ANNUAL REPORT
2020

Submitted to
ICAR- ATARI
Zone – V,
Kolkata

Submitted by

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PROFORMA FOR ANNUAL REPORT(January, 2020 – December, 2020)

1. GENERAL INFORMATION ABOUT THE KVK

1.1. Name and address of KVK with phone, fax and e-mail

Address	Telephone		E mail
Bud Bud, Burdwan-713 403. West Bengal	Office - 0343 2513651	Fax -	kvkburdwan@gmail.com **Web:** www.kvkcrijaf.org.in

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

Address	Telephone		E mail
	Office	FAX	
ICAR-Central Research Institute for Jute and Allied Fibres, Nilgunj, Barrackpore Kolkata- 700 120. West Bengal	033-25356124 -25	033- 25350415	director.crijaf@icar.gov.in crijaf-wb@nic.in

1.3. Name of the Programme Coordinator with phone & mobile No.

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. Sk. Md. Azizur Rahman	--	6296651271 9435378886	r_aziz@rediffmail.com

1.4. Year of sanction of KVK: **2005 vide order No. 5-24 / 2002 – AE – I, dated April 01, 2005**

1.5. Staff Position (**as on 1st January, 2021**)

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& Head	Dr. Sk. Md. Azizur Rahman	Senior Scientist & Head	Entomology	PB-4 (Rs 37,400-67,000) +9000. Level 13A Basic: Rs. 143600	27.12.18	Parmanent	GEN
2	Subject Matter Specialist	Dr. Dipankar Ghorai	SMS (Agriculture)	Agriculture	Rs. 78800-209200 Basic: Rs. 94100	26.04.2006	Permanent	GEN
3	Subject Matter Specialist	Dr. Subrata Sarkar	SMS (Horticulture)	Horticulture	Rs. 78800-209200 Basic: Rs. 94100	04.05.2006	Permanent	GEN
4	Subject Matter Specialist	VACANT	----					
5	Subject Matter Specialist	VACANT	----					
6	Subject Matter Specialist	VACANT	-----					
7	Subject Matter Specialist	VACANT	-----					
8	Programme Assistant	Mr. Sandipan Garai	Prog. Assistant	Agriculture	Rs. 56100-177500 Basic: Rs. 63100	18.04.2006	Permanent	OBC
9	Computer Programmer	Sk Golam Rasul	Prog. Assistant (Computer)	Computer	Rs. 44900-142400 Basic: Rs. 56900	10.04.2006	Permanent	GEN
10	Farm Manager	Mr. Soumya Sarathi Kundu	Prog. Assistant (Farm Manager)	Agriculture	Rs. 56100-177500 Basic: Rs. 61300	06.01.2007	Permanent	GEN
11	Accountant / Superintendent	Mr. Nilesh Ray	Assistant	--	Rs. 35400-142400 Basic: Rs. 37600	27.11.2017	Permanent	GEN
12	Stenographer	VACANT	-----					
13.	Driver	Mr. Joydeep Pal	Driver – cum - mechanic	--	Rs. 25500-81100 Basic: Rs. 34900	06.07.2006	Permanent	GEN
14.	Driver	Mr. Santi Nath Pal	Driver– cum - mechanic	--	Rs. 25500-81100 Basic: Rs. 34900	10.07.2006	Permanent	OBC
15.	Supporting staff	Mr. Shyamal Bhanja	Supporting staff	Peon	Rs. 19900-63200 Basic: Rs. 28400	25.02.2006	Permanent	GEN
16.	Supporting staff	Mr. Anup Das	Supporting staff	Cook	Rs. 19900-63200 Basic: Rs. 28400	01.03.2006	Permanent	SC

1.6. Total land with KVK (in ha) :

S. No.	Item	Area (ha)
1	Under Buildings	3.5
2.	Under Demonstration Units	2.5
3.	Under Crops	7.0
4.	Orchard/Agro-forestry	2.0
5.	Others with details	3.0
	Total	**18.0**

Total area should be matched with breakup

1.7. Infrastructure Development:

A) Buildings and others

S. No.	Name of infrastructure	Not yet started	Completed up to plinth level	Completed up to lintel level	Completed up to roof level	Totally completed	Plinth area (sq.m)	Under use or not*	Source of funding
1.	Administrative Building					√	552	Under use	ICAR
2.	Farmers Hostel					√	306	Under use	ICAR
3.	Staff Quarters (6)					√	400	Under use	ICAR
4.	Piggery unit								
5	Fencing					√	925 m	Under use	ICAR
6	Rain Water harvesting structure					√	7000	Under use	MGNREGA
7	Threshing floor	√							
8	Farm godown	√							
9.	Dairy unit	√							
10.	Poultry unit	√							
11.	Goatary unit					√	50	Under use	ICAR
12.	Mushroom Lab	√							

13.	Mushroom production unit	√							
14.	Shade house					√	1008	Under use	RKVY
15.	Soil test Lab					√	Instrumental support	Under use	ICAR
16	Others, Please Specify								
17.	Feed preparation Unit					√	Instrumental support	Under use	ATMA
18.	Integrated farming system					√	6000	Under use	ICAR
19.	Vermicompost unit					√	60	Under use	ATMA
20.	Portable carp hatchery					√	30	Under use	ICAR
21.	Deep tube well					√	Depth 80 ft.	Under use	ICAR

* 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
TATA SUMO WB 40 C 9883	01.04.1999	---		Condemned
Tractor WB 39 3472	01.04.1999	---		Not in working condition
Tractor WB 42 AT 5641	25.02.2019	6,19,054.00		Working condition

C) Equipment & AV aids

Name of equipment	Year of purchase	Cost (Rs.)	Present status	Source of fund
a. Lab equipment				

Flame photometer	2006-07	29813.00	Out of order	ICAR
Spectrophotometer	2006-07	46283.00	Out of order	ICAR
Shaker	2006-07	20756.00	In working condition	ICAR
Hot air oven	2006-07	5344.00	In working condition	ICAR
Hot plate	2007-08	14000.00	Out of order	ICAR
Glass distillation unit	2007-08	28000.00	In partially (single) working condition	ICAR
Conductivity bridge	2007-08	10000.00	Out of order	ICAR
pH meter	2007-08	9563.00	Out of order	ICAR
Electronic balance	2007-08	12375.00	In working condition	ICAR
Grinder	2007-08	19500.00	In working condition	ICAR
Kjeldahl N analyser	2008-09	250474.00	In working condition	ICAR
Atomic absorption spectrophotometer	2012-13	944832.00	In working condition	ICAR
Mridaparikshak	2015-16	117450.00	Working	ICAR
PUSA STFR Meter	2017-18	86000.00	Working	ICAR
b. Farm machinery				
Tractor	01.04.1999	--	Out of order	ICAR
Power reaper	2011-12	85476.00	In working condition	ICAR
c.AV Aids				
LCD projector	2008-09	109000.00	Out of order	ICAR
Computer with accessories (2 Nos.)	2009 -10	49920.00	In working condition	ICAR
LCD TV	2010-11	13110.00	In working condition	ICAR
Digital Camera	2010-11	14790.00	Out of order	ICAR
Digital SLR Camera	2017-18	38359.00	In Working condition	ICAR
Laptop	2017-18	32989.00	In Working condition	ICAR

Tablet	2018-19	29590.00	In Working condition	ATMA
Computer	2017-18	35999.00	In Working condition	ICAR
Printer(all in one)	2017-18	9575.00	In Working condition	ICAR

D) Farm implements

Name of equipment	Year of purchase	Cost (Rs.)	Present status	Source of fund
TAB	22.01.2019	29590.00	Working	ICAR
brush cutter	26.3.2019	17378.80	Working	ICAR
Potato Digger (MOGA)	29.03.2019	17378.80	Working	ICAR
Power weeder (Shrachi)	29.03.2019	154600.00	Working	ICAR
Leveller blade	29.03.2019	81900.00	Working	ICAR
Tractor	25.02.2019	619054.00	Working	ICAR
Honda pump	28.01.2019	49999.00	Working	ICAR
Two wheel trolly	13..02.2019	150000	Working	ICAR
Hood regular	30.05.2019	3150.00	Working	ICAR
Cage wheel	03.06.2019	11400.00	Working	ICAR
Tractor hitch	26.07.2019	3100.00	Working	ICAR
New ABC (0.4 kg) type fire extinguisher	13.03.2020	23128.00	Working	ICAR
Rice transplanter Make GOMADHI , Model WBT-4K	16.03.2020	311359.00	Working	ICAR
Round Straw Baler Make GOMADHI Model AB1050	16.03.2020	377440.00	Not in used	ICAR
BMW furrow opener Make BMW Model BMW furrow opener	16.03.2020	45000.00	Working	ICAR

Multi crop planter Make National Agro industries Model NMCP4	16.03.2020	103900.00	Not in used	ICAR
Seed grading /fine cleaner machine	14.03.2020	614250.00	Not installed	ICAR
Parts of micro irrigation system	11.02.2020	40596.00	Working	ICAR
Parts of micro irrigation system	11.02.2020	36862.00	Working	ICAR
Parts of micro irrigation system (sprinkler)	11.02.2020	17378.00	Working	ICAR
VST Shakti MT171 DI Samrat High Trque 2W Mini tractor	31.01.2020	258300.00 .	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.	30.03.2021	27	Annexure I		

** Salient recommendation of SAC in bullet form*
Attach a copy of SAC proceedings along with list of participants

2.a. District level data on agriculture, livestock and farming situation (2020)

Purba Bardhaman

Sl. no.	Item	Information
1	Major Farming system/enterprise	Rice production system Dairy –poultry production system Poultry Goatery Duckery Fishery Rice – potato-fodder- livestock production system Rice –vegetable-Rice production system Jute-rice production system Fish-duck-banana production system
2	Agro-climatic Zone	**1. New Alluvium** Average annual rainfall 1300-1600 mm, Soil type- sandy loam, clay and clay loam, Soil depth 4-6 ft with medium to good water holding capacity, **Neutral to acidic soil with good fertility.** **2. Old Alluvium** Average annual rainfall 1300-1500 mm, Soil type- sandy loam and clay loam Soil depth 4-6 ft with medium to good water holding capacity **Neutral to acidic soil with good fertility**
3	Agro ecological situation	**Agro ecological sub region 12.3 under the AES 12.0 (Eastern Plateau)** II. Moist and sub humid ecosystem with alluvial soil with LGP of 180-200 days covering the blocks of Burdwan (N), Burdwan (S), Kalna & Katwa, Main crops paddy, mustard, **sesame, potato, jute, vegetables etc. The area covers 517532 ha**
4	Soil type	**1.Gangetic alluvial – 206423 ha** Soil order is entisols. Sandy loam to clay loam, fine in texture, slightly acidic to neutral in reaction. Rich in potash and medium to rich in available plant nutrients. **2. Vindhya alluvial – 311000 ha** Soil order is entisol Sandy loam to clay loam, fine to moderate coarse in texture, acidic to neutral in reaction.
5	Productivity of major 2-3 crops	Aman paddy – 32.73 Boro paddy – 26.95

	under cereals, pulses, oilseeds, vegetables, fruits and others	Wheat – 21.99 Pulses – 8.80 Oilseeds – 10.01 Jute & other fibres ** - 18.7 lakh bales Potato – 212.49
6	Mean yearly temperature, rainfall, humidity of the district	Mean yearly temperature: Max – 31, Min – 18 Relative humidity : 76 Total rainfall: 1136 mm
7	Production of major livestock products like milk, egg, meat etc.	Milk : 464080 tonnes, 280 kg/year Egg: 2672.40 lakh egg, 85 no. eggs/year Meat : 4000 MT

Note: Please give recent data only

Paschim Bardhaman

Sl. no.	Item	Information
1	Major Farming system/enterprise	Rice production system Dairy –poultry production system Poultry Goatery Duckery Fishery Rice –vegetable-Rice production system
2	Agro-climatic Zone	**1. Red and Lateritic** Average annual rainfall 1100-1400 mm, Soil type- sandy loam, coarse in texture Undulating land with low soil depth, sometimes hard layer present in sub surface **Medium to highly acidic soil**
3	Agro ecological situation	**Agro ecological sub region 12.3 under the AES 12.0 (Eastern Plateau)** I Chhotonagpur Plateau and Garhjat hills, hot dry sub humid ecosystem with red & laterite soils and LGP 150-180 days covering the blocks of Durgapur & Asansol. Main crops are, paddy, mustard, vegetables, pulse etc. The area covers 186154 ha
4	Soil type	**1. Red and Lateritic – 186054 ha** Soil orders are mainly alfisol and ultisol. Coarse gritty soil blended with rock fragment, mainly acidic in nature,

		reddish in color due to high level of iron, low in nitrogen, calcium, phosphate and other plant nutrient.
5	Productivity of major 2-3 crops under cereals, pulses, oilseeds, vegetables, fruits and others	Aman paddy – 26.83 Wheat – 21.99 Pulses – 7.92 Oilseeds – 8.04
6	Mean yearly temperature, rainfall, humidity of the district	Mean yearly temperature: Max – 33, Min – 15 Relative humidity : 69 Total rainfall: 1024 mm
7	Production of major livestock products like milk, egg, meat etc.	Data not available

Note: Please give recent data only

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

S.N	Taluk	Block	Village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Durgapur	Kanksa	Keten , Palashboni, Payarigunj, Chuya, Shokna Shilampur Gangbil Natungram	Paddy, potato, mustard, sesame, lentil, vegetable, cattle, poultry, duck, goat, pig fish Kharif paddy, wheat, mustard, brinjal, cattle, buffalo, pig, goat and poultry	***Bio-physical*** **Low productivity of all major crops** • Non-availability of quality seed / planting materials • Marginal soil • Limited water resources for irrigation • Indiscriminate and inappropriate use of chemical fertilizer **Inadequate descriptive/prolific breed of livestock** **Poor feed resources** ***Socio- economic*** **Lack of credit facilities** **Lack of awareness regarding good agronomic /husbandry practices** **Very restricted livelihood option**	• Integration of good agronomic practices • Creation of rainwater harvesting structures • Utilization of mine lift water for irrigation • Providing quality seeds/planting materials • Diversification of land use • Soil health management like organic farming etc. • Livestock productivity improvement and health care • Efficient utilization of water bodies • Entrepreneurship development
		Andal	Moira,			

