

PROFORMA FOR PREPARATION OF ANNUAL REPORT (January-2020-December-2020)

APR SUMMARY

(Note: While preparing summary, please don't add or delete any row or columns)

1. Training Programmes

Clientele	No. of Courses	Male	Female	Total participants
Farmers & farm women	20	289	159	448
Rural youths	2	50	-	50
Extension functionaries	2	-	59	59
Sponsored Training	5	120	5	125
Vocational Training	5	82	26	108
Total	34	541	249	790

2. Frontline demonstrations

Enterprise	No. of Farmers	Area (ha)	Units/Animals
Oilseeds	125	50	-
Pulses	50	20	-
Vegetables	10	0.2	-
Other Crops (Pearl Millet)	4	1.0	-
Total	189	71.2	-
Other enterprises(Kitchen Garden)	9	0.18	9
Total	9	0.18	9
Grand Total	198	71.38	9

3. Technology Assessment

Category	No. of Technology Assessed	No. of Trials	No. of Farmers
Technology Assessed			
Crops(Wheat & Mustard)	2	13	13
Vegetables (Okra, Cauliflower)	2	8	8
Various enterprises(Aonla, Beetroot & Aonla)	1	10	10
Total	5	31	31

4. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities	441	4308
Other extension activities	14	283
Total	455	4591

5. Mobile Advisory Services

Message Type	Type of Messages						Total
	Crop	Livestock	Weather	Marketing	Aware-ness	Other enterprise	
Text only	25	-	-	-	1	3	29
Text only (Whats App Group)	100	-	40	5	10	-	155
Voice only	-	-	-	-	-	-	-
Voice & Text both	-	-	-	-	-	-	-
Total Messages	25	-	-	-	1	3	29
Total farmers Benefitted	15580	-	-	-	1466	4014	21060

6. Seed & Planting Material Production

	Quintal/Number	Value (Rs.)
Seed (wheat, mustard & palak) (q)	156.8	615370/-
Planting material (No.)	12977	25954/-
Bio-Products (kg) (Vermicompost)	71.66	107490/-

7. Soil, water & plant Analysis

Samples	No. of Beneficiaries	Value Rs.
Soil	270	-
Water	105	-
Plant	74	-
Total	449	

8. HRD and Publications

Sr. No.	Category	Number
1	Workshops	4
2	Conferences	8
3	Meetings	10
4	Trainings for KVK officials	6
5	Visits of KVK officials	5
6	Book published	1
7	Training Manual	2
8	Book chapters	2
9	Research papers	5
10	Lead papers	1
11	Seminar papers	2
12	Extension folder	8
13	Proceedings	3
14	Award & recognition	1
15	On going research projects	8

DETAIL REPORT OF APR-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 30/01/2021) : 430934

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	Grade Pay	Basic	Date of joining	Category	(SC/ST/OBC)	Mobile No.	Email id	Please attach recent
1	Sr Scientist & Head	Dr P.K. Gupta	Sr Scientist & Head	Horticulture	37400-67000	9000	41720+9000	28.02.17	Per.	Gen	8888867619	kvkujwa@yahoo.com	
2	Subject Matter Specialist	Ritu Singh	SMS	Home Science	15600-39100	5400	27370+5400	10.02.05	-do-	Gen	9818550652	-do-	
3	Subject Matter Specialist	Rakesh Kumar	SMS	Horticulture	15600-39100	5400	27370+5400	22.09.05	-do-	Gen	9313047633	-do-	
4	Subject Matter Specialist	Dr. D. K. Rana	SMS	Plant Protection	15600-39100	5400	22850+5400	5.05.10	-do-	Gen	9310904705	-do-	
5	Subject Matter Specialist	Dr Samar Pal Singh	SMS	Agronomy	15600-39100	5400	16230+5400	25.05.18	-do-	Gen	8650399054	-do-	
6	Subject Matter Specialist	Sh Kailash	SMS	Agriculture Extension	15600-39100	5400	16230+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	11940+4200	17.02.14	-do-	Gen	7065787046	-do-	
10	Computer Programmer	Manju	PA	Computer Science	9300-34800	4200	15100+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	21660+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	10300+1900	10.02.05	-do-	Gen	9013553955	-do-	
14	Driver	Rajesh Kumar	Driver	Jeep Driver	5200-20200	1900	10290+1900	02.02.05	-do-	Gen	9899426775	-do-	
15	Driver	Krishan	Driver	Tractor Driver	5200-20200	1900	9190+1900	02.05.08	-do-	Gen	8506920345	-do-	
16	Supporting staff	Ramesh Chander	Attendant	Administration	4440-7440	1800	8270+1800	10.02.05	-do-	Gen	9560290407	-do-	
17	Supporting staff	Sachin Kumar	Attendant	Administration	4440-7440	1800	5410+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	0.10
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-25 box Kinnow with Drip Irrigation Aonla & Bael orchard-3.5 acre Water harvesting -200 m ² Kitchen Garden – 0.1 ha Crop Cafeteria – 0.2 ha Drumstick Orchard – 0.2 ha Solar Farm Unit- 0.40 ha	2.02
3.	Crops (Seed Production)	11.65
4.	Others if any	
	a. Forestry	1.78
	b. Onion storage	1.35
	Total	16.9

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: Pasteurized compost Mushroom unit Vermicompost unit Azolla unit Insect proof net house Apiculture Kinnow & Aonla orchard Water harvesting Drip irrigation system	State Govt NHRDF NHRDF NHRDF ICAR NHRDF	1998 2019 2018 2018 2018 2019 2017 2019	250 m ² 500 m ² 25 m ² 50 m ² 20 box 3.5 acre 200 m ² 2 acre	12,10,000/- - 200000/- 25000/- 125000/- 100000/- 250000/- 150000/- 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.	Tractor trolley	1	1998	11000	
3.	Harrow	1	1999	8600	
4.	Mega phone	1	2002	2100	
5.	Cultivator	1	2002	10900	
6.	Video Camera	1	2002	59990	
7.	Tractor Trolley	1	2002	52970	
8.	Harrow	1	2002	19250	
9.	LCD Multimedia Projector	1	2007	97000	
10.	Juicer Mixer Grinder	1	2009	2050	
11.	Water cooler	1	2009	19700	
12.	Stabilizer	4	2009	26680	
13.	Printer	1	2009	1850	

