ANNUAL REPORT 2011-12

Technology Demonstration Component

NATIONAL INITIATIVE ON CLIMATE RESILIENT AGRICULTURE

ZONAL PROJECT DIRECTORATE ZONE VII
Division of Agricultural Extension
Indian Council of Agricultural Research
Adhartal , Jabalpur - 482004 (M.P.)

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Introduction

Climate change and agriculture are interrelated processes. Global warming is projected to have significant impacts on conditions affecting agriculture, including temperature, carbon dioxide, glacial run-off, precipitation and the interaction of these elements. These conditions determine the carrying capacity of the biosphere to produce enough food for the human population and domesticated animals. Models generally predict that rising temperature, increased climate variability and extreme weather events could significantly impact food production in coming decades impacting growth of agricultural GDP. Assessment of the effects of global climate changes on agriculture might help to properly anticipate and adapt farming to maximize agriculture production. At the same time, agriculture has been shown to produce significant effects on climate change, primarily through the production and release of greenhouse gases such as carbon dioxide, methane, and nitrous oxide, but also by altering the Earth's land cover, which can change its ability to absorb or reflects heat and light, thus contributing to radiative forcing. Land use change such as deforestation and desertification, together with use of fossil fuels, are the major anthropogenic sources of carbon dioxide; agriculture itself is the major contributor to increasing methane and nitrous oxide concentrations in Earth's atmosphere. The Parliamentary committee in agriculture made a strong recommendation to strengthen research in climate change to ensure food security in the country.

It is therefore utmost important that we enhance the resilience of Indian Agriculture Production system to climate variability and climate change. Resilience is the capability of the production system to resist the negative impacts of climate change and also the capacity to recover quickly after the damage. Thus, this scheme has been formulated to develop region specific improved technologies that would enhance the resilience of Indian agriculture to climate change as well as to organize extensive

demonstration of location specific best bet practice of farmer's field involving Krishi Vigyan Kendras (KVKs).

Approach of the Project

- Critical assessment of different crop/zones in the country for vulnerability to climate stresses and extreme events, in particular, intra seasonal variability of rainfall.
- Installation of the state-of-the-art equipment like flux towers for measurement of green house gases in large field areas to understand the impact of management practices and contribute data on emissions as national responsibility.
- Rapid and large scale screening of crop germplasm including wild relatives for drought and heat tolerance through phenomics platforms for quick identification of promising lines and early development and release of heat/drought tolerant varieties.
- Comprehensive field evaluation of new and emerging approaches of paddy cultivation like aerobic rice and SRI for their contribution to reduce the GHG emissions and water saving.
- Special attention to livestock and fishery sectors including aquaculture which have not received enough attention in climate change research in the past. In particular, the documentation of adaptive traits in indigenous breeds is the most useful step.
- Thorough understanding of crop-pest/pathogen relationship and emergences of new biotypes due to climate change.
- Simultaneous up scaling of the outputs both through KVKs and the National Mission on Sustainable Agriculture for wider adoption by the farmers.

Objective of the Project

- To enhance the resilience of Indian agriculture covering crops, livestock and fisheries to climatic variability and climate change through development and application of improved production and risk management technologies.
- To demonstrate site specific technology packages on farmers fields for adapting to current climate risks.
- To enhance the capacity of scientists and other stakeholders in climate resilient agriculture research and its application.

2. Technology demonstration and its performance:-

Under this objective, an integrated package of proven technologies will be demonstration in one village in each district for adaptation and mitigation of the crop and livestock production system to climate variability based on the available technologies. The districts to be covered for these demonstration and list of KVKs are listed separately. The process of finalizing demonstration package will have the following steps:

I. Analysis of climate constraints of villages based on long term data.
II. Assessment of the natural resources states of the villages.
III. Identification of major production systems.
IV. Studying of existing institutional structures and identify the gaps.
V. Focus group discussion with the community to finalize the interventions.

The interventions will cover the following modules.

Modules I: Natural resources

This module consists of interventions related to in-situ moisture conservation, water harvesting and recycling for supplemental irrigation, improved drainage in flood prone areas, conservation tillage where appropriate, artificial ground water recharge and water saving irrigation methods.

Intervention I: In-situ moisture conservation:-

In this intervention Balaghat, Morena, Tikamgarh and Satna KVK **(Madhya Pradesh)** have worked moisture conservation through Conservation Furrow, Broad bed and furrow sowing, Contour tillage, Stubble mulching in cash crops in Balaghat**,** Green Manuring dhaincha (Sesbania); One harrowing +Two ploughing + planking and sowing through seed cum fertilizer drill in wheat crop and Mustard , Alkali soil reclamation ; Two ploughiung and planking. Sowing in line with seed cum fertilizer. Drill and Gypsum 50 % + Green manuring in Mustard (NRCHB -101) in Morena, Ridge and Furrow technique in pegionpea in Satna KVK. Highest BCR ratio 4.27 obtained in Alkali soil reclamation (Gypsum 50 % + Green manuring in Mustard (NRCHB -101). 404Farmers have benefited and 188.2 ha area covered in NICRA villages.

KVK Name	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses)	No. of farmers	Area (ha)	Economics of demonstration (Rs./ha)			
					Gross Cost	Gross Return	Net Return	BCR
1	2	3	4	5	6	7	8	9
Balaghat	• Conservation Furrow • Broad bed and furrow sowing • Contour tillage etc. • Stubble mulching in cash crops		55	35	7,000	10,000	3,000	1.42
Morena	Green Manuring dhaincha (Sesbania); One harrowing +Two ploughing + planking and sowing through seed cum fertilizer drill	Wheat (GW-366)	5	5	27060	70800	44600	2.61
Morena	-do	Mustard (JM-4)	12	10	20300	66650	46350	3.28
Morena	Alkali soil reclamation ; Two ploughiung and planking. Sowing in line with seed cum fertilizer. Drill	Gypsum 50 % + Green manuring , Mustard (NRCHB -	15	10	20400	87200	66800	4.27

		101)						
Tikamgarh	Ridge & Furrow method in soybean with variety	J.S.- 93-05	124	50	14847	50575	35728	3.4
Tikamgarh	Variety	Azad-1	125	50	11722	24300	12578	2.07
Chhatarpur	Summer Ploughing	-	12	6	-	-	-	-
Satna	Ridge and Furrow technique in pegionpea	Ridge and furrow seed drill	11	4.2	9500	18560	9060	1.95
Satna	Ridge and Furrow technique in blackgram	Ridge and furrow seed drill	3	1	8510	14752	6242	1.73
Satna	Ridge and Furrow technique in moonggram	Ridge and furrow seed drill	5	2	8640	14476	5836	1.68
Satna	Ridge and Furrow technique in soybean	Ridge and furrow seed drill	12	5	8970	13870	4900	1.55

In **Chhattisgarh,** this intervention Dantewara and Bhatapara KVK have worked moisture conservation through conservation crops demonstrated to stop runoff and increasing infiltration and plantation of mixed trees (Fruit and Timber plants) like (Mango, Nilgiri, Acasia Menjium, Acasia Nilotica, etc.) in Dantewara KVK . Mulching of polythene (200 micron) in turmeric in Bhatapara KVK and highest BCR ratio 3.5 obtained. A total of 59 Farmers have benefited and 14.5 ha area covered in NICRA villages.

KVK Name	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses)	No. of farmers	Area (ha)	Economics of demonstration (Rs./ha)			
					Gross Cost	Gross Return	Net Return	BCR
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
Dantewada	Plantation of mixed trees (Fruit and Timber plants) Convergence with MGNREGA	Seedlings of Mixed Plants (Mango, Nilgiri, Acasia Menjium, Acasia Nilotica etc.) and Technical Guidance	3	3	-	-	-	-

		though MGNREGA						
Dantewada	Distribution of Fruit plants	Seedlings(Jack fruit, Aonla, Karounda, Drum stick (640 seedlings)) and FYM	28	2	5000	-	-	-
Dantewada	Grasses and pasture development on Slopy land	Seed/rizom/runner (maize/Anjan Grass) and Fertilizer	7	2	5000	-	-	-
Dantewada	Conservation Crops demonstrated to stop runoff and increasing infiltration	Crops (Green Gram- Pusa vishal, Black Gram-TAU-1, Horse Gram-BK-1 and Groundnut- AK-159)	17	5.5	56250	119050	62800	2.1
Bhatapara (Raipur)	Mulching of Pollythene (200 micron) In turmeric cv. Roma	pollythene	4	2	124500	435750	311250	3.5

In **Orrisa**, this intervention Sonepur and Jharsuguda KVK have worked moisture conservation through Forest plant cultivation in Sonepur KVK and Dhanicha incorporation in paddy in Jharsuguda KVK and highest BCR ratio 3.1 obtained. 28 Farmers have benefited and 4.8 ha area covered In NICRA villages.

KVK Name	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses)	No. of farmers	Area (ha)	Economics of demonstration (Rs./ha)			
					Gross Cost	Gross Return	Net Return	BCR
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
Sonepur	Forest plant cultivation	Sunajhari, Subabool, vermicompost, biofertilizer	4	0.8	0	0	0	0

Jharsuguda	Dhanicha incorporation in paddy	Dhanicha seeds	24	4	12,500	39600	27100	3.1

Intervention II: Water harvesting and recycling for supplemental irrigation:

In this intervention Balagat, Morena, and Datia KVK **(Madhya Pradesh)** have worked Water harvesting and recycling for supplemental irrigation through contour trenching on sloppy land Loose boulder check dam, Plantation of economic trees, Percolation tank. Farm ponds in Balaghat , Bori Bandhan and Renovation of Defunct Rain water harvesting Structure in Datia KVK and Farm pod 70x50 Meter (7) repairing and maintenance in storage of water use in Rabi crop irrigation in Morena KVK. 77 Farmers have benefited and 116.5 ha area covered in NICRA villages. Balaghat and Datia KVK have observed maximum BCR 3.3 trough interventions.

KVK Name	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses)	No. of farmers	Area (ha)	Economics of demonstration (Rs./ha)			
					Gross Cost	Gross Return	Net Return	BCR
1	2	3	4	5	6	7	8	9
Balaghat	Staggered contour trenching on sloppy land Loose boulder check dam. Plantation of economic trees. Percolation tank. Farm ponds.	-	20	5	50,000	65,000	15,000	3.3
Datia	Bori Bandhan	-	40 (No. of Farm family	85	10000	33000 ; (300 Rs/ha Irrigation	23000	3.3

			benefited)			charges)		
Datia	Renovation of Defunct Rain water harvesting Structure	-	2	14.5	10020	26750 (300 Rs/ha Irrigation Charges and Rs. 50/ kg sale rate for Fish)	16730	2.66
Morena	Farm pod 70x50 Meter (7) repairing and maintenance in storage of water use in Rabi crop irrigation	Wheat (GW-366)	15	12	26800	79100	52300	2.95

In **Chhattisgarh,** this intervention Dantewara KVK have worked on Water harvesting and recycling for supplemental irrigation through renovation of defunct water harvesting structure (Stop Dam) (30.0 ha area irrigated), Renovation of Defunct Irrigation pond (40X40X1.8), Digging of Irrigation Pond (50X50X1.7m), Digging open wells with ring fitting 5.0 nos. 61 Farmers have benefited and 120 ha area covered In NICRA villages.

KVK Name	Technology demonstrate	Critical input (Variety, Fertilizer / Chemicals doses)	No. of farmers	Area (ha)	Economics of demonstration (Rs./ha)			
					Gross Cost	Gross Return	Net Return	BCR
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
Dantewada	Renovation of defunct water harvesting structure (Stop	Stone (40& 20 MM), Sand, Cement & Laour	16	30	145000	400000	-	-

	Dam) (30.0 ha area irrigated)							
Dantewada	-do	Stone (40& 20 MM), Sand, Cement & Laour	25	25	85000	20000	-	-
Dantewada	Renovation of Defunct Irrigation pond (40X40X1.8)	Labour Payment	4	20	100000	-	-	-
Dantewada	Digging of Irrigation Pond (50X50X1.7m)	Labour payment	7	25	250000	-	-	-
Dantewada	Digging of Irrigation Pond (40X40X1.3m)	Labour payment	4	15	100000	-	-	-
Dantewada	Digging open wells with ring fitting 5.0 nos.	Labour Payment, Rings, Brick and cement	5	5	350000	-	-	-

Gross returns are estimation.

In **Odisha,** this intervention Sonepur KVK have worked on water harvesting and recycling for supplemental irrigation through rain water harvesting structure (Farm pond). Five farmers have benefited and 2 ha area covered In NICRA villages.

KVK Name	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses)	No. of farmers	Area (ha)	Economics of demonstration (Rs./ha)			
					Gross Cost	Gross Return	Net Return	BCR
1	2	3	4	5	6	7	8	9
Sonepur	Rain water harvesting structure (Farm pond)	-	5	2	0	0	0	0

Intervention III: Improved drainage in flood prone areas:

In this intervention, Balaghat KVK **(Madhya Pradesh)** have worked on improved drainage in flood prone areas through Percolation tank, Bund flood method. A total of 10 Farmers have benefited and 5.0 ha area covered in NICRA villages. 1.2 BCR was recorded in NICRA villages.

KVK Name	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses)	No. of farmers	Area (ha)	Economics of demonstration (Rs./ha)			
					Gross Cost	Gross Return	Net Return	BCR
1	2	3	4	5	6	7	8	9
Balaghat	Percolation tank. Bund flood method	-	10	5	25,000	30,000	5,000	1.2

Intervention IV: Conservation tillage where appropriate:

In this intervention Balaghat, Guna, Morena Tikamgarh and Satna KVK **(Madhya Pradesh)** have worked on conservation tillage where appropriate through Deep ploughing and leveling, Hand wheel hoe, Zero tillage sowing method, Deep summer ploughing in paddy. A total of 161 farmers have benefited and 163 ha area covered in NICRA villages. And maximum BCR was recorded 4.68 in Morena NICRA villages.

KVK Name	Technology demonstrate	Critical input (Variety, Fertilizer / Chemicals doses)	No. of farmers	Area (ha)	Economics of demonstration (Rs./ha)			
					Gross Cost	Gross Return	Net Return	BCR
1	2	3	4	5	6	7	8	9
Balaghat	Deep ploughing and leveling		50	75	500	600	100	1.20
Guna	Hand wheel hoe	Hand wheel hoe	25	25	17380	53360	35980	3.07
Morena	Zero tillage sowing method	wheat (MP-4010)	25	20	13719	64246	48712	4.68

Morena	Zero tillage sowing method	Braley (RD-2592)S	18	10	18500	62249	43749	3.36
Tikamgarh	Deep summer ploughing	Mould bold ploughing	31	28	-	-	-	-
Satna	Deep summer ploughing in paddy	Reversible MB Plough	12	5	13250	27625	14375	2.08

In **Chhattisgarh,** Bilaspur KVK have worked Conservation tillage where appropriate through summer tillage deep ploughing. A total of 13 farmers have benefited and 5 ha area covered in NICRA villages.

