	3	18
Plant Protection	EF	Classification of pesticides	1	ON	32	4	36	15	3	18
Plant Protection	EF	Classification of pesticides	1	ON	32	5	37	14	2	16
Plant Protection	PF	Pest and disease management of kharif paddy	1	ONLINE	32	6	38	15	3	18
Plant Protection	EF	Pest management of cereal crops	1	ON	32	6	38	15	3	18
Plant Protection	EF	Pest management of cereal crops	1	ON	32	6	38	14	3	17
Plant Protection	PF	Pest and disease management of paddy	1	OFF	9	15	24	9	15	24
Plant Protection	EF	Training of PCO for glyfosate application	1	ON	33	6	39	15	3	18
Plant Protection	PF	Advanced retting technique of jute	1	OFF	22	0	22	15	0	15
Plant Protection	PF	Pest and disease management of fodder maize	1	OFF	26	6	32	17	2	19
Plant Protection	PF	Panama wilt management in banana	1	OFF	30	0	30	30	0	30
Plant Protection	EF	Pest and disease management of solanacious vegetables	1	ON	33	5	38	15	3	18

Plant Protection	EF	Pest and disease management of solanacious vegetables	1	ON	36	1	37	17	0	17
Plant Protection	PF	Pest and disease management of kharif paddy	1	OFF	28	0	28	16	0	16
Plant Protection	EF	Practical identification of small insects	1	ON	36	1	37	17	0	17
Plant Protection	EF	Practical identification of small insects	1	ON	32	5	37	15	3	18
Plant Protection	EF	Identification of disease and pests of paddy	1	ON	36	1	37	17	0	17
Plant Protection	PF	Pest and disease management of rabi field crops	1	OFF	27	6	33	17	5	22
Plant Protection	PF	Pest and disease management of rabi field crops	1	OFF	40	9	49	28	6	34
Plant Protection	EF	Pest and disease management of cash crops	1	ON	34	5	39	16	4	20
Plant Protection	EF	Practical class on identification of disease and pests of fruit crops	1	ON	32	5	37	15	3	18
Plant Protection	EF	Practical class on identification of disease and pests of fruit crops	1	ON	34	1	35	15	0	15
Plant Protection	EF	Pest and disease identification of fruit crops	1	ON	35	1	36	16	0	16
Plant Protection	EF	Pest and disease management pulse and oilseed	1	ON	32	5	37	15	3	18
Plant Protection	EF	Pest and disease management pulse and oilseed	1	ON	35	1	36	16	0	16
Soil Science	EF	Production technology of vermi compost	1	ON	33	5	38	15	3	18
Soil Science	EF	Production technology of vermi compost	1	ON	30	5	35	15	2	17
Soil Science	EF	Watershed Management	1	ON	30	5	35	14	3	17
Soil Science	EF	Procedure of modern methods of composting	1	ON	32	6	38	15	3	18
Soil Science	PF	Effect of micronutrients on crop production	1	OFF	23	2	25	15	2	17
Soil Science	EF	Improved Composting technologies	1	ON	32	6	38	15	3	18
Soil Science	EF	Soil test based fertilizer recommendation calculation	1	OFF	29	4	33	14	2	16
Soil Science	EF	Liquid fertilizer and it's use	1	ON	33	4	37	16	1	17
Soil Science	EF	Watershed Management	1	ON	32	4	36	15	2	17
Soil Science	PF	Effect of boron in vegetable production	1	OFF	15	0	15	0	0	0
Soil Science	PF	Effect of Zn on boro paddy	1	OFF	13	0	13	0	0	0
Soil Science	PF	Cultivation practices and management in Jute	1	OFF	14	3	17	7	2	9
Soil Science	EF	Integrated Nutrient Management practices	1	OFF	32	5	37	12	3	15
Soil Science	EF	Framework and other details of DAESI course	1	ON	35	4	39	16	3	19
Soil Science	PF	Improved Composting technologies by using poultry litter	1	OFF	10	0	10	10	0	10
Soil Science	PF	Green manuring in Kharif paddy cultivation	1	OFF	21	0	21	2	0	2
Soil Science	PF	Green manuring in Kharif paddy cultivation	1	OFF	10	3	13	3	2	5
Soil Science	EF	Framework and other details of DAESI course	1	ON	34	5	39	15	3	18
Soil Science	PF	Cultivation practices of Kharif Paddy	1	OFF	19	0	19	12	0	12

Soil Science	EF	Soil profile, types and characteristics	1	ON	34	5	39	16	3	19
Soil Science	EF	Production technology of improved composting processes	1	OFF	33	6	39	15	2	17
Soil Science	EF	Production technology of improved composting processes	1	OFF	31	6	37	16	3	19
Soil Science	EF	Soil profile, types and characteristics	1	ON	31	6	37	15	3	18
Soil Science	RY	Importance of soil management in organic agriculture	1	OFF	0	30	30	0	18	18
Soil Science	EF	Soil Physical Properties	1	OFF	34	5	39	17	3	20
Soil Science	PF	Cultivation practices of Kharif Paddy	1	ONLINE	16	1	17	10	1	11
Soil Science	EF	Soil Chemical and Biological Properties	1	ON	31	7	38	13	4	17
Soil Science	PF	Cultivation practices of Kharif Paddy and Nutrient management according to soil test report	1	OFF	15	9	24	15	9	24
Soil Science	PF	Advance retting technology of Jute	1	ON	22	0	22	15	0	15
Soil Science	EF	Soil Physical Properties	1	ON	32	6	38	15	4	19
Soil Science	EF	Interpretation of soil test results	1	ON	32	5	37	16	3	19
Soil Science	EF	Soil Chemical and Biological Properties	1	ON	34	5	39	17	3	20
Soil Science	PF	Fertilizer recommendation according to soil test results	1	ONLINE	19	2	21	16	1	17
Soil Science	EF	Importance of soil testing and methods	1	ON	33	5	38	16	2	18
Soil Science	PF	Use of leaf colour chart in paddy	1	OFF	25	0	25	3	0	3
Soil Science	EF	Methods of soil collection and sample preparation	1	ON	32	7	39	14	3	17
Soil Science	EF	Importance of soil testing, methods, interpretation and evaluation	1	ON	32	6	38	15	2	17
Soil Science	EF	Basic principles of soil testing and practical on soil testing	1	OFF	34	5	39	17	3	20
Soil Science	EF	Principles of soil testing and practical on soil testing	1	OFF	34	5	39	17	3	20
Soil Science	PF	Training programme on jute grading	1	ON	25	0	25	5	0	5
Soil Science	EF	Macro and micro nutrients deficiency in crop plants and remedial measures	1	ON	34	3	37	17	2	19
Soil Science	EF	Macro and micro nutrients deficiency in crop plants and remedial measures	1	ON	32	6	38	15	3	18
Soil Science	EF	Integrated Nutrient Management practices	1	ON	32	5	37	16	2	18
Soil Science	EF	Integrated Nutrient Management practices	1	ON	35	4	39	17	2	19
Soil Science	PF	Importance of Soil Health Management	1	ON	42	4	46	20	0	20
Soil Science	EF	Soil test based fertilizer recommendation calculation	1	OFF	32	5	37	17	2	19
Soil Science	PF	In-situ crop residue decomposition	1	OFF	8	2	10	2	0	2
Soil Science	PF	In-situ crop residue decomposition	1	OFF	8	0	8	6	0	6
Soil Science	PF	In-situ crop residue decomposition	1	OFF	8	2	10	5	2	7

