

DETAILS OF ACTION PLAN OF KVK DURING 2020

(1st January, 2020 to 31st December, 2020)

INDEX

S. No.	Topic	Page No.
1.	General information about the KVK	1-9
2.	Details of the districts	9-12
3.	Technical programmes	13
4.	Abstract of interventions to be undertaken	15-18
5.	Technologies to be assessed and refined	19-24
6.	Frontline demonstrations	25-26
7.	Trainings	27-38
8.	Extension activities	39-40
9.	Target for production and supply of technological products	41
10.	Literature to be developed/published	42
11.	Indicate the specific training, identifying OFTs/FLDs and field activities	43
12.	Status of soil and water testing Laboratory	44
13.	Linkages	44
14.	Details of linkages with ATMA	45
15.	Annexure I (Details of trainings programme)	46-49
16.	Annexure II (Details of frontline demonstrations)	50

DETAILS OF ACTION PLAN OF KVKs DURING 2020

(1st January 2020 to 31st December 2020)

1. GENERAL INFORMATION ABOUT THE KVK

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

Address	Telephone		E mail	Website
	Office	FAX		
Krishi Vigyan Kendra, Nafed Complex, Village & Post -Ujwa, Nazafgarh, New Delhi - 110073	9667971155	011- 28525129	kvkujwa@yahoo.com	www.kvkdelhi.org

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

Address	Telephone		E mail	Website
	Office	FAX		
National Horticultural Research & Development Foundation (NHRDF), 47, Pankha Road Institutional Area, Janakpuri, New Delhi, Pin: 110058	011- 28522211, 28524150	011-28525129	delhi@nhrdf.com	www.nhrdf.org

1.2.b. Status of KVK website : Yes

1.2.c. No. of Visitors (Hits) to your KVK website (as on today) :47669










1.2.d Status of ICT lab at your KVK :Yes








1.3. Name of the Sr Scientist & Head with phone & mobile no.

Name	Telephone / Contact		
	Office	Mobile	Email
Dr P.K. Gupta	9667971155	8888867619	headkvkujwa@gmail.com

1.4. Year of sanction: 1995

1.5. Staff Position (as on 1 January, 2020)

Sl. No.	Sanctioned post	Name of the incumbent	Designation	Discipline	Pay Scale (Rs.)	Grade Pay	Present basic	Date of joining	Permane	Category (SC/ST/	Mobile No.	Email id	Please attach recent
1	Sr Scientist & Head	Dr P.K. Gupta	Sr Scientist & Head	Horticulture	37400-67000	9000	40240+9000	28.02.17	Per.	Gen	8888867619	kvkujwa@yahoo.com	
2	Subject Matter Specialist	Ritu Singh	SMS	Home Science	15600-39100	5400	26410+5400	10.02.05	-do-	Gen	9818550652	-do-	
3	Subject Matter Specialist	Rakesh Kumar	SMS	Horticulture	15600-39100	5400	26410+5400	22.09.05	-do-	Gen	9313047633	-do-	
4	Subject Matter Specialist	Dr. D. K. Rana	SMS	Plant Protection	15600-39100	5400	22020+5400	5.05.10	-do-	Gen	9310904705	-do-	
5	Subject Matter Specialist	Dr Samar Pal Singh	SMS	Agronomy	15600-39100	5400	15600+5400	25.05.18	-do-	Gen	8650399054	-do-	
6	Subject Matter Specialist	Sh Kailash	SMS	Agriculture Extension	15600-39100	5400	15600+5400	27.06.18	-do-	Gen	9413060922	-do-	
7	Subject Matter Specialist	Vacant	SMS	Agro-Meteorology									
8	Subject Matter Specialist	Vacant	SMS	Animal Husbandry									
9	Programme Assistant	Brijesh Yadav	PA	Soil Science	9300-34800	4200	11470+4200	17.02.14	-do-	Gen	7065787046	-do-	
10	Computer Programmer	Manju	PA	Computer Science	9300-34800	4200	14530+4200	2.05.08	-do-	Gen	9718666917	-do-	
11	Farm Manager	Ram Sagar	Farm Manager	Agriculture	9300-34800	4200	9300+4200	1.03.19	-do-	Gen	8953751501	-do-	

12	Accountant / Superintendent	V. K. Dixit	Office Superintendent Cum Accountant	Administration	9300-34800	4200	20900 + 4200	21.10.05	-do-	Gen	9911395569	-do-	
13	Agromet Observer	Vishal	Agromet Observer	Agromet Observer	5200-20200	2000	6460+2000	1.3.2019	-do-	Gen	9466803902	-do-	
13	Stenographer	Atma Ram	Store Keeper	Administration	5200-20200	1900	9940 + 1900	10.02.05	-do-	Gen	9013553955	-do-	
14	Driver	Rajesh Kumar	Driver	Jeep Driver	5200-20200	1900	9930 + 1900	02.02.05	-do-	Gen	9899426775	-do-	
15	Driver	Krishan	Driver	Tractor Driver	5200-20200	1900	8860+1900	02.05.08	-do-	Gen	8506920345	-do-	
16	Supporting staff	Ramesh Chander	Attendant	Administration	4440-7440	1800	7970+1800	10.02.05	-do-	Gen	9560290407	-do-	
17	Supporting staff	Sachin Kumar	Attendant	Administration	4440-7440	1800	5200+1800	18.05.18	-do-	Gen	9012564616	-do-	

1.6. Total land with KVK (in ha) :16.9

S. No.	Item	Area (ha)
1	Buildings	0.7
2.	Demonstration Units Mushroom unit -250 m ² Vermicompost unit -500 m ² Azolla unit-25 m ² Insect proof net house-50 m ² Apiculture-10 box Kinnow with Drip Irrigation & Aonla orchard-3.5 acre Water harvesting -200 m ²	1.5
3.	Crops (Seed Production)	10.97
4.	Kitchen Garden	0.6
5.	Others if any	
	a. Forestry	1.78
	b. Onion Storage	1.35

1.7. Infrastructural Development:

A) Buildings

S. No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Year	Plinth area (Sq.m)	Expenditure (Rs.)	Starting year	Plinth area (Sq.m)	Status of construction
1.	Administrative Building	ICAR	17.2.2011	548.3	54,38,664/-	NA	-	
2.	Farmers Hostel				NIL			
3.	Staff Quarters				NIL			
4.	Demonstration Units:				12,10,000/-			
	Mushroom unit	State Govt	1998	250 m ²	-			
	Vermicompost unit	ICAR	2019	500 m ²	200000/-			
	Azolla unit	ICAR	2018	25 m ²	25000/-			
	Insect proof net house	NHRDF	2018	50 m ²	125000/-			
	Apiculture	NHRDF	2018	10 box	100000/-			
	Kinnow & Aonla orchard	NHRDF	2019	3.5 acre	250000/-			
	Water harvesting	ICAR	2017	200 m ²	150000/-			
	Drip irrigation system	NHRDF	2019	2 acre	360000/-			
5	Fencing				NIL			
7	Threshing floor	ICAR	17.2.2011	222.3	1,92,031/-			
8	Farm godown	ICAR	31.3.2011	35.0	1,99,869/-			
	Other				NIL			

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms Run	Present status
Scooter	1995	21818	-----	Not working
Motorcycle	2000	47063	51784	Not working
Jeep	2017	800000	45149	Working
Tractor	2017	700000	870.7*	Working