KVK Name	Technology demonstrate	Critical input (Variety, Fertilizer / Chemicals doses)	No. of farmers	Area (ha)	Economics of demonstration (Rs./ha)			
					Gross Cost	Gross Return	Net Return	BCR
1	2	3	4	5	6	7	8	9
Bilaspur	Summer tillage	Deep Ploughing	13	5ha	12,150			

In **Odisha,** Sonepur KVK have worked Conservation tillage where appropriate, through Ridge and furrow method of planting in Maize, Green gram after paddy, sowing with seed cum fertilizer drill, IPM practice. A total of 20 farmers have benefited and 9 ha area covered In NICRA villages. And maximum BCR was recorded 2.86 in Sonepur NICRA villages.

KVK Name	Technology demonstrate	Critical input (Variety, Fertilizer / Chemicals doses)	No. of farmers	Area (ha)	Economics of demonstration (Rs./ha)			
					Gross Cost	Gross Return	Net Return	BCR
1	2	3	4	5	6	7	8	9

Sonepur	Maize in Ridge and furrow method of planting	Maize seed (MH9468), IPM	10	4	9600	27500	17900	2.86
Sonepur	Green gram after paddy, sowing with seed cum fertilizer drill, IPM practice	Variety (durga), pheromone traps etc.	10	5	7580	18590	11010	2.45

Intervention V: Artificial ground water recharge:

In this intervention Balaghat and Morena KVK **(Madhya Pradesh)** have worked Artificial ground water recharge through Earthen embankments and renovation of check dams and Sprinkler irrigation in Wheat crop. A total 30 Farmers have benefited and 10 ha area covered In NICRA villages.

KVK Name	Technology demonstrate	Critical input (Variety, Fertilizer / Chemicals doses)	No. of farmers	Area (ha)	Economics of demonstration (Rs./ha)			
					Gross Cost	Gross Return	Net Return	BCR
1	2	3	4	5	6	7	8	9
Balaghat	Earthen embankments and renovation of check dams		25	5	800	1000	200	4:01
Morena	Sprinkler irrigation	Wheat (GW-366)	5	5	28060	72800	42600	2.81

Modules II: Crop Production

This module consists of interventions drought/temperature tolerant varieties, advancement of planting dates of *rabi* crops in areas with terminal heat stress, water saving paddy cultivation methods (SRI, aerobic, direct seeding), frost management in horticulture through fumigation, community nurseries for delayed monsoon, custom

hiring centres for timely planting, location specific system with high sustainable yield Index.

Intervention I: Introducing flood / drought / temperature tolerant varieties

In this intervention **Balaghat KVK** (Madhya Pradesh) have worked on introducing drought / temperature tolerant varieties through demonstrations in different crops viz paddy, wheat, pigeon pea and chickpea. A total 59 farmers benefited and 24 ha area covered under this intervention and resulted BCR ratio 1.8 to 2.2.

A total 333 demonstration conducted in **Datia KVK** and covered the area 115.7 ha in Soybean Var. JS 95-60 (Short duration and high yielding variety), Ground nut Var. JGN-3 , Sesame Var. JTS-8, Okra var. VRO-6. Maximum percent increased the yield in soybean crop 58.89 fallowed by okra 58.22 and BCR ranged from 2.2 to 4.3 in all crops. In **Guna,** 128 demonstrations laid and covered the 78.2 ha area in different crops viz soybean, wheat and gram (using short duration, high yielding variety). Maximum percent increased the yield in gram crop 32.39 and BCR ranged from 2.6 to 3.2 in all crops. In **Morena**, 174 demonstrations conducted and covered the area 78.7 ha in different crops viz pigeonpea, black gram , til, mustard, green gram, barley, maize, water chestnut, soybean, wheat and gram (using Drought resistant, short duration, high yielding variety). Percent increased the yield in different crops ranged from 13.8 to 83.33 and BCR ranged from 2.6 to 3.2 in all crops.In **Tikamgarh**, 249 demonstrations laid and covered the 100 ha in JS-93-05 and Azad-1 was short duration and high yielding variety. 23.1 percent increased the yield in JS-93-05 variety and resulted BCR 3.4 and 2.1 in both crops. In **Chhattarpur,** 137 demonstrations conducted and covered the 53.0 ha in different crops viz soybean, black gram, til, moong, lentil, maize and gram (using Drought resistant, short duration, high yielding variety). Maximum percent increased the yield 25.4 in moong fallowed by 25.2 in lentil crops and BCR ranged from 2.6 to 3.2 in all crops. In **Satna** KVK, 128 demonstrations conducted and covered the 42.83 ha in different crops viz soybean, sorghum, urd, sesame, moong, pigeonpea, okra, turmeric, mustard, wheat and gram (using Drought resistant, short duration, high yielding variety with IPM and INM (organic manure 2t/ha, Imazathapyr@100gmai/ha, DAP100 and Sulphur 20 Kg/ha, One packet/10kg seed of each biofertilizer, one spray Trizophos@1000ml/ha,

Cypermethrin@500ml/ha)technologies). Maximum percent increased the yield 769.6 in okra fallowed by 146.79 in green gram crops and BCR ranged from 1.3 to 4.9 in all crops

KVK Name	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Area (ha)	Measurable indicators of output*		% increase	Economics of demonstration (Rs./ha)				Economics of Local (Rs./ha)			
					Demo	Local		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Balaghat	Use of drought/stress tolerant/short duration crops (paddy, wheat, pigeon pea and chickpea).	Paddy-1010, JRH-5	10	10				24,000	42,000	18,000	1.8	20,000	28,000	15,000	1.4
Balaghat	-do-	Wheat-GW-322, MP4010	12	5				20,000	38,000	18,000	1.9	16,000	22,000	6,000	1.4
Balaghat	-do-	Pigeonpea-ICPH-2671	12	5				18,000	39000	21,000	2.2	17000	32,000	8,000	1.9
Balaghat	-do-	Chickpea-JG14, JG16	25	4				15,000	32000	17,000	2.1	14,000	25,000	11,000	1.8
Datia	Soybean Var. JS 95-60 (Short duration and high yielding variety)	Seed	202	37.5	1966	1237	58.89	12746	39336	26590	3.1	11996	24756	12760	2.1
Datia	Ground nut Var. JGN-3	Seed	36	5.22	1533	1049	46.03	13927	54361	40434	3.9	13127	36745	23618	2.8

Datia	Sesame Var. JTS-8	Seed	85	24	512	368	39.13	10287	23054	12767	2.2	10187	16580	6392	1.6
Datia	Okra var. VRO-6	Seed	10	2	15600	9888	58.22	22957	98870	70913	4.3	20667	59328	38661	2.9
Guna	Demonstration of short duration variety of Soybean JS 95-60	JS 95-60	25	10	24.8	21.4	27.83	19240	57040	37800	3.0	19170	49220	30050	2.6
Guna	Demonstration of high yielding wilt resistant variety of Gram	JG 218	58	23.2	18.8	14.2	32.39	17680	56400	38720	3.2	17450	42600	25150	2.4
Guna	Demonstration of new variety of wheat under limited irrigation	MP 4010	45	45	46	38.6	19.17	21180	55200	34020	2.6	20340	46320	25980	2.3
More na	Replacement of Long duration Variety by short duration variety	Pigeon pea (ICPL-88039)	7	3.5	23.2	17.2	34.88	20400	77920	56020	3.8	19500	58320	38820	3.0
More na	-do	Pigeon pea (UPAS -120)	5	3	21.5	16.8	27.9	20400	72250	51850	3.5	19500	56680	37180	2.9
More na	Drought resistant variety	Black gram (PU-35)	8	2.8	9	7	28.57	15000	31600	16600	2.1	14000	24400	10400	1.7
More na	Improved variety Management of phyllody disease, Mid season drought management	TIL (T-78)	3	1	8.2	5.6	46.42	12000	43080	31080	3.6	11000	29970	18973	2.7
More na	-do-	TIL (JTS-8)	5	4	7.4	5.1	45.09	11600	38560	26960	3.3	11000	26800	15800	2.4

More na	Suitable for kharif session in high yielding variety	Agri Found Dark Red ; 100:50:100:40 NPKS kg/ha + Azoto. +PSB@2.5 kg/ha	4	0.4	220	120	83.33	22600	110000	87400	4.9	20200	60000	39800	3.0
More na	Early maturing variety suitable for rain fed conditions, yellow mosaic disease resistant	Green gram TJM-3	12	5	9.6	7.8	23.07	15000	33220	18820	2.2	14200	26960	12760	1.9
More na	high yielding , aphid tolerant suitable for rain fed condition	Mustard NRCHB- 101	13	5	25.2	20.4	23.52	19200	83600	64400	4.4	18500	67200	48700	3.6
More na	Evaluation of relay cropping in mustard +bar seam suitable for drought condition and mordent resistant disease.	Mustard (JM-4)	10	5	24.4	19.34	26.08	18700	81200	62500	4.3	18270	64020	45750	3.5

More na	Good yield potential, adaptability and suitability and stability for grain yield under normal sown irrigated conditions. Resistant to rusts, for limited water irrigated	Barley (RD-2592)	25	7	41	36	13.8	20780	66000	45220	3.2	18020	57300	39280	3.2
More na	Wilt and heat tolerant variety	Chickpea (JG-11)	3	2	22	16	37.5	19000	67900	48900	3.6	16800	50000	33200	3.0
More na	high yielding variety suitable for rain fed condition late Sowing suitable for pigeon pea, rice wheat cropping system	Wheat (MP-4010)	22	16	51	43.4	17.51	26200	78300	52100	3.0	25500	66420	40920	2.6
More na	high yielding variety suitable for dacha/ soybean and pearl millet - wheat cropping system water management for early sowing minimum tillage and ridge bed planter sowing	Wheat (GW-366)	17	12	52.6	46	13.85	25900	80380	54480	3.1	25420	68800	43380	2.7

More na	Replacement of low value crop (pearl millet) by high value crop (maize)	Maize (NK-30)	7	2.5	51	20	-	17600	68000	50400	3.9	12100	24000	12900	2.0
More na	-do-	Maize (NKk-6240)	7	2.5	48	22	-	17600	63000	45400	3.6	12600	26600	14600	2.1
More na	Replacement of pearl millet crop by high value crop soybean	Soybean (JS-9560)	7	2.5	13.2	19.3	-	17000	35040	18040	2.1	12100	23940	11840	2.0
More na	-do-	Soybean (JS-335)	7	2.5	16.4	18	-	17000	44080	27080	2.6	12500	22400	9900	1.8
More na	West pond used and economic generate by new	Water chestnut	12	2	1.5	-	-	20000	150000	130000	7.5	-	-	-	
Tikam garh	Variety	J.S.- 93-05	124	50	23.8	18.3	23.1	14847	50575	35728	3.4	14847/-	42090	27243	2.8
Tikam garh	Variety	Azad-1	125	50	9	7.2	20	11722	24300	12578	2.1	11722	19440	7718	1.7
Chhat tarpur	Short duration& yellow mosaic resistant,	JS93-05	12	4.8	20	17	18	10000	40000	30000	4.0	9000	34000	25000	3.8
Chhat tarpur	High yielding variety under water stress condition	TPG-41	17	6	11	9.5	16	11000	33000	22000	3.0	11000	28500	17500	2.6
Chhat tarpur	short duration suitable for rainfed condition ,YMV resistant	PU-35	13	5	12	10	20	7500	30000	22500	4.0	7000	25000	18000	3.6
Chhat tarpur	Phytopthora blight resistant, short duration	JTS-8	27	10	5	4	11.11	6000	25000	21000	4.2	5500	22600	17000	4.1

Chhattarpur	Short duration suitable rainfed condition, Resistant to wilt, root rot.	JG-16	40	16	8.96	7.5	16.2	6400	25088	18688	3.9	6200	21000	14800	3.4
Chhattarpur	Sclerotia tolerant ,higher oil percentage	JM-2	13	5.2	11.57	8.63	25.4	4600	25100	20500	5.5	4300	15620	11320	3.6
Chhattarpur	Tolerant to wilt and bold seeded, drought tolerant,	JL-3	15	6	5.02	3.75	25.2	5400	15060	9660	2.8	5000	11250	6250	2.3
Satna	Crop substitution-Paddy substituted with early maturing soybean variety JS-9560	Variety-JS-9560, Seed treatment with Thio-methoxam (1gm/kg seed),	12	5	5.73	4.56 (equivalent yield)	25.66	8144	10640	2496	1.3	9040	8653	-387	1.0
Satna	Integrated crop management in Sorghum	Variety-JJ-1041, organic manure 4 t/ha,, Seed treatment with carbendazim (2gm/kg seed),	10	3.8	15.5	13.4	15	5675	12400	6724	2.2	4580	10720	6140	2.3
Satna	Crop substitution-paddy substituted with early maturing crop black gram	Variety-PU-31, Seed treatment with Thiomethoxam (1gm/kg seed),	11	3.6	2.5	1.8 (equivalent yield)	19.04	7679	11520	3841	1.5	9075	8650	-425	1.0

		organic manure,													
Satna	Crop substitution-Sorghum substituted with early maturing crop with Green gram	Variety-Samrat, Seed treatment with Thiomethoxam (1gm/kg seed), organic manure,	9	3.6	3.85	1.55 (equivalent yield)	146.79	7809	12600	4791	1.6	4580	4976	396	1.1
Satna	Integrated crop management in Sesame	Variety-JTS-08, Seed treatment with carbendazim (2gm/kg seed), organic manure@4t/ha,	13	5	3.15	2.6	21	8100	13250	5130	1.6	6350	10920	4570	1.7
Satna	Integrated crop management in Pigeonpea	Variety-ICPL-88039,	11	5	5.4	4.75	13.68	8675	17280	8605	2.0	7250	15200	7950	2.1
Satna	Introduction of new crop-okra Variety tolerant to YVMV disease	Variety-VRO-06, seed treatment with imidacloprid 3gm/kg seed,	7	1.35	85.83	9.87 (equivalent yield)	769.6	37250	85835.71	48585.71	2.3	4580	9870	5290	2.2
Satna	Introduction of new crop-Turmeric	Variety-Pant Pitambh,	4	0.08	169	-	-	145069	318000	172931	2.2				

		mulching, organic manure 5 t/ha,													
Satna	Integrated crop management in Mustard	Variety-Pusa tarak, organic manure 2 t/ha, NPKS 60:40:20:20 Kg/ha,	14	5.4	7.09	3.12	127.24	7050	24800	17750	3.5	5985	10920	4935	1.8
Satna	Integrated crop management in Chickpea	Variety-JG-11, organic manure 2t/ha, DAP100 and Sulphur 20 Kg/ha,	21	5	16.5	12.9	40.12	10650	51951	41301	4.9	9550	37077	27527	3.9
Satna	Integrated crop management in Wheat	Variety-JW-17, organic manure 4t/ha, NPK 60:20:20 Kg/ha,	16	5	25.02	16.65	50.24	13100	30018.75	16918.75	2.3	11050	19980	8930	1.8

In **Chhattisgarh, Bilaspur KVK** have worked on introducing drought / temperature tolerant varieties through 13 demonstrations at farmers fields using (JT-10) variety for Til crops and covered the area 5 ha. **In Dantewara KVK,** 200 demonstrations conducted under the different crops viz. Rice, Maize, Gram, Urd, Kodo, Kutki G.nut, wheat, Tomato, Brinjal and Ragi and covered 35.18 ha area. Demonstrations Resulted percent increase the crop yield ranged from 61.3 to 104.5 in rice varieties, 67.8 in maize, 78.4 in Green gram,54.7 in black gram and 103.0 in wheat (var. Sujata) and 107.6 in tomato. in hybrid rice maximum percent increased the yield 104.5percent and BC ratio ranged from 1.3 to 4.4 in all crops. **In Bhatapara KVK,** 38 demonstrations conducted under the different crops viz. Rice, Arhar and Brinjal and 28.8 ha area covered.

