ANNUAL ACTION PLAN

KVK, KEONJHAR

2017-18

Contents

Instructions for Filling the Format

1. **Do not change/modify/ delete any column of any of the table. However, additional rows can be created, if required.**
2. **Do not merge columns, rows.**
3. **Please repeat the name of KVK in each table in the column "Name of KVK".**
4. **Do not fill the non-numerical values in numeric field**
5. **Do not repeat the unit while reporting data as it is already mentioned in the heading row**
6. **Strictly fill the data in desired unit only. If it is reported in other unit, convert it in the desired unit**
7. **Please mention only Standard English names of crops (Do not mention Urd, Arhar, Til, Kulthi, Moong, Bajra, etc.)**
8. **Additional relevant information may be provided at the end of Format mentioning "Additional Information"**
9. **Do not press any Enter Key in any of the columns while making entry in the columns of the table. Use only arrow key /Tab key/ mouse pointer while movement from one column/row to another.**

Note for Annual Action Plan 2017-18

1) Kindly fill up only targeted/ proposed information for Annual Action Plan-from 1st April, 2014 to 31st March 2015 in the table no.1, (1.1,1.2,1.3,1.4), 2.1, 3.2, 3.4, 3.5, 4.0, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6 6.0, 7.1, 7.2, 7.3, 7.4, 8.1, 9.0, 10.0, 11, 12.1, 12.2, 12.3, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29. Remaining of the column and tables will be filled up after completion of the work as Annual Progress Report.

2) Any other activities proposed not mentioned in this format may be incorporated in the last page with certain specification.

PERIOD – April 2017 to March, 2018

Summary of the activities

KVK Name	Activity	Target		Achievement		
		Number of activity	No. of farmers/ beneficiaries	Number of activity	No. of farmers/ beneficiaries	Total value of resource generated/Fund received from diff. sources (Rs.)
Keonjhar	OFTs	**07**	**49**			
Keonjhar	FLDs – Oilseeds (activity in ha)	**50**	**125**			
Keonjhar	FLDs – Pulses (activity in ha)	**60**	**150**			
Keonjhar	FLDs – Cotton (activity in ha)	**-**	**-**			
Keonjhar	FLDs – Other than Oilseed and pulse crops(activity in ha)	**11 ha (08 Nos)**	**80**			
Keonjhar	FLDs – Other than Crops (activity in no. of Unit/Enterprise)	**04 nos**	**32**			
Keonjhar	Training-Farmers and farm women	**42**	**1260**			
Keonjhar	Training-Rural youths	**08** VT- 3	**160+45**			
Keonjhar	Training- Extension functionaries	**08**	**120**			
Keonjhar	Extension Activities	**958**	**-**			
Keonjhar	Seed Production (Number of activity as seeds in quintal)	**66**	**OSSC**			
Keonjhar	Planting material ((Number of activity as quantity of planting material in quintal)	**5**	**50**			
Keonjhar	Seedling Production (Number of activity as number of seedlings in numbers)	**136000**	**450**			
Keonjhar	Sapling Production (Number of activity as number of sapling in numbers)	**-**	**-**			
Keonjhar	Other Bio- products (No. of quantity)	1000 nos./ 100Q/10kg	300			
Keonjhar	Live stock products	**1000**	**100**			
Keonjhar	Activities of Soil and Water Testing Laboratory	**650**	**650**			
Keonjhar	Rainwater Harvesting System	**-**	**-**			
Keonjhar	Kisan Mobile Advisory (KVK-KMA)	**48**	**26850**			
Keonjhar	SAC Meeting (Date & no. of core/ official members)	**01**	**30**			

KVK Name	Activity	Target		Achievement		
		Number of activity	No. of farmers/ beneficiaries	Number of activity	No. of farmers/ beneficiaries	Total value of resource generated/Fund received from diff. sources (Rs.)
Keonjhar	Literature to be Developed/Published	**34**	**-**			
Keonjhar	Convergence programmes / Sponsored programmes	**03**	**90**			
Keonjhar	Utilization of Farmers Hostel	**07**	**70**			
Keonjhar	Utilization of Staff Quarters	**04**	**03**			
Keonjhar	Details of KVK Agro-technological Park		**-**			
Keonjhar	Crop Cafeteria-	**12**	**-**			
Keonjhar	Farm Innovators- list of 10 farm innovators from the District	**03**	**03**			
Keonjhar	Status of Revolving Funds	**04**	**-**			
Keonjhar	Awards and Recognitions	**02**	**-**			
Keonjhar	Case study / Success Story to be developed	**04**	**04**			
Keonjhar	KVK Progressive Farmers interaction	**04**	**80**			
Keonjhar	Outreach of KVK in the District (No. of blocks, no. of villages)	**13, 30**	**15000**			
Keonjhar	Technology Demonstration under Tribal Sub Plan	**-**	**-**			
Keonjhar	KVK Ring	**02**	**-**			
Keonjhar	Important visitors to KVK	**06**	**-**			
Keonjhar	Status of KVK Website	**64**	**-**			
Keonjhar	Status of RTI	**-**	**-**			
Keonjhar	E-connectivity	**-**	**-**			
Keonjhar	Details of Technology Week Celebrations	**15**	**700**			
Keonjhar	Interventions on Drought Mitigation	**-**	**-**			
Keonjhar	Proposal of NAIP	**-**	**-**			
Keonjhar	Proposal of NICRA	**-**	**-**			
Keonjhar	Well labeled photographs	**-**	**-**			
Keonjhar	Other Activities	**-**	**-**			

1. GENERAL INFORMATION

1.1. Staff Position (as on date)

Name of KVK.	Sanctioned post	Name of the incumbent	Discipline	Highest degree	Subject of Specialization	Pay Scale (Rs.)	Present basic (Rs.)	Date of joining	Permanent /Temporary	Category (SC/ST/ OBC/ Others)
Keonjhar	Senior Scientist & Head	Dr. Sujit Ku. Nath	Extension Education	Ph.D (Ag),	Agril. Extension Education	15,600-39,100+ 8000 (AGP)	16310	12.11.2016	Pemanent	Others
Keonjhar	Scientist 1	Mr. Prasanta Kumar Nanda	Plant Protection	M.Sc (Ag)	Entomology	15,600-39,100+ 6000 (AGP)	23070	25.08.2006	Pemanent	Others
Keonjhar	Scientist 2	Mr. Jibanjit Sen	Soil Science	M.Sc (Ag)	Soil Microbiology	15,600-39,100+ 6000 (AGP)	23070	26.06.2006	Pemanent	Others
Keonjhar	Scientist 3	Dr.Laxmipriya Pradhan	Home Science	PhD	Home Science. Extension Education	15,600-39,100+ 6000 (AGP)	20590	11.09.2014	Pemanent	Others
Keonjhar	Scientist 4	Vacant								
Keonjhar	Scientist 5	Vacant								
Keonjhar	Scientist 6	Vacant								
Keonjhar	Programme Assistant	Miss. Sipra Das	Soil Science	M.Sc (Ag)	Soil Sc.	9300-34800 GP 4200	10130	21.03.2016	Contractual	Others
Keonjhar	Farm Manager	Mrs. Amrita Mohapatra	Horticulture	Ph.D (Hort.)	Fruit Science	9300-34800 GP 4200	9300	31.07.2015	Contractual	Others
Keonjhar	Computer Programmer	Mrs. Mamata Naik	Computer	M.Sc., MCA	Networking	9300-34800 GP 4200	11010	10.07.2014	Contractual	SC
Keonjhar	Accountant / superintendent	Vacant								
Keonjhar	Stenographer	Vacant								
Keonjhar	Driver	Mr. Ajay Kumar Lenka		9th pass		5200-20200 +1900(GP)	6860	21.07.2008	Contractual	Others
Keonjhar	Driver	Mr. Saroj Ku. Mishra		Graduation		5200-20200 +1900(GP)	5870	10.02.2014	Contractual	Others
Keonjhar	Supporting staff	Mr. Chitta Ranjan Dehury		7th pass		4440-7440+ 1300 (GP)	5820	29.07.2008	Contractual	ST
Keonjhar	Supporting staff	Mr Hari Gouda		8th pass		4750-7440 +1500 GP	5140	20.01.2015	Contractual	Others

1.2. DISTRICT PROFILE (detail of geographical area, cultivation, Land, resources, opportunities, irrigation, populations etc.)–

A. Basic Information:

Agro-climatic zone	North Central Platueu Zone
Agro-ecological situation (AES)	7
Total Geographical Area	8.31 lakh ha
Normal Rainfall	1487.7mm
Irrigated area	63308 ha (Kharif) 31897 ha (Rabi)
Cropping intensity	140
No. of Sub-division	3
No. of Blocks	13
No. of GPs	186
No. of Villages	2133

B. LAND UTILIZATION PATTERN

Forest Area	403680 ha
Cultivable Area	302000 ha
Cultivated Area	2,97,873 ha
A) Upland	158653 ha
B) Medium Land	99832 ha
C) Low Land	39388 ha
Land put to un agricultural use	34000
Barren and uncultivable land	27000

C. DEMOGRAPHIC PROFILE OF THE DISTRICT

Geographical and Population details of the District (Census 2011)			
Population (2011 Census)	Total	1,801,733	in %
	Male	906,487	50.31
	Female	895,246	49.69
	Rural	1,548,674	85.95
	Urban	253,059	14.05
	Scheduled Caste (SC)	209,357	11.62
	Scheduled Caste Male	104,684	50.00
	Scheduled Caste Female	104,673	50.00
	Scheduled Tribe(ST)	818,878	45.45
	Scheduled Tribe Male	405,927	49.57
	Scheduled Tribe Female	412,951	50.43
Population Density	217 (Per sq.km)		
Literacy	Total Literate	1,052,518	69.00
	Literate Male	605,119	79.22
	Literate Female	447,399	58.70
	Total Illiterate	749,215	41.58
	Illiterate Male	301,368	40.22
	Illiterate Female	447,847	59.78
Households	Total Households	405,272	
	Rural Households	348,448	85.98
	Urban Households	56,824	14.02
Population Growth			15.35%
Sex Ratio (Per 1000)			988
Child Sex Ratio (0-6 Age)			958

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

S. No	Farming system/enterprise

1	Paddy-Mustard + Poultry
2	Paddy-Vegetables (Tomato, Brinjal, Cole crops and cucurbits) + Sericulture
3	Paddy-pulse (Chick pea, Green gram, Black gram, Field pea etc.) + Apiculture
4	Vegetable (Kharif tomato, raddish, Cauliflower-Vegetables (tomato, brinjal cole crops)
5	Ground nut-fallow
6	Paddy-Paddy + Fishery +Duckery/Poultry
7	Paddy-Ground nut + Poultry
8	Pulses-Vegetable
9	Paddy-linseed
10	Mango + Spices (Ginger and turmeric) +Poultry
11	Horti-silviculture + Duckery + Poultry
12	Niger-Fallow
13	Maize-Vegetable
14	Paddy-Wheat
15	Paddy-Mustard-Vegetable (Tomato)

