

Action Plan

(April 2017 –March 2018)



**PRESENTED IN ANNUAL WORKSHOP
Of
KVKs of Zone II**

HELD AT

ICAR-CIARI Port Blair

A & N Islands

(14TH - 16TH April 2017)



**KRISHI VIGYAN KENDRA, SCADA, ARA,
SONE COMMAND AREA DEVELOPMENT AGENCY,
SONE BHAWAN, DAROGA PRASAD RAI PATH,
PATNA – 800001**

BHOJPUR AT A GLANCE

1. ESTABLISHMENT: 18.12.1972

(Partition of old Shahabad District and formation of Bhojpur and Rohtas)

2. GEOGRAPHICAL LOCATION:

Latitude: 25⁰15'N to 25⁰46'N

Longitude: 84⁰45'E to 85⁰15'E

Altitude: 195.98 M above MSL

3. GEOGRAPHICAL BOUNDRY:

North: River Ganga, Saran & Baliyan district

South: Rohtas and Gaya district

East: River Sone and Patna district

West: District Buxar

4. GEOGRAPHICAL AREA: 2337.37 (sq km.) or 233729.15 (ha)

5. AGRO-CLIMATIC REGION & ZONE: The district comes under South Bihar Old Alluvial Plains, which has been categorized as Grade III (Sub-humid). The Soil type is heavy to sandy clay.

Rainfall data (m.m.)

Normal : **959.9 mm**

Actual : **817.92 mm**

II. Temperature : Min. 6⁰C; Max. 40⁰C

III. Relative Humidity: 35 to 95%

6. NO. OF BLOCKS/VILLAGE

(a) No. of Blocks : 14

(b) No. of Village Panchayat : 228

(c) No. of Village-Inhabited : 999

(d) No. of Village-Non-Inhabited : 218

(e) No. of Village Electrified : 426

7. (a). POPULATION (AS PER CENSUS):

Sl. No.		Males	Female	Total
1.	Urban	169,535	142,879	312,414
2.	Rural	1,010,076	920,654	1,930,730
	Total	1,179,611	1,063,533	2,243,144

(b) Population density/sq km. : 903

(c) Population below poverty line : 42.5⁰/₀

(d) PERCENTAGE OF POPULATION W.R.T. VARIOUS PARAMETERS:

Sl. No.	Parameter	Total	Rural	Urban
1.	Literacy rate: Persons	58.96	56.84	71.55
	Male	74.29	73.43	79.55
	Female	41.80	38.50	62.36
2.	Main workers: Persons	21.93	22.07	21.07
	Male	36.78	36.85	36.41
	Female	5.45	5.85	2.87
3.	Marginal workers: Persons	7.22	7.97	2.57
	Male	7.31	7.96	3.43
	Female	7.12	7.98	1.55
4.	Non- workers: Persons	70.85	69.96	76.36
	Male	55.91	55.19	60.16
	Female	87.43	86.16	95.58
5.	SC Population: Persons	15.32	16.22	9.76
	Male	15.38	16.33	9.71
	Female	15.25	16.10	9.81
6.	ST Population: Persons	0.37	0.37	0.39
	Male	0.38	0.38	0.39
	Female	0.36	0.36	0.40

8. CLASSIFICATION OF WORKERS:

Sl. No.	DETAILS	NUMBER
	Total Cultivators	227049
	Small & marginal farmers	221535
	Agricultural laborers	259482
	Artisans	NA
	Workers in household industries	24476
	Allied Agro Activities & Other works	144028
	Total working Population	655935
	% of working Population to Total Population	29.15%

9.

<u>Size of Land holding</u>	<u>No. of holding</u>	<u>(%)</u>	<u>Area (ha)</u>	<u>(%)</u>
(a) Less than 1 ha.	203840	78.9	67416	35.8
(b) Between 1 and 2 ha	30498	11.8	38531	20.5
(c) Between 2 and 4 ha	18454	7.1	49380	26.2
(d) Between 4 and 10 ha	5324	2.0	31511	16.7
(e) More than 10 ha	88	0.2	1296	00.8
TOTAL	258204		188134	

10. LAND UTILIZATION PATTERN:

(a) Geographical area	:	2, 33,729.15 ha.
(b) Net cultivable area	:	1, 88,134.00 ha.
(c) Permanent Fallow land	:	418.00 ha.
(d) Cultivable Barren land	:	729.00 ha.
(e) Land temporarily used for non-agriculture purpose	:	925.00 ha.
(f) Pasture & others	:	288.00 ha.
(g) Land not suitable for cultivation	:	7221.00 ha.
(h) Aquatic land	:	4071.00 ha.
(i) Land used for non-agriculture purpose	:	31943.00 ha.
(j) Forest area	:	Nil

11. IRRIGATION SOURCES:

Canal: - Sone Canal Circle, Ara.

Sone Canal Division, Bikramganj

State Tube well - 337 (63 functional)

Private Tube well - 18,901

E.R.P. Set - 09

Lift irrigation - 29

Net Irrigate Area.

Sl. No.	Source	Kharif Area (ha)	Rabi Area (ha)
1.	Canal	72952	29700
2.	Private Tube well	24478	36717
3.	Lift Irrigation	838	153
4.	State Tube well	454	526
5.	Other Sources	1685	1685
	Total	1,00,407(ha)	68,781 (ha)

2. AREA COVERED UNDER DIFFERENT CROPS

Kharif		Rabi		Summer (ha)	
Rice-	1,20,500	Wheat-	1,03,800	Green Gram-	20
Maize-	7,000	Maize-	2,295	Maize-	30
Pulses-	5,580	Pulse-	42,600	Vegetable-	400
Red Gram-	3,500	Gram-	20,500	Onion-	125
Black Gram-	1,000	Pea-	2,500		
Green Gram-	1,080	Others-	4,500		
Oil Seed-	525	Oil seed-	10,140		
Sesame-	215	Rabi/Mustard-	6,100		
Castor-	285	Sunflower-	40		
Sunflower-	25	Vegetable-	2,000		
Vegetable-	750	Potato-	3,525		
Total	1,34,355		1,64,360		575

13. CREDIT SYSTEM:

Lead Bank	Punjab National Bank
P.N.B.	22
S.B.I.	08
Allahabad Bank	01
C.B.I	01
Canara Bank	03
Bank of India	02
Union Bank	03
U.C.O. Bank	02
Indian Bank	02
United Bank	01
Bank of Baroda	02
Syndicate Bank	01
Madhya Bihar Gramin Bank	53
Central Co-operative Bank	15
Land Development Bank	05
Total	122

14. AGRIL. MACHINES:

Tractor	-	1623
Diesel Pump Set	-	15057
Harvester	-	05
Electric Pump Set	-	1870
Harrows	-	360
Winnower	-	25
Z T Machines		2434
Power Tiller		60
Sprayer & duster		676
Ripper		6
Rotavetor		25
Thrasher		425

15. AGRICULTURE SUPPORT / FACILITIES

- (a) Seed / Fertilizer / Pesticides depots: 103
- (b) Rural Markets / Mandis: 91
- (c) Rural God owns: 06
- (d) Cold Storage: 3 - capacity - 10000 MT.

16. ANIMAL HUSBANDRY (AS PER 2005 CENSUS):

Dairy Animals	Total	Milking
Cow	157479	4279
Buffalo	206945	66068
Plough Animals	87852	--
Sheep + Goat + Pigs	43698 + 134142 + 17097	--
Poultry	215459	--

17. PREDOMINANT ECONOMIC ACTIVITIES OF THE DISTRICT

Agriculture is the predominant economic activity in the district. Other important economic activities are dairy, horticulture, transport, housing, business and other activities in the service sector. The industrial activity in the district is in problem state. Most of the industrial units have become sick and good entrepreneurs and businessmen are shifting to other states.

18. MAJOR FOOD CROPS / COMMERCIAL AND PLANTATION / HORTICULTURE CROPS

1. The major food crops of the district are paddy and wheat. Pulses, oilseeds and maize are also important crops
2. However, potato, onion and vegetable have emerged as major commercial horticultural crops .
3. Medicinal and aromatic plants have also started taking roots on a small scale, in the district
4. Mushrooms cultivation is in a nascent stage.