Demonstrations Resulted percent increased the crop yield 22.1 in rice, 28.62 in arhar and 19.76 in gram. BC ratio ranged from 1.5 to 2.6 in all three crops.

KVK Name	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Area (ha)	Measurable indicators of output*		% increase	Economics of demonstration (Rs./ha)				Economics of Local (Rs./ha)			
					Demo	Local		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Bilaspur	Til	JT-10	13	5ha											
Dantewada	Rice (Swarna Masuri)	Seed	8	4	34.4	21.1	63	13200	36120	22920	2.7	12100	22155	10055	1.8
Dantewada	Rice (Samleshwari)	Seed	6	2	31.8	18.8	69.6	13200	33390	20190	2.5	12100	19740	7640	1.6
Dantewada	Rice (Poornima)	Seed	4	2	26.9	16.6	62.2	13200	28245	15045	2.1	12100	17430	5330	1.4
Dantewada	Rice (Samleshwari-Seed prod.)	Seed, Fertilizer	4	0.8	32.1	19.6	63.6	13200	33705	20505	2.6	12100	20580	8480	1.7
Dantewada	Rice (Hy.807)	Seed	2	0.4	38.7	18.9	104.5	13200	40635	27435	3.1	12100	19845	7745	1.6
Dantewada	Rice (Dantehswari-Seed Prod.)	Seed, Fertilizer	1	0.4	29.2	18.1	61.3	13200	30660	17460	2.3	12100	19005	6905	1.6

Dantewada	Maize (JM-216)	Seed, Fertilizer	15	5	31.2	18.6	67.8	10400	23400	13000	2.3	7500	13950	6450	1.9
Dantewada	Green Gram (Pusa Vishal-Seed Prod.)	Seed, Fertilizer	6	2.5	7.8	4.4	78.4	13000	42900	29900	3.3	9000	24200	15200	2.7

Dantewada	Black Gram (TAU-1)	Seed, Fertilizer	5	1	6.7	4.3	54.7	13500	36850	23350	2.7	9500	23650	14150	2.5
Dantewada	Ragi (GPU-28)	Seed, Fertilizer	7	2	19.2	12.7	51.2	7800	34614	26814	4.4	6500	22860	16360	3.5
Dantewada	Kodo (JK-41)	Seed, Fertilizer	5	2	18.1	12.9	40.3	8200	32580	24380	4.0	7100	23220	16120	3.3
Dantewada	Kutuki (JK-8)	Seed, Fertilizer	3	1	8.6	4.8	79.2	8000	18060	10060	2.3	6000	10080	4080	1.7
Dantewada	Ground Nut (AK-159)	Seed, Fertilizer	3	1	6.3	4.1	53.7	13500	28350	14850	2.1	10500	18450	7950	1.8
Dantewada	Horse Gram (BK-1)	Seed, Fertilizer	3	1	3.4	2.6	30.8	8500	10880	2380	1.3	7000	8320	1320	1.2
Dantewada	Niger (JNC-6)	Seed, Fertilizer	3	2	3.9	2.2	77.3	5200	11700	6500	2.3	3600	6600	3000	1.8
Dantewada	Field Pea (GS-10)	Seed, Fertilizer	7	2	7.4	3.8	94.7	11300	19240	7940	1.7	8200	9880	1680	1.2
Dantewada	Chickpea (JG-11)	Seed, Fertilizer	6	2	6.1	3.8	60.5	10500	15250	4750	1.5	7500	9500	2000	1.3
Dantewada	Wheat (Sujata)	Seed	3	2	13.6	6.7	103	14000	20808	6808	1.5	9500	10251	751	1.1
Dantewada	Okra ()	Seed, Fertilizer & Pesticide	21	0.4	59.5	36.2	64.4	20500	59500	39000	2.9	15500	36200	20700	2.3

Dantewada	Tomato (Utkal kumari)	Seed, Fertilizer & Pesticide	15	0.4	218	105	107.6	38000	109000	71000	2.9	32000	52500	20500	1.6
Dantewada	Bottle Guard (Ankur amit)	Seed, Fertilizer & Pesticide	18	0.4	165	103.2	59.9	35000	82500	47500	2.4	27000	51600	24600	1.9
Dantewada	Chilli (F1-365)	Seed, Fertilizer & Pesticide	13	0.4	83.8	49.4	69.6	30000	100560	70560	3.4	28000	59280	31280	2.1
Dantewada	Cowpea (Gomti)	Seed, Fertilizer & Pesticide	19	0.4	112	68.5	63.5	32000	89600	57600	2.8	26000	54800	28800	2.1
Dantewada	Brinjal (Muktakeshi)	Seed, Fertilizer & Pesticide	11	0.4	195	138	41.3	35040	97500	62460	2.8	32925	69000	36075	2.1
Dantewada	Onion (Nasiklal)	Seed, Fertilizer & Pesticide	12	0.4	181.9	94.5	92.5	35000	127330	92330	3.6	30000	66150	36150	2.2
Bhatapara (Raipur)	Paddy cv. Samleshwari	Seed	7	4	37.9	31	22.1	23571	45428	21857	1.9	22400	37200	14800	1.7
Bhatapara (Raipur)	Arhar (UPAS-120)	Seed	7	5.2	8.12	6.31	28.62	21571	31673	10102	1.5	18286	22100	3814	1.2
Bhatapara (Raipur)	Gram (JG-11)	Seed	9	9.6	15.76	13.16	19.76	23222	61446	38224	2.6	22222	42097	19875	1.9
Bhatapara (Raipur)	Brinjal VNR-212	Seed	15	10	**										

In **Odisha,** Sonepur KVK , 30 demonstrations conducted under the Rice crops and 22.0 ha area covered. Demonstrations Resulted percent increased the rice crop yield 22.28 to 36.36 and BC ratio observed 2.3.**In Jharsuguda KVK,** 24 demonstrations conducted under the Rice crops and 4.0 ha area covered. Demonstrations Resulted percent increased the rice crop yield 17.4 and BC ratio observed 2.3.**In Ganjam KVK,** 110 demonstrations conducted under the different crops viz. Rice, G.nut and maize and 47.4 ha area covered. Demonstrations Resulted maximum percent increased the yield 22.1 in hybrid maize. BC ratio ranged from 1.5 to 1.9 in all three crops. **In Kendrapara KVK,** 50 demonstrations conducted under the Rice crops and 7.0 ha area covered.

KVK Name	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Area (ha)	Measurable indicators of output*		% increase	Economics of demonstration (Rs./ha)				Economics of Local (Rs./ha)			
					Demo	Local		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Sonepur	Drought tolerant variety	Variety (Khandagiri) biofertilizer, IPM	30	12	47.2	38.6	22.28	12500	28590	16090	2.3	13350	25900	12550	1.9
Sonepur	-do	Variety (lalat), biofertilizer, IPM	25	10	49	38.6	36.36	14850	34180	19330	2.3	13580	27180	13600	2.0
Jharsuguda	Varietal upland paddy replacement	seeds	24	4	26.3 q/ha	22.4 q/ha	17.4	12000	27600	15600	2.3	10800	23500	12700	2.2
Ganjam	Demonstration on Improved Paddy var. Naveen	Seed, Fertilizer	15	10	28.2	21.3	33.3	17,400	28,200	10,800	1.6	14,300	21,300	7,000	1.5
Ganjam	Paddy var. MTU-1001	Seed, Fertilizer	60	30	35.3	26.2	34.73	21,600	35,300	13,700	1.6	17,100	26,200	9,100	1.5
Ganjam	Improved	Seed,	15	5	14.1	10.4	35.57	22,500	42,300	19,800	1.9	18,400	31,200	12,800	1.7

	Ground nut var. Smruti	Pesticides, Micronutrient													
Ganjam	INM in Maize Hybrid Super-36	fertilizers	10	2	48.6	31.4	54.77	22,400	42,768	20,368	1.9	18,300	27,984	9,684	1.5
Ganjam	Improved Turmeric var. Roma	Seed, Fertilizers	10	0.4	85.1	-		66,000	102,120	36,120	1.5				
Kendrapara	flood tolerant paddy var. Swarna Sub-1	Swarna Sub-1	50	7	-	-	-								

Intervention II: Advancement of planting dates of rabi crops in areas with terminal heat stress

In this intervention **Balaghat KVK (Madhya Pradesh)** have worked on Advancement of planting dates of rabi crops in areas with terminal heat stress through demonstrations in (early maturing variety) rice crops at farmers fields . A total 10 farmers benefited and 4 ha area covered under this intervention and resulted BCR ratio 2.2.**In Guna KVK**, 420 demonstrations conducted under different fruit crops and 420 ha area covered. **In Morena KVK,** 22 demonstrations conducted under wheat in rice-wheat cropping system using zero till seed drill and covered 22.0 ha area. Demonstrations Resulted percent increased the crop yield 17.51percent and BC ratio observed 2.98

KVK Name	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Area (ha)	Measurable indicators of output*		% increase	Economics of demonstration (Rs./ha)				Economics of Local (Rs./ha)			
					Demo	Local		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Balaghat	Early sowing of rabi crops	Paddy 1010, JRH 5	10	4	-	-	-	25,000	55,000	30,000	2.2	22,000	43,000	21,000	1.95
Guna	Mango	Amrapali	70	70	-	-	-	-	-	-	-	-	-	-	-
Guna	Guava	L -49	35	35	-	-	-	-	-	-	-	-	-	-	-
Guna	Guava	KG-1	35	35	-	-	-	-	-	-	-	-	-	-	-
Guna	Jamun	Hybrid	70	70	-	-	-	-	-	-	-	-	-	-	-
Guna	Lime	Seed Less	70	70	-	-	-	-	-	-	-	-	-	-	-

Guna	Custard Apple	Balanager	70	70	-	-	-	-	-	-	-	-	-	-	-	-
Guna	Aonla	NA -7	35	35	-	-	-	-	-	-	-	-	-	-	-	-
Guna	Pomegranate	Aracta	35	35	-	-	-	-	-	-	-	-	-	-	-	-
Morena	High yielding variety suitable for late Sowing suitable for pigeon pea/ rice -wheat cropping system in zero till seed drill sowing method	Wheat (MP - 4010)	22	16	51	43.4	17.51	26200	78300	52100	3.0	25500	66420	40920	2.6

In **Chhattisgarh, Bilaspur KVK** have worked on advancement of planting dates of rabi crops in areas with terminal heat stress through Early sowing of Gram crop in rabi season using Gram JG 11 and JG 64 variety. A total 20 demonstration have conducted and 10 ha area covered in NICRA villages resulted 52.2 percent increased the crop yield and BCR ratio 2.94 obtained by this technology.

KVK Name	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Area (ha)	Measurable indicators of output*		% increase	Economics of demonstration (Rs./ha)				Economics of Local (Rs./ha)			
					Demo	Local		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Bilaspur	Gram variety JG 11 &JG 64	Seed JG11 & JG64	20	10	18.15	9.45	52.2	13580	39949	25369	2.94	8325	20799	9327	2.49

In Odisha, this intervention **Sonepur KVK** have worked on advancement of planting dates of rabi crops in areas with terminal heat stress through Early sowing of rabi crops using improved varieties of black and green gram, Maize , Cowpea, okra and pumpkin. 90 demonstrations conducted under the different crops viz. black and green gram, Maize, water melon, Cowpea, okra

and pumpkin and 14.04 ha area covered. Demonstrations Resulted maximum percent increased the yield 47.72 in water melon fallowed by 45.92 percent in maize. BC ratio ranged from 0.8 to 4.1 in all crops. **In Ganjam KVK**, 35 demonstrations conducted under black gram and green gram and 6.0 ha area covered. Demonstrations Resulted maximum percent increased the yield 63.15 in black gram fallowed by 57.14 percent in green gram. BC ratio ranged from 2.2 to 2.4 in both crops.

KVK Name	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Area (ha)	Measurable indicators of output*		% increase	Economics of demonstration (Rs./ha)				Economics of Local (Rs./ha)			
					Demo	Local		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Sonepur	Green gram	Variety (Durga), IPM schedule	15	3	4.6	3.7	24.32	7950	21500	16550	2.7	5700	11450	5750	2.0
Sonepur	Black gram	High yielding varieties (OBG-17), IPM schedule	10	2	5.4	4.5	20	4950	15500	16550	3.1	4550	9555	5005	2.1
Sonepur	Cowpea	Variety (utkal manik)	10	0.4	15.8	11.5	37.39	19560	15360	14070	0.8	14070	28140	14070	2.0
Sonepur	Maize	Variety (MH9486)	10	2	28.6	19.6	45.92	9600	27500	17900	2.9	11800	25960	14160	2.2
Sonepur	Groundnut	Variety, INM,IPM	5	1	11.7	8.8	32.95	7000	27650	20650	4.0	7275	20370	13095	2.8
Sonepur	Okra	Variety, INM,IPM	10	1	120	87	37.93	14380	53206	38826	3.7	16760	48600	31840	2.9
Sonepur	Watermelon	Variety,INM,IPM	10	2	325	220	47.72	18740	75897	38826	4.1	16760	19650	55030	1.2
Sonepur	Pumpkin	Variety,INM,IPM	10	2	350	260	34.61	15480	55728	40248	3.6	14380	41700	27320	2.9
Sonepur	Bittergourd	Variety,INM,IPM	10	1	110	85	29.41	14300	45760	31460	3.2	13260	38454	25190	2.9
Ganjam	Improved	Seed, Fertilizers,	25	4	6.8	4.2	57.14	8,600	20,400	11,800	2.4	6,200	12,600	6,400	2.0

	Greengram var.TARM-1	Pesticides													
Ganjam	Improved Blackgram var. PU-31	Seed, Fertilizers, Pesticides	10	2	6.2	3.8	63.15	8,300	18,600	10,500	2.2	5,900	11,400	5,500	1.9

Intervention III: Water saving paddy cultivation methods (SRI, aerobic, direct seeding)

In this intervention **Balagat KVK (Madhya Pradesh)** have worked on water saving paddy cultivation methods (SRI, aerobic, direct seeding) through demonstrations in (early maturing variety MTU1010, 1081) rice crops at farmers fields . A total 5 demonstration conducted and covered 2 ha area under this intervention and resulted BCR ratio 2.1.**In Morena KVK,** 8 demonstrations conducted under Paddy (pusa sugandha) and 3.0 ha area covered. Demonstrations Resulted BC ratio 3.5 was obtained in paddy crops. **In Satna KVK,** 20 demonstrations conducted under paddy using direct seeding method (organic manure 4t/ha, NPK 60:20:20 Kg/ha, Seed treatment with salt solution@ 10%, one spray of Trizophos@1000ml/ha,one spray of Hexaconozole 1ml/L of water) and covered 5.4 ha area. Demonstrations Resulted maximum percent increased the yield 198.01 in paddy crop and BC ratio 2.0 in paddy crops.

