## PROFORMA FOR ANNUAL REPORT 2014-15

## 1. GENERAL INFORMATION ABOUT THE KVK

### 1.1. NAME AND ADDRESS OF KVK WITH PHONE, FAX AND E-MAIL

Address	TELEPHONE		E MAIL
KVK HAMIRPUR AT BARA H.P. 177044	OFFICE	FAX	kvkhmr@gmail.com
	01972238130	01972238130	

#### 1.2 . NAME AND ADDRESS OF HOST ORGANIZATION WITH PHONE, FAX AND E-MAIL

Address	TELEPHONE		E MAIL
	OFFICE	FAX	
Chaudhary Sarwan Kumar, Himachal Pradesh Krishi Vishvavidayalaya Palampur, District - Kangra (HP) 176062	01894230465	01894 230511	vc@hillagric.ernet.in

### 1.3. NAME OF THE PROGRAMME COORDINATOR WITH PHONE, MOBILE NO & E-MAIL

NAME	TELEPHONE / CONTACT			
	RESIDENCE MOBILE EMAIL			
DR PARVEEN KR SHARMA		9418585194	parveenkumarsharma11@rediffmail.com	

## **1.4. YEAR OF SANCTION:** DATE - 4<sup>TH</sup> OCTOBER 1988. LETTER NO.- 5-11/89-KVK

# 1.5. Staff Position (as on 31st March 2015)

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	Dr.Parveen K. Sharma	40	Agro forestry Ph.D.	15600-3900 GP-6000	29960	10.4.06	Temporary	Other
2	Subject Matter Specialist	Dr Anjana Thakur	37	Entomology Ph.D.	15600-39100 GP- 6000	28080	10.4.06	Temporary	ST
3	Subject Matter Specialist	Dr Dhanbir Singh	35	Soil Science Ph.D.	15600-39100 GP- 6000	28230	9.10.07	Temporary	SC
4	Subject Matter Specialist	Dr Rakesh Thakur	35	Vety Science Ph.D.	15600-39100 GP- 6000	26970	6.11.07	Temporary	Other
5	Subject Matter	Dr C. L. Chauhan	52	Vegetable Science Ph.D.	15600-39100 GP- 6000	46500	2.2.08	Temporary	Other

	Specialist								
6	Subject Matter Specialist	Dr Kavita Sharma*	46	Home Science Ph.D.	37400-67000 GP -10000	46500	28-8-93	Permanent	Other
7	Subject Matter Specialist	Vacant	-	-	-	-	-	-	-
8	Programme Assistant	Sh Hem Raj Sharma	57	Matric	10300-34800 GP-3600	21200	28.10.05	Permanent	Other
9	Computer Programmer	Smt Rekha Dogra	45	M.Sc. Home Science	10300-34800 GP-7800	34920	16.11.96	Permanent	SC
10	Farm Manager	Sh Dinesh Chand	48	B.Sc. Agriculture	10300-34800 GP-5000	19140		Permanent	Other
11	Accountant / Superintendent	Sh L.C. Karalia	56	B.A.	10300-34800 GP-4800	25900	5.12.13	Permanent	SC
12	Stenographer	Smt Sudha Rani	54	Sen. Sec.	4900-10680 GP-1900	12990	18.5.94	Permanent	Others

13	Driver	Sh Joginder Chand	59	Matric	5910-20200	18800	17.10.89	Permanent	SC
					GP-3000				
14	Driver	Sh Virender Kumar	38	Matric	5910-20200 GP-2400	10590	30.1.08	Temporary	OBC
15	Supporting staff	Prithi Singh	50	Middle	GP 1900	12060	2.04.97	Permanent	Others
16	Supporting staff	Vacant							

# 1.6. Total land with KVK (in ha)

S. No.	Item	Area (ha)
1	Under Buildings	2.25 ha
2.	Under Demonstration Units	2.00 ha
3.	Under Crops	6.00 ha
4.	Orchard/Agro-forestry	1.08 ha
5.	Others (specify) Forest	6.25 ha

# 1.7. Infrastructural Development:

### A) Buildings

		Source of			Stage				
S.	Name of building	funding		Complete			Incomplete		
No.	rame of banding		Completion Date	Plinth area (Sq.m)	Evnenditure (Rc )	Starting Date	Plinth area (Sq.m)	Status of construction	
1.	Administrative Building	ICAR	2000	688	-	-	-	-	
2.	Farmers Hostel	ICAR	Feb,1998	338	-	-	-	-	
3.	Staff Quarters								
	6 No. total	ICAR	March, 2007	401.67	31.20 lakhs	-	-	-	
	6								
4.	Demonstration Units								
	1								

5	Fencing	ICAR	March,	-	1.40 lakhs	-	-	-
			2006					
6	Rain Water harvesting system	ICAR	March,	-	6.11 lakhs	-	-	-
			2007					
7	Threshing floor	ICAR	-	270	2.0 Lakhs	-	-	-
8	Farm godown	ICAR	-	30	2.0 Lakhs	-	-	-

### B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Jeep (Bolero)	2007	4,74,711	1,53,300 km	Need Replacment
HP-22A/4839				
Tractor Massy Fargusson- HP-22/4954	1993	1,91,725	2327 hrs	Need replacement as it is 20 years old and not economical
Motorcycle Bajaj Discover	2010	49,800	12430 km	Good

## C) Equipments & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
Mould board plough	16595.00	25-06-1993	Working
Disk Plough	15955.00	25-06-1993	Working
Trailed Disc harrow	15195.00	25-06-1993	Working
Printer -Dot Matrix Panasonic	16900.00	28-03-2002	Working
Printer –hp Laser Jet	15225.00	07-04-2003	Working
UPS -Pyramid	6950.00	07-04-2003	Non servicable
Scanner hp Scan jet	9600.00	07-04-2003	Working
Color TV- 21 inch	18361.00	25-02-2002	Working
PA-System	17330.00	16-03-2002	Working
VCP- Onida	9990.00	16-03-2002	Working
Over Head projector	7326.00	24-03-2000	Working
Food Processor –Inalsa	5335.00	22-01-2002	Working

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Manual Hindi & English Typewriter			Working
Printer-Fax-Copier-Scanner	9850.00	5-2-2005	Working
Xerox photo copier –Godrej	112000.00	01-03-2002	Working
FAX-Machine	15500.00	06-02-2002	Working
Slide Projector	75000.00	13-06-2002	Not in use
Refrigerator – Kalvinatotr	10000.00	Dec., 2002	Working
Color TV- 17 inch-BPL	5200.00	15-06-2002	Working
Water purifier Aqua guard	6500.00	May 2004	Working
Over Head Projector	8000.00	Jan., 2002	Not in use
Computer	55000.00	04-06-2001	Non serviceable
UPS- PCS	22500.00	04-06-2001	Non serviceable
Printer- Desk Jet	12500.00	04-06-2001	Working
Xerox photo copier –Godrej	112000.00	01-03-2002	Working
ph Meter	14700.00	3-3-2005	Working
Flame Photometer	35000.00	30-3-2005	Working

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Spectrophotometer	155000.00	28-3-2005	Working
Balance portable top pan	28850.00	5-3-2005	Working
Shaker	16150.00	15-3-2005	Working
Willy Grinder	14200.00	15-3-2005	Working
Lab Hot plate – Johnson	1650.00	5-3-2005	Working
Fridge –Samsung	14700.00	24-3-2005	Working
Hot air Oven	24500.00	15-3-2005	Working
Kjeldhal Digestion unit	13775.00	15-3-2005	Working
Mixer Grinder – Inalsa	1995.00	5-2-2005	Working
Gas Connection LPG	2496.00	8-2-2005	Working
Water Distillation –All Quartz	79200.00	3-3-2005	Working
Kjeldhal Digestion unit - PT-430/20	6600.00	15-3-2005	Working
Hot Plate	4130.00	15-3-2005	Working
Analytical Balance	56100.00	28-3-2005	Working
Conductivity meter	11800.00	28-3-2005	Working

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1.8. A). Details SAC meeting\* conducted in the year 2014-15

Date	Name and Designation of Participants	No. of	Salient Recommendations	Action taken
		absentees		
03.07.14	1) Dr N K Pathania DEE, CSKHPKV 2) Dr Keshav PS ZPD, Zone I 3) Sh Pritam Chand Manager, PNB 4) Sh I D Sharma, Project Officer, DRDA Hmr 5) Sh Rajeev Suman, Watershed Devt. 6) Dr Albel Singh Thakur, DD Agriculture, Hmr 7) Sh Harish Kalia PD ATMA Hmr 8) Dr Sunil Chauhan, Div Watershed Devt Officer 9) Sh Baljeet Sandhu, Farmer 10) Smt Pawna Dhiman Member SAC 11) Sh Hukam Singh Bains Member SAC 12) Sh Tara Chand Chaman, Farmer 13) Sh Ram Swaroop Sharma, DO Sericulture 14) Sh H L Chaudhary EO Industries 15) Dr Vidya Sagar Sharma, SMS Hort. 16) Dr Y S Rathore DD Animal Husbandry 17) Sh Suresh Kumar, SH AIR Hmr 18) Sh Surendar Kumar, AIR Hmr 19) Sh Kuldeep Singh, JE IPH 20) Dr KS Verma, Director, IBES Neri 21) Dr Anjana Thakur 22) Dr Chaman Lal 23) Dr Dhanbir Singh	NIL	Problem of Yellow rust in wheat  Crop diversification	Field visits were conducted in collaboration with ATMA and appropriate recommendations were made.  Emphasis on crop diversification was laid through training, FLDs.
		03.07.14  1) Dr N K Pathania DEE, CSKHPKV 2) Dr Keshav PS ZPD, Zone I 3) Sh Pritam Chand Manager, PNB 4) Sh I D Sharma, Project Officer, DRDA Hmr 5) Sh Rajeev Suman, Watershed Devt. 6) Dr Albel Singh Thakur, DD Agriculture, Hmr 7) Sh Harish Kalia PD ATMA Hmr 8) Dr Sunil Chauhan, Div Watershed Devt Officer 9) Sh Baljeet Sandhu, Farmer 10) Smt Pawna Dhiman Member SAC 11) Sh Hukam Singh Bains Member SAC 12) Sh Tara Chand Chaman, Farmer 13) Sh Ram Swaroop Sharma, DO Sericulture 14) Sh H L Chaudhary EO Industries 15) Dr Vidya Sagar Sharma, SMS Hort. 16) Dr Y S Rathore DD Animal Husbandry 17) Sh Suresh Kumar, SH AIR Hmr 18) Sh Surendar Kumar, AIR Hmr 19) Sh Kuldeep Singh, JE IPH 20) Dr KS Verma, Director, IBES Neri 21) Dr Anjana Thakur 22) Dr Chaman Lal	absentees  03.07.14  1) Dr N K Pathania DEE, CSKHPKV 2) Dr Keshav PS ZPD, Zone I 3) Sh Pritam Chand Manager, PNB 4) Sh I D Sharma, Project Officer, DRDA Hmr 5) Sh Rajeev Suman, Watershed Devt. 6) Dr Albel Singh Thakur, DD Agriculture, Hmr 7) Sh Harish Kalia PD ATMA Hmr 8) Dr Sunil Chauhan, Div Watershed Devt Officer 9) Sh Baljeet Sandhu, Farmer 10) Smt Pawna Dhiman Member SAC 11) Sh Hukam Singh Bains Member SAC 12) Sh Tara Chand Chaman, Farmer 13) Sh Ram Swaroop Sharma, DO Sericulture 14) Sh H L Chaudhary EO Industries 15) Dr Vidya Sagar Sharma, SMS Hort. 16) Dr Y S Rathore DD Animal Husbandry 17) Sh Suresh Kumar, SH AIR Hmr 18) Sh Surendar Kumar, AIR Hmr 19) Sh Kuldeep Singh, JE IPH 20) Dr KS Verma, Director, IBES Neri 21) Dr Anjana Thakur 22) Dr Chaman Lal 23) Dr Dhanbir Singh	Dr N K Pathania DEE, CSKHPKV   NIL   Problem of Yellow rust in wheat

	25) Dr PK Sharma 26) Smt Rekha Dogra 27) Sh Dinesh Sharma 28) Sh Hemraj 29) Sh Gian Chand 30) Sh Sanjay Verma	
2.		

