`KRISHI VIGYAN KENDRA HARIHARPUR, VAISHALI

ANNUAL REPORT
(January to December, 2021)

YEAR:2021

DR. RAJENDRA PRASAD CENTRAL AGRICULTURAL UNIVERSITY, BIHAR
PUSA, SAMASTIPUR – 848 125
ATARI, Zone – IV

KRISHI VIGYAN KENDRA, HARIHARPUR, VAISHALI

DR. RAJENDRA PRASAD CENTRAL AGRICULTURAL UNIVERSITY, PUSA

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Publisher: Sr. Scientist & Head
KVK, Vaishali

ANNUAL REPORT 2021 (1st January-31st December 2021)

1. GENERAL INFORMATION ABOUT THE KVK

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

Name and address of KVK	Telephone		E-Mail
	Office	FAX	
K.V.K., Hariharpur Hajipur, Via Rajauli, Vaishali- 844102	Office No land line connection 9431417421	FAX	head.kvk.vaishali@rpcau.ac.in kvkatvaishali@gmail.com www.vaishalikvk.in

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

Name and address of Host Organization	Telephone		E mail
	Office	FAX	
Dr. Rajendra Prasad Central Agricultural University, Bihar, Pusa, Samastipur- 848125	06274 -240226	06274-240226	raupusa@sancharnet.in

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

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. Sunita Kushwah	Hajipur	9431417421	sunita 17kk@rediffmail.com

1.4. Year of sanction of KVK:1997, 4-17/AE Dated 27.03.97

1.5. Staff Position (**as on 31st December 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. Sunita Kushwah	Senior Scientist & Head	Horticulture	37400-67000 139400	02.07.2019	Permanent	Other
2.	Subject Matter Specialist	Mrs. Sunita Kumari	Subject- Matter Specialist	Agronomy	68900-205500 (84800)	03.07.2009	Permanent	Other
3.	Subject Matter Specialist	Miss. Varsha Kumari	Subject- Matter Specialist	Home Science	56100-177500 61300	12.12.2018	Permanent	Other
4.	Subject Matter Specialist	Miss. Swapnil Bharti	Subject- Matter Specialist	Horticulture	56100-177500 61300	17.12.2018	Permanent	Other
5.	Subject Matter Specialist	Mr. Prem Prakash Gautam	Subject- Matter Specialist	Plant Protection	56100-177500 59500	07.03.2019	Permanent	SC
6.	Subject Matter Specialist	Vacant	-	-	-	-	-	-
7.	Subject Matter Specialist	Vacant	-	-	-	-	-	-
8.	Programme Assistant	Mr. Sanjeev Kumar	Lab Technician	M. Sc.	35400-112400 (38700)	27.02.2018	Permanent	Other
9.	Computer Programmer	Vacant	-	-	-	-	-	-
10.	Farm Manager	Vacant	-	-	-	-	-	-
11.	Accountant / Superintendent	Miss. Richa Srivastava	Assistant	M.Sc.	35400-112400 (39900)	22.11.2017	Permanent	Other
12.	Stenographer	Mr. Ravi Kumar	Stenographer – III	B.Sc. (Phy.Hon.)	25500-81100 (27900)	23.02.2018	Permanent	Other
13.	Driver	Mr. Sonu Kumar	Jeep Driver		21700-48500 (21700)	01.03.2021	Permanent	Other
14.	Driver	Mr. Randhir Kumar	Tractor Driver		21700-48500 (21700)	08.03.2021	Permanent	OBC
15.	Supporting staff	Mr. Navneet Kumar	Skilled supporting staff		18000-39900 (18000)	01.03.2021	Permanent	Other
16.	Supporting staff	Mr. Ramakant	Skilled supporting staff		18000-39900 (18000)	03.03.2021	Permanent	Other

1.6. Total land with KVK (in ha):

S. No.	Item	Area (ha)	Hajipur(ha)	Goraul(ha)
1	Under Buildings	2.51	2.0	0.51
2.	Under Demonstration Units	0.50	0.5	Nil
3.	Under Crops	4.52	0.52	4.0
4.	Orchard / BRS/Poly House/Net House	3.50	3.5	4.0
5.	Others with details	1.0	Nil	1 (Pond)
	Total	**16.03**	**6.52**	**9.51**

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	-	-	-	-	Completed well furnished		Under use	ICAR
2.	Farmers Hostel	-	-	-	-	Completed well furnished		Under use	ICAR
3.	Staff Quarters (6)	-	-	-	-	Not completed		Not use	ICAR
4.	Piggery unit	-	-	-	-	-	-	-	-
5	Fencing								
6	Rain Water harvesting structure	-	-	-	-	-	-	-	-
7	Threshing floor					Completed well furnished		Under use	ICAR
8	Seed Godown	-	-	-	-	Completed well furnished	-	Under use	ICAR
9.	Dairy unit	-	-	-	-	-	-	-	-
10.	Poultry unit	-	-	-	-	-	-	-	-
11.	Goatry unit	-	-	-	-	-	-	-	-
12.	Mushroom Lab	-	-	-	-	-	-	-	-
13.	Mushroom production unit	-	-	-	-	Completed well furnished	-	Under use	KVK, RF
14.	Shade house	-	-	-	-	Completed well furnished	-	Under use	ICAR
15.	Soil test Lab	-	-	-	-	Completed well furnished	-	Under use	ICAR
16	Others, Please Specify 1. Polyhouse					Completed well furnished		Under use	ICAR

	2. Quail Unit					Completed well furnished		Under use	ARYA
	3. Azolla Unit					Completed well furnished		Under use	ICAR
.	4. Vermi compost					Completed well furnished		Under use	GOB
	5. Zero energy cool chamber					Completed well furnished		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
Mahindra Marshal (BR31B 1080)	06.05.03	417598.77	369102 (09.09.19)	Process of condemnation started
Tractor (BR01GA 2896)	2009	4,05,000	2102 hrs. (31.12.21)	Not Functional
Tractor John Deere (New) (BR31GB 2244)	2019	6,26,743.84	630 hrs. (31.12.21)	Functional
Tractor New Holland (BR31GB8210)	24.06.2021	9,96,151.52	116 hrs. (31.12.21)	Functional
Motorcycle 1 (BR31Q 7048)	09.09.16	59090	24406 (31.12.21)	Functional
Motorcycle 2 (BR31Q 7049)	09.09.16	59090	26473 (31.12.21)	Functional

C) Equipment & AV aids

Name of equipment	Year of purchase	Cost (Rs.)	Present status	Source of fund
a. Lab equipment				
Water distillation	2005	54240	Working	ICAR
Physical Balance Chemical Balance	2005 2005	110740 8990	Not working	ICAR
Conductivity meter	2006	10170	Out of order	ICAR
Digital pH meter	2006	10170	Condemnable	ICAR
Spectrophoto meter	2006	61020	Condemnable	ICAR
Flame Photo meter	2006	47460	Need repair	ICAR
Hot Plate	2006	9040	Working	ICAR
Hot Air oven	2006	15255	Working	ICAR
Shaker	2006	25425	Working	ICAR
Kjheladhl (digital &Distillation System)	2006	27000	Condemnable	ICAR
Willey mill Grinder	2006	25425	Condemnable	ICAR
Photo Phonies Phil Meteor cover head Projector (twin lamp.)	2003	11172	Condemnable	ICAR
Eutech PH miter	2018	24993	Working	ICAR
b. Farm machinery				

Zero tillage machine	2003		Condemnable	Received from ARI, Patna
Zero tillage machine	2007	49000	Condemnable	Supply by R.A.U., Pusa
Box	2008	3200	Working	
Cultivator	2009	17000	Good	Supply by R.A.U., Pusa
Trailer with old tyre	2009	51923	Working	Supply by R.A.U., Pusa
MB plough	2009	15385	Good	Supply by R.A.U., Pusa
Laveller	2009	7692	Good	Supply by R.A.U., Pusa
Tractor (MF 1035 DIJ)	2009	405000	Condemnable	Supply by R.A.U., Pusa
Trolly with storage box	2009	8900	Working	Supply by R.A.U., Pusa
Potato Planter	2010	40000	Working	NHB, Patna
Potato Digger	2010	46500	Working	NHB, Patna
Conoweeder	2010	1450	Condemnable	Supply by R.A.U., Pusa
Marker	2010	1550	Damaged	Supply by R.A.U., Pusa
Zero Till Seed cum Fertilizer Drill	2011	-	Good	Supply by R.A.U., Pusa
Disc Harrow 12 disc (Mounted)	2012	-	Good	Supply by R.A.U., Pusa
Self Propelled Reaper	2012		Condemnable	
Fruit pruning machine	2012	1960931	Working	NHB, Patna
Power Winnower	2014	19425	Working	KVK
Shaktiman semi champion Rotavator 5.5’	2014	99750	Working	KVK
c. AV Aids				
Godrej Prima 15” (38 cm) English type writer with dust cover	2001	11050	Condemnable	
Godrej Prima Hindi Type writer	2003	11530	Condemnable	
Projector overhead projector voltage stabilizer Laser Printer	2003	11172	Working	
Cylinder-2 regulator	2002	1800	(-do-)	
Generator	2004	40000	(-do-)	
HP Computer System	2004	37765	(-do-) Need upgrading	
Combo Drive	2004	3550	(-do-)	
HP Laser Jet Printer	2004	13699	Condemnable	
UPS Elnova	2004	10160	Condemnable	
Xerox Machine with stabliser	2004	63492	Condemnable	
Refrigerator (Central Purchasing D.E.D., R.A.U., Pusa)	2005	-	Need major repairing	
Stabliser	2005	4400	Condemnable	
Laser Pointer	2003	1936	Out of oeder	
Banana fibre extractor machine	2004	19720	Condemnable	
Yasika MF2 No. 3514565	2006	1920	Condemnable	
Fax Machine Panasonic Model	2005	8990	Condemnable	
Fax Machine	2007	15600	Condemnable	

Dim Display System (Hakins)	2005	13065	Condemnable	
Storewell Grain	2006	10251	(-do-)	
Digital Camera	2005	18750	Condemnable	
HP Psc 1402 Serial No-MY58RCCOWY	2006	4500	Condemnable	
LCD Projector with Stand & display Stand	2007	7512332	Working	
Photocopier machine Canon (Model No. IR 2018N)	2008	53040	Condemnable	
Fax machine Canon-TKD-29711	2008	15600	Condemnable	
Digital Camera (Canon 5x110)	2009	29995	Condemnable	

D) Farm implements

Name of equipment	Year of purchase	Cost (Rs.)	Present status	Source of fund
Zero tillage machine	2003		Condemnable	Received from ARI, Patna
Zero tillage machine	2007	49000	Condemnable	Supply by R.A.U., Pusa
Box	2008	3200	Working	
Cultivator	2009	17000	Good	Supply by R.A.U., Pusa
Trailer with old tyre	2009	51923	Condemnable	Supply by R.A.U., Pusa
MB plough	2009	15385	Good	Supply by R.A.U., Pusa
Leveler	2009	7692	Good	Supply by R.A.U., Pusa
Tractor (MF 1035 DIJ)	2009	405000	Good	Supply by R.A.U., Pusa
Trolly with storage box	2009	8900	Condemnable	Supply by R.A.U., Pusa
Potato Planter	2010	40000	Working	NHB, Patna
Potato Digger	2010	46500	Working	NHB, Patna
Conoweeder	2010	1450	Condemnable	Supply by R.A.U., Pusa
Marker	2010	1550	Damaged	Supply by R.A.U., Pusa
Zero Till Seed cum Fertilizer Drill	2011	-	Good	Supply by R.A.U., Pusa
Disc Harrow 12 disc (Mounted)	2012	-	Good	Supply by R.A.U., Pusa
Self Propelled Reaper	2012		Condemnable	
Fruit pruning machine	2012	1960931	Needs servicing & new blade	NHB, Patna
Power Winnower	2014	19425	Working	KVK
Shaktiman semi champion Rotavator 5.5’	2014	99750	Not in use	KVK
Zero tillage	2020	43120	Working	RPCAU, Pusa
Multi crop Thresher	2020	128800	Working	RPCAU, Pusa

Potato Planter	2020	97500	Working	RPCAU, Pusa
Power Weeder	2020	47600	Working	RPCAU, Pusa
Self Propelled Reaper cum Binder	2020	520000	Working	RPCAU, Pusa
Happy Seeder	2020	-	Working	BISA, Pusa
Multi Crop Planter (04)	2020	-	Working	BISA, Pusa
Raised Bed Planter (02)	2020	-	Working	BISA, Pusa
Green Seeker	2020	-	Working	BISA, Pusa
Soil Moisture Meter (02)	2020	-	Working	BISA, Pusa
Drum Seeder (02)	2020	-	Working	BISA, Pusa
Laser Land Leveller	2021	-	Working	BISA, Pusa
Raised Bed Planter	2021	-	Working	BISA, Pusa
Mountated Sprayer	2021	-	Working	BISA, Pusa
Zero Tillage	2021	-	Working	BISA, Pusa
Wheat Seeder	2021	-	Working	BISA, Pusa
Tractor Tailor Hydrolic	2021	143400	Working	RPCAU, Pusa
Cultivator	2021	-	Working	RPCAU, Pusa
Tractor Operated Disc Plough	2021	94657	Working	RPCAU, Pusa
Tractor Operated Boom Type Sprayer	2021	-	Working	RPCAU, Pusa
Tractor Operated Reaper cum Binder	2021	342000	Working	RPCAU, Pusa
Rotavator	2021	-	Working	RPCAU, Pusa
Tractor Operated Arrow Blast Sprayer	2021	-	Working	RPCAU, Pusa

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.	26.03.2021	44			
2.	09.12.2021	50			

** 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 (2021)

Sl.No.	Items	Information
1	Major Farming system/enterprise	Agri. Horti (Vegetable) –Horticulture (Fruits) –A.H. (Animal Husbandry) (Dairy, Goatry& Fishery) (Irrigated and high cropping intensity area) Horti. (Veg.) – A.H.-Agri- Horti (fruits). (Diara area) Agri- A.H.- Hort..(Fruit)- Hort. (Veg). (Rainfed Area Agri- A.H. (Flood Prone area) Agriculture- A.H. (Water logged or Chaur Area)
2	Agro-climatic Zone	Zone – I, Bihar
3	Agro ecological situation	Upland irrigated/RF, Midland irrigated/RF, Low land rainfed&Chaur land

4	Soil type	Sandy Loam
5	Productivity of major 2-3 crops under cereals, pulses, oilseeds, vegetables, fruits and others	1.cereals-Wheat 4151kg/ha, Rice 1347kg/ha, Maize 5024kg/ha 2. Pulses-Lentil 635kg/ha pigeon pea 760kg/ha, Green gram406kg/ha 3. Oilseeds-1190kg/ha R/M Tisy-464 Sesame-394kg/ha
6	Mean yearly temperature, rainfall, humidity of the district	Mean Yearly temperature 25.8º C average rainfall 993 mm.
7	Production of major livestock products like milk, egg, meat etc.	Live Stock Dairy Animal- 1. Cross breed Cow- (Average milk yield 10 liter per day) Local Cow- (Average milk yield 03 liter per day) Total Cow- 212170 2. Buffalow- 170804 (Average milk yield in 12 liter per day) 3. Total Production **five** lakh liter per day

Note: Please give recent data onl

2.b. Details of operational area / villages (2021)

Sl. No.	Name of Taluk	Name of the block	Name of the villages	Major crops & enterprises	Major problems identified (crop-wise)	Identified Thrust Areas
1.	Hajipur	Hajipur	Hariharpur	Cauliflower Bringal Paddy Moong Litchi	1. Seed certification 2. Boron deficiency 3. Insect pest disease attack. 4. Off season problem	Quality Seed production. Girdling technology
2.	Hajipur	Hajipur	Gurmia	Cauliflower Bringal Paddy Maize Litchi	- do -	- do -
3.	Hajipur	Hajipur	Chakwara	Cauliflower Bringal Tomato	- do -	- do -
4.	Hajipur	Bhagwanpur	Bhagwanpur & Alawalpur	Paddy Maize Mustard Tomato Potato Wheat	Quality seed material	Seed production technique for quality crop production.
5.	Hajipur	Hajipur	Ghoshwar	-	1. Plant Material replacement in banana. 2. Pest Management in Mango. 3. Quality seed material required in time.	1. Training in Banana & Mango. Production technique. 2. Seed Production technique.
6.	Mahnar	Jandaha	Jandaha	Value addition & income generating activity	Unskilled way for making value added product	Training in making value added product

7.	Hajipur	Patepur	Hasansarai	Wheat Paddy Rose	Quality seed material required	Seed production technique
8.	Hajipur	Lalganj	Jalalpur	Wheat	Quality seed material required	Seed production technique
9.	Hajipur	Lalganj	Lalganj & PaudaMadansingh	Mushroom	Quality spawn required	Mushroom production technique
10.	Mahua	Mahua	Garjoul&Mahua	Mushroom	Quality spawn required	Mushroom production technique
11.	Mahua	Raja pakar	MukundpurSarsai	Quail	Availability of Quail chick	Hatchery to be established
12.	Hajipur	Hajipur	Senduari	Paddy Maize Mustard Tomato Potato Wheat	Quality seed material, irrigation problem	Seed production technique for quality crop production.
13.	Rajapakar	Rajapakar	Bakhari Barai	Paddy Maize Mustard Tomato Potato Wheat	Quality seed material, irrigation problem	Seed production technique for quality crop production.
14.	Rajapakar	Rajapakar	Sarsai	Papaya Guava Litchi Cauliflower Potato	Problem in cultivation of Papaya Old orchard of Guava Alternate bearing in Litchi	Pruning in Guava Cultivation of Papaya Girdling in Litchi Quality seed production

2. c. Details of village adoption programme:

Name of the villages adopted by Sr. Scientist & Head and SMS (in year 2021) for its development and action plan

Villages adopted by SMS (Plant protection)		
Name of village	**Block**	**Action taken for development**
Faridpur	Raja Pakar	Integrated pest management (Pheromone trap, Yellow sticky trap, Fruit fly trap)
Senduari	Hajipur	Mushroom spawn and Integrated pest management technology
Sarai	Hajipur	Mushroom spawn and Integrated pest management technology
Naya Gaon	Sahdai	Bee keeping and Integrated pest management technology
Villages adopted by SMS (Animal Science)		
Name of village	**Block**	**Action taken for development**
-	-	-
Villages adopted by SMS (Home Science)		
Name of village	**Block**	**Action taken for development**
Ghoswar &Gurmiya	Hajipur	Stitching and lac bangle
Hariharpur	Hajipur	Stitching and lac bangle
Villages adopted by SMS (Horticulture)		
Name of village	**Block**	**Action taken for development**
Gurmia	Hajipur	Seed production in Cauliflower
Sarsai	Rajapakar	Pruning in guava orchard, Cultivation of papaya
Dhabauli	Bidupur	Intercropping of Vgetables with Banana
Villages adopted by SMS (Agronomy)		
Name of village	**Block**	**Action taken for development**
Faridpur	Rajapakar	Seed/RCT/DSR
BhakhariBarai	Rajapakar	Seed/RCT/DSR
Dhobauli	Bidupur	Seed/RCT/DSR
Shital Bhakhurahar	Lalganj	Seed/RCT/DSR

2.1 Priority thrust areas:

S. No	Thrust area
1.	IFS based model
2.	Vegetable seed production
3.	Fodder production
4.	Poultry & Quail Production
5.	IPM integrated pest management in Crop, fruit and vegetable
6.	Dairy & Goatry for doubling income
7.	Fruit production (Mango & Guava)
8.	Vermi compost Production

. TECHNICAL ACHIEVEMENTS

4. A. Summary details of target and achievement of mandatory activities by KVK during the year 2021

OFT											FLD										
No. of technologies tested:											No. of technologies demonstrated:										
Number of OFTs		Number of farmers									Number of FLDs		Number of farmers								
Target	Achievement	Target	Achievement								Target	Achievement	Target	Achievement							
			SC		ST		Others		Total					SC		ST		Others		Total	
			M	F	M	F	M	F	M	F	T				M	F	M	F	M	F	M	F	T
08	07	08	20	08	0	0	47	22	67	30	97	07	05	07	27	52	0	0	72	32	99	84	183

Training												Extension activities										
Number of Courses		Number of Participants										Number of activities		Number of participants								
Target	Achievement	Target	Achievement									Target	Achievement	Target	Achievement							
			SC		ST		Others		Total						SC		ST		Others		Total	
			M	F	M	F	M	F	M	F	T				M	F	M	F	M	F	M	F	T
85	91	2050	450	709	0	0	1174	731	1623	1419	3050	5680	423	8600	694	368	0	0	3939	2086	4633	2454	6446

Impact of capacity building											Impact of Extension activities										
Number of Participants trained		Number of Trainees got employment (self/ wage/ entrepreneur/ engaged as skilled manpower)									Number of Participants attended		Number of participants got employment (self/ wage/ entrepreneur/ engaged as skilled manpower)								
Target	Achievement	SC		ST		Others		Total			Target	Achievement	SC		ST		Others		Total		
		M	F	M	F	M	F	M	F	T			M	F	M	F	M	F	M	F	T
735	692	09	05	0	0	15	04	24	09	33	4880	4921	25	04	0	0	30	11	55	15	70

Seed production (q)		Planting material (in Lakh)	
Target	Achievement	Target	Achievement
300 q	Paddy – 90 q Potato – 250 q Rai – 9 q Green gram – 2 q	0.50	Mango- 1200 Vegetable Seedling – 35308 Ornamental plants - 2400

Livestock strains and fish fingerlings produced (in lakh)*		Soil, water, plant, manures samples tested (in lakh)	
Target	Achievement	Target	Achievement
0	0	1500	752

* Give no. only in case of fish fingerlings

Publication by KVKs							
Item	Number	No. circulated	No. of Research papers in NAAS rated Journals	Highest NAAS rating of any publication	Average NAAS rating of the publications	Details of awarded publication, if any	Details of Award given to the publication
Research paper	07	Among extension workers, Scientists	07	5.92	04		
Seminar/conference/ symposia papers	02	Mass					
Books	-	-					
Bulletins	03	3000					
News letter	-	-					
Popular Articles	10	Mass					
Book Chapter	01	Mass					
Extension Pamphlets/ literature	02	Mass					
Technical reports	13	Official					
Electronic Publication (CD/DVD etc)	01	Among farmers					
TOTAL	**39**	**3000**					

3.1.1Achievements on technologies assessed and refined:

A) Horticulture (OFT-1)

1.	Title of On farm Trial	Increasing the yield of marigold production through pinching technology.
2.	Problem diagnosed	Marigold is grown in Vaishali district as a commercial crop. Most of growers are not aware about pinching technique so that flower production is low. Without pinching there is lesser number of branches in the plant which decreases the yield.
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	**FP:** No pinching **TO_1:** Pinching at 30 and 40 days after planting **TO_2:** Pinching at 40 and 60 days after planting
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	IARI, New Delhi
5.	Production system and thematic area	Floriculture
6.	Performance of the Technology with performance indicators	✓ Plant height at monthly intervals ✓ No. of leaves ✓ Days taken to flowering ✓ No. of flowers per plant season wise ✓ Flower diameter ✓ Flower weight ✓ Seed yield ✓ B:C ratio
7.	Final recommendation for micro level situation	It is resulted that pinching at 30 and 40 days after planting recorded average high flower yield (0.72kg). More number of branches, increase in flower duration and number of flowers per plant was more and plants were healthy, thus this technology recommended for the farmers.
8.	Constraints identified and feedback for research	Farmers objection in removel of buds in the initial stage of crop.
9.	Process of farmers participation and their reaction	Field visit and training programmes

Thematic area: Floriculture

Problem definition: Marigold is grown in Vaishali district as a commercial crop. Most of growers are not aware about pinching technique so that flower production is low. Without pinching there is lesser number of branches in the plant which decreases the yield.

Technology assessed:

FP: No pinching

TO_1: Pinching at 30 and 40 days after planting

TO_2: Pinching at 40 and 60 days after planting

Table 1:

Treatment	Yield of marigold (t/acre)	Cost of cultivation	Gross return (lac/ha)	Net return (lac/ha)	B:C ratio
Farmers practice-No pinching	15	0.65	1.80	1.15	1.7
Technology option-01 Double pinching at 30 & 40 DAT	**23**	**0.70**	**2.76**	**2.06**	**2.9**
Technology option-02 Double pinching at 40 & 60 DAT	20	0.70	2.40	1.70	2.4

Results: It is resulted that pinching at 30 and 40 days after planting recorded average high flower yield (0.72kg). More number of branches, increase in flower duration and number of flowers per plant was more and plants were healthy, thus this technology recommended for the farmers.