Others	PF	Pesticides application Agriculture Drone	1	OFF	25	4	29	25	4	29
Others	EF	Pesticides application Agriculture Drone	1	OFF	48	0	48	48	0	48
Others	PF	Pesticides application Agriculture Drone	1	OFF	18	5	23	18	5	23
Others	EF	Pesticides application Agriculture Drone	1	OFF	86	26	112	86	26	112
Others	PF	Problems on Mushroom cultivation	1	OFF	5	15	20	5	15	20
Others	PF	Pesticides application Agriculture Drone	1	OFF	32	3	35	32	3	35
Others	PF	Pesticides application Agriculture Drone	1	OFF	18	2	20	18	2	20
Others	PF	Pesticides application Agriculture Drone	1	OFF	15	0	15	15	0	15
Others	PF	pest and disease management of rabi field crops	1	OFF	27	6	33	17	5	22
Others	PF	pest and disease management of rabi field crops	1	OFF	40	9	49	28	6	34
Others	EF	Pesticides application Agriculture Drone	1	OFF	85	9	94	85	9	94
Others	PF	Mushroom and its spawn production technology	1	OFF	0	25	25	0	25	25
Others	EF	Pesticides application Agriculture Drone	1	OFF	56	32	88	56	32	88
Others	PF	Pesticides application Agriculture Drone	1	OFF	47	12	59	47	12	59

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 PF/RY/EF	No. of courses	No. of participants	Sponsoring Agency
1	DAESI	Agriculture extension	12	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	14	464	38	502	50	0	50				514	38	552
Increasing production and productivity of crops	4	106	12	118							106	12	118
Commercial production of vegetables	3	198	6	204	21	0	21				219	6	225

Production and value addition	2	198	6	204	11	0	11				209	6	215
Fruit Plants	2	198	6	204	11	0	11				209	6	215
Ornamental plants	3	188	18	206	21	0	21				209	18	227
Spices crops	2	198	6	204	11	0	11				209	6	215
Soil health and fertility management	2	198	6	204	11	0	11				209	6	215
Production of Inputs at site	2	198	6	204	11	0	11				209	6	215
Methods of protective cultivation													
Mushroom	1	25	5	30	3	0	3				28	5	33
Bee keeping	2	198	6	204	11	0	11				209	6	215
Total													
Post harvest technology and value addition													
Processing and value addition													
Other													
Total													
Farm machinery													
Farm machinery, tools and implements	2	198	6	204	11	0	11				209	6	215
Other													
Total													
Livestock and fisheries													
Livestock production and management	2	198	6	204	11	0	11				209	6	215
Animal Nutrition Management	2	198	6	204	11	0	11				209	6	215
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	2	198	6	204	11	0	11				209	6	215
Other													
Total													
Grant Total	**45**	**2961**	**139**	**3100**	**205**	**0**	**205**				**3166**	**139**	**3305**

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	41	0	41	66				41	0	41
Kisan Mela	1	64	11	75	52				64	11	75
Kisan Ghosthi											
Exhibition	1	777	105	882	49				777	105	882
Film Show	1	224	70	294	46				224	70	294
Method Demonstrations	3	25	30	55	73				25	30	55
Scientist farmers interaction	2	597	128	725	70				597	128	725
Farmers Seminar	6	151	22	173	61				151	22	173
Workshop	2	63	9	72	32				63	9	72
Group meetings	5	73	4	77	38				73	4	77
Lectures delivered as resource persons	7	519	176	695	49				519	176	695
Advisory Services	19	170	3	173	39				170	3	173
Scientific visit to farmers field	16	107	14	121	51				107	14	121
Farmers visit to KVK	10	94	43	137	38				94	43	137

Nature of Extension Activity	No. of activities	Farmers				Extension Officials			Total		
		M	F	T	SC/ ST (% of total)	Male	Female	Total	Male	Female	Total
Diagnostic visits	27	335	13	348	47				335	13	348
Exposure visits	7					154	156	310	154	156	310
Ex-trainees Sammelan	3					66	13	79	66	13	79
Soil health Camp	1	42	4	46	44				42	4	46
Animal Health Camp											
Agri mobile clinic											
Soil test campaigns	1	13	3	16	75				13	3	16
Farm Science Club Conveners meet											
Self Help Group Conveners meetings											
Mahila Mandals Conveners meetings											
Celebration of important days (specify)	4	719	536	1255	48				719	536	1255
Sankalp Se Siddhi											
Swatchta Hi Sewa	12	44	9	53	52	69	6	75	113	15	128
Mahila Kisan Divas											
Any Other (Phone Call)	37	655	86	741	46				655	86	741
Total	**167**	**4713**	**1266**	**5979**	**976**	**289**	**175**	**464**	**5002**	**1441**	**6443**

B. Other Extension activities

Nature of Extension Activity	No. of activities
Newspaper coverage	2
Radio talks	-
TV talks	1
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	17.0		14								
Green gram	Virat	12.0		12								
Black gram	PU 31	22.5		18								
Sesame	Savitri	10.8		16								
Total		**62.3**		**60**								