*In hours

C) Equipment & AV aids

Sr. No	Name of the equipment	Number of Equipment	Year of purchase	Cost (Rs.)	Present status
1.	Seed drill	1	1997	6150	Good
2.	Cultivator	1	1997	1672	
3.	Tractor trolley	1	1998	11000	
4.	Harrow	1	1999	8600	
5.	Juicer Mixer Grinder	1	2009	2050	
6.	Scanner	1	2010	4148	
7.	Speaker	1	2010	1733	
8.	Computer	4	2010	25725	
9.	Computer	5	2011	24210	
10.	Refrigerator	1	2011	11200	
11.	Photocopier machine	2	2011	35000	
12.	Laptop	1	2011	36170	
13.	Generator	1	2011	59000	
14.	Room cooler	3	2012	20402	
15.	Small autoclave	1	2012	67280	
16.	Hot air oven	1	2012	45016	
17.	Laminar flow	1	2012	78874	
18.	Colony counter	1	2012	6156	
19.	B.O.D. incubator	1	2012	107730	
20.	Microscope	1	2012	37822	
21.	Refrigerator	1	2012	32600	
22.	Electric balance	1	2012	42750	
23.	Water distillation	1	2012	25650	
24.	pH meter	1	2012	19687	
25.	EC meter	1	2012	21038	
26.	Spectrophotometer	1	2012	39150	
27.	Flame photometer	1	2012	60750	
28.	Computer	1	2012	34000	
29.	Air conditioner	1	2012	33975	
30.	Laptop	1	2012	37000	
31.	Spirit lamp	2	2012	157	

32.	Stabilizer	1	2012	2000
33.	Hygrometer	1	2012	473
34.	Tally ERP 9 software	1	2014	16400
35.	Reverse Osmosis (RO)	1	2014	15500
36.	Finger print attendance machine	1	2014	11250
37.	Heat convector	3	2014	1800
38.	Mrida parikshak soil testing Mini Lab	1	2015	75000
39.	Trolley	3	2016	158832
40.	Plastic palates	8	2016	29560
41.	Water cooler with RO	3	2016	42550
42.	Inverter set	2	2016	24700
43.	Planker (wood pata with chain)	2	2016	8947
44.	Mrida parikshak soil testing Mini Lab	2	2017	90300
45.	Printer	5	2017	15044
46.	Harrow	3	2017	57000
47.	Leveler	2	2017	13000
48.	Lecture stand	2	2017	8000
49.	Cultivator	3	2017	23800
50.	Printer	5/	2017	15044
51.	Head phone	1	2017	400
52.	Gramin GPS 72 H	1	2017	9984
53.	Mulcher single speed	2	2018	336000
54.	Shurb master	2	2018	103040
55.	Hydrolic reversible 2MB plough	1	2018	135615
56.	Wireless walky phone	1	2018	1750
57.	Happy seeder 10 row	2	2018	332640
58.	TATA sky DTH connection	1	2018	2530
59.	Airtel 4G home wifi router	1	2018	2500
60.	Fire extinguisher	3	2018	6372
61.	Desert cooler	6	2019	10000
62.	Zero seed cum fertilizer drill	4	2019	57000
63.	Computer	4	2019	107100
64.	UPS	5	2019	4300

1.8. A). Details of SAC meetings to be conducted in the year

Sl.No.	Date
1. Scientific Advisory Committee	June & October, 2020

2. DETAILS OF DISTRICT

2.1 Major farming systems/enterprises (based on the analysis made by the KVK)

S. No	Farming system/enterprise
1	Agri-Dairy system (with rice in <i>kharif</i> and wheat in <i>rabi</i> as major crops)
2	Agri- Dairy system (Mustard as major oilseed crop and Jowar/Bajra as fodder crop)
3	Agri- Horticulture (Floriculture) system
4	Agri- Vegetables-Dairy system

2.2 Description of agro-climatic zone & major agro ecological situations (based on soil and topography)

a) Soil type

S.No	Agro-Climatic Zone	Characteristics
1	Trans- Gangatic Plains region (Zone VI)	Semi-Arid, low rainfall, variation in temperature (2 - 47 °C), frost occur once or twice in the year.

b) Topography

S. No.	Agro ecological situation	Characteristics
1	Climate	The state has three seasons viz., winter (Nov-Mar), summer (Apr-June) & Rainy season (July-Oct). The rainfall occurs during the month of July-Sept with occasional showers during Dec- Jan. The range of rainfall between 420-780 mm.

2.3 Soil Types

S. No	Soil type	Characteristics	Area (in ha)
1	Sandy loam/ Sandy clay loam	Light to medium in texture, low water holding capacity, pH slightly saline with low organic matter content. Wide range of crops can be grown but constraint is saline water for irrigation.	35178

2.4. Area, Production and Productivity of major crops cultivated in NCT, Delhi (2019)

S. No	Crop	Area (ha)	Production (MT)	Productivity (Q/ha)
1	Paddy	5854	25256	43.14
2	Wheat	19350	83419	43.11
3	Barley	62	181	29.19
4	Bajra	1482	3256	21.97
5	Maize	34	174	51.18
6	Jowar	3161	3035	9.60
7	Gram	60	120	20.00
9	Mustard	3593	4527	12.60
11	Vegetable	23043	-	-
12	Flowers	5995	-	-

Source: State Agriculture Department, NCT Delhi.

2.5. Weather data (2019)

Month	Rainfall (mm)	Temperature °C	
		Maximum	Minimum
January, 2019	16	21.1	6.8
February, 2019	30	22.68	10.52
March, 2019	0	28.35	13.27
April, 2019	24	37.32	23.19
May, 2019	23	39.8	23.8
June, 2019	0	40.9	29.1
July, 2019	224	36.3	26.2
August, 2019	134	34.1	25.8
September, 2019	23.5	34.4	25.6
October, 2019	15	32.6	19.8
November, 2019	14.5	27.7	15.2
December, 2019	39	18.5	7.7
Total	543	31.14	18.91

2.6. Production and productivity of livestock, poultry, fisheries etc. in the state

Category	Population	Production	Productivity
Cattle	86433		
Crossbred	47935	606232 L Milk	12.65 L / Animal/ Day
Indigenous	24498	97683 L Milk	3.98 L / Animal/ Day
Buffalo	162142	1286925 L Milk	7.94 L / Animal/ Day
Sheep	932		
Crossbred	654	9425 Kg/ Meat	14.4 Kg/ Animal
Indigenous	278	3529 Kg/ Meat	12.6 Kg/ Animal
Goats	30470	262042 Kg/ Meat	8.6 Kg/ Animal
Pigs	76346	Data not Available	Data not Available
Crossbred	8581		
Indigenous	67765		
Rabbits	6706		
Poultry	44000	58225 Kg/ Meat	1.33 Kg/ Bird
Hens	32202	Data not Available	Data not Available
Desi	20530		
Improved	2667		
Ducks	2140		
Turkey and others	1329		

Category	Area	Production	Productivity
Fish			
<i>Marine</i>			
<i>Inland</i>	4000 Ha	70010 ton/year	0.178 ton/ha/year
Prawn		Data not Available	
Scampi			
Shrimp			