B) Home Science -OFT-2

1.	Title of On farm Trial	Effect of different treatment methods on preparation of *Oyster mushroom* powder to enhance the self- life.
2.	Problem diagnosed	Mushroom are rapidly perishable and deteriorates immediately after harvest.
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	**FP:** Drying & powdering mushroom without any treatment. **TO_1:** Drying & powdering mushroom by pre-treating with 0.5 % citric acid **TO_2:**Drying & powdering mushroom by pre- treating with 0.5 % KMS **TO_3:** Drying & powdering mushroom by pre-treating with 1 % KMS
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	University of Agricultural Sciences, Banglore
5.	Production system and thematic area	Value addition
6.	Performance of the Technology with performance indicators	Organoleptic evaluation of the developed power for its acceptability
7.	Final recommendation for micro level situation	Drying & powdering mushroom by pre-treating with 1%KMS found best one amog all treatments. After drying colour quality was good and keeping quality also improved , therefore this technology recommended for the mushroom growers.
8.	Constraints identified and feedback for research	Difficulty in drying of Mushroom
9.	Process of farmers participation and their reaction	a) Short lectures b) Demonstration

Thematic area: Value addition

Problem definition: Mushrooms are rapidly perishable and deteriorates immediately after harvest

Technology assessed:

FP: Drying & powdering mushroom without any treatment.

TO_1: Drying & powdering mushroom by pre- treating with 0.5 % citric acid.

TO_2: Drying& powdering mushroom by pre- treating with 0.5 % KMS

TO_3: Drying & powdering mushroom by pre- treating with 1 % KMS

Table 2:

Sensory evaluation of pre- treated mushroom powder					
	Appearance	**Texture**	**Odour**	**Colour**	**Overall acceptability**
Farmers Practice	6.2	6.8	6.1	6.1	6.3
T1	7	6.8	6.2	6.7	6.67
T2	7.1	7	6.8	6.5	6.85
T3	7.4	7	7.8	6.9	7.27

Result: Drying & powdering mushroom by pre-treating with 1%KMS found best one amog all treatments. After drying colour quality was good and keeping quality also improved , therefore this technology recommended for the mushroom growers.

C) Home Science -OFT- 3

1.	Title of On farm Trial	Assessment of multigrain atta for reduction of anaemia among rural women
2.	Problem diagnosed	Prevalence of Anaemia
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	Farmer's Practice - Wheat based Roti. Technology Option 1- Wheat flour + Soya flour + Besan (1: 0.25 : 0.5) Technology Option 2- Wheat flour + Soya flour + Maize flour (1: 0.25 : 0.5) Technology Option 3- Wheat flour + Maize flour + Besan (1: 0.25 : 0.5)
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	Punjab Agricultural University, Ludhiana
5.	Production system and thematic area	Design and development of high nutrient efficiency diet
6.	Performance of the Technology with performance indicators	- Pre and post blood hemoglobin tests - Oedema, Koelenchia and body weight Organoleptic Evaluation of the developed roti for its acceptability
7.	Final recommendation for micro level situation	**Technology Option 1-** Wheat flour + Soya flour + Besan (1: 0.25 : 0.5)
8.	Constraints identified and feedback for research	Acceptability of multi grain flour is difficult because of unawareness.
9.	Process of farmers participation and their reaction	a) Short duration trainings in adopted village b) Demonstrations c) Lectures on importance of using greens in combating anaemia

Thematic area: Design and development of high nutrient efficiency diet

Problem definition: Prevalence of Anaemia
Technology assessed: Farmer's Practice - Wheat based Roti.
Technology 1- Wheat flour + Soya flour + Besan (1: 0.25 : 0.5)
Technology 2- Wheat flour + Soya flour + Maize flour (1: 0.25 : 0.5)
Technology 3- Wheat flour + Maize flour + Besan (1: 0.25 : 0.5)

Table 2:

Parameters	**T1**		**T2**		**T3**		**FP**	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Hemoglobin (g/dl)	8.34	11.23 (34.65%)	8.7	10.82 (24.36%)	8.4	10.26 (22.14%)	8.26	8.92 (8%)
Body weight (kg)	52.32	54.84 (4.04 %)	52.61	54.66 (3.89%)	51.54	52.55 (1.95%)	49.52	50.01 (0.98%)
Organoleptic acceptability*	8.86		8.36		8.52		8.3	

* Nine point Hedonic Scale

FP- Wheat flour

TO1- Wheat flour + Soya flour + Besan (1: 0.25 : 0.5)
TO2- Wheat flour + Soya flour + Maize flour (1: 0.25 : 0.5)
TO3- Wheat flour + Maize flour + Besan (1: 0.25 : 0.5)

Results: Technology I proves better due to increase in Hemoglobin level and reduction of Anaemia.

D) Agronomy -OFT- 4

1.	Title of On farm Trial	Performance evaluation of different weed management practices in direct seeded rice.
2.	Problem diagnosed	Low yield due to heavy weed infestation
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	**FP** : 1 Hand weeding (30DAS) **TO 1:** Pyrazosulfuron @120 g ai/ha followed by conoweeder (25DAS). **TO 2:** Bispyribac sodium @ 20 gram /a.i./ha (25DAS) **TO 3:** Fenoxaprop-p-ethyl @ 60 gram a.i./ha + 2,4-D@ 0.5 kg ai /ha (25 DAS).
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	IGKV, Raipur, Chattisgardh
5.	Production system and thematic area	Weed management
6.	Performance of the Technology with performance indicators	Yield, Yield attributes, B:C ratio
7.	Final recommendation for micro level situation	Use of Pyrazosulfuron @120 g ai/ha followed by conoweeder (25DAS) in Direct Seeded Rice.
8.	Constraints identified and feedback for research	Lack of knowledge of INM in direct seeded rice.
9.	Process of farmers participation and their reaction	Satisfactory.

Thematic area: Weed management
Problem definition: Low yield due to heavy weed infestation
Technology assessed:
FP : 1 Hand weeding (30DAS)
TO 1: Pyrazosulfuron @120 g ai/ha followed by conoweeder (25DAS).
TO 2: Bispyribac sodium @ 20 gram /a.i./ha (25DAS)
TO 3: Fenoxaprop-p-ethyl @ 60 gram a.i./ha + 2,4-D@ 0.5 kg ai /ha (25 DAS).
Table3:

Technology option	**No. of trials**	**Yield component**			**Disease/ insect pest incidence (%)**	**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.)**						
Farmer practice: 1 Hand weeding (30DAS)	07	12	72	23.26	19	28.9	-	40200	16100	1.61
Technology Option I – Pyrazosulfuron @120 g ai/ha followed by conoweeder (25DAS)		26	114	24.08	10	40.50	40.13	62800	34300	2.21
Technology Option II – Bispyribac sodium @ 20 gram /a.i./ha (25DAS)		22	101	23.92	14	38.04	31.62	57500	29900	2.09
Technology Option III - Fenoxaprop-p-ethyl @ 60 gram a.i./ha + 2,4-D@ 0.5 kg ai /ha (25 DAS).		18	89	23.81	17	35.60	23.18	51900	27400	2.06

Results:KVK conducted On Farm Trial at 7 locations for performance evaluation of different weed management practices in direct seeded rice for higher productivity. It was observed that application of Pyrazosulfuron @120 g ai/ha followed by conoweeder (25DAS) in Direct Seede Rice performed best result and yield 40.50 q/ha.

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E) Agronomy - OFT - 5

1.	Title of On farm Trial	Weed management in wheat
2.	Problem diagnosed	Yield loss due to lack of knowledge of heribicide application in wheat.
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	Farmer practice (1 hand weeding) Technology I – Sulfosulfuran 25 g ai/ha Technology II – Sulfosulfuran 25 g ai/ha + Metasulfuran 4 g ai/ha
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	RPCAU, Pusa, Samastipur
5.	Production system and thematic area	Weed management
6.	Performance of the Technology with performance indicators	Yield, Yield attributes, B:C ratio
7.	Final recommendation for micro level situation	Application of Sulfosulfuran 25 g ai/ha + Metasulfuran 4 g ai/ha in wheat.
8.	Constraints identified and feedback for research	Lack of knowledge of weed management in wheat.
9.	Process of farmers participation and their reaction	Satisfactory.

Thematic area: Weed management
Problem definition: Yield loss due to lack of knowledge of heribicide application in wheat.

Technology assessed:
Farmer practice (1 hand weeding)
Technology I – Sulfosulfuran 25 g ai/ha
Technology II – Sulfosulfuran 25 g ai/ha + Metasulfuran 4 g ai/ha
Table 4:

Technology option	No. of trials	Yield component			Disease/ insect pest incidence (%)	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.)						
Farmer practice: 1 Hand weeding (30DAS)	07	12	72	23.26	19	28.9	-	40200	16100	1.61
Technology Option I – Pyrazosulfuron @120 g ai/ha followed by conoweeder (25DAS)		26	114	24.08	10	40.50	40.13	62800	34300	2.21
Technology Option II – Bispyribac sodium @ 20 gram /a.i./ha (25DAS)		22	101	23.92	14	38.04	31.62	57500	29900	2.09
Technology Option III - Fenoxaprop-p-ethyl @ 60 gram a.i./ha + 2,4-D@ 0.5 kg ai /ha (25 DAS).		18	89	23.81	17	35.60	23.18	51900	27400	2.06

Results: On Farm Trial has been conducted at 7 locations to evaluate the weed management in wheat for sustainable and higher productivity. It was observed that application of Sulfosulfuran 25 g ai/ha + Metasulfuran 4 g ai/ha in wheat performed based result and yield was 41.2 q/ha.

F) Plant Protection - OFT 6

1.	Title of On farm Trial	Efficacy of borer and sucking pest management practices in Okra.
2.	Problem diagnosed	Major losses due to pest infestation in Okra and lack of knowledge in pest management.
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	**Farmers Practice (T_0):** Spray of any insecticide as per suggestion of locally available pesticide shops. **T_1:** Yellow/blue sticky traps @ 10-20 traps/acre + Spray Azadirachtin (1500 ppm) @ 5 ml/liter of water + Pheromone trap @ 15/acre. **T_2:** Installation of Pheromone trap @ 15/acre + Yellow/blue sticky traps @ 10-20 traps/acre and spray of Emamectin Benzoate 5% SG@ 0.4 g/liter of water.
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	Directorate of Plant Protection Quarantine& Storage, Faridabad
5.	Production system and thematic area	Integrated pest management
6.	Performance of the Technology with performance indicators	• No. of nymph and adult/plant • No. of curled leaf/plant • Per plant larval population • Fruit yield • % increase in yield over control • B:C ratio
7.	Final recommendation for micro level situation	Installation of Pheromone traps @ 15/acre + Yellow/blue sticky traps @ 10-20 traps/acre and spraying of *Emamectin Benzoate* 5% SG @ 0.4 g/liter of water revealed the result among the all three treatments.
8.	Constraints identified and feedback for research	Heavy rainfall and water logging during cropping period.
9.	Process of farmers participation and their reaction	Satisfactory.

Table 5:

Technology option	**No. of trials**	No. of nymph and adult/plant	No. of curled leaf/plant	Per plant larval population	Fruit yield (ha^{-1})	% increase in yield over control	B:C ratio
Farmers Practice (T_0)	08	55.36	10.25	5.9	44.5 q	-	-
T_1		45.88	4.16	3.9	50.2 q	12.8	9:1
T_2		31.08	2.87	2.1	54.0 q	21.3	11:1

Results: Treatment 2 performed the best result among the all three treatments including farmer practices in which we observed the highest yield *i.e;* 54 q/ha and 21.3% yield increment over the farmer practices.



G) Plant Protection - OFT 7

1.	Title of On farm Trial	Eco-friendly management of Early blight (*Alternaria solani*) in Tomato.
2.	Problem diagnosed	There is a marked outbreak of early blight disease in Tomato.
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	**Farmers Practice (T_0):** Spray of any chemical fungicides as per suggestion of locally available pesticide shops. **T_1:** i) Soil application of multiplied *Trichoderma viride*@1 kg in 25 kg of Vermicompost before transplanting. ii) Seedling treatment by root dipping in *Trichoderma viride* solution @ 10g/lit. of water at the time of planting. iii) Spray *Trichoderma viride* (0.5%) @ 10 g/lit. of water at 7 days interval on standing crop. **T_2:** Spray with Azoxystrobin 23% SC @1 g/lit. of water at 10 days interval.
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	Indian Institute of Horticultural Research, Banglore
5.	Production system and thematic area	Integrated disease management
6.	Performance of the Technology with performance indicators	✓ % of infested plant before spraying ✓ % of infested plant after spraying ✓ Fruit yield ✓ % increase in yield over control ✓ B:C ratio
7.	Final recommendation for micro level situation	Technical option 1 shown the best result among the others to control the Early blight in Tomato
8.	Constraints identified and feedback for research	Lack of knowledge and awareness regarding disease concern
9.	Process of farmers participation and their reaction	Satisfactory

Table 5:

Technology option	**No. of trials**	% of infested plant before spraying	% of infested plant after spraying	Fruit yield	% increase in yield over control	B:C ratio
Farmers Practice (T_0)	07	42	44	250.2 q	-	3.2:1
T_1		45	12	315.6 q	26.13 %	6:1
T_2		33	32	302.4 q	20.8 %	45:1

Results: The highest fruit yield i.e; 315.6 q/ha observed in Treatment 1 and percent increase in yield i.e; 26.13% over farmer practices.



H) Horticulture - OFT 8

1.	Title of On farm Trial	Bearing regulation in litchi through girdling of primary branch.
2.	Problem diagnosed	Irregular bearing at young stage of the plant in all litchi cultivars is a phenomenon constraint in general and alternate bearing in cultivar of China group in particular.
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	**Farmers practice-** No girdling **Technology option 1-** Circular **g**irdling 2mm diameter on 50% primary branches during 1st week of September. **Technology option 2-** Circular Girdling 3 mm diameter on 50% primary branches during 1st week of September.
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	ICAR-NRC on Litchi Muzaffarpur, AICRP on fruits
5.	Production system and thematic area	Fruit (Regulation of flowering and fruiting in litchi)
6.	Performance of the Technology with performance indicators	• Number of vegetative flush • Percent of shots flowered in both panicle • Number of fruits per bunch • Seed borer infestation • Fruit weight • Fruit size • TSS
7.	Final recommendation for micro level situation	On going
8.	Constraints identified and feedback for research	
9.	Process of farmers participation and their reaction	

I) Agronomy-OFT 9

1.	Title of On farm Trial	Assessment of different Integrated Nutrient Management practices for higher productivity of Mustard.
2.	Problem diagnosed	Use of Imbalanced fertilizer
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	T0-Farmers practice (Only 2 kg DAP) T1-RDF + 10 t/ha FYM T2- RDF + 10 t/ha FYM + 20 kg Sulphur T3-RDF + 10 t/ha FYM + 20 kg Sulphur + Azotobacter (10 gm/kg seed)
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	DRPCAU, Pusa
5.	Production system and thematic area	Integrated Nutrient Management
6.	Performance of the Technology with performance indicators	Yield, Yield attributes, B:C ratio
7.	Final recommendation for micro level situation	On going
8.	Constraints identified and feedback for research	
9.	Process of farmers participation and their reaction	

J) Home Science -OFT 10

1.	Title of On farm Trial	Effect of different treatment methods on preparation of *Oyster mushroom* powder to enhance the self- life.
2.	Problem diagnosed	Mushroom are rapidly perishable and deteriorates immediately after harvest.
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	**FP:** Drying & powdering mushroom without any treatment. **TO_1:** Drying & powdering mushroom by pre- treating with 0.5 % citric acid **TO_2:**Drying & powdering mushroom by pre- treating with 0.5 % KMS **TO_3:** Drying & powdering mushroom by pre- treating with 1 % KMS
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	University of Agricultural Sciences, Banglore
5.	Production system and thematic area	Value addition
6.	Performance of the Technology with performance indicators	Organoleptic evaluation of the developed power for its acceptability
7.	Final recommendation for micro level situation	On going
8.	Constraints identified and feedback for research	
9.	Process of farmers participation and their reaction	

3.1.2 Technology Assessed by KVK (Discipline wise)

Sl. No.	Discipline	Thematic areas	No. of the technologies (Technology Interventions)	No. of trials	No. of Locations
1.	Crop Production				
2.	Livestock				
3.	Enterprises	Mushroom production	01	25	10
		Beekeeping	01	10	05
		Quail farming	01	14	14
		Nursery management	01	15	15
		Banana fiber extraction	02	02	02
4.	Women Empowerment	Income generation activities	01	05	05

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.)		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.	Paddy	Nutrient management	Use of Zinc	08	08	07	01	0	0	09	03	16	04	20	
2.	Vegetable	Integrated Pest Management	Pheromone trap and Yellow sticky trap	25	25	04	0	0	0	19	02	23	02	25	
3.	Fruit & Vegetable	Integrated Pest Management	Fruit fly trap	25	25	05	0	0	0	17	03	22	03	25	
4.	Nutrition garden	Household food security	Improved seed	01	01	06	47	0	0	10	20	16	67	83	
5.	Wheat	Nutrient management	Use of Boron	04	04	02	01	0	0	05	02	07	03	10	
		Weed management	Use of weedicide	08	08	03	03	0	0	12	02	15	05	20	

FLD on Paddy

FLD on Yellow sticky trap

Installation of Pheromone trap in Cauliflower

Yellow sticky trap distributed to the farmer for installation in Tomato

FLD on Fruit fly trap

FLD on Improved seed

Details of farming situation

Sl. No.	Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil (Kg/ha)			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
					N	P_2O_5	K_2O					
1.	Potato	*Rabi*	RF	Sandy loam	155	22	152	Paddy	24/11/20	12/03/21	3 mm	02

2.	Tori	*Rabi*	RF	Sandy loam	155	22	152	Paddy	16/11/20	07/03/21		
3.	Moong	*Summer*	RF	Sandy loam	167	30	175	Potato	22/03/21	06/06/21		
4.	Paddy	*Kharif*	RF	Sandy loam	195	28	169	Moong	16/06/21	07/11/21	993	50
5.	Potato	*Rabi*	RF	Sandy loam	162	32	175	Paddy	24/11/20	Standing	3 mm	02
6.	Tori	*Rabi*	RF	Sandy loam	162	32	175	Paddy	23/11/21	Standing		

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.

B. Performance of FLD

Oilseeds: NA

Frontline demonstrations on oilseed crops

Crop	Thematic Area	Name of the technology demonstrated	No. of Farmers	Area (ha)	Yield (q/ha)		% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demo	Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Total															

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

Pulses : NA

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
	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 crops:

Crop	Thematic area	Name of the technology demonstrated	No. of Farmer	Area (ha)/No.	Yield (q/ha)		% change in yield	Other parameters		*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demonstration	Check		Demo	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Paddy	Nutrient management	Use of Zinc	20	08	33.8	26.10	29.50	3% (Disease incidence)	8% (Disease incidence)	26700	69500	42800	2.60	24500	51940	27440	2.12
Vegetable	Integrated pest Management	Pheromone trap and Yellow sticky trap	25	25	22	20	10	5% (Insect infestation)	20% (Insect infestation)	110000	360000	250000	3.27	128000	288000	160000	2.25
Fruit & Vegetable	Integrated pest Management	Fruit fly trap	25	25	17.6	16	10	8% (Insect infestation)	22% (Insect infestation)	125000	416000	291000	3.32	132000	390000	258000	2.95
Nutrition garden	Household food security	Improved variety seed	83	01	198	161	22.98	4.5% (Disease incidence)	9% (Disease incidence)	43000	192000	149000	4.4	48000	155000	107000	3.22
Wheat	Nutrient management	Use of Boron	10	04	On going.												

Wheat	Weed management	Use of weedicide	20	08	On going.
	Total				

Livestock: NA

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		Demons Ration	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=GROSSRETURN/GROSSCOST

Fisheries : NA

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	Florida sp. demonstrated	25	25	700 kg	375 kg	86.6	-	-	42525	105125	62600	2.47	20875	42550	33675	2.03
Button mushroom																
Vermicompost																
Sericulture																
Apiculture	Super box demonstrated	10	10	600 kg	300 kg	100	-	-	280000	400000	372000	1.42	160000	240000	80000	1.5
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/ Area covered (m^2 per hour)		Remarks
			Demonstration	Check	
Farm Women					
Pregnant women					
Adolescent Girl					
Other women					
Children					
Neonatal					
Infants					

Farm implements and machinery

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

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

Demonstration details on crop hybrids

Crop	Name of the Hybrid	No. of Farmers	Area (ha)	Yield (kg/ha) / major parameter			Economics (Rs./ha)			
				Demo	Local check	% change	GrossCost	GrossReturn	NetReturn	BCR
Cereals										
Bajra										
Maize										
Paddy										
Sorghum										
Wheat										
Others (Pl.specify)										
Total Cereals										
Oilseeds										
Castor										
Mustard										
Safflower										
Sesame										
Sunflower										
Groundnut										
Soybean										
Others (Pl.specify)										
Total Oilseeds										
Pulses										
Greengram										
Blackgram										
Bengalgram										
Redgram										
Others (Pl.specify)										
Total Pulses										
Vegetable crops										
Bottle gourd										
Capsicum										
Cucumber										
Tomato										
Brinjal										
Okra										
Onion										
Potato										
Field bean										
Others (Pl.specify)										
Total Veg. Crops										
Commercial Crops										
Cotton										
Coconut										
Others (Pl.specify)										
Total Commercial Crops										
Fodder crops										
Napier (Fodder)										
Maize (Fodder)										
Sorghum (Fodder)										
Others (Pl.specify)										
Total Fodder Crops										

Technical Feedback on the demonstrated technologies

Sl. No	Crop	Feed Back
1.	Vegetable and Fruit	Farmers used the mechanical tools of IPM and found the less infestation of diseases and insect, more fruit setting and incremental yield enhancement
2.	Kitchen garden	Availability of vegetables at low cost at household level

Extension and Training activities under FLD

Sl. No.	Activity	Date	No. of activities organized	Number of participants	Remarks
1.	Field days	21.12.21 5.02.21	01 01	14 25	Pheromone trap, Yellow sticky trap, Fruit fly Kitchen gardening
2.	Farmers Training	24.12.21 25.03.21	01 01	50 25	IPM in *Rabi* crop Cropping in kitchen garden
3.	Media coverage	21.03.21	01	17	
4.	Training for extension functionaries	-	-	-	

Performance of the demonstration under CFLD on Pulse and Oilseed Crops during *Kharif* and *Rabi*:

A. Technical Parameters:

Sl. No.	Crop demonstrated	Existing (Farmer's) variety name	Existing yield (q/ha)	Yield gap (Kg/ha) w.r.to			Name of Variety + Technology demonstrated	Number of farmers	Area in ha	Yield obtained (q/ha)			Yield gap minimized (%)		
				District yield (D)	State yield (S)	Potential yield (P)				Max.	Min.	Av.	D	S	P
1.	Green gram	Local	6.4	150	520	1160	IPM 2-14+INM+IPM	39	14	11.04	6.70	8.87	9	45	21
2.	Rai	Local	8.30	80	220	1170	Rajendra suflam+INM+IPM	82	50	13.88	9.74	11.81	10	10	27

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.	IPM 2-14+INM+IPM	21500	35850	14350	1.66	22200	32800	30600	2.37
2.	Rajendra suflam+INM+IPM	17250	41000	23750	2.37	18750	58200	39450	3.10

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.	Green gram IPM 2-14	887	16 kg	90	32	275	Education to the children	40
2.	Rajendra Suflam	1181	6 kg	32	10	155	Education to the children	31

D. Oilseed Farmers' perception of the intervention demonstrated

Sl. No.	Technologies demonstrated (with name)	Farmers' Perception parameters					
		Suitability to their farming system	Likings (Preference)	Affordability	Any negative effect	Is Technology acceptable to all in the group/village	Suggestions, for change/improvement, if any
1.	Improved variety	Very much appreciated due to less incidence of insect pest	Very much preferred	Little bit costlier but affordable	No	Yes	Needs further research for soil health

E. Specific Characteristics of Technology and Performance

Specific Characteristic	Performance	Performance of Technology vis-a vis Local Check	Farmers Feedback
Yield	Bitter yield in field	Bitter yield due to bold seed	Customer preferred to buy bold seed