<sup>\*</sup>Copy of SAC proceedings along with list of participants is attached

### **2. DETAILS OF DISTRICT (2014-15)**

## 2.1 MAJOR FARMING SYSTEMS/ENTERPRISES (BASED ON THE ANALYSIS MADE BY THE KVK)

S. No	Farming system/enterprise
1	Maize - Wheat
2	Maize-toria-wheat
3	Tomato-Cauliflower
4	Paddy – Wheat
5	Black gram-Wheat
6	Okra-radish-cauliflower

7	Cucurbits- Cole crops

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

S. No	Agro-climatic Zone	Characteristics
1	<b>Zone</b> I - 801-1000 m	High Altitude sandy clay loam
2	<b>Zone</b> II - 651-800 m	Medium Altitude sandy clay loam
3	<b>Zone</b> III - 651-800 m	Medium Altitude gravelly sandy clay loam
4	<b>Zone</b> IV - 400-650m	Low Altitude Sandy loam

## 2.3 Soil type/s

S. No	Soil type	Characteristics	Area in ha
1	Sandy clay loam	Low water holding capacity, Acidic to neutral pH, low to Medium N, P and K	

2		Low water holding capacity due to presence of stones and gravels,	
	loam	Acidic to neutral pH, Medium N, P and K	
3	Sandy loam	Low water holding capacity, Acidic to neutral pH, Medium N, P and	
		K	

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

S. No	CROP	AREA (HA)	PRODUCTION (QTLS)	PRODUCTIVITY (QTLS /HA)
1.	MAIZE	32043	63774.14	19.9
2.	WHEAT	34443	44133.08	12.8
3.	PADDY	2022	3164.31	15.6
4.	PULSES	50	2438	5.5
5.	VEGETABLES	1555	35239	226.6

### 2.5. Weather data

MONTH	RAINFALL (MM)	TEMPERATURE O C		RELATIVE HUMIDITY (%)	
		MAXIMUM	MINIMUM	MAXIMUM	MINIMUM

APRIL	<u>38.25</u>	<u>39.6</u>	7.8	80	5	
MAY	84.5	41.4	10.2	91	15	
JUNE	<u>126</u>	42.1	2.6	92	8	
JULY	<u>261.25</u>	36.2	<u>7.6</u>	96	38	
August	260.6	33.6	23.4	95	47	
SEPTEMBER	<u>57.25</u>	34.8	18.7	95	39	
OCTOBER	<u>0</u>	32.6	12.8	96	44	
November	<u>0</u>	28	7.7	90	16	
DECEMBER	<u>50</u>	<u>25.6</u>	<u>2.6</u>	98	17	
JANUARY	<u>76.75</u>	22.3	4.5	98	32	
FEBRUARY	<u>87.75</u>	26.2	3.8	100	23	
MARCH	<u>151</u>	32.8	8.5	98	16	
TOTAL	1193.3	395.2	110.2	1129	300	
MEAN	119.3	32.9	9.2	94	25	

<sup>2.6.</sup> Production and productivity of livestock, Poultry, Fisheries etc. in the district APR 2014-15

Category	Population	Production	Productivity
Cattle	I		
Crossbred	30385	35960 L/day	6.17 ( L/Ani/D)
Indigenous	3000	2344 L/day	2.08 ( L/Ani/D)
Buffalo	113946	205090 L/day	4.07 ( L/Ani/D)
Sheep			
Crossbred	2000		
Indigenous	11564		0.68 (Kg/Ani/Year)
Goats	30984		
Pigs			
Crossbred	134		
Indigenous			
Rabbits			
Poultry	I	I	1
Hens	4488		

Desi		
Improved		1.84 (Kg/bird)
Ducks		
Turkey and others		

Category	Area	Production	Productivity	
Fish				
Marine				
Inland				
Prawn				
Scampi				
Shrimp				

# 2.7 Details of Operational area / Villages (2014-15)

Sl.No.	Taluk Name of the block		Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
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APR 2014-	Hamirpur	Hamirpur Nadaun Bhoranj Bijhar Sujanpur Tauni Devi	Jahu Kalan, Jhanikhari, Pandwin, Pansai, Beha, Majhali, Behrad	Maize, Wheat, Vegetables, Dairy farming	Small and scattered land holdings.  Knowledge of Integrated Pest Management is low.  The practice of decomposition of farm wastes and animal excreta is unscientific.  Low milk yield in cattle and buffaloes.  Delayed puberty in heifers and infertility in pluriparous cattle.  Scarcity of green fodder during summer months (April-June).  Poor knowledge of protected cultivation.  Obnoxious weeds like	Soil and water conservation and improvement of soil health  Protected cultivation of high value cash crops  Integrated pest and nutrient management in vegetable and cereal crops  Introduction of income generation enterprises viz. mushroom cultivation, Bee keeping, Poultry farming, Floriculture, Post-harvest management & value addition and Dairy for rural youths  Promoting vermi-composting and organic farming  Introduction of fruits, medicinal and aromatic plants in the existing cropping systems  Balanced feeding of animals and introduction of improved fodder varieties
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# 2.8 Priority/thrust areas

Crop/Enterprise	Thrust area
Maize	Integrated crop management
Wheat	Yellow rust management
Black gram	Integrated nutrient management
Vegetable (Okra, Elephant foot yam)	Varietal evaluation
Dairy	Mineral deficiency, Fodder production
Poultry	Strain evaluation

<sup>\*</sup> An example for guidance only

## **3. TECHNICAL ACHIEVEMENTS**

# 3.A. Details of target and achievements of mandatory activities by KVK during 2014-15

OFT (Technology Asses	sment 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
8	7	30	34	9	12	100	112

Training (includi	ng sponsored, vo	cational and other tr Harvesting Unit)		Extensio	n Activities			
		3			4			
	Number of Cours	ses	Numbe	r of Participants	Number	of activities	Number of p	articipants
Clientele	Targets	Achievement	chievement Targets Achievement		Targets	Achieveme nt	Targets	Achieveme nt
Farmers	50	64	1000	1383	250	347	5000	7907
Rural youth	01	01	20	20				
Extn. Functionaries	01	01	20	28				

See	d Production (Qtl.)		Planting material (Nos.)				
	5		6				
Target	Achievement	Target	Achievement				
15	20	40000	51946				
		5 q	7 q				

Livestock, poultry strai	ns and fingerlings (No.)	Bio-products (Kg)				
	7	8				
Target	Achievement	Target	Achievement			
2	4					

#### 3.B. Abstract of interventions undertaken

								Interventi	ons					
No	Thrust area	Crop/ Enterprise	Problem	Title of OFT if any	Title of FLD if any	Numbe r of Trainin g (farmer	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.)	prod	lucts
						s)	(10ums)	personner)	(1101)	(211.)	(140.)		No.	Kg
	Disease management	capsicum	Problem of powdery mildew	Management of powdery under protected cultivation		2								
	Disease management	capsicum	Yield loss due to diseases and nematodes	Management of nematodes and root rots under protected cultivation		2								
	Disease management	Tomato	Problem of Phytophthora blight	Management of Phytophthora blight		3								
	Varietal demonstratio ns	Elephant Foot-Yam	Low yield and high acridity of existing varieties	Assessment of high yielding varieties .		2				3.0				
	Varietal demonstratio ns	Okra	Low yield of existing cultivars	Performance of different varieties		2				0.7				

Varietal demonstratio ns	Poultry	Low production of indigenous strains	Strain evaluation for rural poultry farming		1				
Integrated crop management	maize	Imbalance nutrient use and no use o herbicide		Integrat ed crop manage ment in maize	1		0.60		
Yellow rust in wheat	wheat	Yellow rust		Yellow rust manage ment in wheat	3		5.0		
Crop cultivation in unsown fields	mustard	Monkey menace		Varietal seed demonst ration	-1		0.09		
Varietal demonstratio ns	Gobhi sarson	Low crop yield of exiting varieties		Varietal demonst rations on gobhi saon	1		0.21		

-do-	chickpea	Low crop yield of		Varietal	1			1.0		
		exiting varieties		demonst						
				rations						
				on						
				chickpe						
				a						
varietal	wheat	Non availability of	varietal evaluation		1	-	1	0.48		var
evaluation		varietal seed	in wheat							ieta
										1
										eva
										luat
										ion
Integrated	maize	Imbalance nutrient		Integrat	1		1	0.60		
crop		use and no use o		ed crop						
management		herbicide		manage						
				ment in						
				maize						
T . 1 .:	7' '1 1	D .		T . 1	1			0.00		
Introduction	Zimikand	Damage to		Introduc	1			8.00		
in monkey		traditional crops		tion in						
menace				existing						
areas				croppin						
				g						
				pattern						

Dairy farmnig	Buffalo	Green fodder shortage	Azolla					
Dairy farming	Buffalo + cattle	Negative Energy protein balance	Uromol brick licks					
Dairy farming	Buffalo	Mineral deficiency	Mineral supplem entation i					

## 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	1				2					3
Seed / Plant										

	1			ı		
production						
Weed Management						
Integrated Crop						
Management						
Integrated Nutrient		1				1
Management						
Integrated Farming						
System						
Mushroom						
cultivation						
Drudgery reduction						
Farm machineries						
Value addition						
Integrated Pest			1			1
Management						
Integrated Disease			2			2
Management						
Resource						
conservation						
technology						

Small Scale income						
generating enterprises						
enterprises						
TOTAL	1	1	5			7

<sup>\*</sup> 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										

 $<sup>{\</sup>it *} \qquad {\it Technology that is refined in collaboration with ICAR/SAU Scientists for improving its effectiveness.}$ 

## 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		01						
Nutrition Management								
Disease of Management								
Value Addition								
Production and Management								
Feed and Fodder								
Small Scale income generating enterprises								
TOTAL		01						

# 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				
Disease of Management				
Value Addition				
Production and Management				
Feed and Fodder				
Small Scale income generating enterprises				
TOTAL				

## 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	Black gram	Nutrient management through fertilizer + Bio-fertilizer	3	3	0.12

Thematic areas	Crop	Name of the technology assessed	No. of trials	Number of farmers	Area in ha (Per trail covering all the Technological Options)
Varietal Evaluation	Elephant Foot-Yam	Assessment of high yielding varieties of Elephant Foot-Yam.	3	3	0.12
	Okra	Performance of different varieties of Okra	7	7	0.12
	Wheat	Evaluation of recently released variety.	4	4	0.36
Integrated Pest Management	capsicum	Management of nematodes and root rots protected cultivation	2	2	0.12
Integrated Crop Management					
Integrated Disease Management	capsicum	Management of powdery under protected cultivation	2	2	0.12
	tomato	Management of <i>Phytophthora</i> blight	3	3	0.16

Thematic areas	Crop	Name of the technology assessed	No. of trials	Number of farmers	Area in ha (Per trail covering all the Technological Options)
Small Scale Income Generation Enterprises					
Weed Management					
Resource Conservation Technology					
Farm Machineries					
Integrated Farming System					
Seed / Plant production					
Value addition					

Thematic areas	Crop	Name of the technology assessed	No. of trials	Number of farmers	Area in ha (Per trail covering all the Technological Options)
Drudgery Reduction					
Storage Technique					
Mushroom cultivation					
Total					

## 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					

Thematic areas	Crop	Name of the technology assessed	No. of trials	Number of farmers	Area in ha (Per trail covering all the Technological Options)
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					

Thematic areas	Стор	Name of the technology assessed	No. of trials	Number of farmers	Area in ha (Per trail covering all the Technological Options)
Total					

### 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	Poultry	Strain evaluation for rural poultry farming	5	5
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				
Disease management				
Value addition				
Production and management				
Feed and fodder				
Small scale income generating enterprises				
Total				

#### B. Details of each On Farm Trial to be furnished in the following format

### A. Technology Assessment

Trial 1

1) Title : Management of powdery in capsicum under protected cultivation.