1.3. DETAILS OF ADOPTED VILLAGE during 1.4.2016 to 31.3.2017 (Approved by competent Authority in meetings/workshops)

KVK Name	Village Name	Year of adoption	Block Name	Distance from KVK	Population	Number of farmers (having land in the village)
Keonjhar	Khuntapingu	2016	Saharpada	52	575	102
Keonjhar	Panposi	2016	Jhumpura	35	510	94
Keonjhar	Maheswarpur	2017	Champua	67	810	135
Keonjhar	Dhanurjaypur	2017	Sadar	36	640	120
Keonjhar	Kundhei	2017	Banspal	47	410	65

1.4. THRUST AREAS identified by KVK (Approved by competent Authority in meetings/workshop)

KVK Name	THRUST AREA
Keonjhar	Crop diversification and Intensification in Rainfed up lands
Keonjhar	Varietal replacement in field and vegetable crops
Keonjhar	Area and technology expansion for off-season vegetable cultivation
Keonjhar	Cultivation of more remunerative crops like onion, garlic, spices, broccoli etc.
Keonjhar	Area expansion of fruit crops and fruit based intercropping
Keonjhar	Soil health management through better and efficient utilization of farm residues
Keonjhar	Integrated nutrient management and correction of micronutrient deficiencies
Keonjhar	Management of problematic soil (Acidic and Iron toxicity)
Keonjhar	Enforcement of IPM strategies in crops with particular emphasis to plant diversity, botanicals, bio-pesticides and behavioural aspects
Keonjhar	Pond based integrated farming system for sustainable production and income
Keonjhar	Integrated nutrient and feed management for improving the pond productivity and high fish production
Keonjhar	Better management practices (BMP) in seasonal water bodies for higher fish production
Keonjhar	Introduction of fast growing and high value fish and shell fishes and adoption of advance culture practices
Keonjhar	Weed management practices in different crops
Keonjhar	Promotion of different agro-based enterprises for women empowerment
Keonjhar	Value addition in vegetables, underutilized fruits and tuber crops
Keonjhar	Medicinal plant cultivation
Keonjhar	Practicing agro-forestry and forest based intercropping
Keonjhar	Organization of farmers group

1.5. Problem identified by KVK (Approved by competent Authority in meetings/workshop)

KVK Name	Problem identified	Methods of problem identification	Location Name of Village & Block
Keonjhar	Low yield & high risk of upland paddy	PRA survey, Problem cause analysis, focus group discussion, interaction with line department, field visit	Hatadihi, Ghasipura, Anandpur
Keonjhar	Low yield in medium land rice due to poor nutrient management, conventional method of	PRA survey, Problem cause analysis, focus group discussion, interaction with	Ghatagaon, Jhumpura, Sadar,Anadpur.Hatadihi

	cultivation, deficiency in Zn and S and heavy incidence of insect pest.	line department, field visit	
Keonjhar	Low yield in maize due to conventional variety, poor nutrient management, deficiency of Zn and B & soil acidity	PRA survey, Problem cause analysis, focus group discussion, interaction with line department, field visit	Telkoi, Sadar, Harichandanpur, , Banspal, Patna
Keonjhar	Low yield of wheat due to poor nutrient management , soil acidity & zinc deficiency	PRA survey, Problem cause analysis, focus group discussion, interaction with line department, field visit	Sadar, Patna, ghatgaon
Keonjhar	Low yield in arhar and chick pea due to traditional variety, poor nutrient management and high infestation of pod borer complex and wilt.	PRA survey, Problem cause analysis, focus group discussion, interaction with line department, field visit	Sadar, Patna,Jhumpura
Keonjhar	Low yield in groundnut due to use of degenerated seeds of AK12-24, poor nutrient management, soil acidity, infestation of leaf minor and PNBN virus.	PRA survey, Problem cause analysis, focus group discussion, interaction with line department, field visit	Patna, Sadar, Jhumpura, Champua
Keonjhar	Low yield in toria due to poor nutrient management, S deficiency and heavy incidence of mustard aphid and weber.	PRA survey, Problem cause analysis, focus group discussion, interaction with line department, field visit	Patna, Ghatagaon, Sadar, Jhumpura, Telkoi, Hatadhihi,Ghasipura
Keonjhar	Low yield in off season tomato due to inappropriate variety, soil acidity, B deficiency and incidence of wilt, fruit borer and leaf curl viral disease incidence.	PRA survey, Problem cause analysis, focus group discussion, interaction with line department, field visit	Jhumpura,Patna, Ghatagaon, Sadar
Keonjhar	Low yield in off season corrander due to local variety	Problem cause analysis, focus group discussion, interaction with line department, field visit	Ghatgaon, Sadar, Patna, Saharpada
Keonjhar	Low yield in tuber crops like sweet potato , yam and elephant foot yam due to traditional variety and conventional management practice.	PRA survey, Problem cause analysis, focus group discussion, interaction with line department, field visit	Sadar, Patna, Jhumpura, Ghatagaon
Keonjhar	Low yield in cabbage and cauliflower due to soil acidity, B deficiency and high infestation of DBM, collar rot and other insect pest.	PRA survey, Problem cause analysis, focus group discussion, interaction with line department, field visit	Hatadihi,Ghatagaon, Anandapur, Ghasipur,
Keonjhar	Low yield in arrow root due to conventional variety with traditional package of practice	PRA survey, Problem cause analysis, focus group discussion, interaction with line department, field visit	Jhumpura, Sadar, Patna
Keonjhar	Low yield and poor fruit quality in brinjal due to heavy incidence of little leaf	PRA survey, Problem cause analysis, focus group discussion, interaction with line department, diagnostic field visit	Ghatgaon, Patna, jhumpura, saharpada
Keonjhar	Low yield in blackgram due to the incidence of YVMV	PRA survey, Problem cause analysis, focus group discussion, interaction with line department, field visit	Saharpada, Sadar, Ghatagaon, Patna,Jhumpura
Keonjhar	Low yield in onion due to sulphur deficiency	PRA survey, Problem cause analysis, focus group discussion, interaction with	Saharpada, Sadar, Ghatagaon, banspal , Patna,Jhumpura

		line department, field visit	
Keonjhar	Low yield and non attainable targeted yield in okra	PRA survey, Problem cause analysis, focus group discussion, interaction with line department, field visit	Jhumpura, Sadar, Patna
Keonjhar	Low yield of tomato due to high weed infestation and traditional method of cultivation.	PRA survey, Problem cause analysis, focus group discussion, interaction with line department, field visit	Patna, Ghatagaon, Jhumpura, Sadar, Anadpur, Hatadihi
Keonjhar	Loss of pulse grains due to high infestation of pulse beetle	PRA survey, Problem cause analysis, focus group discussion, interaction with line department, diagnostic field visit	Ghatgaon, Sadar, Patna, Saharpada
Keonjhar	Non availability of sufficient paddy straw for mushroom cultivation	SHG meet, Problem cause analysis, focus group discussion	Jhumpura, Sadar, Patna
Keonjhar	No value addition in stone apple	SHG meet, Problem cause analysis, focus group discussion	Jhumpura, Sadar, Banspal, Harichandanpur , Patna
Keonjhar	Low yield in paddy due to high incidence of sheath blight	PRA survey, Problem cause analysis, focus group discussion, interaction with line department, diagnostic field visit	Ghatgaon, Sadar, Patna, Saharpada
Keonjhar	Low yield paddy due to non adoption of proper fertilizer management practices	Problem cause analysis, focus group discussion, interaction with line department,	Jhumpura,ghatgaon, Sadar, Patna, saharpada
Keonjhar	Low level of family income and poor productivity from cross pollinated crop	PRA survey, Problem cause analysis, focus group discussion, interaction with line department, field visit	Sadar, Patna, Jhumpura, Ghatagaon
Keonjhar	Lack of suitable enterprise for the farm women and low house hold income	Livelihood analysis, SHG meet, group discussion.	Hatadihi, Ghatagaon, Ghasipur, sadar,patna
Keonjhar	Low egg production, slower growth rate and high mortality in local birds	Problem cause analysis, focus group discussion, interaction with line department,	Jhumpura,Ghatgaon, Sadar, Patna
Keonjhar	Irregular planting of crops in backyard restricts the through out availability of vegetables,Malnutrition incidence among women & children, High price of vegetables	SHG meet, Problem cause analysis, focus group discussion	Patna, Saharpada, Ghatgaon
Keonjhar	Low production of fish due to stocking of small fry with dis propersionate size and ratio, no/ poor supplementary feeding	Problem cause analysis, discussion with FIG, interaction with line department, field visit	Saharpada, Sadar, Patna, jhumpura
Keonjhar	Low production of fish due to under utilization of pond carrying capacity, no pre and post pond water fertilization for pond water productivity	Problem cause analysis, discussion with FIG, interaction with line department, field visit	Patna, Ghatagaon, Jhumpura, Sadar, Anadpur, Hatadihi
Keonjhar	Non adoption of pond based farming system for higher & sustainable return	Problem cause analysis, discussion with FIG, interaction with line department, field visit	Telkoi, Sadar, Banspal

2. On Farm Testing

2.1 Information about OFT to be conducted

KVK name	Year / season	Problem diagnose	Category of technology (Assessment/ Refinement)	Thematic Area	Crop/ enterprise	Farming Situations	Target	No. of trials	Title of OFT	Details of tech.	Source of tech.	Observation parameters	Results (with parameter)			Net Returns (Rs./ha)	
													Farmer practice	Rec. Tech T2	T3	T1	T2

													T1				
Keonjhar	2017-18 Kharif	Less yield (57 q/ha) due to high infestation of rhizome rot in ginger (1100 ha)	Assessment	IPM	Crop	Irrigated Medium land, spice-veg cropping system	1	07	Assessment of management of rhizome rot in ginger	FP: Spraying of Bavistin @ 2 gm/lt during vegetative stage TO1: Rhizome treatment mancozeb @ 2 gm/litre and Drenching of Metalaxyl+ Mancozeb (2.5ml/lt)+ Streptocycline 1.5 gm/10 lt at an interval of 15 days TO2: Rhizome treatment mancozeb @ 2 gm/litre andDrenching of Cymoxil+ Mancozeb (3ml/lt)+ Streptocycline 1.5 gm/10 lt at an interval of 15 days	OUAT 2010	No. of affected plants/ m^2, Yield					
Keonjhar	2017-18 Rabi	Heavy loss in yield due to high infestation of wilt in Tomato (9120 ha)	Assessment	IPM	Crop	Irrigated Medium land, veg-veg/ rice-veg cropping system	1	07	Assessment of management of wilt in Tomato	FP: Spraying of Carbendazim @ 2 gm/lt during vegetative stage TO1: Soil amendment with Neem cake@ 2.5q/ha at 30 D & FYM decomposed soil application with T. *viridae* before planting	OUAT2010	No. of wilt affected plants/ m^2, Yield					