F. Extension activities under FLD conducted:

Sl. No.	Extension Activities organized	Date and place of activity	Number of farmer attended
1.	Field day	04.01.2021, Bakhari Barai	12

2.	Training	15.01.2021, Dhabauli	16
3.	Field visit	24.04.2021, Hariharpur	13
4.	Field day	27.09.2021, Panapur Langa	11
5.	Field day	12.12.2021, Faridpur	17
6.	Field day	23.12.2021, Sheetal Bhakurahar	16

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

H. Farmers' training photographs

I. Quality Action Photographs of field visits/field days and technology demonstrated.

J. Details of budget utilization (01.04.2021 to 31.12.2021)

Crop (provide crop wise information)	Items	Budget Received (Rs.)	Budget Utilization (Rs.)	Balance (Rs.)
	i) Critical input	0	0	0
	ii) TA/DA/POL etc. for monitoring		0	
	iii) Extension Activities (Field day)			
	iv)Publication of literature		0	
	Total	**0**	**0**	**0**

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													
Cropping Systems													
Crop Diversification													
Integrated Farming													
Integrated Nutrient Management	01	09	12	21	06	0	06	0	0	0	15	12	27
Water management													
Seed production													
Nursery management													
Integrated Crop Management													
Fodder production													
Production of organic inputs	01	06	03	09	04	02	06	0	0	0	10	05	15
Others, (Soil testing)													
II. Horticulture													
a) Vegetable Crops													
Integrated nutrient management													
Water management													
Enterprise development	01	23	07	30	17	05	22	0	0	0	40	12	52
Skill development													
Yield increment													
Production of low volume and high value crops													
Off-season vegetables													
Nursery raising													
Export potential vegetables													
Grading and standardization													
Protective cultivation (Green Houses, Shade Net etc.)	01	20	07	27	12	05	17	0	0	0	32	12	44
Others, if any (Cultivation of Vegetable)													
Training and Pruning													
b) Fruits													
Layout and Management of Orchards													
Cultivation of Fruit													
Management of young plants/orchards													
Rejuvenation of old orchards													
Export potential fruits													
Micro irrigation systems of orchards													
Plant propagation techniques													
Others, if any(INM)													
c) Ornamental Plants													
Nursery Management	02	54	06	60	35	06	41	0	0	0	89	12	101
Management of potted plants													
Export potential of ornamental plants													
Propagation techniques of Ornamental Plants													
Others, if any													
d) Plantation crops													
Production and Management technology													

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
Processing and value addition													
Others, if any													
e) Tuber crops													
Production and Management technology													
Processing and value addition													
Others, if any													
f) Spices													
Production and Management technology													
Processing and value addition													
Others, if any													
g) Medicinal and Aromatic Plants													
Nursery management													
Production and management technology	01	20	05	25	14	03	17	0	0	0	34	08	42
Post-harvest technology and value addition													
Others, if any													
III. Soil Health and Fertility Management													
Soil fertility management													
Soil and Water Conservation													
Integrated Nutrient Management													
Production and use of organic inputs													
Management of Problematic soils													
Micro nutrient deficiency in crops													
Nutrient Use Efficiency													
Soil and Water Testing													
Others, if any													
IV. Livestock Production and Management													
Dairy Management													
Poultry Management (Quail)													
Piggery Management													
Rabbit Management													
Disease Management													
Feed management													
Production of quality animal products													
Others, if any Goat farming													
V. Home Science/Women empowerment													
Household food security by kitchen gardening and nutrition gardening	09	03	112	115	11	147	158	0	0	0	14	238	252
Design and development of low/minimum cost diet													
Designing and development for high nutrient efficiency diet	01	28	10	38	12	06	18	0	0	0	40	16	66

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
Minimization of nutrient loss in processing													
Gender mainstreaming through SHGs													
Storage loss minimization techniques	02	16	33	49	21	39	60	0	0	0	37	72	109
Enterprise development													
Value addition	01	0	05	05	0	15	15	0	0	0	0	20	20
Income generation activities for empowerment of rural Women													
Location specific drudgery reduction technologies													
Rural Crafts													
Capacity building													
Women and child care	01	11	03	14	07	01	08	0	0	0	18	04	22
Others, if any													
VI.Agril. Engineering													
Installation and maintenance of micro irrigation systems													
Use of Plastics in farming practices													
Production of small tools and implements													
Repair and maintenance of farm machinery and implements													
Small scale processing and value addition													
Post-Harvest Technology													
Others, if any													
VII. Plant Protection													
Integrated Pest Management	02	17	07	24	10	01	11	0	0	0	27	08	35
Integrated Disease Management	02	17	07	24	10	01	11	0	0	0	27	08	35
Bio-control of pests and diseases	01	15	05	20	03	02	05	0	0	0	18	07	25
Production of bio control agents and bio pesticides													
Others, if any													
VIII. Fisheries													
Integrated fish farming													
Carp breeding and hatchery management													
Carp fry and fingerling rearing													
Composite fish culture & fish disease													
Fish feed preparation & its application to fish pond, like nursery, rearing & stocking pond													
Hatchery management and culture of freshwater prawn													
Breeding and culture of ornamental fishes													
Portable plastic carp hatchery													
Pen culture of fish and prawn													
Shrimp farming													
Edible oyster farming													

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
Pearl culture													
Fish processing and value addition													
Others, if any													
IX. Production of Inputs at site													
Seed Production													
Planting material production													
Bio-agents production													
Bio-pesticides production													
Bio-fertilizer production													
Vermi-compost production													
Organic manures production													
Production of fry and fingerlings													
Production of Bee-colonies and wax sheets													
Small tools and implements													
Production of livestock feed and fodder													
Production of Fish feed													
Others, if any													
X. Capacity Building and Group Dynamics													
Leadership development													
Group dynamics													
Formation and Management of SHGs													
Mobilization of social capital													
Entrepreneurial development of farmers/youths													
WTO and IPR issues													
Others, if any													
XI Agro-forestry													
Production technologies													
Nursery management													
Integrated Farming Systems													
XII. Others (Pl. Specify)													
TOTAL	**26**	**239**	**222**	**461**	**162**	**233**	**395**	**0**	**0**	**0**	**401**	**434**	**845**

B) Rural Youth (On campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Mushroom Production	01	16	2	18	05	02	07	0	0	0	21	04	25
Bee-keeping	01	12	4	16	06	03	09	0	0	0	18	07	25
Integrated Nutrient Management	01	10	02	12	06	01	07	0	0	0	16	03	19
Seed production	01	15	02	17	02	02	04	0	0	0	17	04	21
Production of organic inputs													
Integrated Farming													
Crop Residence Management													
Planting material 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
Vermi-culture	01	09	02	11	02	07	09	0	0	0	11	09	20
Sericulture													
Protected cultivation of vegetable crops													
Commercial fruit production													
Repair and maintenance of farm machinery and implements													
Nursery Management of Horticulture crops	01	05	02	07	05	02	07	0	0	0	10	04	14
Training and pruning of orchards													
Value addition													
Production of quality animal products													
Dairying													
Sheep and goat rearing	01	17	03	20	04	0	04	0	0	0	21	03	24
Quail farming													
Piggery													
Rabbit farming													
Poultry production													
Ornamental fisheries													
Enterprise development	03	17	19	19	05	25	30	0	0	0	22	45	67
Para vets													
Para extension workers													
Composite fish culture													
Freshwater prawn culture													
Shrimp farming													
Pearl culture													
Cold water fisheries													
Fish harvest and processing technology													
Fry and fingerling rearing													
Small scale processing													
Post-Harvest Technology													
Tailoring and Stitching													
Rural Crafts	01	01	07	08	0	10	10	0	0	0	01	17	18
TOTAL	**11**	**102**	**43**	**128**	**35**	**52**	**87**	**0**	**0**	**0**	**137**	**96**	**233**

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													
Crop Residue Management	01	14	0	14	03	0	03	0	0	0	17	0	17
Value addition													
Integrated Pest Management	01	26	12	38	07	05	12	0	0	0	33	17	50
Integrated Nutrient management													
Importance of biodiversity													

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
Importance of soil health													
Nursery raising													
Protected cultivation technology													
Formation and Management of SHGs													
Group Dynamics and farmers organization													
Information networking among farmers													
Capacity building for ICT application													
Care and maintenance of farm machinery and implements													
WTO and IPR issues													
Management in farm animals													
Livestock feed and fodder production													
Household food security													
Women and Child care	02	0	09	09	0	26	26	0	0	0	0	35	35
Low cost and nutrient efficient diet designing													
Production and use of organic inputs													
Gender mainstreaming through SHGs													
TOTAL	**04**	**40**	**21**	**61**	**10**	**31**	**41**	**0**	**0**	**0**	**50**	**52**	**102**

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	02	14	04	18	07	02	09	0	0	0	21	06	27
Resource Conservation Technologies	02	11	06	17	09	04	13	0	0	0	20	10	30
Cropping Systems													
Crop Diversification	01	15	0	15	0	06	06	0	0	0	15	06	21
Integrated Farming													
Water management	02	20	03	23	09	04	13	0	0	0	29	07	36
Seed production	01	09	03	12	04	02	06	0	0	0	13	05	18
Nursery management													
Integrated Crop Management	05	26	34	60	18	09	27	0	0	0	44	43	87
Fodder production													
Production of organic inputs	02	11	19	30	04	16	20	0	0	0	15	35	50
Others, (cultivation of crops)													
II. Horticulture													
a) Vegetable Crops													
Integrated nutrient management													
Water management													
Enterprise development													
Skill development													
Yield increment													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Production of low volume and high value crops													
Off-season vegetables													
Nursery raising													
Export potential vegetables													
Grading and standardization													
Protective cultivation (Green Houses, Shade Net etc.)													
Others, if any (Cultivation of Vegetable)													
Training and Pruning													
b) Fruits													
Layout and Management of Orchards													
Cultivation of Fruit													
Management of young plants/orchards													
Rejuvenation of old orchards													
Export potential fruits													
Micro irrigation systems of orchards													
Plant propagation techniques													
Others, if any(IFS)													
c) Ornamental Plants													
Nursery Management													
Management of potted plants													
Export potential of ornamental plants													
Propagation techniques of Ornamental Plants													
Others, if any													
d) Plantation crops													
Production and Management technology													
Processing and value addition													
Others, if any													
e) Tuber crops													
Production and Management technology													
Processing and value addition													
Others, if any													
f) Spices													
Production and Management technology													
Processing and value addition													
Others, if any													
g) Medicinal and Aromatic Plants													
Nursery management													
Production and management technology													
Post-harvest technology and value addition													
Others, if any													

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													
Soil and Water Conservation													
Integrated Nutrient Management													
Production and use of organic inputs													
Management of Problematic soils													
Micro nutrient deficiency in crops													
Nutrient Use Efficiency													
Soil and Water Testing													
Others, if any													
IV. Livestock Production and Management													
Dairy Management													
Poultry Management													
Piggery Management													
Rabbit Management													
Disease Management													
Feed management													
Production of quality animal products													
Others, if any Goat farming													
V. Home Science/Women empowerment													
Household food security by kitchen gardening and nutrition gardening	01	0	06	06	0	29	29	0	0	0	0	35	35
Design and development of low/minimum cost diet	04	0	39	39	0	71	71	0	0	0	0	110	109
Designing and development for high nutrient efficiency diet													
Minimization of nutrient loss in processing													
Gender mainstreaming through SHGs													
Storage loss minimization techniques													
Enterprise development	01	22	0	22	15	0	15	0	0	0	37	0	37
Value addition	01	0	04	04	0	21	21	0	0	0	0	25	25
Income generation activities for empowerment of rural Women													
Women and Child care	01	0	07	07	01	08	08	0	0	0	0	15	15
Location specific drudgery reduction technologies													
Rural Crafts	02	04	16	20	0	19	19	0	0	0	04	35	39
Capacity building													
Women and child care													
Others, if any													
VI.Agril. Engineering													
Installation and maintenance of micro irrigation systems													
Use of Plastics in farming practices													
Production of small tools and implements													

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
Repair and maintenance of farm machinery and implements													
Small scale processing and value addition													
Post-Harvest Technology													
Others, if any													
VII. Plant Protection													
Integrated Pest Management	03	76	88	164	29	18	47	0	0	0	105	106	211
Integrated Disease Management	03	76	88	164	29	18	47	0	0	0	105	106	211
Bio-control of pests and diseases	01	13	03	16	04	02	06	0	0	0	17	05	22
Production of bio control agents and bio pesticides													
Others, if any													
VIII. Fisheries													
Integrated fish farming													
Carp breeding and hatchery management													
Carp fry and fingerling rearing													
Composite fish culture & fish disease													
Fish feed preparation & its application to fish pond, like nursery, rearing & stocking pond													
Hatchery management and culture of freshwater prawn													
Breeding and culture of ornamental fishes													
Portable plastic carp hatchery													
Pen culture of fish and prawn													
Shrimp farming													
Edible oyster farming													
Pearl culture													
Fish processing and value addition													
Others, if any													
IX. Production of Inputs at site													
Seed Production													
Planting material production													
Bio-agents production													
Bio-pesticides production													
Bio-fertilizer production													
Vermi-compost production													
Organic manures production													
Production of fry and fingerlings													
Production of Bee-colonies and wax sheets													
Small tools and implements													
Production of livestock feed and fodder													
Production of Fish feed													
Others, if any													

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
X. Capacity Building and Group Dynamics													
Leadership development													
Group dynamics													
Formation and Management of SHGs													
Mobilization of social capital													
Entrepreneurial development of farmers/youths													
WTO and IPR issues													
Others, if any													
XI Agro-forestry													
Production technologies													
Nursery management													
Integrated Farming Systems													
XII. Others (Pl. Specify)													
TOTAL	**32**	**297**	**320**	**617**	**129**	**229**	**357**	**0**	**0**	**0**	**425**	**549**	**973**

E) RURAL YOUTH (Off Campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Mushroom Production	02	26	09	35	03	01	04	0	0	0	29	10	39
Bee-keeping	02	28	06	34	12	04	16	0	0	0	40	10	50
Integrated farming													
Seed production													
Production of organic inputs													
Integrated Farming													
Planting material production													
Vermi-culture													
Sericulture													
Protected cultivation of vegetable crops													
Commercial fruit production													
Repair and maintenance of farm machinery and implements													
Nursery Management of Horticulture crops	02	54	06	60	35	06	41	0	0	0	89	12	101
Training and pruning of orchards													
Value addition	01	76	17	93	10	05	15	0	0	0	86	22	108
Production of quality animal products													
Dairying													
Sheep and goat rearing	01	17	03	20	04	0	04	0	0	0	21	03	24
Quail farming													

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
Piggery													
Rabbit farming													
Poultry production													
Ornamental fisheries													
Para vets													
Para extension workers													
Composite fish culture													
Freshwater prawn culture													
Shrimp farming													
Pearl culture													
Cold water fisheries													
Fish harvest and processing technology													
Fry and fingerling rearing													
Small scale processing													
Post-Harvest Technology													
Tailoring and Stitching													
Rural Crafts	01	03	09	12	0	09	09	0	0	0	03	09	12
Others, if any													
TOTAL	**09**	**204**	**50**	**254**	**64**	**25**	**89**	**0**	**0**	**0**	**268**	**66**	**334**

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	01	158	02	160	47	23	70	0	0	0	205	25	230
Integrated Pest Management	01	205	25	230	40	30	70	0	0	0	245	55	300
Integrated Nutrient management													
Rejuvenation of old orchards													
Protected cultivation technology													
Formation and Management of SHGs													
Group Dynamics and farmers organization													
Information networking among farmers													
Capacity building for ICT application													
Care and maintenance of farm machinery and implements													
WTO and IPR issues													
Management in farm animals													
Livestock feed and fodder production													

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													
Women and Child care													
Low cost and nutrient efficient diet designing													
Production and use of organic inputs	01	11	0	11	04	0	04	0	0	0	15	0	15
Gender mainstreaming through SHGs													
Crop intensification													
TOTAL	**3**	**37 4**	**27**	**401**	**91**	**53**	**144**	**0**	**0**	**0**	**465**	**80**	**545**

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	02	14	04	18	07	02	09	0	0	0	21	06	27
Resource Conservation Technologies	02	11	06	17	09	04	13	0	0	0	20	10	30
Cropping Systems													
Crop Diversification	01	15	0	15	0	06	06	0	0	0	15	06	21
Integrated Farming													
Integrated Nutrient Management	01	09	12	21	06	0	06	0	0	0	15	12	27
Water management	02	20	03	23	09	04	13	0	0	0	29	07	36
Seed production	01	09	03	12	04	02	06	0	0	0	13	05	18
Nursery management													
Integrated Crop Management	05	26	34	60	18	09	27	0	0	0	44	43	87
Fodder production													
Production of organic inputs	03	17	22	39	08	18	26	0	0	0	25	40	65
Others, (cultivation of crops)													
TOTAL	**17**	**121**	**84**	**205**	**61**	**45**	**106**	**0**	**0**	**0**	**182**	**12 9**	**31 1**
II. Horticulture													
a) Vegetable Crops													
Integrated nutrient management													
Water management													
Enterprise development	01	23	07	30	17	05	22	0	0	0	40	12	52
Skill development													
Yield increment													
Production of low volume and high value crops													
Off-season vegetables													
Nursery raising													
Exotic vegetables like Broccoli													
Export potential vegetables													
Grading and standardization													

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
Protective cultivation (Green Houses, Shade Net etc.)	01	20	07	27	12	05	17	0	0	0	32	12	44
Others, if any (Cultivation of Vegetable)													
b) Fruits													
Training and Pruning													
Layout and Management of Orchards													
Cultivation of Fruit													
Management of young plants/orchards													
Rejuvenation of old orchards													
Export potential fruits													
Micro irrigation systems of orchards													
Plant propagation techniques													
Others, if any(IFM)													
TOTAL													
c) Ornamental Plants													
Nursery Management	02	54	06	60	35	06	41	0	0	0	89	12	101
Management of potted plants													
Export potential of ornamental plants													
Propagation techniques of Ornamental Plants													
Others, if any													
TOTAL	**04**	**97**	**20**	**117**	**64**	**16**	**80**	**0**	**0**	**0**	**161**	**36**	**197**
d) Plantation crops													
Production and Management technology													
Processing and value addition													
Others, if any													
TOTAL													
e) Tuber crops													
Production and Management technology													
Processing and value addition													
Others, if any													
TOTAL													
f) Spices													
Production and Management technology													
Processing and value addition													
Others, if any													
TOTAL													
g) Medicinal and Aromatic Plants													
Nursery management													
Production and management technology	01	20	05	25	14	03	17	0	0	0	34	08	42
Post harvest technology and value addition													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Others, if any													
TOTAL	**01**	**20**	**05**	**25**	**14**	**03**	**17**	**0**	**0**	**0**	**34**	**08**	**42**
III. Soil Health and Fertility Management													
Soil fertility management													
Soil and Water Conservation													
Integrated Nutrient Management													
Production and use of organic inputs													
Management of Problematic soils													
Micro nutrient deficiency in crops													
Nutrient Use Efficiency													
Soil and Water Testing													
Others, if any													
TOTAL													
IV. Livestock Production and Management													
Dairy Management													
Poultry Management													
Piggery Management													
Rabbit Management													
Disease Management													
Feed management													
Production of quality animal products													
Others, if any (Goat farming)													
TOTAL													
V. Home Science/Women empowerment													
Household food security by kitchen gardening and nutrition gardening	10	03	118	121	11	176	187	0	0	0	14	273	287
Design and development of low/minimum cost diet	08	0	39	39	0	71	71	0	0	0	0	110	109
Designing and development for high nutrient efficiency diet	05	28	49	77	12	77	89	0	0	0	40	126	175
Minimization of nutrient loss in processing													
Gender mainstreaming through SHGs													
Storage loss minimization techniques	02	16	33	49	21	39	60	0	0	0	37	72	109
Enterprise development	01	22	0	22	15	0	15	0	0	0	37	0	37
Value addition	02	0	9	9	0	36	36	0	0	0	0	45	45
Income generation activities for empowerment of rural Women	01	0	13	13	0	13	13	0	0	0	0	26	26
Location specific drudgery reduction technologies	01	11	3	14	07	01	08	0	0	0	18	04	22
Rural Crafts	02	04	16	20	0	19	19	0	0	0	04	35	39
Capacity building													
Women and child care	02	11	10	21	08	09	16	0	0	0	18	19	37
Others, if any													
TOTAL	**34**	**95**	**290**	**385**	**74**	**441**	**514**	**0**	**0**	**0**	**168**	**710**	**886**

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
VI.Agril. Engineering													
Installation and maintenance of micro irrigation systems													
Use of Plastics in farming practices													
Production of small tools and implements													
Repair and maintenance of farm machinery and implements													
Small scale processing and value addition													
Post-Harvest Technology													
Others, if any													
TOTAL													
VII. Plant Protection													
Integrated Pest Management	5	93	95	188	39	19	58	0	0	0	132	114	246
Integrated Disease Management	5	93	95	188	39	19	58	0	0	0	132	114	246
Bio-control of pests and diseases	2	28	8	36	7	4	11	0	0	0	35	12	47
Production of bio control agents and bio pesticides													
Others, if any													
TOTAL	**12**	**214**	**198**	**412**	**85**	**42**	**127**	**0**	**0**	**0**	**299**	**240**	**539**
VIII. Fisheries													
Integrated fish farming													
Carp breeding and hatchery management													
Carp fry and fingerling rearing													
Composite fish culture & fish disease													
Fish feed preparation & its application to fish pond, like nursery, rearing & stocking pond													
Hatchery management and culture of freshwater prawn													
Breeding and culture of ornamental fishes													
Portable plastic carp hatchery													
Pen culture of fish and prawn													
Shrimp farming													
Edible oyster farming													
Pearl culture													
Fish processing and value addition													
Others, if any													
TOTAL													
IX. Production of Inputs at site													
Seed Production													
Planting material production													
Bio-agents production													
Bio-pesticides production													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Bio-fertilizer production													
Vermi-compost production													
Organic manures production													
Production of fry and fingerlings													
Production of Bee-colonies and wax sheets													
Small tools and implements													
Production of livestock feed and fodder													
Production of Fish feed													
Others, if any													
TOTAL													
X. Capacity Building and Group Dynamics													
Leadership development													
Group dynamics													
Formation and Management of SHGs													
Mobilization of social capital													
Entrepreneurial development of farmers/youths													
WTO and IPR issues													
Others, if any													
TOTAL													
XI Agro-forestry													
Production technologies													
Nursery management													
Integrated Farming Systems													
TOTAL													
XII. Others (Pl. specify)													
TOTAL													

an

ii. RURAL YOUTH (On and Off Campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Mushroom Production	3	42	11	53	8	3	11	0	0	0	50	14	64
Bee-keeping	3	40	10	50	18	7	25	0	0	0	58	17	75
Integrated Nutrient Management	01	10	02	12	06	01	07	0	0	0	16	03	19
Seed production	01	15	02	17	02	02	04	0	0	0	17	04	21
Crop Residence Management													
Production of organic inputs													

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													
Vermi-culture	01	09	02	11	02	07	09	0	0	0	11	09	20
Sericulture													
Protected cultivation of vegetable crops													
Commercial fruit production													
Repair and maintenance of farm machinery and implements													
Nursery Management of Horticulture crops													
Training and pruning of orchards													
Value addition	01	76	17	93	10	05	15	0	0	0	86	22	108
Production of quality animal products													
Dairying													
Sheep and goat rearing													
Quail farming													
Piggery													
Rabbit farming													
Poultry production													
Ornamental fisheries													
Para vets													
Para extension workers													
Composite fish culture													
Freshwater prawn culture													
Shrimp farming													
Pearl culture													
Cold water fisheries													
Fish harvest and processing technology													
Fry and fingerling rearing													
Small scale processing													
Post-Harvest Technology													
Tailoring and Stitching													
Rural Crafts	02	04	16	20	0	20	19	0	0	0	04	35	39
Enterprise development	03	17	19	19	05	25	30	0	0	0	22	45	67

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Others if any (ICT application in agriculture)													
TOTAL	**15**	**213**	**79**	**275**	**51**	**70**	**120**	**0**	**0**	**0**	**264**	**149**	**413**