			Madanpur, Baska, Pubra, Andal, Andal Gram, Battala, Dakshinkhanda, Sakra, Shrirampur, Damra Gram, Kajora Gram, Rajhat, Dignala.			
		Ranigunj	Napur, Napur Gram, Chelod, Ballavpur, Belunia, Belunia Gram, Raghunathchak, Kankardanga			
		Jamuria	Jamuria, Siddhapur, Baghdhia, Haripur, Barul, Chaktulshi, Sankhari, Nandi, Sahakhir, Berali, Patharchur, Shibpur, Bogra, Chakdola, Hijalgora, Jambad, Taltor, Parasia, Churulia, Satgram, Madantor, Charanpur,			

			Birkulti, Morden Satgram, Panchachur, Damodarpur			
		Salanpur	Sidhabari			
2	Burdwan North	Galsi-I	Bharatpur Jaguli para , Sillya, Ramgopalpur, Atpara, Raipur, Goligram, Kondaipur, Manikbazar-Jharul, Tildanga, Nurkona Nabakhanda, Bamunara, Fatepur, Puratangram, Ucchagram, Serorai, Chaktentul, Naskarbandh, Budbud,	Aus paddy, kharif paddy, jute, potato, mustard, vegetable cattle, poultry, Goat, broiler farming, fish	***Bio-physical*** **Low productivity of all major crops** • Non-availability of quality seed materials • High cost involvement for major crops • Indiscriminate and inappropriate use of chemical fertilizers • Low input of organics & biofertiliser **Lesser extent of crop diversification** **Low productivity of livestock & poultry** **Poor feed resources** ***Socio-economic*** • Lack of credit facilities • Inadequate house hold income generation	• Providing quality seeds/planting material • Diversification of land use • Entrepreneurship development • Organic farming • Health care • Improvement of women led vocations • Popularization of balanced feeding practices • Crop diversification
		Galsi-II	Garamba, Bhasapur, Pursora, Hitta, Bahirghanna, Taranagar, Sankrai, Sarul, Bhuri.			
3.	Bardhaman Sadar	Aushgram-I	Dignagar, Woyarishpur, Alutia, Bannabagram,	Kharif paddy, Potato, lentil, mustard, til, fodder, cattle, goat, poultry, duck, fish	***Bio-physical*** **Low productivity of all major crops** • Non-availability of quality seed / planting materials	i. Integration of good agronomic practices ii.Providing quality seeds/planting materials

			Dangpara,		• Poor soil health • Limited water resources for irrigation • Indiscriminate and inappropriate use of chemical fertilizer **Inadequate descriptive/prolific breed of livestock** **Poor feed resources** **Inadequate health care** ***Socio- economic*** **Lack of credit facilities** **Lack of awareness regarding good agronomic /husbandry practices** **Very restricted livelihood option**	iii.Diversification of land use iv.Restoration of soil health through organic manuring. v.Livestock productivity improvement and health care vi.Efficient utilization of water bodies vii.Entrepreneurship development viii. Promotion of efficient water use technology ix. technology showcasing
		Aushgram-II	Premganj, Abhirampur, Anandabazar, Bijoydanga, Chandipur,			
		Bhatar	Gholda, Gramdihi, Bamshor, Bijipur, Alinagar, Natungram, Muraripur, Kapshor, Nasigram, Madhpur, Salun, Bonpas, Palar, Narayanpur, Balsidanga, Erachia, Kubachpur, Polsona, Bijaypur, Kherur,			

			Sahebganj, Kashipur, Nurpur,			
5.	Kalna	Kalna	Bhagnapara, Kalna, Durgapur, Nandai, Deulpara, Diara, Mirzapur, Balia, Anukhal, Rangpara, Goara, Anakul,	Paddy, jute, onion, fodder, mustard, banana, potato, mango, cattle, sheep, goat, pig, poultry	***Bio-physical*** **Low productivity of all major crops** • Non-availability of quality seed / planting materials • Nutrient Deficient soil • Indiscriminate and inappropriate use of chemical fertilizer/ pesticides **Inadequate descriptive/prolific breed of livestock** **Poor feed resources** **Inadequate health care** ***Socio- economic*** **Lack of credit facilities** **Lack of awareness regarding good agronomic /husbandry practices** **Very restricted livelihood option** **Less of post harvest operation**	Integration of good agronomic practices ii.Production of quality seeds/planting materials in PPP mode iii.Diversification of land use iv.Restoration of soil health through organic manuring. v.Livestock productivity improvement and health care vi.Efficient utilization of water bodies vii.Entrepreneurship development viii. Promotion of efficient water use technology ix. Promotion of Improved post harvest technology
		Purbasthali - I	Kuricha, Golahat, Betpukur, Chakbamungoria,Shyampur, Parulia, kuldanga, Bhaturia, Minapur, Ramchandrapur, Dogachia, Chupi, Biswarambha, Banki,Bhatsala, Rajapur, Chaitpur, Maganpur,	Paddy, jute, onion, fodder, mustard, banana, potato, mango, cattle, sheep, goat, pig, poultry	***Bio-physical*** **Low productivity of all major crops** • Non-availability of quality seed / planting materials • Indiscriminate and inappropriate use of chemical fertilizer/ pesticides • Very low ground water table **Inadequate descriptive/prolific breed of livestock** **Poor feed resources** **Inadequate health care** ***Socio- economic*** • Lack of awareness regarding good agronomic /husbandry practices • Very restricted livelihood option • Less of post harvest operation	Integration of good agronomic practices ii. Production of quality seeds/planting materials in PPP mode iii. Diversification of land use iv. Restoration of soil health through organic manuring. v. Livestock productivity improvement and health care vi. Efficient utilization of water bodies vii. Entrepreneurship development viii. Promotion of efficient water use technology ix. Promotion of Improved post harvest technology of jute and

			Moshipur,			other crops
		Memari-I & II	Satchachia, Debipur, Khanro, Harindanga	Paddy, onion, fodder, mustard, banana, potato, mango, cattle, sheep, goat, pig, poultry	***Bio-physical*** **Low productivity of all major crops** • Non-availability of quality seed / planting materials • Nutrient Deficient soil • Indiscriminate and inappropriate use of chemical fertilizer/ pesticides **Inadequate descriptive/prolific breed of livestock** **Poor feed resources** **Inadequate health care** ***Socio- economic*** • Lack of credit facilities • Lack of awareness regarding good agronomic /husbandry practices • Very restricted livelihood option • Less of post harvest operation	Integration of good agronomic practices ii. Production of quality seeds/planting materials in PPP mode iii. Diversification of land use iv. Restoration of soil health through organic manuring. v. Livestock productivity improvement and health care vi. Efficient utilization of water bodies vii. Entrepreneurship development viii. Promotion of efficient water use technology ix. Promotion of Improved post harvest technology
		Monthesw ar	Bhelia, Bheti, Sutra	Paddy, onion, fodder, mustard, banana, potato, mango, cattle, sheep, goat, pig, poultry	***Bio-physical*** **Low productivity of all major crops** • Non-availability of quality seed / planting materials • Nutrient Deficient soil • Indiscriminate and inappropriate use of chemical fertilizer/ pesticides **Inadequate descriptive/prolific breed of livestock** **Poor feed resources** **Inadequate health care** ***Socio- economic*** **Lack of credit facilities** **Lack of awareness regarding good agronomic /husbandry practices** **Very restricted livelihood option** **Less of post harvest operation**	Integration of good agronomic practices ii.Production of quality seeds/planting materials in PPP mode iii.Diversification of land use iv.Restoration of soil health through organic manuring. v.Livestock productivity improvement and health care vi.Efficient utilization of water bodies vii.Entrepreneurship development viii. Promotion of efficient water use technology ix. Promotion of Improved post harvest technology

2. c. Details of village adoption programme:

Name of the villages adopted by PC and SMS (2020-21) for its development and action plan

Name of village	Block	Action taken for development
Mobarakgunj	Kanksa	• Training programmes on different aspects of agriculture • FLD on jute • FLD on paddy seed production • CFLD on pulse and oilseeds • Awareness camp on agriculture • Field day and exposure visit of farmers
Sarul	Galsi I	• Training programmes on different aspects of agriculture • FLD on jute • FLD on paddy seed production • CFLD on pulse and oilseeds • Awareness camp on agriculture • Field day and exposure visit of farmers

Achievements on technologies assessed and refined

OFT 1:

Sl no.	Particulars	Details
1	**Season**	Rabi 2019-20
2	**Title of the OFT**	Assessment of effect of zinc and boron on productivity and oil content of mustard under medium upland situation of Burdwan district
3	**Thematic Area**	Nutrient management
4	**Problem Diagnosed**	Sub-optimal production of mustard
5	**Important Cause**	Deficiency of targeted micronutrient in soils of Burdwan district
6	**Production System**	Rice based production system
7	**Micro farming System**	Conventional mustard production in medium upland situation
8	**Technology for Testing**	Application of Zn and B
9	**Existing Practice**	Non application of micronutrients
10	**Hypothesis**	Application of Zn and B will increase productivity and oil quality of mustard
11	**Objective(s)**	1. Increasing productivity of mustard 2. Soil enrichment of targeted micronutrients
12	**Treatments:**	**Farmers Practice (FP):** RDF of NPKS @ 80:40:40:20 **Technology option-I (TO-I):** RDF + Zn @ 5 kg/ha **Technology option-II (TO-II):** RDF + B @ 1 kg/ha **Technology option-III (TO-III):** RDF + Zn @ 5 kg/ha + B @ 1kg/ha
13	**Critical Inputs**	Zn and B in granular form
14	**Unit Size**	0.13 ha
15	**No of Replications**	5
16	**Unit Cost**	Rs. 800
17	**Total Cost**	Rs. 4000
18	**Monitoring Indicator**	Yield, oil content
19	**Source of Technology**	Sher-E-Kashmir University of Agricultural Sciences and Technology, Jammu

Initial Zn content of the soils: 0.45 – 1.2 mg kg^{-1}
Initial B content of the soils: 0.24 – 0.32mg kg^{-1}

Thematic area: Nutrient management

Problem definition: Non-optimum productivity for lack of essential micronutrient in soil and concomitant non-application from outside

Technology assessed: Application of micronutrients of Zn and B

Results

Table: Performance of mustard (Cv. B 9) under different nutrition

Technology option	Yield component			Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
	Plant height (cm)	No. of siliqua/plant	Oil cintent (%)					
FP	95.6	134.8	43.5	8.82	29500	44100	14600	1.49
TO1	112.2	156.3	45.7	9.61	30600	48050	17450	1.57
TO2	109.3	167.9	51.4	11.21	30900	56050	25150	1.81
TO3	110.2	168.2	52.1	11.65	32000	58250	26250	1.82
LSD at 5%	NS	1.34	2.12	1.86				

Results:

It was observed from the OFT that application of Boron can go a long extent in increasing productivity of mustard and improving its quality. However, Zn when singly used did not found to have significant increase in yield. This may pertain to the fact that the fields under the OFT have Zn level above critical limits and Boron level being low it responded that well to application of boron. However, in view of the fact that both Zn and boron content in soils of Burdwan is generally below critical level, farmers should do concomitant use of Zn and boron in mustard.

OFT 2:

Sl no.	Particulars	Details
1	**Season**	Kharif 2020
2	**Title of the OFT**	**Assessment of efficacy of different herbicides on weed control of transplanted rice during kharif season under medium upland situation of Burdwan district**
3	**Thematic Area**	Weed management

4	**Problem Diagnosed**	Infestation of weed leading to reduction in yield
5	**Important Cause**	Improper land preparation coupled with inefficient weed control
6	**Production System**	Rice based production system
7	**Micro farming System**	Transplanted rice farming under medium upland situation
8	**Technology for Testing**	Application of selective herbicides
9	**Existing Practice**	Non application on inefficient application of herbicide
10	**Hypothesis**	Application of improved herbicide for efficient control of weed should lead to augmented productivity
11	**Objective(s)**	Increasing productivity of paddy
12	**Treatments:**	**Farmers Practice (FP):** Application of butachlor 50% EC @ 1.25 kg. a.i./ha **Technology option-I (TO-I):**Application of pyrazosulfuron ethyl 10 % WP @ 160 g a.i./ ha within 4 DAT **Technology option-II (TO-II):**Application of Bispyribac sodium 10% SC @25 g a.i./ ha 15-20 DAT. **Technology option-III (TO-III):**Application of penoxulum 21.7 % SC @ 20 g a.i./ ha at 15-20 DAT
13	**Critical Inputs**	pyrazosulfuron ethyl 10 % WP, Bispyribac sodium 10% SC, penoxulum 21.7 % SC
14	**Unit Size**	0.13 ha
15	**No of Replications**	10
16	**Unit Cost**	Rs. 1500
17	**Total Cost**	Rs. 15000
18	**Monitoring Indicator**	Yield, weed density, Weed biomass
19	**Source of Technology**	BCKV, Mohanpur

Results:

Table: Performance of rice (Cv. MTU 7029) under different seedbed management practices

Technology option	No.	Yield	Cost of	Gross	Net	BC

	of trials	(q/ha)	cultivation (Rs./ha)	return (Rs/ha)	return (Rs./ha)	ratio
Farmers' practice (FP): Application of butachlor 50% EC @ 1.25 kg. a.i./ha	10	49.4	54500	91390	36890	1.68
TO 1: Application of pyrazosulfuron ethyl 10 % WP @ 160 g a.i./ ha within 4 DAT		51.8	56000	95830	39830	1.71
TO2: Application of Bispyribac sodium 10% SC @25 g a.i./ ha 15-20 DAT.		54.1	56800	100085	43285	1.76
TO3: Application of penoxulum 21.7 % SC @ 20 g a.i./ ha at 15-20 DAT		56.9	58500	105265	46765	1.80
CD at 5%		2.49				

Table : Weed parameters

Technology option	Weed density (no m^{-2})						Weed dry biomass (g m^{-2})		
	25 DAT			50 DAT			50 DAT		
	Grasses	**Sedges**	**Broad leaves**	**Grasses**	**Sedges**	**Broad leaves**	**Grasses**	**Sedges**	**Broad leaves**
FP	10.52	8.56	5.69	17.32	14.04	12.24	10.27	9.89	9.08
TO 1	8.69	8.08	5.49	8.41	7.96	7.84	5.06	5.61	6.41
TO2	11.12	10.97	8.76	9.91	7.21	5.67	6.83	5.99	4.48
TO3	13.24	11.62	7.19	7.06	5.43	3.32	3.42	5.80	2.56
CD at 5%	**NS**	**NS**	**NS**	**1.29**	**0.64**	**0.32**	**0.87**	**0.45**	**1.19**

Grasses: *Cynodon dactylon* (L), *Digitaria sanguinalis* (L.), *Echinochloa colonum (*L), *Echinochloa crus-galli* (L.), *Chloris barbata*
Sedges: *Cyperus rotundus* L, *Cyperus diformis* L, *Cyperus iria* L, *Cyperus esculentus* L
Broad leaves: *Eclipta alba, Sesbania aculeata, Phyllanthus niruri* L, *Ammania baccifera* L, *Commelina benghalensis* L.

