

INTRODUCTION

The operational area of Krishi Vigyan Kendra, Ujwa, New Delhi covers rural and peri-urban area of NCT Delhi. NCT Delhi is a part of Indo-Gangetic plains that falls under semi-arid climatic zone with the annual average rainfall of 730 mm. The average height from sea level is 190-220 meter which is located between 28° 24' 17'' to 28° 53' 00'' North latitude and 76° 50' 24'' to 77° 20' 37'' East longitude. There are five blocks (excluding central urban block) namely; Najafgarh, Nangloi, Alipur, Shahadra and Mehrauli. The average maximum and minimum temperature was 30.5°C and 18.7°C, respectively. Most of the arable area comes under irrigated condition. Unfortunately, available groundwater of the major area is of saline in nature. Therefore, the major crops of the area are wheat, mustard, jowar, bajra and some vegetable crops like cauliflower, cucurbits, okra, cabbage, etc. In some pockets where the ground water quality is good other economical crops are cultivated.

The need of the present days to add pulse crops into the existing cropping system is not only to fulfil the requirement of protein in human diet but also to enrich the physical and biological condition of soil. The other important fact is that the huge amount of foreign exchange is being spent to import the oilseeds and pulses to meet the need of population. So as the government is giving more emphasis to increase the production of oilseeds and pulses.

ANNUAL ACTION PLAN

(April, 2016 – March, 2017)

1. On Farm Trials

S. N	Thematic area	Name of activity	Treatment	Location	Rep. No	Coordinator
1.	Feed management	Supplementation of Growth promoter in broiler poultry	T ₀ -Farmer's Practice (No use of growth promoter) T ₁ -Supplementation of Vitamin A T ₂ - Supplementation of Vitamin A+ B Complex	Adopted village	3	SMS (AH)
2.	Disease management	De worming of Buffaloes	T ₀ - No use of dewormer (Farmers Practice) T ₁ - Two times deworming at an interval of 6 months (Albandazole) T ₂ - Four times deworming at an interval of 3 months (Albandazole)	Adopted village	3	SMS (AH)
3.	Integrated pest management	Comparatively evaluation of different insecticide for seed treatment against termite in wheat	T ₀ - Farmer's Practice (no seed treatment) T ₁ - Seed treatment with Chloropyriphos 20 EC @4.5ml/seed T ₂ - Seed treatment with Imidacloprid 17.8 SL @3.5ml/seed	Adopted village	3	SMS (PP)
4.	Integrated Disease Management	Management of damping off disease in Tomato nursery	T ₀ - Farmer's Practice (no seed and soil treatment) T ₁ - Seed treatment with <i>Trichoderma viride</i> @ 5g/kg. seed and soil treatment @ 10g/m ² nursery area with decomposed FYM T ₂ - Seed treatment with <i>Trichoderma viride</i> @ 5g/kg. seed and soil treatment @ 10g/m ² nursery area with decomposed FYM + dipping of seedling in 5g/liter water solution for 15 minutes before transplanting.	Adopted village	3	SMS (PP)
5.	Integrated nutrient management	Effect of NAA & CaCl ₂ on growth & yield of tomato	T ₀ - Control (No use of NAA) T ₁ - 0.02% NAA T ₂ - 0.02% NAA + 0.5% CaCl ₂	Adopted village	3	SMS (Hort.)
6.	Weed management	To assess the efficacy of Oxyfluorfen	T ₀ - Farmer's practice (Pendimethiline + one hand weeding)	Adopted village	3	SMS (Hort.)

		23.5% EC and Quizalofop Ethyl 5% EC weedicide as Early post-emergence in onion	T ₁ - Oxyfluorfen 23.5% EC @ 150ml/ha. and Quizalofop Ethyl 5% EC @ 750ml/ha			
7.	Management of Problematic soil	Performance of salt tolerant wheat varieties	T ₀ - Farmers Practice (WH 711) T ₁ - KRL 210 T ₂ - KRL 213	Adopted village	3	SMS (Agro.)
8.	Varietal evaluation	Performance of Guar (<i>Cyamopsis tetragonoloba</i>) varieties	T ₀ - Farmer's Practices (Rajasthan Local) T ₁ - HG 563 T ₂ - HG 2-20 T ₃ - HG 365	Adopted village	3	SMS (Agro.)
9.	Drudgery réduction	Assessment of Capron in drudgery reduction of farm women in threshing of wheat	T ₁ - Farmer's Practice (conventional head & mouth cover) T ₂ – Specially designed Capron by HAU, Hisar	Adopted village	3	SMS (HS)
10.	Nutrient management	Micronutrient management in paddy	T ₀ - Farmer's Practice (No spray of zn and iron) T ₁ - Spray of ZnSO ₄ @0.5% at 40 & 60 DAT T ₂ - Spray of Znso ₄ @ 0.5% + FeSO ₄ @ 0.5% at 45 &60 DAT	Adopted village	3	PA(Soil Sci.)
11.	Soil fertility management	Balance use of fertilizers in Wheat	T ₀ - Farmer's Practice (Use of N&P) T ₁ - Application of fertilizer on the basis of recommendation dose of fertilizers(N,P,K & Zn) T ₂ - Application of fertilizer on soil test basis (N,P,K & Zn) Intervention	Adopted village	3	PA(Soil Sci.)
12.	Value addition	Acceptability of bajra biscuits in different ratios	T ₁ -Bajra(50%)+Maida(50%) biscuit T ₂ - Atta(50%)+Bajra (50%) biscuit T ₃ - Besan (50%)+Bajra (50%)	Adopted villages	10	SMS (HS)