2) Problem diagnose/defined : Problem of powdery mildew

3) Details of technologies selected for assessment

/refinement :

i. Spray of Tebuconazol 25WG @1g/l followed by Bavistin@1g/l

ii. Spray of Bavistin followed by Mancozeb @2.5g/l®

iii. Farmer practice (Bavistin @1g/l)

4) Source of technology : CSK HPKV

5) Production system

thematic area : Plant protection

6) Thematic area : IPM

7) Performance of the

**Technology with** 

performance indicators : Results showed that spray of Tebuconazol 25WG followed by bavistin was most effective in management of powdery mildew in capsicum

8) Final recommendation for

micro level situation : Spray of Tebuconazol 25WG followed by bavistin can be recommended in management of powdery mildew in capsicum under protected cultivation as an alternative to existing recommendation which is also effective.

9) Constraints identified and

feedback for research : nil

10) Process of farmers

participation and

their reaction : Farmers harvested good yield of capsicum by managing powdery mildew problem in polyhouse by adopting the assessed technology.

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

capsicum	irrigated	Problem of powdery mildew	Management of powdery in capsicum under protected cultivation.	2	1. Spray of Tebuconazol 25WG @1g/l followed by bavistin@1g/l	Per cent disease incidence, Yield (q/250 sq.m.)	32.5 (13%	Technology option 1 proved most effective	Farmers recorded least disease incidence and highest yield in T1

		2. Spray of bavistin followed by	30.0	
		mancozeb @2.5g/l®	(19%)	
		3. Farmer practice (Bavistin @1g/l)	26.0	
			(38%)	

<sup>\*</sup> No. of farmers

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
Spray of Tebuconazol 25WG followed by bavistin	32.5	46250	2.32
2. Spray of bavistin followed by mancozeb ®	30.0	40000	2.14
3. Farmer practice (Bavistin @1g/l)	26.0	30000	1.86

#### Trial 2

1.Title : Management of nematodes and root rots in capsicum under

protected cultivation.

2. Problem diagnose/defined : Yield loss due to diseases and nematodes

3. Details of technologies selected for assessment

/refinement

• i. Soil application of 200g/sq.m of enriched formulation of *T. viride1%WP*, (2kg) + neem cake (500kg) followed by spraying of organic formulation of *T. viride1* 5g/l at 30 days intervals and drenching @5g/l at 30 days of regular intervals.

ii. Soil application of Carbofuran 3G @ 15kg/ha  $\ensuremath{\mathbb{R}}$ 

iii. Farmer practice (No treatment)

4. Source of technology: CSK HPKV and IIHR, Bengaluru

5. Production system

thematic area : plant protection

6. Thematic area : IPM

7. Performance of the Technology with

performance indicators : Results showed that technology option 1 consisting of organic amendments was equally effective to chemical treatments in management of nematodes and root rots in capsicum under protected cultivation.

8. Final recommendation for

micro level situation : technology option 1 and 2 are equally effective

9. Constraints identified and

feedback for research : nil

10. Process of farmers

participation and

their reaction : farmers are becoming aware that for the management of root rot and nematode complex integrated approach is necessary.

### 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
capsicum	apsicum irrigated Yield loss due to diseases and		Management of nematodes and root rots	2	T1	Yield (q/250sq.m.)	30.5	Technology option 1 and 2 proved	-
		nematodes	in capsicum under		T2		29.7	almost equally	
			protected cultivation.		Т3		26.5	effective	

<sup>\*</sup> No. of farmers

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
1.	30.5	41250	2.18
2.	29.7	40250	2.18
3.	26.5	33250	1.99

## Trial 3

their reaction the assessed technologies.

1.	Title :	Management of <i>Phytophthora</i> blight in tomato.
2.	Problem diagnose/defined	: Problem of <i>Phytophthora</i> blight
3.	Details of technologies	
	selected for assessment	
	/refinement :	
		i. Spray of Azoxystrobin 23% followed by Mancozeb @0.25%
		ii. Spray of copper-oxychloride followed by Mancozeb @0.25% ®
		iii. Farmer practice (Spray of Mancozeb @0.25%)
4.	Source of technology:	CSK HPKV and CIB
5.	Production system	
	thematic area :	Plant protection
6.	Thematic area :	IPM
7.	Performance of the	
	Technology with	
	performance indicators	: Results showed that T1 and T2 were equally effective in
mana	gement of Phytophthora bligh	t in tomato.
8.	Final recommendation for	
	micro level situation :	Technology option 1 and 2 are equally effective, hence T1 can be
sugge	ested as an alternative to reco	mmended practiceT2.
9.	Constraints identified and	
	feedback for research	: nil
10.	Process of farmers	
	participation and	

: Farmers recorded least incidence of disease and higher yield in

# B). Results of On Farm Trials

p/ orise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment
	2	3	4	5	6	7	8	9
io	irrigated	Problem of Phytophthora blight	Management of Phytophthora blight in tomato	3 T1		Per cent disease incidence, Yield (q/ha)	390q/ha (12%)	Technology option 1 and 2 proved equally effective
	I				T2		380q/ha (17%)	
	1				Т3		320q/ha	
	1						(31%)	

# \* No. of farmers

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
1.	390	210000	2.17
2.	380	200000	2.11
3.	320	140000	1.78

### Trial 4

1) Title : Strain evaluation for rural poultry farming

2) Problem diagnose/defined : Low production of indigenous strains

3) Details of technologies

selected for assessment:

1. Chabro

2. Palam Chicken

3. Local

4 Source of technology : CPDO North Zone and HPKV

5. Production system

thematic area : Rainfed cereal based system )

6. Thematic area : Strain evaluation

7. Performance of the Technology with

performance indicators : Results showed that strain Palam Chicken started laying at 7m 1wk age with body wt of 1.6 kg while chabro started laying at 7m 3wk of age with body wt of 1.8 kg. the local birds lay at 8 m of age with body wt of 1.5 kg. Egg production is being recorded to till date.

8. Final recommendation for

micro level situation : Palam chicken offer good alternate which start laying at earlier age.

9. Constraints identified and

feedback for research : -

10. Process of farmers

participation and

their reaction : Farmers were supplied day old chicks and were guided about their brooding, feeding and management. All the operations were carried by farmers itself and they are stasfied with the alternate poultry strain.

# 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
Poultry	Rainfed	Low productivity of local strains	Strain evaluation	05	Palam chicken Local	Age and body wt at first egg  Age and body wt at first egg  Age and body wt at first egg	7m 3wk and 1.8 kg, 7m 1wk and 1.6 kg 8m and 1.5 kg	Palam chicken start laying at earlier age	Farmers satisfied with new strain.

<sup>\*</sup> No. of farmers

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
Chabro	-	-	-
Palam chicken	-	-	-
Local	-	-	-

\*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

#### A. Technology Assessment

#### Trial 5

1. Title : Evaluation of promising cultivars of Okra.

2. Problem diagnose/defined : Low yield in the existing varieties of Okra

3. Details of technologies

selected for assessment

/refinement :  $T_1$  Palam komal

T<sub>2</sub> P 8

T<sub>3</sub> Tulsi (Farmer Practice)

4. Source of technology : CSKHPKV

5. Production system

thematic area : Rainfed

6. Thematic area : High Yielding Varieties.

7. Performance of the

Technology with

performance indicators : Palam komal and Tulsi gave higher yield

8. Final recommendation for

micro level situation : The Variety Palam Komal of Okra gave higher yield as

compared to other variety P8 and yielded 12.5% higher

but gave 2.70% less yield to Tulsi Hybrid.

9. Constraints identified and

feedback for research :The farmers were satisfied with the performance of Palam Komal

and preferred to grow.

10. Process of farmers

participation and

their reaction : Farmers were provided seeds of different varieties of Okra

and other inputs including manures and fertilizers were applied by the farmer himself. All other agronomical operations were also done by the farmer himself.

# 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
Okra	Rainfed	Low yield	Evaluation of promising cultivars of Okra.	07	T1:Palam  Komal  T2: P8  T3: Tulsi	Number of pickings, BC ratio and Fruit size	Fruit Yield	T <sub>1</sub> : 180  T <sub>2</sub> : 160  T <sub>3</sub> : 185	Farmers Preferred Palam komal and due to higher yield and more pickings

<sup>\*</sup> No. of farmers

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
Palam Komal	180	130000	3.6
P8	160	105000	3.2
Tulsi (Farmer Practice)	185	110000	2.9

<sup>\*</sup>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.

<sup>\*\*</sup> Give details of the technology assessed or refined and farmer's practice

#### Trial 6

1) Title : Assessment of high yielding varieties of Elephant Foot-

Yam.

2) Problem diagnose/defined : Low yield and high acridity in the existing varieties of Elephant

Foot-Yam

3) Details of technologies selected for assessment /refinement

T<sub>1</sub> Palam Zimikand 1

T<sub>2</sub> Narender 5

T<sub>3</sub> Narender 9

4) Source of technology: CSKHPKV and NDUAT Faizabad

5) Production system : Rainfed

6) Thematic area : High Yielding Varieties having low acridity.

- 7) Performance of the Technology with performance indicators: Narender 5 and Narender 9 gave higher yield and more acceptable due to low acridity.
- 8) Final recommendation for micro level situation: The Variety Narender 9 of Zimikand gave highest yield as compared to other varieties and yielded 3.26 % and 31.94 % higher over other varieties i.e. Narender 5 and Palam Zimikand 1 respectively.
- 9) Constraints identified and feedback for research : The farmers were satisfied with the performance and low acridity of Narender 9 and preferred to grow Elephant Foot-Yam varieties having low acridity.
- Process of farmers' participation and their reaction : Farmers were provided rhizomes the planting material of different varieties of Elephant Foot-Yam and other inputs including manures and fertilizers were procured by the farmer himself. All other agronomical operations were also done by the farmer himself.

## 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
Elephant Foot- Yam	Rainfed	Low yield and high acridity	Assessment of high yielding varieties of Elephant Foot-Yam.	03	T <sub>1</sub> Palam Zimikand 1 T <sub>2</sub> Narender 5 T <sub>3</sub> Narender 9	Corm Yield, BC ratio and acridity	Corm Yield acridity	T <sub>1</sub> : 360  T <sub>2</sub> : 460  T <sub>3</sub> : 475	Farmers Preferred Narender 9 and Narender 5 due to higher yield and less acridity

## \* No. of farmers

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
Palam Zimikand 1	360	135000	1.9
Narender 5	460	225000	2.6
Narender 9	475	240000	2.8

<sup>\*</sup>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.

<sup>\*\*</sup> Give details of the technology assessed or refined and farmer's practice

#### Trial 7

1. Title : Integrated nutrient management in Black gram

2. Problem diagnose/defined : low crop yield of the crop due to imbalance nutrient application

3. Details of technologies selected for assessment

/refinement :

1.Seed inoculation with bio-fertilizers (PSB + Rhizobium @ 100gm/10kg)+75%NPK ha<sup>-1</sup>.

2.Seed inoculation with bio-fertilizers (PSB + Rhizobium @100gm/10kg)+100%NPK@20:40:20kg ha-1.(RP)

3.Framers Practice(1tFYM ha-1)

4. Source of technology : CSKHPKV Palampur

5. Production system

thematic area : rain-fed pulse-cereal based system

6. Thematic area : nutrient management in Blackgram

7. Performance of the

Technology with

performance indicators : Results of the demonstrations showed that Seed inoculation with bio-fertilizers (PSB + Rhizobium @100gm/10kg)+100%NPK@20:40:20kg ha<sup>-1</sup>recorded highest crop yield of blacgram (740 kg/ha), B:C ratio (1:1.85).

8. Final recommendation for

micro level situation : seed inoculation with bio-fertilzers and application of recommended doses of nutrients should be practiced to

harvest higher crop yield.