									@2.5kg/ha TO2: Soil application with copper oxychloride(3gm/lt) and streptocycline (1.5 gm/10 lt)							
Keonjhar	2017-18 Kharif	Low yield (125 q/ha) due to more infestation of weeds	Assessment	ICM	Crop	Irrigated (Deep bore well) upland, hybrid variety, Veg - Veg cropping system	1	07	Assessment of mulching in kharif tomato	FP: Traditional planting method (45' X 60' cm) without mulching TO1: Application of organic mulch (paddy straw/ sal / neem/ jamun leaves as mulch) TO2: Application of Plastic Mulching(30 Micron)	IIVR, 2012	cost in weeding , Fruit weight, No. of fruits/plant, Quality of produce, , Yield					
Keonjhar	2017-18 Kharif	Low yield of black gram (3 q/ha) due to poor nutrient management	Assessment	INM	Crop	rainfed up land, blackgram - fallow cropping system	1	07	Assessment of Nutrient management in kharif Black gram	FP: Imbalanced nutrient application. (30kg DAP/ha) TO1: Recommended Fertilizer Dose (20:40:20 NPK kg/ha) TO2: Soil test Based Fertilizer with rhizobium culture @20g/kg seed treatment	OUAT2012	No of pods/plant , 1000 seed wt (g), yield, pre and post crop soil status					
Keonjhar	2017-18 Rabi	Lack of moisture in the field after rice harvest restricts the farmers to go for second crop	Assessment	ICM	Crop	Rainfed medium land, rice-fallow	1	07	Assessment of Paira cropping systems in rice-fallow	FP:Rice-fallow TO1:Rice(Lalat) - Paira Field Pea (Rachna) TO2: Rice(Lalat) – Paira Chick Pea (Jaki-9217)	OUAT2011	Yield (q/ha)					

Keonjhar	2017-18	Poor procurement price in local market @Rs 10/- per piece	Assessment	Value addition	Enterprise	Homestead	1	07	Assessment of different products for value addition of Jack fruit	FP: Raw jack fruit TO1: Value addition of Jackfruit as chips TO2: Value addition of Jackfruit pickle	OUAT, 2016 ICAR(RC) for Goa-2014 KVK, Card, Panthanamthitta District, Kerala -2014	Cost of Preparation(Rs), Incremental income (Rs), Net income(Rs),Sensory evaluation - (Colour, flavour, Taste, Overall acceptability, Self life(Days).					
Keonjhar	2017-18 Summer	About 30% crop spoils due to germination and rotting during storage	Assessment	Income generation	Enterprise	Backyard	1	07	Assessment of different Practices for preservation of Fresh Ginger	FP: In Pit method TO1: Bricks wall with sand and Chemicals(treated with Bavistin) TO2: Improved Ginger storage structure	Farm Innovation, ICAR Research Complex for NEH region, 2012	Weight loss(%), Sprouting(%), Rotting(%)					

2.1a Recommendations of OFTs

Recommendations		
Title of OFT	**For Farmers**	**For Deptt. Personnel**

2.2 Economic Performance

KVK name	OFT Title	Average Cost of cultivation (Rs/ha)			Average Gross Return (Rs/ha)			Average Net Return (Rs/ha)			Benefit-Cost Ratio (Gross Return / Gross Cost)		
		FP (T1)	RP (T2)	RP (T3)	FP (T1)	RP (T2)	RP (T3)	FP (T1)	RP(T2)	RP (T3)	FP (T1)	RP (T2)	RP (T3)

3. Frontline Demonstrations

3.1. Follow-up for results of FLDs implemented during previous years (upto 2016-17)

List of technologies demonstrated and popularized during previous years and recommended for large scale adoption in the district

KVK Name	Crop/ Enterprise	Thematic Area	Technology demonstrated	Details of popularization methods suggested to the Extension system	Horizontal spread of technology		
					No. of villages	No. of farmers	Area in ha

3.2 Details of FLDs to be implemented during 2017-18

KVK Name	The mati	Name of	Seas on	Technology demonstrated	Crop-Area	Name of	Details of tech.	Source of tech.	Observation parameters	Results (q/ha)	%	No. of farmers

	c area	Crop/ Enter prise	and year		(ha) / Entre p - No.	Variet y Entrep rizes				De mo n	C he ck	c h a n g e	S C	S T	O B C	O th er s	Tot al
Keonj har	IC M	Ma ize + co wp ea	Kha rif- 201 7	Demonstration of maize+cowpea intercropping in unbunded upland	2	Gom ichi- 1 Supe r-36	Maize+ bushy cowpea (2:2) with Soil test based fertilizer	OUA T, 2011	Yield (q/ha)								
Keonj har	IP M	Wa ter mel on	Rabi 17- 18	Demonstration of fruit fly management in Water melon.	1	Aug usta	Pheromone trap for fruit fly with Cue lure @ 50nos/ha + Bait spray (Malathion 1ml + jaggery 100 gm+ Water 1lt.) at 7m intervals for 45 sec	CHE S, 2010	No of fruits affected(%) , Yield								
Keonj har	IP M	Okr a	Sum mer 17- 18	Demonstration of YMV management in Okra .	1	Shak ti	Yellow sticky trap @50Nos/ha at 30 days of sowing & spraying of Diafenthurion @ 1.5 gm/lt twice at 15 days interval when single plant of YMV is observed	OUA T, 2011	No of fruits affected/ 100 fruits, no of fruits/plant, Yield								
Keonj har	IP M	Bri njal	Kha rif 201 7	Demonstration of sucking pest management in Brinjal.	1	Gree n star	Alternate Sprayings of Flonicamide (0.3ml/ltr) with thiomethoxam (0.3 gm/lit) at an interval of 15 days	OUA T, 2011	%leaves affected, % plants affected, Yield								

Keonjhar	INM	Brinjal	Rabi 2017-18	Demonstration of Boron application in Brinjal	1	Green star	Foliar application of 0.25 % Borax twice at fruiting stage	OUAT-2006	% of fruit cracking, Yield, pre and post crop B status								
Keonjhar	INM	Paddy	Kharif 2017	Demonstration of Leaf Color Chart for management of need based Nitrogen Fertilizer in rice.	2	Lalata	Use of nitrogen on the basics of LCC reading (Critical LCC value)	CRRI -2010, OUAT-2014	Yield, Saving of nitrogenous fertilizer, No. of tiller/plant, Plant height, pre and post crop nutrient status								
Keonjhar	INM	Onion	Rabi 17-18	Demonstration sulphur on onion in rice-onion cropping system	1	N-53	Application of Sulphur @30kg/ha in furrows along with basal dose of soil test based NPK fertilizers at the time of sowing	OUAT, 2010	Bulb Wt, Yield Q/ha, 'S"content in soil in pre and post crop period								
Keonjhar	INM	Paddy	Kharif 17-18	Demonstration of STBF application in Paddy	2	Lalata	Soil test based fertilizer application in paddy	OUAT, 2010	pre and post crop soil nutrient status, no of effective tillers/m2, Yield (q/ha)								
Keonjhar	Value addition	Tamarind	Kharif 2017-18	Demonstration of Practices for value addition of Tamarind	10	Tamarind	Preparation of Mint tamarind sauce and RTS from Tamarind pulp	OUAT 2016-17	Sensory evaluation-(Colour, flavour, Taste,) Overall acceptability, Self life(Days)								

Keonjhar	Income generation	Mushroom	Rabi-2017-18	Demonstration of low cost poly house for production of paddy straw mushroom in winter	2	Paddy straw	low cost poly house for production of paddy straw mushroom in winter	OUAT-08-09	Outside & Inside temperature (°C) & Humidity(%), Harvesting period(Days) Yield(Kg/Bed)								
Keonjhar	Drudgery reduction	machinery	Kharif and Rabi-2017-18	Demonstration of Twin Wheel Hoe in weeding for drudgery reduction in backyard vegetable cultivation	10	Twin Wheel Hoe	Twin Wheel Hoe for weeding in Vegetable cultivation for drudgery reduction	OUAT-08-09	Energy expenditure (KJ/Min), Heartbeat (beats/min), Increase efficiency(%), Drudgery(%), CCW, Saving in Cardic cost(%)								
Keonjhar	Value addition	Tomato powder	Rabi-2017-18	Demonstration of value addition Tomato through Tomato powder	10	Tomato powder	Preparation of Tomato Powder	OUAT-2011	Sensory evaluation-(Colour, flavour, Taste, Overall acceptability, Self life(Days)								

3.3 Economic Impact of FLD

KVK Name	Name of Crop/ Enterprise	Technology demonstrated	Parameters	Cost of cultivation (Rs/ha)	Gross Return (Rs/ha)	Average Net Return (Rs/ha)	Benefit-Cost Ratio (Gross Return / Gross Cost)

			Name and unit of Parameter	Demo	Check	Demo	Check	Demo	Check	Demo	Check	Demo	Local Check

3.4 Training and Extension activities proposed under FLD

KVK Name	Crop	Activity	No. of activities organized	Number of participants	Remarks
Keonjhar	Maize+ cowpea	Field days	1	40	
		Farmers Training	1	30	
		Media coverage	1	-	
		Training for extension functionaries	-	-	
Keonjhar	Watermelon	Field days	1	40	
		Farmers Training	1	30	
		Media coverage	1	-	
		Training for extension functionaries	-	-	
Keonjhar	Okra	Field days	1	40	
		Farmers Training	1	30	
		Media coverage	1	-	
		Training for extension functionaries	-	-	
Keonjhar	Brinjal	Field days	1	40	
		Farmers Training	1	30	
		Media coverage	1	-	
		Training for extension functionaries	1	10	
Keonjhar	Brinjal	Field days	1	40	
		Farmers Training	1	30	
		Media coverage	1	-	
		Training for extension functionaries	-	-	
Keonjhar	Paddy	Field days	1	40	
		Farmers Training	1	30	

		Media coverage	1	-	
		Training for extension functionaries	-	-	
Keonjhar	Onion	Field days	1	40	
		Farmers Training	1	30	
		Media coverage	1	-	
		Training for extension functionaries	-	-	
Keonjhar	Paddy	Field days	1	40	
		Farmers Training	1	30	
		Media coverage	1	-	
		Training for extension functionaries	-	-	
Keonjhar	Tamarind	Field days	1	40	
		Farmers Training	1	30	
		Media coverage	1	-	
		Training for extension functionaries	1	15	
Keonjhar	Mushroom	Field days	1	40	
		Farmers Training	1	30	
		Media coverage	1	-	
		Training for extension functionaries	-	-	
Keonjhar	Machinery	Field days	1	40	
		Farmers Training	1	30	
		Media coverage	1	-	
		Training for extension functionaries	-	-	
Keonjhar	Tomato powder	Field days	1	40	
		Farmers Training	1	30	
		Media coverage	1	-	
		Training for extension functionaries	-	-	