2. FRONT LINE DEMONSTRATIONS

Front Line Demonstrations 2016-2017

S. No.	Season	Crops	Thematic area	Area (ha)	No. of Demo.	Coordinator
1.	Rabi	Mustard	Varietal performance	16	40	SMS (AE)
2.	Rabi	Wheat	Varietal performance	10	25	SMS(Agro.)/ PA (Soil Science)
3.	Kharif	Paddy	Varietal performance	8	20	SMS (AE)
4.	Kharif	bhindi	Impact of hand gloves for bhindi picking	-	5	SMS (HS)
5.	Kharif	paddy	Integrated Pest Management	2	5	SMS (PP)
6.	Rabi	Mustard	Integrated disease management	2	5	SMS (PP)
7.	Rabi	Cauliflower	Varietal performance	2	5	SMS (Hort.)
8.	Rabi	Methi	Varietal performance	2	5	SMS (Hort.)
9.	Kharif	Milk Production	Supplementation of calcium to dairy animals	-	20	SMS (AH)
10.	Kharif	Kitchen gardening	Household food security by kitchen gardening and nutrition gardening in schools	-	5	SMS (HS) & SMS (Hort.)
11.	<i>Rabi</i>	Kitchen gardening	Household food security by kitchen gardening and nutrition gardening in schools	-	5	SMS (HS) & SMS (Hort.)

Extension activités under FLD

S. N.	Name of Activity	Thematic area	Location	Number of participants
I. Field Days				
1.	Mustard	Varietal performance	Farmers' field	50
2.	Wheat	Varietal evaluation	-do-	50
3.	Calcium supplementation	Milk Production	-do-	50
4.	Kitchen Garden	Household food security by kitchen gardening and nutrition gardening	-do-	50
II. Farmers trainings under FLD				
1.	Package & practices of mustard	Integrated crop management	Farmers' field	20
2.	IPM in Mustard	Integrated disease management	Farmers' field	20
3.	Package & practices of Wheat	Integrated crop management	Farmers' field	20
4.	IPM in Paddy	Integrated pest management	Farmers' field	20
5.	Package & practices of Methi	Integrated Crop Management	Farmers' field	20
6.	Use of calcium feeding to dairy animals	Milk Production	Farmer's field	20
7.	Importance of kitchen gardening	Household food security by kitchen gardening & nutrition gardening	Rural schools	40

3. Trainings

3.1 Trainings for Rural Youth

S.No.	Thematic Area	Title of the course	Month	Location	No. of trainees			Coordinator
					SC/ST	Others	Total	
1.	Poultry management	Broiler poultry management	September	On Campus	5	15	20	SMS (AH)
2.	Nursery production	Nursery raising of Vegetables	August	Ghumenheda	5	20	25	SMS (Hort.)
3.	Small scale processing	Preparation of nutritive bakery products	October	On campus	3	22	25	SMS (HS)

3.2 Vocational Trainings

S. No.	Thematic Area	Title of the course	Month	Location	No. of trainees			Coordinator
					SC/ST	Other S	Total	
1.	Mushroom Production	Cultivation of White Button Mushroom	October	On Campus	4	16	20	SMS (PP)
2.	Value addition	Value addition to seasonal vegetables & fruits	November	On campus	4	16	20	SMS (HS)
3.	Dairy Management	Commercial dairy farming & organic milk production	August	On Campus	4	16	20	SMS (AH) SMS (HS)
4.	Honey production	Bee-keeping	January	On Campus	4	16	20	SMS (PP)

5.	Vermiculture	Production technology for vermin-compost & vermin-culture	January	On Campus	4	16	20	PA (Soil Sci) SMS (Hort.)
6.	Planting material production	Commercial nursery raising of Horticultural crops	July	On Campus	5	20	25	SMS (Hort.)