9. Constraints identified and

feedback for research : None

participation and

their reaction

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

Blackgram	Rainfed	Imbalance nutrient application	Nutrient management in Blackgram Var. HIM Mash-1	3	Seed inoculation with bio-fertilizers (PSB + Rhizobium @ 100gm/10kg)+75%NPK ha-1.  Seed inoculation with bio-fertilizers (PSB + Rhizobium @100gm/10kg)+100%NPK@20:40:20kg ha-1.(RP)	Seed yield and net returns	Seed yields	Results of the demonstrations showed that Seed inoculation with bio-fertilizers (PSB + Rhizobium @100gm/10kg) +100%NPK@20:40:20kg ha-1 recorded highest crop yield of blacgram (740 kg/ha) B-C ratio	-
					Framers Practice(1tFYM ha <sup>-1</sup> )			(740 kg/ha), B:C ratio (1:1.85).	

<sup>\*</sup> No. of farmers

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
Seed inoculation with bio-fertilizers (PSB + Rhizobium @ 100gm/10kg)+75%NPK ha <sup>-1</sup> .	740	37000	1.85
Seed inoculation with bio-fertilizers (PSB + Rhizobium	618	30900	1.62

APR 2014-15

@100gm/10kg)+100%NPK@20:40:20kg ha <sup>-1</sup> .(RP)			
Framers Practice(1tFYM ha-1)	390	19500	1.30

\*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

### B. Technology Refinement

Trial 1

1. Title : Improved nutrient management for control of reddening in cotton \*\*

2. Problem diagnose/defined : Magnessium deficiency and low productivity

of cotton grown rainfed black soils of central Amaravati district\*\*

3. Details of technologies selected for assessment/refinement:

i. 40 kg N + 30 kg P2O5 - Farmers Practice\*\*

ii. 50:25:25 NPK/ha + 2% Urea spray at flowering stage + 0.2 % magnesium sulphate (one spray) and 2% DAP +0.2% magnesium sulphate at boll formation stage (two spray) – Recommended practice\*\*

iii. 50:25:25 NPK/ha + spraying of soluble fertilizer 19:19:19 NPK @ 1% + 0.2% magnesium sulphate at square formation and flowering stage (two spray) and spray of soluble fertilizer 12:61:00 @ 1% +0.2% magnesium sulphate at boll formations stage (two spray) – Refined Practice\*\*

4. Source of technology : Dr. P.D. K.V Akola\*\*

5. Production system thematic area: Rainfed cotton based system (Cotton – Bengalgram System)

6. Thematic area : Integrated nutrient management\*\*

7. Performance of the Technology

with performance indicators : The refined practice of nutrient management

had less incidence of reddening of leaves (13 per plant), more number of bolls (22) and higher yield (11.75 q/ha) as compared to other treatments of nutrient management.

8. Final recommendation for

micro level situation : Application of 50:25:25 NPK/ha + spraying of soluble fertilizer

19:19:19 NPK @ 1% + 0.2% magnesium sulphate at square formation and flowering stage (two spray) and spray of soluble fertilizer 12:61:00 @ 1% + 0.2% magnesium sulphate at boll formations stage (two spray) may be recommended for control of reddening in cotton on rainfed medium black soils of central Amaravati\*\*

9. Constraints identified and

feedback for research : Mention the specific constraints and feedback

10. Process of farmers participation

and their reaction : Briefly mention the extent, level and process of farmers

participation in planning, execution, monitoring, evaluation of the trial and their reaction towards the performance, efficacy, adoptability etc. of the improved technology refined

### 2). Results of On Farm Trials

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology refined	Parameters	Data on the parameter	Results of refinement	Feedback from the farmer	Justifi cation for refinement
1	2	3	4	5	6	7	8	9	10	11

Cotton	Rainfed	Magnesium deficiency and low productivity	Improved nutrient management for control of reddening in cotton **	5	Days to 50% maturity, no. of bolls/plant, no. of red leaves/plant		

<sup>\*</sup> No. of farmers

Technology Refined	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
12	13	14	15
1. 40 kg N + 30 kg P2O5 - Farmers Practice**			
2. 50:25:25 NPK/ha + 2% Urea spray at flowering stage + 0.2 % magnesium sulphate (one spray) and 2% DAP +0.2% magnesium sulphate at boll formation stage (two spray) – Recommended practice**			
3. 50:25:25 NPK/ha + spraying of soluble fertilizer 19:19:19 NPK @ 1% + 0.2% magnesium sulphate at square formation and flowering stage (two spray) and spray of soluble fertilizer 12:61:00 @ 1% +0.2% magnesium sulphate at boll formations stage (two			

spray) – Refined practice**		

\*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.

<sup>\*\*</sup> Give details of the technology assessed or refined and farmer's practice

# **PART 4 - FRONTLINE DEMONSTRATIONS**

# 4.A. Summary of FLDs implemented during 2014-15

SI.	Category	Farming Situation	Season and	Сгор	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Are	ea (ha)		o. of farme emonstrat		Reasons for shortfall in achievement
			Year						Proposed	Actual	SC/ST	Others	Total	
	Oilseeds	Rain- fed	Rabi 2014- 15	Mustard	KBS-3	-	Demonstrated in unsown monkey menace area.	Demonstration on improved variety of mustard.	1.5	1.6	6	11	17	-
		-do-	Rabi 2014- 15	Gobhi Sarson	ONK-1	-	Low yield of existing varieties.	Varietal Seed demonstration.	2.0	2.0	4	8	12	-
		-do-	Rabi 2014- 15	Gobhi Sarson	GSC-7	-	Low yield of existing varieties.	Varietal Seed demonstration.	1.5	1.5	3	9	12	
	Pulses	Rain- fed	Kharif 2014	Blackgram	Him Mash-	-	Susceptibility to YMV disease in existing variety.	Demonstrations on YMV resistant variety.	8.0	5.0	25	47	72	
		-do-	Rabi 2014- 15	Chickpea	HC-II	-	Low crop yield of existing varieties due to lodging.	Demonstrations on dwarf and high yielding variety of chickpea.	2.0	2.0	14	25	39	-
	Cereals	Rain-fed	Kharif 2014	Maize	Proagro-4640	Yes	Low crop yield due imbalance nutrient management.	Integrated crop management in maize.	1.0	1.0	2	4	6	-

SI.	Category	Farming Situation	Season and	Сгор	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated		ea (ha)	de	o. of farme	on	Reasons for shortfall in achievement
			Year						Proposed	Actual	SC/ST	Others	Total	
		Rain-fed	Kharif 2014	Maize	K-25 gold	yes	-do-	-do-	2.0	2.0	3	7	10	-
		Rain- fed	Rabi 2014- 15	Wheat	HPW-349	-	Low crop yield due to yellow rust disease.	Demonstrations on yellow rust resistant and timely sown variety.	1.5	1.6	2	8	10	-
		-do-	-do-	-do-	HPW-236	-	-do-	-do-	2.0	2.0	3	7	10	-
		-do-	-do-	-do-	VL-907	-	-do-	-do-	1.0	1.0	3	4	7	-
		-do-	-do-	-do-	HS-507	-	-do-	-do-	0.5	0.5	2	2	4	
	Millets													
	Vegetables	rainfed	Kharif 14	Elephant Foot Yam	Narender 5	No	Introduction in monkey menace areas	Demonstration on Zimikand not affected by the monkeys	0.4	0.5	2	9	11	

Sl.	Category	Farming Situation	Season and	Сгор	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Are	ea (ha)		o. of farme emonstrat		Reasons for shortfall in achievement
			Year						Proposed	Actual	SC/ST	Others	Total	
	Flowers													
	Fruit													
	Spices and condiments													
	Commercial													
	Medicinal and aromatic													
	Fodder	Rainfed	2014	Azolla	Azolla	-	Green fodder	Azolla cultivation as	10	10	4	4	10	-

Sl.	Category	Farming Situation	Season and	Сгор	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Are	ea (ha)		o. of farme		Reasons for shortfall in achievement
			Year						Proposed	Actual	SC/ST	Others	Total	
		farming			pinnata		shortage	green fodder						
	Dairy	Rainfed farming	2014- 15	Buffalo	Graded Murrah	-	Mineral deficiency	Mineral supplementation	10	13	4	6	10	-
		Rainfed farming	2014- 15	Buffalo + cattel	Graded Murrah + Sahival/RS cross	-	Negative energy protein balqance	Uromol brick licks	30	40	9	21	30	-
	Poultry	Rainfed farming	2014- 15	Poultry	Broiler	Cob 100	Disease management	Control of Chronic respiratory disease	4	5	2	3	5	-
	Piggery													

Sl.	Category	Farming Situation	Season and	Сгор	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Are	ea (ha)		o. of farme emonstrati		Reasons for shortfall in achievement
			Year						Proposed	Actual	SC/ST	Others	Total	
	Sheep and goat													
	Button mushroom													
	Vermicompost													
	IFS													
	Apiculture													

Sl.	Category	Farming Situation	Season and	Сгор	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Arc	ea (ha)		. of farme monstrati		Reasons for shortfall in achievement
			Year						Proposed	Actual	SC/ST	Others	Total	
	Implements													
	Others (specify)													

# 4.A. 1. Soil fertility status of FLDs plots during 2014-15

Sl. No.	Category	Farming Situation	Season and	Сгор	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated		Status of s		Previous crop grown
			Year						N	P	K	
	Oilseeds	Rain-fed	Rabi 2014-15	Mustard	KBS-3	-	Demonstra ted in unsown monkey menace area.	Demonstration on improved variety of mustard.	18 0to 25 3	8 to 1 5	128- 165	Maize
		-do-	Rabi 2014-15	Gobhi Sarson	ONK-1	-	Low yield of existing varieties.	Varietal Seed demonstration.	19 2to 20 4	1 2 to 1 9	115 to 186	Maize
		-do-	Rabi 2014-15	Gobhi Sarson	GSC-7	-	Low yield of existing varieties.	Varietal Seed demonstration.	16 8to 24 2	1 1 to 2 0	106 to 178	Maize
	Pulses	Rain-fed	Kharif 2014	Blackgram	Him Mash-I	-	Susceptibil ity to YMV disease in existing	Demonstrations on YMV resistant variety.	21 0to	1 0t 0	140 to	Wheat

Sl.	Category	Farming Situation	Season and	Сгор	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated		Status of s (Kg/Acre		Previous crop grown
			Year						N	P	K	
							variety.		2	1 7	147	
		-do-	Rabi 2014-15	Chickpea	HC-II	-	Low crop yield of existing varieties due to lodging.	Demonstrations on dwarf and high yielding variety of chickpea.	15 4to 24 3	1 2t 0 1 9	165 to 191	Maize
	Cereals	Rain-fed	Kharif 2014	Maize	Proagro- 4640	Yes	Low crop yield due imbalance nutrient	Integrated crop management in maize.	23 7to	1 4t o	186 to	Wheat
							management.		8	2 2	227	
		Rain-fed	Kharif 2014	Maize	K-25 gold	yes	-do-	-do-	-do-	-do-	-do-	-do-
		Rain-fed	Rabi 2014-15	Wheat	HPW-349	-	Low crop yield due to yellow	Demonstrations on yellow rust resistant and timely sown	21 0to	1 2t 0	155 to	Maize
				wneat	nrw-349	-	rust disease.	variety.	29 5	1 8	210	Maize
		-do-	-do-	-do-	HPW-236	-	-do-	-do-	-do-	-do-	-do-	-do-