3.5 Details of FLD on crop hybrids.

Sr.No.	Name of the KVK	Name of the Crop	Name of the Hybrids	Source of Hybrid (Institute/Firm)	No. of farmers	Area in ha.
1	**Keonjhar**	**Okra**	**Shakti**	**-**	**10**	**1**

2	**Keonjhar**	**Maize**	**Super -36**	**-**	**10**	**1**
3	**Keonjhar**	**Watermelon**	**Augusta**	**-**	**10**	**1**

4. Feedback System

4.1. Feedback of the Farmers to KVK

Name of KVK	Feedback			
	Technology appropriations	Methodology used	Benefits of OFT/FLD	Future Adoption

4.2. Feedback from KVK to Research System.

Name of KVK	Feedback basic of OFT on Technology Tested

Abbreviation Used

FW	(A) Farmers & Farm Women
RY	(B) Rural Youths
IS	(C) Extension Personnel
ONC	On Campus Training Programme
OFC	Off Campus Training Programme

M	Male
F	Female
T	Total
Thematic Areas for Training	
CP	Crop Production
HOV	Horticulture – Vegetable Crops
HOF	Horticulture-Fruits
HOO	Horticulture- Ornamental Plants
HOP	Horticulture- Plantation crops
HOT	Horticulture- Tuber crops
HOS	Horticulture- Spices
HOM	Horticulture- Medicinal and Aromatic Plants
SFM	Soil Health and Fertility Management
LPM	Livestock Production and Management
WOE	Home Science/Women empowerment
AEG	Agril. Engineering
PLP	Plant Protection
FIS	Fisheries
PIS	Production of Inputs at site
CBD	Capacity Building and Group Dynamics
AGF	Agro-forestry
OTH	Others
RY	Rural Youth
IS	Extension Personnel

5. TRAINING PROGRAMMES

1. **Training programmes should be strictly covered under above mentioned thematic areas only.**
2. **For category, training type and thematic area, use abbreviations only.**

Table 5.1:Documentation of the need assessment conducted by the KVK for the training programme

Name of KVK	Category of the training	Methods of need assessment	Date and place	No. Of participants to be involved
Keonjhar	FW/RY	PRA survey, Group Discussion Problem cause analysis, focus group discussion	03.05.17, Panposi	50
Keonjhar	FW/RY	PRA survey, Group Discussion Problem cause analysis, focus group discussion, field visit	05.05.17, Kundhei	50
Keonjhar	FW/RY	PRA survey, Group Discussion Problem cause analysis, focus group discussion, field visit	08.06.17, Maheswarpur	50
Keonjhar	FW/RY	PRA survey, Group Discussion Problem cause analysis, focus group discussion, field visit	23.06. 17, Dhanurjaypur	50

Table 5.2. Details of Training programmes to be conducted by the KVKs.

Name of KVK	Cate-gory	Training Type	Thematic area	Training Title	No. of Courses	Duration (Days)	Target for No. of participants	Participants							
								General		SC		ST		Others	
								M	F	M	F	M	F	M	F
1	2	3	4	5	7	8		9	10	11	12	13	14		
Keonjhar	FW	OFC	PLP	IPM for management of stem borer in paddy	1	1	30								
Keonjhar	FW	OFC	PLP	Management of sheath blight in Paddy	1	1	30								
Keonjhar	FW	OFC	PLP	Management of rhizome rot in ginger	1	1	30								
Keonjhar	FW	OFC	PLP	Management of wilt disease in tomato	1	1	30								
Keonjhar	FW	OFC	PLP	Management of sucking pest complex in Brinjal	1	1	30								
Keonjhar	FW	OFC	PLP	Management of YMV in cowpea	1	1	30								
Keonjhar	FW	OFC	PLP	IPM practices for management of Leaf miner in Tomato	1	1	30								
Keonjhar	FW	OFC	PLP	Management of early blight in potato	1	1	30								
Keonjhar	FW	OFC	PLP	Management for head borer in sunflower	1	1	30								
Keonjhar	FW	OFC	PLP	Different methods of seed treatment techniques in crops	1	1	30								
Keonjhar	FW	OFC	PLP	Management of fruit borer in Okra	1	1	30								
Keonjhar	FW	OFC	PLP	IPM practices for management of shoot & fruit borer in Brinjal	1	1	30								
Keonjhar	FW	OFC	SFM	Use of micronutrient in different crops	1	1	30								
Keonjhar	FW	OFC	SFM	Nutrient management in Tomato	1	1	30								
Keonjhar	FW	OFC	SFM	Weed management in kharif Maize	1	1	30								
Keonjhar	FW	OFC	SFM	Integrated Nutrient Management in Cauliflower	1	1	30								
Keonjhar	FW	OFC	SFM	Methods of biofertilizer application in vegetables	1	1	30								
Keonjhar	FW	OFC	SFM	Cultivation of pulses as paira crop	1	1	30								
Keonjhar	FW	OFC	SFM	Importance of Soil testing and soil sample collection technique	1	1	30								
Keonjhar	FW	OFC	SFM	Nutrient management in onion crops	1	1	30								
Keonjhar	FW	OFC	SFM	Nutrient management in toria	1	1	30								
Keonjhar	FW	OFC	SFM	Growing of green manuring crops	1	1	30								

Name of KVK	Cate-gory	Training Type	Thematic area	Training Title	No. of Courses	Duration (Days)	Target for No. of participants	Participants							
								General		SC		ST		Others	
								M	F	M	F	M	F	M	F
1	2	3	4	5	7	8		9	10	11	12	13	14		
Keonjhar	FW	OFC	SFM	Nutrient management in Chickpea.	1	1	30								
Keonjhar	FW	OFC	SFM	Nutrient management in pulse crops.	1	1	30								
Keonjhar	FW	OFC	SFM	Methods of lime application in Acid soil	1	1	30								
Keonjhar	FW	OFC	SFM	Nutrient management in blackgram	1	1	30								
Keonjhar	FW	OFC	WOE	Production technology of paddy straw mushroom for income generation	1	1	30								
Keonjhar	FW	OFC	WOE	Brooding management of backyard poultry.	1	1	30								
Keonjhar	FW	OFC	WOE	Preservation & value addition of Tamarind	1	2	30								
Keonjhar	FW	OFC	WOE	Preventing nutrient loss during food processing	1	1	30								
Keonjhar	FW	OFC	WOE	Preparation of model Kitchen garden for nutritional security of farm families	1	1	30								
Keonjhar	FW	OFC	WOE	Production technology of Oyster mushroom mushroom for income generation	1	1	30								
Keonjhar	FW	OFC	WOE	Preparation of nursery bed for quality seedlings	1	1	30								
Keonjhar	FW	OFC	WOE	Storage practices for Safe storage of grain	1	1	30								
Keonjhar	FW	OFC	WOE	Use of drudgery reduction implements for farm women	1	1	30								
Keonjhar	FW	OFC	WOE	Preservation of vegetables through dehydrated method	1	1	30								
Keonjhar	FW	OFC	HOV	Offseason cauliflower cultivation	1	1	30								
Keonjhar	FW	OFC	HOV	Cultivation practices of kharif tomato	1	1	30								
Keonjhar	FW	OFC	HOF	Intercropping in newly developed mango orchard	1	1	30								
Keonjhar	FW	OFC	HOF	Canopy management in mango orchard	1	1	30								
Keonjhar	FW	OFC	HOV	Exotic vegetable cultivation	1	1	30								
Keonjhar	FW	OFC	HOF	Scientific Practices of cashew cultivation	1	1	30								
Keonjhar	RY	ONC	PLP	Honey bee cultivation as a source of livelihood	2	8	40								

Name of KVK	Cate-gory	Training Type	Thematic area	Training Title	No. of Courses	Duration (Days)	Target for No. of participants	Participants							
								General		SC		ST		Others	
								M	F	M	F	M	F	M	F
1	2	3	4	5	7	8		9	10	11	12	13	14		
Keonjhar	RY	ONC	SFM	Vermi-composting	1	4	20								
Keonjhar	RY	ONC	SFM	Organic farming	1	4	20								
Keonjhar	RY	ONC	WOE	Perseveration and Value addition of underutilized fruits	1	4	20								
Keonjhar	RY	ONC	WOE	Preservation and value addition of Tomato	1	4	20								
Keonjhar	RY	ONC	IFS	IFS for sustainable income and higher profit	2	8	40								
Keonjhar	IS	ONC	PLP	Management of pests and diseases in vegetables	1	1	15								
Keonjhar	IS	ONC	PLP	Management of pests and diseases in fruit crops	1	1	15								
Keonjhar	IS	ONC	SFM	Management of Acid Soil	1	1	15								
Keonjhar	IS	ONC	SFM	Micronutrient application in vegetables	1	1	15								
Keonjhar	IS	ONC	WOE	Preservation and a value addition of vegetables and fruits	1	2	15								
Keonjhar	IS	ONC	WOE	Gender Friendly enterprise for livelihood of farm families	1	2	15								
Keonjhar	IS	ONC	CBD	PRA tools for action plan development	2	2	30								

Table 5.3. Details of Vocational training programmes for Rural Youth to be conducted by the KVKs

Name of KVK	Training title	Crop / Enterprise	Identified Thrust Area	Duration of training (days)	Number of Beneficiaries					
					SC		ST		Others	
					M	F	M	F	M	F
Keonjhar	Preparation of bio-pesticides from different leaf extracts	Enterprise	Alternative livelihood option	05						
Keonjhar	Methods of Compost preparation and its application	Enterprise	Alternative livelihood option	05						
Keonjhar	Commercial mushroom production	Enterprise	Alternative livelihood option	05						

Table 5.4. Details of training programme to be conducted for Livelihood Security in rural areas by the KVKs

	Training title	Self employed after training	

Name of KVK		Type of units	Number of units	Number of persons employed	Number of persons employed else where

Table 5.5. Sponsored Training Programmes

Name of KVK	Title	Thematic area (as given in abbreviation table)	Sub-theme (as per column no 5 of Table T1)	Client (FW/ RY/ IS)	Dura-tion (days)	No. of courses	No. of Participants						Sponsoring Agency	Fund received for training (Rs.)
							Others		SC		ST			
							M	F	M	F	M	F		
Keonjhar	Training programme for members of Panipanchayat	CBD		FW	4	3							WALMI, ODISHA	-

Table 5.6 Training Programmes for Panchayatiraj Institutions Office-bearers & members

Name of KVK	Title	Thematic area (as given in abbreviation table)	Sub-theme (as per column no 5 of Table T1)	Client (FW/ RY/ IS)	Dura-tion (days)	No. of courses	No. of Participants						Sponsoring Agency	Fund received for training (Rs.)
							Others		SC		ST			
							M	F	M	F	M	F		

Table 5.7 Evaluation/Follow up & Impact of the training programmes conducted by the KVK (all types of trainings)

Name of KVK	Title of the training	No. of trainees	Change in knowledge (Score)		Change in Production (q/ha)		Change in Income (Rs)		Impact on 1. Area expanded (ha) 2. No. of farmers adopted (no.) 3. % change in knowledge, production & Income
			Before	After	Before	After	Before	After	