Source- Govt. of NCT Delhi 2018-19

2.7 Details of Operational area / Villages

Taluka	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
Alipur	Alipur	Tigipur, Sungerpur & Dariyapur	<p>Rabi - Cauliflower, Spinach, Radish, Onion, Pea, Marigold, Wheat, Mustard</p> <p>Kharif - Tomato, Cucurbits, Okra &, Brinjal, Marigold, Radish & Spinach, Paddy</p> <p>Summer- Okra, Tomato, Brinjal, Cucurbits, Radish</p> <p>Enterprises: Poultry, Dairy, Mushroom, Vegetables Floriculture and Nursery Production.</p>	<ul style="list-style-type: none"> • Sever weed infestation in onion, paddy & wheat • Post-harvest losses in cucurbits, tomato, okra & leafy vegetables • Nutritional deficiency & disorders in cauliflower & cucurbits • Problem disease & insect in onion & okra • Practices of inferior variety of crops/vegetables/ flowers • Intensive tillage practices in rice -wheat system & lower cropping intensity • Low productivity in dairy animals. • Improper management of off-season vegetable cultivation & nursery raising • Low cropping intensity • Imbalance use of fertilizers & pesticides 	<ul style="list-style-type: none"> • Integrated weed management. • Resource conservation practices • Integrated Nutrient Management. • Integrated pest management • Off season vegetable cultivation & nursery raising under protected cultivation • Integrated crop management • Post-harvest management of vegetable crops • Soil test-based fertilizer recommendation (STFR). • Organic farming
Nazafgarh/ Kapashera	Nazafgarh	Kanganheri, Shikarpur	<p>Rabi – Onion, Cauliflower, Spinach, Wheat, Mustard</p> <p>Kharif - Tomato, Cucurbits, Okra &, Brinjal, Paddy</p> <p>Summer- Okra, Tomato, Brinjal, Cucurbits,</p> <p>Enterprises: Dairy, Mushroom Production, Apiculture, Value addition to fruit& vegetable produce</p>	<ul style="list-style-type: none"> • Saline water and Imbalance use of fertilizer. • Problem of diseases and pest in onion, okra, oil seed & cereals. • Problem of endo-parasite and ecto-parasite in animals. • Disorders (Browning & Whiptail) in cauliflower crops. • Post-harvest losses in fruits and vegetables crops. • Vegetable nursery raising in open condition. • Intensive tillage practices in rice -wheat system & lower cropping intensity • Improper nutrient management in rice & wheat • Post-harvest losses in fruit & vegetables • Problem of endo-parasite & ecto parasite in animals 	<ul style="list-style-type: none"> • Promotion of salt tolerant HYV • Integrated Nutrient Management in crops. • Resource conservation practices • IDM & IPM approaches. • Value addition of locally grown crops. • Nutritional awareness among masses. • Promotion of organic farming • Soil test based fertilizers recommendation (STRF)

2.8 Priority thrust areas

Crop/Enterprise	Thrust area
Cucurbits, Okra, cauliflower, onion, leafy vegetables & tomato, Brinjal	Integrated pest management, post-harvest management, weed and nutrient management, seed treatment, nursery raising, promotion of organic farming.
Flowering	Landscaping, Nursery raising of ornamental plants, production of loose flowers.
Paddy	Resources conservation techniques, Nutrient management, direct seeded rice, weed management / pest management and soil fertility management,
Wheat	Resources conservation techniques-zero tillage, weed management / pest management and soil fertility management,
Mustard	Screening of high yielding varieties of Rapeseed-mustard in NCT Delhi, Nutrient management.
Animal Husbandry	Vaccination, repeat breeding, infectious and metabolic disease control & feed management in milch animals.
Fruits (Aonla, Karonda, Guava, Strawberry & Papaya)	Promotion of HYV of fruits plants, IPM, INM .
Women in Agriculture	Women empowerment trough strengthen of SHG's, preservation of fruits & vegetables, Health and nutrition awareness and promotion of nutritional garden in rural areas and post-harvest management.
Agri-based enterprise	Entrepreneurship development in agriculture (value addition, dairy, gardening & nursery raising of horticultural crops, Mushroom Cultivation, Vermi -Compost & Bee keeping)
Market linkage	Formation of Farmer Producer Organization to strengthen farm-based linkages/link farmers to markets

3. TECHNICAL PROGRAMME

3. A. Details of targeted mandatory activities by KVK

OFT		FLD	
(1)		(2)	
Number of OFTs	Number of Farmers	Area (ha)	Number of Farmers
6	42	83.4	206

Training		Extension Activities	
(3)		(4)	
Number of Courses	Number of Participants	Number of activities	Number of participants
51	1020	467	5905

Seed Production (Qtl.)	Planting material (Nos.)	Fish seed prod. (Nos)	Soil Samples
(5)	(6)	(7)	(8)
250 Q	75000	-	800

3. B. Abstract of interventions to be undertaken

S. No	Thrust area	Crop/ Enterprise	Identified Problem	Interventions					
				Title of OFT if any	Title of FLD if any	Title of Training if any	Title of training for extension personnel if any	Extension activities	Supply of seeds, planting materials etc.
1.	IPM	Okra, Onion, Cauliflower, Wheat, mustard	Shoot & fruit borer in Okra and DBM in Cauliflower	Assessment of Management of Shoot & Fruit Borer in Okra	IPM in onion	IPM in Cauliflower, Wheat and Mustard	IPM in vegetables	Extension literature, TV talk, news coverage etc.	Neem pesticide, Bio fungicide, Pheromones traps., Spinosad
2.	INM	Cauliflower, Bottle guard, Mustard, Wheat crop	Nutritional disorders and deficiency	Assessment of micro nutrients in cauliflower. Assessment of Foliar application of Boron on yield and yield attributes of Mustard crops. Assessment on the effect of potash & boron on Bottle guard. Assessment of integrated nutrients management practices in wheat crop.	-	INM in cereals crops, Vermicompost production	INM in Cereals and vegetables	Extension literature, demonstrations, Field visits	Potash, Molybedenm, Boron

3.	ICM	Mustard, Chickpea, summer mung, Wheat, onion, marigold	Cultivation of inferior varieties of crops. Continue rice-wheat cropping system with intensive tillage,	-	To establish the potential of improved technologies of crops at farmers fields.	Improve cultivation practices of cereals and vegetables	-	PRA Survey, Cluster and farmers selection, Kisan goshi, Field visits, Field day and Extension literature	Seed, biofertilizers, herbicides, insecticides
4.	ICT	Mobilization of farmers	Delay and lack of interactive audio-visual based agriculture information dissemination, Unawareness among farmers on new and innovative technologies, Farmers are not united for their common interest, Non awareness of digitalization of marketing among farmers and rural youth.	Assessment of Various ICTs, dissemination of agriculture information and communication to the farmers	Demonstration using print media in popularization of new technologies, Demonstration of work efficiency among farmers through Farmers Interest Group (FIGs)	To develop the skills among farmers and rural youth by providing modern technologies training to generate income.	ICT application for welfare of farmers community	Distribution of extension literatures and printing material (Folder, Pamphlets, leaflet etc.), 1 Group (10-15 Farmers), Training, success story of successful entrepreneur, extension literature.	-
5.	Organic Farming (PKVY)	Crops (<i>Kharif and Rabi</i>)	Imbalance use of fertilizers, soil health hazards due to higher use agro-chemicals.	-	-	Promotion of organic farming in NCT of Delhi.	-	Training and Field visits, Extension literature	

6.	Skill development	Beekeeping, Mushroom production, Vermicompost, Model nursery, Gardeners, IFS model. Processing industry	Unskilled rural youths and Farmers	-	-	VT on Gardner, Nursery Worker, Mushroom cultivation, Beekeeping, IFS, Value addition in fruits & vegetables. To develop the skills among farmers and rural youth by providing modern technologies training to generate income.	-	Extension literature, PPT., Demonstration, Exposure visit, TV talk, news coverage etc.	-
7.	Household food security by Kitchen gardening and nutritional gardening	All seasonal vegetables	Poor health, nutritional status of farm women.	-	FLD on nutritional kitchen gardening, pearl millet & wheat under NARI programme	Household food and nutritional security.	Women and child care	Extension literature, TV talk, news coverage, Demonstration.	Seeds & seedlings

3.1 Technologies to be assessed and refined

A.1 Abstract on the number of technologies to be assessed in respect of **crops**

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Varietal Evaluation										
Seed / Plant production										
Weed Management										
Integrated Crop Management										
Integrated Nutrient Management	1	1			1					3
Integrated Farming System										
Mushroom cultivation										
Drudgery reduction										
Farm machineries										
Value addition						1				1
Integrated Pest Management					1					1
Integrated Disease Management										
Resource conservation technology										
Small Scale income generating enterprises										
Other Post Harvest Management of Vegetable Crops										
Total	1	1			2	1				5

B. Details of On Farm Trial

OFT- 1 (IInd Year)

Assessment of foliar application of Boron on yield and yield attributes of mustard crops.