19. SPECIAL FEATURE OF THE DISTRICT:

- Bhojpur is considered as the rice-bowl in the state and Rice- Mill is a traditional industry
- Land is fertile and the farmers are comparatively progressive.
- Climate of the district is conducive for a wide range agricultural / horticultural crops.
- Medicinal and aromatic plants are already being cultivated in the district.
- There are developed vegetable clusters.
- Dairy infrastructure is well developed.
- The level of farm mechanization is better than many other districts.
- Ara, the headquarter town of the district, is well connected both by rail and road.
- It is an adjoining district of the state capital.
- All the necessary inputs required for Farm as well as Non-Farm activities are available in the district or those can be easily obtained from the adjoining district at competitive price.
- The district is replete with potential for development in Primary, Secondary as well as in Tertiary sectors.

20. OTHER FACTORS AFFECTING THE DISTRICT'S RURAL ECONOMY:

POSITIVE FACTORS

- District headquarter is well linked with other towns and cities by road and rail.
- There is a vast network of canals in the district.
- Two major rivers flow through the district providing a good source of river in fishery and an opportunity to do the sand business.
- A new power grid was commissioned during the year 2004-05 with which the power position in the district is improving.
- The district had been identified under the Rastriya Sam Vikas Yojana and some of the infrastructural bottlenecks, in terms of rural connectivity, energisation etc, had been bridged.

NEGATIVES FACTORS

- Bhojpur is a drought prone district.
- The rural connectivity and rural infrastructure is not very strong.
- A significant portion of land is rain fed.
- The condition of electric supply is not on need based.

THRUST AREAS

Priority Thrust Areas identified through PRA survey & other methods.

1.	Seed Production Programme with special focus on heat & drought tolerant cultivars.
2.	Resource Conservation Technology for better water management under changing climate
3.	Income generation through High tech Horticulture
4.	Adoption of INM and IPM for sustainable agriculture.
5.	Income generation for Farm Women through Apiculture, Poultry, Mushroom & Value addition
6.	Technological awareness for SHG and Kishan Club & Growers Association

Action Plan- 2017-18

1. Name of the KVK : KVK ,SCADA, Bhojpur, Ara
2. Name of host Organization : Sone Command Area Development Agency,
Patna
3. Training Programme to be organized- (April 2016 to March 2017)

ABSTRACT OF TRAINING PROGRAMMES TO BE CONDUCTED (April 2017 – March 2018)

Sl. No.	Discipline	No. of Courses	Duration (Days)	Total Trainee Days	No. of Participants		Grand Total
					Men	Women	
A	For Practicing Farmers	230	397	12300	2880	280	4600
B	For Rural Youths	19	183	6060	260	60	380
C	Extension Functionaries	24	46	960	460	-	480
	Grand Total (A+B+C)	273	626	19320	3600	340	5460

SUMMARY OF TRAINING PROGRAMMES TO BE CONDUCTED (April, 2017-March 2018)

Sl. No.	Discipline	No. of Courses	Duration (Days)	Total Trainee Days	No. of Participants		Grand Total
					Men	Women	
A.	FOR PRACTICING FARMERS						
1.	Crop Production						
a)	Weed Management	6	12	240	120	-	120
b)	Resource Conservation Technologies	4	6	160	60	-	80
c)	Cropping System	3	4	120	40	-	60
d)	Crop diversification	10	26	560	180	-	200
e)	Water management	11	21	560	180	-	220
f)	Seed production	12	38	960	200	-	240
g)	Nursery management	3	4	120	40	-	60
h)	Fodder production	2	4	80	40	-	40
i)	Production of organic inputs	4	9	360	40	-	80
	Total						
2.	Vegetable Production						
a)	Production of low volume and high value Crops	12	24	480	240	-	240
b)	Nursery raising	6	12	240	120	-	120
c)	Seed Production	2	3	120	20	-	40
d)	Weed Control	4	8	160	80	-	80
	Total						
	Fruit Production						
a)	Layout and management of	4	10	400	40	-	80

	Orchards						
b)	Cultivation of Fruits	5	10	200	100	-	100
c)	Rejuvenation of old orchards						
	Total						
	<u>Ornamental plants</u>						
	<u>Plantation crops</u>						
	<u>Tuber crops</u>						
	Medicinal & Aromatic Plants						
	P.H.T.& Value Addition.						
	Total						
	Soil Health & Fertility Management						
	Soil Health & Fertility Management	7	14	280	140	-	140
b)	Integrated Nutrient Management	4	8	160	80	-	80
c)	Production and use of Bio-fertilizer	4	4	160	40	-	80
d)	Micro –nutrient Deficiency	6	8	240	80	-	120
e)	Soil & Water Testing	6	2	240	20	-	160
f)	Land Leveling	2	4	80	40	-	40
	Total						
3.	Agriculture Extension						
a)	Formation of Farm Science Club	24	19	1140	160	-	480
4.	Home Science						
a)	Household kitchen gardening	2	5	200	-	20	40
b)	Designing and development of low cost diet	1	2	40	-	20	20
c)	Gender mainstreaming through SHGs	2	2	80	-	20	40
d)	Storage loss techniques	9	4	360	-	40	180
e)	Value addition	3	5	160	20	20	60
f)	Rural Crafts	3	9	320	-	40	60
g)	Income generation	3	12	240	20	40	60
h)	Drudgery Reduction	4	4	160	-	40	80
i)	Women & child care	5	7	240	20	40	100
	Total						
5.	Agriculture Engineering						
a)	Use of Z.T. in different situation	6	15	600	60	-	120
6.	Plant Protection						
a)	Integrated Pest Management	13	20	640	180	-	280
b)	Integrated Disease Management	12	14	480	140	-	240
c)	Seed Treatment	4	8	160	80	-	80
	Total						
7.	Animal Husbandry & Veterinary						
a)	Dairy Management	4	10	800	20	-	80
b)	Disease Management in Cattle						
c)	Disease Management in Goat						

d)	Disease Management in Poultry	2	2	80	20	-	40
e)	Goatery Management						
f)	Feed Management	2	2	80	20	-	40
g)	Poultry Management	8	12	320	120	-	160
	Total						
	Grand Total – A	230	397	12300	2880	280	4600
B.	FOR RURAL YOUTHS						
1	Seed Production	4	20	400	80	-	80
2	Crop Diversification	2	10	200	40	-	40
3	Integrated Farming	1	5	100	20	-	20
4	Commercial Fruit cultivation	3	17	340	60	-	60
5	Nursery management of Hort. Crop						
6	Small Scale processing	2	6	120	-	40	40
7	Tailoring & Stitching	2	90	3600	-	20	40
8	Rural Crafts						
9	Dairy management	2	15	600	20	-	40
10	Poultry management	2	15	600	20	-	40
11	Agri. Extension	1	5	100	20	-	40
	Grand Total – B	19	183	6060	260	60	380
C.	EXTENSION FUNCTIONARIES						
1	Productivity Enhancement in field crop under stress condition	7	14	280	140	-	140
2	Protected cultivation Technique	1	2	40	20	-	20
3	IPM	4	8	160	80	-	80
4	Fruit Production	1	2	40	20	-	20
5	Aromatic Cultivation	1	2	40	20	-	20
6	Information Networking						
7	Use of ZT for Moisture conservation (RCT)	5	10	200	100	-	100
8	Formation of SHG	1	2	40	20	-	20
9	House hold Kitchen Garden	1	2	40	20	-	20
10	Storage loss technique	1	2	40	20	-	20
11	Drudgery reduction						
12	Seed Production	2	2	80	20	-	40
13	Dairy management						
14	Poultry management						
	GRAND Total – C	24	46	960	460	-	480
	GRAND TOTAL – (A+ B+ C)	273	626	19320	3600	340	5460