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	01	158	02	160	47	23	70	0	0	0	205	25	230
Crop Residue Management	01	14	0	14	03	0	03	0	0	0	17	0	17
Integrated Pest Management	2	231	37	268	47	35	82	0	0	0	278	72	350
Integrated Nutrient management													
Importance of biodiversity													
Importance of soil health													
Nursery raising													
Value addition													
Protected cultivation technology													
Formation and Management of SHGs													
Group Dynamics and farmers organization													
Information networking among farmers													
Capacity building for ICT application													
Care and maintenance of farm machinery and implements													
WTO and IPR issues													
Management in farm animals													
Livestock feed and fodder production													
Household food security													
Women and Child care	03	0	16	16	0	34	34	0	0	0	0	50	50

Low cost and nutrient efficient diet designing													
Production and use of organic inputs	01	11	0	11	04	0	04	0	0	0	15	0	15
Gender mainstreaming through SHGs													
Crop intensification													
Others if any													
TOTAL	**08**	**414**	**55**	**469**	**101**	**92**	**193**	**0**	**0**	**0**	**515**	**147**	**662**

Discipline/Date	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
I. ANIMAL SCIENCE										
02.01.21	School student	Carrier in Agriculture	01	Off campus	76	17	93	10	05	15
11.01.21	RY	Improved goatry	04	On campus	17	03	20	04	0	04

II. AGRONOMY										
12.01.21	PF	Water management in Rabi crop	01	Off campus	16	03	19	04	02	06
18.01.21	PF	Resource conservation technology	01	Off campus	12	06	18	06	04	10
23.01.21	EF	Crop residence management	01	On campus	17	0	17	03	0	03
10.02.21	PF	Scientific cultivation of summer crop	01	Off campus	08	06	14	02	02	04
12.07.21	EF	Importance of organic farming	01	Off campus	15	0	15	04	0	04
15.07.21	PF	Weed management of cereal crops	01	Off campus	08	02	10	02	0	02
19.07.21	PF	Integrated nutrient management in cereal crop	01	On campus	15	12	27	06	0	06
23.07.21	PF	Importance of crop resilient	01	Off campus	15	01	16	0	06	06
11.08.21 to 13.08.21	RY	Integrated Nutrient Management	03	On campus	16	03	19	06	01	07
14.08.21	PF	Scientific method of crop cultivation	01	Off campus	09	21	30	07	02	09
09.09.21	PF	Organic farming	01	Off campus	07	07	14	05	02	07
15.09.21	PF	Vermi compost production technique	01	On campus	10	05	15	04	02	06
05.10.21	PF	Scientific cultivation of Oilseed in Rabi season	01	Off campus	13	04	17	02	02	04

08.10.21	PF	Importance of organic farming	01	Off campus	07	05	12	02	01	03
21.10.21	EF	Scientific cultivation of Rabi crops	01	Off campus	205	25	230	47	23	70
26.10.21 to 30.10.21	RY	Vermi compost production	05	On campus	11	09	20	02	07	09
07.11.21	PF	Zero tillage Wheat cultivation	01	Off campus (Faridpur)	08	04	12	03	0	03
18.11.21	PF	Seed production of rabi pulse crop	01	Off campus (Nirpur)	13	05	18	04	02	06
25.11.21	PF	Importance of organic farming	01	Off campus (Rasulpur)	15	05	20	04	02	06
07.12.21	PF	Importance of organic farming	01	Off campus (Ufraul Desari)	-	30	30	-	14	14
14.12.21	PF	Weed management in wheat & other rabi crops	01	Off campus (Ghoswar)	13	04	17	05	02	07
28.12.21 to 30.12.21	RY	Pulse seed production	03	On campus	17	04	21	02	02	04
III. HORTICULTURE										
19.01.21	PF	Mali training	15	On campus	27	03	30	20	03	23
22.01.21	RY	Gande ki nursery	01	Off campus	05	02	07	05	02	07
05.02.21 to 09.02.21	RY	Mali training	05	On campus	27	03	30	15	03	18
17.02.21 to 19.02.21	PF	Mushroom training	03	On campus	23	07	30	17	05	22
28.05.21	PF	Effect of mulching in vegetable crops	01	On campus	20	07	27	12	05	17
30.05.21	PF	Importance of medicinal plants	01	On campus	20	05	25	14	03	17

IV. PLANT PROTECTION										
20.01.21	RY	Crop management of Button mushroom	01	Off campus	12	04	16	03	01	04
25.01.21	RY	Bee management in bee colony	01	On campus	03	05	08	03	0	03
10.02.21	PF	Bio-control of Pest and Disease in Rabi vegetables	01	On Campus	15	05	20	03	02	05
19.05.21	PF	Insect pest management in Cucurbitacae	01	Off Campus	20	03	23	17	01	18
16.06.21	PF	Integrated pest management of Paddy	01	Virtual mode	09	02	11	06	-	06
21.06.21	EF	Integrated Pest Management in Kharif crop	01	On Campus	26	12	38	07	05	12
24.06.21 to 26.06.21	RY	Oyster Mushroom production	01	On Campus	16	02	18	05	02	07
09.07.21	PF	Integrated pest management in Vegetables	01	On line	08	05	13	04	01	05
27.07.21	RY	Oyster Mushroom production	01	Off Campus	14	04	18	02	01	03
12.08.21	PF	Integrated Pest Management in Kharif crop	01	On Campus	17	07	24	10	01	11
28.08.21	RY	Oyster Mushroom production	01	Off Campus	12	05	17	01	0	01

30.08.21	PF	Bio-control of Pest and Disease in Rabi vegetables	01	Off Campus	13	03	16	04	02	06
07.09.21 to 09.09.21	PF	Training on Bee keeping	03	Off campus	75	25	100	15	12	27
27.09.21	RY	Training on Beekeeping	01	Off Campus	15	03	18	05	02	07
04.10.21	PF	Bee keeping and marketing of Honey through FPO	01	Off campus	06	0	06	02	0	02
18.10.21	RY	Training on Commercial Beekeeping	01	Off campus	16	03	19	04	02	06
21.10.21	EF	Insect & Disease management in Rabi crops	01	Off campus	205	25	230	40	30	70
27.10.21 to 29.10.21	RY	Mushroom production	03	Off campus	14	05	19	-	-	-
16.11.21	PF	Insect pest management in cole crops	01	Off campus	10	05	15	04	03	07
25.11.21 to 27.11.21	RY	Beekeeping	01	On Campus	12	04	16	06	03	09
13.12.21	PF	Integrated pest management in Vegetable	01	Off campus	46	80	126	08	14	22
21.12.21	RY	IPM in Cauliflower	01	Off campus	21	04	25	06	02	08
V. HOME SCIENCE										
04.01.21 to 08.01.21	PF	Preparation of low cost weaning food	05	Off campus	0	35	35	0	15	15
11.01.21 to 13.01.21	PF	Preparation of low cost weaning food	03	Off campus	0	25	25	0	07	07
19.01.21 to 23.01.21	RY	Banana fiber extraction	05	On campus	0	20	20	0	07	07

		product development								
01.02.21 to 03.02.21	PF	Preparation of Herbal Gulal	03	On campus	0	20	20	0	15	15
18.02.20 to 20.02.21	PF	Preparation of low cost weaning food	03	Off campus	0	25	25	0	25	25
22.02.21 to 24.02.21	PF	Preparation of low cost weaning food	03	Off campus	0	25	25	0	24	24
01.03.21 to 02.03.21	PF	Training on Homemade wearning food for rural families	02	Off campus	0	25	25	0	21	21
03.03.21	PF	Waste bag method of kitchen gardening	01	Off campus	0	35	35	0	29	29
04.03.21	PF	Waste bag method of kitchen gardening	01	Off campus	0	25	25	0	08	08
05.03.21	PF	Waste bag method of kitchen gardening	01	Off campus	0	35	35	0	04	04
06.03.21	PF	Waste bag method of kitchen gardening	01	Off campus	0	30	30	0	29	29
09.03.21	PF	Waste bag method of kitchen gardening	01	Off campus	0	25	25	0	19	19
16.03.21	PF	Waste bag method of kitchen gardening	01	Off campus	0	14	14	0	14	14
27.04.21	PF	Preparation of Homemade mask	01	Off campus	0	49	49	0	30	30

17.05.21	PF	Kitchen gardening	01	Online	05	25	30	02	19	21
31.05.21	PF	Food preservation	01	Online	07	22	29	05	17	22
12.08.21 to 14.08.21	PF	Importance & Development of kitchen garden	03	Off campus	09	21	30	09	21	30
21.08.21	PF	Preparation of Jam, Jelly & Pickle	01	Off campus	30	50	80	16	22	38
23.08.21	PF	Parthenium Awareness programme	01	Off campus	18	04	22	07	01	08
23.08.21	PF	Swakshata programme	01	Off campus	18	04	22	07	01	08
24.08.21	RY	Banana fiber extraction & Handicraft making	01	On campus	22	01	23	05	-	05
03.09.21	PF	Formation of FPO	01	Off campus	37	-	37	15	-	15
13.09.21	RY	Banana fiber extraction & handicraft preparation	10	On campus	-	24	24	-	17	17
18.09.21	PF	Importance of food & nutrition	01	Online	40	16	66	12	06	18
01.10.21	PF	Development of kitchen gardening	01	Off campus	-	14	14	-	03	03
27.10.21	PF	Banana fiber extraction & handicraft making	03	Off campus	-	26	26	-	13	13
01.12.21 to 10.12.21	PF	Banana fiber extraction & value addition	10 days	On campus	-	24	24	-	17	17

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	
Beekeeping	Beekeeping	Bee management	05	19	06	25	Small unit	22	22	03
Mushroom	Mushroom	Mushroom cultivation	05	16	09	25	Small unit	19	19	06
Nursery management	Nursery management	Training on garden and nursery establishment and management	05	18	07	25	Nursery	16	16	09

**training title should specify the major technology /skill transferre*

I) Sponsored Training Programme

Sl.	Title	Thematic area	Month	Duration (days)	Client PF/RY/EF	No. of courses	No. of Participants										Sponsoring Agency
							Male			Female			Total				
							Others	SC	ST	Others	SC	ST	Others	SC	ST	Total	
1.	Farmer-Scientist interaction programme		March, 2021	02	PF	01	17	05	0	06	0	0	23	05	0	28	ATMA, Vaishali
2.	Quail farming		March, 2021	01	PF	01	0	0	0	30	45	0	30	15	0	45	Aga Kha, Vaishali
3.	Goat farming		March' 2021	01	PF	01	0	0	0	26	20	0	26	20	0	46	Aga Kha, Vaishali

4.	Krishak Gosthi cum Training		August, 2021	01	PF	01	40	10	0	01	0	0	41	10	0	51	ATMA, Vaishali
5.	Bee Keeping		Sept., 2021	03	PF	01	09	0	0	06	12	0	15	12	0	27	Aga Kha, Vaishali

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	10	145	15	160	28.12	02	04	06	147	19	166
KisanMela	01	2500	1500	3500	22.85	65	25	90	2565	1525	4090
KisanGhosthi	08	240	92	295	61.01	08	02	10	248	94	342
Exhibition	01	40	25	65	29.23	03	02	05	43	27	70
Film Show	0	0	0	0	0	0	0	0	0	0	0
Method Demonstrations	05	25	37	62	27.41	04	0	04	25	37	62
Farmers Seminar	0	0	0	0	0	0	0	0	0	0	0
Workshop	0	0	0	0	0	0	0	0	0	0	0
Group meetings	05	67	32	99	22.22	0	0	0	67	32	99
Self Help Group Conveners meetings	0	0	0	0	0	0	0	0	0	0	0
MahilaMandals Conveners meetings	0	0	0	0	0	0	0	0	0	0	0
Special Programmes (specify)	0	0	0	0	0	0	0	0	0	0	0
Sankalp Se Siddhi	0	0	0	0	0	0	0	0	0	0	0
Swatchta Hi Sewa	01	20	12	32	31.25	01	01	02	21	13	34
RAWE programme	01	23	01	24	33.33	0	0	0	23	01	24
Sponsored training	05	127	70	197	38.57	03	01	04	130	71	201
Scientist-Farmer interaction	03	131	88	219	29.68	03	0	03	134	88	222
Kharif Mahotsav	01	174	76	250	36.02	05	01	06	179	77	256
Rabi Mahotsav	01	208	60	268	27.98	08	03	11	216	63	279
Any Other (Specify) SAC meeting	02	76	18	94	26.59	16	05	21	92	23	115
TOTAL	**4921**	**7967**	**3618**	**11048**	**574.74**	**318**	**71**	**389**	**8281**	**3689**	**11970**

Scientist visit to Farmers field

Soil sample collection by RAWE student

Organization of SAC meeting

B. Other Extension activities

Nature of Extension Activity	No. of activities
Newspaper coverage	170
Radio talks	0
TV talks	05
Popular articles	10
Extension Literature	01
State level E-Kisan Sammelan	01
E-Kisan Choupal	03
Other, if any	0

4 दैनिक जागरण पटना, 9 मार्च, 2021

कृषि के क्षेत्र में अपना उद्यम स्थापित करें महिलाएं : अनिता कुशवाहा

कृषि विज्ञान केन्द्र हरिहरपुर, वैशाली

07 • पटना • बुधवार • 16 जून 2021 • हिन्दुस्तान आज का दिन 1822 में डेनमार्क वेसी ने

वर्चुअल ई–किसान सम्मेलन में शामिल किसानों को कपास प्रबंधन के संबंध में बताया

ई-किसान सम्मेलन में पराली नहीं जलाने पर दिया गया जोर

कृषि विज्ञान केन्द्र

कृषि में भविष्य विषय पर संवाद स्थापित

दैनिक भास्कर हाजीपुर 25-09-2021

तैयारी • डॉ. सुनीता कुशवाहा ने कहा- केला रेशा से सजावटी सामान बनाकर युवा कर सकते हैं अपनी बेरोजगारी दूर

जिले को केला रेशा उत्पादों से मिलेगी राष्ट्रीय पहचान

दैनिक भास्कर हाजीपुर 16-06-2021

कार्यशाला • जलवायु अनुकूल कृषि प्रणालियां अपनाने व कृषि क्षेत्र में बेहतर विकल्प के लिए कृषि वैज्ञानिकों ने किसानों को दिए टिप्स

खेतों में पराली या कूड़ा जलाने की बजाय बनाएं कंपोस्ट खाद

वैज्ञानिकों ने किसानों को दिए जरूरी टिप्स

केले के थम रेशे से भगवान बालाजी एवं जगन्नाथ जी की बनाई आकर्षक मूर्ति

केले के थम रेशे से भगवान की बनाई मूर्ति को दिखाती प्रशिक्षण प्राप्त कर महिलाएं। ● जागरण

संवाद सूत्र, हाजीपुर : कृषि विज्ञान केंद्र में केले के थम रेशे के 10 दिवसीय प्रशिक्षण उपरांत महिलाएं केला रेशा से विभिन्न उत्पाद बनाकर स्वरोजगार कर रही हैं। इसी कड़ी में राजापाकर प्रखंड मुख्यालय के महिलाओं ने कृषि विज्ञान केंद्र से प्रशिक्षण प्राप्त कर केला रेशा से विभिन्न उत्पाद बनाना शुरू भी कर दिया है। प्रशिक्षण प्राप्त करने वाली महिलाएं मुस्कान, अदिति, नीलम ने केले के रेशे से भगवान बालाजी एवं जगन्नाथ की मूर्ति बनाकर कृषि विज्ञान केंद्र हरिहरपुर के प्रधान सह कृषि वैज्ञानिक सुनीता कुशवाहा को भेंट किया। मूर्ति की सुंदरता को देखकर वैज्ञानिक कुशवाहा

कृषि विज्ञान केंद्र में प्रशिक्षण प्राप्त कर महिलाएं कर रही स्वरोजगार, केले के रेशे से क्राफ्ट बनाने का दिया प्रशिक्षण

ने प्रशिक्षणार्थियों का मनोबल बढ़ाया। कहा कि केले के रेशे से क्राफ्ट बनाने का प्रशिक्षण देकर महिलाओं को आत्मनिर्भर बनाने का प्रयास किया जा रहा है। प्रशिक्षण का संचालन कर रहे वैज्ञानिक वर्षा कुमारी ने बताया कि जिले में केला की खेती काफी बड़े पैमाने पर होती है। केले का थम बेकार चला जाता है। इस कार्य में थम को पुन : उपयोग में लाने का कार्य इस प्रशिक्षण के माध्यम से दिया जा रहा है।

Organization of E-Kisan Sammellan

Organization of E-Kisan Chaupal

C. Celebration of important days

Celebration of Important Days	No. of activities	Farmers				Extension Officials			Total		
		M	F	Total	SC/ ST (% of total)	M	F	Total	M	F	Total
Republic day (26th Jan.)	01	27	08	35	34.28	0	0	0	27	08	35
International Women's Day (8th Mar.)	01	15	39	49	36.73	03	02	05	18	41	59
World Water Day (21st Mar.)	01	11	57	68	32.35	05	0	05	16	57	73
Ambedkar Jayanti (14th Apr.)	0	0	0	0	0	0	0	0	0	0	0
International Yoga Day (21st Jun.)	01	17	08	25	32.0	0	0	0	17	08	25
Independence Day (15th Aug.)	01	22	08	30	43.33	0	0	0	22	08	30
Parthenium Awareness Week (16th to 22nd Aug.)	01	48	22	70	35.71	0	0	0	48	22	70
National Nutrition Month (1-30th Sept.)	01	17	53	70	40.0	02	41	43	19	94	113
Hindi Diwas (14th Sep.)	0	0	0	0	0	0	0	0	0	0	0
International Nutrient Cereals Year (17th Sept.)	01	09	77	86	40.69	03	01	04	12	78	90
Gandhi Jayanti (2nd Oct.)	0	0	0	0	0	0	0	0	0	0	0
Mahila Kisan Diwas (15th Oct.)	01	0	45	45	33.33	0	01	01	0	46	46
World Food Day (16th Oct.)	01	10	15	25	32.0	02	01	03	12	16	28
Vigilance Awareness Week (27th Oct. to 2nd Nov.)	01	46	17	63	41.26	0	0	0	46	17	63
National Unity Day (31st Oct.)	01	11	04	15	40.0	0	0	0	11	04	15
World Science Day (10th Nov.)	01	15	06	21	38.09	0	0	0	15	06	21
National Education Day (11th Nov.)	0	0	0	0	0	0	0	0	0	0	0
National Constitution Day (26th Nov.)	01	13	04	17	41.17	0	0	0	13	04	17
World Soil Day (5th Dec.)	01	15	23	38	36.84	02	01	03	17	24	41
Kisan Diwas (23rd Dec.)	01	23	07	30	40.0	0	01	01	23	08	31

World Women's Day

Women Farmer's Day

World Food Day

Celebration of National Unity Day

Celebration of National Nutrition Month
(1-30th Sept., 2021)

Organization of Special Swachhata Abhiyan

Organization of Swachhata Pakhwara

Celebration of National Constitution Day

Organization of Soil Day

D. Interaction/Live telecast programme of Hon'ble PM/Hon'ble AM

Sl.	Date of event	Name of Event/Programme	Interaction of Hon'ble PM/AM/CM	Participants			
				Farmers	Staffs	VIP/Others	Total
1.	17.09.2021	International Nutrient Cereals Year	Sri Narendra Tomar	86	15	03	104
2.	28.09.2021	Farmer's - Scientist interaction	Sri Narendra Modi	205	15	01	221
2.	16.12.2021	Shunaya Budget Prakritik Kheti	Sri Narendra Modi	183	12	02	197

Live telecast of Agriculture Minister, Sri Narendra Singh Tomar, GOI

Live telecast of Prime Minister, Sri Narendra Modi, GOI

Live telecast of Prime Minister, Sri Narendra Modi, GOI

4.5 a. Production and supply of Technological products

Village seed: NA

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
Total								

KVK farm

Crop	Variety	Quantity of seed (q)	Value (Rs)	Number of farmers to whom seed provided			
				SC	ST	Other	Total
Potato	Kufri Khyati	241.5	7,24,500				
	Kufri Sinduri	9.0	27,000				
Rai	Rajendra Suflam	9.0					
Paddy	Rajendra Suwasini	90.0	3,60,000				
Potato	Kufri Khyati	Standing crop					
	Kufri Sinduri						
Rai	Rajendra Suflam	Standing crop					
Grand Total		**349.5**	**11,11,500.00**	***Seed provided to DSF, Dholi & Different KVKs/Institute**			

Pr

Vegetable seedlings							
Cauliflower	Pusa Aghani	9900	9900.00	18	0	102	120
Cucumber	Hybrid	294	1470.00	22	0	38	60
Tomato	Hybrid	9733	9733.00	20	0	100	120
Brinjal	Hybrid	9560	9560.00	18	0	102	120

Bottle gourd	Hybrid	825	4125.00	33	0	87	120
Bitter gourd	Hybrid	469	2345.00	41	0	79	120
Sponge gourd	Hybrid	154	770.00	14	0	26	40
Ridge gourd	Hybrid	253	1265.00	22	0	38	60
Chilli	Hybrid	4120	4120.00	22	0	98	120
Others							
Fruits							
Mango	Maldah, Amrapali, Mallika, Sukul	57	5130.00	09	0	16	25
Guava							
Lime	Kagji lime	03	420.00	0	0	02	02
Papaya							
Banana							
Aonla		02	460.00	0	0	01	01
Others							
Ornamental plants		2400	Not sale				
Medicinal and Aromatic		100	Not sale				
Japani Mint		04	80.00	0	0	02	02
Plantation							
Ajwain		56	1120.00	04	0	18	22
Turmeric							
Tuber							
Elephant yams							
Fodder crop saplings							
Forest Species							
Others, pl.specify							
TOTAL		**37930**	**50498.00**	**223**	**0**	**709**	**932**

Vegetable Seedlings

Ornamental Plants

Vegetable seedling

Production of Bio-Products

Name of product	Quantity Kg	Value (Rs.)	No. of Farmers benefitted			
			SC	ST	Other	Total
Bio-fertilizers	1100	6600.00				
Bio-pesticide						
Bio-fungicide						
Bio-agents	100	10000.00				
Others, please specify.						
Total	**1200**	**7600.00**				

Production of livestock materials

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	No. of Farmers benefitted			
				SC	ST	Other	Total
Dairy animals							
Cows							
Buffaloes							
Calves							
Others (Pl. specify)							
Small ruminants							
Sheep							
Goat							

Other, please specify							
Poultry							
Broilers							
Layers							
Duals (broiler and layer)							
Japanese Quail							
Turkey							
Emu							
Ducks							
Others (Pl. specify)							
Piggery							
Piglet							
Hog							
Others (Pl. specify)							
Fisheries							
Indian carp							
Exotic carp							
Mixed carp							
Fish fingerlings							
Spawn							
Others (Pl. specify)							
Grand Total							

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

i) Name of Seed Hub Centre: **Krishi Vigyan Kendra, Vaishali**

Name of Nodal Officer :	Senior Scientist & Head
Address :	Krishi Vigyan Kendra, Vaishali
e-mail :	head.kvk.vaishali@rpcau.ac.in
Phone No. : Mobile :	 9431417421

ii) Quality Seed Production Reports

Season	Crop	Variety	Production (q)			
			Target (q)	Area sown (ha)	Production	Category of Seed(F/S, C/S)
Rabi 2020-21	Lentil	IPL-316	400	30	106	F/S-1
	Gram	JG-14	300	0.25	3.10	F/S-1
Summer/Spring 2021	Moong	IPM-214	300	20	00	NA

iii) Financial Progress

Fund received (2016-17, 2017-18 and 2019, 2020 and 2021)	Expenditure (Rs. In lakhs)		Unspent balance (Rs. In lakhs)	Remarks
	Infrastructure	Revolving fund		
2016-17 - 90.00	0.00	1.34	88.66	
2017-18 - 125.54	50.00	3.11	72.43	
2019 - 83.63	0.85	1.19	81.59	
2020 - 94.99	0	2.63	92.36	
2021	0	9.33	84.49	

iv) Infrastructure Development

Item	Progress
Seed processing unit/plant	Purchased.
Seed storage structure	Completed.