6. EXTENSION ACTIVITIES

Name of the KVK	Activity	No. of activities (Targeted)	No. of activities (Achieved)	Detail of Participants						Remarks		
				Farmers (Others)		SC/ST (Farmers)		Extension Officials		Purpose	Topic s	Crop Stages
				M	F	M	F	M	F			
Keonjhar	Field Day	12										
Keonjhar	Kisan Mela	01										
Keonjhar	Kisan Ghosthi	06										
Keonjhar	Exhibition	02										
Keonjhar	Film Show	52										
Keonjhar	Method Demonstrations	12										
Keonjhar	Farmers Seminar	03										
Keonjhar	Workshop	1										
Keonjhar	Group meetings	10										
Keonjhar	Lectures delivered as resource persons	20										
Keonjhar	Newspaper coverage	10										
Keonjhar	Radio talks	5										
Keonjhar	TV talks	2										
Keonjhar	Popular Articles	5										
Keonjhar	Extension Literature	10										
Keonjhar	Farm Advisory Services	50										
Keonjhar	Scientific visit to farmers field	180										
Keonjhar	Farmers Visit to KVK	500										
Keonjhar	Diagnostic Visits	50										
Keonjhar	Exposure Visits	10										
Keonjhar	Ex-trainees Sammelan	05										
Keonjhar	Soil Health Camp	2										
Keonjhar	Animal Health Camp	2										
Keonjhar	Agri Mobile Clinic	-										
Keonjhar	Soil Test Campaigns	02										
Keonjhar	Farm Science Club conveners meet	-										
Keonjhar	Self Help Group conveners meetings	6										

7. Production and supply of Technological products

7.1 SEED production

KVK Name	Major group/class	Crop	Variety	Type of produce (for Seed produced type here SD; For Planting Material type here PM)	Quantity	Unit for quantity of produces (qtl for SD and Nos for PM)	Value (Rs.)	Provided to No. of Farmers
Keonjhar	Cereals	Paddy	Sahabhagi Dhan	F	36q	Qtl	97920	OSSC
Keonjhar	Cereals	Paddy	Manaswini	F	12 q	Qtl.	30720	OSSC
Keonjhar	Green manure crop	Sun hemp	-	T.L.	10	Qtl.	57000	OSSC
Keonjhar	Pulse	Horse gram	Urmi	F	8	Qtl.	36000	OSSC

7.2 Planting Material production

KVK Name	Major group/class	Name of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
						Variety	Type of Produce	Qty.	Cost of inputs	Gross income	
Keonjhar	Vegetable Seedling	Tomato	June, september	July , November	polyhouse	BT-10		50,000	13000	30,000	Round the year
Keonjhar	Vegetable Seedling	Chilli	June , sept	Oct , Novmeber	polyhouse	Agni Rekha		10000	4000	6000	Round the year
Keonjhar	Vegetable Seedling	Cabbage	October	November	polyhouse	NS-22		25000	10500	25000	
Keonjhar	Vegetable Seedling	Brinjal	June , July, september	July August , October	polyhouse	Green star		20000	8000	12000	Round the year
Keonjhar	Vegetable Seedling	Cauliflower	October	November	polyhouse	Madhuri, Megha		30000	16000	30000	
Keonjhar	Vegetable Seedling	Papaya	June	July	-	Red lady		1000	8000	12000	
Keonjhar	Spices	Turmeric, ginger	June	December , January	0.2	Suprava, suruchi		5Q	5000	20000	

7.3 Production Units (bio-agents / bio pesticides/ bio fertilizers etc.,)

KVK Name	Name of the Product	Qty	Amount (Rs.)	Remarks

			Cost of inputs	**Gross income**	
Keonjhar	BIOAGENTS				
Keonjhar	BIOFERTILIZERS (Vermicompost)	100q	20000	50000	
Keonjhar	BIOFERTILIZERS (Vermin)	10kg	1000	4000	
Keonjhar	Mushroom spawn	1000 bottles	14000	15000	
Keonjhar	Mushroom	200 kg	12000	16000	
Keonjhar	BIO PESTICIDES				

7.4 Livestock and fisheries production

KVK Name	Name of the animal / bird / aquatics	Details of production			Amount (Rs.)		Remarks
		Breed	Type of Produce	Qty.	Cost of inputs	Gross income	
Keonjhar	Cattle						
Keonjhar	Buffalo						
Keonjhar	Sheep and Goat						
Keonjhar	Poultry	Vanaraja	Chicks	1000	40000	45000	
Keonjhar	Duckery						
Keonjhar	Fisheries						
Keonjhar	Ornamental fish						
Keonjhar	Others (Specify)						

8. Activities of Soil and Water Testing Laboratory

Status of establishment of Lab : YES/NO, If yes, then

Year of establishment : **- 2007**

8.1 Details of soil & water samples analyzed so far :

KVK Name	Type	No. of Samples	No. of Farmers	No. of Villages	Amount released	Resources to be generated
	Soil Sample	650	650	20	-	3250
	Water Sample	-	-	-	-	-

9. Rainwater Harvesting, if available.

Training programmes to be conducted by using Rainwater Harvesting Demonstration Unit

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

10. Kisan Mobile Advisory (KVK-KMA)

KVK Name	No. of messages to be sent	No. of beneficiaries		Major recommendations
Keonjhar		Farmers	Ext. Pers.	
	48	26750	100	INM,IPM,IFS, Production and management, Mushroom, Weed management, Variety etc,.

11. Details of SAC Meeting

KVK Name	Date of SAC meeting	No. of SAC members attended	Major recommendations
Keonjhar	08.11.2017	30	

12. Literature to be Last Developed/Published (with full title, author & reference)

12.1 KVK Newsletters

KVK Name	Date of start	Periodicity	Number of copies to be printed	Number of copies to be distributed
Keonjhar	June	April 2017-June 2017	500	500
Keonjhar	September	July 2017 – Sept 2017	500	500
Keonjhar	December	Oct 2017 – Dec 2017	500	500
Keonjhar	March	Jan 2018 – Mar 2018	500	500

12.2 Details of Electronic Media to be Produced

KVK Name	Type of media (CD / VCD / DVD / Audio-Cassette)	Title of the programme	Number

12.3 PUBLICATIONS

Category	Number	Date of start	Periodicity	Number of copies to be printed	Number of copies to be distributed
Research Paper	1	-	-	50	40
Technical bulletins	3	-	-	100	90
Technical reports	10	-	-	30	20
Popular article	5	-	-	-	-
News paper coverage	10	-	-	-	-
Year Planner	1	April 2017	April2017-March2018	100	90
Others (pl. specify)					

13. Convergence with various agricultural schemes (Central & State sponsored)

KVK Name	Name of scheme	Name of Agency (Central/state)	Funds received (Rs.)	Activities organized	Operational Area	Remarks
Keonjhar	ATMA	State		Farmers Scientist Interaction, Demonstration on ginger in convergence programme	KVK, Keonjhar, Saharpada	
Keonjhar	MNREGA					
Keonjhar	NHM					
Keonjhar	RKVY	RKVY		Infrastructure	KVK,Keonjhar	
Keonjhar	DRDA					
Keonjhar	Zila Panchyat					
Keonjhar	Seed Village					
Keonjhar	NAIP					
Keonjhar	Climate Change					
Keonjhar	Others					

14. Utilization of Farmers Hostel.

Accommodation available (No. of beds):

KVK Name	Months	Year	Title of the training course	Duration of training	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
Keonjhar	August-March	2017-18	RY and Vocational Training	31	70	31	

15. Utilization of Staff Quarters.

KVK Name	Year of construction	Year of allotment	No. of quarters occupied	No. of quarters vacant	Reasons for vacant quarters, if any
Keonjhar		2005	1	-	
Keonjhar	2011 (3 nos.)	2011	2	1	Due to non-availability of supply water

16. Details of KVK Agro-technological Park –

a) Have you prepared layout plan, where sent?yes,

Sr .No.	Name of KVK	Technology park proposal	If yes, where sent?

		developed(yes/no)	**(ZPD/DES/any other,pl. sp.)**
1	**Keonjhar**	**Yes**	**Yes , ATARI, Jabalpur**

b) Details about Technology Park

Name of KVK	**Name of Component of Park**	**Detail Information (If established)**
	Crop Cafeteria	Maize based cropping system, Pest management in brinjal, Indigenous chilly variety preservation, Tribal crop museum, Trailing system in bittergourd
Keonjhar	Technology Desk	
Keonjhar	Visitors Gallery	
Keonjhar	Technology Exhibition	
Keonjhar	Technology Gate-Valve	

c). Crop Cafeteria-

Sr. No.	Theme of Crop Cafeteria	No. of Crop Cafeteria
01	Maize based cropping system	04
02	Pest management in brinjal	02
03	Indigenous chilly variety preservation	01
04	Tribal crop museum	01
05	Trailing system in bittergourd	04

17. Farm Innovators- list of 10 Farm Innovators from the District

Sr. No.	Name of kvk	Name of Farm Innovator	Name of the Innovation	Address of the farmer with Mobile No.
1	Keonjhar	Ratnakar Mohanta	Modified low cost cono weeder	At-Hatikucha, P.O.-Nuagaon, Dist-Keonjhar
2	Keonjhar	Laxmidhar Mohanta	Yellow sticky trap	At:Basudevpur, block: Sadar, Dist-Keonjhar
3	Keonjhar	Pankaj Newta	Mechanized Paddy straw cutter	At: Kempsada, block: Sadar, Dist-Keonjhar

18. KVK interaction with progressive farmers- each KVK had already sent a list of 100 progressive farmers to the ZPD, Zone VII, Jabalpur.

Sr. No.	Date and month of interaction programme with progressive farmers	No. of progressive farmers to be participated
1	July 2017	20
2	August 2017	20
3	September 2017	20
4	February 2018	20

19. Outreach of KVK

Name of KVK	Number of Blocks		Number of Villages	
	Intensive	Extensive	Intensive	Extensive
Keonjhar	6	7	10	22

Intensive- OFTS, FLDS etc
Extensive- Literatures, Publications, Awareness programmes etc.

20. Technology Demonstration under Tribal Sub Plan on Pulses/ Programme on Harnessing Pulses/ Quality Protein Maize, if applicable.

