PROFORMA FOR ANNUAL REPORT 2015-16

1. GENERAL INFORMATION ABOUT THE KVK

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

Address	Telephone		E mail
	Office	FAX	
Krishi Vigyan Kendra, Nafed complex, Village & Post -Ujwa, New Delhi - 110073	011-65638199	011-28525129	*kvkujwa@yahoo.com* *Website: www.kvkdelhi.org*

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

Address	Telephone		E mail
	Office	FAX	
National Horticultural Research & Development Foundation (NHRDF), Chitegaon Phata, Post: Darna Sangavi Taluka: Niphad , Distt. Nashik, Maharashtra, Pin: 422003	02550-237551, 237816, 202422	02550-237947	*nhrdf_nsk@sancharnet.in* *nasik@nhrdf.com*

1.3. Name of the Programme Coordinator with phone, mobile No & e-mail

Name	Telephone / Contact		
	Residence	Mobile	Email
Sh. R. K. Yadav	Nil	9818087979	rkyadavdelhi@rediffmail.com

1.4. Year of sanction: 1995

1.5. Staff Position (as on 31st March 2016)

Sl. No.	Sanctioned post	Name of the incumbent	Age	Discipline with highest degree obt.	Pay Band & Grade Pay (Rs.)	Present basic (Rs.)	Date of joining in KVK	Permanent /Temporary	Category (SC/ST/ OBC/ Others)
1	Programme Coordinator	R. K.Yadav	58	Agriculture Engineering	37400-67000 +GP 9000	55440	14.12.06	Temporary	Others
2	Subject Matter Specialist	Ritu Singh	42	Home Science	15600-39100 +GP 5400	28250	10.02.05	-do-	-do-
3	Subject Matter Specialist	Dr. D. K. Rana	40	Plant Pathology	15600-39100 +GP 5400	24350	5.05.10	-do-	-do-
4	Subject Matter Specialist	Rakesh Kumar	41	Horticulture	15600-39100 +GP 5400	28250	22.09.05	-do-	-do-
5	Subject Matter Specialist	Dr. Himanshu Pandey	37	Animal Husbandry	15600-39100 +GP 5400	25080	9.06.08	-do-	-do-
6	Subject Matter Specialist	Vacant*	-	Agriculture Extension	15600-39100 +GP 5400	21000	-	-	-
7	Subject Matter Specialist	Vacant*	-	Agronomy	15600-39100 +GP 5400	21000	-	-	-
8	Programme Assistant	Brijesh Yadav	33	Soil Science	9300-34800 +GP 4200	13910	17.02.14	-do-	-do-
9	Computer Programmer	Manju	35	Computer Science	9300-34800 +GP 4200	16630	2.05.08	-do-	-do-
10	Farm Manager	Vacant*	-	Agriculture	9300-34800 +GP 4200	-	-	-	-
11	Accountant / Superintendent	V. K. Dixit	53	Administration and accounts	9300-34800 +GP 4200	22290	21.10.05	-do-	-do-
12	Stenographer	Atma Ram	48	Administration	5200-20200 +GP 1900	10500	10.02.05	-do-	-do-
13	Driver	Rajesh Kumar	41	Jeep Driver	5200-20200 +GP 1900	10500	02.02.05	-do-	-do-
14	Driver	Krishan	45	Tractor Driver	5200-20200 +GP 1900	9540	02.05.08	-do-	-do-
15	Supporting staff	Mahavir Singh	51	Administration	4440- 7440 +GP 1300	8190	10.02.05	-do-	-do-
16	Supporting staff	Ramesh Chander	44	Administration	4440- 7440 + GP 1300	8190	10.02.05	-do-	-do-

*Application s received in response to advertisement in News Paper

1.6. Total land with KVK (in ha) :

S. No.	Item	Area (ha)
1	Under Buildings	0.5
2.	Under Demonstration Units	1.0
3.	Under Crops	12.0
4.	Orchard/Agro-forestry	0.4
5.	Others (specify)	1.0

1.7. Infrastructural Development:

A) Buildings

S. No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Date	Plinth area (Sq.m)	Expenditure (Rs.)	Starting Date	Plinth area (Sq.m)	Status of construction
1.	Administrative Building	ICAR	17.2.2011	548.3	54,38,664/-			
2.	Farmers Hostel							
3.	Staff Quarters							
	1							
	2							
	3							
	4							
	5							
	6							
4.	Demonstration Units							
	1							
	2							
	3							
	4							
5	Fencing							
6	Rain Water harvesting system							
7	Threshing floor	ICAR	17.2.2011	222.3	1,92,031/-			
8	Farm go down	ICAR	31.3.2011	35.0	1,99,869/-			

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Tractor	1997	231242	1047**	Not good
Scooter	1995	21818	200*	Not good
Motorcycle	2000	47063	51784	Not good
Jeep	2005	491892	215618	Not good

C) Equipments & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
Air conditioner - 1	1999	27500	Working
Harrow – 1	1999	8600	Working
Refrigerator - 1	1999	9400	Working
Casstte Amplifier Player	1999	4370	Working
Over Head Projector - 1	1995	23520	Working
Slide Projector - 1	1995	11200	Working
Video Cassette Recorder - 1	1997	13000	Working
Television - 1	1997	19890	Working
Fax Machine - 1	1997	13000	Working
Type writer - 1	1996	9855	Working
Seed drill machine - 1	1997	6150	Working
Computer - 2	2000	49500	Not working
Computer -1	2010	25725	Working
Computer -1	2011	24210	Working
Photocopier machine - 1	1998	116610	Working
CD player - 1	2002	8628	Working

Video camera - 1	2002	59990	Not Working
Digital Still camera - 1	2006	24900	Not Working
LCD multi media player	2007	97000	Good
Speaker Sound Colum- 2	1999	2043	Working
R.O.-1	2014	15500	Working
Water Cooler-1	1999	20000	Not Working
Finger Print Attendance Machine-1	2014	11250	Working
Heat Convector-2	2014	1800	Working
Refrigerator-1	2011	11200	Working
Room Cooler-1	2000	6100	Not Working
Room Cooler-3	2012	20402	Working
Telephone-1	2013	1800	Working
Printer-1	2012	5350	Working
UPS-1	2013	2100	Working
Trolly-1	2016	158832	Working
Plastic palates-8	2016	29560	Working
Water Cooler with RO-1	2016	42550	Working
Desert Cooler-4	2009	18000	Not Working
Desert Cooler-5	2014	25594	Working
Microphone-1	1999	1278	Working
Heat Convector	2000	1875	Working
Cultivator-1	1997	1672	Working
Tractor trolly-1	1998	11000	Working
Screen-1	1995	1120	Working
Modem-1	1999	3900	Not Working
Modem-1	2007	2850	Not Working
Printer -1	2009	1850	Not Working
Printer -1	2010	7035	Working
UPS-1	2009	1700	Not Working
UPS-2	2009	6195	Not Working
UPS -1	2011	1785	Not Working
Soil Testing kit-1	2009	1000	Working
Scanner -1	2010	4148	Working
Speaker-1	2010	1733	Working
Photocopier Machine-1	2011	35000	Working
Gen Set -1	2011	59000	Working
Laptop -1	2011	36170	Working
Submercible Pump-1	2011	148713	Not Working
Small autoclave-1	2012	67280	Working
Hot air oven-1	2012	45016	Working
Laminator flow -1	2012	78874	Working
Colony counter-1	2012	6156	Working
B.O.D. incubator-1	2012	107730	Working
Microscope-1	2012	37822	Working
Refrigerator -1	2012	32600	Working
Electric balance-1	2012	42750	Working
Water distillation-1	2012	25650	Working
pH meter-1	2012	19687	Working
EC meter-1	2012	21038	Working
Spectrophotometer-1	2012	39150	Working
Flame photometer-1	2012	60750	Working
Computer-1	2012	34000	Working
Air conditioner -1	2012	33975	Working
Laptop-1	2012	37000	Working
UPS-1	2012	2199	Working
Sprit lamp-2	2012	157	Working

Hygrometer-1	2012	473	Working
Planker (wood pata with chain)	2012	2300	Not Working
Planker (wood pata with chain)	2016	8947	Working
Mrida Parikshak Soil Testing Mini Lab	2015	75000	Working

1.8. A). Details SAC meeting* conducted in the year 2015-16

Sl. No.	Date	Name and Designation of Participants	No. of absentees	Salient Recommendations	Action taken
1.	11.3.2016	• Dr. R. P. Gupta Director, NHRDF • Office of the Joint Director (Agriculture) Govt. NCT, Delhi • Office of the Director, Directorate of Animal Husbandry, Delhi • Office of the Director (Fisheries) Govt. of NCT, Delhi • Bank of Baroda, Ujwa, New Delhi • Ch. Sukveer Singh, Nazafgarh, Delhi • Smt. Sudesh Rani, Nangloi Delhi • Smt. Geeta Devi, Ujwa, Delhi • Sh. Shashi Bhushan, Nangloi, Delhi • Mrs. Ritu Singh SMS (HS), KVK, Ujwa, New Delhi • Sh. Rakesh Kumar SMS(Hort.), KVK, Ujwa, New Delhi • Dr. H. Pandey SMS(AH), KVK, Ujwa, New Delhi • Dr. Devender Rana SMS (PP), KVK, Ujwa, New Delhi • Mrs. Manju PA (Comp), KVK, Ujwa, New Delhi • Sh. Brijesh yadav, PA (SS), KVK, Ujwa, New Delhi • Sh. V. K. Dixit OSCA , KVK, Ujwa, New Delhi • Sh. R. K. Yadav, PC, KVK, Ujwa, New Delhi	7	SMS (AH) should have the complete record of dairy animals, poultry, goats & sheep population for NCT Delhi	Requisite data from state govt. available with KVK.
				Kisan Gosthi should be organized on common topic for improving participation in them	Theme based kisan gosthi is organized but all current agricultural aspects are discussed besides its theme in the kisan gosthi.
				KVK & line department should work collectively for any extension activity	Line departments are roped in for extension activities of KVk.
				For vaccination and AI input Animal Husbandry Department to be approached	SMS (AH) is pursuing the department.
				Organic milk production should be popularized	SMS (AH) has included it in the AAP 2016-17.
				Action plan for NHM/MIDH should be submitted to state department	The issue discussed with Director (Hort). No assurance received till now.
				SMS (Hort) should also emphasize weeding, nutritional aspect and varietal improvement aspect in On Farm Trials.	SMS (Hort) has included it in AAP 2016-17.

				Front line demonstration on use of mulching in vegetables should be included.	SMS (Hort) has included it in AAP 2016-17.
				Meeting with Dr. S.D. Singh, Director (Hort.), Department of Environment should be arranged for collaboration programmes with KVK and state Govt.	Meeting held with Director (Hort). Till now he is asking for subject experts of KVK for conducting trainings by the department which KVK is providing.
				SMS (PP) should promote organic farming in vegetable crops and use of bio-fertilizers should be encouraged.	SMS (PP) has included it in AAP 2016-2017.
				Farm houses in nearby areas should also be exploited for better visibility.	KVK is providing technical backup to farm houses in Delhi
				SMS (HS) should promote demonstration on low cost postharvest structures.	SMS (HS) has included it in AAP 2016-2017.
				The participation of bank officials in vocational trainings/SHG meetings should be ensured.	Bank officials being invited in vocational Trainings and SHG meeting

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

2. DETAILS OF DISTRICT (2015-16)

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

S. No	Farming system/enterprise	
1	Irrigated (bore well)	Bajra/Fodder-Mustard/Wheat; Paddy-wheat; Vegetables-Vegetables
2	Irrigated (canal)	Paddy-wheat, Vegetable-Vegetable
3	Tank Irrigated	-
4	Rain fed	Fallow-Mustard
5	Enterprises	Animal Husbandry/Poultry/Mushroom/Bee keeping

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

S. No	Agro-climatic Zone	Characteristics
1	Trans- Gangatic Plains region (Zone VI)	Semi-Arid, Low rainfall, high temperature during summer (up to 48 degree C) Very low temperature during winter (up to 2 degree C), frost occur once or twice in the season.
2	**Agro ecological situation**	**Characteristics**
	Agro-eco situation-9 Agro-ecological region -4, Agro-ecological sub region -4.1	Alluvial derived soil comprise the northern Indo-Gangatic plains

2.3 Soil type/s

S. No	Soil type	Characteristics	Area in ha
1	Inceptisols and entisol	Sandy loam - Loam, Light texture, low water holding capacity, wide range of crops can be grown but constraint is saline irrigation water.	49702

2.4. Area, Production and Productivity of major crops cultivated in the district

S. No	Crop	Area (ha)	Production (MTs)	Productivity (Qtls /ha)
1.	Paddy	6035	25904	42.92
	Wheat	19360	85558	44.19
	Barley	64	186	29.06
	Bajra	1520	3817	25.13
	Maize	35	783	22.37
	Jowar	3242	29384	9.06
	Gram	41	54	13.1
	Potato	436	9273	21.26
	Oilseed	--	---	--
	S. Cane	--	--	--
2.	Vegetable (Gross area)+	22387	391901	175.0
3.	Flowers (Gross area)+	5995	--	--

Source: Development Department, Govt. of NCT Delhi.

2.5. Weather data

Month	***Rainfall (mm)***	***Mean monthly Temperature ^{0} C***		***Mean monthly Relative Humidity (%)***	
		Minimum	***Maximum***	***Morning***	***Evening***
April, 2015	36	20.6	34.21	40.3	79.3

May, 2015	21	25.7	40.7	23.9	61.0
June, 2015	87	26.6	38.5	40.7	75.1
July, 2015	201	26.1	34.4	62.2	85.5
August, 2015	286.5	26.8	34.9	58.9	88.5
September, 2015	31	26.5	34.9	45.4	76.5
October, 2015	-	21.7	34.3	44.7	85.2
November, 2015	-	14.2	27.8	44.2	86.2
December, 2015	-	8.97	22.1	51.3	95.2
January, 2016	-	8.94	21.7	56.0	101.0
February, 2016	-	10.9	25.6	39.4	88.4
March, 2016	-	17.1	31.9	42.4	88.0
Total	**662.5**	**234.1**	**380.9**	**504.7**	**1009.9**
Mean	**55.2**	**19.50**	**31.74**	**42.05**	**84.15**

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

Category	Population	Production	Productivity
Cattle		**86411**	
Crossbred	48012	576144lit.	12 lit/animal/day
Indigenous	19055	95275 lit.	5 lit/animal/day
Buffalo	162142	1297136 lit.	8 lit/animal/day
Sheep			
Crossbred	620	9300 kg meat	15 kg/animal
Indigenous	312	3744 kg meat	12 kg/animal
Goats	30470	262042 kg meat	8.6 kg/animal
Pigs			
Crossbred			
Indigenous			
Rabbits			
Poultry			
Hens	30742	46113kg meat	1.5 kg/bird
Desi			
Improved			
Ducks			
Turkey and others			

Category	Area	Production	Productivity
Fish	11 ha.	16500 kg./year	1500 kg./ha/year
Marine			
Inland			
Prawn			
Scampi			
Shrimp			

2.7 Details of Operational area / Villages (2015-16)

APR 2015-16

Sl.No.	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Najafgarh Narela Shahadra	Najafgarh, Palam Alipur Narela Shahadra	Jaffarpur, Surhera Ghalibpur, Dhansa, Ghumenhera, Sarangpur, Kanganheri,Badusarai, Bakhtavarpur, Tigipur, Ghogha, Dariapur, Chilla, patpar, Samaspur Jagir	Wheat, Paddy, Bajra, Fodder, Mustard , vegetables & Dairy animals	• Salinity of water. • Poor soil fertility & health • Disease & pest infestation. • Low productivity in dairy animals. • Post harvest losses in cereals and vegetables crops. • Wide spread micro-nutrient deficiency among rural youths & rural women. • Poor adaptability of seed treatment. • Non availability of quality seeds and agricultural inputs.	• Integrated disease & pest management. • Weed management. • Popularization of improved varieties of Paddy, wheat & mustard • Soil fertility management. • Integrated Nutrient Management in vegetables. • Balance feeding in dairy animals. • Post harvest management in vegetables & fruits. • Entrepreneurship development in value addition of locally grown crops. • Nutritional awareness

2.8 Priority/thrust areas

Crop/Enterprise	Thrust area
Wheat & Mustard	Popularization of HYV, Water salinity management, Weed management, Storage loss minimization techniques
Paddy	Weed management, Integrated Pest Management, Nutrient Management
Vegetables (cucurbits, cauliflower, onion & tomato)	Integrated Pest Management, Post harvest management, weed and Nutrient Management, seed treatment, nursery raising
Animal Husbandry	Nutrient, Disease & Feed Management in milch animals
Fruits (aonla, karonda, guava & papaya)	Selection of good planting material, disease management & value addition
Women in Agriculture	Popularization of location specific drudgery reducing tools, preservation of

	fruits & vegetables, strengthening of SHG's, Health and nutrition awareness and promotion of kitchen garden
Agri-based enterprise	Entrepreneurship development in agriculture (value addition, dairy, nursery raising of vegetable crops, mushroom cultivation & bee keeping) strengthening of SHG's

3. TECHNICAL ACHIEVEMENTS

3.A. Details of target and achievements of mandatory activities by KVK during 2015-16

OFT (Technology Assessment and Refinement)				FLD (Oilseeds, Pulses, Cotton, Other Crops/Enterprises)			
1				2			
Number of OFTs		Number of Farmers		Number of FLDs		Number of Farmers	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
12	9	36	34	145	183	145	183

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	56	54	1040	1067	400	419	3500	10416
Rural youth	9	9	180	228				
Extn. Functionaries	5	2	100	41				

Seed Production (Qtl.)		Planting material (Nos.)	
5		6	
Target	Achievement	Target	Achievement
100 qtl	90 qtl		

Livestock, poultry strains and fingerlings (No.)		Bio-products (Kg)	
7		8	
Target	*Achievement*	*Target*	*Achievement*

3.B. Abstract of interventions undertaken

S. No	*Thrust area*	*Crop/ Enterprise*	*Identified Problem*	*Interventions*										
				Title of OFT if any	*Title of FLD if any*	*Number of Training (farmers)*	*Number of Training (Youths)*	*Number of Training (extension personnel)*	*Extension activities (No.)*	*Supply of seeds (Qtl.)*	*Supply of planting materials (No.)*	*Supply of livestock (No.)*	*Supply of bio products*	
													No.	*Kg*
1.	Popularization of improved varieties	Mustard, Wheat, Paddy,	Low productivity of prevailing Varieties in Wheat, mustard, paddy	-	Improved variety of mustard, Varietal evaluation of wheat (var. WH1105, HD3086. HD 2967, var HD2851, HD2894) Paddy (Pusa 1509, Pusa 1401, Pusa 1612)	10	-	-	110	1.4 11.0 1.5	-	-	5	2

	Promotion of Integrated pest Management Technology	Paddy, Wheat, Onion, Okra, Mustard & cauliflower, tomato	Low yield, poor quality and pesticide residue in produce	Management of damping off disease in tomato nursery & seedling evaluation of Choloropyriphos & Imidacloroprid as seed treatment against termite control in wheat	IPM in paddy, IDM in Mustard	9	-	-	48	-	-	-	5 10 3	5 30 3

	Judicious use of Chemicals for Weed Management	Onion, Wheat, Paddy, cauliflower	High cost of labour and Improper use of chemicals for weed control	To assess the efficacy of oxyfluorfen 23.5 % EC & Quizalofop Ethyl 5 % EC weedicide as early post emergence in onion Use of wheel hoe in contrlolling weed in cauliflower	3	2	-	-	67	-	-	-	-	-
	Promoting improved crop production technologies	Wheat & paddy, fruits & vegetables & flowers	Low yield and high cost of production of cereals	Use of zinc sulphate to resist khaira disease in paddy crop.	12	-	-	-	208	-	-	-	-	-