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

Item	Title	Author's name	Number/Journal name	Circulation
Research paper	Adoption of Scientific Vegetable Cultivation Practices by Tribal Women Farmers of Banka District State Bihar.	Sunita Kushwah, Anjani Kumar Singh, R K Sohane, R. N. Singh.	JEE, IARI. Accepted 8.10.21. NAAS rating-5.92.	Among Extension Workers, Scientists
	Growth and yield response of finger millet under varying plant density and organic	Amarjit Kujur, M.S. Yadeva, S. Karamkar, C.S. Singh, Arvind Kr. Singh,	International journal of current	

	nutrient management practices and their residual effect on green pea.	Swati Shabnam & Sunita Kumari	microbiology and applied sciences	
	Effect of plant density and organic nutrient management practices on productivity, nutrient content and uptake of single millet and their residual effect on green pea.	Amarjit Kujur, M.S. Yadeva, C.S. Singh, Swatai Shabnam & Sunita Kumari	2021 JETIR	
	Malting improves nutritional properties of sorghum	VarshaKumari, Sangeeta C Sindhu, Neeta Kumari and Sapna Dhami	The Pharma Innovation Journal	
	Fermentation Improves Mineral Bioavailability of Pumpkin Seed Flour	Neeta Kumari, Sangeeta c. Sindhu, Rarsha Rani, Anju Kumari and Varsha Kumari	Annals of Biology	
	Effect of Fermentation on Nutrient Composition of Pumpkin Seed Flour	Neeta Kumari, sangeeta c. Sindhu, Varsha Rani, Anju Kumari1 and Varsha Kumari2	Annals of Agri-Bio Research	
	Physical activity and health status of adolescents from government and private school: a Comparative assessment	SapnaDhamin,Sangeeta C. Sindhu, Priti,Varsha Kumari	Multilogic in Science	
Seminar/conference/ symposia papers	Adaptation of water conservation technique mulching to mitigate water crisis due to river Sand mining in state Bihar, India. (Oral) paper presented.	Sunita Kushwah and M. S. Kundu.	Souvenir Book ISBN NUMBER 978-93-5419-016- Agricultural & Environmental Technology Development Society (AETDS), U.S. Nagar	Mass
	Zero Tillage Technology and Farm profits through FLD with small land holding farmer of district Begusarai, Bihar. as (poster) presentation	Vinita Kashyap, SunitaKushwah, Ram Pal, M. S. Kundu & B. K. Sahi.	Souvenir Book ISBN NUMBER 978-93-5419-016- (3rd International Conference on "Global Initiative in	

			Agricultural, Forestry and Applied Sciences	
Popular Articles	1. Grih Vatika – Krishi Avshesho ki Sadupyogita aum Poshn Prabandhan	Sunita Kushwah, Varsha Kumari	Krishi Manjusha 4(1):20-22.ISSN No.2582 - 144X.	Mass
	2. Papete ki Kheti – Kisano ki Samirdhi ka Aadhar	Sunita Kushwah, Arun Kumar, Madhusudan Kundu & Sanjiv Kumar	Krishi Manjusha Oct,20214(1):20-22.ISSN No.2582 - 144X.	Mass
	3. Kela resha Nishkrashan Gramin Kachara Prabandhan aur Garibo ki Aajivika ko Badhava dene ka Sabse Acha Tarika	Sunita Kushwah, Srivastava R.C., Mudhusudan Kundu, Varsha Kumari, Sunita Kumari & Gautam P.P.	Agro Science Today, Vo.2 (10), Oct, 2021 E- magazine	Mass
	4.Geho ki Sidhi Buai Takniki	Vinita Kashyap & Dr. Sunita Kushwah	Agro Science Today, Vo.2 (10), Oct, 2021 E- magazine	Mass
	5. Mushroom Utpadak Takniki	Vivek Khere & Dr. Sunita Kushwah	Agro Science Today, Vo.2 (10), Oct, 2021 E- magazine	Mass
	6.Zero tillage se geho ki kheti kar behtar munafa payen	Dr. Sunita Kumari, Dr. Geeta Kumari & Dr. Kamlesh Kumar Singh	0	0
	7.Fasal Avshesh Prabandhan: Mirda ki Urvara Shakti ke liye Vardan	Ragni Kumari, Sunita Kumari, Geeta Kumari, Amit Kumar Pandey & Ashutosh Kumar Singh	0	0
	8. Javik Kheti- Mukhya Ghatak aum Labh	Kamlesh Kumar Singh, Sudesana Das, Santosh Kumar Gupta, Sunita Kumari, S.S. Solanki	0	0
	9. Kisano ke liye Vardan hai Hari Khad	Dr. Sunita Kumari & Dr. Sunita Kushwah	0	Mass
	10.Unnat Gur banana ki taknik aum Sarkshan	Geeta Kumari, Navneet Kumar, Sunita Kumari & Ragni Kumari	0	0
Book Chapter	Effect of climate change on Availability of Phosphorus on Soil	Ragni Kumari, Mona Kumari, Sunita Kumari, Geeta Kumari, Binod Kumar Vimal, Amit Kr.	0	0

		Pandey & Ashutosh Kr. Singh		
Extension Pamphlets/ literature	Jaivik keet Niyantran Banaye Khushhal Kisan	Prem Prakash Gautam, Sunita Kushwah and Sanjeev Kumar	Kisan Mela souvenir-Samarika	Mass
	Bater Palan	Narendra Kumar, Sunita Kushwah and M S. Kundu	Kisan Mela souvenir Samarika	Mass
Technical reports	Edited Zonal workshop report, 2021 and presentation, KVK, KVK, Vaishali.	Sunita Kushwah & Varsha Kumari		Official
	ICDS project Report	Sunita Kushwah, Varsha Kumari, Savita Kuamri and Preeti Pallavi	ICDS Patna	Official
	Compiled Third party Evaluation report, Sept, 2020 KVK, Vaishali.	Narendra Kumar, Sunita Kushwah & Varsha Kumari	For DoEE, Pusa	Official
	Preparation of ICAR National Award for the Best KVK	Sunita Kushwah, Sunita Kuamri, Varsha Kumari, P.P. Gautam, Sanjeev Kuamr, Santosh Kumar	vide O.O. No.15/KVK, Vaishali dated 08/10/2020.	Official
	Compiled Action taken report of 3rd & 4rth EEC meeting of KVK, Vaishali	Sunita Kushwah & Varsha Kumari	For DoEE, Pusa	Official
	Action taken report for SAC meeting KVK, Vaishali, March, 2021.	Sunita Kushwah & Varsha Kumari	For DoEE, Pusa	Official
	Compiled GKRA report, 2020.	Narendra Kumar, Sunita Kushwah, Varsha Kumari and Santosh Kumar	Submitted ATARI, Patna	Official
	Compiled ARYA Annual Project Report, Feb, 2021.	Sunita Kushwah, Varsha Kumari, Swapnil Bharti, P.P.Gautam and Santosh Kumar	Submitted ATARI, Patna	Official
	Pulse Seed Hub Annual Progress Report Edited and Compiled, Feb, 2021.	Sunita Kushwah and Prem Praksah Gautam	Submitted to IIPR, Kanpur	Official
	Compiled CRA progress report, March, 2021	Sunita Kushwah, Prem Praksah Gautam and Varsha Kumari	BISA, Pusa	Official
	Proceedings compilation as a chairperson of repporteurs during	Sunita Kushwah	To ATARI, Patna	Official

	inaugural ceremony of ATARI, Patna.			
	Annual report-2020	Sunita Kushwah, Sunita Kuamri, Varsha Kumari, Swapnil Bharti, P.P. Gautam, Sanjeev Kumar, Ravi Kumar and Santosh Kumar	To ATARI, Patna	Official
	District Contingent Plan	Sunita Kushwah, Varsha Kumari and P.P.Gautam	DoEE, Pusa	Offical
Technical Bulletin	Maa ke Dudh ka Mahtav	Varsha Kumari, Savita Kumari, Priti Pallvi	1000	Official
	Sishu ke liye Poorak Aahar	Varsha Kumari, Savita Kumari, Priti Pallvi	1000	Among farmers
	छह माह के बाद शिशु के लिए पूरक आहार.	Preeti pallavi, Varsha Kumari, Savita Kumari and Sunita Kushwah.	100/ Extension Bulletin no. V/Hs/IB/321/ 2021KVK.	
Electronic Publication (CD/DVD etc)	RAWE programme	Dr. Sunita Kushwah and KVK team	5/ KVK, Vaishali	Among Farmers.
TOTAL			**3000**	

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	Training	Training on Accounts for KVK personnel	Miss. Varsha Kumari SMS, Home Science & Richa Srivastava	09.03.2021 to 11.03.2021 03 days	RPCAU, Pusa
2	Accounts training	Training on Gender and Nutrition	Mrs. Varsha Kumari SMS, Home Science	25.11.2021 01 day	ICAR
3	Workshop	Two-Day (Online) Workshop on Introduction to "R" by Vigyan Varta: An International E-	Dr. Sunita Kushwah Sr. Scientist & Head	13.05.21-14.05.21 (2 days)	Society of Krishi Vigyan

		Magazine for Science Enthusiasts			
4	2 days Worshop	Workshop on statistical analysis organized by SKV	Dr. Sunita Kushwah Sr. Scientist & Head	16.07.21-17.07.21 (2 days)	Society ofKrishi Vigyan
5	International web conference	Soil health Management for sustainable crop productivity	Dr. Sunita Kushwah Sr. Scientist & Head	07.09.21-08.09.21 (2 days)	Madan Bharti Agril. College, Agwanpur, Sahrsa (BAU),
6	International Conference	Pulses as the Climate Smart Crops: Challenges and Oppotunities	Mr. Prem Prakash Gautam SMS (Plant protection)	09.03.2021-11.03. 2021 (3 days)	RPCAU , Pusa

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

Success Story 1:

Name of farmer	 **Sri PrabhuDayal Singh**
Address	Faridpur, Rajapakar, Vaishali
Contact details (Phone, mobile, email Id)	9801236047
Landholding (in ha.)	08
Name and description of the farm/ enterprise	**Progressive Farmers Club**
Economic impact	6:1 (BC ratio)
Social impact	Famous
Environmental impact	Organic farming/Eco friendly
Horizontal/ Vertical spread	More farmers are adopting

1. Introduction

Sri PrabhuDayal Singh is a marginal farmer from a Faridpur village of Rajapakar block of Vaishali district. He owns only 8 hectares of agricultural land. He has shown interest in organic practices of agriculture recently. Though his fellow farmers are not interested in organic farming and having less technical expertise but he is so enthusiastic to move ahead in organic agriculture. Knowing organic practices through Krishi Vigyan Kendra, he started organic practices in hif farm of 08 hectare wherein hi is growing vegetable such as Tomato, Brinjal, Chilli, Okra, Onion, Potato etc. He has also taken up Cauliflower cultivation wherein he has produced quality seed of newly release varieties and sold to his fellow farmers. He uses farm yard manure occasionally as it is a scarce resource to him. KVK Scientist frequently visited his farm and advised him on organic practices in agriculture and also advised him to use waste decomposer and refine preparation of organic extracts such as *jeevamrit*keeping in view of highest beneficial bacterial count and method of use.

2. **Brief Description of Technology, Justification Including Innovation, if any, Implementation and Support** Sri PrabhuDayalsingh and his group in doing all the latest package and practices of vegetable and crop production. He used to grow vegetable organically and adopted integrated pest management techniques as well as plastic mulching in Tomato specially. He widely adopted improved technologies such as- Maize sowing through Pneumatic planter, Irrigation through sprinkler and Drip irrigation in high density orchard, intercropping. He is also involved in vegetable cultivation specially of Okra and he is known for high density Okra cultivation. He is getting yield 300 kg to 500 kg as on alternate day. Before adoption of this technology he was getting 100 kg yield per day from the 1 acres of land.

Impact Analysis:

Impact factor	Before Adoption	After Adoption
Farmer Practice	High use of pesticide	Use of Integrated pest management
Yield of Product	200 kg /day	500 kg/day
Fixed Cost	Rs 1000/hectare	Rs 800/hectare
Recurring Cost	50,000	45,000
Gross Income	4,00000	9,23,250
Net Profit	3,22,000	6,95,550
B:C Ratio	1:1	6:1
Marketing	Local market	Baazarsamiti
Dissemination of knowledge in the locality	More farmers are adopting	Producing in group for marketing

Knowledge gain based on 1- 5 scale*	2	4
Feeling of economic security based on 1- 5 scale*	2	4
Ability to understand and solve problems based on 1- 5 scale*	2	4
Self image in community based on 1- 5 scale*	2	4
Self confidence based on 1- 5 scale*	2	5

* 1- 5 scale indicates 1 = lowest and 5 = highest

3. Benefits (Economical and Social):

There is direct benefit to the production and quality because there is positive impact on natural predators and pollinators. Integrated pest management techniques are cost effective and sustainable crop management by these methods farmers are getting improves quality of fruits and vegetables particularly. There is a more income for farmers who are using this technique for vegetable and crop production. So farmers are coming under one umbrella for vegetable production by this organic method.

4. Adoption, Spread, Up Scaling of Technology

The development and dissemination of novel agricultural technologies is seen as a way of enhancing productivity. Technological innovations have greatly shaped agriculture throughout time. Farmers have developed new ways to make farming more efficient and grow more food. Sri PrabhuDayal Singh has devoted to adopt significant amount of resources to develop technologies that increase yields, reduce exposure to environmental shocks, produce as nutritious crops, reduce human labour requirements and promote long term sustainability. There is urgent need to aware among consumer about benefit of quality vegetable production by farmers and ill effect of chemicals on health used in vegetable production by traditional method. For getting more return and making this business more profitable. So that more unemployed youth can attract in this business of quality vegetable and crop production.

5. Relevant, action photographs

Azola and Vermicompost production	Demonstration of Yellow sticky trap in Frenchbean

Demonstration of Pheromone trap in Tomato

Success Story 2:

Name of farmer	 **Md. Musharaf Khalil**
Address	Bakhari Barai, Rajapakar, Vaishali
Contact details (Phone, mobile, email Id)	9771995522
Landholding (in ha.)	25
Name and description of the farm/ enterprise	**Progressive Farmers**
Economic impact	4.3 (BC ratio)
Social impact	Famous
Environmental impact	Integrated Nutrient Management
Horizontal/ Vertical spread	More farmers are adopting

1. Introduction

Md. Musharaf Khalil is a marginal farmer from a Bakhari Barai village of Rajapakar block of Vaishali district. He earns 6.30 lakh per annum his 10 hectares of agricultural land. He has shown

interest in Scientific cultivation of cereals crops, horticultural crops, poultry, goatry and quail farming in the form of IFS. Though his fellow farmers are not interested in integrated farming system and having less technical expertise but he have so zeal to move ahead in developing integrated farming system. After knowing techniques of integrated farming system through Krishi Vigyan Kendra, he started Scientific cultivation of cereals crop, horticultural crops, poultry, goatry and quail farming in his farm of 10 hectare. He also produces Truthfully Labelled seed of Wheat and Rapeseed mustard in the supervision of KVK Scientist. To increase soil fertility of his land he uses technical knowhow related to Integrated Nutrient Management.

2. **Brief Description of Technology, Justification Including Innovation, if any, Implementation and Support** Md. Musharaf Khalil and his fellow farmers is doing all the latest technology of crops, vegetables, goatry, poultry and quail farming. He used to grow crops and vegetable scientifically and adopted integrated pest management techniques as well as plastic mulching in Tomato specially. He widely adopted improved technologies such as- zero tillage, Maize sowing through Pneumatic planter, Irrigation through sprinkler and Drip irrigation in high density orchard, intercropping.

Impact Analysis:

Impact factor	Before Adoption	After Adoption
Farmer Practice	Monoculture	IFS
Yield of Product	280 q (Grain)	370 q (Grain) + 1510 (Goat + Birds)
Fixed Cost	0	Rs 65,000
Recurring Cost	Rs. 1,85,000	Rs. 2,75,000
Gross Income	Rs. 4,00000	Rs.9,05,000
Net Profit	Rs. 2,15,000	Rs. 6,30,000
B:C Ratio	2:16	3:29
Marketing	Local market	Baazarsamiti
Dissemination of knowledge in the locality	More farmers are adopting	Producing in group for marketing
Knowledge gain based on 1- 5 scale*	2	4
Feeling of economic security based on 1- 5 scale*	2	4
Ability to understand and solve problems based on 1- 5 scale*	2	4
Self image in community based on 1- 5 scale*	2	4
Self confidence based on 1- 5 scale*	2	5

* 1- 5 scale indicates 1 = lowest and 5 = highest

3. **Benefits (Economical and Social):**

There is direct benefit to the production and quality because there is positive impact on soil fertility. Integrated nutrient management techniques are cost effective and sustainable crop management by these methods farmers are getting improves quality of crops and vegetables particularly. There is a more income for farmers who are using this technique for Integrated farming system. He plays a very important role in employment generation for nearby marginal farmers.

4. Adoption, Spread, Up Scaling of Technology

The development and dissemination of novel agricultural technologies is seen as a way of enhancing productivity. Technological innovations have greatly shaped agriculture throughout time. Farmers have developed new ways to make farming more efficient and grow more food. Md. Musharaf Khalil has devoted to adopt significant amount of resources to develop technologies that increase yields, reduce exposure to environmental shocks, produce as nutritious crops, reduce human labour requirements and promote long term sustainability. There is urgent need to aware among consumer about benefit of quality crop and vegetable production by farmers and ill effect of chemicals on health used in crop and vegetable production by traditional method. For getting more return and making this business more profitable. So that more unemployed youth can attract in this business of quality vegetable and crop production.

5. Relevant, action photographs

Success Story 3:

Name of the Farmer	 **Mr. Suresh Kumar Singh**
Address	Bahuara, Bidupur, Vaishali
Contact details (Phone, mobile, email Id)	7070518338
Landholding (in ha.)	0.25
Name and description of the farm/ enterprise	**Manorama Mushroom, Vaishali**
Economic impact	2.33 (BC ratio)
Social impact	Famous
Environmental impact	Good for environment/Eco friendly
Horizontal/ Vertical spread	03 farmers are motivated by him

1. **Introduction :**

   Krishi Vigyan Kendra, Vaishali has been giving long and short duration training on mushroom production both to the rural youth and rural women. Mushroom production has become one of the few enterprise which rural farmer of Vaishali has adopted in big way both at household level and as commercial enterprise as a source of income generation. Suresh Kumar Singh, Village – Bahuara, Hajipur Vaishali, is doing commercial mushroom production of the both Oyster and Button in his area. He sold his product in local market and as well as Patna market.He got the training through **KVK**and started the unit. Technical support provided by the KVK as required.

2. **Impact Analysis:**

Impact factor	**Before Adoption**	**After Adoption**
Farmer Practice	No commercial use of	commercial use of agricultural waste and mushroom production

	agricultural waste	
Yield of Product	-	7 Q
Fixed Cost	-	Rs 45,000
Recurring Cost	-	24,000
Gross Income	-	84,000
Net Profit	-	60,000
B:C Ratio	-	3.5
Marketing	-	Local as well as Patna
Dissemination of knowledge in the locality	-	Producing in group for marketing
Knowledge gain based on 1- 5 scale*	01	04
Feeling of economic security based on 1- 5 scale*	01	04
Ability to understand and solve problems based on 1- 5 scale*	01	04
Self image in community based on 1- 5 scale*	01	04
Self confidence based on 1- 5 scale*	01	05

* 1- 5 scale Indicate* 1- 5 scale indicates 1 = lowest and 5 = highest

3. Benefits (Economical and Social)

Mushroom production now is a village cottage industry in Vaishali district. This is giving employment generation to rural youth and farmers also. More farmers are coming with huge investment for bulk production of mushroom. They are marketing in Patna, so consumers are getting round the year mushroom as per need. Some farmers are now exploring for value addition of mushroom by making pickles and other dishes.

4. Adoption, Spread, Up Scaling of Technology and Future Projection

There is urgent need to aware consumers about medicinal and nutritional benefits of mushroom consumption. There is huge scope of mushroom production in Vaishali district as there is big gap between demand and supply. So there is need to train manpower for mushroom production at village level to capture this opportunity for employment generation at village level.

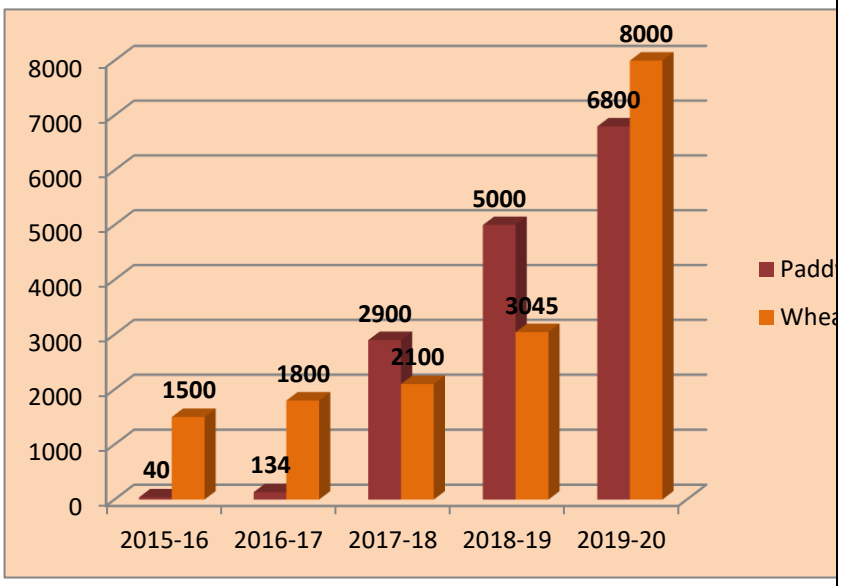
5. Relevant, action photographs

Mr. Suresh Kumar Singh getting technical know-how by KVK, Scientist

3.8 ...ped and used during the year

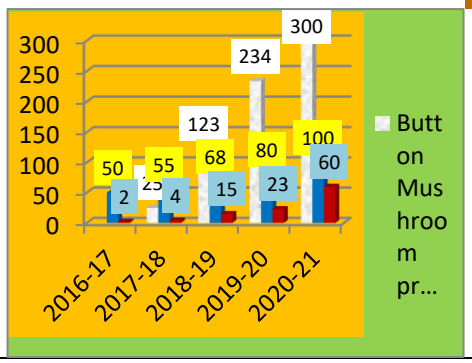
Sl. No.	Name/ Title of the technology	Name/ Details of the Innovator(s)	Brief details of the Innovative Technology

1.	**RCT (Zero Tillage) and introduction of Wheat var. 2967**.	Farmers of the district	Rice-Wheat is one of the major cropping system of Vaishali. It is a major system for food security and provide livelihood and income to farmers and labours. There is urgent need is being felt to explore the possibility of saving to critical input by adopting RCT such as zero tillage and DSR. For this KVK, Vaishali adopted two villages one is Faridpur and second only Senduari. Now in both villages more than 80% of farmers of uses RCT like DSR and Zero tillage through OFT & FLD. **Farmers benefited:** KVK conducted demonstration with 120 farmers in 20 ha of land but now 48000 farmers now (2020) adopted this technology in the operational area of KVK- Vaishali 
2.	**SRI**		This technology introduced among the farmers through OFT, FLD and trainings. Demonstration conducted with the farmers. SRI which has been grown under the supervision of scientists of KVK, Vaishali. On an average farmers is getting yield 70-80 q/ha. Which is three times higher than traditional method of cultivation and all the farmers who once cultivated this technique are get ready for ever. In this way the cultivated area of Paddy and wheat increases day by day. Now, KVK is also trained the labour about this technique through different training programme. **Practical utility of Technology**

			Higher yield, less labour, time saving and lower seed requirement which ensures higher profitability. KVK, Vaishali is organizing regular training in collaboration with District Agriculture department and area under SRI is increasing day by day. 
3.	**Popularization of Mustard variety Rajendra Sufalam through Seed Drill (Resource conservation technology).**		**Farming system followed by the farmers before Technology:** Farmer was growing local mustard variety before adoption of this variety in late sown condition. In post flood, low land farming situation farmers were used this variety. Most of the farmer left the land fallow in post flood situations or just broad casted the seed. They were not using Seed Drill in sowing **How the Technology led to a quantifiable difference in yield of farmers:** KVK introduced mustard variety Rajendra Sufalam with Seed Drill through Front Line Demonstrations and Cluster demonstrations. 20 ha area covered through this technology by KVK Vaishali. In adopted villages of KVK this technology was demonstrated. Yield recorded 14q/ha yield recorded in this

			variety through Seed Drill. There is 22.53 percent increase in yield. **Farmers benefited:** KVK conducted demonstration with 35 farmers in 20 ha of land but now 11343 farmers now adopted this technology in the operational area of KVK, Vaishali. 
4.	**Quail farming**		In Vaishali district land holding of per farmer is very poor Approx. 55% farmers having < 1 acres, 15% farmers are land less, 20% farmers having >1ha of land,10% farmers having 2 ha of land. Therefore KVK team decided to do something for them. Survey conducted in the year 2010-11. KVK SMS started training programmes for them. Master Trainers developed by KVK **Sri Raj Dev Rai and Subodh Kumar**. They trained the farmers locally. KVK personnel's developed SHG's with the help of NABARD. It provided financial support to the farmers for the establishment of Quail units. In the year 2019-20 KVK Vaishali established 10 Quail units with the help of ARAYA project. More than 494 small farm units of quail with capacity of 1000 birds are running successfully with the support of one hatchery established by Mr. Raj Dev Rai with the technical support of KVK and financial support of NABARD since 2014-

			15. Quail farming is more popular in Rajapakar block due to hatchery and intervention by KVK. ***Farmers are contributing Rs. 2 crores in revenue generation through quail farming to the district. In Bihar Vashali is the 1st district that is providing quail to the other districts. Farmer started processing of quail products. There is marketing supply chain developed by the faremrs. They produced eggs and hatching of eggs in hatchery then again they sold the quail. District Vaishali providing quail to entire Bihar and adjoin states like U.P., M.P., Jharkhand and West Bengal.*** 
5.	**Mushroom cultivation for the self employment generation among rural women famrers and youth.**	Successful entreprenеurs developed in Vaishali district, those are Smt. Manorama Devi, Rekha Devi (Lalganj), Manju Devi (Haajipur), Sri Rajeev Ranjan)Lalganj), Sri Subodh Kumar (Bahuara)	**Relevance of technology:** KVK conducted the field visits and interacted with the women farmers. They want to do something for their income enhancement. In this district farmers are poor and per capita vey low land availability. Therefore KVK has taken a step to conduct the trials and trainings among the farmers regarding mushroom cultivation. **Step 1.** KVK conducted training programmes in adopted villages. ON Campus and Off campus training programmes started by the KVK. **Step 2:** KVK, started OFT with the farmers and started to test different mushroom sps like Oyster, Milky white and Button Mushroom and established the demonstration units. **Step 3:** KVK started linkage with other departments like ATMA, JEEVIKA for strenthing of the SHG and financial support. ATMA and DHO provided input for them. **Step 4:** Farmer started Mushroom cultivation with the help of KVK experts **Step5:** Farmer started Mushroom cultivation commercially.

		and many more.	 
6.	**Waste management through vermicompost production**		To reduce the application of chemical fertilizer and to improve soil fertility KVK, Vaishali with the help of District Agriculture Officer, Vaishali and ATMA, Vaishali a joined collaborative approach for promotion of vermin composting. State Govt. also gave subsidy/financial support for establishing of Vermi compost unit. Govt. also promoted the Vermi compost as a job creating sector for rural youth. So large number of farmers in client towards this opportunity and established their Vermi compost unit. One of the innovative farmer Mr. Subodh Kumar of Mukundpur Sarsai established their Vermi unit as a commercial production. Now he sells worms @ Rs. 300/kg a part form Vermi compost after taking technical knowledge from KVK. **740** units established by the financial support of DAO, Vaishali. Demonstration Unit at KVK Vaishali also established for the training purpose.