Sr. No.	Name of crop under Technology demonstration	Area under the programme	No. of Extension Activities	Remarks / Lessons learnt

21. KVK Ring

Sr. No.	Name of Ring Partner	Sharing Activity	Lessons learnt/ Experiences gained.
1	KVK, Deogarh	Sharing of soil testing facility, sharing of scientific	

2	KVK, Mayurbhanj-II	personnel, sharing quality planting material and machinery , technology on Offseason mushroom cultivation in poly house, value addition of underutilized fruits, seeds of green manure crops	

22. Important visitors to KVK

Name of KVK	Name of Visitor	Date of Visit	Remarks
Keonjhar	Prof. S.Pasupalak, VC, OUAT		
Keonjhar	Prof. P.K.Roul, DEE, OUAT,Bhubaneswar	Dt.27.06.2017	
Keonjhar	Dr. N.Thirumala Naik, Collector, Keonjhar		
Keonjhar	Chairman, Zillaparishad		
Keonjhar	ADM, Keonjhar		
Keonjhar	Director, ICAR-ATARI, Kolkata		

23. Status of KVK Website:

Sr. No.	Name of KVK	Date of start of website	No. of updates since inception	No. of visitors
1	**Keonjhar**	**23.11.2010**	**64**	

24. Status of RTI

Sr. No.	Name of KVK	No. of RTI applications received	No. of RTI appeals

25. E-CONNECTIVITY (ERNET Lab)

Name of KVK	Number and Date of Lecture delivered from KVK Hub				No of lectors organized by KVK	Brief achievements	Remarks
	Date	No of Staff attended	No of call received from Hub	No of Call mate to Hub by KVK			

26. DETAILS OF TECHNOLOGY WEEK CELEBRATIONS

Name of KVK	Types of Activities	No. of Activities	Number of Participants	Related crop/livestock technology
Keonjhar	Gosthies			
Keonjhar	Farmer Scientist interaction	1	50	Related to crop
	Road show	1	50	Soil health campaign
Keonjhar	Film show	7	350	-
Keonjhar	Focus group discussion	1	50	Off-season vegetable cultivation
Keonjhar	Awareness camp	5	200	Safe use of insecticide, Seed treatment campaign, Method of Weedicide application, Soil test campaign
Keonjhar	FIG meeting			
Keonjhar	Ex-trainee Sameelan			
Keonjhar	Farm Visit			
Keonjhar	Diagnostic Practical's			
Keonjhar	Distribution of Literature (No.)	500	500	
Keonjhar	Distribution of Seed (q)			
Keonjhar	Distribution of Planting materials (No.)	5000	50	
Keonjhar	Bio Product distribution (Kg)	1000	100	
Keonjhar	Bio Fertilizers (q)	5	250	

27. INTERVENTIONS ON DROUGHT MITIGATION

Introduction of alternate crops/varieties

Sl. No.	Name of KVK	Crops/cultivars	Area (ha)	Number of beneficiaries
	Keonjhar	Sahabhagi Dhan (paddy)	30	60

Major area coverage under alternate crops/varieties

Sl. No.	Name of KVK	Crops	Area (ha)	Number of beneficiaries
1	Keonjhar	Oilseeds	40	100
2	Keonjhar	Pulses	60	150
3	Keonjhar	Cereals	10	20
4	Keonjhar	Vegetable crops	10	35
5	Keonjhar	Tuber crops	-	-
6	Keonjhar	Fruits		
7	Keonjhar	Spices	10	50
8	Keonjhar	Cotton		
		Total	**130**	**355**
		Total		

Farmers-scientists interaction on livestock management

Sl. No.	Name of KVK	Livestock components	Number of interactions	No.of participants
1	Keonjhar	Dairy Management	1	50
2	Keonjhar	Disease management	1	50
3	Keonjhar	Feed and fodder technology	1	50
4	Keonjhar	Poultry management	1	50

Animal health camps to be organized

Name of KVK	Number of camps	No.of animals	No.of farmers

Keonjhar	**02**	**200**	**50**

Seed distribution in drought hit states

Name of KVK	Crops	Quantity (qtl)	Coverage of area (ha)	Number of farmers

Seedlings and Saplings to be distributed

Name of KVK	Crops	Quantity (No.s)	Coverage of area (ha)	Number of farmers
Seedlings				
Keonjhar	Papaya, Mango, Tomato, Chilli, Cabbage, Brinjal	50,000	5 ha	500

Bio-control Agents

Name of KVK	Bio-control Agents	Quantity (q)	Coverage of Area (ha)	No. of farmers

Bio-Fertilizer

Name of KVK	Bio-Fertilizer	Quantity (kg)	Coverage of Area (ha)	No. of farmers
Keonjhar	Vermicompost	1000	-	100

Verms Produced

Name of KVK	Verms Produced	Quantity (q)	Coverage of	No. of Farmers

			Area (ha)	
Keonjhar	Vermins	0.2		20

Large scale adoption of resource conservation technologies

Name of KVK	Crops/cultivars and of resource conservation technologies introduced	Area (ha)	Number of farmers

Awareness Campaign

Name of KVK	Meetings		Gosthies		Field days		Farmers fair		Exhibition		Film show	
	No.	No. of farmers	No.	No. of farmers	No.	No. of farmers	No.	No. of farmers	No.	No. of farmers	No.	No. of farmers
Keonjhar	3	120	1	30	2	60	1	200	1	200	10	200

28. Proposal of NICRA

1. **Technologies to be Demonstrated**

Name of Technology	Name of Crop	Area (ha.)	Yield	% change in Yield	No. of farmers benefitted

2. **Proposed Extension Activities in NICRA Village**

Name of Activity	Number of Participants/Beneficiaries to be Covered			
	Farmers	Farm Women	Official	Total

3. **Proposed Training Activities in NICRA Village**

Name of Activity	Number of Participants/Beneficiaries to be Covered			
	Farmers	Farm Women	Official	Total

4. **Proposed Activities for Fodder Bank**

Established (Years)	Capacity	Current Status

5. **Proposed Activities for Seed Bank**

Established (Years)	Capacity	Current Status

6. **Public Representative/District Administration Visited in NICRA Village**

Name of Representative/Officer	Designation	Date of Visit

7. Feedback of Farmers for future improvement, if any.

8. Good Action Photographs after work progress (step-wise)

29. Proposed works under NAIP (in NAIP monitoring format)

30. Status of Revolving Funds (Rs.)

KVK Name	Account No.	Opening balance (Rs.)	Closing balance (Rs.)	Current status (Rs.)
Keonjhar	30554081340	2,00,000.00	-	-

31. Awards & Recognitions

KVK Name	Name of award /awardee	Type of award (Ind./Group/Inst./Farmer)	Awarding Organizations	Amount received
Keonjhar	Pabitramohan Patra	Farmer		
Keonjhar	Jagannath Munda	Farmer		

32. Case study / Success Story to be developed –

Sr. no.	Name of KVK	No. of success stories	No. of case studies
1	**Keonjhar**	**03**	**01**

Two best only in the following format: Name of the KVK, **TITLE, Introduction,** KVK intervention, Output, Outcome, Impact

33. Well labeled Photographs for each activity of the KVK (Soft copies as well as hard copy- specially for all OFT along with the problem)

Agro-ecological situations (AES)

Agro-ecological situations	Blocks covered	Major crops and commodities	Strength	Weakness & challenges	Opportunity
Medium elevation, Low rainfall (Red Lateritic)	Jhumpura & Saharpada	Paddy, Pulses, Mango, Cashew, Vegetable, AH	Cultivation of different types of crops	Low productivity of agricultural produces	Productivity can be increased with soil management.
Medium elevation , Medium rainfall(Red Lateritic)	Keonjhar, Patna, Telkoi, Joda, Harichandanpur	Paddy, Maize, Pulses, Vegetables, Mango, cashew, AH	Vegetable cultivation	Reliable source of seeds and other inputs are not available	Scope for offseason vegetable cultivation with exportable quality ; processing industries for value addition of vegetable and fruits
Medium elevation, High rainfall(Red Lateritic)	Ghatagaon, Champua	Paddy, Pulses, Maize, Mango orchard, AH	Pulse production, Mango orchard	Unavailability of quality pulse seeds in time	Scope of chickpea production can be explored.
High elevation, High rainfall(Red Lateritic)	Banspal	Paddy, Maize, Niger Mustard, Goatery, Poultry	Maize , niger and mustard are traditionally cultivated by tribals in large scale	Predominant tribal farm families exist, so resource poor cultivation resulting low yield	Value addition and commercialization can increase the living status of tribals.
Low elevation, Medium rainfall (Alluvial)	Ghasipura	Paddy, Pulses, Jute, Vegetable, AH	Rabi pulse production and jute cultivation	Lack of availability of jute seeds of improved varieties	Giving jute priority in cultivation with value addition can be fruitful
Low elevation, low rainfall (Alluvial)	Hatadihi & parts of Anandapur,	Paddy, pulses Jute, Vegetables , AH	Rabi pulse production, Dairy, jute cultivation	Poor productivity in milk and lack of availability of rabi pulse seeds in time	Milk and pulse productivity can be increased with scientific intervention.

Intervention Framework

S.No	Major crops & Enterprise	Major Farming Situation of the crop / enterprise	Prioritized problems in these crops/ enterprises	Area (Ha/No.) affected by the problem in the district	Names of Cluster / Villages identified for intervention	Proposed Intervention (OFT, FLD, Training, extension activity, QPM etc.)
1	Paddy	Rain fed upland	Cultivation of old low yielding varieties Non availability of seeds of recent released varieties Incidence of blast & BLB in paddy	43000 ha.	Maheswarpur, Basudevpur, Kabitra, Kundehi, Khadiadiha	Demonstration of sahabhagi dhan (IRRI H-H trials)
		Rainfed Medium land	Lack of irrigation restricts the farmers to go for second crop Use of degenerated variety Incidence of blast & BLB in paddy	68000 ha	Jodichatar, Basudevpur	Assessment of rice based Paira cropping systems in rice-fallow Demonstration of DRR-42 & 44 (IRRI H-H trials) Agro advisory through KMA on disease management
		Irrigated up/medium land	Low yield due to attack of stem borer, leaf folder, gall midge Incidence of sheath blight, blast in paddy Low yield in medium land rice due to poor nutrient management, conventional method of cultivation	21,000 ha	Kabitra, Basudevpur, Maheswarpur	Training on IPM for management of stem borer, Sheath blight in Paddy FLD on use of LCC in Nitrogen mgt, FLD on STBF in paddy, Agro advisory through KMA on pest management.