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	-	-	-	-	-	-	-	-	-
Elephant Foot Yam	*Bidhan Kusum*	21.6	54,000.00	-	-	-	-	4	-	4	-
Kharif paddy	*Different varieties*	5.0	-	-	-	-	-	-	-	-	-
Grand Total		**27.1**	**54,000.00**	**-**	**-**	**-**	**-**	**4**	**-**	**4**	**-**

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											
Tomato	*Arka Rakshak, Cherry Tomato*	3000	Used in Nadia KVK Farm								
Brinjal	*Gargi, VNR 218*	5000	-do-								
Chilli	*Daya, Bullet, Kalika*	1000	-do-								
Onion	*Agrifound Dark Red*	30000	-do-								
Broccoli	*Ajeet Royal Green*	1500	-do-								
Capsicum	*California Wonder, Radhika, KSP 1709*	2000	-do-								
Lettuce	*Grand Raphis*	1000	-do-								
Purple and Yellow Cauliflower	*Valentena, Caroteena*	2000	-do-								
Others											
Fruits											
Mango											
Guava											
Lime											
Papaya	*Local*	200	-do-								
Banana	*Bagda Kanthali*	100	Taken by CR Farm, BCKV	-	-	-	-	1	-	1	-
Others											
Ornamental plants	*Duranta*, Winter annuals, Summer annuals	20,000	-do-								
Medicinal and Aromatic											
Plantation											
Spices	Black pepper	285	5,700.00	2	-	-	-	4	-	6	-
Turmeric											

Tuber											
Elephant yams	*Bidhan Kusum*	2160 kg	54,000.00	-	-	-	-	4	-	4	-
Fodder crop saplings											
Forest Species											
Others, pl. specify											
Total		**69,300**	**59,700.00**	**2**	**-**	**-**	**-**	**9**	**-**	**11**	**-**

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	80	-	11	0	0	0	9	2	20	2
Bio-agents										
Vermicompost	350	2800.00	-	-	-	-	-	-	-	-
Waste Decomposer Compost	250	750.00	-	-	-	-	-	-	-	-
NOVCOM compost	350	1050.00	-	-	-	-	-	-	-	-
Total	**1030**	**4,600.00**	**11**	**-**	**-**	**-**	**9**	**2**	**20**	**2**

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*	4	54,950.00	-	-	-	-	2	-	2	-
Buffaloes											
Calves	*Desi*	3	12,000.00	-	-	-	-	1	-	1	-
Others (Pl. specify)											
Small ruminants											
Sheep											
Goat	*Black Bengal*	15	21,100.00	-	-	-	-	4	-	4	-

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*	110	-								
Fish											
Grand Total		**132**	**88,050.00**	**-**	**-**	**-**	**-**	**7**	**-**	**7**	**-**

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:

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				

iv) Infrastructure Development

Item	Progress
Seed processing unit	
Seed storage structure	

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

Item	Title	Author's name	Number	Circulation
Research paper	'Clean Food', a model for safe and sustainable agriculture towards accomplishment of circular economy in *Journal of Solid Waste Technology and Management*, 49(2): 115-131 (2023)	K. Mukhopadhyay, K. K. Goswami and M. Debnath		
	Technological Breakthrough for Large Scale Bioconversion of Coir Pith towards Sustainable Soil Health Management and Development of Source Point Methane Abatement Model in *International Journal of Environment and Climate Change*, 13(7), 75-102 (2023).	K. Mukhopadhyay		
Seminar/conference/ symposia papers	Evaluation of different composting processes for effective resource recycling: A case study from Nadia Krishi Vigyan Kendra, West Bengal in **NATIONAL SEMINAR on "Recent Developments of Scientific Research in Soil, Water and Environment"** *Jointly organized by* Department of Agricultural Chemistry & Soil Science, University of Calcutta, and ICAR-Central Research Institute for Jute and Allied Fibres, Barrackpore, Kolkata from 30.04.2023 to 01.05.2023.	K. Mukhopadhyay**,** K.K. Goswami, M. Debnath**,** M. K. Samanta, S. J. Pramanick, S. C. Dhang, S. Islam		
Books				
Bulletins				
News letter				
Popular Articles	"Ajker Krishi-Mati o Joler Sankat" in Kristimon (Local news paper)			
Book Chapter	Moringa Oleifera under stressful condition	S. Islam		
	Benificial fungi as a bio-control agent against fungi	S. Islam		
	Bacillus secondary metabolites and their application in agriculture	S. Islam		
Extension Pamphlets/ literature				
Technical reports				
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 Training Programme on "Geographical Indication and Patenting of Products"	Geographical Indication and Patenting of Products: Importance, Process in Agriculture	Dr. Shubhra Jyoti Pramanik, SMS (Seed Science)	07.02.23 to 08.02.23 (2 days)	Assam Agricultural University and SAMETI, WB
2.	One day workshop on Millet Cultivation	Millet for ensuring nutritional security	Dr. Malay Kumar Samanta, SMS (Hort.) Dr. Shubhra Jyoti Pramanik SMS (Sedd Science) Dr. Sukhen Chandra Dhang, Farm Manager	29.03.2023 (1 day)	DEE, BCKV
3.	Agri-drone training	OEM training of drone	Saidul Islam, Programme Assistant (Lab. Tech.)	13.12.23 to 14.12.23 (2 days)	IOTECH world ltd.
4.	Bengal Aromatic Rice Production, Processing and Marketing	Bengal Aromatic Rice Cultivation	Dr. Shubhra Jyoti Pramanik, SMS (Seed Science)	11.10.2023 (1 day)	RKVY Project on Bengal Aromatic Rice, BCKV
5.	CFLD on Oilseeds and Pulses	Review meeting on CFLD (Oilseeds and Pulses)	Dr. Shubhra Jyoti Pramanik, SMS (Seed Science)	08.09.2023 (1 day)	ATARI, Kolkata
6.	Interactive meeting cum training on tropical orchid	Tropical orchid cultivation	Dr. Malay Kumar Samanta, SMS (Hort.)	03.08.2023 (1 day)	ICAR-NRC on Orchid
7.	Jute Grading using Digital Instruments	Jute Grading	Dr. Shubhra Jyoti Pramanik, SMS (Seed Science)	11.10.2023 (1 day)	Director, NINFET, Kolkata
8.	Krishi Mapper Mobile App	Training for UAT of Krishi Mapper Mobile App for Monitoring CFLD Programme Implemented by ICAR under NFSM	Dr. Shubhra Jyoti Pramanik, SMS (Seed Science)	01.09.2023 (1 day)	Division of Agril. Extn., ICAR, New Delhi
9.	One day workshop on CFLD Oilseeds and Pulses	One day workshop on CFLD Oilseeds and Pulses	Dr. Shubhra Jyoti Pramanik, SMS (Seed Science)	14.07.2023 (1 day)	ICAR-ATARI, Kolkata
10.	One day workshop on Lentil	Impact ofCFLD on Lentil in India	Dr. Shubhra Jyoti Pramanik, SMS (Seed Science)	20.03.2023 (1 day)	Director, ICAR-ATARI, Kanpur
11.	State Level Agricultural GI	GI in Agricultural Produces	Dr. Shubhra Jyoti Pramanik, SMS	10.05.2023 (1 day)	SAMETI, West