Results:

Results indicated that application of penoxulum resulted in significant yield increment over application of other herbicides. Application of pre emergence herbicide of pyrazosulfuron ethyl and post emergence herbicide of bispyribac sodium resulted in at par productivity while application of only butachlor as pre emergence herbicide effected lowest yield and return. As for weed density and weed biomass, penoxulum and bispyribac sodium were found most effective in controlling all kinds of weeds, viz., grasses, sedges and broad leaves.

OFT-3

1.	Title of On farm Trial	Varietal trial of Hybrid tomato

2.	Problem diagnosed	Abhilash is being cultivated for several years; Yield of Tomato is not upto its potential due to multiple disease infestations like leaf curl, wilt and blight.
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	**Farmers Practice (FP):** Abhilash **Technology option-I (TO-I):** Arka Samrat **Technology option-II (TO-II):** Arka Rakshak
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	ICAR-IIHR, Bangaluru
5.	Production system and thematic area	Paddy- vegetable cropping system
6.	Performance of the Technology with performance indicators	Rakshak and Arka Samrat both showed better results in terms of yield and resistance to leaf curl virus. Round shape of Arka Samrat fruits fetched better maket price.
7.	Final recommendation for micro level situation	Arka Rakshak and Arka Samrat both showed promising results and can be recommended according to market preference
8.	Constraints identified and feedback for research	Non availability of seeds in the local market
9.	Process of farmers participation and their reaction	Demonstration, group discussion and field visit

Thematic area: Nutrient management.

Problem definition: Abhilash is being cultivated for several years; Yield of Tomato is not upto its potential due to multiple disease infestations like leaf curl, wilt and blight.

Technology assessed: Arka Rakshak is a multiple disease resistance hybrid that has been tried for better yield.

Table:

Technology option	No. of trials	Yield component			Disease incidence (leaf curl) (%)	Yield (q/ha)	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.)						
FP: Abhilash	10				18	290	139500	320000	180500	2.29
TO 1: Arka Samrat	10				7	340	137000	408000	271000	2.97
TO 2: Arka Rakshak	10				3	350	137000	386000	249000	2.81

Results: Arka Rakshak and Arka Samrat both showed better results in terms of yield and resistance to leaf curl virus. Round shape of Arka Samrat fruits fetched better maket price.

OFT-4

1.	Title of On farm Trial	Assessment of different techniques of vegetable seedling transplanting on the rate of seedling mortality and economic viability of vegetable cultivation (cauliflower)
2.	Problem diagnosed	Vegetable seedlings are grown in raised beds and they are manually uprooted and transplanted in the main field leading to a significant percentage of seedling mortality. At the same time manual transplanting is a labour intensive job.
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	**Farmers Practice (FP):** Raising of seedlings in raised beds and manual transplanting **Technology option-I (TO-I):** Raising of seedlings in pluck trays and manual transplanting **Technology option-II (TO-II):** Raising of seedlings in pluck trays and transplanting with the help of manual transplanter
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	ICAR-IIHR
5.	Production system and thematic area	Vegetable- potato cropping system, nursery management
6.	Performance of the Technology with performance indicators	Results indicated that **Technology option-II** was most labour saving method. Use of plucktrays to raise seedlings reduced the chance of seedlings mortality considerably.Better yield and B:C ratio are also supportive with the fact.
7.	Final recommendation for micro level situation	Raising of seedlings in pluck trays and transplanting with the help of manual transplanter
8.	Constraints identified and feedback for research	Efficient utilization of transplanter needs lot of practice and non-availability of plucktrays in local market.
9.	Process of farmers participation and their reaction	Demonstration, group discussion and training

Thematic area: Nursery management

Problem definition: Results indicated that Raising of seedlings in pluck trays and transplanting with the help of manual transplanter was most labour saving method. Use of plucktrays to raise seedlings reduced the chance of seedlings mortality considerably.Better yield and B:C ratio are also supportive with the fact.

Table:

Technology option	No. of trials	Yield component			No of mandays for transplanting/ha	Seedling mortality %	Yield * (q/ha)	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.)							
Farmers Practice (FP): Raising of seedlings in raised beds and manual transplanting	10				34	16	200	147000	324000	177000	2.20
Technology option-I (TO-I): Raising of seedlings in pluck trays and manual transplanting	10				29	3	200	132000	324000	192000	2.45
Technology option-II (TO-II): Raising of seedlings in pluck trays and transplanting with the help of manual transplanter	10				15	7	200	128,000	324000	196000	2.53

*Gap filling was done by manually

Results: Results indicated that Raising of seedlings in pluck trays and transplanting with the help of manual transplanter was most efficient in terms of labour saving and seedling mortality percentage leading to better cost benefit ratio though efficient utilization of transplanter needs lot of practice.

3.2 Achievements of Frontline Demonstrations

A. Details of FLDs conducted during the year

Cereals

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.	Jute	Package demonstration	JRO 204 Local Chk. JRO 524	10	10	23	2					23	2	25	
2.	Paddy (Rabi 2019-20)	Seed production through seed village	MTU 7029 Seed bed management, and seed production protocols	10	10	25	0					25	0	25	
3.	Mustard (Rabi 2019-20)	Nutrition management + Improved variety	**Improved variety:** Keshari **Technology:** Soil test based N, P, K + 30 kg S/ha+ two foliar spray of boron along with micronutrient mixture (Agromin)	10	10	46	12	1	0	106	22	153	34	187	
4.	Chickpea (Rabi 2019-20)	Nutrient management	15:40:20 N:P:K and 30 kg S/ha; two foliar spray of boron along with micronutrient mixture (Agromin)	10	10	19	6	1	2	36	7	56	15	71	
5.	Chickpea (Rabi 2020-21)	Nutrient management on improved variety	Improved variety (NBEG 45) + Sulfur and Boron nutrition	10	10	0	3	0	0	16	16	16	19	35	
6.	Lentil	Nutrient	Improved variety	10	10	5	3	0	0	9	20	14	23	37	

		management on improved variety	(HUL 57) + Sulfur and Boron nutrition												
7.	Brinjal	Integrated Pest Management	Integrated pest management on *Leucinodes orbonalis* 1. Install pheromone traps 10/acre for mass trapping at 10 m distance from 20 DAT, the pheromone septa should be changed at regular interval. 2. Spray azadirachtin 0.03% (300 ppm) neem oil based WSP @ 1000-2000 ml in 200-400 l of water/acre	1	1	14	6	0	0	0	0	14	6	20	
8.	Onion	Introduction in Kharif season	Agrifound Dark Red	2	2	15	5	0	0	0	0	15	5	20	
9.	Banana (2019-20)	Improve variety	Grand Naine	1	2	17	0	0	0	0	0	17	0	17	
10.	Banana (2020-21)	Improve variety	Grand Naine	1	1	9	4	0	0	0	0	9	4	13	
11.	Marigold (ATMA)	Management of mite	Acaricide (Propargite)	1	2	6	6	0	0	4	2	10	8	18	
12.	Fruits (ATMA)	Scientific ripening of fruits	Ripening chamber	0	8 nos	3	0	0	0	5	0	8	0	8	
TOTAL															

Details of farming situation

Crop	**Season**	**Farming situation (RF/Irrigation)**	**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**					
Jute	Pre Kharif 2020	Irrigated	Loamy	24	52	17	Potato	April 08 – 18th, 2020	July 29 – Aug 09,		

				4		8			2020		
Paddy	Kharif 2020	Irrigated	Loam	229	39	158	Vegetable /oilseeds/ Fallow	June 23–30, 2020	– Nov , 20 -30, 2020		
Chickpea	Rabi 19-20	Irrigated	Clay loam to loam	287	39	189	Fallow	Nov.26-30,2019	March 20 – Mar. 30, 2020		
Lentil	Rabi 20-21	Irrigated	Clay to Clay loam	187	41	203	Paddy	Dec., 2 – 13, 2020	Yet to harvest		
Mustard	Rabi 19-20	Irrigated	Clay to Clay loam to loam	194	40	212	Paddy	Nov. 19 – 27, 2019	Feb 26 – March 12, 2020		
Chickpea	Rabi 20-21	Irrigated	Sandy loam	212	24	176	Paddy	Nov. 15 – 21, 2020	Yet to harvest		
Brinjal	Rabi	irrigated	loam	215	55	194	Vegetables	Augustr, 15-25, 2019	April – May 2020	912	
Onion	Kharif	Irrigated	Loam	230	50	180	Vegetables	25/6/2020	Dec.01, 2020-Dec.20, 2020	920 mm	
Banana (2019-20)	Kharif	Irrigated	Loam	230	20	210	Vegetables	27/7/2019	10/7/20 - 2/10/20	1005mm	
Banana (2020-21)	Kharif	Irrigated	Loam	230	40	200	Vegetables	July15-20, 2020	Not yet started	1005mm	
Marigold (ATMA)	Rabi	Irrigated	Loam	230	60	185	Vegetables	1/02/2020	March. 25, 2020 – April 20,2020	960 mm	

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

Performance of FLD

Oilseeds:

Frontline demonstrations on oilseed crops

Crop	Thematic Area	Name of the technology demonstrated	No. of Farmers	Area (ha)	Yield (q/ha)		% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demo	Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Mustard (Rabi 2019-20)	Nutrition management in improved variety	Improved variety (Keshari) + Sulfur and micronutrient nutrition	187	53	15.1	11.4	32.5	37500	67950	32450	1.81	32500	47800	15300	1.47
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
Chickpea (Rabi 2020-21)	Nutrient management on improved variety	Improved variety (NBEG 45) + Sulfur and Boron nutrition	35	10	CFLD initiated in November, 2020. Crop is in the field										

Lentil (Rabi 2020-21)	Nutrient management on improved variety	Improved variety (HUL 57) + Sulfur and Boron nutrition	37	10	CFLD initiated in November, 2020. Crop is Crop is in the field										
Chickpea (Rabi 2019-20)	Nutrient management on improved variety	Improved variety (JAKI 9218) + INM	71	10	11.78	8.91	32	21800	53010	31210	2.43	18200	40095	21895	2.20

* Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

Other crops

Crop	Thematic area	Name of the technology demonstrated	No. of Farmer	Area (ha)	Yield (q/ha)		% change in yield	Other parameters		*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demonstration	Check		Demo	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Jute	Production technology	Improved production technology	25	10	33.11	30.17	9.75	--	--	64500	97969	33828	1.52	62300	80909	18679	1.30
Paddy (Kharif)	Production tecgnology	Seed production	25	10	60.67	52.84	14.82	--	--	50500	89752	39233	1.78	48500	76691	28181	1.58
Brinjal	Integrated Pest Management	Integrated pest management on *Leucinodes orbonalis*	30	1 ha	274	230	19.1	-	-	82000	186000	104000	2.26	76000	149000	73000	1.96
Onion	Introduction in Kharif season	Agrifound Dark Red	20	2	142	No existing variety	-	-	-	165000	482000	317000	2.92	-	-	-	-
Banana (2019-20)	Improved variety	Grand Naine	17	2	680	520	30.7	-	-	135000	380000	245000	2.81	105000	247000	142000	2.35
Banana (2020-21)	Improved variety	Grand Naine	13	1	Standing crop , result awaited												
Marigold (ATMA)	Management of mite	Acaricide (Propargite)	18	2	There was absolutely no demand of flowers from end of March, 2020 due to COVID 19 situation. Harvesting was completely stopped.												

	Total			

Livestock

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

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

** BCR= GROSS RETURN/GROSS COST

Fisheries

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

	Total			

* Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

Other enterprises

Category	Name of the technology demonstrated	No. of Farmer	No.of units	Major parameters		% change in major parameter	Other parameter		*Economics of demonstration (Rs.) or Rs./unit				*Economics of check (Rs.) or Rs./unit			
				Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Oyster mushroom	Enterprise development															
Button mushroom																
Vermicompost																
Sericulture																
Apiculture																
Others (pl.specify)																
Total																

* Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

Women empowerment

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

Farm implements and machinery

Name of the implement	Crop	Name of the technology	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)

		demonstrated			Demonstration	Check									
ICAR_IIHR Ripening Chamber	Banana	Scientific ripening of fruits	8	-	Uniform ripening	Use of poisonous substance, calcium carbide	It was an airtight plastic chamber inside which fruits like banana, mango etc can be scientifically ripened using ethylene gas discarding the use of poisonous calcium carbide.								

*** 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	Jute	Cost of production is reduced by some margin and quality of fibre has enhanced. As such farmers fetched average of Rs. 230-250/- more per quintal of jute. Seed of improved varieties like JRO 204, CO-58, and CRIJAF SONA to be made available in local market.
2	Paddy	Transpating 1-2 seedling is bit risky where seedbed is grown in clay soil but from seedbed in sandy to loamy soil no. of tillers per hills significantly increased with more test weight resulting in more production. Also farmers fetched higher return for a lion share of their produce being taken as seed material thereby fetching higher price.
3	Onion	Seed of Agrifound Dark Red is not easily available in market
4	Banana	Only variety available in tissue cultured banana is Grand Naine that's need to be replaced with some other varieties also.