Category	Farming Situation	Season and	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated		Status of s (Kg/Acre		Previous crop grown
		Year						N	P	K	
	-do-	-do-	-do-	VL-907	-	-do-	-do-	-do-	-do-	-do-	-do-
	-do-	-do-	-do-	HS-507	-	-do-	-do-	-do-	-do-	-do-	-do-
Millets											
Vegetables											
Flowers											
Fruit											
	Millets  Vegetables  Flowers	Category Situation  -dodo- Willets  Vegetables  Flowers	Category  Farming Situation  Year  -dododo-  Millets  Vegetables  Flowers	Category Situation Year  -dodododo- Willets  Vegetables  Flowers	Category         Farming Situation         and Year         Crop         Variety/breed           -do-         -do-         -do-         -do-         WL-907           Millets         Millets         -do-         -do-         HS-507           Vegetables	Category         Farming Situation         and Year         Crop         Variety/breed         Hybrid           -do-         -do-         -do-         -do-         -to-         -to-	Category         Farming Situation         and Year         Crop         Variety/breed         Hybrid         Thematic area           -do-         -do-         -do-         VL-907         -         -do-           -do-         -do-         -do-         HS-507         -         -do-           Millets         -<	Category         Farming Situation         and Year         Crop         Variety/breed         Hybrid         Thematic area         Technology Demonstrated	$ \begin{array}{ c c c c c c } \hline Category & Farming \\ Situation & Year & & & & & & & & & & & & & & & & & & &$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Category     Faming Situation     and Year     Crop     Variety/breed     Hybrid breed     Thematic area     Technology Demonstrated     Styles       1-do-10-10-10-10-10-10-10-10-10-10-10-10-10-

SI.	Category	Farming Situation	Season and	Сгор	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated		Status of s		Previous crop grown
140.		Situation	Year						N	P	K	
	Spices and condiments											
	Commercial											
	Medicinal and aromatic											
	Fodder											
	Plantation											

SI.	Category	Farming Situation	Season and	Сгор	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated		Status of so		Previous crop grown
			Year						N	P	K	
	Dairy											
	Poultry											
	Piggery											
	Sheep and goat											
	Button mushroom											

SI.	Category	Farming Situation	Season and	Сгор	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated		Status of s (Kg/Acre		Previous crop grown
			Year						N	P	K	
	V.											
	Vermicompost											
	IFS											
	Apiculture											
	Implements											

Sl.	Category	Farming Situation	Season and	Сгор	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated		tatus of s (Kg/Acre		Previous crop grown
			Year						N	P	K	
	Others (specify)											

### **B. Results of Frontline Demonstrations**

# 4.B.1. Crops

Crop	Name of the technology demonstrated	Variety	Hybri d	Farmin g situatio n	No. of Demo	Are a (ha)	Yield (q/ha)				%	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
								Demo		Chec k	Increas e	Gross Cost	Gross Return	Net Return	** BC R	Gross Cost	Gross Return	Net Return	** BC R
							Н	L	A										
Oilseed s	Demonstration on improved variety of mustard.	KBS-3	-	RF	17	1.6						Re	sult awaite	ed due to o	lelay in	crop harv	esting time		1

	Name of the		Hybri	Farmin g	No. of	Demo Chec		%	*Eco	nomics of (Rs./	demonstra ha)	ıtion	*1	Economics (Rs.//	of check ha)				
Crop	technology demonstrated	Variety	d	situatio n	Demo	(ha)		Demo		Chec k	Increas e	Gross Cost	Gross Return	Net Return	** BC R	Gross Cost	Gross Return	Net Return	** BC R
							Н	L	A										
	Varietal Seed demonstration.	ONK-1	-	-do-	12	2.0													
	Varietal Seed demonstration.	GSC-7	-	-do	12	1.5													
Pulses	Demonstration s on YMV resistant variety.	Blackgra m	-	RF	72	8.0	6.8	4.1	5.2	4.6	13.04	1860	31200	12600	1.6 7	16500	23000	6500	1.39
	Demonstration s on dwarf and high yielding variety of chickpea.	Chickpea	-	RF	39	2.0	7.3	5.4	5.9	5.1	15.6	1650 0	23600	7100	1.43	15600	20400	4800	1.30

	Name of the		Hybri	Farmin g	No. of	Are a		Yield	l (q/ha)		%	*Eco	nomics of (Rs./		ıtion	*	Economics (Rs./I	of check ha)	
Crop	technology demonstrated	Variety	d	situatio n	Demo	(ha)		Demo		Chec k	Increas e	Gross Cost	Gross Return	Net Return	** BC R	Gross Cost	Gross Return	Net Return	BC R
							Н	L	A										
Cereals	Integrated crop management in maize.	Maize(4640)	Hybri d	RF	6	1.0	34. 4	29. 7	31. 8	27.2	16.9	1680 0	31800	15000	1.89	14500	27200	12700	2.19
	-do-	Maize(K-25 gold)	hybrid	RF	10	2.0	33. 1	28.	30. 7	26.1	9.2	1650 0	30700	14200	1.86	14500	26100	11600	1.80
	Demonstrations on yellow rust resistant and timely sown variety.	Wheat (HPW-349)	-	RF	10	1.6						1		Crop still	in farm	er fields	1		<u> </u>
	-do-	-do- (HPW-236)	-	RF	10	2.0													

	Name of the		Hybri	Farmin g	No. of	Demo Cnec			%	*Eco	nomics of (Rs./	demonstra (ha)	ntion	*/	Economics (Rs.//				
Crop	technology demonstrated	Variety	d	situatio n	Demo	(ha)		Demo		Chec k	Increas e	Gross Cost	Gross Return	Net Return	** BC R	Gross Cost	Gross Return	Net Return	** BC R
							Н	L	A										
	-do-	-do- (HPW-907)	-	RF	7	1.0									1				
	-do-	-do- (HS-507)	-	RF	4	0.5													
Millets																			
Vegetables	Demonstration on Zimikand not affected by the monkeys	Narender 5		Rainfed	11	0.5	300	260	275	230	30.43	200000	35000 0	15000	1.75	20000	30000	10000	1.50

_	Name of the		Hybri	Farmin g	No. of	Are a		Yiela	l (q/ha)		%	*Eco.	nomics of (Rs./	demonstra ha)	tion	*	Economics (Rs./I	of check	
Crop	technology demonstrated	Variety	d	situatio n	Demo	(ha)		Demo		Chec k	Increas e	Gross Cost	Gross Return	Net Return	** BC R	Gross Cost	Gross Return	Net Return	** BC R
							Н	L	A										
Flowers																			
Fruit																			
Spices and																			
condiments																			
Commercia 1																			

	Name of the		Hybri	Farmin g	No. of	Are	a Demo Chec Inc			%	*Eco	nomics of (Rs./		tion	*1	Economics (Rs.//	of check		
Crop	technology demonstrated	Variety	d	situatio n	Demo	(ha)		Demo		Chec k	Increas e	Gross Cost	Gross Return	Net Return	** BC R	Gross Cost	Gross Return	Net Return	**  BC R
							Н	L	A										
Medicinal and aromatic																			
Fodder	Azolla cultivation as source of green fodder	Azolla pinnata	-	Rainfed farming	10	0.01		10 q/l	na/week		10		,						

<sup>\*</sup> Economics to be worked out based total cost of production per unit area and not on critical inputs alone.

<sup>\*\*</sup> BCR= GROSS RETURN/GROSS COST ; H - Highest Yield, L - Lowest Yield A - Average Yield APR 2014-15

# 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

Type of	Name of the technology	Breed	No. of	No.		Yield	d L/moni	th	%	*Econor	nics of dem on mont	onstration R hly basis	Rs./unit)			cs of check monthly ba	
livestock	demonstrated		Demo	of Units	Demo	Check if any	Increase	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR		
					Н	L	A										
Dairy	Mineral mixture supplementation		13	26	175	160	167.5	154	8.8	3940	6520	2580	1.65	3900	5990	2090	1.54
	Uromol brick licking		40	160	162	158	160	148	8.1	4000	6400	2400	1.6	3900	5920	2020	1.51

Poultry	Management of Chronic respiratory disease	Broiler	5	5			124	160	36	1.29	128	148	20	1.16
Rabbitry														
Pigerry														
Sheep and goat														
Duckery														

Others (pl.specify)								

<sup>\*</sup> Economics to be worked out based total cost of production per unit area and not on critical inputs alone.

#### 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 relatio	n to technology demonstrated
Parameter with unit	Demo	Check if any
Body weight at 40 d of age	1.9 kg	1.6 Kg
Feed conversion ratoi	1.9	2
Mortality	2%	7%

#### 4. B.3. Fisheries

Type of Breed	Name of the technology	Breed	No. of Demo	Units/ Area	Yield (q/ha)	% Increase	*Economics of demonstration Rs./unit) or (Rs./m2)	*Economics of check  Rs./unit) or (Rs./m2)

<sup>\*\*</sup> BCR= GROSS RETURN/GROSS COST

	demonstrated		(m²)	1	Demo	)	Check if any	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
				Н	L	Α									
Common carps															
Others (pl.specify)															

<sup>\*</sup> Economics to be worked out based total cost of production per unit area and not on critical inputs alone.

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	Parameter with unit Demo Check if any											

#### 4.B.4. Other enterprises

<sup>\*\*</sup> BCR= GROSS RETURN/GROSS COST

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

<sup>\*</sup> Economics to be worked out based total cost of production per unit area and not on critical inputs alone.

H-High L-Low, A-Average

<sup>\*\*</sup> BCR= GROSS RETURN/GROSS COST

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	Parameter with unit Demo Local										

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

Sl.No.	Activity	No. of activities organized	Number of participants	Remarks
1	Field days	2	58	
2	Farmers Training			
3	Media coverage			
4	Training for extension functionaries			
5	Others (Please specify)			

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

#### **ON Campus**

Thematic area	No. of					Participants				
	courses		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	01	7	6	13	5	3	8	13	9	21
Seed production										

Nursery management										
Integrated Crop										
Management										
Fodder production	05	60	41	101	36	26	62	96	67	163
Production of organic										
inputs										
II Horticulture										
a) Vegetable Crops										
Production of low volume	03	20	18	38	12	8	20	32	26	58
and high value crops										
Off-season vegetables	01	16	11	27	9	7	16	27	16	43
Nursery raising	01	11	5	16	5	15	20	16	20	36
Exotic vegetables like										
Broccoli										
Export potential vegetables										
Grading and										
standardization										
Protective cultivation										
(Green Houses, Shade Net										

1	 	T	1	1	1		
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							
ADD 2014 15							

Export potential of					
ornamental plants					
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					
D. I. et al.					
Production and					
Management technology					
Processing and value					
addition					
auuiuoii					

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	01	13	4	17	8	4	12	21	8	29
Integrated Nutrient Management	01	10	4	14	6	20	26	16	24	40
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	02	16	5	21	12	3	15	28	8	36
Poultry Management	02	9	2	11	32	8	40	41	10	51
Piggery Management										
Rabbit Management										
Disease Management										
Feed management										
Production of quality animal products										
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening										

Design and development of										
low/minimum cost diet										
Designing and										
development for high										
nutrient efficiency diet										
Minimization of nutrient										
loss in processing										
Gender mainstreaming										
through SHGs										
Storage loss minimization										
techniques										
Value addition	01	2	10	12	0	7	7	2	17	19
Income generation		02	16	18	01	09	10	03	25	28
activities for empowerment	01									
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	01	21	7	28	5	3	8	26	10	36
Integrated Disease Management										
Bio-control of pests and diseases										

Production of bio control					
agents and bio pesticides					
*****					
VIII Fisheries					
Integrated fish farming					
Carp breeding and					
hatchery management					
Carp fry and fingerling					
rearing					
Composite fish culture					
Hatchery management and					
culture of freshwater					
prawn					
Breeding and culture of					
ornamental fishes					
Portable plastic carp					
hatchery					
Pen culture of fish and					
prawn					
Shrimp farming					

Edible oyster farming					
Pearl culture					
Peari 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	01	9	4	13	2	1	3	11	5	16
Group dynamics										
Formation and										
Management of SHGs										
Mobilization of social										
capital										
Entrepreneurial										
development of										
farmers/youths										
WTO and IPR issues										
XI Agro-forestry										
					L					