Title of OFT	Problem Identified	Major cause of problem	Technological Intervention	Source of technology	Critical Inputs	Cost (Rs) of critical input	Area (ha) of OFT	No. of replication	Performance Indicators
Assessment of Foliar application of Boron on yield and yield attributes of Mustard crops	Deficiency of boron in soil (on soil test basis)	Poor seed setting and pods development.	<ul style="list-style-type: none">• T1- Farmers Practice (no use of boron)• T2- Foliar Spray of 0.25 % Boric Acid at 40 and 60 Days After Sowing.	DRMR, Bharatpur	Boron	280/- per demo	0.4	7	Technological Indicator: <ul style="list-style-type: none">• Plant growth parameter• Yield & Yield Attributes Economic indicators: <ul style="list-style-type: none">· Cost of cultivation (Rs/ha)· Net return (Rs/ha)· B:C Ratio Farmers perception: Adoptability/ Accessibility

OFT-2 (IIIrd Year)

Assessment of integrated nutrients management in wheat crop.

Title of OFT	Problem Identified	Major cause of problem	Technological Intervention	Source of technology	Critical Inputs	Cost (Rs) of critical input	Area (ha) of OFT	No. of replication	Performance Indicators
Assessment of integrated nutrients management practices in wheat crop.	Imbalance use of fertilizers in wheat crops	Deficiency of micro nutrients in wheat crop	T ₁ – Farmer's Practice (N-120kg/ha & P-60kg/ha) T ₂ – Application- on of fertilizer on soil test basis. N, P, K & Zinc + Bio fertilizers (Liquid NPK & Zinc)	IARI, New Delhi	Azotobactor + PSB + Potassium solubilizing bacteria	200/- per demo	0.4	7	Technological Indicator: <ul style="list-style-type: none"> · Soil health parameter · Yield & yield Attributes Economic indicators: <ul style="list-style-type: none"> · Cost of cultivation (Rs/ha) · Net return (Rs/ha) · B:C Ratio Farmers perception: <ul style="list-style-type: none"> · Adoptability/ Accessibility

OFT-3 (Ist Year)

Evaluation of different formulations of acaricide for control of ectoparasite in cattle.

Title of OFT	Problem Identified	Major cause of problem	Technological Intervention	Source of technology	Critical Inputs	Cost (Rs) of critical input	Area (ha) of OFT	No. of replication	Performance Indicators
Evaluation of different formulations of acaricide for control of ectoparasite in cattle.	Ectoparasite infestation in bovines.	Tick infestation	T1-Farmers practice. T2-Parental route: Ivermectin T3- Oral route: Ivermectin T4- Spray: Deltamethrin T5: Body line marking: Cypermethrin	GADVASU -Ludhiana				7	Technological Indicator: No. of tick per sq. feet of body area at 3 rd , 5 th , 7 th days after treatment

OFT- 4 (1st Year)

Assessment of Potash & Boron application in Bottle guard.

Title of OFT	Problem Identified	Major cause of problem	Technological Intervention	Source of technology	Critical Inputs	Cost (Rs.) of critical input	Area (ha) of OFT	No. of replication	Performance Indicators
Assessment of potash & boron on Bottle guard.	Reduced yield due to imbalance nutrition.	Potash and boron deficient soil	T1- Farmers practice T2- Application of potash basal dose @ 70kg/ha and three foliar spray of boron @ 2g/L	CCSHAU, Hisar	Potash and boron	750/- per demo	0.4	7	Technological Indicator: <ul style="list-style-type: none">. Plant vine length (cm). Fruit weight(gm). Average yield per ha Economic indicators: <ul style="list-style-type: none">. Cost of cultivation (Rs/ha). Net return (Rs/ha). B:C Ratio Farmers perception: Adoptability/ Accessibility

OFT-5 (Ist Year)**Assessment of the acceptability of the laddoo prepared from underutilised beetroot, Ber & Aonla.**

Title of OFT	Problem Identified	Major cause of problem	Technological Intervention	Source of technology	Critical Inputs	Cost (Rs) of critical input	Area (ha) of OFT	No. of replication	Performance Indicators
Assessment of the acceptability of the laddoo prepared from underutilised beetroot, ber & aonla	No utilization of ber and beetroot in processed and preserved form	Lack of knowledge on utilization of these micronutrient and antioxidant rich fruits and vegetables	Assessment of the acceptability of the laddoo prepared from underutilised beetroot, ber & aonla	IARI, New Delhi	Beet root, ber, aonla, sugar, packing box	800	-	7	Technological Interventions: sensory score Economic indicators: · Cost of cultivation (Rs/ha) · Net return (Rs/ha) · B:C Ratio Farmer's reaction: % adoption

OFT-6 (IInd Year)

Assessment of management of Shoot & Fruit Borer in Okra.

Title of OFT	Problem Identified	Major cause of problem	Technological Intervention	Source of technology	Critical Inputs	Cost (Rs) of critical input	Area (ha) of OFT	No. of replication	Performance Indicators
Management of Shoot & Fruit Borer in Okra	Low yield of Okra	Insect infestation	T1 : Farmers Practice (Cartap Hydrochloride) 50 SP @ 250gm/Ha T2: Spinosad (45 SL) @ 0.5ml/L water at 15 days interval	IARI, Pusa, New Delhi	Spinosad - 100ml	850	0.4	7	Shoot Damage (%) Fruit Damage (%) Yield -Q Economic indicators: <ul style="list-style-type: none">· Cost of cultivation (Rs/ha)· Net return (Rs/ha)· B:C Ratio

3.2 Frontline Demonstrations

A. Details of FLDs to be organized -

Sl. No.	Crop	Variety	Thematic area	Technology for demonstration	Critical inputs	Season and year	Area (ha)	No. of farmers/ demon.	Parameters identified
1	Onion	NHRDF Red	IPM	IPM in rabi onion	<i>Trichoderma viride</i> , Pheromones taps, blue tap & neem pesticide	Rabi 2020-21	4	10	Yield- Q/ha Disease incidence % Pest infestation %, Economics- Rs
2	Mustard	RH-749 & Giriraj	Improved Technology	Newly released variety, Seed treatment & Weed management	Seed, bio-fertilizer, fungicide, insecticide & Trichoderma	Rabi- 2020-21	30	75	Yield kg/ha. Economics- Rs
3	Wheat	HD-3226	Improved Technology	Newly released variety, Seed treatment & Weed management	Seed, bio-fertilizer & weedicide	Rabi- 2020-21	7.2	18	Yield kg/ha. Economics- Rs
4	Onion	NHRDF Red	Improved Technology	Newly released variety, Seed treatment & Weed management	Seed, biofertilizer	Rabi- 2020-21	10	25	Yield kg/ha Economics- Rs
5	Chickpea	GNG-1958	Pulse production	Improved variety	Seed, biofertilizer, herbicide	Rabi- 2020-21	20	50	Yield kg/ha Economics- Rs
6	Marigold	Pusa Narangi	Natural Resource Management	Performance evaluation	Seed	Rabi- 2020-21	4	10	Yield kg/ha Economics- Rs
Total							83.4	206	