A. Farmers and Farmwomen

Thematic Area*	Title	Total No Of Course	Duration	Total Trainee Days	No. of participants			Total			G.T
					SC	S T	Others	M	F	T	
Weed Management	Weed control in rice nursery	1	2	40	5	-	15	20	-	20	20
	Weed control in DSR	1	2	40	5	-	15	20	-	20	20
	Weed control in transplanted rice	1	2	40	5	-	15	20	-	20	20
	Phalaris minor control in wheat.	1	2	40	5	-	15	20	-	20	20
	Weed control in Lentil	1	2	40	5	-	15	20		20	20
	Weed control in Gram	1	2	40	5	-	15	20		20	20
	Total	6	12	240	30		90	120		120	120
Resource CT	Direct seeding of rice with ZT to reduce environmental stress	1	2	40	5	-	15	20		20	20
	Direct seeding of wheat with ZT for minimizing moisture loss.	2	2	80	5	-	15	20		20	40
	MTUPR technique for overcoming negative impact of changing climatic condition.	1	2	40	5	-	15	20		20	20
	Total	4	6	160	15		45	60		60	80
Cropping System	Inter cropping in Sugar cane with Brinjal/Green Gram	1	2	40	5	-	15	20		20	20
	Cultivation of Summer Green gram in Summer Fallow	2	2	80	5	-	15	20		20	40
	Total	3	4	120	10		30	40		40	60
Crop Diversification	Commercial production of Scented rice.	1	5	100	5	-	15	20		20	20
	Scientific cultivation of Green gram	1	2	40	5	-	15	20		20	20
	Scientific cultivation of Hybrid maize.	1	7	140	5	-	15	20		20	20
	Scientific cultivation of Broccoli.	1	2	40	5	-	15	20		20	20
	Scientific cultivation of stress tolerant Maize	1	2	40	5	-	15	20		20	20
	Cultivation of Pearl millet in drought prone area	1	2	40	5	-	15	20		20	20
	Cultivation of short duration Paddy to mitigate climate change	2	2	80	5	-	15	20		20	40
	Resource management with Paddy-Toria-Wheat cropping system	1	2	40	5	-	15	20		20	20
	Cultivation of Rajmah in Wheat fields	1	2	40	5	-	15	20		20	20
	Total	10	26	560	45		135	180		180	200
Water Management	Water management in paddy nursery.	1	2	40	5	-	15	20		20	20
	Water management in DSR paddy.	2	2	80	5	-	15	20		20	40
	Use of sprinkler for better water use efficiency	2	5	200	5	-	15	20		20	40

	Use of Solar Pump for pollution free irrigation system	1	2	40	5	-	15	20		20	20
	Use of drips in Orchards for better water use efficiency	1	2	40	5	-	15	20		20	20
	Application of Sprinkler irrigation system in vegetable cultivation	1	2	40	5	-	15	20		20	20
	Application of Drip irrigation system in Tomato, Brinjal & Chili cultivation	1	2	40	5	-	15	20		20	20
	Mulching in vegetable cultivation to conserve soil moisture	1	2	40	5	-	15	20		20	20
	Poly mulching in vegetable cultivation to conserve moisture in the field.	1	2	40	5	-	15	20		20	20
	Total	11	21	560	45		135	180		180	220
Seed Production	Seed production of Medium duration Rice	1	5	100	5	-	15	20		20	20
	Seed production of Lentil	2	5	200	5	-	15	20		20	40
	Seed production of Gram	2	5	200	5	-	15	20		20	40
	Seed production of timely sown Wheat	1	5	100	5	-	15	20		20	20
	Seed production of late sown Wheat	1	5	100	5	-	15	20		20	20
	Seed production of Mustard	1	2	40	5	-	15	20		20	20
	Technique of certified seed production of Wheat.	1	5	100	5	-	15	20		20	20
	Training on Handling of quality seed (Threshing, Packaging & storing).	1	2	40	5	-	15	20		20	20
	Seed Production of Field Pea	1	2	40	5	-	15	20		20	20
	Farmer's rights under seed Bill.	1	2	40	5	-	15	20		20	20
	Total	12	38	960	50		150	200		200	240
Nursery Management	Preparation of raised bed nursery of Rice.	2	2	80	5	-	15	20		20	40
	Preparation of Rice nursery .for SRI	1	2	40	5	-	15	20		20	20
	Total	3	4	120	10	-	30	40	-	40	60
Fodder production	Fodder production of Bar seem	1	2	40	5	-	15	20		20	20
	Fodder production of Sudan Grass	1	2	40	5	-	15	20		20	20
	Total	2	4	80	10	-	30	40	-	40	40
Production of Organic Input	Brown Manuring in transplanted Rice	2	2	80	5	-	15	20	-	20	40
	Recycling of Agri. Waste as Vermi compost.	2	7	280	5	-	15	20		20	40
	Total	4	9	360	10		30	40		40	80
Production of low Volume & high value crops	Scientific cultivation of early Kharif Cucurbits	1	2	40	5	-	15	20	-	20	20

	Scientific package of practices of Hybrid Brinjal	1	2	40	5	-	15	20		20	20
	Scientific cultivation of early Kharif Okra	1	2	40	5	-	15	20		20	20
	Scientific cultivation of Chili	1	2	40	5	-	15	20		20	20
	Scientific cultivation of Cowpea	1	2	40	5	-	15	20		20	20
	Scientific cultivation of early Cauliflower	1	2	40	5	-	15	20		20	20
	Scientific cultivation of early Tomato	1	2	40	5	-	15	20		20	20
	Scientific cultivation of early Potato	1	2	40	5	-	15	20		20	20
	Scientific package and practices of Vegetable Pea	1	2	40	5	-	15	20		20	20
	Scientific cultivation of Cabbage	1	2	40	5	-	15	20		20	20
	Scientific cultivation of early Summer Okra	1	2	40	5	-	15	20		20	20
	Scientific cultivation of early Summer Cucurbits	1	2	40	5	-	15	20		20	20
	Total	12	24	480	60		180	240		240	240
Nursery Raising	Raising healthy seedling of Kharif Brinjal	1	2	40	5	-	15	20		20	20
	Raising healthy seedling of Chili	1	2	40	5	-	15	20		20	20
	Raising healthy seedling of early Cauliflower	1	2	40	5	-	15	20		20	20
	Scientific nursery management for Onion	1	2	40	5	-	15	20		20	20
	Raising healthy seedling of early Tomato	1	2	40	5	-	15	20		20	20
	Raising healthy seedling of early Cabbage	1	2	40	5	-	15	20		20	20
	Total	6	12	240	30		90	120		120	120
Seed Production	Scientific seed production techniques of Potato	2	3	120	5	-	15	20		20	40
	Total	2	3	120	5	-	15	20		20	40
Weed Control	Weed Control by chemicals in Okra	1	2	40	5	-	15	20		20	20
	Control of Parthenium in Vegetable crops	1	2	40	5	-	15	20		20	20
	Chemical Weed Control in Potato	1	2	40	5	-	15	20		20	20
	Chemical Weed Control in Onion	1	2	40	5	-	15	20		20	20
	Total	4	8	160	20		60	80		80	80
Layout and management of Orchards	Scientific lay out for developing new Mango orchard	2	5	200	5	-	15	20		20	40
	Scientific lay out for developing new Guava orchard	2	5	200	5	-	15	20		20	40
	Total	4	10	400	10		30	40		40	80
Cultivation of Fruits	Band placement of manures & fertilizer in old Mango orchard	1	2	40	5	-	15	20		20	20
	Scientific package & practices for Mango orchard	1	2	40	5	-	15	20		20	20
	Scientific package & practices for Guava	1	2	40	5	-	15	20		20	20