Extension activities under FLD conducted:

Sl. No.	Activity	Date	No. of activities organized	Number of participants	Remarks
1.	Field days	29.09.2020	2	35	Field Day/ Field visit on paddy
		06.08.2020	2	40	Field Day/ Field visit on Jute
		07.12.2020	1	26	Field visit on Lentil and Chickpea
		30.06.2020			Training on paddy
		06.08.2020			Training on jute
		16.09.2020	2	20	Field Day/ Field visit on banana and Ripening chamber
		19.09.2020	1	25	Training/Field visit on banana and onion
		23.09.2020	2	30	Training/Field visit on onion
		30.09.2020	2	24	Training/Field visit
		29.10.2020	1	16	Field visit on onion
2.	Farmers Training	30.06.2020			Training on paddy
		06.08.2020			Training on jute
		16.09.2020	1	10	Training on cultivation of Tissue cultured banana
		19.09.2020	1	10	Training on cauliflower cultivation
		23.09.2020	2	10	Training on cultivation of kharif onion
3.	Media coverage	09.10.2020	1	-	Radio talk about tissue culture banana cultivation (Akashbani, Kolkata)

4.	Training for extension functionaries	07.12.2020	1		Training on Chickpea and lentil

Performance of the demonstration under CFLD on Pulse and Oilseed Crops during Kharif2020:

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
	Chickpea	Anuradha	9.2	--	--	--	**Var:** NBEG 45 **Technology**: 10:40:20 N:P:K and 30 kg S/ha; 2 foliar spray of micronutrient @ pre and post flowering	37	10	Crop in field			--	--	--
	Lentil	Ranjan	8.3	--	--	--	**Var:** HUL 57 **Technology**: 10:40:20 N:P:K and 30 kg S/ha; 2 foliar spray of micronutrient @ pre and post flowering	36	10	Crop in field			--	--	--

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	Chickpea **Var:** NBEG 45 **Technology**: 10:40:20 N:P:K and 30 kg S/ha; 2 foliar spray of micronutrient @ pre and post flowering								
2.	Lentil **Var:** HUL 57 **Technology**: 10:40:20 N:P:K and 30 kg S/ha; 2 foliar spray of micronutrient @ pre and post flowering								

C. Socio-economic impact parameters

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
1.	Chickpea NBEG 45							
2.	Lentil HUL 57							

D. Oilseed Farmers' perception of the intervention demonstrated

Crop	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
Chickpea	**Var:** NBEG 45 **Technology**: 10:40:20 N:P:K and 30 kg S/ha; 2 foliar spray of micronutrient @ pre and post						

	flowering						
Lentil	**Var:** HUL 57 **Technology**: 10:40:20 N:P:K and 30 kg S/ha; 2 foliar spray of micronutrient @ pre and post flowering						

E. Specific Characteristics of Technology and Performance

Specific Characteristic	Performance	Performance of Technology vis-a vis Local Check	Farmers Feedback

F. Extension activities under FLD conducted:

Sl. No.	Activity	Date	No. of activities organized	Number of participants	Remarks
1.	Field days	29.09.2020	2	35	Field Day/ Field visit on paddy
		06.08.2020	2	40	Field Day/ Field visit on Jute
		07.12.2020	1	26	Field visit on Lentil and Chickpea
		30.06.2020			Training on paddy
		06.08.2020			Training on jute
		16.09.2020	2	20	Field Day/ Field visit on banana and Ripening chamber
		19.09.2020	1	25	Training/Field visit on banana and onion
		23.09.2020	2	30	Training/Field visit on onion
		30.09.2020	2	24	Training/Field visit
		29.10.2020	1	16	Field visit on onion
2.	Farmers Training	30.06.2020			Training on paddy

		06.08.2020			Training on jute
		16.09.2020	1	10	Training on cultivation of Tissue cultured banana
		19.09.2020	1	10	Training on cauliflower cultivation
		23.09.2020	2	10	Training on cultivation of kharif onion
3.	Media coverage	09.10.2020	1	-	Radio talk about tissue culture banana cultivation (Akashbani, Kolkata)
4.	Training for extension functionaries	07.12.2020	1		Training on Chickpea and lentil

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

FLD on Jute

FLD on Paddy

FLD on Brinjal	**FLD on Kharif Onion**

FLD on Marigold	**FLD on tissue cultured banana-vegetable intercropping**

H. Farmers' training photographs

Training of Anganwadi Worker at KVK	**Training of Self Help Group at KVK**

DAESI Training	**Training & Demonstration on RIR rearing**

Training on Improved Marigold Cultivation under ATMA	**Training on air layering of guava**

Hands on training on Oyster Mushroom Cultivation	**Vocational Training on Jute Handicrafts and Kantha Stitch**

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

Field Day on Jute	**Field Dayon Paddy**

Field day on tissue culture banana	**Demonstration on Micro-irrigation system**

Demonstration of Cycle Weeder

Demonstration on Bee Keeping

J. Details of budget utilization

Crop: Chickpea **Season: Rabi 2019-20**

Area: 10 ha; Budget sanctioned = 9000.00 x 10 = Rs. 90000.00

Crop (provide crop wise information)	Items	Budget Sanctioned (Rs.)	Budget Received (Rs.)	Budget Utilization (Rs.)	Balance (Rs.)
Chickpea	i) Critical input				
	ii) TA/DA/POL etc. for monitoring				
	iii) Extension Activities				
	iv)Publication of literature				
	Total	**90000**	**90000**	**90000**	**Nil**
Lentil	i) Critical input				
	ii) TA/DA/POL etc. for monitoring				

	iii) Extension Activities				
	iv)Publication of literature				
	Total	**90000**	**90000**	**90000**	**Nil**

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

A) Farmers and farm women (on campus)

Thematic Area	**No. of Courses**	**No. of Participants**									**Grand Total**		
		Other			**SC**			**ST**					
		M	**F**	**T**	**M**	**F**	**T**	**M**	**F**	**T**	**M**	**F**	**T**
I. Crop Production													
Weed Management													
Resource Conservation Technologies	2				16	4	20				16	4	20
Cropping Systems													
Crop Diversification													
Integrated Farming													
Micro irrigation/irrigation													
Seed production	1				5	5	10				5	5	10
Nursery management													
Integrated Crop Management	1				3	7	10				3	7	10
Soil & water conservation													
Integrated nutrient Management													
Production of organic inputs	1				22	28	50				22	28	50
Others	1				5	5	10				5	5	10
Total	**6**	**0**	**0**	**0**	**51**	**49**	**100**	**0**	**0**	**0**	**51**	**49**	**100**
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	3				17	13	30				17	13	30
Total (a)	**3**	**0**	**0**	**0**	**17**	**13**	**30**	**0**	**0**	**0**	**17**	**13**	**30**
b) Fruits													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
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	1				4	6	10				4	6	10
Plant propagation techniques	1				4	6	10				4	6	10
Others													
Total (b)	**2**	**0**	**0**	**0**	**8**	**12**	**20**	**0**	**0**	**0**	**8**	**12**	**20**
c) Ornamental Plants													
Nursery Management													
Management of potted plants													
Export potential of ornamental plants													
Propagation techniques of Ornamental Plants													
Others													
Total (c)													
d) Plantation crops													
Production and Management technology													
Processing and value addition													
Others													
Total (d)													
e) Tuber crops													
Production and Management technology													
Processing and value addition													
Others													
Total (e)													
f) Spices													
Production and Management technology													
Processing and value addition													
Others													
Total (f)													
g) Medicinal and Aromatic Plants													
Nursery management													
Production and management technology													
Post harvest technology and value addition													
Others													
Total (g)													
Total(a-g)	**5**	**0**	**0**	**0**	**25**	**25**	**50**	**0**	**0**	**0**	**25**	**25**	**50**

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
III. Soil Health and Fertility Management													
Soil fertility management													
Integrated water management													
Integrated Nutrient Management	2				13	7	20				13	7	20
Production and use of organic inputs													
Management of Problematic soils													
Micro nutrient deficiency in crops													
Nutrient Use Efficiency	1				5	5	10				5	5	10
Balance Use of fertilizer													
Soil & water testing													
others													
Total	**3**	**0**	**0**	**0**	**18**	**12**	**30**	**0**	**0**	**0**	**18**	**12**	**30**
IV. Livestock Production and Management													
Dairy Management													
Poultry Management													
Piggery Management													
Rabbit Management													
Animal Nutrition Management													
Disease Management													
Feed & fodder technologies													
Production of quality animal products													
Others													
Total													
V. Home Science/Women empowerment													
Household food security by kitchen gardening and nutrition gardening													
Design and development of low/minimum cost diet													
Designing and development for high nutrient efficiency diet													
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													

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
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	2				9	11	20				9	11	20
Integrated Disease Management													
Bio0control of pests and diseases													
Production of bio control agents and bio pesticides													
Others													
Total	2	0	0	0	9	11	20	0	0	0	9	11	20
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													

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
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													
Total													
X. Capacity Building and Group Dynamics													
Leadership development													
Group dynamics													
Formation and Management of SHGs													
Mobilization of social capital													
Entrepreneurial development of farmers/youths													
WTO and IPR issues													
Others													
Total													
XI. Agro forestry													
Production technologies													
Nursery management													
Integrated Farming Systems													
Others													
Total													
XII. Others (Pl. Specify)													
GRAND TOTAL	**16**	**0**	**0**	**0**	**103**	**97**	**200**	**0**	**0**	**0**	**103**	**97**	**200**

B) Rural Youth (on campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Nursery Management of Horticulture crops													
Training and pruning of orchards													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Protected cultivation of vegetable crops													
Commercial fruit production													
Integrated farming													
Seed production	1				10	0	10				10	0	10
Production of organic inputs													
Planting material production													
Vermiculture	3				16	14	30				16	14	30
Mushroom Production	2				4	16	20				4	16	20
Beekeeping	1				9	11	20				9	11	20
Sericulture													
Repair and maintenance of farm machinery and implements													
Value addition													
Small scale processing													
Post Harvest Technology													
Tailoring and Stitching													
Rural Crafts	1				0	20	20				0	20	20
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			SC			ST					
		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													
Total	**8**	**0**	**0**	**0**	**39**	**61**	**100**	**0**	**0**	**0**	**39**	**61**	**100**

C) Extension Personnel (on campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Productivity enhancement in field crops	1				7	3	10				7	3	10
Integrated Pest Management													
Integrated Nutrient management													
Rejuvenation of old orchards													
Protected cultivation technology													
Production and use of organic inputs													
Care and maintenance of farm machinery and implements													
Gender mainstreaming through SHGs													
Formation and Management of SHGs													
Women and Child care													
Low cost and nutrient efficient diet designing													
Group Dynamics and farmers organization													
Information networking among farmers													
Capacity building for ICT application													
Management in farm animals													
Livestock feed and fodder production													

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
Household food security													
Other	1				5	5	10				5	5	10
Total	**2**	**0**	**0**	**0**	**12**	**8**	**20**	**0**	**0**	**0**	**12**	**8**	**20**

D) Farmers and farm women (off campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
I. Crop Production													
Weed Management													
Resource Conservation Technologies													
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													
Others	1				9	1	10				9	1	10
Total	1	0	0	0	9	1	10	0	0	0	9	1	10
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													
Others	3				23	7	30				23	7	30
Total (a)	3				23	7	30				23	7	30
b) Fruits													
Training and Pruning													
Layout and Management of Orchards													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Cultivation of Fruit	1				9	1	10				9	1	10
Management of young plants/orchards													
Rejuvenation of old orchards													
Export potential fruits													
Micro irrigation systems of orchards													
Plant propagation techniques													
Others	1				6	4	10				6	4	10
Total (b)	2	0	0	0	15	5	20	0	0	0	15	5	20
c) Ornamental Plants													
Nursery Management													
Management of potted plants													
Export potential of ornamental plants													
Propagation techniques of Ornamental Plants													
Others													
Total (c)													
d) Plantation crops													
Production and Management technology													
Processing and value addition													
Others													
Total (d)													
e) Tuber crops													
Production and Management technology													
Processing and value addition													
Others													
Total (e)													
f) Spices													
Production and Management technology													
Processing and value addition													
Others													
Total (f)													
g) Medicinal and Aromatic Plants													
Nursery management													
Production and management technology													
Post harvest technology and value addition													
Others													
Total (g)													
Total(a-g)	5				38	12	50				38	12	50
III. Soil Health and Fertility Management													
Soil fertility management													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Integrated water management													
Integrated Nutrient Management													
Production and use of organic inputs													
Management of Problematic soils													
Micro nutrient deficiency in crops													
Nutrient Use Efficiency													
Balance Use of fertilizer													
Soil & water testing													
others													
Total													
IV. Livestock Production and Management													
Dairy Management													
Poultry Management													
Piggery Management													
Rabbit Management													
Animal Nutrition Management													
Disease Management													
Feed & fodder technologies													
Production of quality animal products													
Others													
Total													
V. Home Science/Women empowerment													
Household food security by kitchen gardening and nutrition gardening													
Design and development of low/minimum cost diet													
Designing and development for high nutrient efficiency diet													
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													

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
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	3				14	16	30				14	16	30
Integrated Disease Management	3				12	18	30				12	18	30
Bio0control of pests and diseases													
Production of bio control agents and bio pesticides													
Others													
Total	6	0	0	0	26	34	60	0	0	0	26	34	60
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													

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
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													
Total													
X. Capacity Building and Group Dynamics													
Leadership development													
Group dynamics													
Formation and Management of SHGs													
Mobilization of social capital													
Entrepreneurial development of farmers/youths													
WTO and IPR issues													
Others													
Total													
XI. Agro forestry													
Production technologies													
Nursery management													
Integrated Farming Systems													
Others													
Total													
XII. Others (Pl. Specify)													
GRAND TOTAL	**12**	**0**	**0**	**0**	**73**	**47**	**120**	**0**	**0**	**0**	**73**	**47**	**120**

E)RURAL YOUTH (Off Campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Nursery Management of Horticulture crops													
Training and pruning of orchards													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Protected cultivation of vegetable crops													
Commercial fruit production													
Integrated farming													
Seed production													
Production of organic inputs													
Planting material production													
Vermiculture													
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													

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
Shrimp farming													
Pearl culture													
Cold water fisheries													
Fish harvest and processing technology													
Fry and fingerling rearing													
Others													
Total													

F) Extension Personnel (Off Campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Productivity enhancement in field crops													
Integrated Pest Management													
Integrated Nutrient management													
Rejuvenation of old orchards													
Protected cultivation technology													
Production and use of organic inputs													
Care and maintenance of farm machinery and implements													
Gender mainstreaming through SHGs													
Formation and Management of SHGs													
Women and Child care													
Low cost and nutrient efficient diet designing													
Group Dynamics and farmers organization													
Information networking among farmers													
Capacity building for ICT application													
Management in farm animals													

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
Livestock feed and fodder production													
Household food security													
Other													
Total													

G) Consolidated table (ON and OFF Campus)

i. Farmers& Farm Women

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
I. Crop Production													
Weed Management													
Resource Conservation Technologies	2	0	0	0	16	4	20	0	0	0	16	4	20
Cropping Systems													
Crop Diversification													
Integrated Farming													
Micro irrigation/irrigation													
Seed production	1	0	0	0	5	5	10	0	0	0	5	5	10
Nursery management													
Integrated Crop Management	1	0	0	0	3	7	10	0	0	0	3	7	10
Soil & water conservation													
Integrated nutrient Management													
Production of organic inputs	1	0	0	0	22	28	50	0	0	0	22	28	50
Others	2	0	0	0	14	6	20	0	0	0	14	6	20
Total	7	0	0	0	60	50	110	0	0	0	60	50	110
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													
Others	6	0	0	0	40	20	60	0	0	0	40	20	60