Sponsored Demonstration

Crop	Area (ha)	No. of farmers
Wheat	50	125

Others Details of FLDs under NARI programme -

Sl. No.	Crop	Variety	Thematic area	Technology for demonstration	Critical inputs	Season and year	Area (ha)	No. of farmers/ demon.	Parameters identified
1	Wheat	DBW-187	Nutrition security	Promotion of nutrient rich variety	Seed	Rabi 2020-21	4	10	Presence of macro nutrients
2	Nutri-Garden	IIHR/ IARI	Validation of Nutri-Garden modal area	Vegetables & fruits	Seed & Seedlings	Kharif & Rabi 2020-21	0.2	20	Yield Kg/ ha Saving (Rs.)/ Month

B. Extension and Training activities under FLDs

S. No.	Activity	No. of activities	Month	Number of participants
1	Field days	6	May- 2020, Feb.-2020, March-2020	240
2	Farmers trainings	4	April-2020, October-2020, November-2020 January-2020	120
3	Media coverage	15	April-2020, October-2020, November-2020, January-2020	-
4	Training for extension functionaries	01	July-2020	-

C. Details of FLD on Enterprises

(i) Farm Implements

Name of the implement	Crop	Season and year	No. of farmers	Area (ha)	Critical inputs	Performance parameters / indicators

(ii) Livestock Enterprises

Enterprise	Breed	No. of farmers	No. of animals, poultry birds/ha. etc.	Critical inputs	Performance parameters / indicators

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

d) Plantation crops								
Production and Management technology								
Processing and value addition								
e) Tuber crops								
Production and Management technology								
Processing and value addition								
f) Spices								
Production and Management technology								
Processing and value addition								
g) Medicinal and Aromatic Plants								
Nursery management								
Production and management technology								
Post harvest technology and value addition								
III Soil Health and Fertility Management								
Soil fertility management								
Soil and Water Conservation								
Integrated Nutrient Management	1	15	-	15	5	-	5	20
Production and use of organic inputs	1	15	-	15	5	-	5	20
Management of Problematic soils								
Micro nutrient deficiency in crops								
Nutrient Use Efficiency								
Soil and Water Testing	1	15	-	15	5	-	5	20
IV Livestock Production and Management								
Dairy Management								
Poultry Management								
Piggery Management								
Rabbit Management/goat								
Disease Management								
Feed management	1	15	-	15	5	-	5	20
Production of quality animal products								
V Home Science/Women empowerment								
Household food security by kitchen gardening and nutrition gardening	1	-	15	15	-	5	5	20
Design and development of low/minimum cost diet								
Designing and development for high nutrient efficiency diet								
Minimization of nutrient loss in processing								
Gender mainstreaming through SHGs								
Storage loss minimization techniques								
Value addition	1	-	15	15	-	5	5	20

Income generation activities for empowerment of rural Women	1	-	15	15	-	5	5	20
Location specific drudgery reduction technologies								
Rural Crafts								
Women and child care								
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								
VII Plant Protection								
Integrated Pest Management	2	30	-	30	10	-	10	40
Integrated Disease Management								
Bio-control of pests and diseases								
Production of bio control agents and bio pesticides								
VIII Fisheries								
Integrated fish farming								
Carp breeding and hatchery management								
Carp fry and fingerling rearing								
Composite fish culture								
Hatchery management and culture of freshwater prawn								
Breeding and culture of ornamental fishes								
Portable plastic carp hatchery								
Pen culture of fish and prawn								
Shrimp farming								
Edible oyster farming								
Pearl culture								
Fish processing and value addition								
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								

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								
Other Organic Farming								
TOTAL	7	90	15	105	30	5	35	140
(C) Extension Personnel								
Productivity enhancement in field crops								
Integrated Pest Management	1	15	-	15	5	-	5	20
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	1	15	-	15	5	-	5	20
Livestock feed and fodder production								
Household food security								
Women and Child care								
Low cost and nutrient efficient diet designing	1	-	15	15	-	5	5	20
Production and use of organic inputs	1	15	-	15	5	-	5	20
Gender mainstreaming through SHGs								
Any other (Pl. Specify) Post harvest technology	1	-	15	15	-	5	5	20
Total	5	45	30	75	15	10	25	100
G. Total	29	345	90	435	115	30	145	580

Propagation techniques of Ornamental Plants								
d) Plantation crops								
Production and Management technology								
Processing and value addition								
e) Tuber crops								
Production and Management technology								
Processing and value addition								
f) Spices								
Production and Management technology								
Processing and value addition								
g) Medicinal and Aromatic Plants								
Nursery management								
Production and management technology								
Post-harvest technology and value addition								
III Soil Health and Fertility Management								
Soil fertility management	2	30	-	30	10	-	10	40
Soil and Water Conservation								
Integrated Nutrient Management	1	15	-	15	5	-	5	20
Production and use of organic inputs								
Management of Problematic soils								
Micro nutrient deficiency in crops								
Nutrient Use Efficiency								
Soil and Water Testing								
IV Livestock Production and Management								
Dairy Management								
Poultry Management	1	15	-	15	5	-	5	20
Piggery Management								
Rabbit Management /goat								
Disease Management	1	15	-	15	5	-	5	10
Feed management	1	15	-	15	5	-	5	20
Production of quality animal products								
V Home Science/Women empowerment								
Household food security by kitchen gardening and nutrition gardening								
Design and development of low/minimum cost diet								
Designing and development for high nutrient efficiency diet								
Minimization of nutrient loss in processing	1	-	15	15	-	5	5	20
Gender mainstreaming through SHGs								
Storage loss minimization techniques								

Value addition	1	-	15	15	-	5	5	20
Income generation activities for empowerment of rural Women								
Location specific drudgery reduction technologies								
Rural Crafts								
Women and child care								
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								
VII Plant Protection								
Integrated Pest Management	2	30	-	30	10	-	10	40
Integrated Disease Management								
Bio-control of pests and diseases								
Production of bio control agents and bio pesticides								
VIII Fisheries								
Integrated fish farming								
Carp breeding and hatchery management								
Carp fry and fingerling rearing								
Composite fish culture								
Hatchery management and culture of freshwater prawn								
Breeding and culture of ornamental fishes								
Portable plastic carp hatchery								
Pen culture of fish and prawn								
Shrimp farming								
Edible oyster farming								
Pearl culture								
Fish processing and value addition								
IX Production of Inputs at site								
Seed Production								
Planting material production (Hort.)								
Bio-agents production								
Bio-pesticides production								
Bio-fertilizer production								
Vermi-compost production (Hort.)								

Organic manures production (A.S.)								
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								
X Capacity Building and Group Dynamics								
Leadership development	1	15	-	15	5	-	5	20
Group dynamics	1	15	-	15	5	-	5	20
Formation and Management of SHGs (HS)								
Mobilization of social capital								
Entrepreneurial development of farmers/youths	1	15	-	15	5	-	5	20
WTO and IPR issues								
XI Agro-forestry								
Production technologies								
Nursery management								
Integrated Farming Systems (Agro)								
XII Others (Pl. Specify)								
TOTAL	22	300	30	330	100	10	110	420

A) Consolidated table (ON and OFF Campus)								
Thematic Area	No. of Courses	No. of Participants						
		Others			SC/ST			Grand Total
		Male	Female	Total	Male	Female	Total	
(A) Farmers & Farm Women								
I Crop Production								
Weed Management	4	60	-	60	20	-	20	80
Resource Conservation Technologies	1	15	-	15	5	-	5	20
Cropping Systems								
Crop Diversification								
Integrated Farming	1	15	-	15	5	-	5	20
Water management	1	15	-	15	5	-	5	20
Seed production								
Nursery management								
Integrated Crop Management	1	15	-	15	5	-	5	20
Fodder production								
Production of organic inputs								
II Horticulture								
a) Vegetable Crops								
Production of low volume and high value crops								
Off-season vegetables	1	15	-	15	5	-	5	20
Nursery raising	1	15	-	15	5	-	5	20
Exotic vegetables like Broccoli	1	15	-	15	5	-	5	20
Export potential vegetables								
Grading and standardization	2	30	-	30	10	-	10	40
Protective cultivation (Green Houses, Shade Net etc.)								
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								
c) Ornamental Plants								
Nursery Management								
Management of potted plants	1	15	-	15	5	-	5	20
Export potential of ornamental plants								
Propagation techniques of Ornamental Plants								
d) Plantation crops								