	Orchard										
	Cultivation of Jackfruit in dry land area.	1	2	40	5	-	15	20		20	20
	Cultivation of Awla to mitigate the climate change	1	2	40	5	-	15	20		20	20
	Total	5	10	200	25		75	100		100	100
Production and Management technology	Scientific cultivation of Marigold	1	2	40	5	-	15	20		20	20
	Total	1	2	40	5	-	15	20		20	20
Production and Management technology	Scientific Management of Japanese Mint	1	3	60	5	-	15	20		20	20
	Total	1	3	60	5	-	15	20		20	20
Tuber Crops Production and Management technology	Cultivation of early Potato	1	3	60	5	-	15	20		20	20
	Use of organic manure in vegetable cultivation to maintain the moisture level in field.	1	2	40	5	-	15	20		20	20
	Total	2	5	100	10		30	40		40	40
Medicinal & Aromatic Plant Nursery management	Scientific nursery management of Japanese Mint	1	2	40	5	-	15	20		20	20
	Total	1	2	40	5	-	15	20		20	20
Post-harvest technology and value addition	Packaging & grading of Tomato	1	2	40	5	-	15	20		20	20
	Total	1	2	40	5	-	15	20		20	20
Soil Health & Fertility Management	P-management in Red Gram	1	2	40	5	-	15	20		20	20
	N-management in Rice nursery.	1	2	40	5	-	15	20		20	20
	N- Management in transplanted Paddy	1	2	40	5	-	15	20		20	20
	Foliar application of water soluble fertilizer to reduce plant stress	1	2	40	5	-	15	20		20	20
	Foliar application of Potash to reduce the ET in standing Paddy crop	1	2	40	5	-	15	20		20	20
	Foliar application of NPK in Wheat Wheat water soluble fertilizer	1	2	40	5	-	15	20		20	20
	Summer ploughing & Green manuring to enhance moisture level in field	1	2	40	5	-	15	20		20	20
	Total-	7	14	280	35		105	140		140	140
Integrated Nutrient Management	Advantages of Vermicompost in Rabi vegetable.	1	2	40	5	-	15	20		20	20
	Importance of Sulphur & Boron in Onion	1	2	40	5	-	15	20		20	20

	Nutrient management in Okra	1	2	40	5	-	15	20		20	20
	Foliar spray of water soluble fertilizer to reduce plant stress	1	2	40	5	-	15	20		20	20
	Total	4	8	160	20	-	60	80	-	80	80
Production and use of Organic input	Use of Bio-fertilizer in Paddy	2	2	80	5	-	15	20		20	40
	Use of Bio-fertilizer in Wheat.	2	2	80	5	-	15	20		20	40
	Total	4	4	160	10	-	30	40	-	40	80
Micro nutrient deficiency in Crop	Role of Zn-nutrients in scented Rice	1	2	40	5	-	15	20		20	20
	Zn & Boron application in Paddy	2	2	80	5	-	15	20		20	40
	Role of micro nutrients in Wheat	2	2	80	5	-	15	20		20	40
	Role of S & nutrients in Pulses	1	2	40	5	-	15	20		20	20
	Total	6	8	240	20	-	60	80	-	80	120
Soil & Water Testing	Techniques of soil sampling	6	2	240	5	-	15	20		20	120
	Total	6	2	240	5	-	15	20		20	120
Land Leveling	Land leveling and its importance in Kharif crops production.	1	2	40	5	-	15	20		20	20
	Land leveling and its role in crop production.	1	2	40	5	-	15	20		20	20
	Total	2	4	80	10		30	40		40	40
Formation of Farm Science Club	Formation of Farm Science Club to overcome the challenges of changing climate	2	2	80	5	-	15	20		20	40
	Formation of SHGs for Seed Production	3	5	300	5	-	15	20		20	60
	Benefits of RCT through SHGs for stress management	4	2	160	5		15	20		20	80
	Importance of Agri - Equipment banks for stress management	2	2	80	5	-	15	20		20	40
	Role of Solar Power in Agriculture	2	2	80	5	-	15	20		20	40
	Awareness of different Govt. Subsidies' Schemes related to climate change	3	2	120	5	-	15	20		20	60
	Awareness for different kind of soil & seed treatment	4	2	160	5	-	15	20		20	80
	Importance of Soil testing for enhancing Farm Income under climatic change	4	2	160	5	-	15	20		20	80
	Total	24	19	1140	40		120	160		160	480
Household Kitchen Gardening	Development of nutritional garden for semiarid condition.	2	5	200	5	-	15	-	20	20	40
	Total	2	5	200	5	-	15	-	20	20	40
Designing & Development of low cost	Preparation of low cost balanced diet for mother & children	1	2	40	5	-	15		20	20	20

diet											
	Total	1	2	40	5		15		20	20	20
Gender mainstreaming through SHGs	For women employment , role of SHG	2	2	80	5	-	15		20	20	40
	Total	2	2	80	5	-	15	-	20	20	40
Storage loss technique	Control of godown insect in cereals storage	5	2	200	5	-	15		20	20	100
	Techniques of insect free pulses storage	4	2	160	5	-	15		20	20	80
	Total	9	4	360	10		30		40	40	180
Value addition											
	Grading parameters for better marketing opportunity in vegetable marketing	1	2	40	5	-	15	20		20	20
	Tomato Preservation	2	3	120	5	-	15		20	20	40
	Total	3	5	160	10		30	20	20	40	60
Rural Craft	Candle making	1	2	40	5	-	15		20	20	20
	Tie & dye Batik Painting	2	7	280	5	-	15		20	20	40
	Total	3	9	320	10	-	30	-	40	40	60
Income Generation	Backyard Poultry farming a good source of income	1	5	100	5	-	15		20	20	20
	Mushroom Cultivation	1	5	100	5	-	15		20	20	20
	Drought tolerant cultivars for vegetable production through SHGs	1	2	40	5	-	15	20		20	20
	Total	3	12	240	15		45	20	40	60	60
Drudgery reduction	Drudgery reduction through chemical in Paddy	2	2	80	5	-	15		20	20	40
	Drudgery reduction through Weedicide in Vegetable Production	2	2	80	5	-	15		20	20	40
	Total	4	4	160	10	-	30		40	40	80
Women & Child care	Use of pulses & local vegetable in child diet	2	2	80	5	-	15		20	20	40
	Preparation of balanced diet for children & mother	2	3	120	5	-	15		20	20	40
	To minimize body stress in high temperature condition with use of fruit beverage	1	2	40	5	-	15	20		20	20
	Total	5	7	240	15		45	20	40	60	100
Use of Zero Tillage Technology	Use of ZT for DSR in low land	2	5	200	5	-	15	20		20	40
	Use of Zero Tillage seed cum fertilizer drill for Lentil and Gram.	2	7	280	5	-	15	20		20	40
	Use of ridge bed seed drill for sowing vegetables.	2	3	120	5	-	15	20		20	40
	Total	6	15	600	15		45	60		60	120
Integrated Pest Management	Grass hopper Control in Sugar Cane during drought	2	3	120	5	-	15	20		20	40
	Stem borer control in Scented Rice	1	2	40	5	-	15	20		20	20
	Control of pest in Paddy	2	3	120	5	-	15	20		20	40
	BPH Control in Paddy	2	2	80	5	-	15	20		20	40
	Stem borer control in Maize	1	2	40	5	-	15	20		20	20
	Grasshopper control in Fodder crop during drought condition	1	2	40	5	-	15	20		20	20

	Milbug control in Paddy under drought situation	1	2	40	5	-	15	20		20	20
	Gram pod borer Control	2	2	80	5	-	15	20		20	40
	Aphid management in mustard	1	2	80	5	-	15	20		20	40
	Total	13	20	640	45		135	180		180	280
Integrated Disease Management	BLB control in Rice in high humidity condition	1	2	40	5	-	15	20		20	20
	Wilt control in Red gram	2	2	80	5	-	15	20		20	40
	BLB control in Rice	2	2	80	5	-	15	20		20	40
	Wilt Control in Lentil	2	2	80	5	-	15	20		20	40
	Wilt Control in Gram	2	2	80	5	-	15	20		20	40
	Control of early & late blight in Potato	2	2	80	5	-	15	20		20	40
	YVM disease control in Okra	1	2	40	5	-	15	20		20	20
	Total	12	14	480	35		105	140		140	240
Seed treatments	Seed treatment in Rice	1	2	40	5	-	15	20		20	20
	Seed treatment in Lentil	1	2	40	5	-	15	20		20	20
	Seed treatment in Potato	1	2	40	5	-	15	20		20	20
	Seed treatment in Wheat	1	2	40	5	-	15	20		20	20
	Total	4	8	160	20	-	60	80	-	80	80
Dairy Management	Management of Bovines for hygienic & clean Milk Production	4	10	800	5	-	15	20		20	80
	Total	4	10	800	5	-	15	20		20	80
Disease Management in Poultry	Vaccination of Broiler for different infectious diseases	2	2	80	5	-	15	20		20	40
	Total	2	2	80	5	-	15	20		20	40
Feed Management	Use of Green Fodder for Milk Production In Milch Animals	2	2	80	5	-	15	20		20	40
	Total	2	2	80	5	-	15	20		20	40
Poultry Management	Improved method of back Yard Poultry Farming	2	2	80	5	-	15	20		20	40
	Scientific Broiler Farming for better Productivity	2	2	80	5	-	15	20		20	40
	Housing Management in poultry during Winter season	1	2	40	5	-	15	20		20	20
	Pond management for fish culture	1	2	40	5	-	15	20		20	20
	High density Fish Farming	1	2	40	5	-	15	20		20	20
	Advantage of Rice-Fish culture	1	2	40	5	-	15	20		20	20
	Total	8	12	320	30		90	120		120	160
	Grand Total A.	230	397	12300	790	-	2370	2880	280	3160	4600