KVK Name	Technology demonstrate	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Area (ha)	Measurable indicators of output*		% increase	Economics of demonstration (Rs./ha)				Economics of Local (Rs./ha)			
					Demo	Local		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Balaghat	HighYielding,short duration vrop	Paddy-1010,MTU-1081	5	2	Yieldand Straw	Yieldand Straw		26,000	55,500	29,500	2.1	22,000	40,000	18,000	1.8
Morena	SRI, aerobic, direct seeding)	PADDY (pusasugandha)	8	3	48	20	-	21700	76800	55100	3.5	11700	24000	12300	2.1
Satna	Introduction of new variety in paddy , Direct	Variety-Danteshwari,	20	5.4	30.1	10.1	198.01	12500	25602	13102	2.0	9040	8653	-387	1.0

	seeding														

In **Chhattisgarh** this intervention **Bilaspur KVK** have worked Water saving paddy cultivation methods (SRI, aerobic, direct seeding) through demonstration using High yielding, short duration crop in paddy and wheat. 26 demonstrations conducted under paddy and wheat using direct seeding method and covered 10 ha area. Demonstrations Resulted maximum percent increased the yield 65.5 in paddy and 55 in wheat crop and BC ratio ranged 2.3 to 2.8 in paddy and wheat crops.**In Bhatapara KVK**, 8 demonstrations conducted under paddy using SRI method and covered 4 ha area. Demonstrations Resulted maximum percent increased the yield 14.65 in paddy crop and BC ratio 2.0 in paddy.

KVK Name	Technology demonstrate	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Area (ha)	Measurable indicators of output*		% increase	Economics of demonstration (Rs./ha)				Economics of Local (Rs./ha)			
					Demo	Local		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Bilaspur	Paddy	MTU 1010	13	5	40	25	65.5	20218	45785	25567	2.3	15840	28000	12160	1.8
Bilaspur	Wheat	GW 273	13	5	42	20	55	14400	39900	25500	2.8	9430	19000	9570	2.0
Bhatapara (Raipur)	SRI	Seed	8	4	41.72	36.39	14.65	25125	50062	24937	2.0	23463	43665	20202	1.9

In **Odisha** this intervention **SonepurKVK** have worked on water saving paddy cultivation methods (SRI, aerobic, direct seeding) through demonstration using SRI in Paddy.5 demonstrations conducted under paddy using SRI method and covered 1 ha area. Demonstrations Resulted maximum percent increased the yield 36.01 in paddy crop and BC ratio 2.3 in paddy. **In Kendrapara**

KVK, 4 demonstrations conducted under paddy using SRI method and covered 2 ha area. Demonstrations Resulted maximum percent increased the yield 38.07 in paddy crop.

KVK Name	Technology demonstrate	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Area (ha)	Measurable indicators of output*		% increase	Economics of demonstration (Rs./ha)				Economics of Local (Rs./ha)			
					Demo	Local		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Sonepur	SRI in Paddy	Ranidhan	5	1	52.5	38.6	36.01	14850	34180	19330	2.30	13580	27180	13600	2.0
Kendrapara	SRI method	Lalat	4	2	57.3	41.5	38.07	27000							

Intervention IV: Frost management in horticulture through fumigation

In this intervention **Balagat KVK (Madhya Pradesh)** have worked on frost management in horticulture through fumigation through demonstration using Frost tolerant high yielding variety in arhar. 12 demonstrations conducted and covered 5 ha area. Demonstrations Resulted 1.75 BC ratio in paddy. **Morena KVK,** 5 demonstrations conducted and covered 2.5 ha area.

KVK Name	Technology demonstrate	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Area (ha)	Measurable indicators of output*		% increase	Economics of demonstration (Rs./ha)				Economics of Local (Rs./ha)			
					Demo	Local		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Balaghat	Frost tolerant high yielding variety	Arhar-Laxmi,ICPH-2671	12	5				20,000	35,000	15,000	1.75	19,500	32,000	12,500	1.64
Morena	Irrigation technology and Frost management	Guava (GW-27) Lemon (kagji) ,Anole	5	2.5	-	-	-	-	-	-	-	-	-	-	-

	by fumigation														

Intervention V: Community nurseries for delayed monsoon

In this intervention **Datia KVK** (**Madhya Pradesh)** has worked on community nurseries for delayed monsoon Through demonstration using different crop varieties High Yielding resistant to insect and disease. 7 demonstrations conducted under different crops viz chilli,tomato and onion and covered 115 ha area. Demonstrations Resulted maximum percent increased the yield 30.64 in tomato crop and BC ratio ranged from 5.4 to 12.9 in different crops.

KVK Name	Technology demonstrate	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Area (ha)	Measurable indicators of output*		% increase	Economics of demonstration (Rs./ha)				Economics of Local (Rs./ha)			
					Demo	Local		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Datia	Chilli Var. Kashi Anmol	Seed	1	50	185.86	155.56	19.47	27400	148688	121288	5.4	25030	124448	99418	5.0
Datia	Tomato Var. Kashi Visesh	Seed	1	50	376.28	288.02	30.64	28210	363396	235186	12.9	25640	201614	175974	7.9
Datia	Kharif Onion Var. Agri found Dark Red	Seed	5	15	211.08	-	Introduction n of New crop	35391	211080	175689	6.0	-	-	-	

In **Odisha, Sonepur KVK** have worked on community nurseries for delayed monsoon through demonstration in different crops viz.Brinjal, Cauliflower, Cabbage, Tomato and Onion using high yielding varieties, Bio fertilizers and need based IPM schedule. 50 demonstrations conducted and covered 4 ha area. Demonstrations Resulted maximum percent increased the yield 38.15 in cabbage crop and BC ratio ranged from 2.5 to 3.8 in different crops.

KVK Name	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Area (ha)	Measurable indicators of output*		% increase	Economics of demonstration (Rs./ha)				Economics of Local (Rs./ha)			
					Demo	Local		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Sonepur	Brinjal	High yielding varieties, Bio fertilizers and need based IPM schedule	10	0.8	187	136	37.5	45400	150400	105000	3.3	38600	121630	44430	3.2
Sonepur	Cauliflower	-do	10	0.8	250	189	32.27	34270	86350	832080	2.5	37450	116000	78550	3.1
Sonepur	Cabbage	-do	10	0.8	221	160	38.15	45320	150450	105130	3.3	35400	102000	66600	2.9
Sonepur	Tomato	-do	10	0.8	208	155	34.2	44500	142400	97900	3.2	37200	89200	52000	2.4
Sone	Onion	-do	10	0.8	124	98	26.53	46300	175940	12964	3.8	35000	115000	80000	3.3

pur										0					

Intervention VI: Custom hiring centres for timely planting

In this intervention **Morena KVK (Madhya Pradesh)** have worked on custom hiring centre for timely planting through Use in zero till seed drill sowing method. 47 demonstrations conducted and covered 23 ha area. Demonstrations Resulted maximum percent increased the yield 20.91 in wheat crop and BC ratio ranged from 3.4 to 3.6 in both crops.

KVK Name	Technology demonstrate	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Area (ha)	Measurable indicators of output*		% increase	Economics of demonstration (Rs./ha)				Economics of Local (Rs./ha)			
					Demo	Local		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Morena	Use in zero till seed drill sowing method	Wheat (MP- 4010)	22	16	52.6	43.5	20.91	23840	80756	56916	3.4	26500	66500	40000	2.5
Morena	Use in zero till seed drill sowing method	Barley (RD- 2592)	25	7	41.7	36.4	14.56	18650	67126	48476	3.6	18700	57900	39200	3.1

In Odisha, Sonepur KVK have worked on custom hiring centre for timely planting through Use in Seed cum fertilizer drill sowing method in paddy crop. 5 demonstrations conducted and covered 2 ha area and resulted maximum percent increased the yield 22.28 in paddy crop and BC ratio 2.3 was observed.

KVK Name	Technology demonstrate	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Area (ha)	Measurable indicators of output*		% increase	Economics of demonstration (Rs./ha)				Economics of Local (Rs./ha)			
					Demo	Local		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Sonepur	Line sowing of paddy	Seed cum fertilizer drill	5	2	47.2	38.6	22.28	14850	34180	19330	2.30	13580	27180	13600	2.0

Intervention VIII: Location specific intercropping systems with high sustainable yield index

In this intervention **Balagat KVK (Madhya Pradesh)** have worked on location specific intercropping systems with high sustainable yield index through demonstration in different crops viz Wheat+ Mustard(6:2), Chickpea + Linseed(3:1). 20 demonstrations conducted and covered 8 ha area. Demonstrations resulted BC ratio ranged from 2.4 to 2.7 in both intercropping systems. **In Morena KVK**, 4 demonstrations conducted under Soybean + Maize 2:1inter crop and covered 2 ha area. Demonstrations resulted BC ratio 3.5 in intercropping systems. **In Satna KVK,** 42 demonstrations conducted in different crops viz. Jowar-JJ1041 + Pigeonpea –ICPL-88039(4:2), Chickpea-JG-11 + Mustard-PusaTarak (6:2) and Wheat-HI-1500 + Mustard-PusaTarak (6:2) all seed treatment with Carbendazim 2.5gm/kg seed, and covered 15 ha area. Demonstrations Resulted maximum percent increased the yield 111.66 in Chickpea-JG-11 + Mustard-PusaTarak (6:2) intercropping system and BC ratio was observed in ranged from 2.2 to 2.9 in different crops.

KVK Name	Technology demonstrate	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Area (ha)	Measurable indicators of output*		% increase	Economics of demonstration (Rs./ha)				Economics of Local (Rs./ha)			
					Demo	Local		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Balaghat	Intercropping systems Wheat+ Mustard(6:2) Chickpea + Linseed(3:1)	Wheat-JW-3020, Mustard-PusaTarak.	12	5				18,000	48,000	30,000	2.7	16,000	32,000	16,000	2.0
Balaghat	Intercropping systems Wheat+ Mustard(6:2) Chickpea + Linseed(3:1)	Chickpea- JG14, Linseed-Desi	8	3				18,500	45,000	27,000	2.4	17,000	36,000	19,000	2.1
Morena	intercropping systems	Soybean + Maize 2:1	4	2	10.52+ 38.20	16.4		23200	80584	57384	3.5	21600	38080	16480	1.8
Satna	Jowar + Pigeonpea	Intercropping system Jowar-JJ1041 + Pigeonpea –ICPL-88039(4:2)	13	5	15.58	11.37	17.662	9000	26537	17537	2.9	8200	22562	14362	2.8
Satna	Chickpea +Mustard	Intercropping system Chickpea-JG-11 + Mustard-PusaTarak (6:2)	14	5	3.8	5.86	111.66	9690	21576	11877	2.2	8800	14074	5274	1.6
Satna	Wheat +Mustard	Intercropping system Wheat-HI-1500 + Mustard-PusaTarak (6:2	15	5	14.17	21.63	105.93	11360	29831	18471	2.6	10550	19530	8980	1.9

In **Odisha** this intervention **Sonepur KVK** have worked on location specific intercropping systems with high sustainable yield index through demonstration at farmers field using Maize with Arhar Intercropping systems. 4 demonstrations conducted and covered 1 ha area. Demonstrations resulted BC ratio was observed 2.38 in Maize with Arhar Intercropping systems.**In Ganjam KVK,** 5

demonstrations conducted and covered 0.4 ha area. Demonstrations Resulted maximum percent increased the yield 8.92 in Paddy with Arhar Intercropping systems and BC ratio was observed 1.9.

KVK Name	Technology demonstrate	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Area (ha)	Measurable indicators of output*		% increase	Economics of demonstration (Rs./ha)				Economics of Local (Rs./ha)			
					Demo	Local		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Sonepur	Maize-Arhar intercropping	High yielding varieties, Bio fertilizers and need based IPM schedule	4	1	Maize: 36 ; Arhar: 21.0	25 ; 12	-	10320	24600	14280	2.4	9320	19570	10250	2.1
Ganjam	Inter-cropping of Paddy + Arhar	Seed, Fertilizers, Pesticides	5	0.4	23.2	21.3	8.92	17,500	33600	16,100	1.9	13,500	21,300	7,800	1.6

Modules III: Livestock and Fisheries

Use of community lands for fodder production during drought/floods, improves fodder/feed storage methods, preventive vaccination, improved shelters for reducing heat stress in livestock, management of fish ponds/tanks during water scarcity and excess water, etc.

Intervention I: Use of community lands for fodder production during droughts / floods

In this intervention **KVK Guna (Madhya Pradesh)** have worked on use of community lands for fodder production during droughts / floods through demonstrations at farmers field using high yielding fodder crop variety of Barseem. 25 demonstrations conducted and covered 5 ha area. Demonstrations were resulted maximum percent increased Green fodder yield 25.59 in berseem crop and BC ratio was observed 5.3. **In Morena KVK**, 52 demonstrations conducted under berseem and oat crop and covered 37.5 ha area. Demonstrations resulted BC ratio ranged 3.5 to 4.5.

KVK Name	Technology demonstrate	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Unit/ No. / Area (ha)	Measurable indicators of output*		% increase	Economics of demonstration (Rs./ha)				Economics of demonstration (Rs./ha)			
					Demo	Local		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Guna	high yielding fodder crop variety of Barseem	JB 5	25	5	36.8 mt.	29.3 mt.	25.59	17220	92000	74780	5.3	16530	73250	56720	4.4
Morena	fodder production	Barseem	45	35	350	270		15600	70000	54400	4.5	14450	54000	39550	3.7
Morena	fodder production	Oat	7	2.5	310	240		17500	62000	44500	3.5	16600	48000	31400	2.9

In **Chhattisgarh**, this intervention **Dantewara KVK** have worked on use of community lands for fodder production during droughts / floods through demonstration under Pasture Development. 7 demonstrations conducted under maize crop and covered 2 ha area.

KVK Name	Technology demonstrate	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Unit / No. / Area (ha)	Measurable indicators of output*		% increase	Economics of demonstration (Rs./ha)				Economics of demonstration (Rs./ha)			
					Demo	Local		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Dantewada	Pasture Development	Seed/rizom/runner (maize/Anjan Grass) and Fertilizer	7	2	-	-	-	-	-	-	-	-	-	-	-

In **Odisha,** this intervention **Sonepur KVK** have worked on use of community lands for fodder production during droughts / floods through demonstrations under hybrid Napier and Stylo cultivation. 9 demonstrations conducted under maize crop and covered 2 ha area.