2	Maize	Rainfed upland	Lack of knowledge on weed management in kharif maize Imbalance nutrient management practices Lack of awareness and seed availability of HQPM varieties Non practice of intercropping system in maize	24000 ha	Kundhei, Talachampei, Maheswarpur	DFI programme for weedicide application in maize Training on nutrient management in Maize Distribution of extension literature FLD on maize cowpea intercropping.
3	Blackgram	Rainfed upland	Low yield due to cultivation of local varieties (patna biri) Low yield of black gram (3 q/ha) due to poor nutrient management Lack of Suitable varieties for paira cropping Low yield in blackgram due to the incidence of YVMV Storage loss of grains	14000 ha	Palasapokhari, Panaposi, Kuspada, Khuntapingu	Demonstration of HYV through pulse seed hub programme OFT and training on Nutrient management in Black gram FLD of blackgram paira cropping in rice fallow Agro advisory through KMA & Extension literature Training on practices for Safe storage of grain

4	Ginger	Irrigated Upland	Cultivation of traditional low yielding varieties High infestation of rhizome rot in ginger Storage losses in ginger	1100 ha	Khuntapingu, Panposi, Basudevpur, Badadhanurjaypur	Collaborative demonstration of Suprava var. with ATMA, Keonjhar OFT and Training on Management of rhizome rot in ginger KMA OFT on different Practices for preservation of Fresh Ginger
5	Tomato	Irrigated medium land	Heavy loss in yield due to high infestation of wilt in Tomato Low yield (125 q/ha) due to more infestation of weeds , manual weeding is costly Lack of knowledge and skill in preparation of value added products.	9000 ha	Panaposi, Maheswarpur, Dhanurjaypur , Sankarpur,	OFT , training and agro-advisory on wilt management in tomato Demonstration of different weeders by AICRP on Ergonomics FLD on preparation of tomato powder and Training on Preservation and value addition of Tomato
6	Okra	Irrigated medium land	Low yield of okra, i.e. 90q/ha due to heavy infestation of white fly (YVMV). Fruit borer problem in okra Poor nutrient management practices	4000 ha	Sendcap, Maheswarpur, Panposhi	FLD and Training on YVMV management of Okra Training on pest management in Okra KMA

7	Brinjal	Rainfed medium land	Low yield (175 q/ha) due to high infestation of sucking pest complex in Brinjal Non availability of quality seed and planting material Incidence of shoot and fruit borer Wilt incidence Improper nutrient management practices	12500 ha	Basudevpur, Khuntapingu, Panposi	FLD and Training on sucking pest management in brinjal Supply of quality planting material from KVK Training programme on IPM practices for management of shoot & fruit borer in Brinjal KMA on wilt management FLD on Boron in Brinjal
08	Onion	Irrigated medium land	Low quality and yield (105q/ha)due to sulphur deficiency (3.4 - 5.0ppm) Poor nutrient management Damping of in nursery	500	Kundhei, Maheswarpur, Bhalupali	Demonstration and training on sulphur application in Onion KMA
09	Cauliflower	Irrigated medium land	Low yield due to Poor nutrient management. Lack of good Planting material	800	Maheswarpur, Panposi, Kadagarh	Demonstration and training on INM in cauliflower Supply of planting material from KVK
10	Underutilized forest fruits (Jackfruit/ Tamarind)	Homestead	Distress sale in local market Lack of awareness on value addition	-	Kundhei, Panposi, Maheswarpur, Khuntapingu,	OFT and training on different product / practices for value addition
11	Mushroom	Homestead	Non production paddy straw mushroom in winter due to low atmospheric temperature & humidity.	02	Basudevpur, Panposi, Maheswarpur	Demonstration and training programme on paddy straw mushroom in winter in low cost poly house.

TRAININGS

Crop/ Commodity	Thematic Training Area	Link activities	No of Courses	No of participants
Paddy, Oilseeds, Vegetables	IPM	FLD, OFT	12	360
Paddy, Potato, Vegetables, ginger,	IDM	FLD, OFT	8	185
Vegetable	IPDM	-	2	45
Enterprises (Honey bee, vermicomposting, mushroom, poultry)	Income generation	-	7	120
Maize, Pulses, oilseeds, Vegetables	INM	FLD, OFT	16	440
Vegetables	HOF	-	4	120
Fruits (Mango, Cashew)	HOV	-	4	90
Fruits and Vegetables	Value addition	FLD, OFT	4	105
Cereals and Pulses	Storage	FLD	1	30
Farm tools	Drudgery	FLD, OFT	2	60
Vegetables, Fruits	Nutritional security	-	1	30

Flagship Programmes

Sl No	Programme	Activities	Linked Agency
1	CFLD	Pulses: Pigeonpea (30ha), Chickpea (30ha) Oilseeds: Niger (20ha), Mustard (30ha0	OSSC, Dept. of Agriculture, CA
2	IRRI Trials (H-H)	Demonstration of drought resistance of HYV Rice (DRR42, DRR 44)	IRRI
3	Pulse Seed Hub	Production of pulse seeds of 1000 Q Black gram , Green gram, Chickpea	IIPR, Kanpur, NGOs, Dept of Agriculture
4	Drudgery reduction of Farm Women	Capacity building and skill development in watershed areas in Drudgery reduction in rice cultivation	PD, Watershed, OWDM, ICAR-CIWA

Capacity Building of KVK Personnel

S. No	Name of scientist/staff	Areas of Training	Institution proposed to attend if identified	Justification
1	Dr. Sujit Kumar Nath Senior Scientist & Head	Entrepreneurship development and use of statistics in agriculture	TNAU, Coimbatore IASRI, New Delhi	Important for KVK personnel to develop rural entrepreneur
2	Dr. Laxmipriya Pradhan Scientist (Home Sc.)	Value addition and preservation	CFTRI, Mysore	A good scope of value addition and preservation to many underutilized fruits and vegetables from cultivated areas and forest areas which usually face distress sale
3	Jibanjit Sen Scientist (Soil Sc.)	Remote sensing, GIS mapping and its use in agriculture	IARI, New Delhi	For GIS mapping and its use in agriculture
4	Prasanta Kumar Nanda Scientist (Plant Protection)	Advances in use of neo-pesticides and residual toxicity of pesticides in crops	NICPM, New Delhi	Gaining of use of neo-pesticides and the methods to reduce residual toxicity is important for a KVK personnel
5	Dr. Amrita Mohapatra Farm Manager	Hi-tech horticulture and precision farming	IIVR, Vanarash	Scope for hitech horticulture and precision farming in the district.

Cross-learning across KVKs

S.No.	Name of the KVKs included in the cluster	What do you intend to share with Cluster KVKs	What do you expect from Cluster KVKs
	KVK Deogarh, Mayurbhanj –I, Mayurbhanj-II, Sundargarh – I and Sundargarh –II, Jharsuguda, Keonjhar	➢ Technology on Offseason mushroom cultivation in poly house ➢ Technology of value addition of underutilized fruits like tamarind, bael ➢ Mushroom spawn ➢ Plant diagnostic facility ➢ Planting materials of hybrid vegetable seedlings ➢ Pulse Seeds from seed hub ➢ Sunhemp seeds for green manuring	Scientists sharing from KVK, Deogarh, Mayurbhanj-II in discipline of Horticulture and Agrl. Engg. Agricultural implements f rom all KVKs

DOUBLING FARMERS' INCOME
Agro –Ecological Situation (AES)

Sl.No.	Agro-Climatic Zone	Agro-ecological situations	Pre-dominant Soil groups	Blocks covered
1	North Central Plateau Zone	Medium elevation, Low rainfall (AES-1)	Red Lateritic	Jhumpura & Saharpada
		Medium elevation , Medium rainfall (AES-2)	Red Lateritic	Keonjhar, Patna, Telkoi, Joda, Harichandanpur
		Medium elevation, High rainfall (AES-3)	Red Lateritic	Ghatagaon, Champua
		High elevation, High rainfall (AES-4)	Red Lateritic	Banspal
		Low elevation, Medium rainfall (AES-5)	Alluvial	Ghasipura
2	North Central Coastal Plain	Low elevation, low rainfall (AES-6)	Alluvial	Hatadihi & parts of Anandpur,

Summary of Modules

District	Module	Farming situation/AES	Block/ Village	Name of the existing Farming system	Present income 2016-17	Proposed income 2018-19	Risk/ unsuitability	Remarks	
								Most representative module for the district	Market linkage
Keonjhar	**Module-1** Upland -Arhar, Maize Medium land – Rice goatery, poultry, Mushroom	Rainfed (AES-IV)	Banspal/ Kundhei	Paddy – fallow maize-fallow Niger-Fallow poultry, goatery,	7170	12320	Resource poor farmer, drought	Module-2	Well established market for paddy
	Module-2 Upland- off-season tomato Medium land – Rice, Brinjal goatery, poultry, Mushroom	Irrigated (Dw / Bw/ Nala) (AES-II) (Limited Irrigation)	Sadar/Kusupada, Basudevpur	Paddy – fallow maize-fallow Padddy-vegetables poultry, goatery	25490	37300	Distress sale and market		Demand for vegetable in local market. Availability of cold storage will prevent distress sale
	Module-3 Upland- Rice, Brinjal Medium land Rice-Vegertables goatery, poultry, Mushroom	Irrigated (Dw/pond) (AES-I) (Limited Irrigation)	Jhumpura/ Panposhi, Champua/ Maheswarpur	Paddy – fallow Paddy-chickpea Vegetable-vegetable	20700	30250	Adverse climatic factors, distress sale		Well established market for paddy
	Module-4 Upland-ginger, rice Medium land -rice goatery, poultry, Mushroom)	Irrigated (Dw/Bw) (AES-I)	Saharapada/ Khuntapingu	Paddy – fallow Ginger-fallow Mango orchard poultry, goatery	18410	29280	Grazing of animals, distress sale		Demand for vegetable in local market.

Module-I, AES-IV (High Elevation High Rainfall)
(Rainfed system; Kundhei, Banspal) Rice/Maize-Fallow cropping system,

Farming situation	Existing practices 2015-16		1st year (2016-17)		2nd year (2017-18)		3rd year (2018-19)	
	Component	Problems/practices	Intervention	Yield & Net income/ha	Intervention	Expected Yield & net Income/ha	Intervention	Expected Yield & Income/ha
Up land 0.1ha	Rice-fallow 14 q/ha Rs.7200/ha	➢ Guda dhana ➢ Broadcast sowing ➢ No fertilization	i)Arhar Var. LRG-41 ii)Indoxacarb @1ml/l	8.2 q/ha Rs.10260	iii)Line sowing iv)Weedicide,Pendimethalin 1 kg a.i/ha	10 q/ha Rs 12 300	v)IPM against pod borer in arhar (Use of ph. Traps @8/ac, T. chilonis @ 1lakh/ha, spraying of Indoxacarb@1ml/lt) Line sowing	11.5 q/ha Rs.13400
0.1 ha	Maize-fallow 17.5q/ha - Rs 9500/ha	• Local var • Broadcasting • Weed menace • Drudgery in harvesting of grains	i)Hybrid maize (S-36) ii)Line sowing (60X25 cm)	25q/ha Rs.15100	iii)Herbicide Atrazine @1 kg a.i/ha iv)STB fert application	28q/ha Rs.16500	v)Mech. Maize shelling	28 q/ha Rs.17200