B. Rural Youths

Thematic Area*	Title	Total No Of Course	Duration	Total Trainee Days	No. of participants			Total			G.T
					SC	S T	Othe rs	M	F	T	
Seed Production	Seed Production of rice	1	5	100	5	-	15	20		20	20
	Seed Production of Gram	1	5	100	5	-	15	20		20	20
	Seed Production of Lentil	1	5	100	5	-	15	20		20	20

	Seed production of Wheat	1	5	200	5	-	15	20		20	40
	Total	4	20	400	20		60	80		80	80
Crop diversification	Hybrid Tomato Cultivation	1	5	100	5	-	15	20	-	20	20
	Cultivation of Vegetable Pea	1	5	100	5	-	15	20	-	20	20
	Total	2	10	200	10		30	40		40	40
Integrated Farming	Scientific Cultivation techniques of Marigold	1	5	100	5	-	15	20		20	20
	Total	1	5	100	5		15	20		20	20
Commercial Fruit Cultivation	Scientific cultivation practices of Mango	1	5	100	5	-	15	20		20	20
	High density technology in Mango orchard	1	7	140	5	-	15	20	-	20	20
	High density technology in Guava orchard	1	5	100	5	-	15	20		20	20
	Total	3	17	340	15		45	60		60	60
Small Scale Processing	Mango & Watermelon squace	1	3	60	5	-	15		20	20	20
	Guava Jelly making	1	3	60	5	-	15		20	20	20
	Total	2	6	120	10		30		40	40	40
Tailoring & Stitching	Tailoring	2	90	3600	5	-	15		20	20	40
	Total	1	90	3600	5		15		20	20	40
Dairy Management	Scientific management of Dairy Cattle for Entrepreneurship development	2	15	600	5	-	15	20		20	40
	Total	2	15	600	5		15	20		20	40
Poultry management	Improved method of Broiler Production for Entrepreneurship development in Rural Youth	2	15	600	5	-	15	20		20	40
	Total	2	15	600	5		15	20		20	40
Ag. Ext.	Formation of SHGs for Seed Production	1	5	100	5	-	15	20	-	20	20
	Total	1	5	100	5		15	20		20	20
	Grand Total B.	19	183	6060	80		240	260	60	320	380

C. Extension Functionaries

Thematic Area*	Title	Total No Of Course	Duration	Total Trainee Days	No. of participants			Total			G.T.
					SC	S T	Others	M	F	T	
Productivity Enhancement in Field Crop	New vistas in summer Pulses	1	2	40	5	-	15	20		20	20
	Advances in medicinal crop production	1	2	40	5	-	15	20		20	20
	Constraints of Rice seeds production	1	2	40	5	-	15	20		20	20
	Constraints of Pulses production	1	2	40	5	-	15	20		20	20
	Techniques for higher Oilseed production for better stress manage	1	2	40	5	-	15	20		20	20
	Constraints of Rabi pulses under changing	1	2	40	5	-	15	20		20	20

	climate condition										
	Modern concept of organic farming	1	2	40	5	-	15	20		20	20
	Total	7	14	280	35		105	140		140	140
Protected Cultivation Technique	Advantage & technique of drip irrigation system in Horticultural crop	1	2	40	5		15	20		20	20
	Total	1	2	40	5		15	20		20	20
IPM	IPM in Paddy	1	2	40	5	-	15	20		20	20
	IPM in Cucurbits	1	2	40	5	-	15	20		20	20
	IPM in Potato	1	2	40	5	-	15	20		20	20
	IPM in Pulses	1	2	40	5	-	15	20		20	20
	Total	4	8	160	20		60	80		80	80
Fruit Production	High density Plantation of Mango	1	2	40	5	-	15	20		20	20
	Total	1	2	40	5		15	20		20	20
Aromatic Cultivation	Cultivation of Japanese Mint & its distillation techniques	1	2	40	5	-	15	20	-	20	20
	Total	1	2	40	5		15	20		20	20
RCT	Use of ZT in different crops as a tool for Resource Conservation	1	2	40	5	-	15	20		20	20
	Sprinkler irrigation system in Okra & Cowpea to save Irrigation water	1	2	40	5	-	15	20		20	20
	Drip irrigation system to save irrigation water in Mango orchard	1	2	40	5	-	15	20		20	20
	Drip irrigation system to save irrigation water in Guava orchard	1	2	40	5	-	15	20		20	20
	Ring basin method of irrigation in summer cucurbits to save Irrigation water	1	2	40	5	-	15	20		20	20
	Total	5	10	200	25	-	75	100		100	100
SHG	Formation of SHG	1	2	40	5	-	15	20		20	20
House hold Kitchen Gardening	House hold food security	1	2	40	5	-	15	20		20	20
Storage loss technique	Control of godown pest	1	2	40	5	-	15	20		20	20
Drudgery reduction											
Seed Production	Seed Production of Cereal & Pulses	2	2	80	5	-	15	20		20	40
Dairy management											
Poultry management											
	Total	5	8	200	20	-	60	80		80	100
	Total C	24	46	960	115	-	345	460	-	460	480
									-		

(a) Sponsored

Thematic Area*	Title	Total No Of Course	Duration	Total Trainee Days	No. of participants			Total			G.T.
					SC	ST	Others	M	F	T	
Seed Production	Seed Production of rice	1	5	100	5	-	15	20		20	20
	Quality seed production of sugarcane.	1	7	140	5	-	15	20		20	20
Commercial Fruit Cultivation	Lay-out of mother orchards for Mango & Guava	1	5	100	5	-	15	20		20	20
Value addition	Cereal Seed Processing & Packaging	1	2	40	5	-	15		20	20	20
IPM	BPH Control in Paddy	2	5	200	5	-	15	20		20	40
IDM	Wilt Control in Lentil	2	2	80	5	-	15	20		20	40
	Total	8	26	660	30	-	90	100	20	120	160

(b) Vocational

Thematic Area*	Title	Total No Of Course	Duration	Total Trainee Days	No. of participants			Total			GT
					SC	ST	Others	M	F	T	
Seed Production	Seed Production of Wheat	1	2	40	5	-	15	20		20	20
Commercial Fruit Cultivation	Scientific layout for developing new Guava orchard	1	2	40	5	-	15	20		20	20
Garden Management	Mali Training	1	180	4500	5	-	15	20		20	20
Rural Craft	Beautician & Parlor	1	180	3600	5	-	15		20	20	20
	Total	4	364	8180	20	-	60	60	20	80	80

1 A.-Frontline Demonstration

Sl. No	Season	Crop	Variety/Component	No. of demonstration	Area (ha)
1	Kharif	Paddy	R Sweta	25	10.0
2		Paddy	DSR of cv BPT 5204 with ZT Drill	25	10.0
3		Paddy	Weed Control in DSR	30	12.0
4		Paddy	Zinc as Foliar	25	10.0
5	Rabi	Wheat	HD-2967	30	12.0
6		Wheat	Weed control	20	8.0
7		Lentil	Boran as Foliar	20	8.0
8		Lentil	Weed (Cuscuta) control	25	10.0
9		Mustard	Aphid control	15	5.0
10		Tomato	Apurva	20	5.0
11		Onion	Weed Control	15	3.0
			Grand Total	250	93.0