KVK Name	Technology demonstrate	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Unit/ No. / Area (ha)	Measurable indicators of output*		% increase	Economics of demonstration (Rs./ha)				Economics of demonstration (Rs./ha)			
					Demo	Local		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Sonepur	Production of hybrid Napier	Variety	4	1	-	-	-	-	-	-	-	-	-	-	-

Sonepur	Stylo cultivation	Variety	5	1	-	-	-	-	-	-	-	-	-	-	-

Intervention II: Improved fodder/feed storage methods

In this intervention **Guna KVK (Madhya Pradesh)** have worked on improved fodder/feed storage methods through demonstrations using use of mineral mixture for balance nutrition in milch animals. 25 demonstrations conducted under mineral mixture and covered 25 units. Demonstrations were resulted maximum percent increased lactation 32 and BC ratio was observed 2.0. **In Morena KVK**, 50 demonstrations conducted under dry fodder and covered 50 units. Demonstration resulted BC ratio was observed 2.9.

KVK Name	Technology demonstrate	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Unit/ No. / Area (ha)	Measurable indicators of output*		% increase	Economics of demonstration (Rs./ha)				Economics of demonstration (Rs./ha)			
					Demo	Local		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Guna	Use of mineral mixture for balance nutrition in milch animals	Mineral mixture	25	25	1471 l/lactation	928 l/lactation	32	18265	36775	18510	2.0	14320	23200	8880	1.6
Morena	Augmentation of Fodder production and conservation	Dry Fodder: Green Fodder: Concentrate, Mineral Mix	50	50	8li/day	5li/day		9860	28800	18940	2.9	8500	18000	10500	2.1

In **Odisha,** this intervention **Sonepur KVK** has worked on improved fodder/feed storage methods through Hay making structures. 2 SHGs Farmers group have formed and 75 ha area covered in NICRA villages.

KVK Name	Technology demonstrate	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Unit/ No. / Area (ha)	Measurable indicators of output*		% increase	Economics of demonstration (Rs./ha)				Economics of demonstration (Rs./ha)			
					Demo	Local		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Sonepur	Hay making structures	Cement rings, hybrid napier, stylo	2 SHGs	8	-	-	-	-	-	-	-	-	-	-	-

Intervention III: Preventive vaccination

In this intervention **Guna KVK (Madhya Pradesh)** have worked on preventive vaccination through demonstration under animal vaccination programme. 40 demonstrations conducted and covered 112 units. **In Morena KVK**, 72 demonstrations conducted and covered 150 units. Demonstration resulted BC ratio was observed 2.73.

KVK Name	Technology demonstrate	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Unit/ No. / Area (ha)	Measurable indicators of output*		% increase	Economics of demonstration (Rs./ha)				Economics of demonstration (Rs./ha)			
					Demo	Local		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Guna	Animal Vaccination programme	Private Vaccination	40	112	Animal remained healthy though out the year	-	-	-	-	-	-	-	-	-	-
Morena	Training animal disease vaccination and management	Dairy animals – FMD and HS – and galgontu disease vaccination	72	150	7li/day	4li/day		9200	25200	16000	2.73	8100	14400	6300	1.77

In **Chhattisgarh,** this intervention **Dantewada KVK** have worked on preventive vaccination through Animal Health Camp..
37 Farmers have benefited and covered 250 animals.

KVK Name	Technology demonstrate	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Unit/ No. / Area (ha)	Measurable indicators of output*		% increase	Economics of demonstration (Rs./ha)				Economics of demonstration (Rs./ha)			
					Demo	Local		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Dantewada	Animal Health Camp	Convergence with Veterinary Department	37	250 animals	-	-	-	-	-	-	-	-	-	-	-

In **Odisha,** this intervention **Sonepur KVK** have worked on preventive vaccination through Vaccination of goats and cow..
35 Farmers have benefited and covered 350 goats and 150.

KVK Name	Technology demonstrate	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Unit/ No. / Area (ha)	Measurable indicators of output*		% increase	Economics of demonstration (Rs./ha)				Economics of demonstration (Rs./ha)			
					Demo	Local		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Sonepur	Vaccination of goats and cow	Vaccines, mineral mixtures, vitamins etc.	35	350 goats, 150 cows	-	-	-	-	-	-	-	-	-	-	-

Intervention IV: Improved shelters for reducing heat stress in livestock

In this intervention **Morena KVK (Madhya Pradesh)** have worked on improved shelters for reducing heat stress in livestock through Training animal camp and new brides cross available (Feeding should be minimized during winter. Instead of two only one dose should be applied). 60 Farmers have benefited and covered 130 units.

KVK Name	Technology demonstrate	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Unit/ No. / Area (ha)	Measurable indicators of output*		% increase	Economics of demonstration (Rs./ha)				Economics of demonstration (Rs./ha)			
					Demo	Local		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Morena	Training animal camp and new brides cross available	Feeding should be minimized during winter.	60	130	-	-	-	5000	-	-	-	-	-	-	-

In **Odisha**, this intervention **Kendrapara KVK** have worked on improved shelters for reducing heat stress in livestock through Rearing of poultry bird in backyard var.-Banaraja. 6 farmers have benefited and covered 120 birds and 72.2percent increased output in birds.

KVK Name	Technology demonstrate	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Unit/ No. / Area (ha)	Measurable indicators of output*		% increase	Economics of demonstration (Rs./ha)				Economics of demonstration (Rs./ha)			
					Demo	Local		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Kendrapara	Rearing of poultry bird in backyard var.-Banaraja	Banaraja	6	120 birds	1.8 kg body weight	3.1 kg body weight	72.2	-	-	-	-	-	-	-	-

Intervention V: Management of fish ponds / tanks during water scarcity and excess water

In this intervention **Guna KVK (Madhya Pradesh)** have worked on management of fish ponds / tanks during water scarcity and excess water through Fisheries Programme. 1 farmer have benefited and covered 0.4 ha area and resulted BCR 3.51. **In Morena KVK,** 6 framers have benefited through Training in Maintenance of fish point, proper dose food, and grain and disease control of fish (Manuring should be checked or stopped during winter season. But lime should be used at regular intervals. Water exchange should be done at regular intervals), Fisheries Programme and Covered 3.3 ha area. Resulted 76.50 percent increased the yield and obtained BC ratio ranged 3.51 to 6.0.

KVK Name	Technology demonstrate	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Unit / No. / Area (ha)	Measurable indicators of output*		% increase	Economics of demonstration (Rs./ha)				Economics of demonstration (Rs./ha)			
					Demo	Local		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Guna	Fisheries Programme	Rohu, Katla, Mrigal	1	0.4	3.55 q.	-	-	8075	28400	20325	3.51		-	-	-
Morena	Training Maintenance of fish point	Manuring should be checked or stopped.	5	2.5	150 q/ha/year	85/q/ha/year	76.50%	25000	150000	125000	6	22000	85000	63000	3.86
Morena	Fisheries Programme	Rohu, Katla, Mrigal	1	0.4	3.55 q.	-	-	8075	28400	20325	3.51	-	-	-	-

In **Chhattisgarh,** this intervention **Dantewara KVK** have worked on management of fish ponds / tanks during water scarcity and excess water through Renovation and Digging of Ponds for Irrigation cum fish cultivation. 15 Farmers have benefited and covered 3 Units.

KVK Name	Technology demonstrate	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Unit / No. / Area (ha)	Measurable indicators of output*		% increase	Economics of demonstration (Rs./ha)				Economics of demonstration (Rs./ha)			
					Demo	Local		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Dantewada	Renovation and Digging of Ponds for Irrigation cum fish cultivation	Labour payment	15	3 unit	1- Fish production/ha ; 2-Increase in irrigated area (ha)	-	-	-	-	-	-	-	-	-	-

In **Odisha,** this intervention **SonepurKVK** have worked on management of fish ponds / tanks during water scarcity and excess water through psciculture. 35 demonstration conducted and covered 2.0 ha. **In Ganjam KVK**, 10 demonstration conducted under Composite pisciculture, Feed mgt. in pisciculture and covered 1.0 ha.**In Kendrapara KVK**, 20 demonstration conducted under improved pisciculture and covered 2.0 ha. Resulted increased 51.8 percent yield.

KVK Name	Technology demonstrate	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Unit / No. / Area (ha)	Measurable indicators of output*		% increase	Economics of demonstration (Rs./ha)				Economics of demonstration (Rs./ha)			
					Demo	Local		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Sonepur	pisciculture	Fish yearlings of Catla:Rohu:Mrigal:Common crap in the ratios of 3:2:3:2 were distributed in two farm ponds	35	2	-	-	-	-	-	-	-	-	-	-	-
Ganjam	Composite pisciculture	Rohu, Catla, Mrigal - 2:4:2	5	0.4	-	-	-	-	-	-	-	-	-	-	-
Ganjam	Feed mgt. in pisciculture	-do-	5	0.6	-	-	-	-	-	-	-	-	-	-	-
Kendrapara	Improved Pisciculture	Indian Major carp	20	2	13.5	20.5	51.8	-	-	-	-	-	-	-	-

Modules IV: Institutional interventions

This module consist of institutional either by strengthening the existing ones or initiating new owns relating to seed ban, fodder bank, commodity groups, custom hiring centre, collective marketing group, introduction of weather index based insurance and centre, literacy through a village weather station will be part of this module.

Intervention I: Seed bank intervention

In seed bank intervention **Balaghat KVK (Madhya Pradesh)** have worked.20 demonstrations conducted under participatory seed production program on paddy and wheat crop and covered 80 ha area. **In Guna KVK,** 25 demonstrations conducted under participatory seed production program on soybean and covered 50 ha area. **In Morena KVK,** 80 demonstrations conducted under participatory seed production program on Pigenpea and covered 50 ha area

KVK Name	Details of activity			Critical input (Breed / Variety / Medicine doses,)	No. of farmers	Unit / No. / Area (ha)
	Name of crops / Commodity groups / Implements	Quantity / Number / Rent / Charges	Technology used in seed / fodder bank & function of groups			
1	2	3	4	5	6	7
Balaghat	Participatory seed Production at village level, Paddy and Wheat	200 qtl	Hybrid seed	MTU-1081	40	80
Guna	Soybean JS-95-60	100 q	Improved variety seed, Creation of revolving fund	JS-95-60	25	10
Morena	Training on Commercial seed production in Pigenpea	Rs. 5.00 lakhs / year	One society had been developed a seed processing unit.	ICPL -88039 , Wheat (MP-4010)	80	50

In Chhattisgarh, Dantewara KVK have worked on seed bank intervention. 18 demonstrations conducted under participatory seed production program on Paddy, Green gram, Kodo, Kutki and Ragi crop and covered 6.1 ha area.

KVK Name	Details of activity			Critical input (Breed / Variety / Medicine doses,)	No. of farmers	Unit / No. / Area (ha)
	Name of crops / Commodity groups / Implements	Quantity / Number / Rent / Charges	Technology used in seed / fodder bank & function of groups			
1	2	3	4	5	6	7
Dantewada	Rice (Samleshwari)	22.0 q	Training organized for seed production	Seed - Rice (Samleshwari) and fertilizer	4	0.8 ha
Dantewada	Rice (Dantehswari)	10.0 q	Training organized for seed production	Seed - Rice (Dantehswari) and Fertilizer	1	0.4 ha
Dantewada	Green Gram (Pusa Vishal)	2.0 q	Training organized for seed production	Seed - Green Gram (Pusa Vishal) and fertilizer	6	2.5
Dantewada	Ragi (GPU-28)	2.0 q		Seed - Ragi (GPU-28) and fertilizer	4	1
Dantewada	Kodo (JK-41)	1.0 q		Seed- Kodo (JK-41) and fertilizer	2	1
Dantewada	Kutuki (JK-8)	1.0 q		Seed - Kutuki (JK-8) and fertilizer	1	0.4

In Odisha, Sonepur KVK has worked on seed bank intervention. 20 demonstrations conducted under participatory seed production program on Paddy crop and covered 8.0ha area.

KVK Name	Details of activity			Critical input (Breed / Variety / Medicine doses,)	No. of farmers	Unit / No. / Area (ha)
	Name of crops / Commodity groups / Implements	Quantity / Number / Rent / Charges	Technology used in seed / fodder bank & function of groups			
1	2	3	4	5	6	7
Sonepur	Paddy (Lalat,khandagiri)	250 q	Line sowing, IPM	Line sowing, IPM	20	8

Intervention II: Fodder bank intervention

In Balaghat KVK (Madhya Pradesh) has worked on Fodder bank intervention. 25 demonstrations conducted under participatory fodder production program on community lands and covered 40.0 ha area. **In Guna KVK**, 25 demonstrations conducted under participatory fodder production program in Barseem and wheat straw and covered 5.0 ha area. **In Morena KVK,** 50 demonstrations conducted under Training on Commercial seed production Barseem and covered 30.0 ha area.

KVK Name	Details of activity			Critical input (Breed / Variety / Medicine doses,)	No. of farmers	Unit / No. / Area (ha)
	Name of crops / Commodity groups / Implements	Quantity / Number / Rent / Charges	Technology used in seed / fodder bank & function of groups			
1	2	3	4	5	6	7
Balaghat	Production of fodder on community lands	250 qtl	Maize	HQPM	25	40 ha
Guna	Wheat Straw	50 q	Creation of revolving fund	-	-	-
Guna	Berseem	36.8 mt. Green fodder	Improved variety seed	JB - 5	25	5
Morena	Training on Commercial seed production Barseem	Rs. 6.00 lakhs / year	seed production co. societies were registered and working for farming community	Barseem	50	30

In Sonepur KVK (Odisha) has worked on Fodder bank intervention. In this intervention 4 demonstrations conducted under Hybrid Technology in Stylo and Napier Grass seed and cover the area 1 ha.

KVK Name	Details of activity			Critical input (Breed / Variety / Medicine doses,)	No. of farmers	Unit / No. / Area (ha)
	Name of crops / Commodity groups / Implements	Quantity / Number / Rent / Charges	Technology used in seed / fodder bank & function of groups			
1	2	3	4	5	6	7

Sonepur	Stylo, hybrid Napier	10 q	Stylo, hybrid Napier	Stylo, hybrid Napier	4	1

Intervention III: Commodity group's intervention

In Commodity group's intervention **Balagat KVK(Madhya Pradesh)** has worked and 60 SHG groups have developed and covered 5 ha area.**In Morena KVK**, 40 farmers grouped with one society under this intervention.

KVK Name	Details of activity			Critical input (Breed / Variety / Medicine doses,)	No. of farmers	Unit / No. / Area (ha)
	Name of crops / Commodity groups / Implements	Quantity / Number / Rent / Charges	Technology used in seed / fodder bank & function of groups			
1	2	3	4	5	6	7
Balaghat	Linkage SHGs and commodity groups.	28	SHG	Technology and advice	60	5
Morena	Climate risk management committee	1	One society had been developed a climate risk processing unit. in village level	All facility in maintenances climate seed, implement , fertilizers and other document	40	-

In Odisha, Sonepur KVK have developed Commodity groups consisting 5-5 farmers Vermi compost and Azolla unit based grouped. **In Ganjam KVK** have developed Commodity groups. 445 farmers have benefited and covered 435 ha area.