	Committee Meeting	in WB: A Step for Implementation	(Seed Science)		Bengal
12.	Two days HRD Training Programme	Innovative Approaches in Agriculture, Horticulture and Allied Sectors with Special Focus on Natural Farming	Dr. Shubhra Jyoti Pramanik, SMS (Seed Science) Dr. Sukhen Chandra Dhang, Farm Manager	30.03.2023 to 31.03.2023 (2 days)	DEE, BCKV
13.	Two Days HRD Training Programme	Contemporary Issues and Recommendation from Network Research in food crops for facilitating OFT proposals	Dr. Kaushik Mukhopadhyay, SMS (Soil Science) Dr. Shubhra Jyoti Pramanik, SMS (Seed Science) Dr. Malabika Debnath, SMS (Plant Protection) Dr. Malay Kumar Samanta, SMS (Hort.)	19.12.2023 to 20.12.2023 (2 days)	DEE, BCKV
14.	Two days National Seminar	National Seminar on Soil, Water and Environment	Dr. Kaushik Mukhopadhyay, SMS (Soil Science)	30.04.2023 to 01.05.2023 (2 days)	CRIJAF and Department of Soil science & Agricultural Chemistry, University of Calcutta
15.	Two days' Workshop	Review Workshop on implementation of DAESI Course in West Bengal	Dr. Kaushik Mukhopadhyay, SMS (Soil Science)	03.05.2023 to 04.05.2023 (2 days)	SAMETI, West Bengal
16.	Workshop	workshop on convergence platform for CSISA project (2023-24)	Dr. Malabika Debnath, SMS (Plant Protection)	16.06.2023 (1 day)	OUAT, Bhubaneswar
17.	Workshop on Tropical orchid cultivation	Tropical orchid cultivation	Dr. Malay Kumar Samanta, SMS (Hort.)	01.06.2023 (1 day)	ICAR-ATARI, Kolkata
18.	Workshop	Project completion workshop of IFS project	Dr. Malay Kumar Samanta, SMS (Hort.)	30.06.2023 (1 day)	ICAR-ATARI, Kolkata

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

Success Story-1

Name and contacts of farmer: Mr. Hafijur Rahaman, 8777498890, Address: Vill.- Chandamari , P.O.: Chandamari, Block- Kalyani, Pin: 741245, District: Nadia, West Bengal

Name and contacts of KVK: Dr. Kaushik Mukhopadhyay, SMS (Soil Science) Nadia KVK, Mob: 9231625971, nadiakvk@gmail.com

Title: Waste turning to wealth, journey of a successful poultry farmer

Background information of the farmer: Mr. Hafijur Rahaman, a 56 year old farmer of Chandamari village under Kalyani block is a successful entrepreneur of poultry bird farming. Regardless of the fact that he was successful as a poultry farmer but he was rather worried about the fates of the huge wastes i.e tons of poultry litters coming out from his poultry unit during every season. Though he was little aware that poultry litter could be a rich source of nutrient for agricultural fields if used in a proper way but he wasn't aware of the method by which this waste could be turned to a wealth for the soil. So, he was in search of the process by which good quality poultry litter compost could be prepared and obviously the byproduct of his poultry unit could boost him with additional income support.

Intervention of Nadia KVK: In the mean time he noticed regarding composting of water hyacinth through NOVCOM composting method from the Facebook page of Nadia Krishi Vigyan Kendra. Instantly he had a contact with Nadia Krishi Vigyan Kendra during April, 2022 and Nadia KVK got involved with him and introduced the process of NOVCOM composting method by using poultry litter of his farm. The KVK scientists visited his farm and guided him regarding preparation of some semi-permanent bamboo structures and other pre-requisites for preparing poultry litter compost through NOVCOM composting method. The scientists of Nadia KVK also got involved throughout the process through method demonstration during the initial day and also during the time of 1st and 2nd turning. Thus, following the methodologies the labourers of his farm got trained and accustomed with the composting process. By using this method good quality poultry litter compost was prepared from Mr. Rahaman's farm only within 30 days.

Coverage/ impact of the intervention: During the entire tenure of entrepreneurship with poultry farming Mr. Rahaman's major concern was regarding conversion of the poultry litter into a valuable resource. He was astonished to notice the success when he produced almost 5 tons of poultry litter compost from his nearly 7 ton raw poultry litter in just within a month. Analytical results also showed that the produced compost possesses all the attributes of good quality compost. Average values of the end product showed that the matured poultry litter compost having great content of organic carbon (28.74%), NPK (5.04%), C/N ratio (21:1) and with Compost Mineralization Index of 1.68 except slight limitation in terms of EC (which is 1.23 dsm^{-1}) only. The microbial population (desirable range $10X10^{12}$) within the ready compost is probably the most indicative parameter for its effectivity post soil application. The compost sample showed much higher population of bacteria, fungi and actinomycetes (in the order of 10^{16}c.f.u to 10^{14}c.f.u). In terms of stability and phyto-toxicity the average values of the poultry litter compost produced in the farm are within the stipulated value of matured and good quality compost.

Economics: Mr. Rahaman was excited to notice the minimum cost involvement for producing the poultry litter compost. According to his estimation for producing 5 tons of this compost with a heap size of 10ft x 5ft x 6ft (L X B X H) only Rs. 12,500 is the investment cost which included the cost of raw poultry litter, cow dung, NOVCOM solution, labour and miscellaneous. Thus, it involved production cost of just Rs. 2.5/kg and he sold the same within the range of Rs. 5-7/kg which expressed the profit margin to a tune of 100-180%. Till date he was successfully involved in preparing poultry litter compost and earning an additional income of at least 20% per annum through his poultry farm.