2 B. Seed and planting material production

Seed		Planting material	
Crop	Area (ha)	Crop	Area/No
Paddy	50	Vegetable Seedlings	5000
Wheat	100	Agro-Forestry Plants	2000
Lentil	200	Papaya Seedling	1000
Gram	40	Mango Plants	1000
Sugar Cane	5		

3 C. Extension Activities

Activities	No.	Participation
FIELD DAYS	10	300
KISHAN MELA	3	1500
DIAGNOSTIC SERVICES	30	600
FARMERS VISIT TO KVK		1200
PUBLICATION & DISTRIBUTION	20	6000
KISHAN GOSTHI	8	500
DD / RADIO TALK	10	
FILM SHOW	50	

3D. Expected fund utilization-NA

Project	Source	Amount to be received (Rs. In Lakh)

4 D. On-farm trials to be conducted

Sl. No	Thematic Area	Title	Treatments	No. of Farmer
1	Weed Control	Evaluation of Chemical Control of <i>Cyperus rotundas</i> .	T. O 1– Farmers practice (Hand weeding) T. O 2– Glyphosate - @3.0 Lt / ha as post-emergence T. O 3– Halosulfuron methyl 75%WG @90 gram a.i./ ha as post emergence	20
2	Weed Control	Chemical control of parasitic weeds of lentil	T. O 1– Farmers practice (Hand weeding) T. O 2– Pendimethalin - @1.0 kg a.i. / ha as pre-emergence T. O 3– Quizalofop ethyl @40 gram a.i./ ha as post emergence	20
3	Cropping System	Evaluation of Suitable Date of Wheat sowing in Rice – Wheat Cropping system	T. O. 1– Farmers Practice i.e. cultivation in late November T. O. 2– Sowing of wheat HD 2967 on 1st November T. O. 3– Sowing of wheat HD 2967 on 7st November T. O. 4– Sowing of wheat HD 2967 on 15st November	30

4	Cropping System	Assessment of high yielding variety of Maize	T. O. 1– Farmers practice Cultivation of local cultivars T. O. 2– Cultivation of BKC - 7074	10
5	Cropping System	Evaluation of Maize-Potato inter cropping	T. O. 1– Farmers Practice i.e. sole crop T. O. 2– Maize + Potato	10
6	Cropping System	Evaluation of HYV Brinjal variety Non-0137 to replace the local round Brinjal cultivars	T. O. 1– Farmers practice Cultivation of local cultivars T. O. 2– Cultivation of BKC - 7074	10
7	IDM	Evaluation of Chemical control of wilt in Bottle Gourd	T. O. 1–. Farmers practice Two spray of Mancozeb + Carbendazim @2 Kg. /ha. T. O. 2 - Two spray Pyrochlorstrabin 5% + Metiram 55% @ 1 Kg. /ha.	10
8	IDM	Management of Sheath Rot of Maize in Kharif	T. O. 1–Farmers practices (i.e. spraying of Hexaconazole T. O. 2– Soil treatment with Bleaching Powder (3Kg/ha) T. O. 3– Two spray of Streptomycin + Copper Oxi-Chloride (25gram + 750 gram /ha) after 30 DAS and 60 DAS	20
9	IDM	Management of Rust disease of Lentil	T. O. 1–. Farmers practices Seed treatment with Carbendazim (2g /kg seed). T. O. 2– TO-1 +Two spray of Carbendazim + Mancozeb (2.0 kg a.i. /ha) after 30 DAS and 60 DAS	20
10	INM	Evaluation of Nitrogen application in Lentil	T. O 1– Farmers using DAP and no additional N T. O 2– TO-1 + 30 Kg /ha as basal T. O 3– TO-1 + 10 gram Urea /Lt water as foliar 30 DAS	20
11	Water Management	Evaluation of Pre Sowing Irrigation on germination and yield Lentil.	T. O. 1– Farmers Practice i.e. no Pre Sowing Irrigation T. O. 2– Pre Sowing Irrigation.	20
12	RCT	Evaluation of Conservation Tillage Practices in cultivation of Lentil	T. O. 1– Farmers Practice i.e. Broadcasting of seed T. O. 2– Line sowing with ZT Drill	20
13	RCT	Evaluation of Conservation Tillage Practices in cultivation of Gram	T. O. 1– Farmers Practice i.e. Broadcasting of seed T. O. 2– Line sowing with ZT Drill	20
	TOTAL			230

B. List of projects to be implemented -NA

Name of the project	Fund expected (Rs.)

C. Number of success stories to be developed

- a) Paddy Seed Production
- b) Pulses Seed Production
- c) Wheat Seed Production

D. Scientific Advisory Committee

Date of SAC meeting held during 2014-15	Proposed date
	Sept ,2016 & Feb, 2017

E. Soil and water testing

	No. of sample to be analyzed
Soil	1000
Plant	-
Manure	-

F. Staff position

(As on 1-04-2017)

Sl.No	Sanctioned	In position	Name	If vacant, since when
1	Senior Scientist & Head	02.06.2001	Dr. Pravin Kumar Dwivedi	
2	SMS (Hort.)	09.10.1996	Sri Nilesh Kumar	
3	SMS (H. Sc.)	11.08.2001	Smt. Supriya Verma	
4	SMS (PP)	14.01.2013	Sri Shashi Bhushan Kumar Shashi	
5	SMS (Ag. Extn.)	14.01.2013	Dr. Sachidanand Singh	
6	SMS (PBG)	16.01.2013	Dr. Anil Kumar Yadav	
7	SMS (Vet. A.H.)		Vacant	01.01.2015
8	Programme Assistant		Vacant	14.01.2013
9	Prog. Asstt. (Computer)	01.01.2001	Sri Pankaj Kumar	
10	Farm Manager	06.02.2001	Sri Sunil Kumar	
11	Assistant	16.01.2013	Sri Sanjeev Raghuvanshi	
12	Jr. Stenographer	18.12.2000	Sri RadhaKrishan Nair	
13	Driver	02.12.2000	Sri Mahabir Ram	
14	Driver	06.12.2000	Sri Gopal Kumar	
15	Supporting Staff G-I	07.06.2001	Smt. Baby Kumari	
16	Supporting Staff G-I		Vacant	07.09.2008

G. Status of infrastructure

Infrastructure	Complete	Under Construction	Not started	Reasons, if not started
Administrative Building	Complete			
Trainees hostel	Complete			
Staff Quarter	Complete			
Demonstration Unit Poultry Unit	Complete			
Distillation Unit for Medicinal & Aromatic plant	Complete			
Vermi Compost Unit	Complete			

H. Fund requirement and expenditure (Rs.)

	Expenditure (last year)	Expected requirement (Rs. in Lakh)
<u>Recurring</u>		
Pay & allowance	9593668.00	1,10,00,000.00
Contingency	1559879.00	17,00,000.00
TA	149710.00	1,50,000.00
HRD	45644.00	50,000.00
<u>Non-recurring (specify)</u>		
Library	0.00	0.00
Works	0.00	0.00
Equipment	0.00	5,00,000.00
Total	11348901.00	13400000.00

(P. K. Dwivedi)
 Senior Scientist & Head
 KVK, SCADA, Bhojpur, Ara

OFT-1.