	Promoting integrated nutrient management technologies	Tomato, paddy, wheat, mustard, fruits & vegetables & flowers	Low yield and high cost due to Imbalanced use of nutrients	Effects of NAA & $CaCl_2$ in tomato	6	-	-	-	12	-	-	-	-	-
	Feeding and Health management in livestock	• Buffaloes & cows	Low milk production & heavy worm infestation in buffaloes	• Deworming of buffaloes	• Calcium supplementation for buffaloes	10	-	-	32	-	-	-	-	-
	Poultry management	• Poultry	Supplimentation of growth promoter in poultry	-	-	4	-	-	16	-	-	-		
	Entrepreneurship development on Agri-based enterprises	Employment generation	Low skill and low Employment rate In rural youth	-	-	9	-	-	62	-	-	-	-	-

	Food & Nutrition Security	Fruits & vegetables, moong	Poor knowledge on post harvest management practices, kitchen gardening & lack of awareness on entrepreneurship development in value addition of horticultural crops	Acceptability of bajra biscuits in different ratio	Kitchen gardening for nutritional security Popularization of evaporative cooled vegetable vending cart	9	1	-	20	0.003	1800	-	-	-

3.1 Achievements on technologies assessed and refined

A.1 Abstract of the number of technologies **assessed*** in respect of crops/enterprises

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Varietal Evaluation										
Seed / Plant production										
Weed Management					1					1
Integrated Crop Management										
Integrated Nutrient Management										
Integrated Farming System										
Mushroom cultivation										
Drudgery reduction										
Farm machineries										
Value addition										
Integrated Pest Management										
Integrated					1					1

Disease Management										
Resource conservation technology										
Small Scale income generating enterprises										
TOTAL										

* *Any new technology, which may offer solution to a location specific problem but not tested earlier in a given micro situation.*

A.2. Abstract of the number of technologies **refined*** in respect of crops/enterprises

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
Integrated Farming System										
Mushroom cultivation										
Drudgery reduction					1					1
Farm machineries										
Post Harvest Technology										
Integrated Pest Management										
Integrated Disease Management	2				1					3
Resource conservation technology										
Small Scale income generating enterprises	1									1
TOTAL	3				3					6

***** *Technology that is refined in collaboration with ICAR/SAU Scientists for improving its effectiveness.*

A.3. Abstract of the number of technologies **assessed** in respect of livestock / enterprises

Thematic areas	Cattle	Poultry	Sheep	Goat	Piggery	Rabbitary	Fisheries	TOTAL
Evaluation of Breeds								
Nutrition Management								
Disease of Management								
Value Addition								
Production and Management								
Feed and Fodder								
Small Scale income generating enterprises								
TOTAL								

A.4. Abstract on the number of technologies **refined** in respect of livestock / enterprises

Thematic areas	Cattle	Poultry	Sheep	Goat	Piggery	Rabbitry	Fisheries	TOTAL
Evaluation of Breeds								
Nutrition Management		1						1
Disease of Management	1							1
Value Addition								
Production and Management								
Feed and Fodder								
Small Scale income generating enterprises								
TOTAL	1	1						2

3.2. Achievements on technologies Assessed and Refined

3.2.1. Technologies Assessed under various Crops

Thematic areas	*Crop*	*Name of the technology assessed*	*No. of trials*	*Number of farmers*	*Area in ha (Per trail covering all the Technological Options)*
Integrated Nutrient Management	Onion	Performance evaluation of oxyfluroben 23.5% and quizalofop ethyle 5% EC weedicide for weed control in onion in Delhi condition	3	3	1.2 ha
Varietal Evaluation					
Integrated Pest Management					
Integrated Crop Management					
Integrated Disease Management					
Small Scale Income Generation Enterprises					
Weed Management					
Resource Conservation Technology					

Thematic areas	*Crop*	*Name of the technology assessed*	*No. of trials*	*Number of farmers*	*Area in ha (Per trail covering all the Technological Options)*
Farm Machineries					
Integrated Farming System					
Seed / Plant production					
Value addition					
Drudgery Reduction					
Storage Technique					
Mushroom cultivation					
Total	**1**		**3**	**3**	**1.2ha**

3.2.2. Technologies **Refined** under various **Crops**

Thematic areas	*Crop*	*Name of the technology assessed*	*No. of trials*	*Number of farmers*	*Area in ha (Per trail covering all the Technological Options)*
Integrated Nutrient Management	tomato	Performance evaluation of Naphthalene Acetic Acid & Calcium Chloride application on nutrient uptake,growth & yield of tomato in Delhi condition	3	3	1.2 ha
Varietal Evaluation					
Integrated Pest Management					
Integrated Crop Management					
Integrated Disease Management	Tomato	Performance evaluation of Trichoderma viride as soil, seed and seedling treatment against damping off disease control in tomato in Delhi condition	3	3	2.4 ha
	Wheat	Performance evaluation of Choloropyriphos & Imidacloroprid as seed treatment against termite control in wheat in Delhi condition	3	3	2.4 ha
	Paddy	Performance evaluation of Zinc Sulphate for controlling Khaira disease in paddy in Delhi	3	3	2.4 ha

Thematic areas	*Crop*	*Name of the technology assessed*	*No. of trials*	*Number of farmers*	*Area in ha (Per trail covering all the Technological Options)*
		condition			
Small Scale Income Generation Enterprises					
Weed Management	Cauliflower	Performance evaluation of Wheel hoe for reduce drudgery while weeding in cauliflower in Delhi condition	3	3	1.2 ha
Resource Conservation Technology					
Farm Machineries					
Integrated Farming System					
Seed / Plant production					
Value addition	Pearl millet	Performance evaluation & acceptability of bajra biscuits in different ratio in Delhi condition	3	10	-
Drudgery Reduction					
Storage Technique					
Mushroom cultivation					
Total	**6**	**6**	**18**	**22**	**9.6ha**

3.2.3. Technologies assessed under Livestock and other enterprises

Thematic areas	*Name of the livestock enterprise*	*Name of the technology assessed*	*No. of trials*	*No. of farmers*
Evaluation of breeds				
Nutrition management				
Disease management				
Value addition				
Production and management				
Feed and fodder				
Small scale income generating enterprises				
Total				

3.2.4. Technologies Refined under Livestock and other enterprises

Thematic areas	*Name of the livestock enterprise*	*Name of the technology assessed*	*No. of trials*	*No. of farmers*
Evaluation of breeds				
Nutrition management	Broiler poultry	Performance evaluation of growth promoter (Vit A. & B Complex) for increasing weight gain	3	3

		in broiler poultry in Delhi condition.		
Disease management	Buffaloes	Performance evaluation of Albendazole Dewormer for controlling worms infestation in buffaloes in Delhi Condition	3	3
Value addition				
Production and management				
Feed and fodder				
Small scale income generating enterprises				
Total	2	2	6	6

Details of On Farm Trials

On Farm Trial: 1 (Year: 2nd)

1)	Title	:	Performance evaluation of oxyfluroben 23.5% and quizalofop ethyle 5% EC weedicide for weed control in onion in Delhi condition
2)	Problem diagnose/defined:		Weed infestation, Low yield of onion
3)	Details of technologies selected for assessment /refinement	:	T_1- Farmer's Practice (Pendimethilin one hand weeding) T_2- Oxyfluorfen 23.5%EC @ 1ml/L water + Quizalofop Ethyl 5%EC @ 2ml/L water at 30-35 days after DAT
4)	Source of technology	:	NHRDF
5)	Production system thematic area	:	Paddy-Rabi onion
6)	Thematic area	:	Weed Management
7)	Performance of the Technology with performance indicators	:	Broadleaf and grassy weeds were controlled 78 and 88 per cent and increase yield 284 & 304 respectively.
8)	Final recommendation for micro level situation	:	-
9)	Constraints identified and feedback for research	:	-
10)	Process of farmers participation and their reaction	:	-

B). Results of On Farm Trials

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Rabi Onion	irrigated	Weed infestation Low yield of onion	Performance evaluation of oxyfluroben 23.5% and quizalofop ethyle 5% EC weedicide for weed control in onion in Delhi condition	03	T_0- Farmer's Practice (Pendimethilin one hand weeding)	Weed control efficiency % Yield (qt./ha)	T0-78% T0-284q	Broadleaf and grassy weeds were controlled 78 and 88 per cent and increase yield 284 & 304qtl respectively	Farmers liked the chemical as they applied the chemical only once that effectively controlled both type of weeds
					T_1- Oxyfluorfen 23.5%EC @ 1ml/Lwater + Quizalofop Ethyl 5%EC @ 2ml/L water 30-35 days after DAT	Weed control efficiency % Yield (qt./ha)	T1-88% T1-304q		

**** No. of farmers***

Technology Assessed	*Production per unit(qtl)	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
T_1- Farmer's Practice (Pendimethilin one hand weeding)	T_1-284	154700	3.133:1
T_2- Oxyfluorfen 23.5%EC @ 1ml/Lwater + Quizalofop Ethyl 5%EC @ 2ml/L water 30-35 days after DAT	T_2-304	168200	3.24:1

****Field crops – kg/ha, * for horticultural crops -= kg/t/ha, * milk and meat – litres or kg/animal, * for mushroom and vermi compost kg/unit area.***
***** Give details of the technology assessed or refined and farmer's practice***

On Farm Trial -2 (Year-2nd)

1) Title : Performance evaluation of Albendazole Dewormer for controlling worms infestation in buffaloes in Delhi Condition.
2) Problem diagnose/defined: Worms are the major endoparasites which badly effect health and milk production in buffaloes
3) Details of technologies selected for assessment /refinement :
   T_0- No use of deworming
   T_1- 2 times deworming at an interval of 6 months
   T_2- 4 times deworming at an interval of 3 months
4) Source of technology : HAU, Hisar
5) Production system thematic area : Buffaloes
6) Thematic area : Disease Management
7) Performance of the Technology with performance indicators: Milk production of buffalo increased to 7.9 liter/day (17.72%) in T2 7.2 (9.72%) liter/day as compared to T1 6.50L/day in T0.
8) Final recommendation for micro level situation : NA
9) Constraints identified and feedback for research : NA.
10) Process of farmers participation and their reaction : In initial phase animals were facing problem of dysentery and low milk production but after use of dewormer buffaloes milk Production increased and get rid of dysentery -

Results

Crop/ enterprise	*Farming situation*	*Problem definition*	*Title of OFT*	*No. of trials*	*Technology Assessed*	*Parameters of assessment*	*Data on the parameter*	*Results of assessment*	*Feedback from the farmer*
1	2	3	4	5	6	7	8	9	10
Buffalo	Irrigated	Worms are the major endoparasites which badly effect health ansd milk production in buffaloes	Performance evaluation of Albendazole Dewormer for controlling worms infestation in buffaloes in Delhi condition	3	T_0 -No use of dewormer (Farmer's practice) T_1 - 2 times deworming with albendazole at an interval of 6 month T_2 - 4 times deworming with albendazole at an interval of 3 month	Milk production	T_0 - 6.5 l/d T_1- 7.2 l/d T_2- 7.9 l/d	Milk production of buffalo increased to 7.9 liter/day (17.72%) in T2 7.2 (9.72%) liter/day as compared to T1 6.50L/day in T0.	In initial phase animals were facing problem of dysentery and low milk production but after use of dewormer buffaloes milk Production increased and get rid of dysentery

Technology Assessed	*Source of Technology*	*Production*	*Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)*	*Net Return (Profit) in Rs. / day*	*BC Ratio*
11	12	13	14	15	16
T_0- No use of dewormer (Farmer's practice)		6.5	Milk production (l/day)	84	1.47:1
T_1 - 2 times deworming with albendazole at an interval of 6 month	CCS HAU, Hisar	7.2	Milk production (l/day)	111.50	1.63:1
T_2 - 4 times deworming with albendazole at an interval of 3 month	GBPUA&T, Pantnagar	7.9	Milk production (l/day)	139.0	1.78:1

On Farm Trial -3 (Year- 2rd)

1) Title : Performance evaluation of Trichoderma viride as soil, seed and seedling treatment against damping off disease control in tomato in Delhi condition
2) Problem diagnose/defined: Damping off disease
3) Details of technologies selected for assessment /refinement : T_0- Farmer's Practice (no seed and soil treatment)
   T_1- Seed treatment with *Trichoderma virdi*@ 5g/kg. seed and soil treatment @ 10g/m^2nursery area with decomposed FYM
   T_2- Seed treatment with *Trichoderma virdi* @ 5g/kg. seed and soil treatment @ 10g/m^2nursery area with decomposed FYM + dipping of seedling in 5g/liter water solution for 15 minutes before transplanting.
4) Source of technology : NCIPM, Pusa, New Delhi
5) Production system thematic area : Vegetable
6) Thematic area : Integrated Disease Management
7) Performance of the Technology with performance indicators : Decrease plant infestation and increase yield due to bio fungicide Trichoderma viride
8) Final recommendation for micro level situation : NA
9) Constraints identified and feedback for research : NA
10) Process of farmers participation and their reaction : Seed and soil treatment is effective for seedling stage

Results

Crop/ enterprise	*Farming situation*	*Problem definition*	*Title of OFT*	*No. of trials*	*Technology Assessed*	*Parameters of assessment*	*Data on the parameter*	*Results of assessment*	*Feedback from the farmer*
1	2	3	4	5	6	7	8	9	10
Tomato (*Lycopersicon esclentum*)	Irrigated	Damping off	Performance evaluation of Trichoderma viride as soil, seed and seedling treatment against damping off disease control in tomato in Delhi condition	03	T_0- Farmer's Practice (no seed and soil treatment)	Yield q/ha Incidence %	T0-241.36q T0- 8.9%	Decrease plant infestation and increase yield due to bio fungicide Trichoderma viride	-
					T_1- Seed treatment with *Trichoderma viride* @ 5g/kg. seed and soil treatment @ 10g/m^2nursery area with decomposed FYM	Yield q/ha Incidence %	T1-259.23q T1-3.3%		
					T_2- Seed treatment with *Trichoderma viride* @ 5g/kg. seed and soil treatment @ 10g/m^2nursery area with decomposed FYM + dipping of seedling in 5g/liter water solution for 15 minutes before transplanting.	Yield q/ha Incidence %	T2-262.13q T2 -2.0%		

Technology Assessed	*Source of Technology*	*Production*	*Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)*	*Net Return (Profit) in Rs. / unit*	*BC Ratio*
11	12	13	14	15	16
Farmer's Practice (no seed and soil treatment)	-	241.36q/ha	q/ha.	286540	4.79:1
Seed treatment with *Trichoderma viride* @ 5g/kg. seed and soil treatment @ 10g/m^2nursery area with decomposed FYM	NCIPM, Pusa, New Delhi	259.23q/ha	q/ha.	313345	5.15:1
Seed treatment with *Trichoderma viride* @ 5g/kg. seed and soil treatment @ 10g/m^2nursery area with decomposed FYM + dipping of seedling in 5g/liter water solution for 15 minutes before transplanting.	-	262.13q/ha	q/ha.	317695	5.20:1

On Farm Trial -4 (Year-2nd)

1) Title : Performance evaluation of Choloropyriphos & Imidacloroprid as seed treatment against termite control in wheat in Delhi condition

2) Problem diagnose/defined: Low yield due to insect infestation

3) Details of technologies selected for assessment /refinement :

T_0- No seed treatment (Farmer's practice)
T_1- Seed treatment with Chloropyriphos 20EC @ 4.5 ml/kg seed
T_2- Seed treatment with Imidacloroprid 17.8 SL @ 3.5 ml/kg seed

.

4) Source of technology : CCSHAU, Hisar & IARI, Pusa, New Delhi

5) Production system thematic area : Wheat-Rice

6) Thematic area : Integrated Pest Management

7) Performance of the Technology with performance indicators: Seed treatment with Imidacloroprid 17.8 SL @ 3.5 ml/kg seed resulted is lowest (4.91%) insect infestation & highest yield (39.00qt/ha) yield followed by seed treatment with Chloropyriphos 20EC @ 4.5 ml/kg seed (6.33%) insect infestation & 37.86 qt/ha yield. The insect infestation was highest 11.83% & yield 36.16qt/ha in without seed treatment.

8) Final recommendation for micro level situation : NA

9) Constraints identified and feedback for research : NA

10) Process of farmers participation and their reaction : Technology of T_2 is effective & farmer's of this area agree to practice the seed treatment is easy & cheap method for management insect (termite).

Results

Crop/ enterprise	*Farming situation*	*Problem definition*	*Title of OFT*	*No. of trials*	*Technology Assessed*	*Parameters of assessment*	*Data on the parameter*	*Results of assessment*	*Feedback from the farmer*
1	2	3	4	5	6	7	8	9	10
Wheat (HD-2967)	Irrigated	Low yield due to insect infestation	Performance evaluation of Choloropyriphos & Imidacloroprid as seed treatment against termite control in wheat in Delhi condition	3	T_0- No seed treatment (Farmer's practice) T_1-Seed treatment with Chloropyriphos 20EC @ 4.5 ml/kg seed T_2-Seed treatment with Imidacloroprid 17.8 SL @ 3.5 ml/kg seed	Insect infestation (%) Yield (qt/ha)	T_0- 11.83% T_1- 6.33% T_2-4.91% T_0- 36.16q T_1- 37.86q T_2-39.00q	The insect infestation was loest (4.91%) & highest (39.00qt/ha) yield in T_2 followed by T_1 (6.33%) insect infestation & (37.86 qt/ha) yield.	Technology of T_2 is effective & farmer's of this area agree to practice the seed treatment is easy & cheap method for management insect (termite)

Technology Assessed	*Source of Technology*	*Production*	*Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)*	*Net Return (Profit) in Rs. / unit*	*BC Ratio*
11	12	13	14	15	16
T_0- No seed treatment (Farmer's practice)		36.16	qtl/ha	23956	1.70:1
T_1- Seed treatment with Chloropyriphos 20EC @ 4.5 ml/kg seed	CCSHAU	37.86	qtl/ha	26678	1.78:1
T_2- Seed treatment with Imidacloroprid 17.8 SL @ 3.5 ml/kg seed		39.00	qtl/ha	28500	1.84:1

On Farm Trial 5 (Year-2nd)

1) Title : Performance evaluation of growth promoter (Vit A. & B Complex) for increasing weight gain in broiler poultry in Delhi condition.
2) Problem diagnose/defined : Slow weight gain of birds due to nutritional deficiency
3) Details of technologies selected for assessment /refinement :
   T_0- No use of growth promoter
   T_1- Vitamin A (50 ml/ 1000 birds) for 15 days
   T_2- Vitamin A 50 ml + Vitamin B complex 70 ml/1000 birds for 15 days
4) Source of technology : CARI, Barielly
5) Production system thematic area : Broiler birds
6) Thematic area : Nutrition Management
7) Performance of the Technology with performance indicators: Weight gain of broiler birds were higher in 1.80 kg in T_2 group compare to 1.65kg in T_1 & 1.5 kg in T_0.
8) Final recommendation for micro level situation : NA
9) Constraints identified and feedback for research : NA
10) Process of farmers participation and their reaction : After use of growth promoter in broiler birds increase in the weight gain of bird was observed

Results

Crop/ enterprise	*Farming situation*	*Problem definition*	*Title of OFT*	*No. of trials*	*Technology Assessed*	*Parameters of assessment*	*Data on the parameter*	*Results of assessment*	*Feedback from the farmer*
1	2	3	4	5	6	7	8	9	10
Broiler poultry	Irrigated	Slow weight gain of birds due to nutritional deficiency.	Performance evaluation of growth promoter (Vit A. & B Complex) for increasing weight gain in broiler poultry in Delhi condition	3	T_0 -No use of Growth promoter (Farmer's practice) T_1 –Use of Vitamin A (5 ml/100 birds) for 15 days T_2 - Use of Vitamin A (5 ml/100 birds) & B Complex (7 ml/100 birds) for 15 days	Weight gain (kg)	T_0-1.5kg T_1-1.65kg T_2-1.8 kg	Weight gain of broiler birds were higher in 1.80 kg in T_2 group compare to 1.65kg in T_1 & 1.5 kg in T_0.	After use of growth promoter in broiler birds increase in the weight gain of bird was observed.