14.	Scanner	1	2010	4148
15.	Speaker	1	2010	1733
16.	Camera	1	2010	1000
17.	Computer	1	2010	25725
18.	Printer	1	2010	7035
19.	Computer	1	2011	24210
20.	Refrigerator	1	2011	11200
21.	Photocopier machine	1	2011	35000
22.	Laptop	1	2011	36170
23.	Generator	1	2011	59000
24.	Room cooler	3	2012	20402
25.	Post hole digger	1	2012	42748
26.	Weed cutter	1	2012	24675
27.	Zero till seed cum fertilizer	1	2012	47500
28.	Straw reaper cum trolley	1	2012	342000
29.	Lawn mover	1	2012	12915
30.	Small autoclave	1	2012	67280
31.	Hot air oven	1	2012	45016
32.	Laminar flow	1	2012	78874
33.	Colony counter	1	2012	6156
34.	B.O.D. incubator	1	2012	107730
35.	Microscope	1	2012	37822
36.	Refrigerator	1	2012	32600
37.	Electric balance	1	2012	42750
38.	Water distillation	1	2012	25650
39.	pH meter	1	2012	19687
40.	EC meter	1	2012	21038
41.	Spectrophotometer	1	2012	39150
42.	Flame photometer	1	2012	60750
43.	Computer	1	2012	34000
44.	Air conditioner	1	2012	33975
45.	Laptop	1	2012	37000
46.	Spirit lamp	2	2012	157
47.	Stabilizer	1	2012	2000
48.	Hygrometer	1	2012	473
49.	Printer	1	2012	5350

50.	UPS	1	2013	2100
51.	Reverse Osmosis (RO)	1	2014	15500
52.	Finger print attendance machine	1	2014	11250
53.	Heat convector	2	2014	1800
54.	Desert Cooler	5	2014	25594
55.	Mrida parikshak soil testing Mini Lab	1	2015	75000
56.	Trolley	1	2016	158832
57.	Plastic palates	8	2016	29560
58.	Water cooler	1	2016	20267
59.	Inverter set	1	2016	24700
60.	Planker (wood pata with chain)	1	2016	8947
61.	Reverse Osmosis (RO)	1	2016	16500
62.	Mrida parikshak soil testing Mini Lab	2	2017	90300
63.	Stabilizer	3	2017	9000
64.	Printer	1	2017	15044
65.	Harrow	1	2017	57000
66.	Leveler	1	2017	13000
67.	Lecture stand	1	2017	8000
68.	Cultivator	1	2017	23800
69.	Head phone	1	2017	400
70.	Gramin GPS 72 H	1	2017	9984
71.	Digital still camera	1	2017	28000
72.	LCD Multimedia projector	1	2017	52490
73.	LED TV	1	2017	72000
74.	Electronic balance	1	2017	4000
75.	Air Conditioner	1	2017	121600
76.	Computer	1	2017	80850
77.	UPS	2	2017	4106
78.	Printer	1	2018	10400
79.	Mulcher single speed	2	2018	336000
80.	Shrub master	2	2018	103040
81.	Hydraulic reversible 2MB plough	1	2018	135615
82.	Wireless walkie phone	1	2018	1750
83.	Happy seeder 10 row	2	2018	332640
84.	TATA sky DTH connection	1	2018	2530
85.	Airtel 4G home Wi-Fi router	1	2018	2500

86.	Fire extinguisher	3	2018	6372
87.	Projector screen	1	2018	16461
88.	PA Mixture amplifier	1	2018	8791
89.	PA Microphone	1	2018	3835
90.	PA Wireless Microphone	1	2018	5015
91.	Zero Till Seed cum Fertilizer Drill	3	2018	183849
92.	UPS	2	2018	4800
93.	Desert cooler	1	2019	10000
94.	Zero seed cum fertilizer drill	1	2019	57000
95.	Computer	1	2019	107100
96.	UPS	2	2019	4300
97.	Bag Closer Machine	1	2019	5040
98.	Rotavator	2	2019	220000
99.	GPS Device Tracker	1	2019	7000
100.	CC TV Unit	1	2020	244147
101.	Mobile Hand Set	1	2020	15000
102.	Stand Holder for Mobile phone & Camera	1	2020	699
103.	Directional leveler condenser microphone	1	2020	949
104.	Sanitizer stand	1	2020	2124
105.	Water Tanker	1	2020	38940
106.	Laptop	1	2020	88500

1.8. A). Details SAC meeting* conducted in the year

S.No.	Date	Name and Designation of Participants	Salient Recommendations	Action taken
1.	26/12/20	<ol style="list-style-type: none"> 1. Dr. S. K. Singh, Director, ICAR-ATARI, Jodhpur 2. Dr. R. P. Gupta, Ex Director, NHRDF 3. Dr. J R Mishra, Pr. Scientist, ICAR-IARI, New Delhi 4. Dr. Vijay Kr. Dagar, Vet. Officer, Govt. of NCT Delhi 5. Dr. Vijay Singh Meena, ICAR-NBPGR 6. Er. R K Yadav, Ex Prog. Coordinator, KVK Delhi 	<ol style="list-style-type: none"> 1. All SMS should focus on their respective work achievement considering COVID 19 pandemic. 2. A virtual common hall should be develop for online webinar/trainings 3. KVK should start seed production programme with farmers' participation mode of demanded 	Noted for compliance and incorporated in Annual Action plan 2021.

		<p>7. Sh.Shrichand Sharma, Consultant, (Hort) Govt. of NCT Delhi</p> <p>8. Sh. Atonw Tikat, Doordarshan Kissan</p> <p>9. Sh. Ram Kumar, Progressive farmer</p> <p>10. Sh. Sant Kumar, Agriculture Asst. Govt. of NCT Delhi</p> <p>11. Smt. Geeta Devi, Farmer</p> <p>12. Dr. P.K Gupta, Head, KVK, Delhi</p> <p>13. Dr. Ritu Singh, SMS(HS)</p> <p>14. Sh. Rakesh Kumar , SMS (Hort.)</p> <p>15. Dr. D.K.Rana, SMS(PP)</p> <p>16. Dr. Samarpal Singh, SMS (Agro.)</p> <p>17. Sh. Kailash, SMS(Ext.)</p> <p>18. Sh. Brijesh Yadav, PA (soil)</p> <p>19. Smt. Manju, PA (comp.)</p>	<p>vegetables & Cereals.</p> <p>4. Focus on protected cultivation of vegetables and flowers in NCT Delhi</p> <p>5. Committee has strongly recommended to KVK should focus the source of revenue generation</p> <p>6. As rural youth are attracting towards the agriculture sector as they are unskilled. KVK should focus on rural youth of the area skill development and making them self reliant.</p> <p>7. KVK should conduct the in-service training need bases for extension personal</p> <p>8. KVK should link with Animal department of Delhi for organization the programme like vaccination at Village level for implications of Govt scheme at ground level.</p> <p>9. KVK should develop the self mobile app for registration of farmer and feedback analysis.</p> <p>10. Before introduction of new technology KVK should assess the performance at KVK farm.</p>	
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			<p>11. Technologies of ICAR-CSSRI Karnal should be introduced at KVK farm because this Institute is working on biotic stresses.</p> <p>12. KVK should work on SRR (Seed Replacement Ratio) of vegetables land other crops by demonstrate of new varieties.</p> <p>13. Being horticulture based host organization more number of front line demonstration should be conducted on vegetable crops.</p> <p>14. SMS (Hort) contact to Kitchen Garden Association of Delhi, Flower Association, Mela IARI to provide flower & vegetable seedling, vermicompost etc as well as provide training time to time.</p> <p>15. Source of technology in Agronomy should be included in the OFT write-up.</p> <p>16. Success story of technology and variety should be propagated through mobile Aap, radio as well as different extension mode like print & electronic.</p> <p>17. General nutrition deficiency in soil and water shall be prepared on taluka/block wise to know the status of the area for effective transfer of technology.</p>	
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			<p>18. Focus on organic farming in NCT Delhi because population of Delhi demanding organic food.</p> <p>19. Need based assessment should be done for training and analysis of feedback of last 5 years training should be done and present in the next SAC meeting.</p>	
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Note : This yellow mark may be treated as an example