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
Total (a)	6	0	0	0	40	20	60	0	0	0	40	20	60
b) Fruits													
Training and Pruning													
Layout and Management of Orchards													
Cultivation of Fruit	1	0	0	0	9	1	10	0	0	0	9	1	10
Management of young plants/orchards													
Rejuvenation of old orchards													
Export potential fruits													
Micro irrigation systems of orchards	1	0	0	0	4	6	10	0	0	0	4	6	10
Plant propagation techniques	1	0	0	0	4	6	10	0	0	0	4	6	10
Others	1	0	0	0	6	4	10	0	0	0	6	4	10
Total (b)	4	0	0	0	23	17	40	0	0	0	23	17	40
c) Ornamental Plants													
Nursery Management													
Management of potted plants													
Export potential of ornamental plants													
Propagation techniques of Ornamental Plants													
Others													
Total (c)													
d) Plantation crops													
Production and Management technology													
Processing and value addition													
Others													
Total (d)													
e) Tuber crops													
Production and Management technology													
Processing and value addition													
Others													
Total (e)													
f) Spices													
Production and Management technology													
Processing and value addition													
Others													
Total (f)													
g) Medicinal and Aromatic Plants													
Nursery management													
Production and management technology													
Post harvest technology and value addition													
Others													

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
Total (g)													
Total(a-g)	10	0	0	0	63	37	100	0	0	0	63	37	100
III. Soil Health and Fertility Management													
Soil fertility management													
Integrated water management													
Integrated Nutrient Management	2	0	0	0	13	7	20	0	0	0	13	7	20
Production and use of organic inputs													
Management of Problematic soils													
Micro nutrient deficiency in crops													
Nutrient Use Efficiency	1	0	0	0	5	5	10	0	0	0	5	5	10
Balance Use of fertilizer													
Soil & water testing													
others													
Total	**3**	**0**	**0**	**0**	**18**	**12**	**30**	**0**	**0**	**0**	**18**	**12**	**30**
IV. Livestock Production and Management													
Dairy Management													
Poultry Management													
Piggery Management													
Rabbit Management													
Animal Nutrition Management													
Disease Management													
Feed & fodder technologies													
Production of quality animal products													
Others													
Total													
V. Home Science/Women empowerment													
Household food security by kitchen gardening and nutrition gardening													
Design and development of low/minimum cost diet													
Designing and development for high nutrient efficiency diet													
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													

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
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	5	0	0	0	23	27	50	0	0	0	23	27	50
Integrated Disease Management	3	0	0	0	12	18	30	0	0	0	12	18	30
Bio0control of pests and diseases													
Production of bio control agents and bio pesticides													
Others													
Total	8	0	0	0	35	45	80	0	0	0	35	45	80
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													

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
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													
Total													
X. Capacity Building and Group Dynamics													
Leadership development													
Group dynamics													
Formation and Management of SHGs													
Mobilization of social capital													
Entrepreneurial development of farmers/youths													
WTO and IPR issues													
Others													
Total													
XI. Agro forestry													
Production technologies													
Nursery management													
Integrated Farming Systems													
Others													
Total													
XII. Others (Pl. Specify)													
GRAND TOTAL	**28**	**0**	**0**	**0**	**176**	**144**	**320**	**0**	**0**	**0**	**176**	**144**	**320**

ii. RURAL YOUTH (On and Off Campus)

Thematic Area	No. of Courses	No. of Participants			Grand Total
		Other	SC	ST	

		M	F	T	M	F	T	M	F	T	M	F	T
Nursery Management of Horticulture crops													
Training and pruning of orchards													
Protected cultivation of vegetable crops													
Commercial fruit production													
Integrated farming													
Seed production	1	0	0	0	10	0	10	0	0	0	10	0	10
Production of organic inputs													
Planting material production													
Vermiculture	3	0	0	0	16	14	30	0	0	0	16	14	30
Mushroom Production	2	0	0	0	4	16	20	0	0	0	4	16	20
Beekeeping	1	0	0	0	9	11	20	0	0	0	9	11	20
Sericulture													
Repair and maintenance of farm machinery and implements													
Value addition													
Small scale processing													
Post Harvest Technology													
Tailoring and Stitching													
Rural Crafts	1	0	0	0	0	20	20	0	0	0	0	20	20
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			SC			ST					
		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													
Total	**8**	**0**	**0**	**0**	**39**	**61**	**100**	**0**	**0**	**0**	**39**	**61**	**100**

iii. Extension Personnel (On and Off Campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Productivity enhancement in field crops	1	0	0	0	7	3	10	0	0	0	7	3	10
Integrated Pest Management													
Integrated Nutrient management													
Rejuvenation of old orchards													
Protected cultivation technology													
Production and use of organic inputs													
Care and maintenance of farm machinery and implements													
Gender mainstreaming through SHGs													
Formation and Management of SHGs													
Women and Child care													
Low cost and nutrient efficient diet designing													
Group Dynamics and farmers organization													
Information networking among farmers													
Capacity building for ICT application													
Management in farm animals													
Livestock feed and fodder production													

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
Household food security													
Other	1	0	0	0	5	5	10	0	0	0	5	5	10
Total	**2**	**0**	**0**	**0**	**12**	**8**	**20**	**0**	**0**	**0**	**12**	**8**	**20**

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

Discipline	Clientele	Title of the training programme	Duration in days	Venue (Off / On Campus)	Number of participants			Number of SC/ST		
					Male	Female	Total	Male	Female	Total
Agriculture	PF	Vermicompost production at farmers' level	1	On Campus	22	28	50	22	28	50
	PF	Role of nutrient in crop production in jute	1	On Campus	6	4	10	6	4	10
	PF	Benefit of integrated nutrient management in field crops	1	On Campus	7	3	10	7	3	10
	PF	Improved technology of jute retting	1	On Campus	3	7	10	3	7	10
	RY	Vermicompost production for enhancing income of rural youth	1	On Campus	10	0	10	10	0	10
	RY	Seed production of different field crops for entrepreneurship	1	On Campus	10	0	10	10	0	10
	RY	Vermicompost production technology for income generation	1	On Campus	4	6	10	4	6	10

	PF	Role of nutrient in crop production	1	On Campus	5	5	10	5	5	10
	PF	Improved oilseed cultivation technique	1	Off Campus	9	1	10	9	1	10
	PF	Sustainable crop production through conservative agriculture in jute based cropping system	1	On Campus	6	4	10	6	4	10
	PF	Seed production of different field crops for income enhancement in COVID 19 situation	1	On Campus	5	5	10	5	5	10
	PF	Role of nutrient vis-à-vis crop production and climate change	1	On Campus	5	5	10	5	5	10
	PF	Rice cultivation through SRI	1	On Campus	10	0	10	10	0	10
	RY	Need for composting and vermicompost production at farmers level for maintaining soil health and income generation	1	On Campus	2	8	10	2	8	10
	EF	Climate change and effect on agriculture and contingency planning	1	On Campus	5	5	10	5	5	10
Horticulture	PF	Improved production	1	Off Campus	9	1	10	9	1	10

		technology of TCB								
	PF	Improved production technology of Cauliflower	1	Off Campus	9	1	10	9	1	10
	PF	Plant propagation techniques of sub-tropical fruit crops	1	On Campus	4	6	10	4	6	10
	PF	Improved production technology of kharif onion	1	Off Campus	8	2	10	8	2	10
	PF	Micro irrigation system in orchards	1	On Campus	4	6	10	4	6	10
	PF	Improved production technology of potato	1	Off Campus	6	4	10	6	4	10
	PF	Cultivation techniques of solanaceous crop	1	On Campus	7	3	10	7	3	10
	PF	Cultivation techniques of solanaceous crop	1	On Campus	5	5	10	5	5	10
	PF	Cultivation techniques of solanaceous crop	1	On Campus	5	5	10	5	5	10
	PF	Preparation of organic pesticides & its application	1	Off Campus	6	4	10	6	4	10
	RY	Training on jute handicrafts and kantha stitch	1	On Campus	0	20	20	0	20	20
	EF	Seed production of vegetable	1	On Campus	7	3	10	7	3	10

		crops								
Plant Protection	PF	Integrated Pest Management in jute-rice cropping systems	1	On Campus	3	7	10	3	7	10
	PF	Integrated Pest Management in aman paddy	1	Off Campus	5	5	10	5	5	10
	PF	Insect pest management in tomato	1	Off Campus	4	6	10	4	6	10
	PF	Insect pest management in brinjal	1	On Campus	6	4	10	6	4	10
	RY	Oyster Mushroom Cultivation	2	On Campus	4	6	10	4	6	10
	RY	Bee Keeping	1	On Campus	7	3	10	7	3	10
	PF	Disease management in mustard	1	Off Campus	5	5	10	5	5	10
	PF	Disease management in cole crops	1	Off Campus	5	5	10	5	5	10
	PF	Disease management in tomato	1	Off Campus	2	8	10	2	8	10
	RY	Bee Keeping	1	On Campus	2	8	10	2	8	10
	RY	Oyster Mushroom Cultivation	1	On Campus	0	10	10	0	10	10
	PF	Insect pest management in mustard	1	Off Campus	5	5	10	5	5	10

H) Vocational training programmes for Rural Youth

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	
Rural Crafts		Kantha Sticth & Jute Handicrafts Preparation	7	0	20	20				

*training title should specify the major technology /skill transferred

I) Sponsored Training Programmes

Details of Sponsored Training Programme

Sl.No	Title	Thematic area	Month	Duration (days)	Client	No. of courses	No. of participants	Sponsoring Agency
					PF/RY/EF			

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	15	60	75	45	1	0	1	16	60	76
Kisan Mela											
Kisan Ghosthi	1	12	0	12	100	2	0	2	14	0	14
Exhibition											
Film Show											
Method Demonstrations											
Farmers Seminar											
Workshop	1	12	0	12	0	0	0	0	12	0	12
Group meetings	2	35	5	40	50	00	0	0	35	5	40
Lectures delivered as resource persons	2	130	20	150	68	0	0	0	130	20	150
Advisory Services	68	143397	47799	191196	27	0	0	0	143397	47799	191196
Scientific visit to farmers field	33	299	54	353	70	0	0	0	299	54	353

Farmers visit to KVK	143	294	201	495	52	0	0	0	294	201	495
Diagnostic visits											
Exposure visits											
Ex-trainees Sammelan											
Soil health Camp	3	81	28	109	100	0	0	0	81	28	109
Animal Health Camp											
Agri mobile clinic											
Soil test campaigns											
Farm Science Club Conveners meet											
Self Help Group Conveners meetings											
Mahila Mandals Conveners meetings											
Celebration of important days (specify)											
Sankalp Se Siddhi											
Swatchta Hi Sewa											
Mahila Kisan Divas	1	0	13	13	100	8	0	8	21	0	21
Any Other (Specify)											
Webcast of Global Potato Conclave	1	25	7	32	100	8	0	8	33	7	40
Kharif crop preparedness and contingency measures in post Um-Pun (through audio conferencing)	1	50	1	51	20	1	0	1	50	1	51
Webinar conducted by Press Information Bureau, Kolkata on the latest welfare measures taken by the govt on agriculture	1	0	0	0	0	20	2	22	20	2	22
ICAR 92nd Foundation Day Celebration	1	8	2	10	40	6	0	6	14	2	16
Webcasting programme of 'Inauguration of Academic and Administrative Building of Rani Lakhmi Bai Central Agricultural University, Jhansi by our Hon'ble Prime Minister'	1	14	6	20	100	7	0	7	21	6	27
Parthenium Awareness Week	1	0	0	0	0	7	0	7	7	0	7
Birth Day Celebration of Gandhi	1	5	10	15	20	8	0	8	13	10	23
Vigilance Awareness Week	1	32	5	37	100	8	0	8	40	5	45
Celebration of "Constitution Day"	1	0	0	0	0	8	0	8	8	0	8
World Soil Day	1	27	0	27	7	4	0	4	31	0	31
Training on Anganwadi Worker	1	4	52	56	18	9	0	9	13	52	65

Webcasting programme of PM Kisan Money Transfer by Hon'ble Prime Minister'	1	15	45	60	58	8	0	8	23	45	68
TOTAL	**268**	**144455**	**48308**	**192763**	**1075**	**105**	**2**	**107**	**144572**	**48297**	**192869**

B. Other Extension activities

Nature of Extension Activity	No. of activities
Newspaper coverage	8
Radio talks	1
TV talks	
Popular articles	
Extension Literature	8
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
Total												

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
Okra	Kashi Kranti	2 kg	1000	0	0	0	0	0	0	0	0
Paddy	MTU 7029	11550 kg	600600	35				40		75	
Paddy	MTU 1010	525 kg	21000	5				5		10	
Paddy	Rajendra Masuri	800kg	37600	5				6		11	
Grand Total		12877	660200	45				51		96	

Production of planting materials by the KVKs

Crop	Variety	No. of planting materials	Value (Rs)	Number of farmers to whom planting material provided							
				SC		ST		Other		Total	
				M	F	M	F	M	F	M	F
Vegetable seedlings											
Cauliflower											
Cabbage											
Tomato											
Brinjal	Bhangar	3850 pc	3080	1						1	
Chilli											
Onion											
Others											
Fruits											
Mango											
Guava	Baruipur	333 pc	13320	20						20	
Lime	Kagji	333 pc	13320	30						30	
Papaya											

Banana											
Others											
Ornamental plants											
Medicinal and Aromatic											
Plantation											
Spices											
Turmeric											
Tuber											
Elephant yams											
Fodder crop saplings											
Forest Species											
Others, pl. specify											
Total			29720								

Production of Bio-Products

Name of product	Quantity	Value (Rs.)	No. of Farmers benefitted							
			SC		ST		Other		Total	
			M	F	M	F	M	F	M	F
Bio-fertilizers	25 kg	225					1		1	
Bio-pesticide	6080 pc	3040					3		3	
Bio-fungicide										
Bio-agents										
Others, please specify.										
Total		3265					4		4	

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											
Buffaloes											
Calves											
Others (Pl. specify)											
Small ruminants											
Sheep											
Goat											
Other, please specify											
Poultry											
Poultry	RIR	20 no(31 kg)	4960								
Poultry	Kadaknath	1 no(1 kg)	550								
Broilers											
Layers											
Duals (broiler and layer)											
Japanese Quail											
Turkey											
Emu											
Ducks	Khaki campbell	26 no(30.5 kg)	3451								
Ducks	Khaki campbell	242 egg	1694								
Others (Pl. specify)											
Piggery											
Piglet											
Hog											
Others (Pl. specify)											
Fisheries											
Indian carp											
Exotic carp											
Mixed carp											
Fish fingerlings											
Spawn											
Others (Pl. specify)											
Grand Total			10655								