Medium land 0.2ha	Rice-fallow 23 q/ha Rs.10000/ha	▪ Lalat ▪ Broadcasting ▪ Drought at later stage of crop growth	i)Manaswin/Hiranmayee/ Naveen/DRR-42 ii) Line transplanting	25.5 q/ha Rs.10500	iii)STB fertiliser application iv)Weedicide (Bensulfuronmethyle+ Pretilachlor @ 10 kg/ha at 3 DAT+ One HW at 35 DAT)	28 q/ha Rs. 13000	v)IPDM practices against blast, stem borer (Use of ph. Traps @20/ha, T. japonicum @ 1lakh/ha, spraying of Cartap hydrochloride@2 gm/lt against stem borer), Spraying of Tricyclazole @ 1gm/lt against blast	30.0 q/ha Rs. 15300
Homestead	Goatery (10nos/ farmer)- Rs.2000	• Worm infestation • Mortality of kids • No additional feeding • Poor shed mgt	i)Deworming	Rs. 2400	ii)Feed management	Rs. 2600	iii)Shed management and sanitation	Rs. 2700
	Local poultry bird (10 birds) Rs. 1500/-	• Low growth • No additional feeding	i)Banaraja -10birds /farmer	2.0 kg /bird Rs.1800	ii)RD Vaccination at 7th day, 21st day	2.5 kg/bird Rs. 2000	iii)Shed management and additional feeding	2.8 kg/bird Rs.2300
	Under-utilised paddy straw	• No value to unutilised straws	i)Oyster Mushroom (20beds/ farmer)	Rs.850	ii)Paddy straw- Apr-Sep-20 beds, Oyster Mushroom- Oct-Mar-20 beds)	Rs.1200	iii)Value addition iv)Marketing	Rs.1200
Income (Rs) from 0.4 ha land +		**7170**		**9690 (35%)**		**11280 (57%)**		**12320 (71%)**

homestead vocation								

Module-II, AES-III (Medium Elevation Medium Rainfall)
(Irrigated (Nala/Dw)system; Kuspada & Basudevpur, Sadar)

Farming situation	**Existing practices 2015-16**		**1st year (2016-17)**		**2nd year (2017-18)**		**3rd year (2018-19)**	
	Component	**Problems/ practices**	**Intervention**	**Yield & Net income/ha**	**Intervention**	**Expected Yield & net Income/ha**	**Intervention**	**Expected Yield & Income/ha**
Up land (Unbonded) 0.1ha	Maize (Hyb)-Fallow-28.2 q/ha Rs 22300/ha	-Monocropping -Low income	i)Crop Diversification with Off-season tomato – var.Bhagya hyb	190 q/ha Rs 51000	ii)STB fert appln including micronutrient	220 q/ha Rs.54000	iii)Mgt of Fruit rot by spraying with Vitavax Power@2gm/ltr iv)Staking in tomato	235 q/ha Rs.57000
Medium land 0.4ha	*Paddy – Brinjal cropping system* Cultivation of HYV paddy var. Swarna 32q/ha (Rs. 12500/ha)	• Random transplanting • Imbalance dose of fert. • Weed infestation • Blast and stem borer menace	i)Line transplanting ii)STB fertliser application	35q/ha Rs. 15550	iii)Green manuring Weedicide (Bensulfuron methyle+Pretilachlor @ 10 kg/ha at 3 DAT+ One HW at 35 DAT)	38 q/ha Rs. 18200	iv)Management of stem borer(IPM practices by use of Ph. traps@ 20/ha T.japonicum @1 lakh/ha, spraying of Cartap Hydrochloride @2gm/lt) and blast(Use of	40q/ha Rs.20500

							Tricyclazole @1gm/lt)	
0.2ha	Local Brinjal cultivation 180 q/ha (Rs 73800/ha)	Brinjal fruit and shoot borer	i)Spraying of cartap hydrochloride @2 ml/lit in 15 days interval	210q/ ha Rs.80100	ii)Use of Ph. traps@20/ha, T. chilonis-1 lakh/ha, Spinosad @0.5ml/lit	230q/haRs. 84000	iii)Grading, packing , with marketing strategies	Rs. 87000
Homestead	Goatery (10nos/ farmer)- rs.2000	• Worm infestation • Mortality of kids • No additional feeding • Poor shed mgt	i)Deworming	Rs.2200	ii)Feed management	Rs.2500	iii)Shed mgt and sanitation	Rs. 2600
Homestead	Local breed poultry bird rearing (10 birds) Rs. 1500/-	• Low growth • No additional feeding	i)High growth bird rearing(banaraja) (10birds/farmer)	2.0 kg /bird Rs.1800	ii)RD Vaccination at 7th day, 21st day	2.5 kg/bird Rs.2000	iii)Shed management and additional feeding	2.8 kg/bird Rs.2200
	Under utilised paddy straw	• No income from Paddy straw	i)Oyster Mushroom (20bags/ farmer)	Rs.800	ii)Paddy straw- Apr-Sep-20 beds, Oyster Mushroom- Oct-Mar-20 beds)	Rs.1200	iii)Value addition iv)Marketing strategies	Rs.1200

Income (Rs) from 0.5ha land + homestead vocation	**25490**			**32140 (26%)**		**35180 (38%)**		**37300 (46%)**

Module-III, AES-I (Medium elevation, Low rainfall)
Irrigated (Bw/Dw/Nala)System; Panposhi, Jhumpura & Maheswarpur, Champua

Farming situation	**Existing practices 2016-17**		**1st year (2017-18)**		**2nd year (2018-19)**	
	Component	**Problems/practices**	**Intervention**	**Yield & Net income /ha**	**Intervention**	**Expected Yield & net Income/ha**
Upland (bonded)-rainfed lands 0.1ha	Paddy-fallow 18 q/ha Rs 10000/ha	(i)Broadcasting of rice var.Annapurna Ii) Weed menace	i)Varietal substitution to Sahabhagidhan	26q/ha Rs.14000	ii)Weedicide Pyrazosulfuron ethyl (Sathi)200 gm/ha 5days after germination of seeds	28 q/ha Rs 15500
Upland (Unbonded) 0.1ha	Brinjal 200q/ha Rs 20000/ha	i) Low yielding var ii) Wilt and Shoot & Fruit borer	i)Seedlings of High yielding var/ Hybrid with seedling/ seed treatment	250 q/ha Rs 30000/ha	ii)Pest management in brinjal (Wilt(Spraying with copper oxy chloride@3gm/lt& Streptocycline@1.5g/10 l and Shoot & Fruit borer(Spraying with Spinosad 0.5 ml/lt, Use of T. chilonis 1 lakh/ha, use of Ph traps @ 20/ha)	300q/ha 40000/ha
Medium land 0.4ha	Paddy – vegetables Cultivation of Pratikshya HYV paddy 33q/ha (Rs.	• Low plant population for random planting of paddy • Imbalance dose of fert. • Weed infestation	i)Line transplanting ii)Green manuring iii)STB fertliser application	39q/ha Rs. 17550	iv) Weedicide (Bensulfuron methyle+Pretilachlor @ 10 kg/ha at 3 DAT+ One HW at 35 DAT) v) Management of stem borer(IPM practices by use of Ph. traps@ 20/ha T.japonicum@1 lakh/ha, spraying of Cartap	42 q/ha Rs. 20000

	13000/ha)	• Blast, Stemborer			Hydrochloride@2gm/lt) and blast(Use of Tricyclazole @1gm/lt)	
0.2ha	Cauliflower (Megha hyb) 190 q/ha Rs.45000/ha	Improper nutrient management	i)STB fertiliser application with soil appln of boron 10 kg/ha	220 q/ha 50000/ha	ii)Marketing strategy through producer group formation	220 q/ha Rs 55000/ha
Homestead	Local breed poultry bird rearing (10 birds) Rs. 1500/-	• Low productive birds • No additional feeding	i)High productive bird rearing(banaraja) (10birds/farmer)	2.0kg/bird Rs.1800	ii)RD Vaccination at 7th day, 21st day	2.5 kg/bird Rs.2000
	Under utilised paddy straw giving no income	• No value to unutilised straws	i)Oyster Mushroom (20bags/ farmer)	Rs.800	ii) Paddy straw- Apr-Sep-20 beds, Oyster Mushroom- Oct-Mar-20 beds)	Rs.1200
Homestead	Goatery (10nos/ farmer)- rs.2000	• Worm infestation • Mortality of kids • No additional feeding • Poor shed mgt	i)Deworming	Rs.2200	ii)Feed mgt	Rs.2500
Income (Rs) from 0.6ha land + homestead vocation	**20700**			**26220 (26%)**		**30250 (46%)**

Module-IV, AES-I (Medium elevation, Low rainfall)
Irrigated (Pond/ Dugwell) system, Khuntapingu, Saharapada)

Farming situation	**Existing practices 2016-17**		**1st year (2017-18)**		**2nd year (2018-19)**	
	Component	**Problems/practices**	**Intervention**	**Yield & Net income/ha**	**Intervention**	**Expected Yield & net Income/ha**
Up land (Unbonded) 0.2ha	Ginger - Fallow- 40 q/ha ginger Rs 38200/ha	i) Local var of ginger (ii) Rhizome rot in ginger iii) Insect pest problem in vegs	i)Introduction of new var. of ginger in uplands (Suprava)	65 q/ha Rs.52000	ii)STB fert appln including management of rhizome rot in ginger(Seed treatment with Ridomil-M-Z @2.5 g/lt, Spraying of copper oxychloride@3g/lt+ Streptocycline@1.5g/10lt. of water)	68 q/ha Rs.56400
Upland (bonded)- rainfed lands 0.2ha	Paddy-fallow 18 q/ha Rs 10000/ha	(i)Broadcasting of Annapurna var ii) Weed menance	i)Varietal substitution to drought resistant Sahabhagi dhan	26q/ha Rs.14000	ii)Weedicide Pyrazosulfuron ethyl (Sathi)200 gm/ha 5 days after germination	28 q/ha Rs 15500
Medium land 0.4ha	Paddy – fallow Swarna HYV paddy 32q/ha (Rs. 12500/ha)	• Random planting • Imbalanced fert. • Weed infestation • Blast menace	i)Var DRR-42/ Naveen/ Manaswini ii)Line transplanting iii)Green manuring iv) STB fertilizer application	35q/ha Rs. 15550	v)Weedicide (Bensulfuron methyle+ Pretilachlor @ 10 kg/ha at 3 DAT+ One HW at 35 DAT) vi)Mngt. Of Blast(Use of Tricyclazole @1gm/lt)	37 q/ha Rs. 18000

0.2ha	fallow	Rabi fallow	i) Paira cropping of chickpea (JG-14)	8 q/ha Rs.8000	ii)STBF	10q/ha Rs.10000
Homestead	Local breed poultry bird rearing (10 birds) Rs. 1500/-	• Low productive birds • No additional feeding	i)High productive bird rearing(banaraj)a (10birds/farmer)	2.0kg/bird Rs.1800	ii)RD Vaccination at 7th day, 21st day	2.5kg/bird Rs.2000
	Under utilised paddy straw giving no income	• No value to unutilised straws	i)Oyster Mushroom (20bags/ farmer)	Rs.800	ii) Paddy straw- Apr-Sep-20 beds, Oyster Mushroom- Oct-Mar-20 beds)	Rs.1200
Homestead	Goatery (10nos/ farmer)- rs.2000	• Worm infestation • Mortality of kids • No additional feeding • Poor shed mgt	i)Deworming	Rs.2200	ii)Feed management	Rs.2500
Income (Rs) from 0.8 ha land + homestead vocation	**18140**			**25820 (42%)**		**29280 (61%)**