01.	Title of On-Farm Trail		:	Evaluation of Chemical Control of <i>Cyperus rotundas</i> .
02.	Micro-irrigation system		:	Rainfed
03.	Problem identified		:	Cyperus weed is fastly infesting large area under upland conditions especially in Vegetables, Maize and Sugarcane including Paddy.
04.	Hypothesis		:	As post-emergence weedicide Glyphosate is controlling the weed but now the efficiency has drastic reduction. Thus there is need of Post emergence weedicide for the control of such Weeds A new broad spectrum Post emergence weedicide Halosulfuron methyl 75% WG will control effectively the Cyperus weed and may solve the problem.
05.	Source of technology		:	HAU, Haryana
06.	Technical intervention		:	Weedicides
07.	Treatment details	Tech. option -1 Tech. option -2 Tech. option -3	:	Farmers practice (Hand weeding) Glyphosate @3.0 Lt/ ha as postemergence Halosulfuron methyl 75% WG @90 gram a.i./ ha as post emergence
08.	Replication		:	20(Area 0.2 ha./treatments)
09.	Performance indicators	Technical observation	:	Weed Count / m ² , dry wt., Yield attributes, yield
		Economic indicators	:	Net return B. C. Ratio
		Farmers feedback	:	Quality & Effectiveness of the chemical return

OFT -2

01.	Title of On-Farm Trail		:	Chemical control of parasitic weeds of lentil
02.	Micro-irrigation system		:	Rain fed
03.	Problem identified		:	Cuscuta as parasite weed is fastly infesting large area under pulses specially lentil. This weed is also hazardous for animal and other associated crops.
04.	Hypothesis		:	As pre-emergence weedicide Pendimethalin is controlling the weed emergence in early stage but again it is appearing. Thus there is need of Post emergence weedicide for the control of such parasites A new broad spectrum Post emergence weedicide Quizalofop ethyl is identified for effective control of Cuscuta and may

				solve the problem.
05.	Source of technology		:	DrRPCAU, Pusa
06.	Technical intervention		:	Weedicides
07.	Treatment details	Tech. option -1 Tech. option -2 Tech. option -3	:	Farmers practice (Hand removal) Pendimethalin - @1.0 kg a.i. / ha as pre-emergence Quizalfop Ethyl 5EC @40 g a.i./ ha as post- emergence
08.	Replication		:	20(Area 0.2 ha./treatments)
09.	Performance indicators	Technical observation	:	Weed Count / m ² , dry wt., Yield attributes, Yield
		Economic indicators	:	Net return B. C. Ratio
		Farmers feedback	:	Quality & Effectiveness of the chemical return

OFT-3.

01.	Title of On-Farm Trail		:	Evaluation of suitable date of Wheat sowing in Rice-Wheat cropping system
02.	Micro-irrigation system		:	Irrigated
03.	Problem identified		:	Traditionally long duration Paddy is grown in major parts of canal irrigated situation. This results in delay up to 40 days in Wheat sowing. This leads to drastic reduction in Wheat productivity with all based management practices.
04.	Hypothesis		:	Timely sowing that is in 1 st week of Nov. Provides more cold days for better vegetative growth of Wheat which may result in better productivity
05.	Source of technology		:	CSISA
06.	Technical intervention		:	Date of sowing & Seed
07.	Treatment details	Tech. Option -1 Tech. Option -2 Tech. Option-3 Tech. Option -4	:	Farmers Practice i.e. delayed cultivation (20-30 November) Sowing of Wheat on 1 st Nov. Sowing of Wheat on 7 th Nov. Sowing of Wheat on 15 th Nov.
08.	Replication		:	30 (0.2ha/treatment)
09.	Performance indicators	Technical observation	:	Tillering increase/decrease. Yield & Test weight
		Economic indicators	:	Net return BC ratio
		Farmers feedback	:	Over all crop Growth & Grain Quality

OFT-4

01.	Title of On-Farm Trail		:	Assessment of high yielding variety of Maize
02.	Micro-irrigation system		:	Irrigated Upland
03.	Problem identified		:	Poor yield of Maize due to selection of local variety
04.	Hypothesis		:	Farmers are growing local variety of maize which gives poor yield in district

				Bhojpur having Avg. yield 24 Qt. /ha. Improved variety like NK-6240 and BKC-7074 are high yielding variety may be suitable to this area. Therefore to evaluate the comparative performance present OFT is proposed.
05.	Source of technology		:	DMR, Begusaray
06.	Technical intervention		:	High yielding Hybrid Maize seed
07.	Treatment details	Tech. Option -1 Tech. Option -2 Tech. Option -3	:	Farmers practice local cultivars cultivation Cultivation of DHM-117 Cultivation of HM-12
08.	Replication		:	10 (0.20 ha/treatment)
09.	Performance indicators	Technical observation	:	Plant Height, Days to Mature, Avg. No. of Cobs/Plant, No. of Grain/Cob Increase/decrease in yield, test weight
		Economic indicators	:	Net return BC ratio
		Farmers feedback	:	Crop growth & yield.

OFT-5

01.	Title of On-Farm Trail		:	Evaluation of Maize-Potato inter cropping
02.	Micro-irrigation system		:	Irrigated Upland
03.	Problem identified		:	At times the Potato crop is facing severe disease and natural challenges resulting in very poor economic returns. Under such changing situation Maize is the future crop which can change the economics
04.	Hypothesis		:	Newly developed Hybrid variety DKC-9081 may be a good choice for intercropping with Potato and it may be replace the traditional cultivation of sole potato crop.
05.	Source of technology		:	RAU, PUSA
06.	Technical intervention		:	High yielding Hybrid Maize seed
07.	Treatment details	Tech. Option -1 Tech. Option -2	:	Farmers practice(i.e. cultivation of Potato) Cultivation of Potato + Maize
08.	Replication		:	10 (0.20 ha. / farmers)
09.	Performance indicators	Technical observation	:	Plant Height, Days to Mature, Avg. No. of Cobs/Plant, Increase/decrease in yield, No. of Grain/Cob, Test weight. Yield Equivalence
		Economic indicators	:	Net return BC ratio
		Farmers feedback	:	Crop growth & yield.

OFT-6

01.	Title of On-Farm Trail		:	Evaluation of HYV of round Brinjal Variety NON-0137 to replace the local cultivars
02.	Micro-irrigation system		:	Irrigated
03.	Problem identified		:	Brinjal is the second most important vegetable of Bhojpur district in term of

				area. Through the farmer are cultivating Round Brinjal's local cultivars since long. The Germplasm had deteriorated and number of pest and disease are attacking the cultivars resulting in poor yield i.e. below 120 qt/ha and very poor economical return.
04.	Hypothesis		:	As per the felt need of the farmers the traditional varieties need to replace with High yielding as well as YMV resistant varieties considering the importance of this crop the present OFT with variety Non – 0137(Round Brinjal) is prospered to assess its potentiality against the specific problem of poor yield
05.	Source of technology		:	IIVR, Varanasi
06.	Technical intervention		:	Improved Seed
07.	Treatment details	Tech. option -1 Tech.option-2	:	Farmers Practice Cultivation of Non – 0137
08.	Replication		:	10 Farmers (0.2 ha./ treatment) 2 ha.
09.	Performance indicators	Technical observation	:	Vigor & Color. Etiology Yield
		Economic indicators	:	Net result & BC ratio
		Farmers feedback	:	Overall crop growth & gain quality

OFT-7.

01.	Title of On-Farm Trail		:	Evaluation of Chemical Wilt control in Bottle Gourd
02.	Micro-irrigation system		:	Irrigated Upland
03.	Problem identified		:	Bottle gourd is one of the leading crop and is grown in an area of 1200 ha. Having the Average productivity of 300 Qt/ha. (net return Rs. 1.4 Lakh/ha.) but since last 3-4 years there is drastic reduction in yield up to 40% was observed due to wilt infestation This has severely affected the economic return of this highly value crop
04.	Hypothesis		:	The traditional molecule foliar application is partially controlling the disease. A new broad spectrum fungicide having the combination of Pyrochlorabin 5%+Metiram 55% as good curative for this disease. This molecule was evaluated in KVK & was found significantly good for the control of Wilt.
05.	Source of technology		:	K.V.K., Bhojpur
06.	Technical intervention		:	Fungicide

07.	Treatment details	Tech. Option -1 Tech. Option -2	:	Farmers practice two spray of Mancozeb+ Carbendazim @2 Kg./ha. Two spray Pyrochlorobin 5%+Metiram 55% @ 1 Kg./ha.
08.	Replication		:	10 (0.20 ha. Per farmers)
09.	Performance indicators	Technical observation	:	No. Of infected plant per100mt
		Economic indicators	:	Net return B. C. Ration
		Farmers feedback	:	Disease infestation fruit quality economical return

OFT-8.