Technology Assessed	*Source of Technology*	*Production*	*Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)*	*Net Return (Profit) in Rs. / 1000 birds*	*BC Ratio*
11	12	13	14	15	16
T_0 -No use of Growth promoter (Farmer's practice)		1.50	Kg	46954	1.50:1
T_1 –Use of Vitamin A (5 ml/100 birds) for 15 days	CARI, Bareilly, U.P	1.65	Kg	37262	1.41:1
T_2 - Use of Vitamin A (5 ml/100 birds) & B Complex (7 ml/100 birds) for 15 days	CDPO, Chandigarh	1.80	Kg	29470	1.34:1

On Farm Trial: 6 (Year-2nd)

1) Title : Performance evaluation & acceptability of bajra biscuits in different ratio in Delhi condition
2) Problem diagnose/defined: Poor consumption of bajra
3) Details of technologies selected for assessment /refinement combination. : A simple low cost technology has been assessed to popularize the consumption of bajra in biscuit form using different

   T_0-Bajra(50%)+Maida(50%) biscuit
   T_1-Atta(50%)+Bajra (50%) biscuit
   T2- Besan (50%)+ Bajra (50%)

4) Source of technology : CCS HAU, Hisar
5) Production system thematic area : Irrigated
6) Thematic area : Value Addition
7) Performance of the Technology with performance indicators : It was observed that bajra+Besan biscuit in 50% combination (T3) was liked very much by 60% in taste as compared to T2
   Bajra+Wheatt which was liked by 50% of respondents followed by T1 (bajra+Maida) which was only liked by 40% of the respondents.
8) Final recommendation for micro level situation : To be assessed
9) Constraints identified and feedback for research : -
10) Process of farmers participation and their reaction : Farm women participatory approach and efficiency was reported by the users.

B). Results of On Farm Trials

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Value addition	-	Low realization for bajra crop	Performance evaluation & acceptability of bajra biscuits in different ratio in Delhi condition	3	T0: Maida (50%)+ Bajra (50%)	Organoleptic acceptability in terms of taste (%) Organoleptic acceptability in terms of colour (%)	T0-40% T0-50%	Bajra biscuit in combination of 50% each in bajra+ besan combination was liked by the majority in terms of taste (60%) as well as colour (65%)	Majority of the population showing keen interest in bajra biscuits and it can become effective tool in improving the nutritional status of the masses.
					T1- Wheat (50%) + Bajra (50%)	Organoleptic acceptability in terms of taste (%) Organoleptic acceptability in terms of colour (%)	T1-50% T1-50%		
					T2- Bajra (50%)+Besan (50%)	Organoleptic acceptability in terms of taste (%) Organoleptic acceptability in terms of colour (%)	T2-60% T2-65%		

Technology Assessed	***Source of Technology***	***Production***	***Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)***	***Net Return (Profit) in Rs. / 1000 birds***	***BC Ratio***
11	12	13	14	15	16
T_0 - Bajra(50%)+Maida(50%) biscuit	CCS HAU, Hisar	-	-	-	-
T_1- Atta(50%)+Bajra (50%) biscuit	CCS HAU, Hisar	-	-	-	-
T2- - Besan (50%)+ Bajra (50%)					

On Farm Trial: 7 (Year-3rd)

1)	Title	: Performance evaluation of Wheel hoe for reduce drudgery while weeding in cauliflower in Delhi condition
2)	Problem diagnose/defined	: Weed infestation, high cost & drudgery in manual weeding
3)	Details of technologies selected for assessment/refinement	: A simple low cost wheel hoe has been assessed to reduce the drudgery and labour cost in Culiflower crop. T_0- Farmer's Practice (Hand weeding) T_1- Weedicide spray + one hand weeding at 45 DAT T_2- Weedicide spray + weeding by wheel hoe weeder
4)	Source of technology	: Indian Agriculture Research Institute, New Delhi
5)	Production system thematic area	: Irrigated
6)	Thematic area	: Drudgery Reduction
7)	Performance of the Technology with performance indicators	: Use of wheel hoe had recorded drudgery (man days in one ha per weeding) and save Rs.9200 Per weeding in one ha.
8)	Final recommendation for micro level situation and feedback for research	: To be assessed Constraints identified
9)	Constraints identified and feedback for research	-
10)	Process of farmers participation and their reaction	: Due to its easy operation and no maintenance cost there is good demand for the implement

B). Results of On Farm Trials

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Cauliflower	Irrigated	Weed infestation, high cost & drudgery in manual weeding	Performance evaluation of Wheel hoe for reduce drudgery while weeding in cauliflower in Delhi condition	10	T0: Farmer's practice(hand weeding)	Weeding cost Rs/ha: Labour Used (No./ha):	T0-Rs.15000/ha T0 25/ha(for2weeding(50labour)	Use of wheel hoe recorded reduced drudgery (14 man days in one ha per weeding) and save Rs.10200 per weeding in one ha	Due to its easy operation and no maintenance cost there is good acceptability for the implement.
					T1- Weedicide spray+one hand weeding at 45 DAT	Weeding cost Rs/ha: Labour Used (No./ha):	T1-Rs. 9300/ha T1-29/ha		
					T2- Weedicide spray+weeding by wheel hoe weeder	Weeding cost Rs/ha: Labour Used (No./ha):	T2-Rs.4800/ha T2- 14/ha		

**** No. of farmers***

Technology Assessed	***Source of Technology***	***Production***	***Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)***	***Net Return (Profit) in Rs. / 1000 birds***	***BC Ratio***
11	12	13	14	15	16
T_1- Farmer's Practice (Hand weeding)		137	q/ha	70760	2.06:1
T2- Weedicide spray + one hand weeding at 45 DAT	IARI	135.3	q/ha	75000	2.24:1
T3- Weedicide spray + weeding by wheel hoe weeder	IARI	136.3	q/ha	80500/-	2.44:1

On Farm Trial: 8 (Year-1st)

APR 2015-16

1. Title	:	Performance evaluation of Naphthalene Acetic Acid & Calcium Chloride application on nutrient uptake, growth & yield of tomato in Delhi condition
2. Problem diagnose/defined:		Poor flower setting & physiological disorder (Blossom end rot)
3. Details of technologies selected for assessment /refinement	:	There is no use of NAA and CaCl2 in tomato T0- Farmer's Practice (No use of growth regulator) T_1- NAA 0.02% at the time of first flower blooming T3- NAA 0.02%+ CaCl2 0.5% at the time of first flower blooming
4. Source of technology	:	Indian Agriculture Research Institute, New Delhi
5. Production system thematic area	:	Irrigated
6. Thematic area	:	Nutrient Management
7. Performance of the Technology with performance indicators	:	The application of NAA 0.02%+ CaCl2 0.5% at the time of first flower blooming resulted in control bloosom end rot and higher yield (290 qt/ha) as compare to control (265 qt/ha)
8. Final recommendation for micro level situation	:	
feedback for research	:	To be assessed
9. Constraints identified and feedback for research	:	Not available locally and quantity required in very less amount
10. Process of farmers participation and their reaction	:	Generally farmer did not use the micro nutrients. After brief discussion with farmers about importance of micro nutrient in crops. They were ready to use and find positive result on crop.

B). Results of On Farm Trials

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Tomato	Irrigated	Poor fruit setting & physiological disorder	Performance evaluation of Naphthalene Acetic Acid & Calcium Chloride application on nutrient uptake, growth & yield of tomato in Delhi condition	3	T_1: Farmer's Practice (No use of growth regulator)	Yield: qtl/ha Plant height (cm)	T_1: 265 T_1:78	The application of NAA 0.02%+ CaCl2 0.5% at the time of first flower blooming resulted in control bloosom end rot and higher yield (290 qt/ha) as compare to control (265 qt/ha)	
					T_2- NAA 0.02% at the time of first flower blooming	Yield: qtl/ha Plant height (cm)	T_2: 275 T_2:80		
					T_3- NAA 0.02%+ CaCl2 0.5% at the time of first flower blooming	Yield: qtl/ha Plant height (cm)	T_3: 290 T_3: 82		

**** No. of farmers***

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
T1- Hand weeding	T_1: 265	43500	1.67:1
T2- Weedicide spray+ one hand weeding at 45 days DAT	T_2: 275	47500	1.74:1
T3- Weedicide spray+ weeding by wheel hoe weeder	T_3: 290	52500	1.82:1

****Field crops – kg/ha, * for horticultural crops -= kg/t/ha, * milk and meat – litres or kg/animal, * for mushroom and vermi compost kg/unit area.***
***** Give details of the technology assessed or refined and farmer's practice***

On Farm Trial: 9 (Year-I1nd)

1) Title : Performance evaluation of Zinc Sulphate for controlling Khaira disease in paddy in Delhi condition
2) Problem diagnose/defined: Paddy crop damage by khaira disease has been observed in the area.
3) Details of technologies selected for assessment /refinement :
   T_0 – Farmers Practice (No use of Zinc Sulphate)
   T_1 - Spray of Zinc Sulphate (33%) @ 0.5 % Concentration..
   T_2 - Basal Doses of Zinc Sulphate were given @ 25 kg/hectare
   First Spray 40 days after transplantation and Second Spray after 60 days after transplantation in Paddy Crop.
4) Source of technology : Division of Soil Science and Agricultural Chemistry, IARI, Pusa New Delhi.
5) Production system thematic area : Wheat-paddy
6) Thematic area : Integrated Disease Management
7) Performance of the Technology with performance indicators : -
8) Final recommendation for micro level situation : NA
9) Constraints identified and feedback for research : Application of $ZnSO_4$ is favorable to control khaira disease in paddy due to deficiency of Zn in soil therefore, zinc should be applied in soil.
10) Process of farmers participation and their reaction : Khaira disease is common in different parts of the country. In Delhi region farmers also face this problem. Farmers require economical chemical of $ZnSO_4$ and easily availability in the market.

B). Results of On Farm Trials

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Paddy (Oryza sativa)	Irrigated	Occurance of Khaira Disease in paddy crop	Performance evaluation of Zinc Sulphate for controlling Khaira disease in paddy in Delhi condition	3	T_0- Farmers Practice	Incidence of Khaira disease(%) Yield (q/ha)	T_0 -19.7% T_0 -45.2q	Application of $ZnSO_4$ (Basal dose) @ 25kg/ha and yield of 47.1 q/ha followed by spray of ZnSO4 (0.5%) & yield of 46.0 q/ha.	$ZnSO_4$ is easily available at reasonable rate in market.
					T_1- Spray ZnSo4 (0.5%)	Incidence of Khaira disease(%) Yield (q/ha)	T_1 – 8.0% T_1 - 46.0q		
					T_2- Basel dose ZnSo4	Incidence of Khaira disease (%) Yield (q/ha)	T_2 -6.0 % T_2 - 47.1q		

**** No. of farmers***

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
T_0- Farmers Practice	45.2	55525/-	2.59:1
T_1- Spray ZnSo4 (0.5%)	46.0	57125/-	2.63:1
T_2- Basel dose ZnSo4 (25kg/ha)	47.1	59325/-	2.70:1

PART 4 - FRONTLINE DEMONSTRATIONS

4.A. Summary of FLDs implemented during 2015-16

Sl. No.	*Category*	*Farming Situation*	*Season and Year*	*Crop*	*Variety/ breed*	*Hybrid*	*Thematic area*	*Technology Demonstrated*	*Area (ha)*		*No. of farmers/ demonstration*			*Reasons for shortfall in achievement*
									Proposed	*Actual*	*SC/ST*	*Others*	*Total*	
1.	Oilseeds	Irrigated	Rabi 2015-16	Mustard	P-Vijay	-	IDM	IDM in mustard	4	4	-	10	10	
2.		Irrigated	Rabi 2015-16	Mustard	P-Vijay	-	Varietal evaluation	Improved variety of mustard – Pusa Vijay	28	28	8	62	70	
3.	Pulses	-	-	-	-	-	-	-	-	-	-	-	-	
4.	Cereals	Irrigated	Kharif 2015-16	Paddy	Pusa-1509	-	Varietal evaluation	Improved variety of paddy – Pusa 1509	-	6.4	-	16	16	
		Irrigated	Kharif 2015-16	Paddy	Pusa-1121	-	IPM	IPM – Pusa 1121	2	2	1	4	5	
		Irrigated	Kharif 2015-16	Paddy	Pusa-1401	-	Varietal evaluation	Improved variety of paddy – Pusa 1401	-	1.6	-	4	4	
		Irrigated	Kharif 2015-16	Paddy	Pusa-1612	-	Varietal evaluation	Improved variety of paddy – Pusa 1612	0.4	0.4	-	1	1	
		Irrigated	Rabi 2015-16	Wheat	HD-3086	-	Varietal evaluation	HYV of wheat- HD 3086	-	0.8	-	2	2	
		Irrigated	Rabi 2015-16	Wheat	WH 1105	-	Bio-fertilizers	HYV of wheat- WH 1105 with bio-fertilizers (Azotobactor+ PSB)	-	2.0	-	5	5	
		Irrigated	Rabi 2015-16	Wheat	WH 1105	-	HYV - WH 1105	HYV of wheat- WH 1105	-	2.0	1	4	5	

Sl. No.	*Category*	*Farming Situation*	*Season and Year*	*Crop*	*Variety/ breed*	*Hybrid*	*Thematic area*	*Technology Demonstrated*	*Area (ha)*		*No. of farmers/ demonstration*			*Reasons for shortfall in achievement*
									Proposed	*Actual*	*SC/ST*	*Others*	*Total*	
		Irrigated	Rabi 2015-16	Wheat	WH 1105	-	Varietal evaluation	Improved variety of wheat – WH 1105	-	3.0	-	7	7	
		Irrigated	Rabi 2015-16	Wheat	HD-2967	-	Varietal evaluation	HYV of wheat- HD 2967	-	0.8	-	2	2	
		Irrigated	Rabi 2015-16	Wheat	HD-2851	-	Varietal evaluation	HYV of wheat- HD 2851	-	1.2	-	3	3	
		Irrigated	Rabi 2015-16	Wheat	HD-2894	-	Varietal evaluation	HYV of wheat- HD 2894	-	1.2	-	3	3	
5.	Millets													
6.	Vegetables													
7.	Flowers													
8.	Fruit													
9.	Spices and condiments													
10.	Commercial													
11.	Medicinal and aromatic													
12.	Fodder													
13.	Dairy	Irrigated	Kharif 2015-16	Buffalo	Local		Nutrition management	Calcium Supplementation to buffaloes	10 no	10 no	02	8	10	
14.	Poultry													
15.	Piggery													
16.	Sheep and goat													
17.	Button mushroom													
18.	Vermicompost													
19.	IFS													
20.	Apiculture													
21.	Implements	Irrigated	Rabi-kharif 2014-2016	Vegeatbles	-	-	Post harvest management	Popularization of evaporative cooled vegetable vending cart	-	-	-	3	3	

Sl. No.	Category	Farming Situation	Season and Year	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
									Proposed	Actual	SC/ST	Others	Total	
22.	Others (specify) Nutrional Kitchen Gardeneing	Irrigated	Kharif 2015-16	Kharif season vegetable	Pusa kitchen garden kit	-	Nutritional Gardening	Kitchen gardening for nutritional security	0.2	0.2	-	10	10	-
23.		Irrigated	Rabi 2015-16	Rabi season vegetable	Pusa kitchen garden kit	-	Nutritional Gardening	Kitchen gardening for nutritional security	0.4	0.4	-	20	20	-

4.A. 1. Soil fertility status of FLDs plots during 2015-16

Sl. No.	Category	Farming Situation	Season and Year	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Status of soil (Kg/ha)			Previous crop grown
									N	P	K	
	Oilseeds	Irrigated	Rabi 2015-16	Mustard	P-Vijay	-	IDM	IDM in mustard	-	43.46	283.04	Fallow
		Irrigated	Rabi 2015-16	Mustard	P-Vijay	-	Varietal evaluation	Improved variety of mustard – Pusa Vijay	-	12.5	114.8	fallow
	Pulses	-	-	-	-	-	-	-	-	-	-	-
	Cereals	Irrigated	Kharif 2015-16	Paddy	Pusa-1509	-	Varietal evaluation	Improved variety of paddy – Pusa 1509	135.4	16.61	33.82	Wheat
		Irrigated	Kharif 2015-16	Paddy	Pusa-1121	-	IPM	Improved variety of paddy – Pusa 1121	135.4	16.61	33.82	Wheat
		Irrigated	Kharif 2015-16	Paddy	Pusa-1401	-	Varietal evaluation	Improved variety of paddy – Pusa 1401	135.4	16.61	33.82	wheat
		Irrigated	Kharif 2015-16	Paddy	Pusa-1612	-	Varietal evaluation	Improved variety of paddy – Pusa 1612	135.4	16.61	33.82	
		Irrigated	Rabi 2015-16	Wheat	HD-3086	-	Varietal evaluation	HYV of wheat- HD 3086	-	15.82	85.2	Fallow
		Irrigated	Rabi 2015-16	Wheat	WH 1105	-	Bio-fertilizers	HYV of wheat- WH 1105 with bio-fertilizers (Azotobactor+ PSB)	-	15.82	85.2	Fallow
		Irrigated	Rabi 2015-16	Wheat	WH 1105	-	HYV of	HYV of wheat- WH 1105	-	15.82	85.2	Fallow

Sl. No.	*Category*	*Farming Situation*	*Season and Year*	*Crop*	*Variety/ breed*	*Hybrid*	*Thematic area*	*Technology Demonstrated*	*Status of soil (Kg/ha)*			*Previous crop grown*
									N	*P*	*K*	
							wheat- WH 1105					
		Irrigated	Rabi 2015-16	Wheat	WH 1105	-	Varietal evaluation	Improved variety of wheat – WH 1105	-	15.82	85.2	Fallow
		Irrigated	Rabi 2015-16	Wheat	HD-2967	-	Varietal evaluation	HYV of wheat- HD 2967	-	15.82	85.2	Fallow
		Irrigated	Rabi 2015-16	Wheat	HD-2851	-	Varietal evaluation	HYV of wheat- HD 2851	-	15.82	85.2	Fallow
		Irrigated	Rabi 2015-16	Wheat	HD-2894	-	Varietal evaluation	HYV of wheat- HD 2894	-	15.82	85.2	Fallow
	Millets											
	Flowers											
	Fruit											
	Spices and condiments											
	Commercial											
	Medicinal and aromatic											
	Fodder											
	Plantation											
	Dairy	Irrigated	Kharif 2015-16	Buffalo	Local		Nutrition management	Calcium Supplementation to buffaloes	-	-	-	-
	-											
	Piggery											
	Sheep and goat											
	Button mushroom											
	Vermicompost											
	IFS											
	Apiculture											
	Implements											
	Others (specify) Nutritional Gardening	Irrigated	Kharif 2015-16	Kharif season vegetables	Pusa kitchen garden kit	-	Kitchen gardening for nutritional	Kitchen gardening for nutritional security		-	-	Fallow

Sl. No.	Category	Farming Situation	Season and Year	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Status of soil (Kg/ha)			Previous crop grown
									N	P	K	
							security					
		Irrigated	Rabi 2015-16	Rabi season vegetable	Pusa kitchen garden kit	-	Kitchen gardening for nutritional security	Kitchen gardening for nutritional security	-	6.10	198.7	Kharif vegetables