Production and Management technology								
Processing and value addition								
e) Tuber crops								
Production and Management technology								
Processing and value addition								
f) Spices								
Production and Management technology								
Processing and value addition								
g) Medicinal and Aromatic Plants								
Nursery management								
Production and management technology								
Post harvest technology and value addition								
III Soil Health and Fertility Management								
Soil fertility management	2	30	-	30	10	-	10	40
Soil and Water Conservation								
Integrated Nutrient Management	2	30	-	30	10	-	10	40
Production and use of organic inputs	1	15	-	15	5	-	5	20
Management of Problematic soils								
Micro nutrient deficiency in crops								
Nutrient Use Efficiency								
Soil and Water Testing	1	15	-	15	5	-	5	20
IV Livestock Production and Management								
Dairy Management								
Poultry Management	1	-	15	15	-	5	5	20
Piggery Management								
Rabbit Management/goat								
Disease Management	1	-	15	15	-	5	5	20
Feed management	2	-	30	30	-	10	10	40
Production of quality animal products								
V Home Science/Women empowerment								
Household food security by kitchen gardening and nutrition gardening	1	-	15	15	-	5	5	20
Design and development of low/minimum cost diet								
Designing and development for high nutrient efficiency diet								
Minimization of nutrient loss in processing	1	-	15	15	-	5	5	20
Gender mainstreaming through SHGs								
Storage loss minimization techniques								
Value addition	2	-	30	30	-	10	10	40
Income generation activities for empowerment of rural Women	1	-	15	15	-	5	5	20

Location specific drudgery reduction technologies								
Rural Crafts								
Women and child care								
VI Agri. 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								
VII Plant Protection								
Integrated Pest Management	4	60	-	60	20	-	20	80
Integrated Disease Management								
Bio-control of pests and diseases								
Production of bio control agents and bio pesticides								
VIII Fisheries								
Integrated fish farming								
Carp breeding and hatchery management								
Carp fry and fingerling rearing								
Composite fish culture								
Hatchery management and culture of freshwater prawn								
Breeding and culture of ornamental fishes								
Portable plastic carp hatchery								
Pen culture of fish and prawn								
Shrimp farming								
Edible oyster farming								
Pearl culture								
Fish processing and value addition								
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								
X Capacity Building and Group Dynamics								
Leadership development	1	15	-	15	5	-	5	20
Group dynamics	2	30	-	30	10	-	10	40
Formation and Management of SHGs								
Mobilization of social capital	1	15	-	15	5	-	5	20
Entrepreneurial development of farmers/youths	2	30	-	30	10	-	10	40
WTO and IPR issues								
XI Agro-forestry								
Production technologies								
Nursery management								
Integrated Farming Systems								
Sponsored training								
TOTAL	39	520	80	600	165	25	180	780
(B) RURAL YOUTH								
Mushroom Production	1	15	-	15	5	-	5	20
Bee-keeping	1	15	-	15	5	-	5	20
Integrated farming	1	15	-	15	5	-	5	20
Seed production								
Production of organic inputs								
Integrated Farming								
Planting material production								
Vermi-culture	1	15	-	15	5	-	5	20
Sericulture								
Protected cultivation of vegetable crops								
Commercial fruit production								
Repair and maintenance of farm machinery and implements								
Nursery Management of Horticulture crops	1	15	-	15	5	-	5	20
Training and pruning of orchards								
Value addition	1	-	15	15	-	5	5	20
Production of quality animal products								
Dairying	1	15	-	15	5	-	5	20
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								
Other Organic farming								
TOTAL	7	90	15	105	30	10	35	140
(C) Extension Personnel								
Productivity enhancement in field crops								
Integrated Pest Management	1	15	-	15	5	-	5	20
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	1	15	-	15	5	-	5	20
Livestock feed and fodder production								
Household food security								
Women and Child care								
Low cost and nutrient efficient diet designing	1	-	15	15	-	5	5	20
Production and use of organic inputs	1	15	-	15	5	-	5	20
Gender mainstreaming through SHGs								
Any other (Pl. Specify) Post harvest technology	1	-	15	15	-	5	5	20
Total	5	45	30	75	15	10	25	100
G. TOTAL	48	655	125	780	110	45	240	1020

MahilaMandals Conveners meetings	-	-	-	-	-	-	-	-	-	-
SHG Meeting	60	-	120	-	-	-	10	-	120	130
FPO Meetings	12	100	5	105	-	-	-	100	5	105
FPO AGM Meeting	1	100	5	105	-	-	-	100	5	105
Celebration of important days (specify) Yoga day Mahila kisaan diwas Kisaan diwas World honey day World soil day	4	-	-	-	-	-	-	-	-	200
Pre Kharif workshop	1	-	-	-	-	-	-	-	-	100
Pre Rabi workshop	1	-	-	-	-	-	-	-	-	100
PPVFRA workshop	-	-	-	-	-	-	-	-	-	-
Any Other (Specify)										
Total	467	2450	990	3520	205	40	235	2725	1030	5905

3.5 Target for Production and supply of Technological products SEED MATERIALS

Sl. No.	Crop	Variety	Quantity (Q)
CEREALS	Wheat	HD -2967	120
OILSEEDS	Mustard	RH-749 & Giriraj	80
PULSES	-	-	-
VEGETABLES	Palak	Pusa All Green	22
Flower	Marigold		1
Total		4	223

PLANTING MATERIALS

Sl. No.	Crop	Variety	Quantity (Nos.)
FRUITS			
SPICES			
VEGETABLES	Tomato	Arka rakshak	10,000
	Onion	NHRDF Red	5 Q seedling
	Brinjal	Pusa Uttam	5000
	Chilli	Pusa Sadabhar	5000
	Bottle Gourd	Pusa Samridhi	5000
FOREST SPECIES			
ORNAMENTAL CROPS	Marigold Flower	Pusa Narangi	10,000
		Total	

Bio-products

Sl. No.	Product Name	Species	Quantity	
			No	(kg)
BIO PESTICIDES				
1				
2				

LIVESTOCK

Sl. No.	Type	Breed	Quantity	
			(Nos)	Unit
	Cattle			
	Goat			
	Sheep			
	Poultry			
	Pig farming			
	Fisheries			

3.6 Literature to be Developed/Published

(A) KVK News Letter

Date of start : January – June 2020 & July – December 2020

Number of copies to be published : 500 copy half year

(B) Literature developed/Published during the year

S.No.	Topic	Number
1	Research paper each scientist	5
2	Technical reports	3
3	News letters	2
4	Training manuals of all disciplines	6
5	Popular articles by each scientist	6
6	Extension Literature	8
	Total	30

(C) Details of Electronic Media to be Produced

S. No.	Type of media (CD / VCD / DVD / Audio-Cassette)	Title of the programme	Number
1	CD	CRM	1
2	CD	25-year journey of KVK	1

3.7. i) Success stories/Case studies identified for development as a case.