Horizontal spread: Mr. Hafijur Rahaman's poultry farm is now a perfect example of integrated farming in which the left over material of one unit is used as the basic raw material of another unit. Now he is also exploring his expertise in this field and encouraging other rural youths of his vicinity to gain hands on experience with the simplest method of compost preparation and thereby find an alternative avenue of self-establishment.

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

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	Aster flower	Aster is a floricultural crop which is cultivated in winter season in Nadia District. Some farmers of Ranaghat – II block cultivating aster flower as an intercrop in the litchi orchard. The benefit of the technology is that it utilizes the free space in the litchi orchard and at the same time weed infestation is controlled in the litchi orchard. On the other hand litchi plants provide shade to the aster plants. So the flower production extands upto mid april. So the late flower fatch very good market price particularly for marrage.	Value addition over space and time

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 .5	32.2 q/ha	18	Local market
2	Indigenous rice variety (Kerala sundari)	4.76	57.8 q/ha	25	Govt. purchase
3	Aromatic rice (Gobindabhog)	4..3	35.5 q/ha	20	Local market

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 Appraisal	This tool aims to incorporate the knowledge and opinions of rural people for the proper planning and management of development programmes
2.	Rapid Rural Appraisal	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			
226	35	261	261	7	-

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	7	Prof. Goutam Saha, VC, BCKV Prof. S. K. Sanyal, Ex. VC, BCKV Prof. J. Tarafdar, Director of Research, BCKV Prof. P. Bandopadhyay, Director of Extension Education, BCKV Dr. S. Mitra, Director of Farms, BCKV Dr. Barun Bhattacharya, DDA (Admin), Nadia Dr. R. Bera, Senior Scientist, Inhana Organic Research Foundation	55	125

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

3.13. Technology week celebration

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

3.14. RAWE/ FETprogramme - is KVK involved? Yes

No of student trained	No of days stayed
156	30

ARS trainees trained	No of days stayed

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

Date	Name of the person	Purpose of visit
05.12.2023	Prof. Goutam Saha, VC, BCKV	World Soil Day
	Prof. S. K. Sanyal, Ex. VC, BCKV	
	Prof. J. Tarafdar, Director of Research, BCKV	
	Prof. P. Bandopadhyay, Director of Extension Education, BCKV	
	Dr. S. Mitra, Director of Farms, BCKV	
	Dr. Barun Bhattacharya, DDA (Admin), Nadia	
	Dr. R. Bera, Senior Scientist, Inhana Organic Research Foundation	
31.01.2023	Prof. B. S. Mahapatra, VC, BCKV	To attend SAC meeting
	Dr. Subrata Ray, Director, ICAR-ATARI, Kolkata	

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	342	75%	41,000/- per 1000 sq.m.	2,45,000/- per 1000 sq. m.
Adoption of banana bunch cover in G- 9 variety	459	25%	4.8 lakh/ha	8.4 lakh/ha
Seed production of pulses	261	29%	32,000/- per ha	60,000/- per ha
Fruit fly management in fruit crops	720	78%	4.9 lakh/ha	5.5 lakh/ha
Orchard development	340	68%	1.4 lakh/ ha	3.0 lakh/ ha
Composting	156	59%		14000 / ha savings in cost of fertilizer, and soil health improvement
Use of leaf colour chart in paddy	450	70%		Increase in nitrogen use efficiency, 35% fertilizer cost reduction and soil health improvement
Mushroom production	250	40%		35000-110000 yearly income per unit
Micronutrient application	180	32%		Quality enhancement in production and upto 11% increase in yeild

4.2. Cases of large scale adoption

Horizontal spread of technologies	
Technology	**Horizontal spread**
Protected cultivation technology	250 units of protected structures covering nearly 1,90,000 sq.m. area.
Adoption of banana bunch cover in G- 9 variety	More than 135 ha of land
Cultivation of nematode resistant variety of tuberose- prajjal	More than 1150 ha of land
Fruit fly management in fruit crops- like Mango, Guava and ber and vegetables like cucurbits.	More than 132 ha of land
Green gram variety samrat	More than 135 ha of land
Lentil variety moitree	More than 228 ha of land
Production of *Trichoderma spp.* at Nadia KVK for soil borne disease control at farmer's field.	More than 85 ha of land
Production of Mushroom as well as spawn production for sustainable mushroom cultivation in Nadia district	More than 70 entreprenureships 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

4.4. Details of innovations recorded by the KVK

Thematic area:	
Name of the Innovation:	
Details of Innovator:	
Background of the Innovation:	
Technological Details:	
Practical utility of the innovation:	

4.5. Details of entrepreneurship development

Entrepreneurship development	
Name of the enterprise	
Name & complete address of the entrepreneur	
Role of KVK with quantitative data support:	
Timeline of the entrepreneurship development	
Technical Components of the Enterprise	
Status of entrepreneur before and after the enterprise	
Present working condition of enterprise in terms of raw materials availability, labour availability, consumer preference, marketing the product etc. (Economic viability of the enterprise):	
Horizontal spread of enterprise	

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 2023 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 Course Training	Training of extension functionaries	Throughout 2023	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	287 no saplings	3,000.00	5,800.00	
2	Bio pesticide production unit	2012	8.0	*Trichoderma viride*	*Trichoderma viride* Frmulation	80 Kg	2000.00	16,000.00	The whole amount was distributed among farmers
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	
Tomato	12.10.22-20.10.22 & 15.10.23	09.12.22-13.02.23 & 17.12.23 & onwards	0.03	*Arka Apeksha, Arka Rakshak, Cherry tomato*	Seedlings & vegetables	0.3	4200.00	-	Demonstration purpose
Okra	10.04.23	30.5.23-08.8.23	0.03	*Hybrid Rohini*	Vegetables	0.5	2500.00	500.00	-do-
Cowpea	06.04.23	25.5.23-13.7.23	0.03	*Krishi Kanchan Barbati*	-do-	0.4	3500.00	400.00	-do-
Brinjal	12.10.22 & 09.10.23	26.12.22-27.04.23 & 25.12.23 to onwards	0.03	*Brinjal no. 704 & VNR 218, Gargi*	Seedlings & vegetables	0.4	4500.00	-	-do-
Chilli	--do-	26.12.22-27.04.23 & 22.12.23 & onwards	0.03	*Daiya, Majum, Kalika, Bullet*	-do-	0.3	3500.00	-	-do-
Onion	10.06.23	20.11.23	0.03	*Arkafound Dark Red*	-do-	Stored	4500.00	-	-do-
Broccoli	12.10.22 & 15.10.23	20.01.23-25.01.23 & 22.01.24 & onwards	0.03	*Centauro, Ajeet Royal Green*	-do-	400	4000.00	-	-do-
Capsicum	12.10.22 & 15.10.23	02.01.23-20.2.23	0.03	*California Wonder, KSP*	-do-	0.3	3600.00	-	-do-