B. Results of Frontline Demonstrations

4.B.1. Crops

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	No. of Demo.	Area (ha)	Yield (q/ha)				% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
							Demo			Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
							H	L	A										
Oilseeds	IDM in Mustard	P-Vijay	-	Irrigated	10	4	26.90	24.15	25.49	23.90	10.26	17450	86666	69216	4.96:1	17800	81260	63460	4.56:1
	Varietal Evaluation	P.Vijay	-	Irrigated	70	28	26.50	23.40	24.80	23.10	6.85	17200	84320	67120	4.90:1	17400	78540	61140	4.51:1
Pulses																			
Cereals	Varietal Evaluation	Pusa-1509	-	Irrigated	16	6.4	55.0	45.0	50.0	44.0	13.63	34562	90000	55438	2.6:1	34400	79200	44800	2.30:1
	IPM	Pusa-1121	-	Irrigated	5	2	47.35	46.15	46.72	40.90	4.05	33350	93440	62090	2.80:1	33900	89800	57900	2.64:1
Paddy	Improved variety	Pusa-1401	-	Irrigated	4	1.6	52.5	45.0	49.0	44.0	11.36	34562	73500	38934	2.12:1	34492	66000	31508	1.91:1
Paddy	Improved variety	Pusa-1612	-	Irrigated	1	0.4	-	-	45.0	44.0	2.27	34562	67500	32938	1.95:1	34400	66750	32350	1.94:1
Wheat	HYV of wheat- HD-3086	HD-3086			2	0.8	36.20	36.10	36.15	30.05	16.87	33900	57840	23940	1.70:1	33900	48080	14180	1.41:1
Wheat	HYV of wheat- WH 1105 with bio-fertilizers (Azotobactor+ PSB)	WH-1105	-	Irrigated	5	2.0	38.40	38.60	38.50	30.20	21.55	33900	61600	27700	1.81:1	33900	48320	14420	1.42:1
Wheat	HYV of wheat- WH 1105	WH 1105	-	Irrigated	5	2.0	37.30	37.90	37.80	30.20	20.10	33900	60480	26580	1.78:1	33900	48320	14420	1.42:1

Crop	*Name of the technology demonstrated*	*Variety*	*Hybrid*	*Farming situation*	*No. of Demo.*	*Area (ha)*	*Yield (q/ha)*				*% Increase*	**Economics of demonstration (Rs./ha)*				**Economics of check (Rs./ha)*			
							Demo			*Check*		*Gross Cost*	*Gross Return*	*Net Return*	*** BCR*	*Gross Cost*	*Gross Return*	*Net Return*	*** BCR*
							H	L	A										
Wheat	Varietal evaluation	Improved variety of wheat – WH 1105	-	Irrigated	7	3.0	38.30	36.50	37.20	30.20	18.81	33900	59520	25620	1.75:1	33900	48320	14420	1.42:1
Wheat	HYV of wheat- HD 2967	HD-2967	-	Irrigated	2	0.8	40.10	39.50	39.80	30.20	24.12	33900	63680	29780	2.05:1	33900	48320	14420	1.42:1
Wheat	HYV of wheat- HD 2851	HD-2851	-	Irrigated	3	1.2	29.40	30.30	30.05	29.50	1.83	33900	48080	14180	1.41:1	33900	47200	13300	1.39:1
Wheat	HYV of wheat- HD 2894	HD-2894	-	Irrigated	3	1.2	30.10	30.05	30.20	29.00	3.97	33900	48320	14420	1.42:1	33900	46400	12500	1.36:1
Millets																			
Vegetables	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Flowers																			
Fruit																			
Spices and condiments																			
Commercial																			
Medicinal and aromatic																			
Kharif season vegetable	Kitchen gardening for nutritional security	Pusa kitchen garden kit	-	Irrigated	10	200m^2	4.2qtl/demo	2.9qtl/demo	3.5qtl/demo	-	-	850/ unit	2625/ unit	1775/ unit	3.08:1	-	-	-	-
Rabi season vegetable	Kitchen gardening for nutritional security	Pusa kitchen garden kit	-	Irrigated	10	200m^2	4.6qtl/demo	3.7qtl/demo	4.2 qtl/demo	-	-	900/ unit	2940/ unit	2040/ unit	3.26:1	-	-	-	-
Fodder																			

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST ; H – Highest Yield, L – Lowest Yield A – Average Yield

Data on additional parameters other than yield (viz., reduction of percentage in weed/pest/ diseases etc.)

Data on other parameters in relation to technology demonstrated					
Crop	***Technology to be demonstrated***	***Variety/ Hybrid***	***Parameter with unit***	***Demo***	***Check***

4.B.2. Livestock and related enterprises

	Name of the technology demonstrated	*Breed*	*No. of Demo*	*No. of Units*	*Yield (q/ha)*				*% Increase*	**Economics of demonstration Rs./unit)*				**Economics of check (Rs./unit)*			
					Demo			*Check if any*		*Gross Cost*	*Gross Return*	*Net Return*	*** BCR*	*Gross Cost*	*Gross Return*	*Net Return*	*** BCR*
					H	L	A										
Dairy	Calcium Supplementation to buffaloes	Local	10	10	7.90	7.56	6.70	6.84	10.52	165.50	378.0	212.5	2.28:1	160.0	342.0	182.0	2.13:1
Poultry																	
Rabbitry																	
Pigerry																	
Sheep and goat																	
Duckery																	
Others (pl.specify)																	

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

Data on additional parameters other than yield (viz., reduction of percentage diseases, increase in conceiving rate, inter-calving period etc.)

Data on other parameters in relation to technology demonstrated		
Parameter with unit	***Demo***	***Check if any***

4. B.3. Fisheries

Type of Breed	*Name of the technology demonstrated*	*Breed*	*No. of Demo*	*Units/ Area (m^2)*	*Yield (q/ha)*				*% Increase*	**Economics of demonstration Rs./unit) or (Rs./m2)*				**Economics of check Rs./unit) or (Rs./m2)*			
					Demo			*Check if any*		*Gross Cost*	*Gross Return*	*Net Return*	*** BCR*	*Gross Cost*	*Gross Return*	*Net Return*	*** BCR*
					H	L	A										
Common carps																	
Others (pl.specify)																	

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST
H-High L-Low, A-Average

Data on additional parameters other than yield (viz., reduction of percentage diseases, effective use of land etc.)

Data on other parameters in relation to technology demonstrated		
Parameter with unit	***Demo***	***Check if any***

4.B.4. Other enterprises

Enterprise	*Name of the technology demonstrated*	*Variety/ species*	*No. of Demo*	*Units/ Area {m^2}*	*Yield (q/ha)*				*% Increase*	**Economics of demonstration (Rs./unit) or (Rs./m2)*				**Economics of check (Rs./unit) or (Rs./m2)*			
					Demo			*Check if any*		*Gross Cost*	*Gross Return*	*Net Return*	*** BCR*	*Gross Cost*	*Gross Return*	*Net Return*	*** BCR*
					H	L	A										
Button mushroom																	
Vermicompost																	
Apiculture																	
Others (pl.specify)																	

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST
H-High L-Low, A-Average

Data on additional parameters other than yield (viz., additional income realized, employment generation, quantum of farm resources recycled etc.)

Data on other parameters in relation to technology demonstrated		
Parameter with unit	***Demo***	***Local***

4.B.5. Extension and Training activities under FLD

Sl.No.	***Activity***	***No. of activities organised***	***Number of participants***	***Remarks***
1	Field days	Calcium supplementation to dairy animals	**58**	
		Performance of improved variety of mustard	**40**	
2	Farmers Training	Supplementation of calcium to dairy animals	24	
	IDM in mustard	1	18	
	IPM in Paddy	1	18	
3	Media coverage	1	58	
	Feeding of calcium to dairy animals			
4	Training for extension functionaries	Kitchen gardening for nutritional security	22	
5	Others (Please specify) Field visit to	212	220	

	demonstrated plots Method Demonstration on layout of kitchen garden	2	24	

5. Achievements on Training (Including the sponsored, vocational, FLD and trainings under Rainwater Harvesting Unit) :

A) **ON Campus**

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
(A) Farmers & Farm Women										
I Crop Production										
Weed Management										
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming										
Water management										
Seed production										
Nursery management										
Integrated Crop Management										
Fodder production										
Production of organic inputs										
II Horticulture										
a) Vegetable Crops										
Production of low volume and high value crops										
Off-season vegetables										
Nursery raising										
Exotic vegetables like Broccoli										
Export potential vegetables										
Grading and standardization										
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										
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										
Soil and Water Conservation										

Integrated Nutrient Management										
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient Use Efficiency										
Soil and Water Testing										
IV Livestock Production and Management										
Dairy Management										
Poultry Management										
Piggery Management										
Rabbit Management										
Disease Management										
Feed management	1	19	-	19	2	-	2	21	-	21
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	1	-	28	28	-	1	1	-	29	29
Designing and development for high nutrient efficiency diet	1	-	29	29	-	4	4	-	33	33
Minimization of nutrient loss in processing										
Gender mainstreaming through SHGs										
Storage loss minimization techniques										
Value addition	1	-	12	12	-	6	6	-	18	18
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										
Integrated Disease Management	1	18	-	18	2	-	2	20	-	20
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										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
WTO and IPR issues										
XI Agro-forestry										

Production technologies										
Nursery management										
Integrated Farming Systems										
TOTAL	**5**	**37**	**69**	**106**	**4**	**11**	**15**	**41**	**84**	**125**
(B) RURAL YOUTH										
Mushroom Production	1	17	-	17	3	-	3	20	-	20
Bee-keeping	1	30	-	30	3	-	3	33	-	33
Integrated farming										
Seed production										
Production of organic inputs	1	13	4	17	3	-	3	16	4	20
Integrated Farming										
Planting material production										
Vermi-culture										
Sericulture										
Protected cultivation of vegetable crops										
Commercial fruit production										
Repair and maintenance of farm machinery and implements										
Nursery Management of Horticulture crops	1	13	3	16	9	-	9	22	3	25
Training and pruning of orchards										
Value addition										
Production of quality animal products										
Dairying	1	28	3	31	4	-	4	32	3	35
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production	1	19	1	20	1	-	1	20	1	21
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	1	6	12	18	2	2	4	8	14	22
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
TOTAL	**7**	**126**	**23**	**149**	**25**	**2**	**27**	**151**	**25**	**176**
(C) Extension Personnel										
Productivity enhancement in field crops										
Integrated Pest Management										
Integrated Nutrient management										
Rejuvenation of old orchards										
Protected cultivation technology										
Formation and Management of SHGs										
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Care and maintenance of farm machinery and implements										
WTO and IPR issues										
Management in farm animals										
Livestock feed and fodder production										
Household food security	1	-	19	19	-	3	3	-	22	22
Women and Child care										
Low cost and nutrient efficient diet designing										

Production and use of organic inputs										
Gender mainstreaming through SHGs										
TOTAL	1	-	19	19	-	3	3	-	22	22

B) **OFF Campus**

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
(A) Farmers & Farm Women										
I Crop Production										
Weed Management										
Resource Conservation Technologies										
Cropping Systems	1	18	-	18	2	-	2	20	-	20
Crop Diversification										
Integrated Farming										
Water management										
Seed production										
Nursery management										
Integrated Crop Management	1	16	-	16	4	-	4	20	-	20
Fodder production										
Production of organic inputs										
II Horticulture										
a) Vegetable Crops										
Production of low volume and high value crops	1	15	-	15	2	-	2	17	-	17
Off-season vegetables	2	19	-	19	21	-	21	40	-	40
Nursery raising										
Exotic vegetables like Broccoli	1	18	-	18	2	-	2	20	-	20
Export potential vegetables										
Grading and standardization	1	16	-	16	2	-	2	18	-	18
Protective cultivation (Green Houses, Shade Net etc.)										
b) Fruits										
Training and Pruning										
Layout and Management of Orchards	1	18	-	18	3	-	3	21	-	21
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	10	-	10	8	-	8	18	-	18
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	1	15	-	15	3	-	3	18	-	18
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	1	15	-	15	3	-	3	18	-	18
Soil and Water Conservation	1	19	-	19	2	-	2	21	-	21

Integrated Nutrient Management	4	67	-	67	10	-	10	77	-	77
Production and use of organic inputs	1	23	-	23	2	-	2	25	-	25
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient Use Efficiency	1	14	-	14	4	-	4	18	-	18
Soil and Water Testing	3	43	-	43	14	-	14	57	-	57
IV Livestock Production and Management										
Dairy Management	1	19	-	19	3	-	3	22	-	22
Poultry Management	1	14	-	14	3	-	3	17	-	17
Piggery Management	1	17	-	17	-	-	-	17	-	17
Rabbit Management										
Disease Management	4	62	-	62	14	-	14	76	-	76
Feed management	3	15	40	55	3	9	12	18	52	70
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	1	-	28	28	-	4	4	-	32	32
Minimization of nutrient loss in processing	1	-	17	17	-	-	-	-	17	17
Gender mainstreaming through SHGs	1	-	16	16	-	-	-	-	16	16
Storage loss minimization techniques	2	-	61	61	-	10	10	-	71	71
Value addition	2	-	44	44	-	8	8	-	52	52
Income generation activities for										

empowerment of rural Women										
Location specific drudgery reduction technologies										
Rural Crafts										
Women and child care	1	-	24	24	-	4	4	-	28	28
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	5	77	-	77	14	-	14	91	-	91
Integrated Disease Management	3	47	-	47	11	-	11	58	-	58
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										
Group dynamics										
Formation and Management of SHGs	1	-	16	16	-	-	-	-	16	16
Mobilization of social capital										
Entrepreneurial development of farmers/youths	1	17	-	17	4	-	4	21	-	21
WTO and IPR issues										
XI Agro-forestry										

Production technologies										
Nursery management										
Integrated Farming Systems										
TOTAL	**49**	**594**	**246**	**840**	**134**	**35**	**169**	**728**	**281**	**1009**
(B) RURAL YOUTH										
Mushroom Production										
Bee-keeping										
Integrated farming										
Seed production										
Production of organic inputs	1	18	-	18	7	-	7	25	-	25
Integrated Farming										
Planting material production										
Vermi-culture										
Sericulture										
Protected cultivation of vegetable crops										
Commercial fruit production										
Repair and maintenance of farm machinery and implements										
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Value addition	1	-	26	26	-	1	1	-	27	27
Production of quality animal products										
Dairying										
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Para vets										
Para extension workers										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										

Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
TOTAL	**2**	**18**	**26**	**44**	**7**	**1**	**8**	**25**	**27**	**52**
(C) Extension Personnel										
Productivity enhancement in field crops										
Integrated Pest Management										
Integrated Nutrient management										
Rejuvenation of old orchards										
Protected cultivation technology										
Formation and Management of SHGs										
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Care and maintenance of farm machinery and implements										
WTO and IPR issues										
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Women and Child care	1	-	19	19	-	-	-	-	19	19
Low cost and nutrient efficient diet designing										

Production and use of organic inputs										
Gender mainstreaming through SHGs										
TOTAL	**1**	**-**	**19**	**19**	**-**	**-**	**-**	**-**	**19**	**19**

C) Consolidated table (ON and OFF Campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
(A) Farmers & Farm Women										
I Crop Production										
Weed Management										
Resource Conservation Technologies										
Cropping Systems	1	18	-	18	2	-	2	20	-	20
Crop Diversification										
Integrated Farming										
Water management										
Seed production										
Nursery management										
Integrated Crop Management	1	16	-	16	4	-	4	20	-	20
Fodder production										
Production of organic inputs										
II Horticulture										
a) Vegetable Crops										
Production of low volume and high value crops	1	15	-	15	2	-	2	17	-	17
Off-season vegetables	2	19	-	19	21	-	21	40	-	40
Nursery raising										
Exotic vegetables like Broccoli	1	18	-	18	2	-	2	20	-	20
Export potential vegetables										
Grading and standardization	1	16	-	16	2	-	2	18	-	18
Protective cultivation (Green Houses, Shade Net etc.)										
b) Fruits										
Training and Pruning										
Layout and Management of Orchards	1	18	-	18	3	-	3	21	-	21
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	10	-	10	8	-	8	18	-	18
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	1	15	-	15	3	-	3	18	-	18
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	1	15	-	15	3	-	3	18	-	18
Soil and Water Conservation	1	19	-	19	2	-	2	21	-	21

Integrated Nutrient Management	4	67	-	67	10	-	10	77	-	77
Production and use of organic inputs	1	23	-	23	2	-	2	25	-	25
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient Use Efficiency	1	14	-	14	4	-	4	18	-	18
Soil and Water Testing	3	43	-	43	14	-	14	57	-	57
IV Livestock Production and Management										
Dairy Management	1	19	-	19	3	-	3	22	-	22
Poultry Management	1	14	-	14	3	-	3	17	-	17
Piggery Management	1	17	-	17	-	-	-	17	-	17
Rabbit Management										
Disease Management	4	62	-	62	14	-	14	76	-	76
Feed management	4	34	40	74	57	3	60	91	43	134
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	1	-	28	28	-	1	1	-	29	29
Designing and development for high nutrient efficiency diet	2	-	57	57	-	8	8	-	65	65
Minimization of nutrient loss in processing	1	-	17	17	-	-	-	-	17	17
Gender mainstreaming through SHGs	1	-	16	16	-	-	-	-	16	16
Storage loss minimization techniques	2	-	61	61	-	10	10	-	71	71
Value addition	3	-	56	56	-	10	10	-	66	66
Income generation activities for										

empowerment of rural Women										
Location specific drudgery reduction technologies										
Rural Crafts										
Women and child care	1	-	24	24	-	4	4	-	28	28
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	5	77	-	77	14	-	14	91	-	91
Integrated Disease Management	4	65	-	65	13	-	13	78	-	78
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										
Group dynamics										
Formation and Management of SHGs	1	-	16	16	-	-	-	-	16	16
Mobilization of social capital										
Entrepreneurial development of farmers/youths	1	17	-	17	4	-	4	21	-	21
WTO and IPR issues										
XI Agro-forestry										

Production technologies										
Nursery management										
Integrated Farming Systems										
TOTAL	**54**	**631**	**314**	**945**	**196**	**34**	**232**	**945**	**232**	**1177**
(B) RURAL YOUTH										
Mushroom Production	1	17	-	17	3	-	3	20	-	20
Bee-keeping	1	30	-	30	3	-	3	33	-	33
Integrated farming										
Seed production										
Production of organic inputs	2	31	4	35	10	-	10	41	4	45
Integrated Farming										
Planting material production										
Vermi-culture										
Sericulture										
Protected cultivation of vegetable crops										
Commercial fruit production										
Repair and maintenance of farm machinery and implements										
Nursery Management of Horticulture crops	1	13	3	16	9	-	9	22	3	25
Training and pruning of orchards										
Value addition	1	-	26	26	-	1	1	-	27	27
Production of quality animal products										
Dairying	1	28	3	31	4	-	4	32	3	35
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production	1	19	1	20	1	-	1	20	1	21
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	1	6	12	18	2	2	4	8	14	22
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
TOTAL	**9**	**144**	**49**	**193**	**32**	**3**	**35**	**193**	**35**	**228**
(C) Extension Personnel										
Productivity enhancement in field crops										
Integrated Pest Management										
Integrated Nutrient management										
Rejuvenation of old orchards										
Protected cultivation technology										
Formation and Management of SHGs										
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Care and maintenance of farm machinery and implements										
WTO and IPR issues										
Management in farm animals										
Livestock feed and fodder production										
Household food security	1	-	19	19	-	3	3	-	22	22
Women and Child care	1	-	19	19	-	-	-	-	19	19
Low cost and nutrient efficient diet designing										

Production and use of organic inputs										
Gender mainstreaming through SHGs										
TOTAL	**2**	**-**	**38**	**38**	**-**	**3**	**3**	**-**	**41**	**41**