KVK Name	Details of activity			Critical input (Breed / Variety / Medicine doses,)	No. of farmers	Unit / No. / Area (ha)
	Name of crops / Commodity groups / Implements	Quantity / Number / Rent / Charges	Technology used in seed / fodder bank & function of groups			
1	2	3	4	5	6	7
Sonepur	Vermi compost unit	5		Cement rings	5	-
Sonepur	Azolla unit	5		Cement rings	5	-
Ganjam					435	435

Intervention IV: Custom hiring centre

In Madhya Pradesh, Datia **KVK** has worked on Custom hiring centre intervention in which 92 demonstrations were conducted and covered 210 ha area. Also Custom hiring implements were used on rental basis M.B. Plough, Disk Herrow, Rotavator Ferti-seed Drill, Multicrop thresher, Sprinkler set, Diesel pump.

In MorenaKVK has worked on Custom hiring centre intervention in which 40 demonstrations were conducted and covered 30 ha area. Also Custom hiring implements were used on rental basis M.B. Plough, Disk Herrow, Rotavator Ferti-seed Drill, Multicrop thresher, Sprinkler set, Diesel pump.

KVK Name	Details of activity			Critical input (Breed / Variety / Medicine doses,)	No. of farmers	Unit / No. / Area (ha)
	Name of crops / Commodity groups / Implements	Quantity / Number / Rent / Charges	Technology used in seed / fodder bank & function of groups			
1	2	3	4	5	6	7
Datia	Soybean, Ground nut, Sesame, Chickpea, Vegetable pea, Mustard	6 no. of implement used on rent (M.B. Plough, Disk Herrow, Rotavator Ferti-seed Drill, Multicrop thresher, Sprinkler set, Diesel pump)	function of groups	-	92	210
Morena	Zero till seed drill, ridge bed planter, Leveller, M.B.Plough, Sprinkler set, Disc harrow, Power sprayer,	-	In-situ moisture conservation And use in difference NICRA activity	Wheat ,Barley, mustard , chickpea ,Green gram ,maize and soybean	40	30

In **Chhattisgarh, BilaspurKVK** have worked as Custom hiring through custom hiring Reaper was used on rental basis and conducted 35 demonstration on 14.0 ha

area.**In Bhatapara KVK** have worked as Custom hiring centre, these centers 2no. of implement , MB Plough and Seed Drill for land preparation and sowing. 40 farmers have benefited and 10.2 ha area covered.

KVK Name	Details of activity			Critical input (Breed / Variety / Medicine doses,)	No. of farmers	Unit / No. / Area (ha)
	Name of crops / Commodity groups / Implements	Quantity / Number / Rent / Charges	Technology used in seed / fodder bank & function of groups			
1	2	3	4	5	6	7
Bilaspur	Reaper 01	Rs 425/acre			35	14ha
Bhatapara (Raipur)	MB Plough	1	Deep ploughing		20	5
Bhatapara (Raipur)	Seed drill	1	Line sowing		20	5.2

In **Odisha**, **Sonepur KVK** have worked as Custom hiring centre, these centers implements were used on rental basis like M.B. Plough, Rotavator, seed cum fertilizer drill, power weeder, reaper, multi crop thresher, leveler, for land preparation and sowing.32 farmers have benefited and covered 50 ha area.**In Jharsuguda KVK** have worked as Custom hiring centre, these centers implements were used on rental basis like, Paddy reaper, Power sprayer, Sprinkler, Thresher, Winnower for land preparation and sowing. 58 farmers have benefited and 43.3 ha cover the area in NICRA village.

KVK Name	Details of activity			Critical input (Breed / Variety / Medicine doses,)	No. of farmers	Unit / No. / Area (ha)
	Name of crops / Commodity groups / Implements	Quantity / Number / Rent / Charges	Technology used in seed / fodder bank & function of groups			
1	2	3	4	5	6	7
Sonepur	M.B. Plough, Rotavator, seed cum fertlizer drill, power weeder, reaper, multi crop thresher, leveller	2500	Custom hiring	M.B. Plough, Rotavator, seed cum fertlizer drill, power weeder, reaper, multi crop thresher, leveller	32	50
Jharsuguda	Power tiller	Rs.300/hr	Ploughing	Implements	15	5.0
Jharsuguda	Paddy reaper	Rs.300/hr	Reaping paddy	Implements	12	6.3

Jharsuguda	Power sprayer	Rs.50/day	Spraying pesticides	Implements	5	6
Jharsuguda	Sprinkler	Rs.200/day	Irrigation	Implements	2	2
Jharsuguda	Thresher	Rs.20/day	Paddy threshing	Implements	14	14
Jharsuguda	Winnower	Rs.20/day	Paddy winnowing	Implements	10	10

Intervention V: Collective marketing intervention

In **Madhya Pradesh, Balagat KVK** have worked on Collective marketing. In Collective marketing intervention 20 farmers were benefited and covered 2.0 ha area. **In Morena KVK** have worked in Collective marketing. In Collective marketing intervention different crops seed like Maize, soybean, wheat barley, rice, turmeric and mustard have marketed in NICRA villages. 150 farmers have benefited and covered 55 ha area.

KVK Name	Details of activity			Critical input (Breed / Variety / Medicine doses,)	No. of farmers	Unit / No. / Area (ha)
	Name of crops / Commodity groups / Implements	Quantity / Number / Rent / Charges	Technology used in seed / fodder bank & function of groups			
1	2	3	4	5	6	7
Balaghat		2	Group	Feedback	20	2
Morena	Maize ,soyabean , wheat barley , rice ,turmeric and mustard	-	Market facility and high value of input	Maize ,soyabean , wheat, barley,rice ,turmeric and mustard	150	55

Intervention VI: On Climate literacy through a village level weather station

In Madhya Pradesh Balagat KVK has worked On Climate literacy through a village level weather station. In this intervention forecasting has done for incidence of insect and disease in villages. **In Morena** 200 demonstration conducted using sowing with Zero till seed drill in different crops viz. wheat, barley and green gram.

KVK Name	Details of activity			Critical input (Breed / Variety / Medicine doses,)	No. of farmers	Unit / No. / Area (ha)
	Name of crops / Commodity groups / Implements	Quantity / Number / Rent / Charges	Technology used in seed / fodder bank & function of groups			

1.	2.	3.	4.	5.	6.	7.
Balaghat	Forecasting for insect and disease	10	SMS	Technology		-
Morena	Zero till seed drill sowing in wheat ,barley and green gram literacy	-	Technology development	-	200	-

On Climate literacy through a village level weather station have worked **Sonepur KVK** in **Odisha**. Through this intervention Forecasting done for incidence of insect and disease in NICRA villages and Zero till seed drill sowing in wheat ,barley and green gram technology have demonstrated . 35 farmers were benefited and cover the area 35 ha in NICRA village surrounding.

KVK Name	Details of activity			Critical input (Breed / Variety / Medicine doses,)	No. of farmers	Unit / No. / Area (ha)
	Name of crops / Commodity groups / Implements	Quantity / Number / Rent / Charges	Technology used in seed / fodder bank & function of groups			
1.	2.	3.	4.	5.	6.	7.
Sonepur	AWS, GPS	2	Data recording	AWS, GPS	35	35

3. Capacity building

Under this objectives need based training will be provided to scientist on the tools and methodology of climate change research at the best of the institutions around the world as listed in the table. Simultaneously, capacity building of senior faculty through short term exposure visits, extension workers and lead farmers to filed demonstration sites will be taken up to enhance the awareness and coping capacity of different stakeholders to climate changes. The capacity building also includes visit of foreign experts to India to train India scientist.

A total 8874 farmers benefited through training /Capacity building in the Zone VII during the year 2011-12. Out of 8874 farmers (4128 male and 695 female in M.P, 830 male and 88 female in CG, and2211 male and 922 female in Odisha) during the training 310 No. of courses covered.

4. Extension activities

In order to create awareness among the farmers in region, large numbers of extension activities were organized by KVK at the farms and the farmers fields. 664 farmers benefited through Launching Workshop, 757 farmers Crop Seminar, 1223 farmers Field day, 469 farmers Animal Health camp, 129 farmers Soil Health Camp and 90 farmers benefited through Exposure Visit in this year

Name of KVK	Launching Workshop	Crop Seminar	Field day	Animal Health camp	Soil Health Camp	Exposure Visit
Datia	106	62	253	181	54	45
Ganjam	100	100	100	85	50	25
Jharsuguda	150	350	20	150	0	20
Kendrapara	275	120	750	0	0	0
Morena	33	125	100	53	25	0
Total	664	757	1223	469	129	90

5. Status of custom hiring Services

NICRA –KVK DATIA

S. No.	Name of implements	Date of Purchase	Operational performance		Revenue Generated (Rs.)	No. of Farmers benefited
			No. of hrs.	Area covered (ha)		
1.	M.B. Plough		12	06	60	15
2.	Leveler		10	05	50	05
3.	Disc harrow		32	16	320	40
4.	Rotavator		06	06	30	15
5.	Ferti cum Seed drill		31	31	310	78
6.	Power Sprayer		16	16	80	40
7.	Sprinkler with pump set		20	10	200	25
8.	Rain Gun		20	08	100	20
9.	Multi crop Thresher		60	40	1200	100
10.	**Total**		**191**	**138**	**2350**	**338**

NICRA –KVK Morena

S.No.	Name of implements	Date of Purchas e	Operational performance		Revenue Generated (Rs.)	No. of Farmers benefited
			No. of hrs.	Area covered (ha)		
1.	Zero till Seed drill	20/02/12	350 hours	100 ha.	2000/-	250
2.	Seed cum fertilizer drill	20/02/12	145	155	1900/-	75
3.	Tractor drawn bed planter	20/02/12	200	70	1200/-	150
4.	Multi-crop turbo seeder	20/02/12	160	60	700/-	100
5.	Tractor drawn	27/02/12	270	75	600/-	115

	land leveler					
6.	Tractor drawn reversible plow 2 bottom	27/02/12	180	80	700/-	125
7.	Tractor drawn Disk harrow	27/02/12	120	65	700/-	80
8.	S.I. Mark power sprayer	27/02/12	70	25	400/-	45
9.	Hand sprayer	27/02/12	125	45	200/-	65
10.	Seed treatment drum	27/02/12	40	125	100/-	170
11.	Aspee-ASM .779/high pressure power sprayer	21/03/12	40	25	400/-	45
					8900/-	

NICRA –KVK Tikamgarh

S.No.	Name of implements	Date of Purchas e	Operational performance		Revenue Generated (Rs.)	No. of Farmers benefited
			No. of hrs.	Area covered (ha)		
1	MB Plough	17.01.12	96 hrs.	24 ha.	Nil	20

NICRA –KVK Bilaspur

S.No.	Name of implements	Date of Purchas e	Operational performance		Revenue Generated (Rs.)	No. of Farmers benefited
			No. of hrs.	Area covered (ha)		
1.	Reaper	31.03.2011	35 hrs.	14	15000.00	15
2.	Rotavator	31.03.2011	02 hrs.	0.8	500.00	01
3.	Seed Drill	31.03.2011	02 hrs.	0.8	500.00	01
					16000.00	**17**

NICRA –KVK Dantewada

S.No.	Name of implements	Date of Purchase	Operational performance		Revenue Generated (Rs.)	No. of Farmers benefited
			No. of hrs.	Area covered (ha)		
1	NIL	NIL	NIL	NIL	NIL	NIL

KVK,Ganjam,Bhanjanagar

S.No.	Implements	No. of units	Usage/unit (hr)	Area Covered (ha)	No. of farmers using implements	Labor saved (hr/ha)	Cost saving (Rs/ha)	Revenue generated from CHCs(Rs)
1.	Aspee high pressure sprayer	1	20	8	12	20	300	200
2.	Garuda mini weeder	1	56	8	17	19	300	560
3.	VST shakti power tiller	1	165	45	72	14	200	6600
4.	Rotary tiller	1	35	5	8	8	100	350
5.	Hsmf pumpset(diesel)	1	42	11	17	14	200	840
6.	Multi crop thresher	1	72	27	24	24	300	2880

7.	Varsha 4 hp pumpset(diesel)	1						
8.	Seed cum fertilizer drill	1						
9.	HPDE sprinkler pipe with accessories	1						
10	MB plough	1						

6. Publicity of NICRA interventions


मुरैना भास्कर

शुक्रवार

मुरैना

दैनिक भास्कर

नूज इनसाइड


मुरैना भास्कर

शुक्रवार

मिट्टी की सेहत के लिए हेल्थ कार्ड

आठवीं डायर

हेल्थ कार्ड के मुताबिक उर्वरक देंगे तो किसानों को मिलेगी अच्छी पैदावार

क्या है हेल्थ कार्ड


ग्वालियर, सोमवार 3 अक्टूबर 2011

ग्वालियर

पीपुल्स समाचार 05

रबी में मक्का की सेंध

यहां से हुई शुरुआत

ऐसे है कमाऊ फसल

मुनाफे का गणित


दैनिक भास्कर मुरैना/आस-पास

तकनीक बढ़ा सकती है उत्पाद

दैनिक जागरण

मुरैना भास्कर

शुक्रवार ग्वालियर 9 सितंबर 2011

दैनिक भास्कर

मुरैना

निधान गांव में लगाया बहाय प्रशिक्षण शिविर

मुरैना। आंचलिक कृषि विज्ञान केन्द्र मुरैना के कार्यक्रम समन्वयक डा. वायपी सिंह के निर्देशन में जौरा कस्बे के निधान गांव में एक दिवसीय बहाय प्रशिक्षण शिविर का आयोजन किया गया। प्रशिक्षण में प्रसार वैज्ञानिक डा. एसपीएस चौहान ने कृषकों को बताया कि खाद, बीज, रसायनिक दवाएं आदि खरीदते समय स्टैंडर्स आईएसआई कंपनी का ही माल लें। वैज्ञानिकों ने कृषकों को बताया कि माल खरीदकर उसकी रसीद अवश्य प्राप्त करें। सस्य वैज्ञानिक डा. धर्मेन्द्र सिंह ने किसानों को गाजरघास मिटाने के लिए फूल आने से पूर्व कम्पोस्ट बनाने की सलाह दी। शिविर में गांव के लगभग सभी कृषक उपस्थित थे।

मुरैना जागरण

ग्वालियर, 16 सितम्बर, 2011 13
www.jagran.com

सोयाबीन फसल पर प्रक्षेत्र दिवस कार्यक्रम हुआ

मुरैना ब्यूरो: जौरा ब्लाक के ग्राम निधान में निकरा परियोजना के तहत सोयाबीन प्रक्षेत्र दिवस (किस्म जेएस-9560 एवं जेएस-335) के सम्बन्ध में कार्यक्रम आयोजित हुआ। इसमें प्रोजेक्टर इंचार्ज डा. वायपी सिंह ने बताया कि 9560 शीघ्र पकने वाली मौसम के अनुकूल फसल है जबकि 335 देर से पकने वाली अच्छी किस्म की सोयाबीन है। परियोजना के सह निर्देशक डा. धर्वेन्द्र सिंह अरहर, मक्का की खेती एवं उसके खरपतवारों के बचाव एवं तकनीकी बिन्दुओं पर चर्चा की।