* Attach a copy of SAC proceedings along with list of participants

2. DETAILS OF DISTRICT (2020)

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- Horticulture (Mushroom) system
5	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 ⁰ 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-Jan), summer (Apr-June) & Rainy season (June - 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	Net cultivated area (in ha)
1	Sandy 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.	33455

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

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 2018-19

2.5. Weather data

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)	
		Maximum	Minimum	Max RH	Mini RH
January	47.7	22	2.0	98	34
February	2	26.8	3.2	98	37
March	174.6	32	9.5	98	28
April	8.8	40	12.2	83	21
May	37.4	46.5	18.4	84	19
June	59.9	43.3	20.2	92	25
July	270.9	41	21.1	96	42
August	342.1	37	24	97	58
September	9.8	38	22	94	42
October	00	36	10.8	95	23
November	3.2	31	5.5	95	25
December	0.6	28	2.4	97	27

2.6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

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: State Agriculture Department, NCT Delhi 2018-19

2.7 Details of Operational area / Villages (2020)

Sl.No.	Taluk	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: 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 • 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)
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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.
Fruits (Aonla, Karonda,	Promotion of HYV of fruits plants, IPM, INM.

Guava, Strawberry & Papaya)	
Women in Agriculture	Women empowerment through 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)

3. TECHNICAL ACHIEVEMENTS

3.A. Details of target and achievements of mandatory activities by KVK during 2020

OFT (Technology Assessment)				FLD (Oilseeds, Pulses, Cotton, Other Crops/Enterprises)			
1				2			
Number of OFTs		Total no. of Trials		Area in ha		Number of Farmers	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
6	5	42	31	83.4	71.38	206	198

Training (including sponsored, vocational and other trainings carried under Rainwater Harvesting Unit)					Extension Activities			
3					4			
Number of Courses			Number of Participants		Number of activities		Number of participants	
Clientele	Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
Farmers	41	20	800	472	467	455	5905	4591
Rural youth	5	5	100	103				
Extn. Functionaries	5	2	100	60				
Total	51	27	1000	635	467	455	5905	4591

Seed Production (Qtl.)			Planting material (Nos.)		
5			6		
Target	Achievement	Distributed to no. of farmers	Target	Achievement	Distributed to no. of farmers
250	156.8	1279	75000	12977	190

I.A TECHNOLOGY ASSESSMENT

Summary of technologies assessed under various **crops** by KVKs

Thematic areas	Crop	Name of the technology assessed	No. of trials	No. of farmers
Integrated Nutrient Management	Mustard	Foliar application of boron	6	6
	Cauliflower	Effect of foliar application of Borax @ 0.3% + Ammonium molybdate @ 0.05% on cauliflower	5	5
	Wheat	Integrated Nutrient Management in Wheat	3	3
Varietal Evaluation				
Integrated Pest Management	Okra	Assessment of Management technique of Short & Fruit borer in Okra	3	3
Integrated Crop Management				
Integrated Disease Management				
Small Scale Income Generation Enterprises				
Weed Management				
Resource Conservation Technology				
Farm Machineries				
Integrated Farming System				
Seed / Plant production				
Post Harvest Technology / Value addition	Beetroot, Ber & Aonla	Assessment of the acceptability of the ladoo prepared from Beetroot, Ber & Aonla.	10	10
Drudgery Reduction				
Storage Technique				
Others (Pl. specify)				
Total			31	31

I.B. TECHNOLOGY ASSESSMENT IN DETAIL

(From each state please include the full details of three OFTs on technology assessment under the broad thematic areas such as Integrated Crop Management, weed management, pest and disease management, nutrient management, resource conservation, livestock enterprises, Integrated Nutrient Management)

(The model for preparing the same is furnished below)

PEST AND DISEASE MANAGEMENT

Problem definition: Shoot and fruit borer is the most distractive insect of Okra in NCT Delhi. The larva of Okra shot & fruit borer burrows in the petioles and tender shoot

Technology assessed: KVK, Delhi conducted an on-farm trial on shoot & fruit borer in okra crop in the *Kharif* season 2020 to assess the effect of foliar application of Spinosad (45SL) @ 0.5ml/L water at 15 days interval on low infestation of shoot and fruit borer in okra. The assessed foliar application of Spinosad (45SL) was found to be better with 9.6% increased yield as compared to farmer practices.

Source of Technology: NCIPM, New Delhi

Technology Option	No. of trials	Shoot Infestation (%)	Fruit Infestation (%)	Yield (kg/ha)	% Increase in yield over farmer's practice	Net return Rs/ha	B:C ratio
T ₁ - Farmers Practice-Cartap hydrochloride (SD) 1gm/lit water	03	10.70	11.0	18173	-	122650	1.5:1
T ₂ - Spray of Spinosad (45SL) @ 0.5ml/L water at 15 days interval		5.20	6.5	19857	9.6	161900	1.6:1

NUTRIENT MANAGEMENT

Problem definition: Poor pod development and flowering in rapeseed -mustard due to boron deficiency in soil identified through soil test basis.

Technology Assessed: Foliar application of Boron in Mustard crop.

Source of technology: ICAR-DRMR, Bhartpur

KVK, Delhi conducted an on-farm trial on mustard crop in the *rabi* season 2019-20 to assess the effect of foliar application of boron on yield and yield attributes of mustard crop to enhance the productivity of crop. The foliar application of Boron @ 0.25% boric acid was assessed at 40 and 60 days after sowing. The higher average mean yield of mustard crop was reported with foliar application of Boron as compared to farmer practices.