Note: Please furnish the details of above training programmes as <u>Annexure</u> in the proforma given below

Date	Clientele	Title of the training programme	Discipline	Thematic area	Duration in days	Venue (Off / On Campus)	Number of other participants			Number of SC/ST			Total number of participants		
							Male	Female	Total	Male	Female	Total	Male	Female	Total
4/4/2015	PF	Integrated Pest Management of okra	PP	IPM	One day	On Campus	18	-	18	-	-	-	18	-	18
10/4/2015	PF	Broiler poultry management in summer	AH	Poultry Management	One day	Off campus	14	-	14	3	-	3	17	-	17
22/4/2015	PF	Post harvest technology of rabi onion	Hort	Grading and standardization	One day	Off campus	16	-	16	2	-	2	18	-	18
24/4/2015	PF	Method of soil sampling	SS	Soil and Water Testing	One day	Off campus	14	-	14	5	-	5	19	-	19
2/5/2015	PF	Method of soil sampling	SS	Soil and Water Testing	One day	Off campus	15	-	15	5	-	5	20	-	20
21/5/2015	PF	Technological intervention in paddy crop	Agro	ICM	One day	Off campus	16	-	16	4	-	4	20	-	20
22/5/2015	PF	Vaccination schedule of dairy	AH	Disease Management	One day	Off campus	13	-	13	8	-	8	21	-	21
23/5/2015	PF	Preparation of squashes and drinks from seasonal fruits	HS	Value Addition	One day	On campus	-	12	12	-	6	6	-	18	18
3/6/2015	PF	IPM in cucurbits	PP	IPM	One day	Off campus	16	-	16	2	-	2	18	-	18
6/6/2015	PF	Green fodder productio	AH	Feed Management	One day	Off campus	-	20	20	-	2	2	-	22	22

		n round the year													
10/6/2015	PF	SHG formation and developm ent of entreprene urial skills	HS	Gender mainstr eaming through SHGs	One day	Off campus	-	16	16	-	-	-	-	16	16
12/6/2015	PF	New orchard establish ment and after care	Hort	Layout and Manage ment of Orchard s	One day	Off campus	18	-	18	3	-	3	21	-	21
27/6/2015	PF	Use of green manure to improve soil fertility and soil physical properties	SS	Soil fertility manage ment	One day	Off campus	15	-	15	3	-	3	18	-	18
30/6/2015	PF	Preservati on of mango	HS	Storage loss minimiz ation techniq ues	One day	Off campus	-	29	29	-	4	4	-	33	33
1/7/2015	PF	Managem ent of bakani disease in paddy	PP	IDM	One day	Off campus	14	-	14	6	-	6	20	-	20
3/7/2015	PF	Importanc e of balanced fertilizer in paddy crop	SS	INM	One day	Off campus	16	-	16	2	-	2	18	-	18
24/7/2015	PF	Early cultivatio n of leafy vegetables	Hort	Off season vegetabl e cultivati on	One day	Off campus	4	-	4	14	-	14	18	-	18
30/7/2015	PF	Managem ent of stored grains	HS	Storage loss minimiz ation techniq ues	One day	Off campus	-	32	32	-	6	6	-	38	38
3/8/2015	PF	IPM of paddy	PP	IPM	One day	Off campus	13	-	13	6	-	6	19	-	19
11/8/2015	PF	Entrepren eurship developm	Extn	Entrepr eneurial develop	One day	Off campus	17	-	17	4	-	4	21	-	21

		ent		ment of farmers/ youths											
13/8/2015	PF	Supplementation of calcium to dairy animals	AH	Feed management	One day	Off campus	-	20	20	-	4	4	-	24	24
14/8/2015	PF	Value addition in karonda	HS	Value addition	One day	Off campus	-	27	27	-	8	8	-	35	35
18/8/2015	EF	Management practices during pregnancy and lactation	HS	Women and child care	One day	Off campus	-	19	19	-	-	-	-	19	19
26/8/2015	PF	INM in paddy	SS	INM	One day	Off campus	14	-	14	4	-	4	18	-	18
26/8/2015	PF	Preparation of nutritious sprout snacks	HS	Designing and development for high nutrient efficiency diet	One day	On campus	-	29	29	-	4	4	-	33	33
28/8/2015	PF	Early cultivation of leafy vegetables	Hort	Off season vegetable cultivation	One day	Off campus	5	-	5	17	-	17	22	-	22
19/9/2015	PF	Production technology of rabi season vegetables	Hort	Production of low volume and high value crops	One day	Off campus	15	-	15	2	-	2	17	-	17
19/9/2015	PF	Metabolic disease of diary animals	AH	Disease Management	One day	Off campus	17	-	17	3	-	3	20	-	20
21/9/2015	PF	Production technology of mustard	Extn	ICM	One day	Off campus	16	-	16	4	-	4	20	-	20
22/9/2015	PF	Production and use of organic input	SS	Production and use of organic inputs	One day	Off campus	18	-	18	7	-	7	25	-	25
22/9	VT	Gardening	Hort	Nursery	Seven	On	13	3	16	9	-	9	22	3	25

/2015-28/9/2015		and nursery raising of Horticultural crops.		Management of Horticulture crops	day	campus									
23/9/2015	PF	SHG's Formation	HS	Formation and Management of SHGs	One day	Off campus	-	16	16	-	-	-	-	16	16
24/9/2015	PF	Integrated Pest management of cauliflower	PP	IPM	One day	Off campus	14	-	14	4	-	4	18	-	18
24/9/2015	PF	Nutritional recipes for growing children & pregnant women	HS	Women and child care	One day	Off campus	-	24	24	-	4	4	-	28	28
6/10/2015	PF	Preparation of balance ration for dairy animals	AH	Feed Mgt.	One day	On campus	19	-	19	2	-	2	21	-	21
06/10/2015-15/10/2015	VT	Preservation & processing of fruits vegetables.	HS	Small scale processing and value addition	One day	On campus	6	12	18	2	2	4	8	14	22
8/10/2015-14/10/2015	VT	Cultivation of white button mushroom	PP	Mushroom production	Seven day	On campus	17	-	17	3	-	3	20	-	20
20/10/2015-27/10/2015	VT	Dairy farming a profitable business to agriculture.	AH	Dairying	Eight day	On campus	28	3	31	4	-	4	32	3	35
23/10/2015	PF	Role of bio fertilizer in improving soil fertility	SS	Soil Fertility mgt	One day	Off campus	23	-	23	2	-	2	25	-	25
31/1	PF	Insect &	PP	IDM	One day	On	18	-	18	2	-	2	20	-	20

0/2015		disease management in cauliflower				campus									
4/11/2015	PF	Nutrient management of wheat crop	SS	INM	One day	Off campus	16	-	16	1	-	1	17	-	17
6/11/2015	PF	Pig management during winter season	AH	Piggery mgt	One day	Off campus	17	-	17	-	-	-	17	-	17
20/11/2015	PF	Production technology of exotic vegetable	Hort	Exotic vegetables like Broccoli	One day	Off campus	18	-	18	2	-	2	20	-	20
3/12/2015-9/12/2015	VT	Preservation of fruit and vegetables	HS	Value addition	Seven day	On campus	-	26	26	-	1	1	-	27	27
7/12/2015	PF	Integrated pest management of wheat	PP	IPM	One day	Off campus	16	-	16	2	-	2	18	-	18
17/12/2015	PF	Integrated nutrient management in wheat	SS	INM	One day	Off campus	20	-	20	5	-	5	25	-	25
18/12/2015	PF	Care and management of dairy animals during winter	AH	Dairy management	One day	Off campus	19	-	19	3	-	3	21	-	21
29/12/2015	PF	Bajra processing and value addition	HS	Designing and development for high nutrient efficiency diet	One day	On campus	-	28	28	-	1	1	-	29	29
2/1/2016	PF	Balance Use of fertilizer in rabi crops	SS	Soil and Water Conservation	One day	Off campus	19	-	19	2	-	2	21	-	21
8/1/	VT	Bee	PP	Bee	Six day	On	30	-	30	3	-	3	33	-	33

2016-13/1/2016		Keeping		Keeping		campus									
20/1/2016	PF	Management of Aphid in crucifers crops	PP	IDM	One day	Off campus	18	-	18	3	-	3	21	-	21
22/1/2016-27/1/2016	VT	Poultry Farming: A profitable subsidiary business to agriculture	AH	Poultry Mgt	Six day	On campus	19	1	20	1	-	1	20	1	21
22/1/16	PF	Production technology of rabi onion	Hort	Production and Management technology	One day	Off campus	15	-	15	3	-	3	18	-	18
30/1/2016	PF	Use of green leafy vegetables	HS	Minimization of nutrient loss in processing	One day	Off campus	-	17	17	-	-	-	-	17	17
30/1/2016	PF	Care and management of potted ornamental plants	Hort	Management of potted plants	One day	Off campus	10	-	10	8	-	8	18	-	18
3/2/2016	PF	Value addition of seasonal fruits and vegetables	HS	Value addition	One day	Off campus	-	17	17	-	-	-	-	17	17
8/2/2016	PF	Control of termite in wheat	PP	IDM	One day	Off campus	15	-	15	2	-	2	17	-	17
12/2/2016-16/2/2016	VT	Vermicompost production	SS	Production of organic input	Five day	On campus	13	4	17	3	-	3	16	4	20
19/2/2016	EF	Kitchen garden for nutritional security	HS	Household food security	One day	On campus	-	19	19	-	3	3	-	22	22
22/2	PF	Dewormi	AH	Disease	One day	Off	16	-	16	-	-	-	16	-	16

/2016		ng of dairy animals		mgt		campus									
4/3/2016	PF	Stem rot in mustard	PP	IDM	One day	Off campus	16	-	16	3	-	3	19	-	19
5/3/2016	PF	Methods of soil sampling	SS	Soil & water testing	One day	Off campus	14	-	14	4	-	4	18	-	18
15/3/2016	PF	Nutrient management of cucurbits	Hort	INM	One day	Off campus	15	-	15	2	-	2	17	-	17
28/3/2016	PF	Improvement of poor quality roughages through urea treatment	AH	Feed mgt	One day	Off campus	15	-	15	3	-	3	18	-	18
22/3/2016	PF	Nutritional requirement for adolescence girls	HS	Designing and development for high nutrient efficiency diet	One day	Off campus	-	28	28	-	4	4	-	32	32

(D) Vocational training programmes for Rural Youth

Crop / Enterprise	**Date**	**Training title***	**Identified Thrust Area**	**Duration (days)**	**No. of Participants**			**Self employed after training**			**Number of persons employed else where**
					Male	**Female**	**Total**	**Type of units**	**Number of units**	**Number of persons employed**	
Horticulture crop	22/9/2015-28/9/2015	Gardening and nursery raising of Horticultural crops.	Horticulture crop	07	22	3	25	Small	2	4	
Mushroom	8/10/2015-14/10/2015	Cultivation of white button mushroom	Mushroom	07	20	-	20	Small	2	4	
Value addition	06/10/2015-15/10/2015	Preservation & processing of fruits vegetables.	Value addition	10	8	14	22	Small	3	6	
Dairying	20/10/2015-27/10/2015	Dairy farming a profitable business to agriculture.	Dairying	08	32	3	35	Small	4	8	
Value addition	3/12/2015-9/12/2015	Preservation of fruit and vegetables	Value addition	07	-	27	27	Small	2	3	
Bee	8/1/2016-	Bee Keeping	Bee	06	33	-	33	Small	4	6	

keeping	13/1/2016		keeping								
Poultry	22/1/2016-27/1/2016	Poultry Farming: A profitable subsidiary business to agriculture	Poultry	06	20	1	21	Small	1	2	
Vermi compost	12/2/2016-16/2/2016	Vermicompost production	Vermi compost	05	16	4	20	Small	2	2	

*training title should specify the major technology /skill transferred

(E) Sponsored Training Programmes

Sl. No	Date	Title	Discipline	Thematic area	Duration (days)	Client (PF/RY/EF)	No. of courses	No. of Participants									Sponsoring Agency	Amount of fund received (Rs.)
								Others			SC/ST			Total				
								Male	Female	Total	Male	Female	Total	Male	Female	Total		
Total																		

6. Extension Activities (including activities of FLD programmes)

Sl. No.	Nature of Extension Activity	Purpose/ topic and Date	No. of activities	Participants											
				Farmers (Others) (I)			SC/ST (Farmers) (II)			Extension Officials (III)			Grand Total (I+II+III)		
				Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1.	Field Day	Calcium supplementation to dairy animals 20/02/2016	1	-	49	49	-	9	9	-	-	-	-	58	58
2.	Field Day	Mustard 11/02/2016	1	36	-	36	2	-	2	-	-	-	38	-	38
	Total		2	36	49	85	2	9	11	-	-	-	38	58	96
3.	Kisan Mela	-	-	-	-	-	--	-	-	-	-	-	-	-	-
4.	Kisan Mela	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Kisan Ghosthi	• Kharif Diwas- 20.5.15 • Scientific feeding of dairy animals - 29.06.2015 • Kisan gosthi on Parthenium Week- 17/8/2015 • Kisan Gosthi on Sarson ki unnat kheti - 21.9.2015 • Kisan gosthi on Jai Kisan Jai Vigyan Diwas-23/12/2015	5	127	46	173	38	4	42	-	-	-	165	50	215
6.	Exhibition	• State level Kharif Kisan Sammelen – 2015	4	514	228	750	178	27	205	8	-	8	700	255	955

		17/07/2015 • Kharif Kisan Sammelan at KVK, Shikohpur, 26/9/2015 • Pre Rabi Kisan Sammelan, 17/10/2015, • KVK Exhibition during Pusa Horticulture Show 27-29 /2/2016													
7.	Film Show	• Quality nursery raising • Production of vermicompost • Vegetable cultivation under protected condition • Feeding of mineral mixture technology • Clean milk production • Dairy health management • Improvement of poor quality roughages • Rural poultry farming • Management of poultry farming • Nutritive value of honey • Vermicompost production technology • Organic farming • Integrated nutrient management • Kisano ko diya gaya vermicompost banana ka prasikshan dated 17.2.2016 in Dainik Jagran, New Delhi	14	112	44	156	31	8	39	5	-	5	148	52	200
8.	Method Demonstrations	• Preservation of low cost recopies • Improvement of wheat straw through urea treatment • Fumigation in stored grains Fumigation in stored grains • Use of mineral mixture of calcium in the ration of dairy animals • Fumigation in stored grains Fumigation in stored grains • Honey biscuits • Nursery raising under low tunnel • Use of Vitamins in poultry • Preparation of Aonla pickle • Use of bio fungicides in vegetables • Benefits of pheromone	12	88	148	236	17	4	21	-	-	-	105	152	257

		in cauliflower • Preparation of bajra biscuits													
9.	Farmers Seminar	• State Level Kharif kisan Sammelen 2015, 17/7/15 • State Level Rabi kisan Sammelan 2015, 17/10/15	2	348	122	470	152	48	200	30	-	30	530	170	700
10.	Workshop attended	• Financial assistance for different agriculture & allied programme 11/7/2015 •	1	1	-	1	-	-	-	-	-	-	1	-	1
11.	Group meetings	-	28	127	84	211	22	12	34	-	-	-	149	96	245
12.	Lectures delivered as resource persons	-	39	402	342	744	310	34	344	30	-	30	742	376	1118
13.	Newspaper coverage	• 'Pashuo ke aahar mein khanij padharth par kisan gosthi ka aayojan' 3.7.2015 • 'Vagyanik khilai pilai par kisan gosthi ka aayojan sampann' 17.7.2015 • 'Kheti ke liye mitti ki janch jururi' 18.7.2015 • 'Kisan sammelan mein jute kisan aur vagyanik' 18.7.2015 • Nursery & gardening visya par prashikshan sampann, 3.10.2015 • Preservation & processing of fruits & vegetables, 17.10.2015 • Gramino ko pashupalan karne ki di gai jankari, 28.10.2015. • Kisan sarkar ki yojanao ka uthay labh, 19.10.2015. • Soil Health Card distributed during World Soil Day 6.12.2015 • Madumakkhi palan par diya gaya prashikshan 15.1.2016 • Kisano ko diya gaya vermicompost banana ka prasikshan 17.2.2016 • Dhudharu pasuo ko dein 50 ml calcium prati din 21.2.2016	12	-	-	-	-	-	--	-	-	--	-	--	-
14.	Radio talks	• Anaj Bhandaran ki tekniki 22.4.2015 • Summer poultry management 25.4.2015	21	-	-	-	-	-	-	-	-	-	-	-	-

		• Insect & pest management of pulse crop 27.5.2015 • Dairy management 25.5.2015 • Dudharu pashu ki dekhbal 20.5.2015 • Pig farming subsidiary business to agriculture 4.6.2015 • Gramin mahila evam udhamita vikas 15.7.2015 • Management of dairy animals during rainy season 24.7.2015 • "Protected cultivation" 20.8.2015 • "IPM in paddy" 24.8.2015 • "Poultry feeding managemnt" 16.9.2015 • "Phone in programme" 25.9.2015 • "Hooner se roojgar" 17.9.2015 • "Off season vegetable cultivation" 18.9.2015 • "Feeding and disease management of Poultry" 19.10.2015 • Winterseason vegetable cultivation" 20.10.2015 • "Insect & disease management of rabi crops" 17.11.2015 • "Feeding management of pigs" 1.12.2015 • "White button mushroom" 21.12.2015 • "Vaccination of dairy animals" 11.12.2015 • "Food Security" 11.12.2015													
15.	TV talks	• Question answer of letters of farmers related to animal husbandry 17.4.2015 • Poltry farming 14.5.2015 • Phal sabji uttpadan 28.5.2015 • Pashu palan (Appki chithi programm) 22.5.2015 • Care of animal during summer season and balanced feeding 18.6.2015	33	-	-	-	-	-	-	-	-	-	-	--	-

		• Food processing 28.7.2015 • Establishment of new fruit orchard 3.7.2015 • State level Kharif Kisan Sammelen 2015 on khet khalyan programme 20.7.2015 • Hello kisan live telecast of 'Agriculture equipment 21.7.2015 • Dairy management during rainy season 1.7.2015 • Dhansa gaon mein pashuo ki khilai pilai par kisan gosthi ka aayojan 8.7.2015 • Letter answers related to animal husbandry on aapki chithi programme 31.7.2015 • Kisan club ki upyogita" 24.8.20 • "Management of dairy animals" 5.8.2015 • "Poultry farming" 6.8.2015 • "Pig farming" 28.8.2015 • 'Success story of Broiler poultry farmin of Mr. Tasvir at village Jafferpur' 25.8.201 • "Insect and disease of kharif vegetables" 10.8.2015 • "IPM of kharif crops" 17.8.2015 • Kharif sabjio ke samsamik karya" 12.8.201 • Cultivation of brinjal" 18.8.2015 • Cultivation of early cauliflower" 11.8.201 • "Sabjio avam phalo ki unnat kheti" 3.8.2015 • Self help group and rural women" 21.8.2015 • "Women empowerment" 22.9.201 • "Divercification of agriculture for getting higher income" 18.9.2015 • "Dairy animal management during change climatic														

		conditions" 27.10.2015 • "Celebration of World soil day" 7.12.2015 • "Celebration of World soil day" 11.12.2015 • "Poultry Farming" 7.1.2016 • "Advisory on rabi crops 16.3.2016 • "Dairy farming in change climate 18.2.2016 • "Preparation of carrot murabba and tomato puree: 23.2.2016													
16.	Popular articles	• Assessment of synthetic pyrethrods residues in vegetables • Yield & gap analysis of wheat productivity in NCR Delhi. • Status of available major and micro nutrients in soils of Parmapur area of Mirzapur district of Uttar Pradesh • Growth, Yield and Quality of chickpea (Cicer arietinum L.) as influenced by sulphur and boron application and rhizobium inoculation	4	-	-	-	-	--	-	-	-	-	-	-	-
17.	Extension Literature	• Moong ki vigyanik kheti • Gheun ki unnat kheti • Dhan mein sameketi nishijeev prabhandan takniki • Fal –sabjiyon ka prirkshan • Madhu makhi palan takniki • Louki ki utpadan takniki • Gheun ki unnat kheti • Dhan mein sameketi nishijeev prabhandan takniki • Fal –sabjiyon ka prirkshan • Dairy farming • Mineral mixture • PPT sanitation of dairy animals • Madhu makhi palan • Preservation of fruit & vegetables • Kitchen garden for nutritional security • Wheat farming • White button mushroom cultivation	18	445	350	795	80	28	108	47	-	47	572	378	950