		& 02.01.24 & onwards		*1709*					
Papaya	09.04.22	10.12.22-02.02.23 & onwards	0.13	*Local selection*	Fruits	0.89	8000.00	890.00	
Banana	18.04.22	20.09.23 & 15.01.24 (2nd year)	0.13	*Bagda Kanthali*	Fruits	-	20,000.00 & 12,000.00	-	Whole plantation was damaged due to havoc storm
Ornamental plants	15.07.23	-	0.03	*Duranta, winter & Summer ornamentals*	Used in KVK	-	5000.00	-	Demonstration purpose
Black pepper	14.06.23	-	For saplings	*Pennyur 5*	Saplings	2000 nos	4000.00	5,700.00	-do-
Mango	11 years old	Off year	0.2	*Himsagar, Amrapalli*	Fruits	-	2400.00	-	-do-
Malta orange	3 years old	Crop not allowed	0.13	*BARI 1*	-	-	2500.00	-	-do-
Guava	3 years old	Crops were not been sold	0.4	*Allahabad safeda, Baruipur, Khaja, VNR Bihi*	Fruits	-	2500.00	-	-do-
Coconut	-	Juvenile stage	0.27	*Local Tall*	-	-	3500.00	-	-do-
Citrus	9 years old	Hard pruning done	0.2	*Pati, Golpatti*	Fruits	-	6000.00	-	-do-
Tomato	12.10.22-20.10.22 & 15.10.23	09.12.22-13.02.23 & 17.11.23	0.03	*Arka Apeksha, Arka Rakshak, Cherry tomato*	Seedlings & vegetables	-	4200.00	-	Demonstration purpose

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*)	80	2,000.00	Distributed among farmers	
2.	Vermicompost	350	3000.00	Used in KVK farm	
3.	Other compost	600	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 & Live	181.5 litre Milk & 7 in Numbers	27,000.00	93,858.00	
2.	Goats	Black Bengal	Live	15 nos	5800.00	21,100.00	

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)
			-
Total :			

(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, 2023
	Kharif	Rabi	Kharif	Rabi	

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

Item	Released by ICAR		Expenditure		Unspent balance as on 1st April 2023
	Kharif	Rabi	Kharif	Rabi	
Blackgram	1,80,000.00		1,70,101.00		9,899.00
Lentil		90,000.00		84,340.00	5,660.00

7.4. Utilization of KVK funds during the year 2022-23 (Audited- 01.04.2022 to 31.03.2023)

Sl. No.	Particulars	Sanctioned	Released	Expenditure
A. RECURRING CONTINGENCIES				
1	Pay & Allowances	2,07,86,000.00	2,07,86,000.00	1,98,89,371.00
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	3,00,000.00	3,00,000.00	1,80,879.00
B	Training	2,25,000.00	2,25,000.00	1,92,694.00
C	OFT	1,13,000.00	1,13,000.00	73,640.00
D	FLD	1,12,000.00	1,12,000.00	68,217.00
E	SCSP	20,00,000.00	20,00,000.00	4,73,406.00
F	Swachhta Expenditure/ SAP Fund			
TOTAL (A)		**2,36,86,000.00**	**2,36,86,000.00**	**2,09,36,841.00**
B. NON-RECURRING CONTINGENCIES				
1	Equipments & Furniture	65,000.00	65,000.00	-
2	Works	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**	**-**
GRAND TOTAL (A+B)		**2,47,61,000.00**	**2,47,61,000.00**	**2,09,36,841.00**
C. REVOLVING FUND				

7.5. 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)
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)
2023-24	44.43681*	3.99203	8.55170	39.87714 (As on 31.12.2023)

*Balance includes Rupees 18 lakhs (26,43,681 + 18,00,000) yet to be transferred from BCKV

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)

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 Yuva Kendra(NYK) Training

Title of the training programme	Period		No. of the participant		Amount of Fund Received (Rs)
	From	To	M	F	
Millets Mela	14.08.2023	14.08.2023	54	7	10,000.00

9.2. PPV & FRA Sensitization training Programme

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

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

Type of message	No. of messages	No. of farmers covered
Crop	41	1,33,872
Livestock		
Fishery		
Weather	7	23,439
Marketing		
Awareness		
Training information		
Other		
Total	**48**	**1,57,311**

9.4. *KVK* Portal and Mobile App

Sl. No.	Particulars	Description
1.	No. of visitors visited the portal	10253
2.	No. of farmers registered in the portal	225
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
17.10.2023 to 23.102023	Awareness programme, Cleaning of the campus, sanitizing the office building, cleaning of demonstration units
30.10.2023	Cleaning and sanitizing of the laboratory
31.10.2023	Cleaning activities conducted by DAESI participants

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

	Activities	Number	Expenditure (in Rs.)
1.	Digitization of office records/ e-office		
2.	Basic maintenance	2	8800.00
3.	Sanitation and SBM		
4.	Cleaning and beautification of surrounding areas		
5.	Vermicomposting/ Composting of biodegradable waste management & other activities on generate of wealth for waste		
6.	Used water for agriculture/ horticulture application		
7.	Swachhta Awareness at local level	1	-

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	14	-
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 Seema Suraksha Bal/ 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
Satish Chandra Memorial school	24.07.2023		Audio visual
Kantabelia Primary School	05.09.2023		Audio visual