Technology Option	No. of trials	Yield (kg./ha)	Increase in Yield (%)	Cost of cultivation (Rs./ha)	Gross return (Rs./ha)	Net return (Rs/ ha)	B:C Ratio
T1-Farmers Practice (No use of Boron)	6	1900	--	21440	72200	50760	2.36
T2-Foliar application of Boron @ 0.25% boric acid at 40 and 60 Days after sowing.		2250	10.00	22290	85500	63210	2.83

Growth and yield attributes:

Treatments	Average primary branches per plant	Average number of siliquae per plant	Average number of seeds per siliquae	Average plant height (cm)
T1-Farmers Practice	4.5	400	11.5	190
T2-Foliar application of Boron @ 0.25% boric acid at 40 & 60 Days after sowing .	6	465	13.5	195

NUTRIENT MANAGEMENT

Problem definition: Lower productivity in cauliflower.

Technology Assessed: Nutrient management in cauliflower.

Source of Technology: IARI, Pusa, New Delhi

KVK, Delhi conducted an on-farm trial on cauliflower. in the *rabi* season 2019-20 to assess the effect of foliar application of Borax @ 0.3% + Ammonium molybdate @ 0.05% on yield and yield attributes of cauliflower to enhance the productivity of crop. The assessed foliar application of Borax @ 0.3% + Ammonium molybdate @ 0.05% at 45 DAT was found to be better with 8.17% increase in yield.

Table: Effect of foliar application of Borax @ 0.3% + Ammonium molybdate @ 0.05% at 45 DAT in cauliflower.

Technology Option	No. of trials	Curd weight(gm)	Plant height (cm)	Yield (kg./ha)	Increase in Yield (%)	B:C Ratio
T1- Farmers Practice (No use of micronutrients)	5	700	29.3	18100	--	2.62
T2-Foliar spray of of Borax @ 0.3% + Ammonium molybdate @ 0.05% at 45 DAT		775	31.7	19580	8.17	3.24

INTEGRATED NUTRIENT MANAGEMENT

Problem definition: Low yield in wheat crop.

Technology Assessed: Integrated Nutrient Management in Wheat.

Source of Technology : CCSHAU, Hisar

KVK, Delhi observed the low productivity of wheat crop due to imbalance use of fertilizer and assessed the application of balanced nutrition on soil test basis T2 with Nitrogen @ 120 kg, Phosphorus @ 60kg, Potassium @ 40kg and Zinc @ 5 kg / ha along with the bio fertilizers over the farmers practice (T1) application (N & P). Results of the trial revealed that wheat yield under T2 was increased by 8.99% and yield also (51.50q/ha with B:C ratio of 2.74) over farmers' practice (47.25q/ha B:C ratio of 2.53).

Table Performance of Wheat to integrated nutrient management

Technology Option	No. of trials	Plant height at flowering stage	Test wt 1000g	Yield (kg./ha)	Increase in Yield (%)	B:C Ratio
T ₁ Farmer's Practice (N&P)	3	92	37	47.25	-	2.53
T ₂ –Applicati- on of fertilizer on soil test basis. N, P, K & Zinc + Bio fertilizers (Liquid NPK & Zinc)		99	40	51.50	8.99	2.74

POST HARVEST TECHNOLOGY/VALUE ADDITION

Problem definition: Non utilization of available Aonla, Ber and Beetroot in processed and preserved form.

Technology assessed: Assessment of the acceptability of the laddoo prepared from Beetroot, Ber & Aonla.

Source of Technology : IARI, Pusa, New Delhi

KVK, Delhi assessed the technology on value addition in the Beetroot, Ber & Aonla to develop laddoo. The preparation of laddoo from Ber (20%), Aonla (20%) and Beetroot (10%) along with equal amount of sugar (50%) were kept in oven at 60°C for 2 hours. The material then taken out, cooled and then shaped in to the rounded structure and packed in polypropylene bag.

Table: Acceptance of laddoo prepared with Aonla, Beetroot and Ber.

Technology Option	No. of trials	Organoleptic acceptability in terms of taste (%)	Organoleptic acceptability in terms of color (%)	Result of assessment	Famers reaction
T ₁ – Farmer's Practice (Aonla Laddoo)	10	40	50	Laddoo in combination of ber, aonla beetroot was liked by the majority in terms of taste (80%)	Majority of the population showing keen interest in laddoo and it can become effective tool in improving the nutritional status of the masses.
T ₂ – Ber (20%), Aonla (20%) and Beetroot (10%) with equal amount of sugar (50%) laddoo		80	60		

II. FRONTLINE DEMONSTRATION

a. Follow-up for results of FLDs implemented during previous years

List of technologies demonstrated during previous year and popularized during 2018-19 and recommended for large scale adoption in the district

S. No.	Crop/ Enterprise	Thematic Area*	Technology demonstrated	Details of popularization methods suggested to the Extension system	Horizontal spread of technology		
1.	Mustard	Integrated Crop Management	Improved variety of mustard crop- Giriraj and RH-749	Through Frontline demonstrations and result demonstrations and Trainings and other relevant extension activities	8	375	150
2.	Mustard	Integrated disease management	IDM in Mustard	Through Frontline demonstrations and result demonstrations and other relevant extension activities	7	80	32
3.	Wheat	Integrated Crop Management	HYV of wheat- HD-3226	Through Frontline demonstrations and result demonstrations and Trainings and other relevant extension activities	15	400	160
4.	Onion	Integrated Crop Management	Improved variety <i>Rabi</i> onion	Through Frontline demonstrations and result demonstrations and other relevant extension activities	5	75	35
5.	Summer moong	Crop diversification	Improved variety of summer moong	Through Frontline demonstrations and result demonstrations and Trainings and other relevant extension activities	6	75	30

* *Thematic areas as given in Table 3.1 (A1 and A2)*

- b. Details of FLDs implemented during 2020 (Information is to be furnished in the following **three tables** for **each category** i.e. **cereals, horticultural crops, oilseeds, pulses, cotton and commercial crops.**)

S. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
					Proposed	Actual	SC/ST	Others	Total	
1	Mustard	Integrated crop management	Improved variety (Giraj)+ Nutrient and weed management	Rabi 2020	50.00	50.00	5	120	125	
2	Gram	Integrated crop management	Improved variety (GNG 1958)+ Nutrient and weed management	Rabi 2020	20.00	20.00	5	45	50	
3.	<i>Kharif</i> Onion through bulblet	Integrated Crop Management	variety <i>Kharif</i> Onion var. ADR	<i>Kharif</i> 2020	-	0.1	1	4	5	
4.	<i>Kharif</i> Onion	Integrated Pest Management	Seed treatment with <i>Trichoderma</i> and foliar application of <i>Trichoderma</i> , Pseudomonas, yellow stick and neem pesticide in onion crop	<i>Kharif</i> 2020	-	0.1	1	4	5	

Details of farming situation

Crop	Season	Irrigation situation (RF/Irrigated)	Soil type	Status of soil			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
				N	P	K					
Mustard	Rabi	Irrigated	Sandy loam	M	M	M	Fallow/Rice	10-10-2019 to 18-10-2019	01-03-2020 to 08-03-2020	220.30	14
Gram	Rabi	Irrigated	Sandy loam	M	M	M	Fallow/Rice	20-10-2019 to 08-11-2020	25-03-2020 to 07-04-2020	302.10	17
Kharif onion through bulblet	Kharif	Irrigated	Sandy loam	M	M	M	Wheat	02/09/2020	16/12/2020	-	-
Kharif onion	Kharif	Irrigated	Sandy loam	M	M	M	Wheat	08/09/2020	25/12/2020	75.0	01

Technical Feedback on the demonstrated technologies

S. No	Feed Back
1	Giriraj is a high yielding variety of mustard crop for timely sown condition as compare to other varieties and found suitable for NCT Delhi.
2	Chick pea variety GNG 1958 found suitable for the region where irrigation water is not saline
3	Kharif onion variety ADR is a newly introduced in the area and found suitable for NCT Delhi through bulblets.