		• Dairy farming													
18.	Advisory Services	-	-	752	120	872	119	30	149	-	-	-	871	150	1021
19.	Scientific visit to farmers field	-	154	352	35	387	69	9	78	-	-	-	421	44	465
20.	Farmers visit to KVK	-	-	492	18	510	135	6	141	-	-	-	627	24	651
21.	Diagnostic visits	-			-	175	60	-	60	-	-	-	235	-	235
22.	Exposure visits	• Hayat Mushroom Farm, 12/10/2015, • Dairy Farm of Mitraon, 12/10/2015, • Poultry Farm 25/10/2015 • PHT, IARI, Pusa, Delhi- 9/10/2015 • Unnat Krishi Mela- 19/3/2016	5	862	182	1044	56	32	88	-	-	-	918	214	1132
23.	Ex-trainees Sammelan	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24.	Soil health Camp	Soil health Camp	11	190	-	190	45	-	45	-	-	-	235	-	235
25.	Animal Health Camp	-													
26.	Agri mobile clinic	-													
27.	Soil test campaigns	Soil test campaigns	2	32	-	32	20	-	20	-	-	-	52	-	52
28.	Farm Science Club Conveners meet	Farmer's Club	16	199	-	199	29	-	29	-	-	-	228	-	228
29.	Self Help Group Conveners meetings	SHG's	17	-	781	781	-	85	85	-	-	-	-	866	866
30.	Mahila Mandals Conveners meetings	-													
31.	Celebration of important days (specify)	• Nutrition week, 01-07.2015 • World Soil Day 5/12/2015 • Parthanium week	3	245	141	386	30	30	60	-	-	-	275	171	446
32.	Others	Seed Treatment Campiagn	2	89	-	89	20	-	20	-	-	-	109	-	109
		Award Received:	3	1	2	3	-	-	-	-	-	-	1	2	3
		Conference attended	1	1	-	1	-	-	-	-	-	-	1	-	1
		Seminar attended • National Dialogue on "Innovative Extension Systems for Farmers' Empowerment and Welfare" 17-19 December, 2015 • National Youth Convention programme on Attractingand Retaining Youth in	3	76	-	76	-	-	-	-	-	-	76	-	76

		Agriculture (ARYA) 27 January, 2016 • Medicinal plant production issues & challenges 28-29 /2/ 2016													
		Training received • IPM for important crops 20-22/8/2015	1	1	-	1	-	-	-	-	-	-	1	-	1
		Visit: Haryana Agro Industries Corporation, Murthal	1	2	-	2	-	-	-	-	-	-	2	-	2
	Grand Total	-	**419**	**5574**	**2741**	**8315**	**1421**	**375**	**1796**	**120**	**-**	**120**	**7300**	**3116**	**10416**

6. B. Kisan Mobile Advisory Services

Kisan Mobile Advisory									
Name of the KVK	**No. of farmers Covered**	**No. of Messages (Text)**	**Type of messages**						
			Crop	**Livestock**	**Weather**	**Marketing**	**Awareness**	**Other enterprise**	**Any other**
	3909	**17**	**vegetable**						
	524	**2**	**Fruits**						
	293	**2**	**Flower**						
	486	**3**		**Buffaloes & cows**					
	2000	**2**	**Paddy**						

6.C. DETAILS OF TECHNOLOGY WEEK CELEBRATIONS during 2015-16

No. of Technology week celebrated	**Types of Activities**	**No. of Activities**	**Number of Participants**	**Related crop/livestock technology**
	Gosthies			
	Lectures organised			
	Exhibition			
	Film show			
	Fair			
	Farm Visit			
	Diagnostic Practicals			
	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			

7. Production and supply of Technological products

A) SEED MATERIALS

Major group/class	Crop	Variety	Quantity (qtl.)	Value (Rs.)	Provided to No. of Farmers
CEREALS					
	Wheat	HD 3086	72.80	254800	182
	Wheat	HD 2967	52.80	184800	132
OILSEEDS	Mustard	Pusa Vijay	10.59	74130	530
PULSES					
VEGETABLES	Palak	Pusa All Green	4.49	35920	56
FLOWER CROPS					
OTHERS (Specify)					

B) PLANTING MATERIALS

Major group/class	Crop	Variety	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
FRUITS					
	Mango*	**Alphanso***	**600**	**12000**	**100**
	Mango*	**Kesar***	**500**	**10000**	**40**
	Pineapple*	**Honeydew***	**2000**	**100000**	**100**
SPICES					
VEGETABLES					
FOREST SPECIES					
ORNAMENTAL CROPS					
PLANTATION CROPS					

Others (specify)					

*An example for guidance only

C) BIO PRODUCTS

Major group/class	Product Name	Species	Quantity		Value (Rs.)	Provided to No. of Farmers
			No	(kg)		
BIOAGENTS						
1						
2						
3						
4						
BIOFERTILIZERS						
1						
2						
3						
4						
BIO PESTICIDES						
1						
2						
3						
4						

D) LIVESTOCK

Sl. No.	Type	Breed	Quantity		Value (Rs.)	Provided to No. of Farmers
			(Nos	Kgs		
Cattle	**Buffalo***	**Murrah***				
	Buffalo*					
SHEEP AND GOAT	**Goat***	**Osmanabadi***				
POULTRY	**Hen***	**Whiteleghorn***				
	Hen*	**Giriraja***				
	Quails*					
FISHERIES						
Others (Specify)						

*** An example for guidance only**

PART 8 – PUBLICATION, SUCCESS STORY, SWTL, TECHNOLOGY WEEK AND DROUGHT MITIGATION

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

(A) KVK News Letter – (Name, Date of start, periodicity, number of copies distributed, etc.)

(B) Literature developed/published

Item	*Title*	*Authors name*	*Number of copies*
Research papers			
Technical reports	Kharif kisan sammelan report Rabi kisan sammelan report SAC agenda papers	R K Yadav & Ritu Singh Ritu Singh Manju & Ritu Singh	5 5 35
Technical bulletins			
Popular articles	• Asesment of synthetic pyrethrods residues in vegetables • Yield & gap analysis of wheat productivity in NCR Delhi. • Status of available major and micro nutrients in soils of Parmapur area of Mirzapur district of Uttar Pradesh • Growth, Yield and Quality of chickpea (Cicer arietinum L.) as influenced by sulphur and boron application and rhizobium inoculation	Dr. D.K.Rana Dr. Y P Singh, Dr, D.K.Rana Sh Brijesh Yadav	
Training Manual	Phalon ke ras ka presanskaran Ankuran ka mahtav Phal sabjiyon ka parirakshan	Ritu Singh Ritu Singh Ritu Singh	25 25 20
Extension literature	**KVK News Letter** – Krishi Vahini, January 2015-June 2015 Krishi Vahini, July 2015-December 2015	KVK staff	200 200
Folders /leaflets			
TOTAL			

(C) Details of Electronic Media Produced

S. No.	Type of media (CD / VCD / DVD / Audio-Cassette)	Title of the programme	Number

9.A. Success stories/Case studies, if any (two or three pages write-up on each case with suitable action photographs)

The success stories/case studies with good action photographs (with captions) should be on the following topics

a) ***Effective popularization on a larger scale of any one FLD technology and its role in transformation of district agriculture with respect to that particular crop or enterprise***
b) ***Performance of the end results of any one technology assessed, its refinement if any and its impact in district agriculture with respect to that crop or enterprise***
c) ***Effect of production and supply of seeds and planting material / animal breed / or bio-product and its impact on district agriculture with respect to that crop/ enterprise/ bio-product***

The general format for preparing the above success stories/case studies are furnished below

TITLE: Woman Empowerment through EDP

Introduction: Transformation of Mrs. Sudesh Rani, 44 years from devoted housewife into budding woman entrepreneur in just 2 years is the mission fulfilled. Sh. Roop Chand, her visionary father, had great expectation of making her a self reliant person, whom she lost at a young age.

The cherished ambition of fulfilling father's wish ultimately tickled Mrs. Sudesh Rani to call Kisan Call Centre in December 2012 which after sensing her enthusiasm advised her to contact Krishi Vigyan Kendra, Ujwa, New Delhi.

KVK intervention: Mrs. Sudesh Rani visited Krishi Vigyan Kendra, Ujwa and met the scientist team led by Sh. RK Yadav, Programme Coordinator. She expressed her resolve to venture into bee keeping and value addition of fruits /vegetables activities during the interaction with scientist team of KVK, Ujwa. After SWOT analysis of her case, KVK team prescribed her the Road Map- **undergo training, form a firm plan and start activities, arrange fund from KVIC/NABARD/Bank/ other source; undertake brand promotion, talk to experts for help**.

Output : Mrs. Sudesh Rani religiously followed the Road Map prescribed to her by KVK, Ujwa. She took training on vegetable & fruit preservation from Zonal Multi Disciplinary Training Center, KVIC, Rajghat, Delhi in Dec. 2012. Besides, she also underwent training on bee keeping from KVIC Training Center, Muzaffer Nagar (UP) in Jan 2013. After hand on experience in Apiary for few months from Sh. Naresh of village Banot, Shamli (UP), an experienced bee keeper, she started with 20 bee boxes in Sept. 2013. Mean while, she got registered the firm, M/s Krishna Food, in May 2013 at Delhi. She engaged professional consultant for design of product label under the brand 'Shree Roop' in memory of her father. She started processing and packing of honey at her works- Plot No. 395, Kotla Vihar Phase-II, Baprola Village, Delhi-41.
She got FSSAI license for honey packing from Department of Food Safety, New Delhi in Oct 2013. She somehow lost confidence in tackling bee keeping issues and was hesitant to start preservation of

fruits/vegetable on commercial level. Mrs. Sudesh Rani re visited KVK, Ujwa and discussed the issue. In order to hone up her skills and gain confidence she took training on beekeeping and fruit /vegetable preservation in Dec. 2014 and Jan 2015 respectively from KVK, Ujwa.

Outcome: It tremendously helped her in fine tuning her bee keeping activity and starting vegetable/fruit preservation on commercial scale. She got FSSAI license for honey, pickles, jam etc. in Jan 2015. KVK, Ujwa facilitated the online submission of her loan proposal of Rs. 15 lakh with KVIC in August, 2015. With continuous support and handholding from KVK, Ujwa, Delhi Mrs. Sudesh Rani has standardized her production techniques and got exposure for participation in exhibitions and media publicity.

Impact : Mrs. Sudesh Rani has exhibited her products in Pusa Krishi Mela 2014, Agriculture Exhibitions arranged by KVK, Ujwa in July 2015 & Oct 2015, Pusa Krishi Vigyan Mela 2015, Aam Mohotsav 2015, Dilli Haat, Janak puri Delhi on Mahila Diwas (March 2015) and India International Trade Fair 2015, Pragati Maidan. She appeared in DD Kisan Channel in their Hallo Kisan Programme on 28/7/2015. Her story was also aired by All India Radio in Aakashwani Programme on 12/7/2015.
Mrs Sudesh rani is producing and packing 4000 bottles honey and 3500 packs of jams, pickles and chutney under brand name of 'Shree Roop'. It is spectacular performance because Mrs. Sudesh Rani has achieved this level in just 2 years without any financial help from any institution. It is just beginning and holds great promise.

TITLE: Vegetable Nursery Enterprise

Personal Information
Name of the farmer/ entrepreneur: Sh. Satywan S/o Sh. Sahib Singh,
VPO- Dariya Pur Kalan, Bawana, Delhi

Farming Experience/ Experience in enterprise: Farming experience 20 years
Vegetable Nursery Enterprise experience 3years

Professional Information
Enterprise(s):

- Vegetable Nursery Grower
- Vegetable Production
- Basmati Rice Production

Cropping pattern:

- Paddy-Wheat-Vegetables (16ha)
- Rabi Vegetable Nursery Production (2 ha)
- Kharif Vegetable Nursery Production (2 ha)
- Spring-Summer Vegetable Nursery Production (1 ha)

Problem statement (problems faced by the farmer before and while running the enterprise(s):

Problem faced before running the enterprise

- Non availability of good quality vegetable seeds & seedlings
- Pest problem during crop production
- Poor nutrient management

Problem faced while running the enterprise

- Insect & pest problem in vegetable nursery in open field
- Problem of off season vegetable nursery raising

KVK Intervention:

- Provided technical know-how through visits, meetings & skill training programmes.
- Motivating him for starting vegetable nursery
- Introducing him with IARI
- The facility of small poly tunnel and low cost polyhouse were created.

Output: Mr. Satyawan is hard working farmer and he is able to grasp the technologies faster and adopt it. He is actively involved in all day to day working of the farm and marketing. He direct sell his produce in Azadpur Mandi as he got license from Agriculture Produce Marketing Committee (APMC) Azadpur. He is can now identify important insect pest of vegetables he is growing and their management practices. He was also found to actively guide other farmers in adoption of new technologies. With his intervention they have started to grow different vegetable crops in a season in the village and as a result they are realizing better price in the market.

Results/ Impact (economical/ social/ etc.) : Mr. Satyawan incorporated the components in such a way that it enhanced productivity and profitability in relation to the farming system model in consultation with KVK, Ujwa. Satyawan also provides jobs to local people to help him.

Factors contributing to success: The key to his success is his eagerness to learn and understand very soon, hard work & positive attitude. He is a model farmer.
"If more families devote their time farming vegetables on a large scale, they can make income in lakhs annually by growing & marketing their produce in the state," said Satyawan.

Economic return for farm enterprise during 2014-15			
1 Wheat	486000	230000	1: 1.89
2 Paddy	968000	390500	1: 1.67
3 Rabi vegetables	1440000	832000	1: 2.36
4 Kharif vegetables	920000	532500	1: 2.37
5 Rabi vegetable nursery	450000	245000	1: 2.19
6 Kharif veg. nursery	420000	230000	1: 2.21

Future plans :

- To increase area under nursery i.e Hi –tech nursery
- To establish vermicompost unit.
- Setting up of grading, packing & sorting unit for sale of produce

9.B. Give details of innovative methodology/technology developed and used for Transfer of Technology during the year

- Use of herbicide formulation viz. Sulphosulfuron 75 % + Metsulfuron 5% @ 40 g/ha. and Cloidinofop 15% + Metsulfuron 1% @ 400 g/ha. against control of mixed weed flora in wheat (Spray at 35 DAS)
- Use of Cartap Hydrochloride 4G found promising for the management of leaf folder and stem borer in paddy @7.5 kg/acre (Broadcasting on occurrence of pest).
- Use of Fertera found effective on control of stem borer and leaf folder in paddy @ 4 kg /acre (broadcasting at 30 DAT or occurrence of pest)
- Acephate 75WP@ 1.5 g/liter water effectively control of stem borer and leaf folder in paddy.
- Application of Bispyribac Sodium 10% (Nominee Gold) @ 100ml/acre is found effective in controlling post-emergence weeds in paddy.
- Use of DDVP (Dichlorvos) @ 400ml/acre is effective in controlling Brown Plant Hopper in paddy.
- Use of Bufrofenzine @ 330ml/acre is effective in controlling Brown Plant Hopper in paddy
- Production of spring summer season tomato for getting higher rates of produce.
- Adoption of low cost onion storage structures.

- Off season cultivation of bottle gourd and summer squash in low tunnel
- Early cucurbits production by raising seedlings in poly bags under protected structures.
- Use of Propiconazole 20EC found promising for the management of brown spots and sheath blight in paddy @ 200ml/acre (Spray in sept. - oct.).
- Use of Imidachlorpid 17.8EC found effective against leaf curl and white fly in tomato @ 50 ml/acre (Spray at 10 days interval).
- Use of Spinosad 45 EC @ 80 ml/acre is effective in controlling fruit borer in tomato, Brinjal and Okra.
- Use of pheromones traps and a spray of NSKE 5 % @ 5ml /liter water effectively control DBM in cauliflower.
- Use of NSKE 5 % controls DBM in cauliflower
- Seed treatment with Carbendazim 50 WP @ 10gm + 1 g streptocycline for 10 kg seed is effective for control of bakanae disease in paddy.
- Spray of Propiconazole 20EC @ 200ml/acre is found effective for management of rust disease in wheat.
- Two foliar spray of Gibbrelic acid (GA_3) @ 50ppm or Ethrel @ 200ppm at two and four leaf stage is helpful in sex modification of flowers to increase fruit yield in bottlegaurd.
- Use of Karathane found effective for the management of leaf spots, *Cercospora* spots, flower rot, bud rot and fruit rot in cucurbits @ 200 ml/acre (Spray at 10 days interval).
- Use of Profenophos+DDVP (Dichlorvos) found effective against fruit fly of cucurbits @ 250 ml/acre (spray at the 10 days interval).
- Use of Bifenthrin found promising for the management of termite in wheat @ 400 ml/acre with 20 kg sand, and broadcasting.
- Use of Cartap Hydrochloride 50SP found effective against Red pumpkin beetle in cucurbits @ 300gm/acre (Spray at 10 days interval).
- Three foliar spray of Boron 0.3% + Calcium chloride 0.2% + Ferrous ammonium sulphate 0.3% during preblooming stage at 15 days interval prevent flower & fruit drop and fruit cracking & rotting in tomato.
- Use of low cost solar dehydrator was found very effective in drying the horticultural crop especially and dry the product much faster rate as compare to open sun drying.
- Blanching of Bajra flour in hot water for 230 second and drying is found effective in increasing the shelf life of flour up to one month.
- Feeding of mineral mixture @ 40 gm/day/animal reduced the disease incidence in animal and increase milk production.
- Use of steam treated mustard cake in the diet of dairy animal is effective for increasing milk production.
- Adoption of improved sickle for harvesting is gaining

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

S. No.	Crop / Enterprise	ITK Practiced	Purpose of ITK
1.	Vegetable crop	The farmers puts the Cotton bolls on sticks on the boundary of fields and daily at the time of evening the cottons ball has been dipped in phenyl. Due to smell of phenyl the wild animal specially *Neel gai* are not entered in the fields	Protection against wild animal
2.	Cucurbits	Gugle smoke use for control of red pumpkin beetle	For control of red pumpkin beetle
3.	Wheat	Use of fresh neem leaves, matchstick, turmeric rhizome to prevent insect infestation during storage of grains	To control insect infestation in wheat during storage
4.	Animal	Use of Tarpin oil for control of Blot problem	Prevention of Blot

		in Dairy animals	problem in Dairy animal
5.	Animal	Use of butter milk as dewormer in dairy animal	Control of worm infestation in dairy animals
6.	Dairy animals	Use of ghee	Proper exit of placenta
7.	Poultry	Use of tamarind water for treatment of Asitis in poultry birds	Prevention the problem of Asitis
8.	Dairy animal	Feeding of Gur with Mustard oil just after the calving for increasing milk production in dairy animals	Increase milk production
9.	Poultry birds	Bunch of neem leaves	Control of de beaking in birds
10.	Humans	Use of Rabdi a traditional soft drink against prevention of heat stroke	Protection against heat stroke in human beings

9.D. Indicate the specific training need analysis tools/methodology followed for

- **Identification of courses for farmers/farm women**
  Need assessment was made based on PRA reports, observations, field visits, interactions with farmers/farm women in meeting, field days etc. and detailed discussion with VLW's of target villages.
- **Identification of courses for rural youth**
  Identification of training needs of rural youth is identified through PRA, SWOT and interaction with rural youth, village elders and professional 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), Deptt. 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.