3.3 Extension personnel/In-service Trainings

S. No	Thematic area	Title of the course	Month	Location	No. of trainees			Coordinator
					SC/ST	Others	Total	
1.	Protected cultivation technology	Off season and exotic vegetable cultivation in peri-urban areas	October	On Campus	5	15	20	SMS (Hort.)
2.	Post harvest technology	Post harvest management of vegetables	February	On campus	5	15	20	SMS (Hort.)/SMS (HS)
3.	Integrated pest management	Integrated pest management in vegetable crops	October	On Campus	4	16	20	SMS (PP)
4.	Low cost & nutrient efficient diet designing	Minimization of nutrient loss while cooking	September	On Campus	5	15	20	SMS (HS)
5.	Integrated Nutrients Management	Soil fertility Management	September	On campus	5	15	20	PA (Soil Sc.)
6.	Entrepreneurship	Improving personnel effectiveness of development official	October	On campus	5	15	20	SMS (Ext.) / PA (Comp.)

7.	Feed Management	New technologies intervention for organic feeding of dairy animals	November	On Campus	5	15	20	SMS (AH.)
8.	Natural Resource Management	Resource Conservation Technologies for sustainable crop production	October	On Campus	5	15	20	SMS (Agro.)
9.	Women & child care	Balanced diet & nutrient deficiency in children	February	Off campus	2	13	15	SMS (HS)

3.4 ON CAMPUS TRAININGS FOR PRACTISING FARMERS/FARM WOMEN

S.No.	Thematic area	Title of the course	Month	Location	No. of trainees			Coordinator
					SC/ST	Others	Total	
1.	Management of problematic Soil	Crop production under saline soil & water condition	June	-do-	4	16	20	PA (Soil Sc.)
2.	IPM	IPM in paddy crop	June	-do-	4	16	20	SMS (PP)
3.	Feed management	Preparation of balanced ration for dairy animals.	Oct.	-do-	4	16	20	SMS (AH)
4.	ICM	Production technology of mustard	Sept.	-do-	4	16	20	SMS (Ext.)
5.	Soil fertility management	Role of biofertilizers in improving soil fertility	Oct.r	-do-	4	16	20	PA (Soil Sc.)
6.	Off – season Vegetables	Production technology of cucurbits	Dec	-do-	4	16	20	SMS (Hort.)
7.	Household food security by kitchen gardening and nutrition gardening	Nutritional security through nutrition garden	Dec.	-do-	4	16	20	SMS (HS) & SMS (Hort)
8.	Disease management	Management of mite in bee colonies	Jan.	-do-	4	16	20	SMS (PP)
9.	Storage loss minimization technique	Food adulteration consumer awareness	July	-do-	5	20	25	SMS (HS)

10.	Value addition	Preparation of squashes and drinks from seasonal fruits	May	-do-	4	16	20	SMS(HS)
11.	Women empowerment	Women empowerment through different skill up gradation	Aug.	-do-	4	16	20	SMS (HS) & SMS (AH)
12.	Processing & cooking	Preservation of aonla by preparing different value added products	Jan.	-do-	4	16	20	SMS (HS)

3.5 OFF CAMPUS TRAININGS FOR PRACTICING FARMERS/FARM WOMEN

S. No	Thematic area	Title of the course	Month	Location	No. of trainees			Coordinator
					SC/ST	Others	Total	
1.	Soil testing	Importance of Soil and water testing	April	Shikarpur	5	15	20	PA (Soil Sc.)
2.	IPM	Integrated pest management of cucurbits	April	Badusarai	5	15	20	SMS (PP)
3.	Poultry management	Broiler poultry management in summer	April	Ujwa	5	15	20	SMS (AH)
4.	Grading and standardization	Grading, sorting and safe storage of onion	April	Sikarpur	5	15	20	SMS (Hort.)
5.	Storage loss minimization technique	Requirement of ideal grain storage structure	April	Kharkhari	3	17	20	SMS (HS)
6.	Integrated Pest management	Insect control for Till crop	May	Kadipur	5	15	20	SMS (PP)
7.	Fertilizer management	Increase nitrogen use efficiency in crops	May	Dhansa	5	15	20	PA (Soil Sc.)