- Vegetable production
- Gardner
- Mushroom production
- Vermi-compost
- Crop production
- Happy seeder
- Nuri-garden

ii) Case study on Impact of Food processing trainings for entrepreneurship development or as a source of income generating activity

a. Brief introduction

b. Interventions

c. Output

d. Outcomes

e. Impact

i) Social economic

ii) Bio-Physical

f. Good Action Photographs

3.8 Indicate the specific training need analysis tools/methodology followed for

Practicing Farmers

Need assessment was made based on concerned departments, PRA reports, observations, field visits, interactions with farmers/farm women in meeting, field days etc. and detailed discussion with VLW's of target villages

Rural Youth

Identification of training needs of rural youth is identified through PRA, SWOT and interaction with rural youth, village elders, professionals and courses are accordingly identified. The views of officials of line department are also taken in deciding the issues.

In-service personnel

Meeting with Joint Director (Ag.), Delhi Govt., Director Animal Husbandry, Delhi Govt. and the District Officer Social Welfare (South West), Dept. of Social Welfare, Govt. of Delhi, held every year and the training programmes are organized as per the requirements. Feedback is also collected from participants of in-service training course for their future training requirements.

3.9 For OFT:

- i) PRA
- ii) Problem identified from Matrix ✓
- iii) Field level observations ✓
- iv) Farmer group discussions ✓
- v) Others if any

For FLD:

- i) New variety/technology ✓
- ii) Poor yield at farmers level
- iii) Existing cropping system ✓
- iv) Others if any

3.10 Field activities

- I. Name of villages identified/adopted with block name (2020):
- II. Block: Najafgarh/Kapashera : Villages: 1. Kanganheri, 2. Shikarpur.
Block: Alipur : Villages: 1. Tigipur, 2. Sungerpur 3. Daryapur
- III. No. of farm families selected per village: 10
- IV. No. of survey/PRA conducted: 5
- V. No. of technologies taken to the adopted villages: 5
- VI. Name of the technologies will be found suitable by the farmers of the adopted villages crop residue management (CRM), OFT, FLD, Marketing and Enterprises.
- VII. Impact (production, income, employment, area/technological–horizontal/vertical): will be assessed
- VIII. Constraints if any, in the continue application of improve technologies: Will be assessed

3.11. Activities of Soil and Water Testing Laboratory

Status of establishment of Lab:

1. Year of establishment : 2015-16
2. List of equipments purchase with amount

Sl. No.	Name of the equipment	Quantity	Cost (Rs)
1	Mrida parikshak kit	2	168000

3. Targets of samples for analysis:

Details	No. of Samples	No. of Farmers	No. of Villages	Amount to be realized
Soil Samples	500	450	12	-
Water	100	100	10	-
				-
Total	600	550	22	-

4.0 LINKAGES

4.1 Functional linkage with different organizations

Sl.No.	Name of organization	Nature of Linkage
1.	Indian Agricultural Research Institute, New Delhi	Adoption Agri-Technologies, Seeking technical support, demonstrations/ field visits/resource persons, Seminars, Farmers' group visits through NHRDF
2.	CCS Haryana Agricultural University, Hisar	Technical support, Adopting of improved Technologies
3.	National Horticultural Research & Development Foundation (NHRDF), New Delhi	Parent organization of KVK; a duly recognized 'Scientific & Industrial Research Organization' (SIRO by Dept. of Science & Industrial Research, GOI, and National Agency for implementation of National Horticulture Mission of GOI. To provide administrative, financial and technical support to KVK
4.	State Department of Agriculture & Horticulture, New Delhi	Training of extension functionaries
5.	Development Department, Govt. of NCT Delhi	Collaborative work on solar plant and livelihood programmes
6.	State Animal Husbandry Department, Delhi	Collaborative animal camps, training of extension personnel's/ resource persons
7.	National Horticulture Board, Delhi	Conducting sponsored programmes
8.	Khadi & Village Industries Commission, new Delhi	Field visits/Resource persons
9	KVK- Shikohpur, Mandkola	Field visits/Resource persons
10	Integrated Child Development Services	Training of AWW and Supervisors
11	NABARD	Providing support for establishment of FPO and farmers club
12	Directorate of Wheat Research	Conducting frontline demonstration at farmers field
13	National Research Center of Integrated Pest Management	Joint implementation of projects
14	Department of Education, Govt. of NCT Delhi	Technical guidance on nutrition education, career orientation in agriculture and its allied fields.
15	Rural Health Training Centre, Min. of Health & Family Welfare, GOI	Orientation of nursing students on KVK activities
16	Gram Vikas evam Kalayan Association, Delhi	Resource Person & guidance on agri-agro enterprises
17	DIET, Ghumenheda, New Delhi	Conducting training
18	NAFED	Storage of onion & training to staff

4.2 Details of linkage with ATMA

a) Is ATMA implemented in your district Not existing in NCT, Delhi

S. No.	Programme	Nature of linkage
1		

4.3 Give details of programmes under National Horticultural Mission

S. No.	Programme	Nature of linkage
1		

4.4 Nature of linkage with National Fisheries Development Board: NA

S. No.	Programme	Nature of linkage
1		

5.0 Utilization of hostel facilities: NA

S. No.	Programme	No. of days
1		
	Total	

6.0 Convergence with departments: Nil

7.0 Feedback of the farmers about the technologies demonstrated and assessed:

- Mustard Variety RH-749 & Giriraj was demonstrated under CFLD Mustard and the response from the farmers was found to be satisfactory.
- FLD in pearl millet under programme NARI brought a satisfactory amount of iron (Fe) and zinc in the crop for human health.
- IPM approaches demonstrated to farmers were started practicing in the area.
- Farmers accepted and applied the technology of micronutrients applications in tomato.
- Majority showed key interest in Bajra biscuits (Bajra + Basen) demonstrated to them.
- Vegetable nursery rising under the protected condition.
- Chick pea variety GNG 1958 was demonstrated by KVK and a higher yield was reported by the farmers.

8.0 Feedback from the KVK Scientists (Subject wise) to the research institutions/universities:

- Research institutes may focus on the development of high yielding salt tolerant varieties of Rice, Wheat and Mustard crop.
- Development of Bio-Fortified varieties of Crops to sort out the problem of Malnutrition.
- Floriculture research to be focused on the development of Salt tolerant varieties of flowers to promote flower farming in land irrigated by salt water.
- Research on advanced agro-technique in saline condition for agronomic and horticulture crops.
- Research to be focused on Nano-Technology in Agriculture for demonstration and welfare of Farmers.
- Advance research in the field micro-nutrients availability for the vegetable crops.
- Low cost technologies development in food processing.
- Dissemination of technologies from veterinary universities/institutes to other states through KVKs in the field of veterinary sciences for demonstrations and trials.
- Herd health-based approach for research and development of technologies in veterinary sciences.