Farmers' reactions on specific technologies

S. No	Feed Back
1	Mustard Variety Giriraj is a high yielding and bold seeded.
2	Chick pea variety GNG 1958 is bold seeded and high yielding.
3	Best option for onion production during lean period to fetch more income

Extension and Training activities under FLD

S. No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Field days	2	25/02/2020 mustard var. Giriraj, 28/02/2020 mustard var. RH749	74	
2	Farmers Training	2	7/10/2020 and 19/10/2020	38	

Performance of Frontline demonstrations

Frontline demonstrations on oilseed crops

Crop	Thematic Area	technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
						Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						High	Low	Average										
Mustard	Crop management	Improved variety + Nutrient and weed management	RH 749	60	24	24.70	14.80	21.00	18	16	23510	76760	53250	2.3	22540	68400	45860	2.23
			Giriraj			24.00	17.30	20.20	18	13	23510	79781	56271	2.7	22540	68400	45860	2.23

Frontline demonstration on pulse crops

Crop	Thematic Area	technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
						Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						High	Low	Average										
Chickpea	Chickpea	Crop management	Improved variety + Nutrient and weed management	GNG-1958	20	24	13	16.50	14	17	26832	82500	55668	2.07	25450	70000	44550	1.70

FLD on Other crops

Category & Crop	Thematic Area	Name of the technology	No. of Farmers	Area (ha)	Yield (q/ha)				% Change in Yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)				
					Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)	
					High	Low	Average											
Cereals																		
Wheat	Crop management	Improved variety HD 3226	18	7.2	-	-	56.81	45.6	24.50	46436	128625	82189	1.77	46436	105745.6	59309	1.28	
		HPBW01			-	-	49.4	45.6	8.40	46436	112879	66443	1.73	46436	105745.6	59309	1.28	
Kharif onion through bulb lets	Varietal Evaluation	Improved variety of Kharif onion	05	0.1	172	160	165.4	155.0	6.70	62500	363880	301380	4.82	62500	341000	278500	4.45	
Kharif onion	IPM	IPM	05	0.1	172	160	165.4	155.0	6.70	62500	363880	301380	4.82	62500	341000	278500	4.45	

FLD on Women Empowerment

Category	Name of technology	No. of demonstrations	Name of observations	Demonstration	Check
Pearl Millet	Nutritional Security	4	Iron and zinc content and yield	Demonstration on Biofortified crops	86M11

FLD on Other Enterprise: Kitchen Gardening

Category and Crop	Thematic area	Name of the technology demonstrated	No. of Farmer	No. of Units	Yield (Kg)		% 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 (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
<i>Kharif</i> season vegetables crops	Household Food security through Kitchen Gardening & Nutritional gardening	Kitchen Gardening & Nutritional gardening	9	9	132	-	-	132	-	1500/unit	6605/unit	5105/unit	3.40:1	-	-	-	-

Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques										
Others (pl specify)										
Total (b)										
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl specify)										
Total (c)										
d) Plantation crops										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (d)										
e) Tuber crops										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (e)										
f) Spices										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (f)										
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others (pl specify)										
Total (g)										
GT (a-g)										
III Soil Health and Fertility Management										
Soil fertility management										
Integrated water management										
Integrated Nutrient Management	1	18	-	18	2	-	2	20	-	20
Production and use of organic inputs	2	36	-	36	4	-	4	40	-	40
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient Use Efficiency										
Balance use of fertilizers										
Soil and Water Testing	1	18	-	18	2	-	2	20	-	20
Others (pl specify)										
Total	4	72	-	72	8	-	8	80	-	80
IV Livestock Production and Management										
Dairy Management										
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Disease Management										
Feed & fodder technology										
Production of quality animal products										
Others (pl specify)										
Total										
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening										
Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet	1	-	28	28	-	2	2	-	30	30
Minimization of nutrient loss in processing										
Processing and cooking	1	-	22	22	-	2	2	-	24	24

IV.Extension Programmes

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Advisory Services	20	189	-	89
Diagnostic visits	48	82	-	82
Field Day	2	74	6	80
Farmers Meeting	21	324	-	324
Kisan Ghosthi	7	302	-	302
Film Show	4	100	-	100
Self -help groups	8	320	5	355
Exhibition	2	1000	6	1006
Scientists' visit to farmers field	274	345	-	345
animal health camps	1	47	5	52
Farm Science Club/FPO	4	70	-	70
Lecture delivered	27	942	10	952
Method Demonstrations	10	100	5	105
Celebration of important days International Women Day Mahila Kisan Divas Rashtriya Poshan Maah Celebration of world soil day Parthenium Week Yoga Day	11	286	55	341
Special Day celebration 150 th Birth Anniversary of Mahtma Ghandi Ji	6	127	-	127
Exposure visits	2	30	5	35
Others (pl. specify) Swachata Pakhwada 16-30 December, 2020	8	156	-	156
Total	455	4494	97	4591

Details of other extension programmes

Particulars	Number
Electronic Media (CD./DVD)	5
Extension Literature	8
News paper coverage	7
Popular articles	-
Radio Talks	3
TV Talks	12
Animal health amps (Number of animals treated)	1
Others (pl. specify)	-
Total	36

M-Kisan

Message Type	Type of Messages						Total
	Crop	Livestock	Weather	Marketing	Aware-ness	Other enterprise	
Text only	25	-	-	-	1	3	29
Text only (Whats App Group)	100	-	40	5	10	-	155
Voice only	-	-	-	-	-	-	-
Voice & Text both	-	-	-	-	-	-	-
Total Messages	125	-	40	5	1	3	29
Total farmers Benefitted	15680	-	40	5	1476	4014	21215