Production technologies										
Nursery management										
Integrated Farming Systems										
TOTAL	21	196	133	329	133	114	247	332	245	576
(B) RURAL YOUTH										
Mushroom Production										
Bee-keeping										
Integrated farming										
Seed production										
Production of organic inputs										
Integrated Farming										
Planting material production										
Vermi-culture										
Sericulture										

Protected cultivation of					
vegetable crops					
Commercial fruit					
production					
Repair and maintenance of					
farm machinery and					
implements					
Nursery Management of					
Horticulture crops					
Training and pruning of					
orchards					
77.1					
Value addition					
Production of quality					
animal products					
Dairying					
Sheep and goat rearing					
Sheep and goat rearing					
Quail farming					
Piggery					
Rabbit farming					
					l

Poultry production	01	16	02	18	02	0	02	18	02	20
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	01	16	02	18	02	0	02	18	02	20
(C) Extension Personnel										
Productivity enhancement in field crops										
Integrated Pest Management	01	14	3	17	10	01	11	17	11	28
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										
Low cost and nutrient efficient diet designing										
Production and use of organic inputs										
Gender mainstreaming through SHGs										
TOTAL	01	14	3	17	10	01	11	17	11	28

## A) **OFF Campus**

Thematic area	No. of courses	Participants								
	courses		Others			SC/ST			Grand Total	
		Male	Female	Total	Male	Female	Total	Male	Female	Total
(A) Farmers & Farm Women										
I Crop Production										
Weed Management	01	9	4	13	6	2	8	15	6	21
Resource Conservation Technologies										
Cropping Systems	01	8	3	11	3	6	9	11	9	20
Crop Diversification										
Integrated Farming										
Water management										
Seed production										
Nursery management										
Integrated Crop	01	6	2	8	6	4	10	12	6	18

Management										
Fodder production										
Production of organic inputs										
II Horticulture										
a) Vegetable Crops										
Production of low volume and high value crops	05	45	18	63	19	14	33	64	32	96
Off-season vegetables	01	9	3	12	4	0	4	13	3	16
Nursery raising	04	32	13	45	17	4	21	49	17	66
Exotic vegetables like Broccoli										
Export potential vegetables										
Grading and standardization										
Protective cultivation (Green Houses, Shade Net etc.)	01	18	02	20	14	01	15	32	03	35

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					
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ornamental plants					
D					
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	01	7	5	12	12	7	19	19	12	31
Soil and Water Conservation										
Integrated Nutrient Management	01	6	3	9	4	4	8	10	7	17
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	02	14	11	25	7	4	11	21	18	39
Poultry Management	01	2	1	3	8	4	12	10	5	15
Piggery Management										
Rabbit Management										
Disease Management	01	7	2	9	3	5	8	10	7	17
Feed management	05	28	31	59	14	18	32	42	49	91
Production of quality animal products										
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening										

02	1	10	11	3	28	31	4	38	42
02									
02	7	17	24	3	11	14	10	28	38
02									
06	4	28	32	7	76	83	11	104	115
	1	14	15	0	03	03	01	17	18
01									
		02 02 7 06 4 1	02 02 7 17 06 4 28 1 14	02       02       7       17       24       06       4       28       32       1       14       15	02       02       7       17       24       3       06       4       28       32       7       1       14       15       0	02       02       7       17       24       3       11       14       15       00       1       14       15       10       10       11       12       14       15       10       10       10       10       10       10       11       12       13       14       15       16       16       17       17       18       11       12       12       12       13       14       15       16       17	02       02       7     17       24     3       11     14       06     4       28     32       7     76       83       1     14       15     0       03       03	02       02       7     17       24     3       11     14       15     0       03     03       11       12     14       15     0       10       11       12       14       15       16       17       18       11       11       12       14       15       16       17       18       11       12       12       12       12       12       12       12       12       12       12       12       12       12       12       12       12       12       12       12       13       14       15       16       17       17       18       11       12       12       13       14       15       16       16       17 <td< td=""><td>02       02       7     17       24     3       11     14       10     28       28     32       7     76       83     11       104       1     14       15     0       03     03       01     17</td></td<>	02       02       7     17       24     3       11     14       10     28       28     32       7     76       83     11       104       1     14       15     0       03     03       01     17

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	02	26	14	40	13	6	19	39	20	59
Management	03									
Integrated Disease	02	10	7	17	13	5	18	23	12	35
Management	UZ									
Bio-control of pests and	02	22	5	27	16	3	19	38	8	46
diseases	UZ									

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					<u> </u>	

Edible oyster farming					
Pearl culture					
Peari 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					

	1		1			
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	43	262	193	455	172	205	377	434	401	835
(B) RURAL YOUTH										
Mushroom Production										
Bee-keeping										
Integrated farming										
Seed production										
Production of organic inputs										
Integrated Farming										
Planting material production										
Vermi-culture										
Sericulture										

Protected cultivation of					
vegetable crops					
Commercial fruit					
production					
Repair and maintenance of					
farm machinery and					
implements					
Nursery Management of					
Horticulture crops					
Training and pruning of					
orchards					
Value addition					
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					
(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					
Low cost and nutrient efficient diet designing					
Production and use of organic inputs					
Gender mainstreaming through SHGs					
TOTAL					

## C) Consolidated table (ON and OFF Campus)

Thematic area	No. of courses	S								
	courses		Others			SC/ST			Grand Total	
		Male	Female	Total	Male	Female	Total	Male	Female	Total
(A) Farmers & Farm Women										
I Crop Production										
Weed Management	1	9	4	13	6	2	8	15	6	21
Resource Conservation Technologies										
Cropping Systems	01	8	3	11	3	6	9	11	9	20
Crop Diversification										
Integrated Farming										
Water management	1	7	6	13	5	3	8	13	8	21
Seed production										
Nursery management										
Integrated Crop	1	6	2	8	6	4	10	12	6	18

Management										
Fodder production	5	60	41	101	36	26	62	96	67	163
Production of organic inputs										
II Horticulture										
a) Vegetable Crops										
Production of low volume and high value crops	8	65	36	101	31	22	53	96	58	154
Off-season vegetables	2	25	14	39	13	7	20	40	19	59
Nursery raising	5	43	18	61	22	19	41	65	37	102
Exotic vegetables like Broccoli										
Export potential vegetables										
Grading and standardization										
Protective cultivation (Green Houses, Shade Net etc.)	01	18	2	20	14	01	15	32	3	35

13.5		1	I	<u> </u>		
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	1	7	5	12	12	7	19	19	12	31
Soil and Water Conservation	1	13	4	17	8	4	12	21	8	29
Integrated Nutrient Management	2	16	7	23	10	24	34	26	31	57
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	4	30	16	46	19	7	26	49	26	75
Poultry Management	3	11	3	14	40	12	52	51	15	66
Piggery Management										
Rabbit Management										
Disease Management	1	7	2	9	3	5	8	10	7	17
Feed management	5	28	31	59	14	18	32	42	49	91
Production of quality animal products										
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening										

Design and development of										
low/minimum cost diet										
Designing and										
development for high										
nutrient efficiency diet										
Minimization of nutrient		1	10	11	3	28	31	4	38	42
loss in processing	2									
Gender mainstreaming										
through SHGs										
Storage loss minimization		7	17	24	3	11	14	10	28	38
techniques	2									
Value addition	7	6	38	44	7	83	90	13	121	134
Income generation		3	30	33	1	12	13	4	42	45
activities for empowerment										
of rural Women	2									
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	4	47	21	68	18	9	27	65	30	96
Management	4									
Integrated Disease	02	10	7	17	13	5	18	23	12	35
Management	UZ									
Bio-control of pests and	02	22	5	27	16	3	19	38	8	46
diseases	UZ									

Production of bio control					
agents and bio pesticides					
VIII Fisheries					
Integrated fish farming					
Carp breeding and					
hatchery management					
Carp fry and fingerling					
rearing					
C ' C' 1 1					
Composite fish culture					
Hatchery management and					
culture of freshwater					
prawn					
Breeding and culture of					
ornamental fishes					
Portable plastic carp					
hatchery					
D 1: (C) 1					
Pen culture of fish and					
prawn					
Shrimp farming					

Edible oyster farming					
Pearl culture					
Peari 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										
and wax sireets										
Small tools and implements										
Production of livestock										
feed and fodder										
Production of Fish feed										
X Capacity Building and										
Group Dynamics										
Leadership development	1	9	4	13	2	1	3	11	5	16
Group dynamics										
Formation and										
Management of SHGs										
Mobilization of social										
capital										
Entrepreneurial										
development of										
farmers/youths										
WTO and IPR issues										
XI Agro-forestry										
					<u> </u>					

Production technologies										
Nursery management										
Integrated Farming Systems										
TOTAL	64	458	326	784	305	319	624	771	646	1383
(B) RURAL YOUTH										
Mushroom Production										
Bee-keeping										
Integrated farming										
Seed production										
Production of organic inputs										
Integrated Farming										
Planting material production										
Vermi-culture										
Sericulture										

Protected cultivation of					
vegetable crops					
Commercial fruit					
production					
Repair and maintenance of					
farm machinery and					
implements					
Nursery Management of					
Horticulture crops					
Training and pruning of					
orchards					
Value addition					
Production of quality					
animal products					
Dairying					
Sheep and goat rearing					
Quail farming					
Piggery					
Rabbit farming					

Poultry production	01	16	02	18	02	0	02	18	02	20
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	01	16	02	18	02	0	02	18	02	20
(C) Extension Personnel										
Productivity enhancement in field crops										
Integrated Pest Management	01	14	3	17	10	01	11	17	11	28
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										
Low cost and nutrient										
efficient diet designing										
Production and use of										
organic inputs										
Gender mainstreaming										
through SHGs										
TOTAL	01	14	3	17	10	01	11	17	11	28

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

Dat e	Clientele	Title of the training programme	Discipline	Thematic area	Duration in days	Venue (Off / On Campus)		er of o		Numb	oer of S	C/ST	Total number of participants		
		programme				campus	Mal e	Fem ale	Tot al	Mal e	Fem ale	Tot al	Mal e	Fem ale	Tota l

#### (D) VOCATIONAL TRAINING PROGRAMMES FOR RURAL YOUTH

Crop / Enterprise	Date	Training title*	Identified Thrust Area	Duration (days)	No	. of Participa	ants	Self	employed after	training	Number of persons employed else where
					Male	Female	Total	Type of units	Number of units	Number of persons employed	

<sup>\*</sup>training title should specify the major technology /skill transferred

### (E) Sponsored Training Programmes

								No	o. of	Partici	par	its					Spo nsor ing	Amount of fund
al V		Titl	Disc ipli	The mati	Durat ion	Client	No. of	Ot	hers		S	C/ST		Total			Age ncy	received (Rs.)
Sl.No	Date	e	ne	c area	(days	(PF/R Y/EF)	es es	M a l	F e m a l	Tota l	M a l	m a l	Tota l	Male	Fem ale	Tot al		
									e			е						

Total									

### 6. Extension Activities (including activities of FLD programmes)

Sl. No.		Purpose/							Parti	cipants					
	Nature of Extension Activity	topic and Date	No. of activities	Far	mers (Oth	iers)	SC/	ST (Farm	ers)	Exte	ension Off	icials		Grand To	
				Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1.	Field Day	Wheat	1	10	5	15	3	2	5	1	0	1	14	7	20
2.	Field Day	Maize 20.8.14	1	13	1	14	5	0	7	2	0	2	20	01	21
3.	Field day														
	Total		2	23	6	29	8	2	12	3	0	3	34	8	41
4.	Kisan Mela														
5.	Kisan Mela														
	Total														

6.	Kisan Ghosthi		05	527	380	907	124	218	342	12	7	19	663	605	1268
7.	Exhibition														
8.	Film Show		25	154	58	212	78	62	134	17	8	25	249	128	377
9.	Method Demonstrations														
10.	Farmers Seminar														
11.	Workshop	Plant protection varieties and FRA	03	170	120	290	74	54	128	26	6	32	270	210	480
12.	Group meetings														
13.	Lectures delivered as resource persons		106	670	1102	1772	120	325	445	88	24	112	88	24	2329
14.	Newspaper coverage		21												
15.	Radio talks		05												
16.	TV talks														
17.	Popular articles														
18.	Extension Literature														
19.	Advisory Services														
20.	Scientific visit to farmers		173	341	213	534	158	70	228						762