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

i) Name of Seed Hub Centre:

Name of Nodal Officer :	
Address :	
e-mail :	
Phone No. : Mobile :	

ii) Quality Seed Production Reports

Season	Crop	Variety	Production (q)			
			Target	Area sown (ha)	Production	Category of Seed (F/S, C/S)
Kharif 2020						
Rabi 2020-21						
Summer/Spring 2021						

iii) Financial Progress

Fund received (2016-17, 2017-18 and 2018-19)	Expenditure (Rs. in lakhs)		Unspent balance (Rs. in lakhs)	Remarks
	Infrastructure	Revolving fund		
2016-17				
2017-18				
2018-19				
2019-20				

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	Doubling Farmers' Income through Integrated Farming System Approach in Purba Barddhaman District of West Bengal	F. H. Rahman, D. Ghorai, S. Sarkar, S. S. Kundu and S. Das	1	-
Seminar/conference/ symposia papers				
Books				
Bulletins				
News letter	CRIJAF-KVK Samachar January – December, 2019	S. M. A. Rahman, D. Ghorai, S. Sarkar, S. Garai, S. S. Kundu and G. Rasul	1	350
Popular Articles				
Book Chapter				
Extension Pamphlets/ literature	Kenchosar – Proyojoniyota o prostuti (in vernacular)	D. Ghorai and M. S. Behera		
	Vermicompost production	D. Ghorai and M. S. Behera		
	Dhan gache khadyopadaner obhabjonito lokkhon o tar protikar (In vernacular)	D. Ghorai, S.S.Kundu and S. Sarkar		
	Susonghoto Krishi byabosthapona o MAtir Sasthyo (In vernacular)	D. Ghorai, S.S.Kundu and S. Sarkar		
	Integrated nutrient management and soil health (in vernacular)	D. Ghorai , S. S. Kundu and **S. Sarkar**	1	200
	Go-khadya hisabe gaimuger chas	S. Garai S. and S.M.A Rahaman	1	20
	Dhaner pradhan kayekti rog o tar pratikar	S. Garai S. and S.M.A Rahaman	1	20
	Kadaknath murgir pratipalan.	S. Garai S. and S.M.A Rahaman and T. Samajdar	1	20
Technical reports				
Electronic Publication				

(CD/DVD etc)				
TOTAL				

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

(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	Online workshop	Strategies for FPO Formation and Migrant Labour Policies	Sk Md Azizur Rahman, Senior Scientist and Head	05.03.20	Deen Dayal Research Institute, Delhi
2	Online workshop	The DAESI course and how to continue the same through online mode	Sk Md Azizur Rahman, Senior Scientist and Head	18.05.20 and 06-07-20	SAMETI, Narendrapur
3	Webinar	Recent cabinet decision to encourage rural agriculture-Enables farmers to harness economy and attract FDI in agriculture	Sk Md Azizur Rahman, Senior Scientist and Head	14.06.2020	Press Information Bureau, Kolkata
4	National Webinar	Managing Wetlands for Aquatic Crops: Opportunities and Challenges	Sk Md Azizur Rahman, Senior Scientist and Head	29.06.2020	Bhola Paswan Shastri Agricultural College, Purnea, Bihar-854302 (Bihar Agricultural University, Sabour, Bhagalpur, Bihar-813210, India)
5	Online workshop	Zonal Workshop of KVKs of Zone V, 2020 Kolkata	Sk Md Azizur Rahman, Senior Scientist and Head	01-07-20 to 02-07-20.	ATARI, Kolkata
6	National Webinar	Strategies of small scale aqua farming during COVID-19 and beyond	Sk Md Azizur Rahman, Senior Scientist and Head	10.07.2020	West Bengal University of Animal & Fishery Sciences, Kolkata
7	National Webinar	92nd Foundation Day and Award Ceremony of the ICAR	Sk Md Azizur Rahman, Senior Scientist and Head	16.07.2020	ICAR, New Delhi

8	National Webinar	CSISA Dashboard meeting	Sk Md Azizur Rahman, Senior Scientist and Head	17.07.2020	ICAR ATARI
9	Live Webinar	Achieving Agrarian Prosperity Through Agri-Entrepreneurship	Sk Md Azizur Rahman, Senior Scientist and Head	21.08.2020	ICAR-RCER, FSRCHPR, Plandu, Ranchi, Jharkhand
10	Live Webcasting Programme	Inauguration of Academic and Administrative Building of Rani Lakhmi Bai Central Agricultural University, Jhansi our Hon'ble Prime Minister	Sk Md Azizur Rahman, Senior Scientist and Head	29.08.2020	Our Hon'ble Prime Minister
11	Live Webinar	Farmers Producers Organisations (FPOs)-the road ahead	Sk Md Azizur Rahman, Senior Scientist and Head	18.09.2020	ICAR-ATARI, Kolkata
12	Live Webinar	Outreach of KVK to Farming Community- Krishi Bills	Sk Md Azizur Rahman, Senior Scientist and Head	03-10-20 and 06 to 07-10-20	M/o Agriculture and ICAR-New Delhi
13	Live Webinar	Advanced strategies for management of coastal Agriculture	Sk Md Azizur Rahman, Senior Scientist and Head	15-10-20	ICAR and Neotia University
14	Webinar	Outreach programme on recently enacted farm acts	Sk Md Azizur Rahman, Senior Scientist and Head	23.10.20	MANAGE, Hyderabad
15	Live Webinar	Paddy residue management	Sk Md Azizur Rahman, Senior Scientist and Head	28-10-20	ICAR ATARI Kanpur
16	Live Webinar	New Farm Act, 2020	Sk Md Azizur Rahman, Senior Scientist and Head	29.10.2020	ICAR-ATARI, Kolkata
17	Live Webinar	National Nutrition Mission-the way forward	Sk Md Azizur Rahman, Senior Scientist and Head	11.11.2020	ICAR-ATARI, Kolkata
18	Live Webinar	Sensitization workshop on Animal husbandry	Sk Md Azizur Rahman, Senior Scientist and Head	28.11.2020	ICAR-ATARI, Pune
19	FLD Programme	Clustered Front Line Demonstration Programme on Pulses	Sk Md Azizur Rahman, Senior Scientist and Head	09.12.2020	ICAR-ATARI, Kolkata
20	Ceremony Programme	Curtain raiser ceremony …	Sk Md Azizur Rahman, Senior Scientist and Head	16.12.2020	ICAR
21	Workshop	Hindi Workshop	Sk Md Azizur Rahman, Senior	22.12.2020	ICAR-CRIJAF

			Scientist and Head		
22	Webinar	Nutrition garden	Sk Md Azizur Rahman, Senior Scientist and Head	29.12.2020	KVK Burdwan
23	Online workshop	DAESI course and how to continue the same through online mode	Dr. Subrata Sarkar, SMS(Hort)	18.05.20	SAMETI, Narendrapur
24	Online review workshop	DAESI course and how to continue the same through online mode	Dr. Subrata Sarkar, SMS(Hort)	06.07.20.	SAMETI, Narendrapur
25	Webinar	Recent cabinet decision to encourage rural agriculture-Enables farmers to harness economy and attract FDI in agriculture	Dr. Subrata Sarkar, SMS(Hort)	14th June, 2020	Press Information Bureau, Kolkata
26	Workshop	Outreach programme on recently enacted farm acts	Dr. Subrata Sarkar, SMS(Hort)	23.10.20	MANAGE, Hyderabad
27	National Webinar	Managing Wetlands for Aquatic Crops: Opportunities and Challenges	Sandipan Garai, T-6	29.06.2020.	BholaPaswanShastri Agricultural College, Purnea, Bihar-854302 (Bihar Agricultural University, Sabour, Bhagalpur, Bihar-813210
28	National Webinar	Strategies of small scale aqua farming during COVID-19 and beyond	Sandipan Garai, T-6	10.07.2020	West Bengal University of Animal & Fishery Sciences, Kolkata
29	Live Webinar	Achieving Agrarian Prosperity ThroughAgri-Entrepreneurship	Sandipan Garai, T-6	21.08.2020	ICAR-RCER, FSRCHPR, Plandu, Ranchi, Jharkhand
30	Live Webinar	Farmers Producers Organisations (FPOs)-the road ahead	Sandipan Garai, T-6	18.09.2020	ICAR-ATARI, Kolkata

31	Live Webinar	New Farm Act, 2020	Sandipan Garai, T-6	29.10.2020.	ICAR-ATARI, Kolkata
32	Live Webinar	National Nutrition Mission-the way forward	Sandipan Garai, T-6	11.11.2020	ICAR-ATARI, Kolkata
33	Virtual Farmers' Day and Training Programme	Fodder cultivation and it's utilization	Sandipan Garai, T-6	07.10.2020	KVK Burdwan, ICAR-CRIJAF
34	Live Webinar	Awarness programme on nutrional garden	Sandipan Garai, T-6	29.12.2020	KVK Burdwan, ICAR-CRIJAF

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

Success Story: Mushroom Cultivation

Name of farmer	Sri Ranjit Kumar Nath
Address	B Zone, Durgapur
Contact details (Phone, mobile, email Id)	7872671007
Landholding (in ha.)	Mushroom Cultivation Farm of about 450 sq.ft area, maintaining 650 beds at a time.
Name and description of the farm/ enterprise	Mushroom Production Unit
Economic impact	He is selling fresh mushroom @ Rs. 100/- per Kg in the local area. He is also preparing Mushroom Pickle commercially with **a brand name, "OYSTER"** @ Rs.70/- per 250 gm. His monthly income approximately Rs. 15000/- per month.
Social impact	Sri R. K. Nath was an unemployed youth. He had not a fixed income for his family. He was given training on Improved cultivation of Oyster Mushroom at KVK Burdwan. Now he is a successful entrepreneur maintaining 650 beds at a time.

Environmental impact	
Horizontal/ Vertical spread	He can influence others to adopt this technology.

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

Sl. No.	Name/ Title of the technology	Name/ Details of the Innovator(s)	Brief details of the Innovative Technology

3.9. a. Give details of indigenous technology practiced by the farmers in the KVK operational area which can be considered for technology development (in detail with suitable photographs)

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

b. Give details of organic farming practiced by the farmer

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

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

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

3.11. a. Details of equipment available in Soiland Water Testing Laboratory

Sl. No	Name of the Equipment	Qty.
1	Flame photometer	One
2	Spectrophotometer	One
3	Shaker	One
4	Hot air oven	One
5	Hot plate	One
6	Glass distillation unit	One
7	Conductivity bridge	One
8	pH meter	One
9	Electronic balance	Two

20	Grinder	One
11	Kjeldahl N analyser	One
12	Mridaparikshak	One
13	Atomic absorption spectrophotometer	One
14	PUSA STFR Meter	One

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			
30	15	45	101	14	--

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 on soil health through webinar	40 input dealers	-	-	15	0

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

No of training programme	No of demonstrations	No of plant material produced	Visit by the farmers	Visit by the officials
2	2	10000 seedling	110	5

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? (Y/N)

No of student trained	No of days stayed

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

4. IMPACT

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

Sl. No.	Item	Unit	Prior to KVK	Post KVK activities
1.	Change in cropping intensity	(%)	175	194
2.	Change in productivity of 1.Paddy 2.wheat 3.potato 4.Jute 5.oil seeds 6.pulse	(kg/ha)	 4960 -- 28400 2540 1050 950	 5980 -- 30500 2980 1350 1240
3.	Use of HYV (high-yielding varieties) 1. MTU 7029 2. MTU 1010 3. IR36 4. PUSA Sugandh 5	(%)	 80 11.3 40 0	 67 23.3 30 12

	5. PM 26 6. JD 6 7. B 9 8. B256 9. WBL 77 10. JRO 524 11. JRO 204 12. Grand Naine 13. Agrifound Dark Red 14. AK 12-24 15. TG 51 16. TG 37A 17. SML 668 18. JAKI 9218 Pl Add more if required		0 92 94 3 100 0 0 60 0 0 0 0	6.6 15.4 75 67 42 49 45 45 40 25 35 40
4.	**Use of fertilizers (NPK) (nutrient)**			
	Paddy	**(Kg/ha)**	100:65:40	100:50:50
	Mustard		90:65:40	80:40:40
	Jute		40:30:20	60:30:30
	Sesame		90:60:40	80:40:40
	Groundnut		10:40:40	15:25:50
	Lentil		15:50:10	20:40:20
	Greengram		15:50:10	20:40:20
	Chickpea		15:50:10	20:40:20
	Banana		150:100:100	200:150:150
	Tomato (Improved)		100:80:50	120:60:60
	Tomato (Hybrid)		120:100:60	150:80:80
	Brinjal		110:70:40	100:50:50
	Cucurbits		100:60:30	80:40:40
5.	Use of FYM and other biofertilizers	(kg/ha)	FYM: 3500 Biofertlizer: 0	FYM: 2600 Vermicompost: 1200 Biofertlizer: 0
6.	Tractor/machinery	(No)	25	53

7.	Change in economic indicators (in adopted villages) (a) Net return/ha/yr (by crop/enterprise) 1.Paddy 2.Mustard 3.Jute 4.Sesame 5.Lentil 6.Banana 7.Tomato 8.Potato	(No) Rs.	 26500 12500 20500 13500 15000 65000 53500 45000	 39100 15700 30000 18600 18600 105000 93500 63500
8.				

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

4.2. Cases of large scale adoption

(Please furnish detailed information for each case)

Horizontal spread of technologies	
Technology	Horizontal spread
Sulfur and boron nutrition in mustard	The soils of the district are largely deficient in two essential nutrients required for mustard, namely, Sulfur and Boron. KVK after successfully establishing the fact that supplemenatation of sulphur and boron can augment productivity significantly through OFT, applied the technology in CFLD on mustard Since 2016-17. Farmers were greatly encouraged by the results and as a result of which the technology has spreaded to 5 blocks of the district, namely Kalna, Purbasthali, Ausgram, Galsi I and Galsi II.
Cultivation of kharif onion	Farmers in this region were usually engaged in cultivation of paddy in kharif season which provided on an average profit of Rs. 28000/- to 35000/- per ha. Where as onion in kharif season transported from outsides of the states leading to very high market price. Agrifound Dark Red a variety suitable for kharif season was introduced through demonstration in kharif season for the last few years, starting from 2017-18. It showed encouraging result in terms of profit for the farmers and as a result the technology has spreaded to 4 blocks of the district, namely Kalna I & II, Purbasthali I & II, along with different pockets of other blocks like Kaksa, Ausgram, Galsi I and Galsi II.