मुरैना भास्कर

शुक्रवार ग्वालियर, 16 सितंबर 2011

दैनिक भास्कर मुरैना

सोयाबीन फसल पर प्रक्षेत्र दिवस आयोजित

मुरैना। जौरा कस्बे के निधान गांव में निकरा परियोजना के अंतर्गत प्रोजेक्ट इंचार्ज डा. वायपी सिंह के निर्देशन में सोयाबीन प्रक्षेत्र दिवस का आयोजन किया गया। इस अवसर पर आंचलिक कृषि विज्ञान केन्द्र के निकरा परियोजना के सह निर्देशक डा. धर्मेन्द्र सिंह ने किसानों को सोयाबीन की उन्नत तकनीकी युक्त खेती एवं किस्मों के बारे में जानकारी दी। उन्होंने किसानों को खरपतवारों से फसल के बचाव आदि के बारे में भी बताया। परियोना की डा. स्वाती तोमर ने किसानों को तालाबों के सिंघाड़े की इल्ली, बीमारी एवं कीटों को देखकर रोकथाम के उपाय के बारे में विस्तृत जानकारी दी। परियोजना में कार्यरत शिशुपाल सिंह राजपूत ने रबी मौसम में ली जाने वाली गेहूं सरसों और सब्जियों के उत्पादन पर उन्नत तकनीक के बारे में किसानों को जानकारी दी।

7. Monitoring of NICRA projects

NICRA –KVK Datia

S.No.	Name of KVK	Name of NICRA Village	Name & designation of visitors	Date of visit	Remarks If Any
1	Datia	Sanora, Baroudi	Dr. R.V. Deshmukh, Ex. VC, Rahuri Adriculture University Maharastra	24.04.2011	Member of QRT
2	Datia	Sanora, Baroudi	Dr. R.V.S.Ratan, DES, Agriculture University, Ranchi, Jharkhand	24.04.2011	Member of QRT
3	Datia	Sanora, Baroudi	Dr. U.S.Gautam, ZPD, Zone VII, Jabalpur	24.04.2011	Member of QRT
4	Datia	Sanora, Baroudi	Dr. Y. M. Kool DES, RVSKVV, Gwalior	24.04.2011	Member of QRT
5	Datia	Sanora, Baroudi	Shri. S.P. Sharma ADA, Department of Agriculture, Datia (MP)	24-10-2011	
6	Datia	Sanora, Baroudi	Dr. Saket Dubey RA, ZPD, Zone VII Jabalpur (MP)	24-12-2011	
7	Datia	Sanora, Baroudi	Dr. Nishi Roy & Scientist of KVK Jhansi (UP)	05-01-2012	
8	Datia	Sanora, Baroudi	Dr. S.S. Tomar, DES RVSKVV, Gwalior (MP)	16.01.2012	
9	Datia	Sanora, Baroudi	Dr. N.S.Tomar, Dean College of Agriculture, Gwalior (MP)	16.01.2012	
10	Datia	Sanora, Baroudi	Dr. S. P. Tiwari, Director CSWCRTI, Datia	25-02-2012	

NICRA –KVK Morena

S.No.	Name of KVK	Name of NICRA Village	Name & designation of visitors	Date of visit	Remarks If Any
1.	MORENA	Nidhan	Associate director Research Dr. J.P. Dixit	07/7/11	
		Nidhan	Agriculture Secretary M.P Govt. Bhopal	20/08/11	
2.		Nidhan & Jigni	Director extension services RVSKVV Gwalior	05/1/12,27/1/12	
3.		Nidhan	Mr. Saket Kumar (R.A.)ZPD VIIth zone Jabalpur	23/1/12	

NICRA –KVK Tikamgarh

S.No.	Name of KVK	Name of NICRA Village	Name & designation of visitors	Date of visit	Remarks If Any
1.	Tikamgarh	Kanti	Dr. S. Kovaysi (Soybean farming Specialist, Japan)	06.08.11	Visit of farmers field & see Ridge & Furrow method in Soybean sowing
2.	Tikamgarh	Kanti	Dr. R.K. Verma (HOD, Deptt of Plant Pathology, JNKVV)		
3.	Tikamgarh	Kanti	Er. R.K. Patel (Assitt. Professor, Deptt of Farm Machinery, JNKVV)	15.09.11	Attend Field Day of Soybean JS-9305
4.	Tikamgarh	Kanti	Dr. M. K. Awasthi (Senior Scientist, JNKVV)	15.09.11	
5.	Tikamgarh	Kanti	Mr. Saket Dubey (RA, NICRA) ZPD Zone VII, JNKVV	26.12.11	Monitoring of NICRA village Kanti
6.	Tikamgarh	Kanti	Dr. Wada Takushi (JICA Project)	26.12.11	
7.	Tikamgarh	Kanti	Dr. S. Kovaysi (Soybean farming Specialist, Japan)	09.06.12	Visit of farmers field & see Deep ploughing
8.	Tikamgarh	Kanti	Dr. S. Kosttore(JICA Project)		

NICRA –KVK Dantewara

S.No.	Name of KVK	Name of NICRA Village	Name & designation of visitors	Date of visit	Remarks If Any
1	Dantewada	Heeranar	Shri Jai Ram Ramesh Hon'ble central minister, Panchayat & Rulal development, Govt. of India	08/11/11	
2	Dantewada	Heeranar	Shri Ramvichar Netam Hon'ble minister, Panchayat & Rulal development, govt. of CG	08/11/11	
3	Dantewada	Heeranar	Shri O.P. Chaudhari (i.a.s.) Collector & DM, Dantewada	08/11/11	
4	Dantewada	Heeranar	Smt. S. Sajjala, Member of Human Right, Gov. of India	26/11/11	
5	Dantewada	Heeranar	Shri Saket Dubey,(team,zonal project director)	04/02/11	
6	Dantewada	Heeranar	Dr. S.D. Patel, Principal Scientist, I.G.K.V. Raipur	03/03/11	
7	Dantewada	Heeranar	Dr. S.S.Rao ,Dean, sgcars Jagdalpur	05/04/11	

8	Dantewada	Heeranar	dr. mukherjee, Dean,sgcars Jagdalpur	05/04/11	

NICRA –KVK Bilaspur

S.No.	Name of KVK	Name of NICRA Village	Name & designation of visitors	Date of visit	Remarks If Any
1.	Bilaspur	Khargahna	Dr. R.K. Shukla, Ex. PC, KVK Bilaspur	06.06.2011	
2.	Bilaspur	Khargahna	Dr. D.K. Sharma, Principal Scientist, Agril.Extension, KVK Bilaspur (C.G.)	11.06.2011	
3.	Bilaspur	Khargahna	Er. U.K. Dhruw, Engineer, KVK Bilaspur (C.G.)	08.09.2011	
4.	Bilaspur	Khargahna	Shri Saket Dubey, RA, NICRA, Jabalpur (M.P.)	13.09.2011	
5.	Bilaspur	Khargahna	Dr. C.R. Gupta, Dean, TCBCARS, Bilaspur (C.G.)	19.01.2012	
6.	Bilaspur	Khargahna	Dr. S.R.K. Singh. Senior Scintist, ZPD, Jabalpur (M.P.)	14.02.2012	
7.	Bilaspur	Khargahna	Dr. R.N. Sharma, PC, KVK Bilaspur (C.G.)	17.02.2012	
8.	Bilaspur	Khargahna	Er. R.K. Singh, Agril. Engineer, Bilaspur Division (C.G.)	19.03.2012	

8. Glimpses of NICRA activities


CUSTOM HIRING CENTRE
NICRA PROJECT
Village: Bholmunda,
Dist: Jharsuguda
K.V.K, Jharsuguda


RIDGE & FURROW PRATICE
FOR IN SITU MOISTURE CONS
(Under NICRA)
Crop : Radish
Variety : Pusa Chetki
Season : Kharif 2011
Village : BHOIMUNDA
KVK, JHARSUGUDA


इंदिरा गांधी कृषि विश्वविद्यालय, रायपुर (छ.ग.)
कृषि विज्ञान केन्द्र, सरकण्डा, बिलासपुर (छ.ग.)
जलवायु परिवर्तन प्रतिरोध
कृषि पर राष्ट्रीय पहल (निकरा) परियोजना
निकरा परियोजना के तहत प्रक्षेत्र प्रदर्शन

वर्मी कम्पोस्ट निर्माण पर प्रशिक्षण देते हुये

	

Zone wise Progress Report

Module-1: Natural Resource Management

Interventions	Technology demonstrate	No. of farmers	Area (ha)	Measurable indicators of output*	Economics of demonstration (Rs./ha)			
					Gross Cost	Gross Return	Net Return	BCR
1	2	4	5	6	7	8	9	10
In-situ moisture conservation RCT	Seed-cum-fertilizer drill with ridge furrow system, Green Manuring dhaincha , Summer Ploughing , Increasing infiltration, Mulching of Pollythene, Forest plant cultivation, Dhanicha incorporation in paddy	491	207.5	High Yield, Soil moisture increase, less pest/weed infestation	17740.62	51128.74	33388.13	2.88
Water harvesting and recycling for supplemental irrigation	Staggered contour trenching on sloppy land, maintenance in storage of water, Rain water harvesting Structure, Renovation of defunct water harvesting structure, Renovation of Defunct Irrigation pond, Rain water harvesting structure	143	238.5	Area Covered under life saving irrigation, High Yield(storage of water)	13831.43	29121.43	15290.00	2.11
Improved drainage in flood prone areas	Bed planting sowing method	39	22.5	High Yield(storage of water)	6405.00	18560.00	12155.00	2.90
Conservation tillage where appropriate	Deep ploughing and leveling , Hand wheel hoe, Zero tillage sowing method, Deep Ploughing summer , Ridge and furrow method of planting, sowing with seed cum fertilizer drill, IPM practice	194	177	Moisture conservation, crop of yield, Production, High yield	3784.88	11742.67	7957.79	3.10
Artificial ground water recharge	Earthen embankments and renovation of check dams , Sprinkler irrigation	30	10	High Yield (storage of water) Moisture conservation	14430.00	36900.00	22470.00	2.56
Water saving irrigation methods	Sprinkler, drip irrigation system, Sprinkler Irrigation , Ridge & furrow practices	86	19.3	Area Covered under life saving irrigation, High Yield(storage of water), High yield	12581.67	31966.69	19385.03	2.54
Any other (Pl. specify)	Saving of time and cost of cultivation , Demonstration of power sprayer, Control of insect-pest and weeds through summer deep ploughing, NADEP tank constructed, Vermi-composting tanks, Ridge & furrow practices , INM practices , IPM, IDM practice in Groundnut, Paddy, Turmeric ,	194	791.6	Crop of yield, Production of NADEP compost, High Yield(storage of water)	17921.94	44032.89	26110.94	2.46

	Integrated weed management, field preparation, Popularization of Paddy straw Mushroom													

Module-2: Crop Production

Interventions	Technology demonstrate	No. of farmers	Area (ha)	Measurable indicators of output* q/ha		% increase	Economics of demonstration (Rs./ha)				Economics of Local (Rs./ha)			
				Demo	Local		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
1	2	4	5	6	7	8	9	10	11	12	13	14	15	16
Introducing drought / temperature tolerant varieties	Integrated crop management in Sorghum, Integrated crop management in Mustard, Mid season drought management, high yielding , aphid tolerant suitable for rain fed condition, Drought tolerant variety (lalat, khandagiri, kalinga-iii, udaygiri, Jogeshetc.)with INM, IPM in Paddy; Demonstration on Improved Paddy var. Naveen, INM in Maize	1698	595.55	182.50	116.74	46.33	18624.45	45391.04	26766.60	2.44	13040.13	26118.46	13078.33	2.00
Advancement of planting dates of rabi crops in areas with terminal heat stress	Early sowing of rabi crops, high yielding variety , Gram JG11 &JG64, Green Gram Variety (Durga), IPM schedule, High yielding varieties (OBG-17), IPM schedule, Improved Blackgram var. PU-31	597	470.4	33.60	24.34	19.22	6226.38	17876.32	11649.94	2.87	5296.37	12357.32	7060.95	2.33
Water saving paddy cultivation methods (SRI, aerobic,	Paddy MTU1010 , Wheat, SRI in Paddy, SRI method of rice cultivation	76	27.4	26.85	17.35	28.92	12495.25	22629.17	10133.92	1.81	7605.21	14035.08	6429.87	1.85

Interventions	Technology demonstrate	No. of farmers	Area (ha)	Measurable indicators of output* q/ha		% increase	Economics of demonstration (Rs./ha)				Economics of Local (Rs./ha)			
				Demo	Local		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
1	2	4	5	6	7	8	9	10	11	12	13	14	15	16
direct seeding)														
Frost management in horticulture through fumigation	Frost tolerant high yielding variety, Irrigation technology	17	7.5	0.00	0.00	0.00	2857.14	5000.00	2142.86	1.75	2785.71	4571.43	1785.71	1.64
Community nurseries for delayed monsoon	High yielding and resistant insect and disease, Vegetable variety improved Brinjal, Caouliflower	57	119	69.89	47.18	8.88	12782.96	59529.33	46746.38	4.66	9763.33	36245.50	26482.17	3.71
Custom hiring centres for timely planting	Timeliness and precision in field operations even under erratic and low rainfall situations, better utilization of stored water. Use in zero till seed drill sowing method, Line sowing of paddy, seed cum fertilizer	52	25	7.86	6.55	3.33	3007.92	9010.08	6002.17	3.00	3015.00	7448.33	4433.33	2.47
Location specific intercropping systems with high sustainable yield index	Intercropping systems , Maize-Arhar intercropping; High yielding varieties, Bio fertilizers and need based IPM schedule	75	26.4	7.29	5.85	27.63	5310.00	13234.27	7924.27	2.49	5043.59	9490.38	4446.79	1.88
Any other (Pl. specify)	Demonstration of IDM module for controlling powdery mildew, INM in Okra -Aparajita, Avantika, Introduction of Yam Bean Var-Rajendramishrikhanda, CTCRI, IDM for control of Tikka disease in Groundnut, IPM for	486	157	27.81	20.98	14.78	9862.32	26757.09	16894.77	2.71	9181.62	22019.44	12837.83	2.40

Interventions	Technology demonstrate	No. of farmers	Area (ha)	Measurable indicators of output* q/ha		% increase	Economics of demonstration (Rs./ha)				Economics of Local (Rs./ha)			
				Demo	Local		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
1	2	4	5	6	7	8	9	10	11	12	13	14	15	16
	control of Black headed caterpillar in green gram													

***Ponds/check dam/irrigation channel dimensions, Yield (q/ha), Milk yield (kg/liter), Egg production , Fish production, Meat production**

Module-3: Livestock & Fisheries

Interventions	Technology demonstrate	No. of farmers	Unit/ No./ Area (ha)	Measurable indicators of output*		% increase	Economics of demonstration (Rs./ha)				Economics of demonstration (Rs./ha)			
1	2			Demo	Local		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
Use of community lands for fodder production during droughts	Growing drumstick by submerged pitcher and pit depression system of planting, Demonstration of high yielding fodder crop variety of Barseem , Pasture development, Stylo cultivation, Production of hybrid Napier	93	48.8	38.71	29.96	2.13	8386.67	37333.33	28946.67	4.45	7930.00	29208.33	21278.33	3.68
Improved fodder/feed storage methods	Growing drumstick Agast.Katchnar.Bahera by Sub merged pitcher and pit depression system of planting. Use of mineral mixture for balance nutrition in milch animals , Hay making structures	77	83	98.60	62.20	2.67	4017.86	9367.86	5350.00	2.33	3260.00	5885.71	2625.71	1.81