APR 2014-15

	field														
21.	Farmers visit to KVK			1012	713	1725	452	144	696						2421
22.	Diagnostic visits														
23.	Exposure visits		04	40	16	56	20	8	28	3	1	4	63	25	88
24.	Ex-trainees Sammelan														
25.	Soil health Camp														
26.	Animal Health Camp														
27.	Agri mobile clinic														
28.	Soil test campaigns														
29.	Farm Science Club Conveners meet														
30.	Self Help Group Conveners meetings														
31.	Mahila Mandals Conveners meetings														
32.	Celebration of important days (specify)	Foundation day	01	52	20	72	18	2	24	6	2	8	76	24	100
	Grand Total		347	3012	2634	5626	1060	887	2049	158	48	206	1477	1032	7907

<sup>\*</sup> Example for guidance only

## 6. B. Kisan Mobile Advisory Services

	Kisan Mobile Advisory											
Name of the KVK												
	Crop Livestock Weather Marketing Awareness Other enterprise Any other											
KVK Hamirpur         1300         30         15         5         6         1         3         1												

# 6.C. DETAILS OF TECHNOLOGY WEEK CELEBRATIONS during 2014-15

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	HPW 236	10.77	32310	
	Wheat	HPW 349	4.49	13455	
	Wheat	HPW 507	1.19	3555	
	Wheat	HPW 360	0.23	690	
	Wheat	VL 892	0.65	1950	
OILSEEDS					
	Gobhi sarson	ONK1	1.18	5428	
	Toria	Bhavani	0.26	1196	

PULSES					
	Black gram	Him Mash 1	1.13	9040	
VEGETABLES					
	Okra	P8	10	3500	
FLOWER CROPS					
OTHERS (Specify)					

<sup>\*</sup>An example for guidance only

### B) PLANTING MATERIALS

Major group/class	Crop	Variety	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
FRUITS					

SPICES					
VEGETABLES	Bottle gourd	Sharda, Disha, MGH1, MGH8	2008	20080	
	Onion	Palam Lohit, N53	632 kg	50560	
		Shyamali, Arka green, Arka Keshav	3004	3004	
	Tomato	7730, 7711, Yash	7399	7399	
	Chilli	Surajmukhi	2802	2802	
	Cabbage	Golden Acre, Varun	2140	2140	
	Broccoli	Palam Samridhi	980	980	
	Cauliflower	Megha, 626	29122	29122	
	Bitter gourd	Pali, Aman	1016	10160	
	Cucumber	Malav	766	7660	
	Summer squash	Australian green	9	90	

	Capsicum	California Wonder, Natasha, Swarna, Indira	2570	5140	
	Zimikand	Palam zimikand 1	110 kg	3300	
	Chinese cabbage	Palam green	130	130	
FOREST SPECIES					
POREST STECIES					
ORNAMENTAL CROPS					
PLANTATION CROPS					
Others (specify)					
Fodder crop root slips	Guinea grass	PGG -9	400000	200000	
	Napier bajra	NBH - 37	560000	280000	

hybrid		

<sup>\*</sup>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.	Туре	Breed	Quantity		Value (Rs.)	Provided to No. of Farmers
			(Nos	Kgs		
Cattle	Buffalo	Murrah	4		116500	4
	Buffalo	Murrah (Grading Up through Natural service)	56		14000	52

SHEEP AND GOAT	Goat*	Osmanabadi*		
POULTRY	Hen*	Whiteleghorn*		
	Hen*	Giriraja*		
	Quails*			
FISHERIES				
Others (Specify)				

<sup>\*</sup> 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	Effect of replacing dung slurry with vermicompost in azolla production <i>J. Krishi Vigyan 2015</i>	Rakesh Thakur, Gulshan Kumar, P.K. Sharma, C.L. Chauhan and Anand Singh	-
Technical reports			
	FLD Seasonal and Annual report	KVK, Hamirpur at Bara	2+1=3

Item	Title	Authors name	Number of copies
	Quarterly report	KVK, Hamirpur at Bara	4
	Annual report	KVK, Hamirpur at Bara	2
	Monthly report	KVK, Hamirpur at Bara	12
	SAC Report and Proceedings	KVK, Hamirpur at Bara	1
	Annual Report to Registrar	KVK, Hamirpur at Bara	1
Technical bulletins			
Popular articles	Ajolla: utpadan evam upyogita <b>Giriraj Saptahik</b> 14 May 2014 pp 5.	Rakesh Thakur, Anand Singh, and Chaman Chauhan	
	Chara parirakshan: Dudh utpadan me safalata ki chabi <b>Giriraj Saptahik</b> , 17 Sept 2014 pp 5.	Rakesh Thakur, Anand Singh, Gulshan Kumar & Deepika Sharma	
	Jaiwik pashupalan: sidhant evam sambhavnaye July-Dec 2014 <b>Parvatiya Khetibari</b> pp34	PK Dogra, Rakesh Thakur, Varun Sankhyan, YP Thakur and Sanjit Katoch	

Item	Title	Authors name	Number of copies
	Bird flu: Jankari evam savdhaniya Giriraj Saptahik 11 Feb. 2015 pp 5.	Rakesh Thakur, Anand Singh and Gulshan Kumar	
Training Manual			
Extension literature			-
Folders /leaflets			
TOTAL			

### (C) Details of Electronic Media Produced

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

#### 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: INTEGRATED FARMING WAY TO SELF SUSTENANCE

**INTRODUCTION** SH. Anil Kumar is a matriculate and a small progressive farmer. He is having 2.4 acre of cultivated land situated nearby urban area. Seeing the demand, scope and profit in vegetables in nearby market he came in contact of KVK, Hamirpur and started vegetable cultivation in less than one acre of land. After having profit in this entrepreneur he increased the area under vegetables up to two acre.

**KVK INTERVENTION:** under motivation and technical guidance after undergoing training at KVK he built 3 nos. of poly house with the assistance under National Horticulture Technology Mission and *Pandit Deendayal Kisan Bagwan Samridhi Yojna*.

**Output** HE CULTIVATED SEASONAL VEGETABLES IN HIS FARM AND IN POLYHOUSE HE MOSTLY CULTIVATED CAPSICUM TOMATO CUCUMBER AND SOME LEAFY VEGETABLES AS PER DEMAND OF THE MARKET. HE HAS 2 IMPROVED CATTLE'S (BUFFALOES). HE HAS A TUBE WELL, SPRINKLER & DRIP SYSTEM OF IRRIGATION.

**Outcome** T: He is earning more than 3 lakhs from hese entrepreneurs.

**Impact**: Today anil kumar is a self sustained farmer and a source of inspiration to many youngsters.



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

- Cultivation of Azolla for enrichment of feed in animals, poultry; especially in dry season
- Demonstrations of pheromone traps for the management of fruit fly and other major insect-pests of the district at farmers' fields so as to popularize biological control of the pests.
- Demonstration of zimikand cultivation at KVK farm for assessing its success in the district.

- Establish the concept of farmer-led extension through the involvement of progressive farmers in different training/extension activities of KVK especially in the field of vegetable, composting, dairy and mushroom farming. It has been observed that the involvement of farmers approved rapid transfer of technology to trainees.
- Popularization of value addition of underutilized fruits/vegetables so as to earn income from the locally available resources.
- Attempted to produce value added products of jimikand, papaya, amla and local fruits .
- The number of vegetable growers in the district is increasing at very fast rate but the marketable surplus with individual farmer level is low due to small size of holdings. In order to reduce the transportation cost and efficient marketing the farmers have been educated to dispose off their produce in a group mode. In addition to this a few small farmers groups have been advised to sell their produce directly to the consumer at a common place in the village itself. At present there are about 25 village huts which are selling their produce directly to the consumer and are getting remunerating returns.

# 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	Colocasia	Cultivation with maize crop	Reducing the incidence of blight in colocasia
2	Maize	Use of crackers and locally made guns	Control of wild bears and monkey menace
3	maize, wheat and pulses	Used leaves of neem, Melia, banna and Eucalyptus	For the control of stored grain pests

4	Health disorder	Leaves of gandala, banna and mendru boiled in water	Muscle pain
5	Health disorder	Juice extracted from mentha and onion	To control vomiting
6	Health disorder	Consumption of roasted harad	Bronchitis and stomach ailments
7	Health disorder	Decoction of tulsi,bhabri, mulathi and banafshah	Cold and cough
8	Cucurbits	Application of ash in morning hours	Management of red pumpkin beetle
9	Vegetables	Cow urine	Management of various diseases and insect pests.

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

- Identification of courses for farmers/farm women
  - The training needs of the farmers/farm women are identified on the basis of preliminary survey conducted by KVK through PRA Tools.

- The interventions are prioritized after the identification of extension/researchable issues.
- The trainings/On Farm Trials on different agricultural technologies in the field are conducted on the demand of the farmers to address their specific needs
- Rural Youth
  - The training for rural youth are being organized by the Kendra in the field of agro-based enterprises such as vegetable production, organic farming' mushroom production, dairy, poultry, post-harvest and value addition for self employment.
- Inservice personnel
  - The trainings to the In-service personnel are being planned keeping in view the agro-ecological situations and crop cafeteria and new potential crops / enterprises.

#### 9.E. Field activities

- i. Number of villages adopted: 5
- ii. No. of farm families selected: 400
- iii. No. of survey/PRA conducted: One

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

Status of establishment of Lab : Functional

1.	Year of establishment	2007
<b>1</b> .	i cai di establisillicit	200

# 2. List of equipments purchased with amount :

Sl. No	Name of the Equipment	Qty.	Cost
1	Mentioned earlier in Infrastructure		
2			
3			
Total			

### 3. Details of samples analyzed so far

Details	No. of Samples	No. of Farmers	No. of Villages	Amount realized
Soil Samples	220	220	8	-
Water Samples				
Plant Samples				
Petiole Samples				
Total				

10. IMPACT10.1 Impact of KVK activities (Not to be restricted for reporting period).

Name of specific technology/skill transferred	No. of % of adoption participants		Change in income (Rs.)		
technology/skill transferred	participants		Before (Rs./Unit)	After (Rs./Unit)	
Use of improved	340	80	60000	132000	
hybrids in veg. crops			(Rs./ha)	(Rs./ha)	
Protective cultivation	250	250	10000	35000	
of vegetable			Rs./250 sqm polyhouse	Rs./ 250 sqm polyhouse	
Vermicomposting	250	60	Nil	5000(Rs./month)	
Scientific cultivation of oil seed and pulses	270	30	10000.00 (Rs./ha)	15000-30000 (Rs./ha)	
Post harvest management of fruits and vegetables	290	30	2500 (Rs./month)	9000 (Rs./month)	
Poultry farming	240	20	-	40,000/-( 400	

				birds)
Dairy farming	120	25	20,000	40,000
			(Rs./month)	(Rs./month)
Pheromone traps for the control of fruit fly in vegetables	200	200	50000	75000
			(Rs./ha)	(Rs./ha)

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)

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

- Farmers are gaining knowledge about Azolla cultivation for feeding their livestock.
- Farmers are now again shifting towards cultivation of pulse crops mostly blackgram, pigeon pea and cowpea due to adoption of pulse village programme.
- KVK is demonstrating biological pest control tactics especially Pheromone traps for the control of fruit fly in the district and farmers are now well aware of its use and demanding more traps.
- KVK has imparted vocational trainings on poultry farming and the number of poultry units in the district increased significantly in past few years.