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) - **NA**

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)
1.	Vegetable production (Cauliflower, Pumpkin & Okra)	50 (Approx)	Cauliflower – 250 q/ha Pumpkin – 100 q/ha Okra – 100 q/ha	110	Yes
2.	Mango	50 (Approx)	15 tone per ha	90	Yes
3.	Banana	50 (Approx)	100 tone per ha	110	Yes

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

Sl. No.	Brief details of the tool/ methodology followed	Purpose for which the tool was followed
1.	PRA	To assess situation based need.
2.	Farm & Home visit	To gather information.
3.	Interaction/Group discussion	To assess needs of farmers.

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

Sl. No	Name of the Equipment	Qty.
1.	PH meter	01
2.	EC meter	01
3.	Spectrophotometer	01
4.	Flamephotometer	01
5.	Atomic Absorption Spectrophoto meter	01
6.	Pelican Nitrogen Distillation unit	01
7.	Distillation unit	01
8.	Hot Air Oven	01
9.	Hot Air oven	01
10.	Hot plate	01
11.	Electronic balance	01
12.	Physical balance	01
13.	Digital balance	01

3.11.b. Details of samples analyzed so far:

Number of soil samples analyzed		
Through mini soil testing kit/labs	Through soil testing laboratory	Total

3.11.c Detail of Soil, Water and Plant analysis at KVK

Sl.	Analysis	No. of Samples analyzed	No. of Villages	No. of Farmers	Amount realized (Rs.)
1.	Soil	752	08	752	-
2.	Water				
3.	Plant				
4.	Fertilizers				
5.	Manures				
6.	Food				
7.	Others (if any)				

3.11.d. 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.	Organized one day training programme for celebration of World soil day-2021	55	-	-	55	55

3.12. Activities of Rain Water Harvesting structure and micro irrigation system- **NA**

No of training programme	No. of demonstrations	No. of plant material produced	Visit by the farmers (No.)	Visit by the officials (No.)

3.13. Technology week celebration: **NA**

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

3.14. RAWE/ FETprogramme - is KVK involved? (Yes)

No of student trained	No of days stayed
24	91

ARS trainees trained	No of days stayed
No	N0

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
22.03.21	Pratima Kumari MLA, Rajapakar	Visit of KVK work.
28.09.21	Sri Awdesh Singh MLA, Hajipur	Visit of KVK work.
09.12.21	Dr. M.S. Kundu DEE, DRPCAU, Pusa	Participated in SAC meeting
16.12.21	Sri Sanjay Kr. Singh MLA, Lalganj	Visit of KVK work
16.12.21	Dr. R.C. Srivastava Hon'ble Vice-chancellor RPCAU, Pusa	Visit of KVK work
23.12.21	Abhishek Anant CGC, Vaishali	Visit of KVK work.
23.12.21	Dr. P.Vijay Anand Chief Scientist & Head CFJRI, Mysore	Visit of KVK work.

Dignitaries visit at KVK, Vaishali

4. IMPACT

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

Name of specific technology/skill transferred	No. of participants	% of adoption	Change in income (Rs.)	
			Before (Rs./Unit)	After (Rs./Unit)
Fruit fly trap	15	5%	22,000/person	29,000/person
Pinching technology of marigold	25	7%	36000/	50000/

Impact of KVK in Terms of Agricultural and Animal Productivity, Socio-economic Conditions and Employment Generation during the period in the Adopted villages

Item	Unit	Prior to KVK	Post KVK activities
Change in cropping intensity		125	137
Change in productivity of 1. Cereal crops Wheat Paddy Maize 2. Pulses Lentil Pigeon Pea Green Gram 3.Oilseeds Tori	(kg/ha)	 25 q/ha 18 q/ha 45 q/ha 700 400 800 17 q/ha	 32 q/ha 22 q/ha 55 q/ha 900 1600 550 1100 19 q/ha
Use of fertilizers (Nutrient) Paddy Wheat Mustard Lentil Use of HYV (High yielding varieties) Paddy Maize Tomato Cauliflower		 (kg/ha) 140:70:40 100:50:20 90:40:42 25:45:20:20 10% 12% 8% 4%	 (kg/ha) 121:62:42 (N:P:K) 120:60:40 (N:P:K) 80:40:40 (N:S:P) 20:45:20:20 (N:F:P:S) 15% 30% 20% 20%
Mushroom Cultivation	23	2 q/day	1 tonns/day

4.2. Cases of large scale adoption

(Please furnish detailed information for each case)

Horizontal spread of technologies	
Technology	Horizontal spread
RCT (Zero tillage)	40% farmers of Faridpur village adopted zero tillage technology because of more return, saving on fertilizer, seed, irrigation, labour charges etc.
Rajendra Subhasani, Prabhat and Rajendra Bhagwati	Paddy seed (var. Rajendra Subhasani, Prabhat and Rajendra Bhagwati has increased from 5.5 ton to 80 ton and the produce has been sold to the neighboring farmers.
Banana fiber production and product development	05 unit established in the year, 2020

improved variety of Pigeon pea Malvai – 13 and Bahar	Pigeon pea Malvai – 13 and Bahar has increased from 215 ha to 713 ha
Bee- Keeping	700 beekeeper with honey production 42 tone to 318 tonns.
Vermocompost	Production of 85360 qt to 140670 qt.
Quail Farming	Small scale commercial goat farming in rural landless women with 50 units.

Give information in the same format as in case studies

4.2. 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
1.	RCT (Zero tillage)	Conservation of time, water, seed and deasel	Transfer technology has enhanced the income of farmer by 25%
2.	Pinching in marigold	Due to this practice the number of branches increases as a result more number of buds therefore more yield to farmers	Increase in income to approx twice.
3.	Raising nursery in potrays and polybags in vermicompost and cocopeat	No water logging No incidence of soil borne disease Ease in handling The media has good water absorbing capacity	More survival of the plants (25%) in Potrays and Polybags as compare to beds.

4.3.1 Impact on profitability/productivity/ sustainability –

Area coverage under Vermi compost production in the district.

Year	Area (ha)/units	Production (qt.)
2021	1203	40000

Impact of newly introduced variety of oilseed & pulses in the district

Area in ha.

Year	Mustard (ha) (var. Rajendra suflam)	Pigeon pea (ha) (M-13/Bahar)
2021	3000	713

4.3.2 Impact on Livelihood Security:

Topics	No. of trainees	Impact (%)
Poultry farming	35	5
Goatry	255	23

Quail farming	226	15

4.3.3 Impact on creation of Job Opportunity:

- For creation of job opportunities and self employment opportunities among rural youth KVK scientists are organizing regular training programme for rural youth and rural women. For self employment, rural youth are selected and motivated through regular training in the field of Goatry, Poultry, Quail farming, Mushroom production technology, Bee keeping, Horticulture crops and Tailoring etc.

Impact on Entrepreneurship Development:

Topics	Units/Trainees
Vermi compost production	155
Bee keeping	70
Banana fiber extraction & handi craft making	2
Cauliflower seed production	8
Azolla production	16
Nursery establishment	125

4.4. Details of innovations recorded by the KVK

Thematic area	**IPM**
Name of the Innovation	Use of Neem seed karnel oil for the management of fruit and shoot and borer of Bhindi
Details of Innovator	Sri Jitendra Singh, Namidha, Lalganj, Vaishali
Back ground of innovation	Innovative farmers winner of ICAR and several Award
Technology details	Neem seed karnel oil is extracted and spraying for the management of fruit and shoot borer in Ladies finger
Practical utility of innovation	It acts as deterant

Thematic area	**Value addition**
Name of the Innovation	Product development from Banana Fiber Extraction
Details of Innovator	Mrs. Vaishali PriyaVaishali
Back ground of innovation	Fashion Designer
Technology details	Promotion and development of products by Banana fiber and fabric after processing of fiber
Practical utility of innovation	Dumping and waste of Banana pseudostem used for product development with high cost in the market

Thematic area	**Quail farming**
Name of the Innovation	Introduction of quail farming for rural employment and food security
Details of Innovator	Mr. Rajdev Rai, Mukundpur Sarsai, Vaishali
Back ground of innovation	Establishment of hatchery
Technology details	Establishment of mother unit for supply of eggs to hatchery
Practical utility of innovation	Good source of quality protein and employment generation in less capital, resource and space

Thematic area	**Azolla cultivation as a feed**
Name of the Innovation	Introduction of azolla cultivation
Details of Innovator	Mr. Rakesh Kumar, Patepur
Back ground of innovation	Azolla unit for goat feed
Technology details	Establishment of azolla unit for supply of feed to goatry/poultry unit
Practical utility of innovation	Good source of quality proteinfor goat and chicks

Thematic area	**Nursery Management**
Name of the Innovation	Establishment of Nursery
Details of Innovator	MrsGuddiSah
Back ground of innovation	House wife
Technology details	Establishment of fruit nursery
Practical utility of innovation	Good quality planting material is being made available

4.5. Details of entrepreneurship development

Entrepreneurship development	
Name of the enterprise	**Goat farming**
Name & complete address of the entrepreneur	Sri Rakesh Kumar, Vill.- Harpurhari, Patepur, Dedhua, Ward No. 03, Block- Patepur, Distt.- Vaishali
Role of KVK with quantitative data support:	Training and technical support.
Timeline of the entrepreneurship development	One year from April, 2020
Technical Components of the Enterprise	Selling goat kits round the year specially Bakrid, Dushara&Holi festival. Having total strength 75 goat.
Status of entrepreneur before and after the enterprise	Income enhanced many folds and become popular among rural youth
Present working condition of enterprise in terms of raw materials availability, labour availability, consumer preference, marketing the product etc. (Economic viability of the enterprise):	Due to heavy demand of goat kid and meat (Chevon) unable to supply the demand of market.
Horizontal spread of enterprise	Yes

Entrepreneurship development	
Name of the enterprise	**Banana fiber product development**
Name & complete address of the entrepreneur	Mrs. Vaishali Priya, Vill.- Mile Pakri, Block- Bidupur, Distt.- Vaishali
Role of KVK with quantitative data support:	KVK provided training on Banana fiber extraction and product development to a group of women for income generation alongwith input distribution.
Timeline of the entrepreneurship development	One year from April, 2020
Technical Components of the Enterprise	Banana fiber product development has a good market demand inside and outside India. The fiber can also used for fabric making.

Status of entrepreneur before and after the enterprise	Income enhanced many folds and become popular among rural youth
Present working condition of enterprise in terms of raw materials availability, labour availability, consumer preference, marketing the product etc. (Economic viability of the enterprise):	Many innovative products are being developed with a good market demand.
Horizontal spread of enterprise	Yes

Entrepreneurship development	
Name of the enterprise	**Nursery**
Name & complete address of the entrepreneur	Sanjeev Kumar, PanapurLanga
Role of KVK with quantitative data support:	Training, providing planting material, and guidance
Timeline of the entrepreneurship development	Five month from February, 2020
Technical Components of the Enterprise	FYM, Vermicompost, Plants, Pots
Status of entrepreneur before and after the enterprise	Previously Sri Sanjeev Kumar used to work in his own field but now he can earn a good profit by establishment of this 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):	Healthy planting material and seasonal flowering plants are being made available to the customer
Horizontal spread of enterprise	Yes.

Entrepreneurship development	
Name of the enterprise	**Flower Nursery**
Name & complete address of the entrepreneur	Rambir Kumar Chaudhary
Role of KVK with quantitative data support:	Training, providing planting material, and guidance
Timeline of the entrepreneurship development	5 years
Technical Components of the Enterprise	FYM, Vermicompost, Plants, Pots
Status of entrepreneur before and after the enterprise	Previously Sri Rambir used to work in his own field but now he can earn a good profit by establishment of this 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):	Healthy planting material and seasonal flowering plants are being made available to the customer
Horizontal spread of enterprise	74 Flower nurseries technically supported by him Yes.

Entrepreneurship development	
Name of the enterprise	**Button Mushroom**
Name & complete address of the entrepreneur	Rajeev Ranjan
Role of KVK with quantitative data support:	Training, providing planting material, and guidance

Timeline of the entrepreneurship development	3 years
Technical Components of the Enterprise	FYM, Vermicompost, Plants, Pots
Status of entrepreneur before and after the enterprise	Previously Rajeev Ranjan was doing job. He left the job and strated mushroom production unit.
Present working condition of enterprise in terms of raw materials availability, labour availability, consumer preference, marketing the product etc. (Economic viability of the enterprise):	To provide fresh mushroom. 3 q/day
Horizontal spread of enterprise	80 farmers established unit under his guidelines with the technical support of KVK.

1.6. Any other initiative taken by the KVK:

Leading project in KVK, Vaishali for livelihood enhancement of Farmers

A. <u>ARYA PROJECT-</u>

The project entitled Attracting and Retaining Rural Youth in Agriculture started in 2019 -20 with the aim of retaining youth in agriculture. It has the following components.

- Bee- Keeping
- Mushroom Cultivation
- Banana Fibre Extraction
- Quail Farming
- Nursery Management

Under ARYA project many rural youth have been trained for components under ARYA

Name of Enterprises	No. of training programme conducted	No. of rural youths trained	No. of youths established their enterprise	Percent change in income over the years
Horticulture Nursery	12	152	15	25
Mushroom Production Unit	11	119	04	21.5
Bee keeping and Honey Production Units	09	156	15	15.33
Quail Unit	10	100	14	23
Banana Fiber Extraction Units	18	123	02	19.77


कृषि विज्ञान केन्द्र
हरिहरपुर, वैशाली


कृषि विज्ञान केन्द्र
ARYA परियोजना

B. ICDS PROJECT

The project is running at KVK Vaishali with an total outlay of 27.85 lakh.It is, aimed to develop less costly but equally nutritious complementary foods from locally available foods that may be within the reach of masses.

OBJEVCTIVE

Development of high nutrient dense complementary mixes from locally available foods For the reduction in malnutrition

S.No.	Activities	Beneficiary/household
1.	Training of Mothers	255
2.	Training of stake holders	180
3.	Development of Kitchen garden	100
4.	Product development	25
5.	Literature development	6

- The Project entitled " Improve Access to good quality nutrition's to children of poor families" got implemented at the state level.

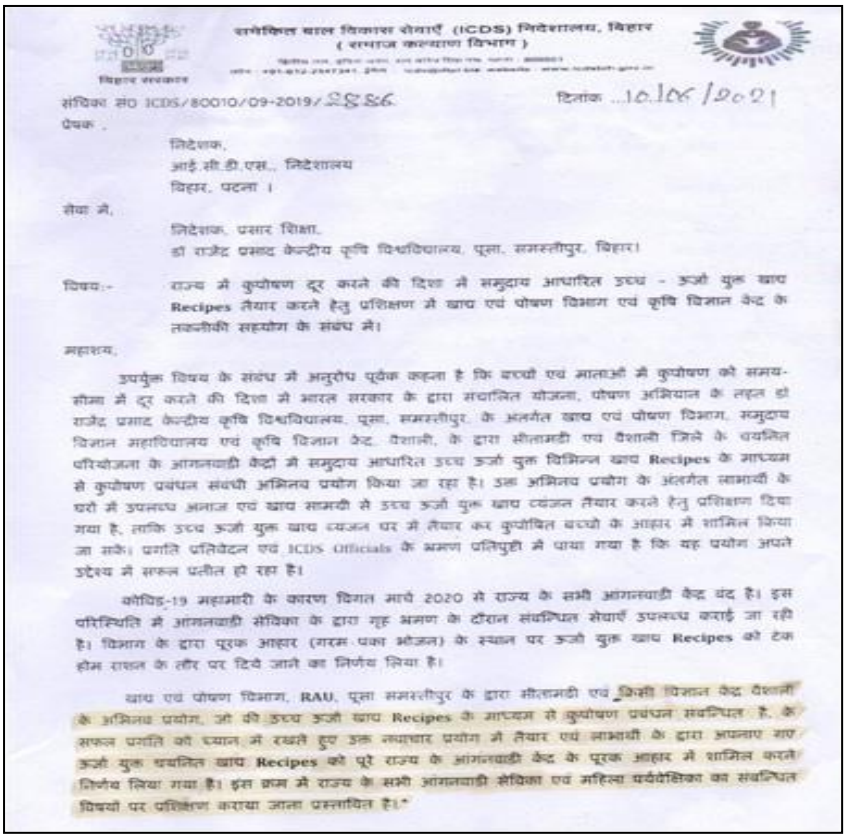
- The multi grain Ladoo developed under this project has been being given to all Aganwadi Kendra of state because due to Pandemic situation of COVID the Aganwadi Kendra are being closed and

the multi grain Ladoo is a ready to eat nutrient dense food which is given to children of households attached Aganwadi .

Inspection of work by ICDS team, Patna

Demonstration of Multigrain Ladoo in trial village

Letter of Bihar Govt. for ICDS



समेकित बाल विकास सेवाएँ (ICDS) निदेशालय, बिहार
(वरयराज कल्याण विभाग)

संख्या सं0 ICDS/80010/09-2019/2886 दिनांक 16/06/2021

प्रेषक,

निदेशक,
आई.सी.डी.एस., निदेशालय
बिहार, पटना ।

सेवा में,

निदेशक, प्रसार शिक्षा,
डॉ राजेंद्र प्रसाद केन्द्रीय कृषि विश्वविद्यालय, पूसा, समस्तीपुर, बिहार।

विषय:- राज्य में कुपोषण दूर करने की दिशा में समुदाय आधारित उच्च - ऊर्जा युक्त खाद्य Recipes तैयार करने हेतु प्रशिक्षण में खाद्य एवं पोषण विभाग एवं कृषि विज्ञान केन्द्र के तकनीकी सहयोग के संबंध में।

महाशय,

उपर्युक्त विषय के संबंध में अनुरोध पूर्वक कहना है कि बच्चों एवं माताओं में कुपोषण को समय-सीमा में दूर करने की दिशा में भारत सरकार के द्वारा संचालित योजना, पोषण अभियान के तहत डॉ राजेंद्र प्रसाद केन्द्रीय कृषि विश्वविद्यालय, पूसा, समस्तीपुर, के अंतर्गत खाद्य एवं पोषण विभाग, समुदाय विज्ञान महाविद्यालय एवं कृषि विज्ञान केन्द्र, वैशाली, के द्वारा सीतामढ़ी एवं वैशाली जिले के चयनित परियोजना के आंगनवाड़ी केंद्रों में समुदाय आधारित उच्च ऊर्जा युक्त विभिन्न खाद्य Recipes के माध्यम से कुपोषण प्रबंधन संबंधी अभिनव प्रयोग किया जा रहा है। उक्त अभिनव प्रयोग के अंतर्गत लाभार्थी के घरों में उपलब्ध अनाज एवं खाद्य सामग्री से उच्च ऊर्जा युक्त खाद्य व्यंजन तैयार करने हेतु प्रशिक्षण दिया गया है, ताकि उच्च ऊर्जा युक्त खाद्य व्यंजन घर में तैयार कर कुपोषित बच्चों के आहार में शामिल किया जा सके। प्रगति प्रतिवेदन एवं ICDS Officials के भ्रमण प्रतिपुष्टी में पाया गया है कि यह प्रयोग अपने उद्देश्य में सफल प्रतीत हो रहा है।

कोविड-19 महामारी के कारण विगत मार्च 2020 से राज्य के सभी आंगनवाड़ी केंद्र बंद है। इस परिस्थिति में आंगनवाड़ी सेविका के द्वारा गृह भ्रमण के दौरान संबन्धित सेवाएँ उपलब्ध कराई जा रही है। विभाग के द्वारा पूरक आहार (गरम पका भोजन) के स्थान पर ऊर्जा युक्त खाद्य Recipes को टेक होम राशन के तौर पर दिये जाने का निर्णय लिया है।

खाद्य एवं पोषण विभाग, RAU, पूसा समस्तीपुर के द्वारा सीतामढ़ी एवं वैशाली विज्ञान केंद्र वैशाली के अभिनव प्रयोग, जो की उच्च ऊर्जा खाद्य Recipes के माध्यम से कुपोषण प्रबंधन संबन्धित है, के सफल प्रगति को ध्यान में रखते हुए उक्त नमाधार प्रयोग में तैयार एवं लाभार्थी के द्वारा अपनाए गए ऊर्जा युक्त चयनित खाद्य Recipes को पूरे राज्य के आंगनवाड़ी केंद्र के पूरक आहार में शामिल करने निर्णय लिया गया है। इस क्रम में राज्य के सभी आंगनवाड़ी सेविका एवं महिला पर्यवेक्षिका का संबन्धित विषयों पर प्रशिक्षण कराया जाना प्रस्तावित है।"

C. Seed Hub Project:

- 105 quintal Seeds of Lentil (IPL-316) and Chickpea (JG-14) has been produced through farmers and sold to different agencies.

(>10Lakh revenue generated)

- Seed processing plant and institute, got the license for processing and selling produce.
-

D. CRA Programme- Popularization of Climate based cropping system

The project on **"Climate Resilient Agriculture Programme"** sanctioned by the Government of Bihar to popularize Climate based cropping system. Five villages (Neerpur, Bajitpur, Rasalpur, Bardiha& Repura) of Patepur block are selected under this project. Total 623 acre demonstration under different interventions like zero tillage wheat/Lentil/Chichpea/Mustard, use of happy seeder, crop residue management, raised based planting maize/wheat nutrient expert green seeker based nutrient etc.