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 Door Darshan (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- Bhayna, Block- Hanskhali, Dist- Nadia (9674545585)	Organic pest and disease management
3.	Ashim Biswas	Vill- Ramnagar, Block- Hanskhali, Dist- Nadia (7602639355)	Banana cultivation
4.	Mafijul Mondal	Vill- Satyapole, Block- Haringhata, Dist- Nadia (8388878085)	Integrated nutrient & pest management practices
5.	Tapan Kumar Bain	Vill- Bhayna, Block- Hanskhali, Dist- Nadia (9749245465)	Organic package of practices

9.13. Revenue generation

Sl.No.	Name of Head	Income(Rs.)	Sponsoring agency
1.	Farm unit	1,55,888.00	
2.	Hostel unit	1,000.00	
Total		**1,56,888.00**	

9.14. Resource Generation:

Sl.No.	Name of the programme	Purpose of the programme	Sources of fund	Amount (Rs. Lakhs)	Infrastructure created
1	DAESI	Diploma training for Input Dealers	Self-Financed	16.00	Nil
Total				**16.00**	

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 2023

Progress of DAPST for the year 2023 (Jan. to Dec., 2023)

Name of KVK							
Sl.No.	***Item/Activity***		***Units***	***Targets/Achievements***		***No. of Beneficiaries***	
				Annual Targets	***Achievements***	***Annual Targets***	***Achievements***
1	**Trainings (Capacity building/ Skill Development etc.)**		No.				
	1.1	1-3 days	No.				
	1.2	4-10 days	No.				
	1.3	2-4 weeks	No.				
	1.4	More than 4 weeks	No.				
2	**On Farm Trials (OFTs)**		No.				
3	**Front Line Demonstrations (FLDs) and other demonstrations**		No.				
4	**Awareness camps, exposure visits etc.**		No.				
5	**Input Distribution**						
	5.1	Seeds (Field Crops)	Tonnes				
	5.2	Seeds (High Value Crops, spices etc.)	kg				
	5.3	Seeds (Root & Tuber Crops)	tonnes				
	5.4	Nursery plants	No.				
	5.5	Cutting , slips, suckers, etc	No.				
	5.6	Mushroom Spawns/ Bio-Fertilizers (in Packets)	Packets				

	5.7	Honey Bee Colonies	No.				
	5.8	Animals-large (Cattle/ Buffalo/ camel/horse/donkey/Mithun/Yak etc.)	No.				
	5.9	Animals-small (pig, sheep, goat etc.)	No.				
	5.1	Poultry chicks / duckling etc	No.				
	5.11	Fish Spawns/ fingerlings	No.				
	5.12	Small equipment's (upto Rs 2000)	No.				
	5.13	Medium Equipment's/ machinery (upto Rs 25000)	No.				
	5.14	Large Equipment's / machinery (> Rs. 25000)	No.				
	5.15	Infrastructure / Civil Works/ Ponds etc	No.				
	5.16	Setting up plant nursery/ seed farm/ hatchery	No.				
	5.17	Land development/ Reclamation / Conservation	hectares				
	5.18	Fertilizers (NPK)/ Secondary fertilizers	tonnes				
	5.19	Micro nutrients	tonnes				
	5.2	FYM/ Vermicompost	tonnes				
	5.21	Soil amendments (Gypsum, lime etc.)	tonnes				
	5.22	Plant protection chemicals	kg				
	5.23	Plant growth Promoter	kg				
	5.24	Animal Feed	tonnes				
	5.25	Animal Fodder	tonnes				
	5.26	Animal medicines	doses				
	5.27	Any other (Liquid PSB etc.)	Litre				
6	**Services/Facilitation**						
	6.1	Animal Health Camps	No.				
	6.2	Artificial Insemination / Vaccination	No.				
	6.3	Veterinary Services (Hospitalization, on-site treatment, PD, surgery etc)	No.				

	6.4	Testing samples of Soil, plant, water, feed, fodder and livestock	No.				
	6.5	Promotion of agri-entrepreneurship	No.				
	6.6	Promotion of IFS, IOFS, Natural Farming, Nutrigarden, kitchen garden, orchards etc	No.				
	6.7	Creation of market links of farm produces	No.				
	6.8	Use of Institute Facilities (Processing etc.) (in Hours)	Hours				
	6.9	Subsidies/ Assistance (50% of Project cost, Max. Rs 10,000/beneficiary)	No.				
7	**Distribution of Literature**		No.				
8	**Employment generation for livelihood**		(Man-months)				
9	**Fellowship, Stipends or Scholarship**		No.				
10	**Area oriented R&D Activity (project addressing the problems of agri. Sector faced by the SC/STs and benefit directly, which is measurable and identifiable**		No. of projects				
11	**Monitoring & Evaluation of DAPSC/ST (upto 3%)**						
12	**Any other (specify)**						

b. Fund received under TSP in 2022-23 (Rs. In lakh):

12. Details of DAPSC/ SCSP

a. Achievements of physical output under SCSP during 2023

Progress of DAPSC for the year 2023 (Jan. to Dec., 2023)

Name of KVK		**Nadia Krishi Vigyan Kendra, Gayeshpur**					
Sl.No.	***Item/Activity***		***Units***	***Targets/Achievements***		***No. of Beneficiaries***	
				Annual Targets	***Achievements***	***Annual Targets***	***Achievements***
1	**Trainings (Capacity building/ Skill Development etc.)**		No.				
	1.1	1-3 days	No.	119	172	3242	5267
	1.2	4-10 days	No.				
	1.3	2-4 weeks	No.				
	1.4	More than 4 weeks	No.				
2	**On Farm Trials (OFTs)**		No.	8	61	7	57
3	**Front Line Demonstrations (FLDs) and other demonstrations**		No.	19	19	654	721
4	**Awareness camps, exposure visits etc.**		No.	12	13	350	427
5	**Input Distribution**						
	5.1	Seeds (Field Crops)	Tonnes	20	20	120	120
	5.2	Seeds (High Value Crops, spices etc.)	kg	8	8	147	147
	5.3	Seeds (Root & Tuber Crops)	tonnes				
	5.4	Nursery plants	No.				
	5.5	Cutting , slips, suckers, etc	No.				
	5.6	Mushroom Spawns/ Bio-Fertilizers (in Packets)	Packets				