- KVK is associated with 167 SHGs through line departments for promotion of their income by imparting trainings in the field of post harvest technology, tailoring & stitching, rural crafts, food processing & value addition.
- Members of some Self Help Groups have started their microenterprise after receiving trainings from the Kendra.
- As a result of KVKs efforts in popularising vermicompost bulk of rural households in the district have their own vermicomposting units

#### 11.0 LINKAGES

#### 11.1 Functional linkage with different organizations

Name of organization	Nature of linkage
District Rural Development	Supplementary observation mechanism (SOM) of watershed activities.
Agency – Hamirpur	Training of watershed functionaries.
	Training of farmers under Intensive Dairy Development Project in district Hamirpur
Deptt. of Agriculture –Hamirpur	Participation in different extension programmes of Technology Dissemination such as trainings, diagnostic field visits.
	Refresher training for Officers and Extension functionaries of the Deptt.
	Collaboration in the implementation of KVK activities like FLD and OFTs in the fields.

	Co-ordination in celebration of different important days.		
Agriculture Technology	Assessment and refinement of technology.		
Management Agency (ATMA) Hamirpur	Training of SHGs/FIGs		
	Orgnising Kisan Gosthis and participation in different activities organized by BTTs/ATMA.		
	Planning implementation and monitoring of different research/extension activities as member of ATMA Management Committee/Governing Board.		
Deptt. of Horticulture – Hamirpur	Co-ordination in departmental and HTM activities		
JICA (Japan International	Training of SHGs		
Cooperation Agency)	Participation in different extension programmes of Technology Dissemination such as trainings, diagnostic field visits.		
Mid Himalayan Watershed Development Project –Sujanpur	Coordination in watershed development and trainings to the farmers for watershed development		
HIMFED-Hamirpur	Input co-ordination.		
HP- Agro Industries Hamirpur	Input and infrastructure development.		
Divisional Silk Officer, Nadaun	Training and Input supply.		

Divisional Forest Officer – Hamirpur	Training to their farmers group.
Block Development Officer – Nadaun	Implementation of watershed programme in block level, Training.
District Sports And Youth Services Officer – Hamirpur	Vocational and un-employed training to youth and school dropout in the district
Deptt. of Animal Husbandry – Hamirpur	Training of farmers under Intensive Dairy Devt. Project in district Hamirpur
	Exposure visit, clinical camp and training.
CDPO- working in each block	Training to Women Self Help Group and school dropouts.
Market committee –Hamirpur	Devt. Of market yard and training of farmers.
Nehru Yuva Kendra- Hamirpur	Training and Awareness camp
Yuvak Mandal – Jol Sappad	Training and Awareness camp
All Mahila Mandal in – Hamirpur	Training and Awareness camp
Panchayat in district Hamirpur	Training and Awareness camp

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

NB

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

Name of the scheme	Date/ Month of initiation	Funding agency	Amount (Rs.)
National Initiative on Climate Resilient Agriculture	2010	ICAR, New Delhi	1060000/- during 2014-15

## 11.3 Details of linkage with ATMA

a) Is ATMA implemented in your district Yes

S. No.	Programme	Nature of linkage	Remarks
1.	Technology assessment and refinement	Especially for popularization of vegetables hybrids Integrated Pest Management	Increased number of Vegetable growers
2.	Trainings of the farmers	Training being conducted at KVK Campus	
3.	Diagnostic visits	Joint Farmers field visits	

# Coordination activities between KVK and ATMA during 2014-15

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				
	Technology Week				
	Exposure visit				
	Exhibition				
	Soil health camps				
	Animal Health Campaigns				
	FFS				
06	Publications				

S. No.	Programme	Particulars	No. of programmes attended by KVK staff	No. of programmes Organized by KVK	Other remarks (if any)
	Video Films				
	Books				
	Extension Literature				
	Pamphlets				
	Others				
	News coverage				
07	Other Activities				

# 11.4 Give details of programmes implemented under National Horticultural Mission

S. No.	Programme	Nature of linkage	Constraints if any
1	Training & awareness Diagnostic Visits	Technical Support & Consultancy	

# 11.5 Nature of linkage with National Fisheries Development Board : NIL

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.	Sl. No. Demo Unit Year of estt. Area		Demo Unit Year of estt. Area		of production		Amount (Rs.)		Remarks	
				Variety	Produce	Qty.	Cost of inputs	Gross income		

## 12.2 Performance of instructional farm (Crops) including seed production

Name	Date of sowing	Date of harvest	(ha)	Detai	ls of production		Amour	nt (Rs.)	Remarks
Of the crop			Area	Variety	Type of Produce	Qty.	Cost of inputs	Gross income	
Cereals									
Maize									
Wheat	Nov. 2013	April/may	2.1	HPW-236, 349 & 360 VL-892	Foundation	17.33	21500	50490	

		2014		HS-507, PBW- 621	Seed	q			
Pulses									
ruises									
Black gram	July 14	Oct 14	2.3	Him Mash 1, UG 218	Foundation Seed	1.96 q	4500	11180	
Oilseeds									
Gobhi Sarson	Nov 13	May 14	0.06	ONK 1	Foundation Seed	1.18 Q	100	5310	
Fibers									
Spices & Planta	tion crops	-			1	1	1		1
Floriculture									
Fruits									
Peach									
Mango									
Vegetables									

Peas Fresh					
Others (specify)					

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

Sl.	Name of the Product	Qty	Amou	Remarks		
No.			Cost of inputs	Gross income		

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

Sl.	Name	Details of production			Amou		
No	of the animal / bird / aquatics	Breed	Type of Produce	Qty.	Cost of inputs	Gross income	Remarks
01	Buffalo	Murrah	Milk	6850 L	209556	246624	

### 12.5 Utilization of hostel facilities:

Accommodation available (No. of beds) = 36

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
April 2014	-	-	-
May 2014	-	-	-
June 2014	10	4	-
July 2014	41	6	-

August 2014	36	4	-
September 2014	-	-	-
October 2014	9	1	-
November 2014	25	1	-
December 2014	10	2	-
January 2015	-		-
February 2015	33	1	-
March 2015	49	2	-

### 12.6. Database management

S. No	Database target	Database created by the KVK

### 12.7 Rainwater Harvesting

## Training programmes conducted using Rainwater Harvesting Demonstration Unit

ъ.	No. of Participants		ticipants incl	uding SC/ST	No. of SC/ST Participants		pants		
Date	Title of the training course	Client (PF/RY/EF)	Courses	Male	Female	Total	Male	Female	Total

## **Demonstrations conducted using Rainwater Harvesting Demonstration Unit**

				No. of Par	ticipants inc	uding SC/ST	No.	of SC/ST Partici	pants
Date	Title of the Demonstration	Client (PF/RY/EF)	No. of Demos.	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	State Bank of India	Bara	10640342317
With KVK	State Bank of India	Bara	11518791639

# 13.2 Utilization of KVK funds during the year 2014-15 (up to March 2015)

S. No.	Particulars	Sanctioned	Released	Expenditure
NO.				
A. Recu	rring Contingencies			
1	Pay & Allowances	8500000	7936537	10510896
2	Traveling allowances	45000	45000	57590
3	Contingencies			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)			132000
В	POL, repair of vehicles, tractor and equipments			100000
С	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)			63512
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)			27233
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)			108610
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)			87338
G	Training of extension functionaries			25647
Н	Maintenance of buildings			30076

I	Establishment of Soil, Plant & Water Testing Laboratory			0
J	Library			0
	Total Contingencies	400000	400000	574416
	TOTAL (A)	8945000	8381537	11142902
B. Non-	Recurring Contingencies	I		I
1	Works			
2	Equipments including SWTL & Furniture			
3	Vehicle (Four wheeler/Two wheeler, please specify)			
4	Library (Purchase of assets like books & journals)			
	TOTAL (B)			
C. REV	OLVING FUND	-	-	-
	GRAND TOTAL (A+B+C)	8945000	8381537	11142902

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

Year	Opening balance as on 1 <sup>st</sup> April	Income during the year	Expenditure during the year	Net balance in hand as on 1 <sup>st</sup> April of each year
April 2011 to March 2012	13,44,367	811810	1120454	1035723
April 2012 to March 2013	1035723	1187481	982532	1330672
April 2013 to March 2014	1330672	1236945	827380	1740237
April 2014 to March 2015	1740237	1358394	1079949	2018682

# 14. Details of HRD activities attended by KVK staff during 2014-15

Name of the staff	Designation	TITLE OF THE TRAINING PROGRAMME	INSTITUTE WHERE ATTENDED	Date
Dr Chaman Lal	Extension Specialist (Vegetable)	Extension methodologies	CSKHPVK	30-31.1.15
Dr Dhanbir Singh	Extension specialist (Soil)	Technology demonstration for climate resilience and value added agromet advisories	CRIDA HYDERABAD	19-20.01.15

Dr Parveen Sharma	Extension specialist (Agro forestry )	Technology demonstration for climate resilience and value added agromet advisories	CRIDA HYDERABAD	19-20.01.15

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

# Annexures

# <u>District Profile - I</u>

#### Include the details of

- 1. General census
- 2. Agricultural and allied census
- 3. Agro-climatic zones
- 4. Agro-ecosystems
- 5. Major and micro-farming systems
- 6. Major production systems like rice based (rice-rice, rice-green gram, etc.), cotton based, etc.
- 7. Major agriculture and allied enterprises

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

#### Include

- 1. Names of villages, focus area, target area etc.
- 2. Survey methods used (survey by questionnaire, PRA, RRA, etc.)
- 3. Various techniques used and brief documentation of process involved in applying the techniques used like release transect, resource map, etc.
- 4. Analysis and conclusions
- 5. List of location specific problems and brief description of frequency and extent/ intensity/severity of each problem
- 6. Matrix ranking of problems
- 7. List of location specific thrust areas
- 8. List of location specific technology needs for OFT and FLD
- 9. Matrix ranking of technologies
- 10. List of location specific training needs

# **Technology Inventory and Activity Chart - III**

#### Include

- 1. Names of research institutes, research stations, regional centres of NARS (SAU and ICAR) and other public and private bodies having relevance to location specific technology needs
- 2. Inventory of latest technology available \*

Sl.	Technology	Crop/enterprise	Year of release	Source of	Reference/citati
No			or	technology	on
			recommendatio		
			n of technology		
1.	Cv. BSMR-8 *	Pigeonpea	2006	MAU,	Notification no.
				Parbhani	656 dated
					25.06.2006 of
					Central/State
					Varietal Release
					Committee/
					Proceedings no.

					66 of MAU, Parbhani dated 04.02.2006
2.	Modified Paddy Drum Seeder*	Improved Farm Implements	2007	Directorate of Rice Research	Proceedings/Not ification no. 77 of DRR, Hyderabad dated 04.02.2007
3.	Stem application of Imidachloropid @ 0.04%*	Cotton	2008	ANGRAU, Hyderabad	Proceedings/Not ification no. 88 of ANGRAU, Hyderabad dated 04.02.2008

**PS** \* an example for guidance only

# 3. Activity Chart

Crop/Animal/ Enterprise	Problem	Cause	Solution	Activity		erence of hnology
Cotton	Low productivit y of cotton under rainfed medium black soils of Northern Amaravati	1) Imbalance fertilizer application 2) Pest and disease occurance 3) Flower and fruit drop due to micronutrient deficiency	1. Application of recommend dose of Nutrients  2. Integrated Pest control  3. Micro-nutrient i.e boron application to control flower and fruit drop	1. Single component FLD to demonstrate effect of recommended dose of nutrients  2. Training and FLD programme on integrated pest management of cotton pest  3. OFT on management boron deficiency to control flower and fruit drop	1. 2. 3.	Sl. No. 6 of Technology Inventory Sl. No. 45 of technology Inventory Sl. No. 99 of Technology inventory

Soybean			
Mulberry			
Jersy Cow			

#### 4. 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
- b. Details of technologies that may include formulation, quantity, time, methods of application of nutrients, pesticides, fungicides etc., for technologies selected under FLD and OFTs
- c. Details of location/area specificity of recommended technology viz., for each of the variety/breed/technology selected for FLD and OFT