Crop	Variety/ Technology demonstrated	Season Kharif/Rabi/ Summer	No. of Benefi ciaries	Area (ha)	Yield of local check		In crease in yield (%)
					Demo. yield	Local yield	
Green gram	Zero tillage	Summer	146	53.6	11.65	7.2	61.80
Lobiya			11	3.2	Hari Khad ke liye.		
Cluster Bean			19	5.2			
Paddy	DSR	Kharif 2021	117	44	41.2	33.5	22.98
Paddy	TPR		317	139.6	43.6	32.8	32.92
Paddy	Drum Seeder		125	48.4	41.8	34.1	22.58
Soyabean	Raised bed		12	3.2	Damaged due to heavy rain fall.		
Maize			16	3.2			
Bajara	Zero tillage		05	0.8			
Pigeon Pea	Raised Bed		16	3.2			
Ragi	Zero tillage		01	02			
Foxtail Bajara			03	0.4			
Wheat	HD-2967	Rabi 2021-22	06	2.4	On going.		
Wheat	Zero tillage		65	25.2			

Rai			25	8.4	
Kabuli Chana			08	02	
Lentil			10	3.2	
Maize+Potato	Antarvarti crop		30	10.4	
Potato	Potato Planter		15	12	

Innovation 1: Use of ICT for the Farmers

Kisan Sarthi App

ICT is an important tool to reach out to the farmers in a timely, holistic and extensive manner but most farmers cannot benefit from web access as the outreach through Government Offices, Common Service Centres and Internet Kiosks is also limitedas far as web enabled services are concerned. However, mobile telephone density in the rural areas is increasing everyday with more than 35 crore mobile connections being used and therefore, the National e-Governance Plan (NeGP-A) and 12th Plan Document

for the National Mission on Agricultural Extension & Technology lay great emphasis to provide extension services through mobile phones which gives a potential outreach to nearly 13 crore farm families.

Under this service, Agromet advisory-based information of weather forecast is sent through SMS on the mobiles of farmers on everyday in both the languages Hindi & English. Till date 7640 farmer registred on this app.

WhatsApp Groups

KVK, Vaishali iniciated 3 groups for the farmers. There are 325 farmers in groups and they are sharing their problems. KVK SMS solved their problems through SMS advisory. Till date 1859 messages shared with farmers.

Automated Weather Station and Advisory Services

Automatic weather stations may be designed as an integrated concept of various measuring devices in combination with the data- acquisition and processing units. Such a combined system of instruments, interfaces and processing and transmission units is usually called an automated weather observing system(AWOS) or automated

surface observing system (ASOS). This station updates the weather related information like Relative Humidity, Rainfall, Temperature, and Wind Velocity. The farming community of the district is regularly benefitted from this weather station. The KVK regularly displayed the forecast and provide to the farmer and it send to the line department of the district through voice and text messages.

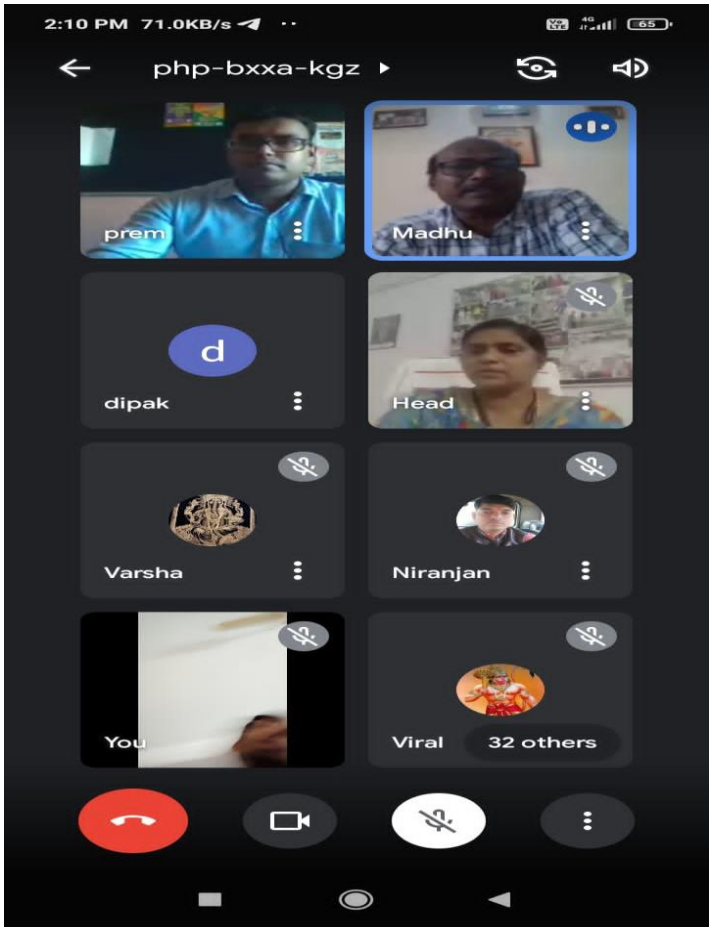
Innovation 2: Custom Hiring Centre

Custom hiring centre for timely planting: Custom hiring centre was established through CNC ICAR and CRA project. Farmers received these equipments on hired basis from KVK. The farmers used these instruments and equipment in a very enthusiastic manner and overall productivity was increased. The crops were planted in time and the farmers were able to learn that this was the only non-monitory input for yield enhancement.

Innovation 3: Trainings through Virtual Mode

Use of Mobile & TABLETS

KVK, Strated trainings Kisan Gosthi and **e-Kisan Sammellan** through virtual mode due to COVID Pandemic and to provide better technical input to them. KVK provided TABLET to the SHG's during training. They attended training over it. In two years of COVID KVK provided 34 trainings 1 Kisan Sammelan & 5 e Kisan Chaupal in virtual mode with 1676 farmers,



हाजीपुर में कीट प्रबंधन पर आनलाइन प्रशिक्षण

संवाद सूत्र, वैशाली : कीट प्रबंधन विषय पर आनलाइन प्रशिक्षण का आयोजन जिले के कृषकों के लिए किया गया। प्रशिक्षण में जिले के 62 कृषकों, छात्रों एवं नवयुवकों ने भाग लिया। शुभारंभ डा. राजेन्द्र प्रसाद केंद्रीय कृषि विश्वविद्यालय के प्रसार शिक्षा निदेशक डा. एमएस कुंडू ने किया। उन्होंने कहा कि किसानों की सेवा के लिए कृषि विज्ञान केंद्र की टीम विश्वविद्यालय के कुलपति डा. रमेश चंद्र श्रीवास्तव के दिशा-निर्देश में लगातार अग्रसर है। डा. अनुपमा कुमारी, उप निदेशक प्रसार ने किसानों को इस प्रकार के प्रशिक्षण में भाग लेने के लिए प्रेरित किया।

कार्यक्रम के मुख्य वक्ता प्रेम प्रकाश गौतम ने समेकित कीट प्रबंधन हेतु जैविक कीट नियंत्रण के उपायों को अपनाने पर बल दिया। उन्होंने रासायनिक दवाइयों के प्रयोग से बचने की सलाह दी।

Innovation 4: Use of Spent Mushroom Substrate by Vegetable growers

Spent Mushroom Substrate Technology:

It is readily available (bagged, at nursery suppliers), and its formulation generally consists of a combination of wheat straw, cow dung and ground chalk, composted together. It is an excellent source of humus, although much of its nitrogen content will have been used up by the composting and growing mushrooms. It remains, however, a good source of general nutrients (0.7% N, 0.3% P, 0.3% K plus a full range of trace elements), as well as a useful soil conditioner. However, due to its chalk content, it may be alkaline, and should not be used on acid-loving plants, nor should it be applied too frequently, as it will overly raise the soil's pH levels.

(i) Training - More than apprx.2000 farmers were trained for this technology mushroom production technology and disseminated the technologies in all blocks of Vaishali district (16 blocks) with the help of Krishi Vigyan Kendra, Vaishali.

(ii) Demonstration conducted: OFT, FLD conducted at farmers field. They adopted the technology. Demonstration conducted on 6 locations Lalganj, Bhagwanpur, Mukundpur, Vidupur, Sarai and Hajipur.

(iii) Spent mushroom substrate application - This spent substrate utilized in potato field at the rate of 6 tons per acre and observed that 10-12% increment in yield, desired uniform size of potato and better quality. Similarly, other vegetables crop like Brinjal, Cauliflower, Onion, Tomato, Lady finger etc. showed their quantitative and qualitative improvement.

(iv)Marketing Channel – Linakge support provided to the mushroom growers for the marketing of this compost. All Spent Mushroom Substrate supplied to nursery growers who technically supported by the KVK. At present 2000 tones spent mushroom substrate is marketed by the farmers.

Farmer with Spent Mushroom Substrate

Innovation 5: Standardization of Mulching technology for vegetable cropping system.

Scientific relevance: Yes, this is very relevant technology for Vaishali district and also for other parts of Bihar.

1. **Reduction of Weeds:** Mulching decreases the weed population year by year because weed seeds inside the mulch destroyed when they continuously receive moisture. Weed plants did not get light therefore their growth affected and these died.
2. **Reduction in soil borne diseases and pest:** Soil solarisation done through plastics in summer. In case of plastic mulching same phenomenon repeated in the field. Insect's eggs destroyed because they do not found suitable environment for hatching of eggs inside the polythene.
3. **Earliness in crop:** Regular availability of water and early germination enhances the earliness in crop. For example, Okra seed facing problem in seed germination in the month of January last week but if seeds are sown under plastic mulch germination occurs fast. Because it is find during experimentation soil temperature increases 3-4 ^{0}C. This temperature helps in rapid seed germination.
4. **Soil health management (Increase soil flora & fauna):** Adequate soil moisture increases the population of microbes found in the soil. This microbial activity enhances the organic component in the soil. Now a day our soil is deficient in organic content, it happens due to imbalance dose of fertilizers and water management.
5. **Water conservation:** Number of irrigations reduced in mulching technology because polythene sheet stopped loss of moisture through evaporation and flood irrigation.

6. **Reduced in cost of cultivation:** Weed not grown, irrigation decreased, use of insecticides pesticide minimized, minimum labour, all parameters decreased the cost of cultivation.
7. **Increase in the yield:** It is recorded that yield increased 3 times.

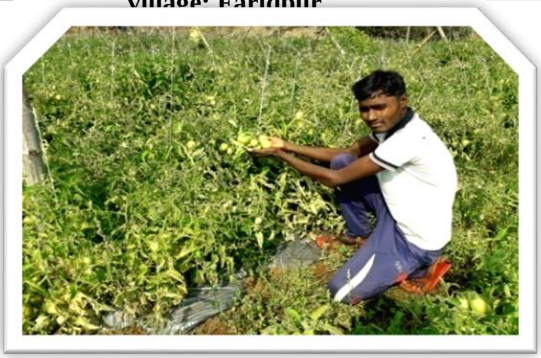
A. <u>Socio-economic relevance:</u> It is very relevant to the Vaishali district farmers especially because 90 percent farmers of the district are marginal farmer's. Average land holding size of the farmer in Vaishali district is 0.2 ha. They already growing vegetables, therefore it was easy to convince the farmers regarding technology. Now the situation has been changed.

Appropriate plan /Methodology used for execution or implementation of work:

1. **Conducted Awareness Campaign about Importance & benefit of Mulching:** KVK started awareness programmes since year 2014 to till today continuously. We have conducted 8 programmes regarding this and 658 farmers benefitted by this programme.
2. **Demonstrations of technology:** KVK conducted Front Line Demonstration in the year 2020-21 at farmer's field.
3. **Conducted Training programmes:** KVK conducted 34 training programmes for Practicing Farmers, Rural Youth & Extension Functionaries within 5 years.

Mulching demonstration at KVK, Vaishali

Demonstration at Farmers field, village: Faridpur



Innovation 6: Introduction of Azolla Production as a Biofertilizer and cattle feed.

For the popularization of Azolla cultivation a demonstration unit by established in 2016-17 by KVK. A large number of farmers including extension functionary's got training on Azolla cultivation and started their own unit of Azolla cultivation.

Purpose of innovation: Vaishali district is every year facing water logging in the fields during rainy season. At that time fodder crises ouccered in the distirct. Farmer do not have green fodder for their cattles, so that azolla would be a best source of green fodder during this critical period. **Quality of fodder:** As we know that Azolla is a cheap source of micro nutrient and protein for cattle, goat, quail and fish. By feeding of Azolla farmer can save up to 10% on feed expenditure. This innovation helped farmers lot. 30 percent of the farmers of distirct now aware about azolla cultivation. 1000 Azolla unit established in the district.

Azolla Unit at KVK for display

Azolla cultivation in paddy crop for bio fertilizer

धान की बिक्री व अजोला उत्पादन पर प्रशिक्षण शुरू

हाजीपुर | एक प्रतिनिधि

लॉकडाउन से कृषि कार्य को अलग रखने व खरीफ में किसानों को बेहतर बीज उपलब्ध कराने के लिए सरकार के दिशा-निर्देश पर तेजी से कार्य शुरू किए गए हैं। सोमवार को स्थानीय हरिहरपुर स्थित कृषि विज्ञान केन्द्र में उत्तम क्वालिटी के धान के बीज की बिक्री शुरू हो गई।

कोविड-19 के प्रभाव के कारण सामाजिक दूरी का पूरा ध्यान रखते हुए किसानों को बीज की बिक्री स्वप्निल भारती के द्वारा की गई। कृषि विज्ञान केन्द्र के वरीय वैज्ञानिक सह प्रधान नरेन्द्र कुमार ने बताया कि किसानों ने नकदी रहित विधि (डेविट कार्ड, क्रेडिट कार्ड) द्वारा भुगतान किया है।

सभी किसान बीज पाकर उत्साहित थे। उन्होंने बताया कि बीज लगाने संबंधी जानकारी शस्य विज्ञान के वैज्ञानिक डॉ. सुनीता कुमारी ने पूर्ण रूप से दी। बीज उपचार के लिए बाविस्टिन नामक दवा का प्रयोग करने की सलाह किसानों को दी गई। नर्सरी में ही जींक का प्रयोग कराने की सलाह दी गई, ताकि पौधा स्वस्थ और उत्पादन अच्छा हो और खैरा रोग से बचाव हो सके। केन्द्र के प्रधान डॉ. नरेन्द्र कुमार ने बीज बिक्री के उपरांत सभी कृषकों को अजोल उत्पादन तकनीक पर एक प्रशिक्षण दिया तथा अजोला का धान पर उत्तम प्रभाव संबंधी जानकारी दी गई।

डॉ. नरेन्द्र कुमार ने बताया कि अजोला एक पशु चारा के साथ-साथ एक प्राकृतिक खाद्य भी है जो हवा से नाइट्रोजन लेकर जमीन में फिक्स करना है, जिससे जमीन की उर्वरा शक्ति बढ़ती है।

अजोला के कारण किसानों को कम खर-पतवार का सामना करना पड़ता है। इससे मजदूरी में बचत होती है तथा उत्पादन अच्छा मिलता है। धान के खेत से उत्पादित अजोला का पशु चारा के रूप में आसानी से उपयोग किया जा सकता है, जिसका अच्छा परिणाम दूध उत्पादन पर पड़ता है।

स्थानीय हरिहरपुर कृषि विज्ञान केन्द्र में धान बीज की बिक्री करते डॉ. नरेन्द्र कुमार व स्वप्निल भारती। ● हिन्दुस्तान

Innovation 7: Banana Fiber Extraction Technology

Purpose of innovation: Vaishali district is famous for banana cultivation. Pseudo stem of banana can be used for making fiber. For that purpose a large number of rural youth was trained on banana fiber extraction technique. Farmers harvested banana fruit after that they dumped banana thumb in road side areas for in the barren fields. They cretated bad odur and pollution in surrounding perifere. Farmers were also paying prices for the dumping of this waste material.

Identification of banana fields: KVK Vaishali selected the areas where banana is growing. Selected the farmers and trained them about banana waste utilization.

Establishement of Banana Fiber extraction Unit at KVK: KVK established one Banana Fiber Extraction Unit at KVK. This unit used for training and demonstration purpose.

Technology provided:

1. **Banana fiber extraction:** Banana thumb utilized in this process. With the help of banana fiber extraction machine fiber is making. KVK provided training to the farmers.
2. **Use of banana slurry in vermicompost:** Banana bi product i. e. waste after fiber extraction is now utilized by the farmers in vermicompost preparation. With in 3 months farmers are getting quality compost. There is one more benefit to the farmers i.e. volume of banana waste got reduced after converting into vermicompost. It will be just ¼ of the actual volume.

Some of the innovative farmers after training established their on extraction unit at village-Vidupur, Block-Vidupur, Hajipur. They got success in making handicraft items and market their product at Patna and other places of Bihar.

Training in KVK for rural women for Banana fber extraction and preparation of cord

Innovation 8: Value Addition & Marketting linkages of Quail

KVK, Vaishali introduced quail farming in the district 2011-12 with the help of NABARD and RUDSET. Around 700 rural youth selected and trained (2012-20) for quail farming from hatchery to market. One of the innovative farmers Mr. Rajdev Rai established their hatchery unit at the Mukundpur Sarsai with hatching capacity of around 15000 quail egg in hatchery machine. Now he produced more than 10 to 15 thousand eggs per cycle and sell their chicks, adult birds to all over Bihar and UP. Quail farming is becoming more popular among rural youth because it is innovative and requires less investment as compare to poultry farming. Consumption of quail eggs increasing due to its nutritious value. Poor labours and farmers are keen to buy quail egg for their nutritional requirement. 13 SHG,s are working with 494 quail units. 2200 Farmers are getting employment through quail farming. This is the best suited innovation for the farmers. Marginal farmers adopted this technology on large scale.

Now farmer's has been started processing of quail. On the online order or telephonic booking they supplied the all kinds of processed food items of quail like egg curry, quail tandoori, quail curry, quail mushroom curry etc. They provides the food items within one hrs door to door supply through Swiggy, Zomate and retail outlet like Restraunt. Quail producer started one retail out let at Hajipur in the technical support of KVK.

DEE, DDT and Director RGM, visited his processing outlet at Hajipur

बटेर पालन का रोजगार युवाओं के लिए लाभप्रद

संवाददाता, राजापाकर

वैशाली जिला राज्य में बटेर पालन में प्रथम स्थान पर है . कृषक श्री राजदेव राय 4-5 वर्ष से बटेर पालन कर रहे है. साथ ही सभी लोगों को प्रेरित भी कर रहे है .कृषि विज्ञान केंद्र के बटेर पालन इकाई को देखने के लिए नजदीकी जिले के कृषक एवं बेरोजगार युवा समय समय पर भ्रमण करते रहते है . वैशाली जिले के बटेर पालक यहां से अन्य जिलों में पड़ोसी राज्यों में बटेर की पूर्ति की जा रही है शुक्रवार को बेगूसराय जिले के कृषकों ने कृषि विज्ञान केंद्र, हरिहरपुर, वैशाली में बटेर पालन इकाई का भ्रमण किया . बटेर पालन इकाई को भ्रमण करते समय कृषि विज्ञान केंद्र के वरीय वैज्ञानिक एवं प्रधान डॉ सुनीता कुशवाहा ने सभी कृषकों को बटेर पालन के लिए तकनीकी सलाह के साथ साथ बटेर पालन के लिए मार्गदर्शन भी किया . तथा सभी किसानों को बताया कि बटेर पालन स्वरोजगार का एक अच्छा माध्यम है. युवा बेरोजगार कृषक विज्ञान केंद्र में बटेर पालन का प्रशिक्षण लेकर अपने-अपने क्षेत्र में बटेर पालन का फार्म खोलकर अच्छा आमदनी प्राप्त कर जीविकोपार्जन कर सकते हैं.

निरीक्षण करते कृषि विज्ञान केंद्र के वरीय वैज्ञानिक एवं प्रधान डॉ सुनीता कुशवाहा .

Work in Media

Innovation 9: Waste Bag method of Kitchen

Kitchen garden has been developed in different villages of KVK Vaishali that includes Gurmiyan, Hariharpur,Balwan Kuwari, Subhai, Daulatpur and Saidpur Rajauli. Waste bag method of kitchen gardening withn minimal cost and for landless farmer. The main components are a waste plastic bag, soil, vermicompost and a 1.5 feet of bamboo and some seeds of seasonal vegetables especially climbers and creepers. A woman Anjali Bharti of Hariharpur village has successfully planted and growing vegetables as per family needs. 300 farm families are producing vegetables in waste bagsThe family comprises of five members and growing vegetables like Bottle gourd, lady finger, bitter gourd.

KVK team monitoring waste bag at farmers house

Women Farmer with waste bag

Innovation 10: Introduced technology for the use organic products

Herbal Gulal preparation technology

In the year 2020-21 KVK, Vaishali introducted new innovation i.e. use of Harbal Gulal making technology among rural youth and women farmer for employment generation.
Methodology: KVK conducted survey and found that in village areas there is huge scope of herbal products preparpation. Farmers are already producing vevegatables, flowers and these are the raw materials for the gulal making.

Types of Harbal Gulal prepared:

1. **Gulal by turmeric:** In this technique KVK SMS prepared gulali through turmeric powder. As a base material Arrarote used in this
2. **Gulal by bean leaves:** Green colour gulal prepared by seim (bean leaves). Botanically known as lab lab.
3. **Gulal by Achiote plants (Sindoor) seeds:** Orange colour gulal prepared by seeds. This shrub botanical name is Bixa orenella. On the occasion of world environment day KVK provided these plants to the 100 farmers in the collaboration of department of Forestry, Vaishali.

Training to the farmers: 4 trainings organized for gulal preparation. Initiatives for conservation of natural resources have been taken up for improvement in soil health, water use efficiency, conservation practices, use of organic inputs by KVK.

Programme of training telecasted on Doordarshan, Patna

Innovation 11: Multigrain Laddoo for Children

A multigrain based ladoo developed at KVK for feeding under ICDS project in which the grains has been cleaned, washed, processed, dried and floured. This mixture can be use to make ladoo for childrens as well as can be prepared by cooking with sugar and milk for 2-3 minute. This prepared flour is ready to cook complementary food for childrens of poor families at very low cost and domestic level processing

Processing of grain

Wheat (40gm) + **Maize (20gm) + Ragi (20gm) + Mung (20gm)**

↓

Cleaning of grains

↓

Soaking Overnight

↓

Washing & germinating

↓

Drying

↓

Roasting

↓

Flouring

2. LINKAGES

Extension agencies like KVK face the twin challenge of limited finance and manpower. So KVK Vaishali manage these challenges and achieve larger impacts by converging KVK efforts with ATMA, DAO, DHO, NHM, RUDSET, JEEVIKA, AGA KHAN & other Govt. agency.

Approach – For convergence by KVK, Vaishali

With the idea to expand it activities for better reach, the KVK made an action plan and named it, as Farmer's development. The approach was launched in 2015 in collaboration with various agencies to improve delivery of technical and extension services in a convergence mode. Since then KVK, Vaishali has been working with more than 10 agencies/partners such as ATMA, Vaishali, District Agriculture Officer, District Animal Husbandry Officer, District Fishery Officer, DRDA, IFFCO, Reliance Foundation, RUDSET, National Institute for Agriculture Marketing Agency, NHM, RCM, World Vision, Narayani Seva Sansthan, NIAM and others.

5.1. Functional linkage with different organizations

S.No.	Organizations	Area of collaboration / interaction
1.	DRPCAU, Pusa, Samastipur	This is the host organization provided financial support, research and teaching programme implementation. RAWP executed by the KVK for the students and KVK has many projects for multiplication trials like varietal evaluation of

		pointed gourd, biofortified wheat, state varietal trial of maize etc. Administrative control also.
2.	ICAR –RCR- Patna	Scientists interface Research and technical information. One acre trial of Faba bean conducted in CRA village
3.	ATARI, Zone IV, Patna	Financial assistance and project implementations.
4.	DWMR, WALMI, Patna	Participation in trainings
5.	Central Potato Research Institute Phulwari Sharif, Patna	Linkage for technology transfer through FLD, OFT and multiplication of potato varieties among farmers. KVK Vaishali popularized Kufri Lalit, KufriLalima and KufriKhyati in this area. In the year 50 q breeder seed provided by CPRS and KVK produced 250 Foundation seed.
6.	IARI, New Pusa farm, Samastipur	Joint Implementation of technology through demonstrations. Papaya variety PusaNahna popularized.
7.	Indian Institute of Pulses Research, Kalyanpur, Kanpur	Joint Implementation for Seed Hub Programme and seed production. KVK, Vaishali granted Rs.1.5 cr. For execution of project.
8.	Coconut Development Board, Patna (regional Office)	Joint Implementation of extension programmes like trainings and Kisan Gosthi.
9.	District Level officials, such asDistrict Magistrate, DDC	Task fore meeting, advisory board meetings and technical support to the department.
10.	District Agril. Department , Vaishali	Joint field visits, inspections, participation in meeting and technicalsupport by KVK.
11.	District Hort. Department, Vaishali	Horticulture entrepreneur development they provided subsidy and other govt. grants to farmers on the recommendation of KVK. Horticulture Exhibition and Horticulture shows organized and KVK farmers awarded by the department.15 Awards received by KVK, also grant subsidy to establish hort. Units. 1. Mr Rajeev Ranjan, KVK Trained farmer got Rs.20 lakh subsidy to start button mushroom unit 2. Smt Manorama Singhreceived Rs.30 Lakh in subsidy for mushroom production unit. 3. Mushroom growers 150 farmers received subsidy for oyster mushroom production on the recommendation of KVK.