V. DETAILS OF TECHNOLOGY WEEK CELEBRATIONS

Number of KVKs organized Technology Week	Types of Activities	No. of Activities	Number of Participants	Related crop/livestock technology
	Gosthies			
	Lectures organized			
	Exhibition			
	Film show			
	Fair			
	Farm Visit			
	Diagnostic Practical			
	Distribution of Literature (No.)			
	Distribution of Seed (q)			
	Distribution of Planting materials (No.)			
	Bio Product distribution (Kg)			
	Bio Fertilizers (q)			
	Distribution of fingerlings			
	Distribution of Livestock specimen (No.)			
	Total number of farmers visited the technology week			

VI. PRODUCTION OF SEED/PLANTING MATERIAL AND BIO-PRODUCTS**Production of seeds by the KVKs**

Crop	Name of the crop	Name of the variety	Name of the hybrid	Quantity of seed (q)	Value (Rs)	Number of farmers
Cereals						
	Wheat	HD-3226	Foundation	45.60	171000	114
		HD-2967	TL	80.64	262080	201
Oilseeds	Mustard	Giriraj IJ 31	TL	15.50	91450	775
Pulses						
Commercial crops						
Vegetables	Palak	Pusa All Green	TL	15.14	90840	189
Flower crops						
Spices						
Fodder crop seeds						
Fiber crops						
Forest Species						
Others						
Total				156.88	615370	1279

Production of planting materials by the KVKs

Crop	Name of the crop	Name of the variety	Name of the hybrid	Number	Value (Rs.)	Number of farmers
Commercial						
Vegetable seedlings	Cabbage	Charmanth	F1	383	766	22
	Broccoli	Saki	F1	679	1358	15
	Tomato	Arka Rakshak Shasdhari Suto	F1	5819	11638	60
	Chili	Megadheera Sakata 651	F1	3393	6786	40
	Brinjal	992	F1	1932	3864	35
	Cauliflower	Cashmere Sakata 651	F1	771	1542	18
Total				12977	25954	190

Production of Bio-Products

Bio Products	Name of the bio-product	Quantity	Value (Rs.)	No. of Farmers
		Kg		
Bio Fertilizers	Vermi compost	7166	107490	1433
Total		7166	107490	1433

VII. DETAILS OF SOIL, WATER AND PLANT ANALYSIS

Samples	No. of Samples	No. of Farmers	No. of Villages	Amount realized (Rs.)	No. of soil health cards distributed
Soil	280	270	35	-	280
Water	105	105	33	-	-
Plant	74	74	14	-	-
Total	459	459	82	-	280

VIII. SCIENTIFIC ADVISORY COMMITTEE

Name of KVK	Date of SAC Meeting	Participants
Ujwa, Delhi	26/12/2020	19

IX. NEWSLETTER/MAGAZINE

Name of News letter/Magazine	No. of Copies printed for distribution
Krishi Vahini Jan-June 2020	200
Krishi Vahini July- December 2020	200

XIII. DETAILS ON HRD ACTIVITIES

A. HRD activities organized in identified areas for KVK staff by ATARI


Title of the training programmes	No of programmes	No. of Participants	No. of KVKs involved
State Level Work Plan (2020) Workshop for KVKs of Haryana and Delhi states on 5 th February, 2020	1	4	19
Virtual Annual Zonal Review Workshop of KVKs of Zone-II during 17 th to 19 th July, 2020	1	8	63
Virtual Zonal Workshop-cum-Training of CFLDs on Pulses under NFSM for KVKs of Rajasthan, Haryana and Delhi during 23 rd to 24 th November, 2020	1	3	63
Online-Review workshop under GKMS project by ICAR-ATARI, Zone-II, Jodhpur on 07 th September, 2020	1	3	16
Total	4	18	161

XIV. CASE STUDIES (CASE STUDIES MAY BE GIVEN IN DETAIL AS PER THE FOLLOWING FORMAT)

Success Story on Gardner

MR. Mukesh Kuma, Job Role: Gardener New Delhi

"To plant a tree is to believe in tomorrow". Mr. Mukesh Kumar of Ujwa, New Delhi, is from a poor family. His father worked as a daily wage labourer. It was very difficult for him to mobilize the requisite resources due to which Mr. Mukesh had to discontinue his studies after matriculation. As a result, he had very few job opportunities and received very low wages. This made him determined to change his life. Fortunately at this juncture, he came to know about the KVK training on gardening that was being conducted Institute by ASCI at Ujwa, New Delhi. He contacted them for admission and joined. During the training, the experts at KVK gave him great support. They motivated him and guided him. He is now working in Ch. Brahm Prakash Ayurvedic Charak Sansthan, at Kheda Dabur New Delhi. He is the proud recipient of the 'Best Mali Award' and is also expected to be promoted in the near future. On an average he now earns about Rs 20,000/- per month. He is very thankful to the Krishi Vigyan Kendra (NHRDF), Ujwa, New Delhi, ICAR-ATARI, Jodhpur (Rajasthan), Ministry of Agriculture, NSDC & ASCI for facilitating his personal & professional development.

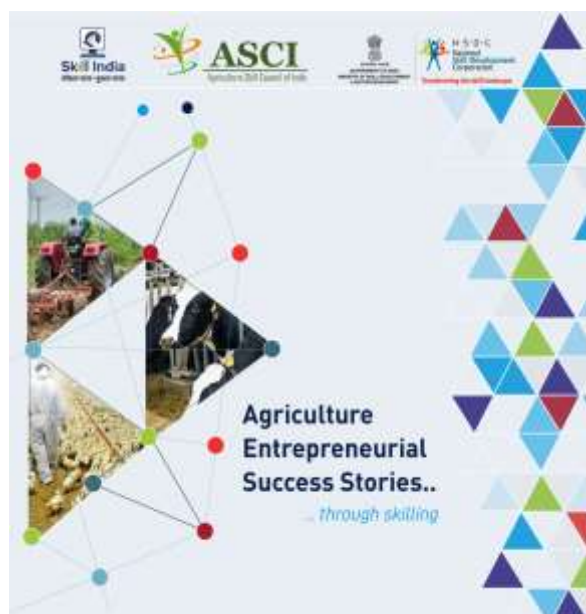
Personal Details	
1. Name of the Farmer/ Trainee	Mukesh Kumar 
2. Address	VPO-Ujwa, New Delhi-110073
3. Mobile No	9871734273
4. State	Delhi
5. Age of person	40
6. Batch ID No.	394671
7. Aadhar No.	628158676341
8. Duration of Course	200 hrs
9. Qualification	10 th pass
Detail of the Success Story	
10. Major Occupation of the farmer/ trainee	Agriculture
11. Course Undertaken (QP/Job Role)	Gardeners
12. Name of the scheme (RKVY, DDUGKY, STAR etc.)	NHRDF-MIDH
13. Nodal Training Institute	Krishi Vigyan Kendra, (NHRDF), Ujwa, New Delhi -110073
14. Annual Income before Training	Unemployed
15. Annual Income after Training	20000 / per month (Annual 2,40,000/- per year)
16. Enlist the Skill development after the training	As Mali post employed at Ch. Brahmhe Prakash,