9.E. Field activities

i. Number of villages adopted : 05 (Kair, Shikarpur, Tigipur, Ghogha, Samaspur Jagir)

ii. No. of farm families selected : 25 farm family from each village

iii. No. of survey/PRA conducted : Survey conducted in each of above 5 adopted villages

9.F. Activities of Soil and Water Testing Laboratory :

Status of establishment of Lab :

1. Year of establishment :
2. List of equipments purchased with amount :

Sl. No	Name of the Equipment	Qty.	Cost
1	Marida Parikshak Kit	1	75000/-
2			
3			
Total			

3. Details of samples analyzed so far :

Details	No. of Samples	No. of Farmers	No. of Villages	Amount realized
Soil Samples	205	205	12	-

Water Samples	5	4	4	-
Plant Samples	102	106	12	-
Petiole Samples	-	-	-	-
Total				

10. IMPACT

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

S. No.	Problem diagnosed	Control Measures	Cure %
1.	Fruit rot in tomato	Metalaxyle +moncozeb 72MZ) 2gm/L water (Ridomil)	65
2.	Fruit borer in tomato and shoot & fruit borer in brinjal	Spinosad 200ml/ha Indoxcarv 200ml/ha	65
3.	Fruit fly of bottle gourd	• Imidachloroprid 0.5ml/L water • Acetamiprid @ 150gm/ha	70
4.	Thrips in Onion	Imidachloroprid 0.5ml/L water	75
5.	Leaf curl disease in tomato	• Imidachloroprid 0.5 ml/L water	45
6.	Yellow vein mosaic virus in okra	• Imidachloroprid 0.5ml/L water	45
7.	Dampping off disease in Tomato, cauliflower & onion nursery	• Trichoderma viridi 10gm/m^2 • Copperoxychloride @2gm/L water	60
8.	Powderymeldew, Anthroconose disease, of Bottle gourd	• Karathane @ 300ml/ha. Metalaxyle +moncozeb 72MZ) 2gm/L water	65
9.	Stem borer	• Pheromon tap 10/ha • Trichograma japonicum 1lakh/ha • Cartaphydrochloride 4G @ 18.25 kg/ha or Fertera @ 10kg/ha	80
10.	leaf folder in paddy	• Acephate (70WP) 2gram/L water	90
11.	Post-emergence weed control in paddy	• Bispyribac sodium 10% @ 250ml/ha	98
12.	Weed management in wheat crop	• Sulphosulfuron 75% + metsulfuron 5% @ 40 g/ha. • Clodinafop 15% + metsulfuron 1% @ 400 g/ha.	85
13.	Low milk yield in dairy animals	• Mineral mixture 40-50gm/day • Calcium @ 100ml/day	60
14.	Heat problem	• Mineral mixture 40 -50gm/day	30
15.	Endo-parasite in calves	• Albendazole 1.5gm/dose	60
16.	Ecto-parasite in animals	Flumethrin 1% @ 1ml/kg bwt.	85
17.	Dysentery in calves	• Hostacycline powder	80
18.	Bakanae disease in paddy	• Seed treatment Pseudomonas florocence 5gm/kg seed • Seed treatment with Carbendazim@ 2 g/kg seed and uprooting of nursery after irrigation.	65
19.	Brown plant hopper in paddy	• Dichlorvos (DDVP) @ 400 ml/acre • or Bufrofezine@1 lit./ha	70 80

20.	Termite is major insect problem in the area.	• Imidachloroprid 2.5L /ha • Chloropyriphos (20EC) 3.75 L/ha.	85
21.	Panted bug in mustard	• Methyl parathion dust 5% 25kg/ha	45
22.	Stem rot in mustard	• Seed treatment with Carbendazim@ 2 g/kg seed.	75

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

10.2. Cases of large scale adoption
(Please furnish detailed information for each case)

Case Study on Tenant Farming:

- School dropouts, small & marginal farmers become agripreneurs

Situation:

- Majority of farmers in Delhi are small & marginal farmers.
- Majority of school dropouts in rural Delhi perform trivial jobs like security guards, peon, labourers etc. in city including long duty hours & long travel.
- Many villagers are well educated and settled in city doing well in service/business & their land remains neglected.

KVK Intervention

- KVK, Delhi motivated the school dropouts, small & marginal farmers for taking land on lease from these absentee farmers for farming.
- Majority of farmers were indifferent to the idea. Very few came forward with KVK handholding they have become agripreneurs.

Name of Farmer	Land Cultivation		Major Crops	Net Income (Rs)
	Own land (ha)	lease land (ha)		
Sh. Satyawan, Dariya Pur Kalan	8	10	Paddy, Wheat, Cole crops, tomato fruit crops, cucurbits, onion, okra & vegetable nursery	2460000/-
Sh. Dayanand, Ghumenhera	4	24	Paddy, Wheat, Cole crops, tomato fruit crops, onion, okra	2767100/-
Sh. Mukesh,Kair	2.4	14	Bajra, Jowar, Mustard, Wheat	706344/-
Sh. Jitender, Ujwa	1	12	Bajra, Jowar, Mustard, Wheat, tomato fruit crops, Cucurbits	1489800/-
Sh. Narender, Ghumenhera	2.4	12	Paddy, Wheat, Cole crops, tomato fruit crops, cucurbits, okra	1516980/-
Sh. Surender, Mitraon	1.0	3	Wheat, Mustard, Cole crops & dairy	642920/-
Sh. Anil Chauhan Bakhtawar Pur	0.8	4.8	Cole crops, tomato fruit crops, cucurbits, onion, okra	752440/-
Sh. Dharam Singh, Palla	0	1.6	Cole crops, tomato fruit crops, cucurbits, onion, okra	292500/-
Arvind Beniwal, Palla	0	4	Strawberry	670000/-

Pradeep, Ghumenhera	2	4	Onion, okra, potato, bottle guard, wheat, paddy	610000/-
Chandroop, Ghumenhera	4	10	Onion, okra, potato, bottle guard, sponge guard, chilli, cauliflower, wheat, paddy	1260000/-
Ravinder, Ghumenhera	2	10	Cauliflower, onion, cucumber, wheat, paddy	1125000/-

- **Popularization of Rotavator in Rice-Wheat growing area –** 60% paddy growers saving Rs. 58.56 lakh by using Rotavator for preparation of land beside saving time and better field preparation.

- **Large scale adoption of high yielding and disease resistant Wheat variety HD 2967 –**About 65% Replacement of wheat variety with HD-2967 has increased the farmers yield by an average of 5.25 qt./ha It has resulted in additional income of Rs. 10.76 Crore in NCT Delhi.

- **Impact of diagnostic and advisory services of KVK –**The control measures suggested by KVK scientists cure the problem from 30% heat problem in animals to 98% Post-emergence weed control in paddy.

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

Name of specific technology/skill transferred	No. of participants	% of adoption	Change in income (Rs.)	
			Before (Rs./Unit)	After (Rs./Unit)
Poultry farming	21	7	Nil	Rs. 49,000/-per batch of 5000 broiler birds
Dairy farming	35	20	Rs. 5,000/- per animal /year	Rs. 13,000/- per animal /year
Vegetable nursery raising	25	25	Unemployed	Rs 1.50 lakh/per annum
Preservation & processing of fruits & vegetables	22	30	Nil (Unemployed)	Rs. 60000 /annum
Value addition in fruits & vegetables	25	10	Nil (Unemployed)	Rs.48,000/- per annum.
Bee keeping	33	8	Rs. 25,000/- per annum	Rs.50000/- per annum
Mushroom Cultivation	20	4	Rs. 60,000/- per annum	Rs. 150000/- per annum
Vermicompost production	20	10	Unemployed	Rs. 1,20000/- per annum

Popularization of technology through Electronic Media

During the year 2015-16, KVK emphasized on popularization of technologies through electronic media i.e. news paper, radio and TV coverage. During the year 61 TV talk were recorded for National Chanel in Krishi Darshan Programme. The 42 programmes on crop production, Mushroom production, IPM, off season vegetables, Bee keeping and management of dairy animals were broadcasted on All India Radio /Gayan Vani. 12 programmes were published in reputed news papers of Delhi edition.

11.0 LINKAGES

11.1 Functional linkage with different organizations

Name of organization	Nature of linkage
National Horticultural Research & Development Foundation (NHRDF)	Parent organization of KVK; a duly recognized 'Scientific & Industrial Research Organization' (SIRO by Deptt. of Scienfic & Industrial Research, GOI, and a National Agency for implementation of National Horticulture Mission of GOI. Provides administrial, financial and technical logistics to KVK
CCS Haryana Agricultural University, Hisar	Technical support
Indian Agricultural Research Institute	Conducting training programmes and demonstrations/ Field visits/Resource persons
State Department of Agriculture	Training of extension functionaries
State Animal Husbandry Department	Collaborative animal camps, training of extension personnel's/ Resource persons
National Horticultural Mission (Min. of Agriculture)	Seminars, Farmers' group visits through NHRDF, a National agency.
Khadi & Village Industries Commission, New Delhi	Field visits/Resource persons
National Bank of Agricultural and Rural Development	Participation in meeting, training
Mother Dairy, Delhi	Participation in meeting/ Field visit
Safal, Delhi	Participation in meeting/ Field visit

KVK- Sikohpur, Jhajjar	Field visits/Resource persons
Integrated Child Development Services	Training of AWW and Supervisors
Community Food Nutrition Extension Unit	Collaborative training and extension activities
Municipal Corporation of Delhi	Collaborative programme for the rural community
Directorate of Wheat Research	Conducting Frontline Demonstration
NCIPM	Joint implementation of Project
Don Bosco, Nazafgarh	Guidance by KVK on income generating activities and SHG strengthening.
The Najafgarh Farmer's Coop. Marketing Society	Technical guidance and farm advisory
Department of Education, Govt. of NCT Delhi	Technical guidance on nutrition education, carrer orientation in agriculture and its allied fields.
Rural Health Training Centre, Min. of Health & Family Welfare, GOI	Orientation of nursing students on KVK activities
Gram Vikas evam Kalayan Association, Delhi	Resource Person & guidance on agri- agro entreprises
NRC Piggery	Protide training
Rao Tula Ram Hospital, Jaffarpur, New Delhi	For conducting on farm trials
Myrado, Nazafgarh, New Delhi	Lecture delivery
St. Stephens Hospital, Delhi	For conducting training
DIET, Ghumenheda, New Delhi	For conducting training

NB The nature of linkage should be indicated in terms of joint diagnostic survey, joint implementation, participation in meeting, contribution received for infrastructural development, conducting training programmes and demonstration or any other

11.2 List special programmes undertaken by the KVK, which have been financed by State Govt./Other Agencies : NA

Name of the scheme	Date/ Month of initiation	Funding agency	Amount (Rs.)
FLD on improved wheat varities	**October, 2015**	**DWR, Karnal**	**-**
	July, 2015	**IARI, New Delhi**	**-**
	July, 2015	**NHB, Gurgaon**	**1.40**

11.3 Details of linkage with ATMA

a) Is ATMA implemented in your district: No

S. No.	Programme	Nature of linkage	Remarks

Coordination activities between KVK and ATMA during 2015-16

S. No.	*Programme*	*Particulars*	*No. of programmes attended by KVK staff*	*No. of programmes Organized by KVK*	*Other remarks (if any)*
01	**Meetings**				
02	**Research projects**				
03	**Training programmes**				
04	**Demonstrations**				
05	**Extension Programmes**				
	Kisan Mela				

S. No.	*Programme*	*Particulars*	*No. of programmes attended by KVK staff*	*No. of programmes Organized by KVK*	*Other remarks (if any)*
	Technology Week				
	Exposure visit				
	Exhibition				
	Soil health camps				
	Animal Health Campaigns				
	FFS				
06	**Publications**				
	Video Films				
	Books				
	Extension Literature				
	Pamphlets				
	Others News coverage				
07	**Other Activities**				

11.4 Give details of programmes implemented under National Horticultural Mission : NA

S. No.	Programme	Nature of linkage	Constraints if any

11.5 Nature of linkage with National Fisheries Development Board

S. No.	Programme	Nature of linkage	Remarks

11.6. Details of linkage with RKVY

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Remarks

12. PERFORMANCE OF INFRASTRUCTURE IN KVK

12.1 Performance of demonstration units (other than instructional farm)

Sl. No.	Demo Unit	Year of estt.	Area	Details of production			Amount (Rs.)		Remarks
				Variety	Produce	Qty.	Cost of inputs	Gross income	
1	Vermicompost unit	2012-13	50 m^2	-	Compost	3321.5 Kg	5100	21472	
2	Mushroom Production Unit	2012-13	20 m^2	White button mushroom	Mushroom	15.400 kg	1200	1232	

12.2 Performance of instructional farm (Crops) including seed production

Name Of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty.	Cost of inputs	Gross income	
Cereals – Wheat	5/12/2015	12/4/2016	2.4	HD 3086	Grain	94.93qtl.	87,000/	63,710	
Wheat	28/11/2015	12/4/2016	0.8	HD 2891	Grain				
Wheat	8/11/2015	12/4/2016	0.4	WH 1105	Grain				
Wheat	8/12/2015	12/4/2016	0.4	HD 2967	Grain				
Wheat	23/12/2015	12/4/2016	2.4	HD 2967	Seed	66.0 qtl (raw)	49920/	*	*To be processed, packed & sale as seed
Rice									
Pulses									
Pigeonpea									
Oilseeds-Mustard	29/10/2015	28/3/2016	2.4	Pusa Vijay	Seed	20.0 qtl (raw)	36,/740	*	*To be processed, packed & sale as seed
Fibers									
Spices & Plantation crops									
Floriculture									
Fruits									
Vegetables –Palak	4/11/2015	*To be harvested	0.4	Pusa All Green	Seed	-	6400/-	-	The crop is at harvesting stage
Others (specify)									

12.3 Performance of production Units (bio-agents / bio pesticides/ bio fertilizers etc.,) NA

Sl. No.	Name of the Product	Qty	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	

12.4 Performance of instructional farm (livestock and fisheries production) NA

Sl.	Name	Details of production	Amount (Rs.)	Remarks

No	of the animal / bird / aquatics	Breed	Type of Produce	Qty.	Cost of inputs	Gross income	

12.5 Utilization of hostel facilities: NA

Accommodation available (No. of beds) =

Months	*No. of trainees stayed*	*Trainee days (days stayed)*	*Reason for short fall (if any)*
April 2015			
May 2015			
June 2015			
July 2015			
August 2015			
September 2015			
October 2015			
November 2015			
December 2015			
January 2016			
February 2016			
March 2016			

12.6. Database management

S. No	*Database target*	*Database created by the KVK*
1	1	3

12.7 Rainwater Harvesting

Training programmes conducted using Rainwater Harvesting Demonstration Unit

Date	Title of the training course	Client (PF/RY/EF)	No. of Courses	No. of Participants including SC/ST			No. of SC/ST Participants		
				Male	Female	Total	Male	Female	Total

Demonstrations conducted using Rainwater Harvesting Demonstration Unit

Date	Title of the Demonstration	Client (PF/RY/EF)	No. of Demos.	No. of Participants including SC/ST			No. of SC/ST Participants		
				Male	Female	Total	Male	Female	Total

Seed produced using Rainwater Harvesting Demonstration Unit

Name of the crop	Quantity of seed produced (q)

Plant materials produced using Rainwater Harvesting Demonstration Unit

Name of the crop	Number of plant materials produced

Other activities organized using Rainwater Harvesting Demonstration Unit

Activity	No. of visitors
Visit of farmers	
Visit of officials	

13. FINANCIAL PERFORMANCE

13.1 Details of KVK Bank accounts

Bank account	Name of the bank	Location	Account Number
With Host Institute	-	-	-
With KVK	Bank of Maharashtra	Janakpuri, New Delhi	20027446105
	Bank of Baroda	Ujwa, New Delhi	21440100003810
	Bank of Baroda	Ujwa, New Delhi	21440100004152

13.2 Utilization of KVK funds during the year 2015-16 (up to March 2016)

S. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	**Pay & Allowances**	99.85	99.81	99.35
2	**Traveling allowances**	0.80	0.80	0.70
3	**Contingencies**	**15.00**	**15.00**	**15.00**
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)			
B	POL, repair of vehicles, tractor and equipments			
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)			
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)			
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)			
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)			
G	Training of extension functionaries			
H	Maintenance of buildings			
I	Establishment of Soil, Plant & Water Testing Laboratory			
J	Library			
TOTAL (A)		**115.65**	**115.61**	**115.05**
B. Non-Recurring Contingencies				
1	**Works**			
2	**Equipments including SWTL & Furniture**	4.75	4.75	4.75
3	**Vehicle** (Four wheeler/Two wheeler, please specify)			
4	**Library** (Purchase of assets like books & journals)			
TOTAL (B)		**4.75**	**4.75**	**4.75**
C. REVOLVING FUND				
GRAND TOTAL (A+B+C)		**120.40**	**120.36**	**119.80**

13.3 Status of revolving fund (Rs. in lakhs) for the last four years

Year	Opening balance as on 1st April	Income during the year	Expenditure during the year	Net balance in hand as on 1st April of each year
April 2012 to March 2013	43.91	13.59	3.44	54.06
April 2013 to March 2014	54.06	7.68	2.46	59.28
April 2014 to March 2015	59.28	10.67	5.56	64.39
April 2015 to March 2016	64.39	9.40	4.30	69.49

14. Details of HRD activities attended by KVK staff during 2015-16

Name of the staff	*Designation*	*Title of the training programme*	*Institute where attended*	*Date*

15. Please include any other important and relevant information which has not been reflected above (write in detail).

Annexure

District Profile - I

Include the details of

1. General census

•	Total Population	1,67,53,235
•	Male	89,76,410
•	Female	77,76,825
•	Literacy Rate	86.34%
•	Sex Ratio	866
•	Total Geographical Area	1, 47, 488 Ha (1, 475 sq.kms)
•	No. of villages	191
•	Gross Cropped area	42084 ha

2. Agricultural and allied census

Area, Production and average yield in kg/ha of major crops in the district (2011-12)

S. N.	Name of Crops	Area (Ha)	Production (MT)	Productivity (Qtl/ha)
1.	I. Paddy	6068	296520	43.22
	II. Wheat	19450	848020	43.60
	III. Barley	65	1830	28.28
	IV. Bajra	1519	38150	18.78
	V. Maize	37	8280	19.50
	VI. Jowar	3319	300820	9.66
	VII. Gram	44	530	14.77
	VIII. Potato	689	146520	164.48
	IX. Oilseed	950	*	*
	X. S. Cane	3	2260	752.35
	Total	**32144**	**1642930**	**1094.64**
2.	Vegetable (Gross area)	13280	145900	*
3.	Flowers (Gross area)	5500	104370	*

Source: Development Department, Govt. of NCT Delhi; * Data for not available with NCT Delhi

3. Agro-climatic zones

S. No	Agro-climatic Zone	Characteristics
1	Trans- Gangatic Plains region (Zone VI)	Semi-Arid, Low rainfall, high temperature during summer (up to 48 degree C) Very low temperature during winter (up to 2 degree C), frost occur once or twice in the season.