S. No	Thematic area	Title of the course	Month	Location	No. of trainees			Coordinator
					SC/ST	Others	Total	
8.	Crop production	Production technology of paddy crop	May	Shikarpur	5	15	20	SMS (Agro)
9.	Mobilization of social capital	Technological intervention of progressive farmers on paddy crop	May	Baddusarai	5	15	20	SMS (AE)
10.	Layout and Management of of orchard	New orchard establishment and after care	May	Kharkhari Raundh	5	15	20	SMS (Hort.)
11.	Disease management	Vaccination in dairy animals against HS & BQ.	May	Samaspur	5	15	20	SMS (AH)
12.	Drudgery reduction	Use of drudgery reduction tools in household and farm activities	May	Kanganheri	4	16	20	SMS (HS)
13.	Bio control of pest & diseases	Management of Bakanae disease in paddy through bio product	July	Gumenhera	5	15	20	SMS (PP)
14.	Off – season Vegetables	Early cultivation of leafy vegetables	July	Badusarai	5	15	20	SMS (Hort.)
15.	Entrepreneurs hip development of farmers	Micro entrepreneurship promotion in agriculture	July	Samaspur	5	15	20	SMS (Ext.)
16.	Fertilizer management	Influence of soil pH on availability of nutrients	July	Kair	5	15	20	PA (Soil Sc.)

S. No	Thematic area	Title of the course	Month	Location	No. of trainees			Coordinator
					SC/ST	Others	Total	
17.	Storage loss minimization techniques	Management of stored grain pests	June	Kharkhari	4	16	20	SMS (HS)
18.	Processing & cooking	Different preserved mango products	July	Dhansa	3	17	20	SMS (HS)
19.	Feed management	Organic Green fodder production round the year	July	Ghumenhera	5	15	20	SMS (AH)
20.	Water management	Scheduling of irrigation in paddy crop	July	Ghumenhera	5	15	20	SMS (Agro.)
21.	Integrated pest management	Role of seed treatment in crops	Aug.	Goela khurd	5	15	20	SMS (PP)
22.	Export potential vegetables	Production technology of kharif season okra	Aug.	kanganheri	5	15	20	SMS (Hort.)
23.	Weed management	Weed management in paddy	Aug.	Sarangpur	5	15	20	SMS (Agro.)
24.	Pig farming	Piggery a subsidiary business to agriculture	Aug.	Jharodakalan	5	15	20	SMS (AH) PA (Soil)
25.	Women & child care	Ways to combat water born disease during rainy season	August	Ujwa	4	16	20	SMS (HS) SMS (AH)
26.	Integrated pest management	Integrated Pest Management of cauliflower	Sept.	Pandwala	5	15	20	SMS (PP)
27.	Vegetable	Production technology of Rabi season	Sept.	Ghumanhera	5	15	20	SMS (Hort)

S. No	Thematic area	Title of the course	Month	Location	No. of trainees			Coordinator
					SC/ST	Others	Total	
	production	vegetables						
28.	Groups dynamics	Promoting ITK for live hood security	Sept.	Kair	5	15	20	SMS (Ext.)
29.	Production and use of organic input	Production of vermin-compost at farmers field	Sept.	Samaspur	5	15	20	PA (Soil Sc.)
30.	Design & development of low/minimum cost diet	Nutritious recipes for growing children and pregnant women	Sept.	Mudela kalan	5	15	20	SMS (HS)
31.	Women empowerment	Vocational & Career Development Programme for adolescents	Oct.	Ghumenheda	5	25	30	SMS (HS) PA (Comp)
32.	Crop management	Production technology of mustard crop	Oct.	Kharkhari nahar	5	15	20	SMS (Agro.)
33.	Integrated pest management	IPM in mustard	Oct.	Kair	5	15	20	SMS (PP)
34.	Goat Management	Goat farming a profitable business	Nov.	Dariyapur	5	15	20	SMS (AH)
35.	Exotic Vegetables	Production technology of Exotic vegetables	Nov.	Goyala khurd	5	15	20	SMS (Hort.)
36.	Nutrient management	Nutrient management in wheat	Dec.	Kair	5	15	20	SMS (Agro.)