	Ayurvedic Charak Sansthan, Kheda Dabur, New Delhi-110073
Output of the Success Story	
1. Background of the person (family, social as well as economic background)	Mr. Mukesh Kumar a native of village Ujwa, Najafgarh, New Delhi, his father Mr Zile Singh is a daily wages labour. He belongs to poor background and educationally poor due to family problem and financial problem. due to he was discontinued his study.
2. Challenges he faced which made him to take up the training	He was 10 th pass and ignorant of job opportunity lower confidence level and poor knowledge.
3. His views on the course and why he should go for the training	He was eager to change his life but he has no money to apply for a job. So he contact KVK for admission in Skill development training on Gardner.
4. What are the benefits he got after getting trained	He got job of Mali in Ch. Brahmhe Prakash Ayurvedic Charak Sansthan, Kheda Dabur, New Delhi-110073
5. Support that he got for the training	Krishi Vigyan Kendra (NHRDF), Ujwa, New Delhi has given a scope to know about the job prospect, motivated him a lot to grow in his life. KVK expert has played a great role to guide and mentor his life and also he is very thankful to Ministry of Agri, NSDC & ASCI for showing him the way for his personal & professional development.
6. His current status (economic status and standard of living) and his way forward/ future plans	His family is very happy for his success. Now he work as a <i>mali</i> and has improved a lot. He has also got best Mali Award and he will be promoted in near future and his salary will cross 15000/- per month.
7. His message to the other aspirers	Skill development training program organized for rural youths for employment generation is beneficial for them to get success in life.

Full view image of his farm/ working area



Publication in Agriculture Entrepreneurial Success Stories



Gardening: A way to care for nature

MR. MOHESH KUMAR
Job Role: Gardener
New Delhi

"To plant a tree is to believe in tomorrow".

Mr. Mohesh Kumar of Ujwal, New Delhi, is from a poor family. His father worked as a daily wage labourer. It was very difficult for him to maintain the requisite resources due to which Mr. Mohesh had to discontinue his studies after matriculation.

As a result, he had very few job opportunities and received very low wages. This made him determined to change his life. Fortunately at his parents, he came to know about the SKDT training on gardening that was being conducted by ASCI at Ujwal, New Delhi. He contacted them for admission and joined.

During the training, the experts at SKDT gave him great support. They motivated him and guided him. He is now working in O. Baidya Prabhu Agrivardh: Charat Sanathan, at Kheda Debar and New Delhi. He is the proud recipient of the Best Skill Award and is also expected to be promoted to the next level. On an average he now earns about Rs. 15,000/- per month. He is very thankful to the Ministry of Agriculture, NSDC & ASCI for facilitating his personal & professional development.

His message to building Agri-Entrepreneurs is, "The skill development training program for rural youth enable them to achieve success in life."

Gardener	
Address	Ujwal, New Delhi
Age	30 Year
Qualification	10th Standard
Major Occupation	Farming
Model Training Institute	ASC, New Delhi
Name of the Scheme	NSDF-NSDF
Course Duration	200 Hours
Annual Turnover Before Training	Nil
Annual Turnover After Training	Rs. 1.5 Lakh
Key Skills Gained	Training in pruning, grafting, stem maintenance, identification & management of insects and pest, kitchen gardening

XIII. STATUS REVOLVING FUNDS

Year	Opening balance as on 1 st April	Income during the year	Expenditure during the year	Net balance in hand as on 1 st April of each year
April 2018 to March 2019	8205455.31	1106942.50	968207.82	8344190.03
April 2019 – March 2020	8344190.03	1373740.00	1138564.82	8579365.32

The KVKs implementing VATICA, NARI & Doubling Farmers income should submit one-page report with salient achievements along with photographs pertaining to year 2020.

Initiative under NARI scheme during the year

The level of nutrition in NCT Delhi is disturbing in spite of production of crops and vegetables. According to NFHS 4 (2015-16) survey, about 35% of all adults have BMI<18.5 in Delhi, more than 25% of women have a BMI below 18.5 in the age groups of 15-49 years, about 22 per cent of women suffer from chronic energy deficiencies, 78% of women (rural) in the age group of 15-49 years are anemic and 63% children in the age group of 6 months to 5 years are anemic.

It shows that food security does not directly translate into nutritional security. There is a disconnect between agriculture and nutrition which needs to be bridged. To address these issues, a scheme on Nutri Sensitive Agricultural Research and Innovation (NARI) was initiated by KVK, Ujwa, Delhi, during the year 2019. Under the scheme one village: Mitraon in Nazafgrh block, New Delhi had been selected. The following initiatives were undertaken during the year 2020:

- Under NARI programme, which is being started in the village Mitraon, Nazafgarh, New Delhi, during the year 2020 different agriculture interventions like field demonstrations on nutri- rich varieties, capacity building programmes, minimal processing techniques of pearl millet. The details of activities conducted during the year 2020 is given below:

1. Field Demonstrations on Nutri-crops

S. No.	Name of crop	Variety	No. of demonstrations	Nutrient value
1	Pearl Millet	AHB -1200Fe	4	high Fe (87 ppm) and high Zn (38 ppm)

FLD on Pearl Millet:

Pearl millet is an important coarse grain cereal cultivated in states like Rajasthan, Uttar Pradesh and Haryana. It has rich composition of proteins and minerals and has several health benefits. It has the highest protein content for any grain. It contains several essential minerals like phosphorus, zinc, magnesium, essential vitamins and amino acids etc. Even though, it was part of the traditional diet pattern, but, now a days, due to changing cropping pattern and consumption pattern, such crops are disappearing from the field and diet as well (even though, pearl millets are being cultivated by the farmers but it was only for the fodder purpose). Vasantrao Naik Marathwada Krishi Vidhyapeeth, Parbhani, Maharashtra, developed iron rich pearl millet variety AHB-1200Fe. This high iron content dual purpose pearl millet variety (AHB- 1200Fe) has been demonstrated to create awareness about its high iron content and how important it is with respect to nutrition. As it was a dual-purpose variety, the stem can be used as fodder for livestock. As the farmers were

having livestock, the straw (stem) was used as cattle feed, which is again an additional nutritional benefit to human beings who consume such milk and milk products.



FLD Nutritional kitchen garden –

To ensure the regular supply and consumption of seasonal nutritious vegetables (*kharif* vegetables), farm trainings on nutri-kitchen garden are given to farmers from project village. The vegetables included Spinach, Amaranths, Brinjal, Sem, Radish, Cauliflower, Pea, Bean, drumstick etc. Under this programme 10 demonstrations were conducted.