	5.7	Honey Bee Colonies	No.				
	5.8	Animals-large (Cattle/ Buffalo/ camel/horse/donkey/Mithun/Yak etc.)	No.				
	5.9	Animals-small (pig, sheep, goat etc.)	No.				
	5.1	Poultry chicks / duckling etc	No.				
	5.11	Fish Spawns/ fingerlings	No.				
	5.12	Small equipment's (upto Rs 2000)	No.				
	5.13	Medium Equipment's/ machinery (upto Rs 25000)	No.				
	5.14	Large Equipment's / machinery (> Rs. 25000)	No.				
	5.15	Infrastructure / Civil Works/ Ponds etc	No.				
	5.16	Setting up plant nursery/ seed farm/ hatchery	No.				
	5.17	Land development/ Reclamation / Conservation (Microbial consortium for Jute retting)	hectares	6	10.6	80	80
	5.18	Fertilizers (NPK)/ Secondary fertilizers	tonnes				
	5.19	Micro nutrients	tonnes	0.105	0.105	180	200
	5.2	FYM/ Vermicompost	tonnes				
	5.21	Soil amendments (Gypsum, lime etc.)	tonnes				
	5.22	Plant protection chemicals	kg	30	31.018	70	80
	5.23	Plant growth Promoter	kg				
	5.24	Animal Feed	tonnes				
	5.25	Animal Fodder	tonnes				
	5.26	Animal medicines	doses				
	5.27	Any other (Leaf colour chart, Banana bunch cover, plug tray)		1 ha/10 units/ 50 no.	1 ha/10 units/ 50 no.	120	120
6	**Services/Facilitation**						
	6.1	Animal Health Camps	No.				
	6.2	Artificial Insemination / Vaccination	No.				

	6.3	Veterinary Services (Hospitalization, on-site treatment, PD, surgery etc)	No.				
	6.4	Testing samples of Soil, plant, water, feed, fodder and livestock	No.	280	419	270	213
	6.5	Promotion of agri-entrepreneurship	No.				
	6.6	Promotion of IFS, IOFS, Natural Farming, Nutrigarden, kitchen garden, orchards etc	No.				
	6.7	Creation of market links of farm produces	No.				
	6.8	Use of Institute Facilities (Processing etc.) (in Hours)	Hours				
	6.9	Subsidies/ Assistance (50% of Project cost, Max. Rs 10,000/beneficiary)	No.				
7	**Distribution of Literature**		No.				
8	**Employment generation for livelihood**		(Man-months)				
9	**Fellowship, Stipends or Scholarship**		No.				
10	**Area oriented R&D Activity (project addressing the problems of agri. Sector faced by the SC/STs and benefit directly, which is measurable and identifiable**		No. of projects				
11	**Monitoring & Evaluation of DAPSC/ST (upto 3%)**						
12	**Any other (Agriculture Drone Demonstration)**		No.	-	-	14	654

b. Fund received under SCSP in 2023-24 (Rs. In lakh):

13. 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

14. Awards/Recognition received by the KVK

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

Award received by Farmers from the KVK district

Sl. No.	Name of the Award	Name of the Farmer	Year	Conferring Authority	Amount	Purpose
1.	Genome Saviour Award	2023	PPV &FRA	1,50,000.00	For conserving folk varieties	Genome Saviour Award

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

16. 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	2022 -24	Arbandhi Agri Farmers Producer Company Limited (FPC)	Shantipur	Nadia	Shantipur, Nadia	03.02.2022				300	-	Suman Sarkar (6295268192)	7	Spices production, Potato seeds etc.
2	2022 -24	Jeevansathi Farmers producer Organization (FPO)	Nakashipara	Nadia	Nakashipara, Nadia	01.07.2022	IV-0011/22			311	Julfikar Sekh (8926330538)	Abdul Alim Gharami (7797978788)	3	Exporting Aswagandha

17. 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	1,000.00	2,500.00	11 nos	40% monetary gain
2.	Horticulture		Vegetables seedlings	5,000.00	12,000.00		
3.	Diary		Milk – 181.5 lit Cowdung – 5 tonnes Waste decomposer compost – 1 tonnes NOVCOM compost – 1 tonnes	24,000.00	72,700.00		
4.	Goatery		Goats (15)	8,500.00	21,000.00		

18. 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	1,85,000.00	68	
2	Malta cultivation	This fruit is cultivated High demand in market	1,65,000.00	10	

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

Phase	Database prepared/ covered for		KVK level Committee		Various activity conducted for farmers
	Total no. of villages	Total no. of farmers	Date of formation	Name of members	
I					
II					
Total					

20. 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)

21. Skill Development Training

a) Information on ASCI Skill Development Training Programme, if undertaken during 2023

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 2023

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	

22. 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

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

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

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

***

ON & ONLINE Campus Training

OFF Campus Training

Front Line Demonstration (FLD)

Cluster Front Line Demonstration (CFLD)

On Farm Trail (OFT)

OFT on IPM for management of Bacterial blight of paddy

OFT on management of Collar rot of chilli

OFT on foliar nutrient application in Green gram

OFT on seed quality of Brinjal

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

OFT on nitrogen use efficiency through Nano nitrogenous fertilizer in Kharif paddy

OFT on Introduction of low cost poly walking tunnel for additional off season harvest of Pointed Gourd

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

SPECIAL PROGRAMMES

Krishi Mela

ICAR Foundation Day

Sankalp Sapath

Exposure Visit

Drone demonstration

Farmer award received


DAESI


RAWE


Plantation Programme

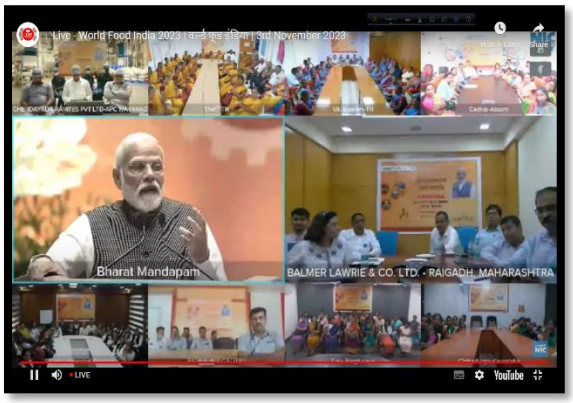
Catch Them Young

Dignitaries Visit

World soil day

Swachtta Activity

Mann Ki Baat



World Food Day

Glimpses of ATMA short term research project work