01.	Title of On-Farm Trail		:	Evaluation of Molecules for effective Sheath Rot Control in Maize
02.	Micro-irrigation system		:	Irrigated Upland
03.	Problem identified		:	Maize crop in general is suffering a lot due to Sheath Rot infection now a day. This disease is appearing in epidemic form in the initial stage of flowering & thus result in heavy loss in Maize production
04.	Hypothesis		:	Since the disease is composite in nature, application of Anti biotic may be curative. To assess the effectiveness the present OFT is being proposed.
05.	Source of technology		:	KVK, Bhojpur
06.	Technical intervention		:	Anti biotic with Fungicide and other chemicals
07.	Treatment details	Tech. option -1	:	Farmers practice spraying of Hexaconazole
		Tech. option -2	:	5 EC @ 1.25 lit / ha.
		Tech. option -3	:	Soil treatment with Bleaching Powder (3Kg /ha) Two spray of Streptocyclin + Copper OxiChloride (25gm+750 gm /ha) after 30 DAS and 60 DAS
08.	Replication		:	20 (0.20 ha/treatment.)
09.	Performance indicators	Technical observation	:	Occurrence of Sheath Blight Increase in yield Paddy yield
		Economic indicators	:	Net return BC ratio
		Farmers feedback	:	Plant health & efficiency of medicine

OFT-9.

01.	Title of On-Farm Trail		:	Management of Rust disease in Lentil
02.	Micro-irrigation system		:	Rain fed Medium land
03.	Problem identified		:	Lentil crop in general is suffering a lot due to Sheath Rot infection now a day. This disease is appearing in epidemic form in the later stage of flowering & thus result in heavy loss in Lentil production
04.	Hypothesis		:	The incidence of Rust disease in Lentil at flowering results in heavy loss in yield

				resulting in poor seed setting. The spread of disease is very fast through smutted spores. The application of fungicides at different stages may control the incidence of disease and combat further spread. .
05.	Source of technology		:	RAU, Pusa
06.	Technical intervention		:	Fungicide
07.	Treatment details	Tech. option -1 Tech. option -2	:	Farmers practices Seed treatment with Carbendazim (2g /kg seed) Seed treatment with Carbendazim (2g /kg seed) +Two spray of Carbendazim + Mancozeb (2.0 kg a.i. /ha) after 30 DAS and 60 DAS
08.	Replication		:	20 (0.20 ha/treatment.)
09.	Performance indicators	Technical observation	:	Occurrence of Rust disease Increase in yield Lentil yield
		Economic indicators	:	Net return BC ratio
		Farmers feedback	:	Plant health & efficiency of medicine

OFT-10

01.	Title of On-Farm Trail		:	Evaluation of N application in Lentil
02.	Micro-irrigation system		:	Irrigated
03.	Problem identified		:	Farmers are not using the Rhizobium Culture and the FYM due to in proper supply. This result in poor Nitrogen availability in the Rhizosphere of Lentil leading to poor vegetative growth and branching and as a result low yield of Lentil
04.	Hypothesis		:	Application of Nitrogen in addition to the normal recommendation of DAP which is supplementing partial Nitrogen will cover up the demand of Lentil crop for proper vegetative growth, which is now going to be a bigger problem in Lentil growing area. The proper branching & vegetative growth will result in increased no. of flower per plant leading to more grain setting and ultimately better yield
05.	Source of technology		:	ICAR, IIPR, Kanpur
06.	Technical intervention		:	Application of N Fertilizer
07.	Treatment details	Tech. option -1 Tech.option-2 Tech.option-3	:	Farmers Practice application of DAP@125 kg./ha. DAP @125Kg/ha + 30 Kg Urea/ha as basal DAP @125Kg/ha + 10 gram Urea/liter as foliar 30-35 days after DAS
08.	Replication		:	20 Farmers (0.2 ha./ treatment) 8 ha.
09.	Performance indicators	Technical observation	:	No. of plant / sq. meter plant height No. of grain per pot yield Test weight
		Economic indicators	:	Net result & BC ratio
		Farmers feedback	:	Overall crop growth & gain quality

OFT-11.

01.	Title of On-Farm Trail		:	Evaluation of Pre-sowing irrigation on Germination and Yield of Lentil
02.	Micro-irrigation system		:	Irrigated
03.	Problem identified		:	The frequent tillage operations over long periods have detrimental effect on surface of soil. It pulverizes the soil into dust and breaks down soil aggregates. Tillage hastens the oxidation of organic matter from the soil, reduces infiltration and induces runoff and soil erosion.
04.	Hypothesis		:	The area under Lentil is around 20000 ha. with average yield of around 8 quintal / ha. it since to be very low as compare to the potential yield of the existing cultivars which is more than 10 Q. / ha.. The pre sowing irrigation may result is better crop stand with good vegetative smooth and high nutrient use efficiency leading to improvement in yield.
05.	Source of technology		:	B.A.U., Sabour
06.	Technical intervention		:	Irrigation
07.	Treatment details	Tech. option -1 Tech.option-2	:	Farmers Practice is no Pre sowing irrigation Pre sowing irrigation
08.	Replication		:	20 Farmers (0.2 ha./ treatment) 4 ha.
09.	Performance indicators	Technical observation	:	No. of plant / sq. meter plant height No. of sowing per pot yield Test weight (1000 grin weight)
		Economic indicators	:	Net result BC ratio
		Farmers feedback	:	Overall crop growth & gain quality

OFT-12

01.	Title of On-Farm Trail		:	Evaluation of Conservation Tillage Practices in cultivation of Lentil
02.	Micro-irrigation system		:	Rain fed
03.	Problem identified		:	Traditionally Lentil is shown in major part after harvesting of Paddy on residue moisture. This result in poor germination and crop stand leading to poor yield of Lentil with all Agronomical practices.
04.	Hypothesis		:	The area under Lentil is around 20000 ha. With average yield of around 8 quintal /ha, very low as compare to the potential yield of the existing cultivars (16 Q. / ha). This is mainly due to poor moisture leading to under supply of nutrients. To control above disadvantages of repeated tillage operations in cultivation of lentil, Sowing of seeds by drilling might be better options

				for resource conservation..
05.	Source of technology		:	CSISA, Bihar &UP Hub
06.	Technical intervention		:	Irrigation
07.	Treatment details	Tech.option-1 Tech.option-2	:	Farmers Practice conventional of Sowing Sowing of Lentil with ZT drilling
08.	Replication		:	20 Farmers (0.2 ha./ treatment) 4 ha.
09.	Performance indicators	Technical observation	:	No. of plant / sq. meter plant height Test weight (1000 gram weight),Yield
		Economic indicators	:	Net result BC ratio
		Farmers feedback	:	Overall crop growth & gain quality

OFT-13

01.	Title of On-Farm Trail		:	Evaluation of Conservation Tillage Practices in cultivation of Gram
02.	Micro-irrigation system		:	Rain fed
03.	Problem identified		:	Traditionally Gram is shown in major part after harvesting of Paddy on residue moisture. This result in poor germination and crop stand leading to poor yield of Gram input of all agronomical practices.
04.	Hypothesis		:	The area under Gram is around 18000 ha. with average yield of around 8-9 quintal/ ha, very low as compare to the potential yield of the existing cultivars (16-18Q./ ha). This is mainly due to poor moisture leading to under supply of nutrients. To control above disadvantages of repeated tillage operations in cultivation of lentil, Sowing of seeds by drilling might be better options for resource conservation
05.	Source of technology		:	CSISA, Bihar &UP Hub
06.	Technical intervention		:	Irrigation
07.	Treatment details	Tech. option -1 Tech.option-2	:	Farmers Practice conventional of Sowing Sowing of Gram with ZT drilling
08.	Replication		:	20 Farmers (0.2 ha/ treatment) 4 ha.
09.	Performance indicators	Technical observation	:	No. of plant / sq. meter plant height Test weight (1000 gram weight),Yield
		Economic indicators	:	Net result BC ratio
		Farmers feedback	:	Overall crop growth & Grain quality

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