4. Agro-ecosystems

S. No	Agro ecological situation	Characteristics
1	Agro-eco situation-9 Agro-ecological region -4, Agro-ecological sub region -4.1	Alluvial derived soil comprise the northern Indo-Gangatic plains

Source: NBSS & LUP, Regional station, IARI, New Delhi

5. Major and micro-farming systems

S. No	Farming system/enterprise
1.	Agriculture + Animal Husbandry
2.	Agriculture + beekeeping
3.	Agriculture + Value addition in fruits and vegetable
4.	Agriculture + Mushroom cultivation

6. Major production systems like rice based (rice-rice, rice-green gram, etc.), cotton based, etc.

S.No.	**Production based**	**Crop based**
1	Wheat/mustard based	Paddy - Wheat
		Fodder Sorghum/ Fodder Maize - Wheat
		Fallow - Mustard
		Moong - Wheat
		Arhar - Wheat
2	Vegetable based	Vegetable – Vegetable - Wheat
		Vegetable - Vegetable
		Paddy-Vegetable
		Vegetables - Wheat

7. Major agriculture and allied enterprises

- Cereal production
- Oilseed production
- Vegetable production
- Flower production
- Seed & plant material production
- Mushroom production
- Dairy
- Beekeeping
- Poultry
- Value addition of fruits and vegetables.

Agro-ecosystem Analysis of the focus/target area - II

Include

1. Names of villages, focus area, target area etc.

   Shikar Pur. Kair, Tigipur, Ghogha, Samaspur Jagir

   Focus Area: Agriculture enterprise and Animal Husbandry based enterprises.
   Target Area: Periurban Horticulture

2. Survey methods used (survey by questionnaire, PRA, RRA, etc.) : PRA

3. Various techniques used and brief documentation of process involved in applying the techniques used like release transect, resource map, etc.

   KVK has selected 5 villages in NCT Delhi. A structured bench mark survey was conducted to make proper assessment of the existing situation. This includes the assessment of the resource position of the selected villages and the farm families, information on different production systems with technology adoption, resource availability, farming situations, socio-economic status, farmers needs, market facilities, infra structure facilities etc. The data collected with the use of different PRA tools like transect map, chapatti diagram, time analysis survey, problem cause diagram etc. The data collected was supplemented with secondary data collected from village record maintained by the Patwari in block development office and agriculture and allied departments of state Government and statistical abstract.

4. Analysis and conclusions

   The problem cause analysis of the selected villages brought out several problems which are being tackled through appropriate interventions by KVK scientists. Suitable scientific interventions were selected for tackling the important problems during 2011-12 in close coordination with local research institutes and line departments.

5. List of location specific problems and brief description of frequency and extent/ intensity/severity of each problem

problem: The frequency and intensity of the location specific problems are scored on 5 – point scale.

Problem	Frequency	Intensity
1. Weed problem		
a)Fallow land	000	00000
b)Improper crop rotation	00	0000
c)Lack of awareness on weedicide application	000	0000
2. Poor soil health		
a)Imbalance use of fertilizer	00000	00000
b)Brackish water	000	0000
c)Minimum use of FYM	000	0000
3. Low adoptability of seed treatment		
a)Lack of knowledge	0000	0000
b)Unavailability of treated seed	000	000
c)Unavailability of good quality fungicides	000	000
4. Low yield of wheat		
a)Depleting ground water level	0000	0000
b)Brackish water	000	000

c) Heavy weed incidence like *Phalris minor*, broad leaf	0000	0000
5. Low yield of Mustard		
a) Heavy insect attack aphid	0000	0000
b) Due to frost in winter prohibits pod formation	0000	0000
c) Heavy termite attack	00	000
6. Heavy incidence of disease & pests in vegetables		
a) Heavy incidence of damping off disease at nursery stage	0000	0000
b) Incidence of red beetle, Downey mildew & fruit fly in bottle gourd	000	000
c) Problem of yellow mosaic virus	000	000
d) Fruit fly, flower & fruit drop in tomato	0000	0000
e) High cost of plant protection	0000	0000
7. Heavy post harvest losses		
a) Lack of awareness regarding correct preservation techniques for horticultural crops	0000	0000
b) Lack of training facility	000	000
c) Low rate of literacy among the farm women	00	00
8. Low use of nutrients in vegetable crops		
a) Lack of awareness on INM	00000	00000
b) Unavailability of good quality nutrients	0000	0000
9. Heavy incidence of disease & pests in Basmati Paddy		
a) Low adoptability of seed treatment	000	0000
b) Heavy incidence of blast & sheath blight disease	0000	0000
c) Heavy incidence of stem borer & leaf folder insect attack	0000	0000
Animal production system:		
9. Low productivity.		
a) Adverse ambient conditions	000	000
b) Poor Feeding	0000	0000
c) Cleanness	00	00
d) Disease	0000	0000
e) Milking Method	000	000
10. Endo-ecto parasite.		
a) Climate	000	000
b) Dirtiness	000	000
11. Imbalance use of nutrients.		
a) Lack of knowledge	0000	0000
b) Cost	00	00
c) Application & quality of nutrients	000	000
12. Attack of disease like HS, BQ metabolic disease like Bloat, Ketosis, milk fever.		
a) Climatic factor	00	00
b) No use of vaccination	0000	0000
c) Worm infestation	0000	0000
d) Lack of nutrients	000	000
e) Under or overfeeding	000	000
13. Irregular and delayed conception in dairy animals.		
a) No use of mineral mixture	0000	0000
b) Imbalance feeding	000	000
c) Pedigree record	0000	0000

6. Matrix ranking of problems: The matrix rankings of problems are scored on 5-point scale.

S. No.	Problem	Villages				
		Kair	**Shikarpur**	**Tigipur**	**Ghogha**	**Samaspur jagir**
1.	Salinity of soil and water.	+++++	++	++	++	+
2.	Low soil fertility & health	++++	+++	++	+++	++++

3.	Low yield of wheat	++++	++++	++++	+++	-
4.	Low yield of Mustard.	++++	++	++	++	-
5.	Poor adaptability of seed treatment.	+++++	++++	+++	++++	++++
6.	Non availability of quality seeds.	+++++	+++++	+++++	+++++	+++++
7.	Heavy weed infestation.	++++	+++++	++++	++++	+++++
8.	Disease & pest infestation in vegetables	++	+++++	+++++	+++	+++++
9.	Heavy disease incidence in Basmati rice crop.	-	++++	+++++	++++	-
10.	Low productivity in dairy animals	++++	++++	++++	++++	+++
11.	Imbalance use of nutrients.	++++	+++++	++++	+++++	+++
12.	Poor adaptability of INM.	++++	+++	++++	+++++	+++
13.	Post harvest losses in cereals and vegetables crops.	++++	+++++	+++	+++	++++
14.	Wide spread micro-nutrient deficiency among rural youth & rural women	++++	++	+++	+++	+++
15.	Endo-ecto parasites in animals.	+++	++++	++++	+++++	++++
16.	Drudgery in fodder harvesting.	+++++	++++	++++	++++	+++++
17.	Marketing.	++++	++++	++++	++++	++++

7. List of location specific thrust areas:

- Management of brackish water for use in irrigation.
- Integrated Disease and insect management in cereals and vegetable crops
- Weed management in cereals and vegetables
- Production of off season vegetable crops.
- Soil fertility management.
- INM in vegetables like bottlegourd, tomato & cauliflower.
- Feed management in dairy animals
- Use of women friendly tools to reduce drudgery
- Value addition in fruits and vegetables
- Techniques for minimization of storage loss

8. List of location specific technology needs for OFT and FLD.

- Improved variety for Mustard.
- Improved variety for Wheat.
- INM in cereal and vegetable crops
- IPM in cereal and vegetable crops
- Feed management in dairy animals.
- Location specific drudgery in harvesting & storage
- Post harvest management of horticultural crops

9. Matrix ranking of technology: The matrix rankings of technologies are scored on 5- point scale.

S. no.	Problem	Villages				
		Kair	**Shikarpur**	**Tigipur**	**Ghogha**	**Samaspur jagir**
1.	Salinity of soil and water	+++++	++	++	++	+
2.	Improved seed variety	++++	+++	+++	+++	+++
3.	Integrated nutrient management in vegetable.	-	++++	+++	++++	+++
4.	IPM in Paddy	-	++++	+++	+++	-
5.	Feed Management	++++	+++	++++	++++	+++
6.	Value addition	+++++	++++	++++	++++	+++++
7.	Weed Management	++++	+++	+++	+++	++
8.	Soil fertility	+++++	++++	+++	+++	++

9.	Seed treatment	+++++	++++	+++	++++	++++
10.	pH losses in cereals & vegetable crops	++++	++++	+++	+++	++++
11.	Disease Management	++++	+++	+++	+++	+++

10. List of location specific training needs:

- Management of brackish water and saline soil.
- Integrated pest management for the crops growing in the area.
- Production of quality seeds.
- Cultivation of off season vegetable crop.
- Market base crop cultivation.
- Round the year fodder availability for dairy animals.
- Drudgery reduction techniques
- Value addition of horticultural crops.
- Reproduction management in dairy animals.
- Technologies for increase milk yield.

Technology Inventory and Activity Chart - III

Technology Inventory and Activity Chart

Include

1. **Name of research institutes, research stations, regional centers of NARS (SAU and ICAR) and other public and private bodies having relevance to location specific technology needs:**

- IARI
- CCS HAU, Hisar
- NDRI
- NCIPM
- CIAE
- CIAH
- GBPUA & T
- IIVR
- DWR
- NHRDF
- MGICCC
- CSSRI

Sl. No	Technology	Crop/enterprise	Year of release or recommendation of technology	Source of technology	Reference/citation
1.	Calcium supplementation for milk production	Dairy	2005	NDRI, Karanal	Dairy farming: A technology bulletin modern dairy farming practices.
2.	Use of growth promoter in poultry for increasing	Poultry	1999	CARI, Bareilly	Poultry Nutrition Rajvir Singh

	weight gain				
3.	Breed evaluation of Vanraja	Poultry	1995	CPDO,Chandigarh	Poultry production B.Panda
4.	Deworming	Dairy animals	2000	Veterinary Collage, Udgir, Latur, (MS)	Handbook of veterinary clinicians A.U. Bhikane & S.B. kawitkar
5.	Mineral mixture supplementation for milk production	Dairy	2005	NDRI, Karanal	Dairy farming: A technology bulletin modern dairy farming practices.
6.	Response of wettable sulphar	Onion	**1993 and 1999**	NHRDF	NHRDF bulletin Onion production in India published in 1993 and reprinted in 1999
7.	Weed management	Onion	**1993 and 1999**	NHRDF	NHRDF bulletin Onion production in India published in 1993 and reprinted in 1999
8.	Varietal evaluation	Cauliflower, Carrot	2002,2009	IARI, Pusa	Div. of Vegetable, IARI,Pusa
9.	Preparation of bajra biscuit	Post harvest technology of Pearl millet	2003	CCSHAU, Hisar	NATP project on processing of pearl millet for value addition & development of health food. Dr. S. Sehgal, Dr. Asha Kawtra, Deptt of Food & Nut., CoHS
10	Drudgery & cost reduction by the use of wheel hoe	Cauliflower	2010	IARI, New Delhi	Uchh uttpadan hetu unnat krishi prodhikiyan, IARI, New Delhi
11	Use of evaporative cooled vegetable vending to reduce post harvest losses	Vegetables	2014	IARI, New Delhi	IARI Annual Report 2014-15, New Delhi
12	Improved variety WH 1105	Wheat	2012	HAU, Hisar	HAU, Hisar
13	Improved variety DBW 88	Wheat	2013	DWR	Directorate of wheat research, Karnal
14	Improved variety HD 3086	Wheat	2013	IARI	Div. of genetics & plant breeding, IARI, Pusa
15	Improved variety (HD-2967)	Wheat	2011	IARI	Div. of genetics & plant breeding, IARI, Pusa

16	Improved variety HD 2851	Wheat	2005	IARI	Div. of genetics & plant breeding, IARI, Pusa
17	Improved variety HD-2894	Wheat	2008	IARI	Div. of genetics & plant breeding, IARI, Pusa
18	Integrated disease management	Paddy	2011	IARI	Div. of Soil Sc. & Agril. Chem., IARI, Pusa
19	Improved variety CS 56	Mustard	2008	CSSRI	CSSRI, bulletin
20	Improved variety Pusa Vijay	Mustard	2008	IARI	Div. of genetics & plant breeding, IARI, Pusa
21	Improved variety Pusa 1121	Paddy	2003	IARI	Div. of genetics & plant breeding, IARI, Pusa
22	Improved variety Pusa 1509	Paddy	2013	IARI	Div. of genetics & plant breeding, IARI, Pusa
23	Integrated pest management	Cauliflower	2010	NCIPM New Delhi	Gobhi ki fashal ma samakit jeev parbhandan
24	Integrated pest management	Paddy	2014	NCIPM New Delhi	Integrated pest management of paddy
25	Integrated disease management	Mustard	2012	NCIPM New Delhi	-
26	Management of Bakanae disease (*Fusarium monilifome*) in Paddy	Paddy	2011-12	CCSU Hisar	Package & Practice
27	Management of Rust (*Puccinia striiformis*.) in wheat (*Triticum aestivum*).	Wheat	2010	IARI	Plant Pathology
28	Management of damping off disease in tomato nursery	Tomato	2014	NCIPM New Delhi	Tamatar ki fashal ma samakit jeev parbhandan

PS * an example for guidance only

1. Activity Chart

Crop/Animal/Enterprise	Problem	Cause	Solution	Activity	Reference of Technology
Buffaloes & Poultry	Low milk production of buffaloes & slow weight gain in poultry	• Imbalance feeding • No use of Calcium • No Use of growth promotar • Lack of Awareness of new technologies	• Balanced feeding • Supplementation of Calcium • Use of growth promoter in poultry.	• OFT on Supplementation ion broiler poultry • FLD on supplementation of calcium in cows. • FLD on breed evaluation of poultry • OFT on Deworming of buffaloes • Trainings on preparation of balanced ration, Feeding management in buffaloes, metabolic disease of dairy animals, ectoparasite control in dairy animals & vaccination in animals. • Kisan Gosthi • Method Demonstration. • Film Show • Popular articles	Sl. No. 2 of technology inventory Sl. No. 1 of technology Inventory Sl. No. 3 of technology inventory Sl. No. 4 of technology Inventory Sl. No. 5 of technology Inventory
Onion	Nutrient deficiency, Low yield of onion Weed infestation, Low yield of onion	• No use of wettable sulphur as foliar spray ▪ No judicious use of chemical s for weed control	1.Application of wettable sulphur as foliar spray 2.weed management	1.OFT on Response of wettable sulphur on increasing yield in Rabi onion (*Allium cepa*) 2. OFT on To assess the efficacy of oxyfluorfen 23.5%EC and Quizalofop Ethyl 5% EC weedicide as early post emergence	Sl. No.06 of Technology Inventory Sl. No.07 of Technology Inventory

				in rabi onion • . Extension littérature distribution	
Cauliflower, Carrot	Low yield Cauliflower, Carrot Heavy weed infestation	• Low productivity of old variety • Non availability of HYV.	Popularization of HYV of Cauliflower, Carrot Popularization of hand wheel hoe for weeding in cauliflower	• FLD on Varietal performance of Cauliflower, • FLD on use of wheel hoe in cauliflower Carrot • Training on Off season Vegetable production. • Extension literature distribution	Sr. No. 08 of technology Inventory Sr. No. 10 of technology Inventory Sr. No. 08 of technology Inventory
Bajra	Poor consumption of bajra	• Lack of knowledge regarding improved processing techniques • Lack of knowledge on nutritional value of local crops	1. Preparation of different products of bajra	2. OFT on acceptability of bajra biscuit in different ratio 3.Method demonstration on improved processing technique 4.Extension literature distribution	
Paddy	Prevailing low yield due to khara disease	• No judious of zinc sulphat	Use of zinc sulphat resist khara disease	Use of zinc sulphat to resist khara disease in paddy crop	Sr. No. 18 of technology Inventory

1. Details of each of the technology under Assessment, Refinement and demonstration include

a.Detailed account on varietal/breed characters for each of the variety/breed selected for FLD and OFT

Sr. No.	Crop	Character
1.	Wheat WH- 1105	• Timely sowing • High yielding • Resistance to yellow & brown rust
2.	Wheat DBW -88	• Disease resistance • Timely sowing • High yielding
3.	Wheat HD-3086	• Resistance leaf & strip rust • Timely sowing • High yielding
4.	Wheat HD-2967	• Timely sowing • Lodging resistant due to hard stem. • High yielding

		• Disease resistance
5.	Wheat HD-2851	• Recommended for NCR Delhi • Timely sowing • Resist to rust
6.	Wheat HD-2894	• Timely sowing • Resistance leaf rust
7.	Mustard (CS 56)	• Recommended for saline water & soil • High yielding
8.	Mustard (Pusa Vijay)	• Recommended for NCR Delhi • High yielding • Heat tolrent
9.	Paddy (Pusa 1121)	• Recommended for NCR Delhi • High yielding
10.	Paddy (Pusa 1509)	• Recommended for NCR Delhi • High yielding • Early maturity

b. Details of technologies that may include formulation, quantity, time, methods of application of nutrients, pesticides, fungicides etc. for technologies selected under FLD and OFT's

S. No.	Technology	Detail of Technology			
		Var./Chemical	Conc.	Dose	Method of application
Front Line Demonstration					
1.	Calcium supplementation	Osteovet	-	50ml /day for lactating animals	4-6 months for lactating animals
2.	Breed Evaluation of Back yard poultry	Vanraja	-	-	-
3.	HYV of mustard	CS 56	-	5kg/ha	Line sowing
4.	HYV of mustard	Pusa Vijay	-	5kg/ha	Line sowing
5.	HYV of paddy	Pusa 1121	-	12.5kg/ha	Line Transplanting
6.	HYV of Paddy	Pusa 1509	-	12.5kg/ha	Line Transplanting
7.	Improved variety of Wheat	WH- 1105	-	100kg/ha	Line sowing
8.	Improved variety of Wheat	DBW -88	-	100kg/ha	Line sowing
9.	Improved variety of Wheat	HD-3086	-	100kg/ha	Line sowing
10.	Improved variety of Wheat	HD-2967	-	100kg/ha	Line sowing
11.	Improved variety of Wheat	HD-2851	-	100kg/ha	Line sowing
12.	Improved variety of Wheat	HD-2894	-	100kg/ha	Line sowing

13.	IPM in Cauliflower	Trichoderma *Viride* Neem pesticide Pheromone traps+Lure (DBM) SNPV	- 1500ppm - 100 LE	4g/kg seed +2.5kg/ha 2.5L/ha 10 traps/ha 250ml/ha	Seed treatment+ soil application with FYM Apply immediately after insect appearance Placed at insect appearance
On Farm Trial					
14.	Seed treatment in paddy	Carbandazim	50%WP	2g/kg seed	Mixed with seed before sowing
15.	Disease management of Bakane disease of paddy	Carbendazim Thiram	50% WP 75% WP	1g/kg seed 2.5g/kg seed	Treatment of seed before sowing
16.	Management of stem rot of mustard	Trichoderma *Harzinium* Carbendazim	- 50% WP	5g/kg seed Soil treatment – 9.4kg/ha 2g/kg seed	Treatment of seed & sowing before sowing Treatment of seed before sowing
17.	Management of rust of wheat	Diathene M-45 Propaconazole	45% WP 20%EC	2 g/liter water 1 ml/liter water	Foliar spray after disease appearance

c. Details of location/area specificity of recommended technology viz., for each of the variety/breed/technology selected for FLD and OFT

S.No.	Technology	Variety	Recommendation
1.	High yielding Wheat variety	HD-2967	Recommended for North West Plain Zone in timely sown and irrigated condition
2.	HYV of Mustard	CS 56	Recommended for saline soil & water
3.	HYV of Mustard	Pusa Vijay	Recommended heat tolrent & timely sown
4.	HYV of paddy	Pusa 1121	Recommended for NCR Delhi
5.	HYV of paddy	Pusa 1509	Recommended for NCR Delhi & early maturity