12.	District Fishery Department, Vaishali	Trainings and farmers mobilization.
13.	District Forest Department, Vaishali	Association for auction of farm trees, trainings and joint plantation programmes. 3000 plants distributed among farmers.
14.	ATMA, Vaishali	Joint Implementation of field visits, trainings, Kisan mela and demonstrations. Fund received for technology refinement Rs. 3.75 Lakh.
15.	Plant Protection Officer and Block level Agril. Officer	Kisan Goshthi, Training Programmes, Kisan Melas and demonstrations and technical help of the farmers, joint visits.
16.	DAHO, Vaishali	District Animal Husbandry Officer conducted joint programmes with KVK. Animal Health Camp 15 conducted and technical support by KVK. Trained farmer's received subsidy for establishment of Dairy.
17.	RLBCU, Jhansi	For seed input in Seed hub programme and technical support. 15 q Lentil Seed provided in 2020.
18.	BISA, Pusa	For technical and financial support.
19.	CSISA, CIMMYT	For technology intervention Rs. 2 lakh granted
20.	IARI, Deptt. Of Plant breeding & Genetics	Multiplication trial for screening of 300 germplasms in Bihar location. Technical support.
21.	NRC, Litchi, Muzaffarpur, Bihar	Technology dissemination. 1 technology Girdling in litchi is on going since to years and technical support.
22.	CFTRI, Mysore	Banan processing technical support to the banana growers in the operational area of KVK. Ready to conduct one project with KVK on processing.
23.	ICDS, Patna	Project implementation with rural women farmers of the district.
24.	JEEVIKA, Bihar	For SHG capacity building training programmes
25.	BAMETI, Patna	For trainings and capacity building programmes
26.	Doordarshan, Patna	For live seminars and TV talk for the farmers.
27.	Radio Station, Patna	Radio talk and programme recordings
Fertilizer & Pesticide Companies		
28.	Indogulf Cooperation	Kisan Mela sponsorship and mobilization of farmer. Linkage for seed, fertilizer & pesticide inputs, trainings programmes, farmers mobilization, exhibitions and demonstrations.
29.	Rastriya Chemical Fertilizers.	
30.	Indofil chemical Limited	
31.	Hindustan Chemicals.	
Private Seed Companies		
32.	Godrej Agrovet Pvt. Ltd.	Seed Input & farmers mobilization Kisan mela sponsorship.
33.	Bayer Crop Science Ltd.	Pescide& Seed Input linkage

34.	UPL, Ltd.	Seed input linkage. Maize trials provided to the Farmers.
35.	Kaveri Seeds Pvt. Ltd.	Seed input linkage
36.	Crystal Crop Science Ltd.	Seed & pesticide input
37.	Kanchan Seeds Ltd.	Seed input Linkage & Kisan Mela
38.	Nuziveedu Pvt. Ltd.	
39.	Excel India Ltd.	Pesticide linkage &Exhibitions
40.	Dhanuka	
41.	Aga khan Rural Support Programme	For trainings and extension work. Farmers mobilization. Travelling seminars in CRAvillage 500 farmers mobilize by them. Capacity building training programmes like training for goat farming, Mushroom cultivation, Quail Farming etc. for the rural women farmers.
42.	BASIX	For trainings and farmers mobilization in FPO formation and its support at Vidupur.
43.	Mahindra Samruddhi, Vaishali	Association for mechanization in operational area of KVK.
Public Institutions		
44.	Khadi Gramodyog Sangh.	Women farmer mobilization to the KVK activities and training programmes
45.	Nehru Yuva Kendra, Patna	For training of rural youth
46.	RUDSET, Vaishali	For the training support & to build up entrepreneurship.
47.	IFFCO, Hajipur	Demonstrations for NANO fertilizers in the interest of farmers and environment.
48.	COMFED	Participation in meeting, conducting training & Demonstration and regular announcement of the activities of the KVK through the wall Magazine PRATIBADH. Associated dairy farmers.
49.	KRIBHICO	Fertilizer input and extension activities
Financial Organization		
49.	Bank of Baroda, Hajipur.	Financial Linkage and participation in training.
50.	Regional Rural Bank, Hajipur.	
51.	Central IPM, Punaichak, Patna.	IPM Demonstration. 3 ha demonstration conducted in the adopted village of KVK
52..	NHM (National Horticulture Mission), MMM (Micro- Mode Management) & NHB	For training demonstration & seed production & popularization of vegetable/ horticultural crop. Protected cultivation developed through NHM &NHB.. Training pruning machine provided by NHB approx.30 ha orchard pruned by this machine. 300 farmers seen demonstration of this machine.

NGO's		
53.	World Vision, Vaishali	Trainings and Farmers mobilization. Provided sanitation kit to 100 farmers during COVID,2020 at KVK. Travelling seminars conducted with the help of them. 200 farmers they mobilize for the KVK.
54.	MamtaMahila Kisan Club	Mobilization of women farmers and trainings for rural youth.
55.	Kishore Mitra, Vaishali	Trainings for animal husbandry and farmers mobilization
Private News Channels		
56.	Zee. TV, Vaishali Bihar	
57.	Vaishali News Channel	
Print Media		
58.	Hindustan News paper	Publication of extension activities of KVK and help in technology dissemination among the mass
	Dainik Jagran News paper	
	Dainik Bhaskar News Paper	
	PrbhatKhaber News paper	
Others		
59.	Dr. C. V. Raman University, Vaishali	RAWE programme association. 2 students conducted RAWE at KVK, Vaishali.
60.	Linkage with FPO's Turki Rasalpur Farmers producer Organization.	Technical support by KVK. 12 FPO's for farmer's mobilization. Technical support by KVK
61	Lovely ProfeffsionalUniversity, Lucknow	RAWE programme association.
62.	NIAM, Jaipur	Trainings support
63.	NCDC	For FPO formation

KVK, Vaishali has good convergence with the all line departments. District Govt. departments, Private agencies, NGO's, FPO's, FIG and JEEVIKA played an important role in KVK functioning.

5.2. List of special programmes undertaken during 2020by 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.)

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./No.	Cost of inputs	Gross income	
1.	Quail unit	2019	1.08	Quail	Egg & Quail	1508	2500	4524	Demonstration purpose only
2.	Azolla unit	2009	1.5	Azolla	Azolla	1q	250	1000	Distribution and used in quail feed
3.	Mushroom unit	2018	25.62	Oyster & Button	Oyster	10 kg	1000	1200	Demonstration and Sale
4.	Vermi compost unit	2018	55.8	Vermi	Culture	1120 kg		6720	
4.	Poly house	2019	600	Different Vegetable seedling	Seedling	35308		43280	
5.	Mushroom compost making floor	2019	22.26	-	-	-	-	-	-
				Tomato	Vegetable	44 kg		352	
Total			**706.26**					**57076**	

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	
Potato	24.11.20	12.03.21	2	K. Khyati	FS 1	241.5	2,10,000	7,24,500	
Toria	25.11.20	07.03.21	0.5	R. Suflam	TL	9	14,000	540000	
Paddy	14.06.21	07.11.21	1	R. Suwashni	FS	45 q	55000	1,12,500	
Paddy	14.06.21	07.11.21	1	R. Suwashni	CS	45 q	55000	90,000	
Potato	02.12.21	Standing	2	K. Khyati	FS 2				
Toria	15.11.21	Standing	1	R. Suflam	TL				

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.	Azolla	100 kg	-	1000.00	

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	

6.5. Utilization of hostel facilities :

Accommodation available (No. of beds)

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

(For whole of the year)

6.6. Utilization of staff quarters: **Not Completed.**

Whether staff quarters has been completed: No

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
Main Account	Bank of Baroda	Hajipur	25930200000005
Revolving Account	Bank of Baroda	Hajipur	25930100002376
Seed Hub	Bank of Baroda	Hajipur	25930100012752

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

Item	Released by ICAR		Expenditure		Unspent balance as on – 31.12.2021
	Kharif	Rabi	Kharif	Rabi	
				89660.00	

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

Item	Released by ICAR		Expenditure		Unspent balance as on -
	Kharif	Rabi	Kharif	Rabi	

7.4. Utilization of KVK funds during the year 2021 (Not audited) *in lakh*

Sl. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	Pay & Allowances	10500000.00		
2	Traveling allowances	54000.00		13690.00
3	Contingencies			
A	HRD	36000.00	548600.00	
B	Office Expense	500000.00		367426.23
C	Training	240000.00		144776.00

D	FLD	120000.00		49605.00
E	OFT	90000.00		30393.00
F	Maintenance of Building	50000.00		32310.00
G	Extension Activities/Kisan Mela	50000.00		6495.00
TOTAL (A)		**1140000.00**	**548600.00**	**631005.73**
B. Non-Recurring Contingencies				
1	Works	-		
2	Vehicle	-		
3	Library	-		
4	Equipment & Furniture	-		
TOTAL (B)		-		
C. REVOLVING FUND		-		
GRAND TOTAL (A+B+C)		**1140000.00**		

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)
2019	41.13	17.98	16.27	42.84
2020	42.84	18.90	43.47	18.28
2021	18.28	16.29	12.49	22.08 (31.12.2021)

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
Rabi Abhiyan	01	Rabi	ATMA & DAO	Yes	Yes
KharifAbhiyan	01	Kharif	ATMA & DAO	Yes	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)
Early blight	Potato	24.12.20	225	27	Mancozeb 75% WP
Leaf curl	Tomato, Brinjal, Okra	29.05.20	215	18	Imidachloprid 17.85 L/Thiamethoxam

8.2. Prevalent diseases in Livestock/Fishery

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

9.1. Nehru YuvaKendra(NYK) Training: **NA**

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

9.2. PPV & FR Sensitization training Programme: **NA**

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): **NA**

Type of message	No. of messages	No. of farmers covered
Crop		
Livestock		
Fishery		
Weather		
Marketing		
Awareness		
Training information		
Other		
Total		

9.4. *KVK* Portal and Mobile App

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

9.5 Kisan Mobile Advisory Services (KMAS)

Sl. No.	Discipline	No. of Advisories	No. of Messages (SMSs)	No. of Farmers
1.	Horticulture	155	155	620
2.	Agronomy	56	56	157
3.	Plant Protection	782	782	1106
4.	Animal Science	25	25	92
5.	Home Science	32	32	96

9.6. a. Observation of Swachha Bharat Programme/Pakhwara

Date/ Duration of Observation	Activities undertaken	No. of Participants			
		Staffs	Farmers	Others	Total
16.12.2021 To 31.12.2021 15 days	Swachhta Pakhwada	16	56	24	96

b. Details of Swachhta activities with expenditure

Activities	**Number**	**Expenditure (in Rs.)**
1. Digitization of office records/ e-office	46	
2. Basic maintenance	30	
3. Sanitation and SBM	47	
4. Cleaning and beautification of surrounding areas	11	
5. Vermicomposting/ Composting of biodegradable waste management & other activities on generate of wealth for waste	06	
6. Used water for agriculture/ horticulture application	0	
7. Swachhta Awareness at local level	30	
8. Swachhta Workshops	01	
9. Swachhta Pledge	15	
10. Display and Banner	30	
11. Foster healthy competition	01	
12. Involvement of print and electronic media	01	

13. Involving the farmers, farm women and village youth in the adopted villages (no of adopted village)	05	
14. No. of Staff members involved in the activities	20	
15. No of VIP/VVIPs involved in the activities	02	
16. Any other specific activity (in details)	0	
Total	**245**	**8026.00**

9.7. Observation of National Science day: **NA**

Date of Observation	Activities undertaken

9.8. Programme with SeemaSurakshaBal/ BSF: **NA**

Title of Programme	Date	No. of participants

9.9. 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)

9.10. Details of '*Pre-Rabi Campaign'* Programme: **NA**

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

9.11. Details of Swachhta Hi Sewaprogramme organized

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

1.	06	05	76	02	Mukhiya

9.12. Details of Mahila Kisan Divas programme organized

Sl. No.	Activity	No. of villages Involved	No. of Participants	No. of VIPs	Name (s) of VIP(s)
1.	06	05	76	02	Mukhiya

9.13. 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.	Sri Rajesh Singh	Hariharpur, Hajipur	Dairy farming
2.	Sri Rakesh Kumar	Patepur	Goat farming
3.	Sri Pankaj Kr. Choudhary	SakrauliBuchauli, Jandaha 9955408248	Fishery production
4.	Sri Harivansh Narayan Singh	Dhobouli, Bidupur 8002176620	Pea seed production Banana cultivation by tissue culture
5.	Sri Sanjeev Kumar	Chakwara, Hajipur 9852109928	Cauliflower seed production
6.	Sri Shyam Kishore Thakur	Alwalpur, Bhagwanpur 9835089216	Tomato seed production
7.	Sri Rahul Singh	Nameedha, Lalganj 9431441369	Utilization Neem Karnel for Vegetable production & orchard management)
8.	Sri. Rajdev Rai	MukundpurSarsai, Rajapakar 728200681	Quail production
9.	Sri PrabhuDayal Singh	Faridpur, Rajapakar 9801236047	Vegetable production
10.	Md. Nadir Ali	Faridpur, Rajapakar 9771995522	IFS, Vegetable, Poultry production
11.	Md. Tahir Imam	Kutubpur, Rajapakar 9708800227	Poultry farming
12.	Mrs. Vaishali Priya	Mile Pakri, Bidupur	Banana fiber

13.	Sri Rajesh Kr. Singh	Sarasai, Rajapakar 9470752280	Fruit & Vegetable cultivation
14.	Sri Ramveer Kr. Chaurasia	Paswan Chowk, Hajipur 9939711742	Nursery
15.	Sri Jittendra Kr. Singh	Namidih, Lalganj 7991166409	Vegetable production

9.14. Revenue generation :

Sl.No.	Name of Head	Income(Rs.)	Sponsoring agency
1.	Technology refinement	75000	ATMA
2.	CRA (Seed production & Demonstration)	600000	Govt. of Bihar
3	Community Irrigation	16000	DRPCAU, Pusa
4.	Institutional Charges	10,000	Agakhan Rural Support Programme

9.15. Resource Generation: **Nil**

Sl.No.	Name of the programme	Purpose of the programme	Sources of fund	Amount (Rs. lakhs)	Infrastructure created

9.16. Performance of Automatic Weather Station in KVK

Date of establishment	Source of funding i.e. IMD/ICAR/Others (pl. specify)	Present status of functioning
2010	IMD	Data transmitted to IMD Pune

9.17. Contingent crop planning: **NA**

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: 2021

b) Introduction / General Information:

Experiment	Title	Objective	Treatment details	Date of sowing	Replication	Result with photographs
Experiment 1						

Experiment 2						
Experiment 3						
Others (If any) Demonstration	Direct Seeded Rice	To popularize DSR among farmers	-	22.07.21	10	
	Zero tillage in wheat	To popularize zero tillage in wheat	-	28.11.21	10	On going

Result with photographs

Crop	Technology demonstrated	No. of farmers	Area (ha)	Yield (q/ha)		% change in yield
				Demo.	Check	
Paddy	**Zero tillage**	**10**	**04**	**42.4**	**34.1**	**24**

Paddy crop

Wheat Crop

11. Details of TSP: **NA**

a. Achievements of physical output under TSP during 2021

Sl.	**Activities**	**Physical Achievement**	
1)	Trainings	No. of Trainings/Demos	No. of beneficiaries
a.	Farmer		
b.	Women		
c.	Rural Youths		
d.	Extension Personnel		
2)	OFT	No. of OFTs	No. of beneficiaries
3)	FLD	No. of FLDs	No. of beneficiaries
4)	Mobile agro- advisory to farmers	No. of advisory	No. of beneficiaries

5)	Other activities	
a.	Participants in extension activities (No.)	
b.	Production of seed (q)	
c.	Production of Planting material (No. in lakh)	
d.	Production of Livestock strains (No. in lakh)	
e.	Production of fingerlings (No. in lakh)	
f.	Testing of Soil, water, plant, manures samples (Nos.)	
g.	Asset creation (Number; Sprayer, ridge maker, pump set, weeder etc.)	
h.	No. of other programmes (Swachha Bharat Abhiyaan, Agriculture knowledge in rural school, Planting material distribution, Vaccination camp etc.)	

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

c. Achievements of physical outcome under TSP during 2021-22: **NA**

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

d. Location and Beneficiary Details during 2021-22 : **NA**

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

12.Details of SCSP

Sl.	**Activities**	**Physical Achievement**	
1)	Trainings	No. of Trainings/Demos	No. of beneficiaries
a.	Farmer	05	120
b.	Women	02	36
c.	Rural Youths	01	25
d.	Extension Personnel	0	0
2)	OFT	No. of OFTs	No. of beneficiaries
3)	FLD	No. of FLDs	No. of beneficiaries
		01	30
4)	Mobile agro- advisory to farmers	No. of advisory	No. of beneficiaries
		46	605
5)	Other activities		

a.	Participants in extension activities (No.)	05
b.	Production of seed (q)	
c.	Production of Planting material (No. in lakh)	
d.	Production of Livestock strains (No. in lakh)	
e.	Production of fingerlings (No. in lakh)	
f.	Testing of Soil, water, plant, manures samples (Nos.)	

13. Progress report of NICRA KVK (Technology Demonstration component) during the period (Applicable for KVKs identified under NICRA): **NA**

Natural Resource Management

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

Crop Management

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

Livestock and fisheries

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

Institutional interventions

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

			M	F	M	F	M	F	M	F	T	

Capacity building

Thematic area	No of Courses	No of beneficiaries								
		SC	ST		Other			Total		
		M	F	M	F	M	F	M	F	T

Extension activities

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

Detailed report should be provided in the circulated Performa

14.a) Awards/Recognition received by the KVK in year 2021: **NA**

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

b) Award received by Farmers in year 2021

Sl.	Name of the Award	Name of the Farmer	Address	Contact No.	Aadhar No.	Amount	Purpose	Conferring Authority
1.	IARI-Innovative Farmer Award 2020	Md. Musharraff Khalil	Bakhari Barai, Rajapakar, Vaishali	9771995522	473352044682		Mechanization of Agriculture	ICAR, New Delhi
2.	IARI-Fellow Farmer Award 2020	Sri Jitendra Singh	Namidih, Lalganj, Vaishali	9431441369	274760020690		Outstanding contribution in the field of Agriculture	ICAR, New Delhi
3.	Jagjivan Ram Abhinav Kisan Puraskar - 2020	Smt. Manorama Singh	Agarpur, Lalganj, Vaishali	9334929333		50000.00	Mushroom production	ICAR, New Delhi
4.	1st prize in nursery at University level	Sri Rambir Kr. Choudhary	Jadhua Barai Tola, Hajipur, Vaishali	9939711742	431564297455		Nursery production	DRPCAU, Pusa

	Kisan Mela 2021							
5.	Innovative Kisan Puruskar 2020	Sri Rajdev Rai	Mukundpur Sarsai, Rajapakar, Vaishali	8877508513 /9470633763	554471734640	5000.00	Quail farming	DRPCAU, Pusa

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

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

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

17. Integrated Farming System (IFS): **NA**

A) 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

B) Activities under IFS

Sl. No.	Component Name	No. of Components established	Area (ha)	No. of Activities		No. of farmers benefited	
				Demo	Training	Demo	Training

18. Technologies for Doubling Farmers' Income:

Sl. No.	Name of the Technology	Brief Details of Technology (3- 5 bullet points)	Net Return to the farmer (Rs.) per ha per year due to adoption of the technology	No. of farmers adopted the technology in the district	One high resolution 'Photo' in 'jpg' format for each technology
1	RCT (Zero tillage)	• Saving of seed • Time • Diseal • Labour • Water	Rs. 45000/ha from wheat	In one block-Rajapakar – 120 farmers adopted this technology. Approx 1000 farmers in Vaishali district.	
2	By Pass Fat Feeding in	• Reduce negative	Rs. 4000/month per cow.	Approx 2000 dairy farmer adopted in	

	cross breed cow (HF)	energy balance. • One calf in one year • Improved breeding efficiency		Vaishali district.	
3.	Azolla as a cattle field	• Reduce feed cost • Good source of protein & vitamin	Rs. 10 saving on feed cost after feeding azolla 1.5 kg per day per animal	Around 1000 azolla pits are available in Vaishali district.	
4.	Goatry	• Less investment more profit	1500 per goat per year	100 goat farmers has been established	

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

Phase	Database prepared/ covered for		KVK level Committee		Various activity conducted for farmers
	Total no. of villages	Total no. of farmers	Date of formation	Name of members	
I (up-to 15.03.2018)					
II (up-to 24.04.2018)					
Total					

20. Information on Visit of Ministers to KVKs, if any: **NA**

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

21. a) Information on **ASCI** Skill Development Training Programme, if undertaken during 2017-18, 2019 2020 and 2021: **NA**

Year	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 SDMS Portal (Y/N)	Fund utilized for the training (Rs.)
2017-18							
2019							
2020							

2021							

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	

22. Information of 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
Sr. Scientist & Head	0	-	01	10	80	Women empowerment

Progress Information of NARI Project

a. Details of established Nutrition Garden in Nutri-Smart village

Sl.	Name of Nutri-Smart Village	Type of Nutrition Garden	Number	Area (sqm)	No. of beneficiaries
1.	Gurmia, Hariharpur, Daulatpur, Balwa Kuwari	Backyard/Kitchen garden	08		25
2.		Community level	01	10x5	05
3.		Terrace Garden	-	-	-
4.		Vertical Garden	-	-	-
TOTAL			**09**	**-**	**30**

b. Details of Bio-fortified crops in Nutri-Smart village

Name of Nutri-Smart Village	Season	Activity (OFT/FLD)	Category of crop (cereal/ pulses/oilseed/ fruits & veg./ others	Name of Crop	Variety	Area (ha)	No. of benefi-ciaries
Hariharpur	Kharif	FLD	Vegetables	Potato, Papaya, Guava	Nil Kaunth Pusa, Surya, Lalit	10x10	08

c. Value addition in Nutri-Smart village

Name of Nutri Smart Village	Name of Crop/veg./fruits/other	Name of Value added product	Activity (OFT/FLD)	No. of farmers/ beneficiaries
Hariharpur	Fruit, Vegetables, Cereals	Multigain flour	OFT	25

d. Training programmes in Nutri-Smart village

Name of Nutri Smart Village	Area of Training	No of courses	No. of beneficiaries
Hariharpur	Development of Nutri garden	14	306

e. Extension activities under NARI Project

Name of Nutri-Smart Village	Title of Activity	No. of activities	No. of beneficiaries
Hariharpur	Development of Nutri garden	08	197

23. Activities under KSHAMTA: **NA**

Number of Adopted Villages	No. of Activities		No. of farmers benefited	
	Demo	Training	Demo	Training

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

Krishi Kalyan Abhiyan- I/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. Any other programme organized by KVK, not covered above: **NA**

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

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


प्रसार बुलेटिन सं0- V/Hs/IB/320/2021
शिशु के लिए पूरक आ
वर्षा कुमारी
विषय वस्तु विशेषज्ञ
गृह विज्ञान
सविता कुमारी
कार्यक्रम सहायक
ICDS Project
प्रीति पल्लवी
तकनीकी सहायक
ICDS Project
कृषि विज्ञान केन्द्र
मिट्टी जाँच प्रयोगशाला
प्रसार बुलेटिन सं0- V/Hs/IB/321/2021
बाद शिशुओं के लिए पूरक आहार
ा दूध अवश्य पिलाऐं
प्रीति पल्लवी
तकनीकी सहायक
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वर्षा कुमारी
सविता कुमारी
कार्यक्रम सहायक
ICDS Project
डॉ0 सुनीता कुशवाहा
कृषि विज्ञान केन्द्र