Give information in the same format as in case studies

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

Sl. No.	Brief details of technology	Impact of the technology in subjective terms	Impact of the technology in objective terms

4.4. Details of innovations recorded by the KVK

Thematic area	
Name of the Innovation	
Details of Innovator	
Back ground of innovation	
Technology details	
Practical utility of 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

DAESI Course

In Purba and Paschim Bardhaman there are about 2500 practicing agri-input dealers, who are the prime source of farm information to the farming community. The first contact point for majority of farmers is the agri-input dealer. While purchasing different inputs required for farming operations, the farmer naturally tries to find out from the input dealer about the usage of inputs, both in terms of quality and quantity. However, most of these input dealers do not have formal agricultural education. With the objective of shaping these input dealers as para-extension professionals by providing requisite knowledge, one self-financed course of 40 input dealers was sanctioned by SAMETI and the batch was first started in August, 2018.

- Following courses were conducted under **DAESI 2nd batch from March, 2020.**

Sl No.	Topic of the class, Exposure visit and Examination	Date
1	Exposure Visit –Krishi Mela, BudBud, Purba Bardhaman	09.01.20
2	Crop production Technology of paddy	16.01.20
3	Integrated Disease Management.	16.01.20
4	Exposure Visit- Agricultural farm, Durgapur	23.01.20
5	Zero tillage and brown manuring in paddy	31.01.20
6	Quality seeds- its importance and classification	31.01.20
7	Exposure visit to Birbhum KVK, Bolpur	07.02.20
8	Macro-Micronutrient deficienciesand their Management in major fruits and vegetables	13.02.20
9	Principles and practices of Seed Production	13.02.20
10	Exposure Visit to Taldangra State Horticulture Farm, Taldangra, Bankura	20.02.20
11	Operation of Computer: Word and Excel	27.02.20
12	Identification of pests and disease of paddy	27.02.20
13	Organic pesticides: preparation and application (1st half)	05.03.20
14	SRI Technology in paddy (2nd Half)	05.03.20
15	**1st Evaluation/ Short test**	12.03.20
16	Cultivation techniques of major oilseed crops (1st half)	12.03.20
17	Use of internet & practice (2nd Half)	12.03.20
Due to lockdown class has been suspended and as per instruction of SAMETI, Narendrapur online class on experimental basis resumed as follows		

18	Management of horticultural crops post cyclone, "Amphun" period	04.06.20
19	Seed production of paddy	11.06.20
20	Insecticides Act	18.06.20
21	Classification of insects and insecticides	25.06.20
22	Mode of action of insecticides	03.07.20
23	Importance of weeds and role of herbicides	09.07.20
24	Classification of fungicides and fungicides toxicity	16.07.20
MANAGE, Hyderabad approved the online mode of class and set guideline to conduct DAESI through online mode due to COVID 19. Followings are the topics conducted through online mode		
25	Interaction on MANAGE guidelines and modalities of online class	24.07.20
26	Seed treatment- Importance and procedure(1st half)	07.08.20
27	Seed production of paddy on (2nd Half)	07.08.20
28	Importance and Management of micro-Irrigation systems (Sprinkler & Drip Irrigation) (1st half)	11.08.20
29	Importance of weeds their types & management (2nd Half)	11.08.20
30	Integrated farming system (1st half)	14.08.20
31	Insecticide Act (2nd Half)	14.08.20
32	Nursery management fruits & vegetable crops (1st half)	18.08.20
33	Group approaches in Agriculture Extension and marketing role of CIGs, FIGs ,WIGS, FOs (2nd Half)	18.08.20
34	Exposure visit at KVK, Howrah	21.08.20
35	Disease management of solanaceous vegetables (1st half)	25.08.20
36	Integrated pest Management (2nd Half)	25.08.20
37	Macro- Micronutrient deficiencies & their Management in major field crops (1st half)	28.08.20
38	Vermi-composting (2nd Half)	28.08.20
39	Exposure visit: Farm, BCKV, Burdwan	01.09.20
40	Plant Propagation Techniques of fruit crops (1st half)	04.09.20
41	Disease symptoms and management of major field crops of Bardhaman district (2nd Half)	04.09.20
42	Exposure visit: RRS, Jhargram, BCKV	08.09.20
43	Production Technology of Kharif Onion(1st half)	11.09.20

44	Sketch and diagram on rice pest (2nd Half)	11.09.20
45	Cultivation practice of solanaceous vegetables(1st half)	15.09.20
46	Pest Management on major Pulse crops (2nd Half)	15.09.20
47	Seed Certification (1st half)	18.09.20
48	**2nd Evaluation/ Short test**	18.09.20
49	e NAM (National Agricultural Marketing) (2nd Half)	18.09.20
50	Harmful and Beneficial insects, Harmful effect of indiscriminate use of agricultural inputs and compatibility of agrichemicals (1st half)	22.09.20
51	Pest managements of paddy (2nd Half)	22.09.20
52	Basic principles and methods of irrigation(1st half)	25.09.20
53	Cultivation Practices of major cut flowers (2nd Half)	25.09.20
54	Integrated Nutrient Management on field crops (1st half)	29.09.20
55	Fodder cultivation technology (2nd Half)	29.09.20
56	Safe handling pesticides and First Aid (1st half)	03.10.20
57	Agro-meteorological information and their impact on Agricultural Production (2nd Half)	03.10.20
58	Climate change and adaptation strategy (1st half)	06.10.20
59	Soil sampling and testing (PH) (2nd Half)	06.10.20
60	**Midterm examination**	09.10.20
61	Cyber extension- Concept& various agricultural information sources (1st half)	13.10.20
62	Mushroom cultivation (2nd Half)	13.10.20
63	Extension Management- Communication , Negotiation & Motivation (1st half)	16.10.20
64	Mathematical calculation of fertilizer and pesticide dose (2nd Half)	16.10.20
65	Cultivation techniques of major pulse crops (1st half)	19.10.20
66	Problem of nematode in vegetables and its management (2nd Half)	19.10.20
67	Identification of different pests of vegetables (1st half)	21.10.20
68	Importance of agricultural insurance and its procedure (2nd Half)	21.10.20
69	Agro-ecological zone, cropping system and crop rotation (1st half)	27.10.20
70	Identification of disease symptoms in winter vegetable crop (2nd Half)	27.10.20
71	Storage pests and their Management (1st half)	29.10.20

72	Seed production of major vegetable crops (2nd Half)	29.10.20
73	Production technology of Cole crops (1st half)	03.11.20
74	Cultivation technique of major fruit crops	03.11.20
75	Basics Knowledge of Plant growth hormone and their application on Agriculture and horticultural crops. (1st half)	06.11.20
76	Seed production of major field crops (2nd Half)	06.11.20
77	Integrated Nutrient Management of fruit crops (1st half)	10.11.20
78	Seed treatments and testing for germination (2nd Half)	10.11.20
79	**3rd Evaluation/ Short test**	12.11.20
80	Canopy management, intercultural operation and bahar treatment in fruit crops. (1st half)	13.11.20
81	Identification on different type of weeds and herbicide selection (2nd Half)	13.11.20
82	Post harvest operation and storage of horticultural crops (1st half)	17.11.20
83	Cultivation Practices of major loose flowers (2nd Half)	17.11.20
84	Problematic soil and their management	20.11.20
85	Classification of Pesticides and New Generation Pesticides	20.11.20
86	Organic farming	24.11.20
87	Biofertilizer and its application	24.11.20
88	Package & Practice on Potato Cultivation.	01.12.20
89	Protective cultivation of high value horticultural crops	01.12.20

5. LINKAGES

5.1. Functional linkage with different organizations

Name of organization	Nature of linkage
SAMETI, Narendrapur	DAESI course
ICAR-Indian Institute of Water Managemnt , Bhubaneswas	HRD training of KVK official
ICAR-Central Institute of Subtropical Horticulture, Malda	HRD training of KVK official
Directorate of Agriculture, Govt. of W.B.	▪ Input supply for Seed village program

	▪ Supply of new variety pulse and oil seed
Animal Resource Development Department, Govt. of W.B.	• Vaccination camp
Office of Assistant Director of Fisheries, Meen Bhawan, Burdwan	• Fish fingerlings supply • Training on fish culture, management • Awareness camp on subsidized loan scheme, fisherman identity card, Formation of Self-help group, Fish production group, cooperative societies etc.
ATMA	• Governing body and management committee member • Collaborative programmes:- **Trainings** **Demonstration**. **Trials**
RKVY	• Governing body and management committee member
NREGS	Convergence programmes were • Training of NREGA technical staff on Vermi-compost, Rainwater harvesting, horticulture, Composite fish culture, Integrated farming • Field demonstrations by KVKs on NREGA works on IMC culture, Duck rearing, integrated farming (Fish-livestock- horticulture) • Skill development of NREGA workers under SGSY through Preparation of jute handicrafts, kantha-stitch.
National Seed Corporation, State Seed Corporation,	Foundation and certified paddy and potato, pulses and oil seed etc.
Bidhan Chandra Krishi Viswavidyalaya, Mohanpur	• Time to time planning execution • Planting material collection • Bio fertilizers collection • Resource persons
Vishwabharati University	• Trainings / demonstrations
West Bengal University of Animal and Fishery Science	Feed and milk sample analysis
Regional Station for Forage Production Demonstration, Kalyani	Training and fodder seed collection

CIFA, Kalyani	Exposure visit
State Agricultural Management Extension Training Institute, Narendrapur	DAESI programme, skill training for rural youths
NABARD, CBI, SBI & RRBs ,Burdwan Region	Farmers; club, Credit facility for farmers
NGOs like Men at Work, Ujjiban, SSSNS, Meghdhoot, Mangal Chandi Self help group	Farmers' tour , Training etc

5.2. List of special programmes undertaken during 2020-21by the KVK, which have been financed by ATMA/ Central Govt/ State Govt./NABARD/NHM/NFDB/Other Agencies **(information of previous years should not be provided)**

a) Programmes for infrastructure development

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

(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.)
Fodder demonstration on 1. Maize (Var. J-1006)- 30 kits (each of 5 kg) 2. Ricebean (Var. Bidhan -2) – 10 kits (each of 5 kg)	Fodder demonstration with improved package of practices for enhancement of livestock production especially milk production.	June, 2020	Regional Fodder Station, M/o Fisheries, Animal Husbandry & Dairying, Kalyani	Free allotment to KVK Burdwan

1. Training on improved cultivation of marigold – 2 nos. (60 partcipants) 2. Demonstration on management of mite in marigold – 18 nos. 3. Demonstration ICAR-IIHR ripening chamber – 8 nos	1. Capacity Building 2. Yield improvement through better management of mite 3. Scientific ripening of fruits	March, 2020	ATMA	
OFT on "Assessment of different remediation measures for cold stress of rice seedling during *rabi* season under medium upland situation of Burdwan district"	1. To make farmers aware about the technologies to get rid of cold stress of rice seedlings in boro season 2. Decrease seedling mortality rate 3. Increase paddy productivity	December, 2020	ATMA	
OFT on "Assessment of effect of zinc and boron on productivity and oil content of mustard under medium upland situation of Burdwan district"	1. To make farmers aware about the technologies to get higher quality and productivity of mustard through application of Zn and B 2. Increase oil content	November 2019	ATMA	
Training and distribution programme on Bee-keeping	Capacity Building	March, 2020	ATMA	

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.	Orchard	2009	10000	Mango, Guava, Citrus	Fruits	**	5000	**	** Orchard is under lease of Rs.25000.00
2.									
3.									
4.									
5.									
6.									
7.									
	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	
Okra	15/7/20	multiple time	0.01	Kashi Kranti	seed	0.02	500	1000	
Guava	-	-	-	Baruipur, L49	saplings	300 nos.	1000	12000	
Lime	-	-	-	Kagzi	saplings	300 nos.	1000	12000	

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

Sl. No.	Name of the Product	Qty. (Kg)	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	
1.	Vermicompost	25 Kg	-	225.00	
2.	Vermiworm	6080 pc.	-	3040.00	
Total				3265.00	

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

Sl. No	Name of the animal / bird / aquatics	Details of production			Amount (Rs.)		Remarks
		Breed	Type of Produce	Qty.	Cost of inputs	Gross income	
1.	Duckery	Khaki Campbell	Live duck	26 nos. (30.5Kg.)	-	3451.00	
2.			Duck egg	242 pc.	-	1694.00	
3.	Poultry	RIR	Live bird	20 nos. (31 Kg.)	-	4960.00	
4.	Poultry	Kadaknath	Live bird	1 pc (1 Kg)	-	550.00	
TOTAL						10655.00	

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)
Due to COVID-19 protocol, no one allowed to stay in the Trainees Hostel			
Total :			

(For whole of the year)

6.6. Utilization of staff quarters

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	State Bank of India	Mankar, Purba Bardhaman	30466431682

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

Item	Released by ICAR		Expenditure		Unspent balance as on -31.12.2020
	Kharif	Rabi	Kharif	Rabi	
					10,15,924.00

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

Item	Released by ICAR		Expenditure		Unspent balance as on 31.12.2020
	Kharif	Rabi	Kharif	Rabi	
		1,80,000.00		1,79,180.00	820.00

7.4 Utilization of KVK funds during the year 2020-21(Not audited)

Sl. No.	Particulars	Sanctioned (Rs in lakh)	Released (Rs in lakh) December 2020	Expenditure (Rs in lakh)
A. Recurring Contingencies				

1	Pay & Allowances	152.00	130.30	94.90748
2	Traveling allowances	1.20		0.60041
3	HRD	0.30		0.00
3	Contingencies	19.00	12.10	2.43078
A	Stationary, telephone, postage and other expenditure on office running, etc			
B	POL, repair of vehicles, tractor and equipments	1.2		
C	Meals/refreshment for trainees (@Rs75/day/trainee for residential and @ Rs 40/daytrainee for non-residential training)			
D	Training material(need based materials & equipment for conducting the training)	0.90		
E	FLD	0.45		
F	OFT	0.45		
G	IFS			
H	Training of extension functionaries			
I	Extension activities			
J	Farmers Field School			
K	EDP/Innovative activities			
L	Soil & Water testing & Issue of Soil Health Cards			
M	Display board			
N	Maintenance of building	2.00		
O	SCSP	14.00		5.86810
TOTAL (A)		172.50	142.40	
B. Non-Recurring Contingencies				
1				
2				
3				
4	Library	0.10	0.10	Nil
TOTAL (B)				
C. REVOLVING FUND				
GRAND TOTAL (A+B+C)		172.60	135.34	103.80667

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

Year	Opening balance as on 1st April	Income during the year	Expenditure during the year	Net balance in hand as on 1st April of each year (Kind + cash)
2015-16	153165/-	877375/-	8,90,977/-	139563/-