2. Front Line Demonstrations on kitchen garden

S. No.	Name of crop	Variety	No. of demonstrations	Nutrient value
1	Kharif kitchen garden seed kit	IARI	9	Iron, Vitamin A and Vitamin C rich vegetables



Kitchen garden at farmer's field

Capacity building interventions:

Pearl millet is an important coarse grain cereal cultivated in states like Rajasthan, Uttar Pradesh and Haryana. It has rich composition of proteins and minerals and has several health benefits. It has the highest protein content for any grain. It contains several essential minerals like phosphorus, zinc, magnesium, essential vitamins and amino acids etc. Even though, it was part of the traditional diet pattern, but, now a days, due to changing cropping pattern and consumption pattern, such crops are disappearing from the field

and diet as well (even though, pearl millets are being cultivated by the farmers but it was only for the fodder purpose). Training programme on value added products of pearl millet was conducted at the village. Farm women were trained to prepare the value added products from pearl millet and oats and explained about their importance and nutritive value.

S. No.	Title of training	No. of participants
1	Importance of nutritional kitchen garden	21
2	Bakery products from pearl millet	20



Demonstration on preparation of Bajra cookies



KVK kitchen garden visited by Anganwadi workers

Initiative under Doubling Farmers Income (DFI)

1. Linking Farmers to Market- Formation of Farmer Producer Organization

- **Formation of Farmer Producer Organization:** In this regard KVK formed one Farmer producer organizations with the financial support of NABARD name GROFREE registered under company registration Act (Registration No. U01100DL2020PTC362610) as a way forward to get some form of land consolidation – and an integration of smallholders within an agricultural value chain – which is critical to tackle the problem rural agrarian crisis. Such a consolidation, together with appropriate training and skill development of rural youth of the district for emerging farm and non-farm jobs, would appear to be the key to lifting the economic situation of the farmers' district. The objective of the GROFREE FPO is to form collectivize small farmers or producers for:

(a) backward linkage for inputs like seeds, fertilizers, credit, insurance, knowledge and extension services and

(b) Forward linkages such as collective marketing, processing, market agriculture production etc. At the heart of this effort is to gain collective bargaining power for small farmers/ producers.

At present there are 100 members from Tigipur, Palla and other neighboring villages



Meeting with BOD for FPO



Online Training of BOD & KVK staff from BIRD, Lucknow

Functioning of Agri produce Outlet by Grofree FPO

The lockdown announced by Government has thrown unique challenges for farmers and farmer related institutions. There is a sudden drop in demand for agricultural produce as movement of agricultural output has come to a standstill. So Grofree FPO decided to help farmers in by procuring their produce which otherwise was being taken away at throwaway prices. The vegetable produce outlet has been opened at RWA's in urban location of by the FPO. The outlet is functioning in compliance with the district administration directions. The FPO has priced all its produce 30 per cent below the market price. This has provided farmers a great relief.



2. **Digital Platform:** Created Whats App Group of FPO for technical support and Marketing

Outcome- Following activities are running in DFI Villages

S. No	Technologies intervention	Outcome/ adoption (%)
1	Fertilizer application on soil test basis	15
2	Timely management of Insect pest and diseases	40
3	Production of pulses in DFI Villages	30
4	Resource conservation practices in Rice-wheat cropping system	45
5	Formation of Farmer Producer Organization	25
6	Goat Farming	5
7	Fish Farming	15

Success Story under DFI

Adopting Advanced Pulse Production Technology

Pulses are important source of protein, its ability to fix nitrogen, profuse and deep root system, restoration of soil fertility makes it as integral part of sustainable agriculture particularly in dry land areas. It can be grown in all three seasons i.e. Kharif, Rabi and Spring/summer. The crops grown in spring/summer are urdbean, mungbean, cowpea etc. Long term solution to fulfill the demand for pulses lies in increasing pulses production in the country. The cropping system approach to inculcate pulses under, new niches- such as mungbean in rice-wheat cropping systems, To exploit the yield potentials with aggressive ToT and location specific agronomic modules, need to be initiated.

THE TECHNOLOGY TO introduce production of moong was initiated in DFI adopted villages viz. Tigipur and Palla. Both the villages are agrarian, rain-fed, and suffer from low investments compared with other regions. The area experiencing extreme temperatures which soar to 45-47 degrees in summers and dip to 5-7 degree during winters. However, in spite of these disadvantages, the land-use pattern of area was found to be conducive for pulse production.

However, farmers were constrained by lack of up-to-date technical support that was (and is) essential for high pulse productivity. Understanding their predicament, KVK Delhi offered a viable solution in the form of the latest “pulse production technology”. This aimed at augmenting the productivity and profitability of the rain-fed pulse production system, along with scientific use for sowing seeds at appropriate depth, and the proper mixing of a balanced fertilizer. To elaborate, some of the most striking results of this innovative technology have been an increase in production, with a 58-66% improvement in yield, which resulted in positive changes in the cost-benefit ratio for farmers and also in their living standards; an improvement in the health of the soil because of mung bean cultivation an increase in the water level due to line sowing; and a decrease in the growth of weed because of the fertilizers. Also, the use of weedicide (after 15-20 days of sowing) proved more effective in controlling the weed and was also found

to be a cheaper option compared to hand weeding. As has been seen, the scope of this technology is far-reaching.

1. **Suitability:** The farming community in this area was satisfied with the results of this innovation. Along with the small and marginal farmers, the technology was also adopted by big farmers and other farming communities in the nearby villages.

2. **Reusability:** This has been successfully replicated in other villages as well. For instance, the farmers in Tigipur are now able to achieve a better yield and higher remunerative prices for their produce. Almost all the farmers who have practised this technology have advocated it to other farming communities.

3. **Scalability:** Initially, this technology was tested across acres, largely in the Tigipur village. The commendable results led to the increase in the scalability of the technology by the farmers who adopted it over an additional 20 acre in the area and 47 acre for seed production.

4. **Sustainability:** The use of the root nodule bacteria of black gram in this technology helps fix the nitrogen in the soil and the crop residue supports an increase in the organic matter as well as the humus content in the soil. This has also helped accelerate the efficiency in the utilization of water and fertilizers. With better water holding capacity, better carbon-nitrogen (CN) ratio and endurance of the pulse production system in Alipur, it has been found that his innovative technology is highly sustainable.



Cluster frontline demonstrations of summer Mung crop

Production of Chickpea crop –

Krishi Kendra has conducted the demonstrations on Chickpea crop during *Rabi* season 2020 in adopted villages for Increase pulse production and reducing cost of crops cultivation as pulses are very less input required crop and maintain the suitability of cropping system. Demonstrations of Chickpea crop of improved Variety GNG1958 with proper weeds and nutrients management were demonstrated.