Training Programmes

i) Farmers & Farm Women (On Campus)

Date	Clientele	Title of the training programme	Duration in days	Number of participants			Number of SC/ST			G. Total
				M	F	T	M	F	T	
Crop Production/Agronomy										
June	PF	Weed Management in Rice Crop	4	15	-	15	5	-	5	20
Nov	PF	Irrigation Scheduling in <i>Rabi</i> crops for higher Water Productivity	4	15	-	15	5	-	5	20
Dec	PF	Integrated Weed Management in Wheat Crops	4	15	-	15	5	-	5	20
Horticulture										
Nov	PF	Off season vegetables for get more income	4	15	-	15	5	-	5	20
Livestock production and management										
Nov	PF	Preparation of balance ration for dairy animals	4	15	-	15	5	-	5	20
Agriculture Extension										
Sept	PF	Formation of Farmer Club/ Farmers Producer Organization	4	15	-	15	5	-	5	20
Oct	PF	Capacity Development for ICTs Application	4	15	-	15	5	-	5	20
Nov	PF	Training on Digital / Online Marketing	4	15	-	15	5	-	5	20
Home Science										
July, Oct	PF	Household food security by kitchen gardening and nutrition gardening	4	-	15	15	-	5	5	20
July	PF	Value addition in Mango	4	-	15	15	-	5	5	20
Sept.	PF	Income generation activities for seasonal preservation of fruits & vegetables	4	-	15	15	-	5	5	20
Plan Protection										
July	PF	Use of bio pesticides management of vegetables pest and diseases	4	15	-	15	5	-	5	20
Nov	PF	Integrated pest management of cauliflower	4	15	-	15	5	-	5	20
Soil Health										
July	PF	Balance use of fertilizers in crops	4	15	-	15	5	-	5	20

i) Farmers & Farm Women (Off Campus)

Date	Clientele	Title of the training programme	Duration in days	No. of participants			Number of SC/ST			G. Total
				M	F	T	M	F	T	
Crop Production/ Agronomy										
July	PF	Agro-technique in Rice Cultivation	4	15	-	15	5	-	5	20
July	PF	Weed Management Practices in Kharif Crop	4	15	-	15	5	-	5	20
Oct.	PF	Integrated Nutrient Management in Oil Seed and Pulses Crops	4	15	-	15	5	-	5	20
Nov.	PF	Weed Management Practices in Rabi Crop	4	15	-	15	5	-	5	20
Horticulture										
June	PF	Nursery raising of vegetables	4	15	-	15	5	-	5	20
Oct	PF	Management of potted plants	4	15	-	15	5	-	5	20
Nov	PF	Exotic vegetables production in peri-urban Delhi	4	15	-	15	5	-	5	20
Livestock production and management										
July	PF	Vaccination in dairy animals against HS & BQ	4	15	-	15	5	-	5	20
Nov	PF	Round the year green fodder production	4	15	-	15	5	-	5	20
Agriculture Extension										
Aug.	PF	Training on leadership Development	4	15	-	15	5	-	5	20
Oct.	PF	Capacity Building for ICTs Application	4	15	-	15	5	-	5	20
Home Science										
July	PF	Value addition of seasonal fruits	3	-	15	15	-	5	5	20
Dec.	PF	Utilization of pearl millet flour by suitable processing techniques	3		15	15	-	5	5	20
Plant Protection										
Sept.	PF	Cultivation of mustard and their pest, disease management	4	15	-	15	5	-	5	20
Soil Health										
June	PF	Role of green manuring to improve soil health	4	15	-	15	5	-	5	20
July	PF	Management of problematic soil	4	15	-	15	5	-	5	20
Nov.	PF	Use of bio fertilizer in Wheat & mustard crop	4	15	-	15	5	-	5	20

ii) Vocational training programmes for Rural Youth

Crop / Enterprise	Identified Thrust Area	Training title	Month	Duration (days)	No. of Participants			SC/ST participants			G. Total
					M	F	T	M	F	T	
Household Enterprises	Value addition of Fruit & Vegetables	Empowerment of farm women through skill up-gradation technique: Fruit & vegetable preservation	Nov.	21	-	15	15	-	5	5	20
Gardening	Employment generation	Assistant Gardner & Nursery Worker	July	21	15	-	15	5	-	5	20
Mushroom	Mushroom Production	Cultivation of white button, oyster & milky mushroom	Oct.	21	12	3	15	3	2	5	20
Bee keeping	Honey production	Bee keeping	Jan	21	15	-	15	5	-	5	20
Livestock Production	Dairy Farming	Commercial dairy farming	Feb	21	15	-	15	5	-	5	20
Farming System	IFS	Integrated Farming System	Feb.	21	15	-	15	5	-	5	20
Vermicompost	Vermiculture	Vermicompost production	Feb	21	15	-	15	5	-	5	20

iii) Training programme for extension functionaries

Date	Clientele	Title of the training programme	Duration in days	No. of participants			Number of SC/ST			G. Total
				M	F	T	M	F	T	
On Campus										
Sept	Department of agri, horticulture and anganwadi workers	Post-harvest technology for vegetables & fruits	2	-	15	15	-	5	5	20
Oct	Aanganwadi workers & supervisors	Low cost and nutrient efficient diet designing	2	-	15	15	-	5	5	20
Oct.	Development Department, Delhi	Promotion of Organic Farming in NCT Delhi	1	15	-	15	5	-	5	20
Dec.	Development Department, Delhi	Integrated Pest Management in vegetable crops	1	15	-	15	5	-	5	20
Dec.	Development Department, Delhi	Management of reproductive disorders in bovines and vaccination schedule in cattle.	1	15	-	15	5	-	5	20

iv) Sponsored programme

Discipline	Sponsoring agency	Clientele	Title of the training programme	No. of course	No. of participants			Number of SC/ST			G. Total
					M	F	T	M	F	T	
a) Sponsored training programme											
Agri. Extn	ICAR	Farmers	In-Situ Crop Residue Management by Farm Machineries	1	20	5	25	3	2	5	30
Agri. Extn.	ICAR	Farmers	Operational Guidelines of farm machineries for In-Situ Crop Residue Management	1	20	5	25	3	2	5	30
Total											
b) Sponsored research programme											
Total											
c) Any special programmes											
Agri. Extension	NABARD	KVK staff & FPO board of directors CEO of FPO	Orientation on formation and functioning of FPO, business operations and management.	1	10	-	-	10	-	-	10
Total				1	10	-	-	10	-	-	10

Frontline Demonstrations

A. Details of FLDs to be organized -

Sl. No.	Crop	Variety	Thematic area	Technology for demonstration	Critical inputs	Season and year	Area (ha)	No. of farmers/demon.	Parameters identified
1	Onion	NHRDF Red	IPM	IPM in rabi onion	<i>Trichoderma viride</i> , Pheromones traps, blue tap & neem pesticide	Rabi 2020-21	4	10	Yield- Q/ha Disease incidence % Pest infestation %, Economics- Rs
2	Mustard	RH-749 & Giriraj	Improved Technology	Newly released variety, Seed treatment & Weed management	Seed, bio-fertilizer, fungicide & insecticide	Rabi- 2020-21	30	75	Yield kg/ha. Economics- Rs
3	Wheat	HD-3226	Improved Technology	Newly released variety, Seed treatment & Weed management	Seed, bio-fertilizer & weedicide	Rabi- 2020-21	7.2	18	Yield kg/ha. Economics- Rs
4	Onion	NHRDF Red	Improved Technology	Newly released variety, Seed treatment & Weed management	Seed, biofertilizer	Rabi- 2020-21	10	25	Yield kg/ha Economics- Rs
5	Chickpea	GNG-1958	Pulse production	Improved variety	Seed, biofertilizer, herbicide	Rabi- 2020-21	20	50	Yield kg/ha Economics- Rs
6	Marigold	Pusa Narangi	Natural Resource Management	Performance evaluation	Seed	Rabi- 2020-21	4	10	Yield kg/ha Economics- Rs
					Total		83.4	206	

Sponsored Demonstration (CRM)

Crop	Area (ha)	No. of farmers
Wheat	50	125

Others Details of FLDs under NARI programme -

Sl. No.	Crop	Variety	Thematic area	Technology for demonstration	Critical inputs	Season and year	Area (ha)	No. of farmers/ demon.	Parameters identified
1	Wheat	DBW-187	Nutrition security	Promotion of nutrient rich variety	Seed	<i>Rabi</i> 2020-21	4	10	Presence of macro nutrients
2	Nutri-Garden	IIHR/IARI	Validation of Nutri-Garden modal area	Vegetables & fruits	Seed & Seedlings	<i>Kharif & Rabi</i> 2020-21	0.2	20	Yield Kg/ ha Saving (Rs.)/ Month