2016-17	139563/-	961400/-	6,06,847/-	494116
2017-18	494116/-	900930/-	13,44,849/-	50197/-
2018-19	50197/-	1006948/-	898606/-	1,58,539/-
2019-20	1,58,539/-	12,82,977/-	6,12,108/-	8,29,408/-
2020-21	8,29,408/-	13,00,000/-		

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

Nameof activity	Number of activity	Season	With line department	With ATMA	With both
Training on improved cultivation of marigold	2 nos. (60 partcipants)	Summer, 2020	-	Yes	-
Demonstration on management of mite in marigold	1 no. (18 beneficiaries)	Summer, 2020	-	Yes	-
Demonstration ICAR-IIHR ripening chamber	1 no. (08 beneficiaries)	Summer, 2020	-	Yes	-
OFT on "Assessment of different remediation measures for cold stress of rice seedling during *rabi* season under medium upland	1 no. (10 beneficiaries)	December 2020	-	Yes	-

situation of Burdwan district"					
OFT on "Assessment of effect of zinc and boron on productivity and oil content of mustard under medium upland situation of Burdwan district"		November 2019	-	Yes	-
Training and distribution programme on Bee-keeping	1 no. (28partcipants)	-	-	Yes	-

8. Other information

8.1. Prevalent diseases in Crops

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

8.2. Prevalent diseases in Livestock/Fishery

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

					(in ha)

9.1. Nehru YuvaKendra(NYK) Training

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

9.2. PPV & FR Sensitization training Programme

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

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

Type of message	No. of messages	No. of farmers covered
Crop	2	156264
Livestock		
Fishery		
Weather	34	6340188
Marketing		
Awareness	25	2365487
Training information		
Other	7	563841
Total	**68**	**9425780**

9.4. *KVK* Portal and Mobile App

Sl. No.	Particulars	Description
1.	No. of visitors visited the portal	27,000
2.	No. of farmers registered in the portal	1,91,467
3.	Mobile Apps developed by KVK	*01*
4.	Name of the App	*Soil Test Based Fertilizer Application for Burdwan District*
5.	Language of the App	*English*
6.	Meant for crop/ livestock/ fishery/ others	*Crop*
7.	No. of times downloaded	

9.5. a. Observation of Swachh Bharat Programme

Date/ Duration of Observation	Activities undertaken
15.09.2020 – 02.10.2020	Swachhta Pledge, Swachhta Awareness at local level, Sanitation, Cleaning and beautification of surrounding areas, Digitization of office records/ e-office, Display and Banner etc.

b. Details of Swachhta activities with expenditure

Activities	**Number**	**Expenditure (in Rs.)**
1. Digitization of office records/ e-office		**20000.00**
2. Basic maintenance	1	
3. Sanitation and SBM	2	
4. Cleaning and beautification of surrounding areas	2	
5. Vermicomposting/ Composting of biodegradable waste management & other activities on generate of wealth for waste	2	
6. Used water for agriculture/ horticulture application	1	
7. Swachhta Awareness at local level	1	
8. Swachhta Workshops	0	
9. Swachhta Pledge	10	

10. Display and Banner	5	
11. Foster healthy competition	0	
12. Involvement of print and electronic media	1	
13. Involving the farmers, farm women and village youth in the adopted villages (no of adopted village)	3	
14. No of Staff members involved in the activities	10	
15. No of VIP/VVIPs involved in the activities	0	
16. Any other specific activity (in details)	-	
Total	**38**	**200000.00**

9.6. Observation of National Science day

Date of Observation	Activities undertaken

9.7. Programme with SeemaSurakshaBal/ BSF

Title of Programme	Date	No. of participants

9.8. Agriculture Knowledge in rural school

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

Give good quality 1-2 photograph(s)

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

Date of	No. of Union Ministers	No. of Hon'ble MPs	No. of State Govt.	Participants (No.)	Coverage by	Coverage by

pro gra m me	attended the programme	(Loksabha/ Rajyasabha) participated	Ministe rs	MLAs Attende d the progra mme	Chairm an ZilaPan chayat	Distt. Collect or/ DM	Bank Offici als	Farmers	Govt. Official s, PRI member s etc.	Total	Door Dars han (Yes/ No)	other chan nels (Nu mber)

9.10. Details of Swachhta Hi Sewaprogramme organized

Sl. No.	Activity	No. of villages Involved	No. of Particip ants	No. of VIPs	Name (s) of VIP(s)
1	Swachhta Hi Sewa	4	200	0	-

9.11. Details of MahilaKisan Divas programme organized

Sl. No.	Activity	No. of villages Involved	No. of Particip ants	No. of VIPs	Name (s) of VIP(s)
1	Celebration of Mahila Kisan Divas	2	30	0	-

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	Dinabandhu Pal	Warishpur, Ausgram 7699870386	Farm mechanization
2	Mahadeb Porey	Bharatpur, Galsi I 9732914451	Groundnut seed production
3	Bharat Dhali	Gopalpur colony, Ausgram 9933870374	Quality seed grower
4	Bapi Sk	Mirjapur, Kalna 9734213386	Trichoderma making in homestead

9.13. Revenue generation

Sl.No.	Name of Head	Income(Rs.)	Sponsoring agency
1.	Paddy seed – 14125 kg	6,71,066.00	ICAR
2.	Fruit sapling (666pc)	26640.00	ICAR
3.	Poultry and duckery (Eggs and meat)	10655.00	ICAR
4.	Other (Green coconut, seedlings, vermicompost, vermiworm, etc.)	6690.00	ICAR

9.14. Resource Generation:

Sl.No.	Name of the programme	Purpose of the programme	Sources of fund	Amount (Rs. lakhs)	Infrastructure created
1.	DAESI	Capacity building through one year diploma course for Input Dealer	SAMETI	4.00	-
2.	Training and demonstration	Capacity building	ATMA	13.12801	-
3.	Farm mechanization	Farm mechanization	Central Assistance to under Sub Mission on Agricultural Mechanization (DAC & FW)	12.00	-
4.	Input distribution	Input distribution	SCSP Fund (IIPR)	5.03684	-

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 2020-2021

Programmes	**Physical achievements**
Asset creation (Number; Sprayer, ridge maker, pump set, weeder etc.)	
On-farm trials (Number)	
Frontline demonstrations (Number)	
Farmers training (in lakh)	
Extension personnel training (in lakh)	
Participants in extension activities (in lakh)	
Seed production (in tonnes)	
Planting material production (in lakh)	

Livestock strains and fingerlings production (in lakh)	
Soil, water, plant, manures samples testing (in lakh)	
Provision of mobile agro – advisory to farmers (in lakh)	
No. of otherprogrammes (Swachha Bharat Abhiyaan, Agriculture knowledge in rural school, Planting material distribution, Vaccination camp etc.)	

b. Fund received under TSP in 2020-21 (Rs. In lakh):

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

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

(ii) Table:

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

d. Location and Beneficiary Details during 2020-2021

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

12. Schedule caste Output & Outcome achievements

Sl. No.	Indicator/Activities	Unit of Indicator	Achievements
1	Farmers, farm women trained by KVKs	Number	420
2	Extension personnel trained by KVKs	Number	20
3	On-farm trials conducted by KVKs	Number	4
4	Frontline demonstrations conducted by KVKs	Number	12
5	Quantity of seeds produced	Quintal	141.25
6	Planting materials Produced	Number	660
7	Livestock strains and fingerlings produced	Number	
8	Soil & water samples tested	Number	45

13**.** Information pertaining to ARYA Project

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

14.Progress report of NICRA KVK (Technology Demonstration component) during the period
(Applicable for KVKs identified under NICRA)

Natural Resource Management

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

Crop Management

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

Livestock and fisheries

Name of intervention undertaken	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

15. Awards/Recognition received by the KVK

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

Award received by Farmers from the KVK district

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

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

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

Sl. No.	Name of the organization/ Society	Trust Deed No.& date	Date of Trust Registration Address	Proposed Activity	Commodity Identified	No. of Members	Financial position (Rupees in lakh)	Success indicator

18. Integrated Farming System (IFS)

Details of KVK Demo. Unit

Sl. No.	Module details (Component-wise)	Area under IFS (ha)	Production (Commodity-wise)	Cost of production in Rs. (Component-wise)	Value realized in Rs. (Commodity-wise)	No. of farmer adopted practicing IFS	% Change in adoption during the year
1	Fishery-Fruit Orchard-Duckery-Goatary						

19. 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	Seed production of paddy	• Improved quality seed was supplied • Farmers	17500/-	40	Given with selected photographs

		trainied on ICM on paddy and seed production protocols			
2	Vermiculture and vermicomposting	• Vermiculture • Production of vermicompost	Rs. 48200/- (From 8 pits measuring 6′ x 3′ x 1.5′)	45	Given with selected photographs

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

	Database prepared/ covered for		KVK level Committee		Various activity conducted for farmers
Phase	Total no. of villages	Total no. of farmers	Date of formation	Name of members	
I (up-to 15.03.2018)	353	5600	01.02.18	Dr. D. Ghorai, Mr. J. Chatterjee, Sk. G. Rasul, Sk Amir Hossain, Sk. Janab Ali, Bapi Sk, Noorjahan Khatun	• Capacity building • Exposure visit • Whatappgroup
II (up-to 24.04.2018)	819	27400			
Total	1172	33000			

21. 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)

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

Name of the Job role	Name of the certified Trainer of KVK for the Job role	Date of start of training	Date of completion of training	No. of participants						Whether uploaded to SIP Portal (Y/N)	Fund utilized for the training (Rs.)
				SC		ST		Other			
				M	F	M	F	M	F		

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

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

23. Information on NARI Project(if applicable)

Name of Nodal Officer	**No. of OFT on specified aspects**	**Title(s) of OFT**	**No. of FLD on specified aspects**	**No. of capacity development programme on specified aspects**	**Total no. of farm women/ girls involved in the project**	**Details of Issues related to gender mainstreaming addressed through the project**

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

Krishi Kalyan Abhiyan- I and II

A. Training

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

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

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

C. Livestock and Fishery related activities

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

D. Other activities

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

	NADEP Pit established										
	Farm implements distributed										
	Others, if any										
KKA-II	Soil Health Card Distributed										
	NADEP Pit established										
	Farm implements distributed										
	Others, if any										

Krishi Kalyan Abhiyan- III

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

25. Nutri-garden

Sl.no.	**Name of KVK**	**Established in KVK Campus**	**No. of nutria-garden established in the village**	**Major vegetables production**
1	Burdwan	2019-20	25	Tomato, brinjal, okra, cucurbits and different leafy vegetables including jute

Please provide one or two good quality photographs

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

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

1	Training and distribution programme on Bee-keeping.	17.3.2020	KVK Burdwan	Training and distribution	13
2	Training and demonstration programme on "Rearing of RIR Poultry Chicks"	17.03.2020	KVK Burdwan and adopted village	Training and distribution	150
3	Training and demonstration programme on "Vermicompost Preparation"	21.03.2020	KVK Burdwan and adopted village	Training and distribution	50
4	Distribution of **Paddy seeds variety MTU-7029- 15 ton, vegetable 600 seed kits and Dhaincha seeds -2 q**	June, July and Sept,2020	KVK Burdwan and adopted village	Distribution	1200
5	Distribution of CRIJAF SONA	12.08.2020	Purbasthali	Distribution	210
6	Training and input distribution in collaboration with NDRI		KVK Burdwan	Training and distribution	39

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

Plantation under Swachhta Saptah

Webcasting of PM Kisan Money Transfer at KVK

SCSP Training on Jute Based Farming System

Demonstration unit on Kadaknath

Celebration of Mahila Kisan Diwas

Demonstration unit on Apiary

Exposure visit of DAESI Students

Distribution of RIR Chicks under SCSP

International Womens Day Celebration	**Demonstration unit on Vermicompost**

28. SC SP quarter-wise

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

Physical Output 2020-2021

Sl. No.	Indicator/Activities	Unit of Indicator	Quarterly Breakup (Target)		Targets Achieved		No. of Beneficiaries		Outcome
1	**Farmers, farm women trained by KVKs**	**Number**	Q-1	0	Q-1	0	Q-1	**0**	
			Q-2	8	Q-2	8	Q-2	**80**	
			Q-3	14	Q-3	14	Q-3	**140**	
			Q-4	22	Q-4	22	Q-4	**230**	
2	**Extension personnel trained by KVKs**	**Number**	Q-1	0	Q-1	0	Q-1	**0**	
			Q-2	0	Q-2	0	Q-2	**0**	
			Q-3	0	Q-3	0	Q-3	**0**	

Sl. No.	Indicator/Activities	Unit of Indicator	Quarterly Breakup (Target)		Targets Achieved		No. of Beneficiaries		Outcome
			Q-4	2	Q-4	2	Q-4	**20**	
3	**On-farm trials conducted by KVKs**	**Number**	Q-1	0	Q-1	0	Q-1	**0**	
			Q-2	2	Q-2	2	Q-2	**16**	
			Q-3	1	Q-3	1	Q-3	**10**	
			Q-4	1	Q-4	1	Q-4	**4**	
4	**Frontline demonstrations conducted by KVKs**	**Number**	Q-1	4	Q-1	4	Q-1	**80**	
			Q-2	1	Q-2	1	Q-2	**25**	
			Q-3	2	Q-3	2	Q-3	**72**	
			Q-4	0	Q-4	0	Q-4	**0**	
5	**Quantity of seeds produced**	**Quintal**	Q-1	150	Q-1	150	Q-1	**0**	
			Q-2	0.02	Q-2	0.02	Q-2	**0**	
			Q-3	0	Q-3	0	Q-3	**0**	
			Q-4	0	Q-4	0	Q-4	**0**	
6	**Planting materials Produced**	**Number**	Q-1	0	Q-1	0	Q-1	**0**	
			Q-2	10600	Q-2	10600	Q-2	**35**	
			Q-3	0	Q-3	0	Q-3	**0**	
			Q-4	0	Q-4	0	Q-4	**0**	
7	**Livestock strains and fingerlings produced**	**Number**	Q-1	0	Q-1	0	Q-1	**0**	
			Q-2	0	Q-2	0	Q-2	**0**	
			Q-3	0	Q-3	0	Q-3	**0**	
			Q-4	0	Q-4	0	Q-4	**0**	
8	**Soil & water samples tested**	**Number**	Q-1	15	Q-1	15	Q-1	**26**	
			Q-2	0	Q-2	0	Q-2	**0**	
			Q-3	0	Q-3	0	Q-3	**0**	
			Q-4	30	Q-4	30	Q-4	**75**	

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