S. No	Thematic area	Title of the course	Month	Location	No. of trainees			Coordinator
					SC/ST	Others	Total	
37.	Soil fertility Management	Use of Biofertilizers in rabi crops	Dec.	Kherkhari	5	15	20	PA (Soil Sc.)
38.	ICT	Use of kisan mobile advisory (KMA)	Dec.	Tigipur	5	15	20	SMS(Ext.)/ PA(Comp.)
39.	Integrated pest management	Insect and disease management of rabi onion	Dec.	Shikarpur	5	15	20	SMS (PP)
40.	Designing & development for high nutrient efficiency diet	Processing of Bajra for nutritional enhancement	Dec.	Adopted village	5	15	20	SMS (HS)
41.	Dairy Management	Organic milk production through dairy animals	Dec.	Kair	5	15	20	SMS (AH)
42.	Integrated pest management	Termite management in wheat	Jan.	Ujwa	5	15	20	SMS(PP)
43.	Fish Management	Fish farming in salt prone area	Dec.	Shikarpur	5	15	20	SMS (AH)
44.	Design & development of low/minimum cost diet	Popularization of greens for iron deficiency	Jan.	Adopted villages	5	15	20	SMS(HS)
45.	Export potential vegetables	production technology of rabi onion	Jan.	Sikarpur	5	15	20	SMS (Hort)
46.	Weed management	Weed management in vegetable crops	January	Badusarai	5	15	20	SMS (Agro)

S. No	Thematic area	Title of the course	Month	Location	No. of trainees			Coordinator
					SC/ST	Others	Total	
47.	Disease management	Endoparasite control in dairy animals.	Feb.	Shikarpur	5	15	20	SMS (AH)
48.	Management of potted plant	Care and management of potted ornamental plants	Feb.	Urban area	5	15	20	SMS (Hort)
49.	Entrepreneurs hip development	Micro entrepreneurship promotion in dairy sector	Feb.	Ghoga	5	15	20	SMS (Extn)
50.	Salinity management	Cucurbits production under Saline water condition	Feb.	Kanganheri	5	15	20	PA (Soil Sc.)
51.	Designing & development for high nutrient efficiency diet	Preparation of multigrain and low calorie atta	Feb.	Adopted villages	3	12	15	SMS (HS)
52.	Crop production	Production technology of summer moong	March	Shikarpur/ Daulatpur	5	15	20	SMS (Agro)
53.	Soil health management	Use of organic manure	March	Ghumenhera	5	15	20	PA (Soil Sc.)
54.	Feed Management	Improvement of poor quality roughages,	March	Sarangpur	5	15	20	SMS (AH)
55.	Gender mainstreaming through SHG's	Importance of formation of SHG	March	Kadipur	5	15	20	SMS (HS)

4. OTHER EXTENSION ACTIVITIES

S. N.	Name of Activity & Number	Approx. no. of participants	Coordinator
1.	Field Day - 3	150	All KVK staff
2.	Kisan Ghosthi -3	150	All KVK staff
3.	Exhibition - 2		SMS (AE)
4.	Film Show - 20		All KVK staff
5.	Method Demonstrations - 25	500	All KVK staff
6.	Farmers Seminar -1	500	All KVK staff
7.	Lectures delivered as resource persons - 20	-	All KVK staff
8.	Newspaper coverage - 20		All KVK staff
9.	Radio talks – 15		All KVK staff
10.	TV talks - 15		All KVK staff
11.	Popular articles – 10		All KVK staff
12.	Extension Literature -5		All KVK staff
13.	Advisory Services - 30		All KVK staff
14.	Scientists visit to farmers field –5 each month		All KVK staff
15.	Farmers visit to KVK -50 each month		All KVK staff
16.	Diagnostic visits -5 each month		All KVK staff
17.	Animal health camp-1	50	SMS (AH)
18.	Exposure visits - 4	100	All KVK staff
19.	Seed testing Campaign -2	50	SMS (PP)
20.	Soil health campaign -2	100	Prog. Asst. (S.Sc.)
21.	Farm Science Club formation & meetings	25	SMS (HS)/SMS (Hort.)

22.	Self Help Group meetings 6each month	75 each month	SMS (HS)
23.	Celebration of important days (specify)-		
24.	Any Other (Seed treatment campaign)	100	SMS (PP)
25.	Nutrition week -1	60	SMS (HS)
26.	KVK News Letter- 2 (Krishi Vahini)	320	All KVK staff
27.	Ex-trainee sammelan	50	All KVK staff
28.	Farmers club meeting	30	SMS (AE)

Other Activities

S. N.	Particular	Month
1.	Training to be received by staff of KVK- 1 each	-

Seed Production Programme

S.N.	Crop/variety	Area in acres at KVK farm	Approx. Productio (Qt/acre)	Coordinator
1.	Wheat (var HD 2967)	18	-	SMS (PP/Hort.) /Farm manager
2.	Mustard (var. Pusa Vijay)	5	-	SMS (PP/Hort.) /Farm manager
3.	Palak (All Green)	1	-	SMS (PP/Hort.) /Farm manager
4.	Technology Park	3	-	SMS (PP/Hort.) /Farm manager
Total		27	-	