Interventions	Technology demonstrate	No. of farmers	Unit/ No./ Area (ha)	Measurable indicators of output*		% increase	Economics of demonstration (Rs./ha)				Economics of demonstration (Rs./ha)			
1	2			Demo	Local		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
Preventive vaccination	Vaccine for FMD and HS-vaccination ; Vaccination against Ranikhet and Gumboro disease. Vaccination of goats and cow	184	1012	0.39	0.19	0.00	1314.29	3600.00	2285.71	2.74	1157.14	2057.14	900.00	1.78
Improved shelters for reducing heat stress in livestock	Rearing of poultry bird in backyard var.-Banaraja	66	250	0.60	1.03	24.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Management of fish ponds / tanks during water scarcity and excess water	Maintenance of fish pond , proper dose food grain and disease control of fish ; Composite pisciculture	87	11.3	11.05	10.38	20.45	5143.75	25850.00	20706.25	5.03	2750.88	10625.00	7874.12	3.86
Any other (Pl. specify)	NADEP Compost and Wormi compost, Technical guidance and worms, Distribution of Piggery , goatry, Construction of vermin compost pits, Vermicomposting in back yard, Mushroom cultivation	508	1634	1.17	0.65	6.63	2.38	11.90	9.52	5.00	2.38	16.67	14.29	7.00

***Ponds/check dam/irrigation channel dimensions, Yield (q/ha), Milk yield (kg/liter), Egg production , Fish production, Meat production**

Module-4: Institutional Interventions

Interventions	Details of activity			Critical input (Breed / Variety / Medicine doses,)	No. of farmers	Unit / No. / Area (ha)
	Name of crops / Commodity groups / Implements	Quantity / Number / Rent / Charges	Technology used in seed / fodder bank & function of groups			
1	**2**	**3**	**4**	**5**	**6**	**7**
Seed bank	Participatory seed Production at village level, Paddy and Wheat ; Soybean JS-95-60 ; Training on Commercial seed production in Pigeon pea	200 qtl ; 100 q; Rs. 5.00 lakhs / year; Rice (Samleshwari), Rice (Dantehswari), Green Gram (Pusa Vishal), Ragi (GPU-28), Kodo (JK-41), Kutuki (JK-8); Paddy (Lalat,khandagiri);22.0 q ; 10.0 q; 2.0 q; 2.0 q; 1.0 q ; 1.0 q; 250 q	Hybrid seed; Improved variety seed, Creation of revolving fund ; One society had been developed a seed processing unit. Training organized for seed production ; Line sowing, IPM	MTU-1081 ; JS-95-60 ; ICPL -88039 , Wheat (MP-4010); Seed - Rice and fertilizer ; Line sowing, IPM	183	154.1
Fodder bank	Production of fodder on community lands, Wheat Straw , Berseem , Training on Commercial seed production Barseem; Stylo, hybrid Napier	250 qtl; 50 q ; 36.8 mt. Green fodder ; Rs. 6.00 lakhs / year; 10 q	Maize, Creation of revolving fund , Improved variety seed , seed production co. societies were registered and working for farming community; Stylo, hybrid Napier	HQPM, JB - 5, Barseem; Stylo, hybrid Napier	104	76
Commodity groups	Linkage SHGs and commodity groups. Climate risk management commity ; Vermicompost unit ; Azolla unit	33	SHG , One society had been developed a climate risk processing unit. in village level	Technology and advice, All facility in maintenances climate seed, implement , fertilizers and other document ; Cement rings	545	440

Custom hiring centre	Timeliness and precision in field operations through Zero till seed drill, ridge bed planter, Leveller, M.B.Plough, Sprinkler set, Disc harrow, Power sprayer, Custom hiring centre	6 no. of implement used on rent (M.B. Plough, Disk Herrow, Rotavator Ferti-seed Drill, Multicrop thresher, Sprinkler set, Diesel pump) 325/hr	function of groups, In-situ moisture conservation And use in difference NICRA activity	Wheat ,Barley, mustard , chickpea ,Green gram ,maize and soybean	**297**	**357.5**
Collective marketing	Maize ,soyabean , wheat barley , rice ,turmeric and mustard	2	Group, Market facility and high value of input	Feedback Maize ,soyabean , wheat, barley,rice ,turmeric and mustard	170	57
Climate literacy through a village level weather station	Forecasting for insect and disease; Zero till seed drill sowing in wheat ,barley and green gram literacy ; AWS, GPS	12	SMS ; Technology development ; Data recording	Technology AWS, GPS	235	35
Any other (Pl. specify)	Training on Mushroom Production to Rural youth;	10,000 / month; 232 animals ; 220 animals ; 1	25 rural youth has been involved in Mushroom production ; Diagnosis, mineral & vitamins supplementation; Mushroom production through women SHGs in the village; Vaccination, Treatment, Diagnosis; Books, literature, leaflets, booklets	Market linkage ; Medicines, Vitamins, Minerals ; Paddy straw/oyster mushroom; Medicines, Vitamins; Books, literature, leaflets, booklets, flex etc.	419	760

Capacity Building (HRD):

State	Thematic area	Title of training	No. of Courses	No. of beneficiaries		Date
				Male	Female	
	1	**2**	**3**	**4**	**5**	**6**
M.P.	CPM, Drought mitigation, Farmers motivation, Feeding management, Health &Hygiene; Hay production, ICM, IDM, IFM, IFS, INM, IPM, IWM, Livestock management, PHM, PHT, Production Technology, Purpose of high yield in zaid	Rain water harvesting Techniques, Resource conservation technologies for rain fed farming, Weed management in Kharif crops, Integrated farming system model for drought prone areas, Organic manure and bio pesticide preparation techniques. Drought mitigation and management technologies for kharif crops, Formation & management of SHG/ seed club/ Krishi gyandoot Farmer training on Preventive Measures to protect Kharif crops from heavy Rains. Farmer training on Drought mitigation and management	181	4128	695	

	pulses production, Rain water harvesting, RCT, Sowing technique, value addition , Water conservation technology, Women empowerment .	technology for Kharif crops. Techniques of orchard establishment and in situ moisture conservation on wasteland, Method Demonstration on Nutritional Feed Preparation for Animals, Importance of Summer Deep Ploughing, Farmer training on Integrated farming system model for drought prone area. Rain water harvesting techniques Resources conservation technologies for rainfed farming, Farmer training on Integrated Nutrient Management.				
Chhattisgarh	Weed Management , Fertilizer Management, Vegetable production, Vermicompost, Nursery Management, Farm Machinery, Storage, NRM, Seed production, Entrepreneurship	Control of weeds by Conoweeder, Balanced Application of fertilizer, Importance of Vegetables, Preparation of Nursery bed, Enhancing milk production by green fodder, Vermicompost, Reaper Management, Importance of Storage, Production of Ginger & Banana, Farmers Training cum meeting on Need and importance of Soil Testing, method of soil sampling, Production technology for Rabi crops, Farmers and farm women training on production techniques of ginger & turmeric, Farmers and farm women training on seed production techniques , Farmers and farm women training on "Maintenance of farm machinery and implements", Farm and farm women training on improved cultivation of paddy, Farm and farm women training on improved techniques of crop production, Farmers and Farm women training on "Edible oyster mushroom farming", Farmers and Farm women training on " weed management ".	42	830	88	
Odisha	Crop production, Cultivation techniques, Disease management, Diversification of Agriculture, Drudgery reduction, Entrepreneurship development, Farm machineries, Fish farming, Floriculture, Group dynamics, ICM,	Farmers scientist interaction programme on kharif crops and their pest and disease managements , Awareness campaign on vegetable cultivations and pest, disease managements, Green manuring by incorporation of dhanicha in paddy, Ridge & furrow practices in radish & cowpea, IDM in fish farming, Cultivation Technique of commercial fruit, Improved method of greengram cultivation, Improved cultivation techniques of rose, Vermi-composting technique, Vocational Training on Maintenance of farm machineries of custom hiring centre	87	2211	922	

	IDM, IGA, INM, Integrated Crop Management, IPM, Livestock, Micro-irrigation, Mushroom cultivation, Pisciculture, Plant protection, Small Scale income generating enterprises, Soil and water conservation, Women empowerment					

State wise Progress Report

Format NICRA Report (March, 2011 to Feb, 2012)

Module-1: Natural Resource Management

Interventions	Technology demonstrate	No. of farmers	Area (ha)	Measurable indicators of output*	Economics of demonstration (Rs./ha)			
					Gross Cost	Gross Return	Net Return	BCR
2	3	4	5	6	7	8	9	10
Madhya Pradesh								
Water harvesting and recycling	Staggered contour trenching on	77	116.5	Area Covered under life saving irrigation, High Yield(storage of water)	13831.43	29121.43	15290.00	2.11

Interventions	Technology demonstrate	No. of farmers	Area (ha)	Measurable indicators of output*	Economics of demonstration (Rs./ha)			
					Gross Cost	Gross Return	Net Return	BCR
2	3	4	5	6	7	8	9	10
for supplemental irrigation	sloppy land, maintenance in storage of water, Rain water harvesting Structure							
Improved drainage in flood prone areas	Bed planting sowing method	39	22.5	High Yield(storage of water)	6405.00	18560.00	12155.00	2.90
Conservation tillage where appropriate	Deep ploughing and leveling , Hand wheel hoe, Zero tillage sowing method,	161	163	Moisture conservation, crop of yield	7,918.63	26,010.00	17,864.50	3.28
Artificial ground water recharge	Earthen embankments and renovation of check dams , Sprinkler irrigation	30	10	High Yield(storage of water) Moisture conservation	14,430.00	36,900.00	21,400.00	2.56
Water saving irrigation methods	Sprinkler, drip irrigation system,	29	12.5	High Yield(storage of water) Moisture conservation	11,345.00	29,466.75	18,121.75	2.60
Any other (Pl. specify)	saving of time and cost of cultivation , Demonstration of power sprayer, Control of insect-pest and weeds through summer deep ploughing	53	365	Crop of yield	19,285.00	57,062.00	37,777.00	2.96
In-situ moisture conservation RCT	Seed-cum-fertilizer drill with ridge furrow	404	188.2	High Yield, Soil moisture increase, less pest/weed infestation	11,946.85	32,526.23	20,645.54	2.72

Interventions	Technology demonstrate	No. of farmers	Area (ha)	Measurable indicators of output*	Economics of demonstration (Rs./ha)			
					Gross Cost	Gross Return	Net Return	BCR
2	3	4	5	6	7	8	9	10
	system, Green Manuring dhaincha , Summer Ploughing							
Chhattisgarh								
In-situ moisture conservation RCT	Increasing infiltration, Mulching of Pollythene	59	14.5	Soil and water conservation, Soil erosion checked, increased infiltration,	38150.00	110960.00	74810.00	2.91
Water harvesting and recycling for supplemental irrigation	Renovation of defunct water harvesting structure, Renovation of Defunct Irrigation pond,	61	120	High yield	147142.86	0.00	0.00	0.00
Improved drainage in flood prone areas		0	0	0	0.00	0.00	0.00	0.00
Conservation tillage where appropriate	Deep Ploughing summer	13	5	Production	4050.00	0.00	0.00	0.00
Artificial ground water recharge		0	0	High Yield, Soil moisture increase, less pest/weed infestation	0.00	0.00	0.00	0.00
Water saving irrigation methods	Sprinkler Irrigation demonstrated	2	3	Water saving, water use efficiency	0.00	0.00	0.00	0.00
Any other (Pl. specify)	NADEP tank constructed, Vermi-composting tanks,	10	0	Production of NADEP compost	40000.00	0.00	0.00	0.00
Odisha								
In-situ moisture conservation	Forest plant cultivation, Dhanicha	28	4.8	High Yield, Soil moisture increase, less pest/weed infestation	3125.00	9900.00	6775.00	3.17

Interventions	Technology demonstrate	No. of farmers	Area (ha)	Measurable indicators of output*	Economics of demonstration (Rs./ha)			
					Gross Cost	Gross Return	Net Return	BCR
2	3	4	5	6	7	8	9	10
RCT	incorporation in paddy							
Water harvesting and recycling for supplemental irrigation	Rain water harvesting structure	5	2		0.00	0.00	0.00	0.00
Improved drainage in flood prone areas		0	0		0.00	0.00	0.00	0.00
Conservation tillage where appropriate	Ridge and furrow method of planting, sowing with seed cum fertilizer drill, IPM practice	20	9	High yield	3436.00	9218.00	5782.00	2.68
Artificial ground water recharge		0	0	0	0.00	0.00	0.00	0.00
Water saving irrigation methods	Sprinkler Irrigation , Ridge & furrow practices	55	3.8	Water saving, water use efficiency	26400.00	66433.33	40033.33	2.52
Any other (Pl. specify)	Ridge & furrow practices , INM practices , IPM, IDM practice in Groundnut, Paddy, Turmeric , Integrated weed management, field preparation,	131	426.6	High Yield(storage of water)	34480.83	75036.67	40555.83	2.18

Interventions	Technology demonstrate	No. of farmers	Area (ha)	Measurable indicators of output*	Economics of demonstration (Rs./ha)			
					Gross Cost	Gross Return	Net Return	BCR
2	3	4	5	6	7	8	9	10
	Popularization of Paddy straw Mushroom							

Module 2 Crop Production

Interventions	Technology demonstrate	No. of farmers	Area (ha)	Measurable indicators of output* q/ha	% increase	Economics of demonstration (Rs./ha)	Economics of Local (Rs./ha)

				Demo	Local		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
2	3	5	6	7	8	9	10	11	12	13	14	15	16	17
Madhya Pradesh														
Introducing flood / drought / temperature tolerant varieties	Crop substitution, Integrated crop management in Sorghum, Imtegrated crop management in Mustard, Use of drought/stress tolerant/short duration crops, Replacement of Long duration Variety by short duration variety, Mid season drought management, high yielding , aphid tolerant suitable for rain fed condition	1208	445.45	462.04	300.30	51.38	17707.49	53383.87	35596.36	3.01	12403.18	30465.82	18126.43	2.46
Advancement of planting dates of rabi crops in areas with terminal heat stress	Early sowing of rabi crops, high yielding variety	452	440	12.75	10.85	4.38	3414.13	8887.53	5474.27	2.60	3392.86	7815.71	4422.86	2.30
Water saving paddy cultivation methods (SRI, aerobic, direct seeding)		33	10.4	13.02	5.02	28.29	8600.00	22557.43	13957.43	2.62	6105.71	10379.00	4273.29	1.70
Frost management in horticulture through fumigation	Frost tolerant high yielding variety, Irrigation technology	17	7.5	0.00	0.00	0.00	2857.14	5000.00	2142.86	1.75	2785.71	4571.43	1785.71	1.64
Community nurseries for	High Yield resistant insect and disease	7	115	85.91	49.29	5.57	11375.13	90395.50	66520.38	7.95	6333.75	40757.75	34424.00	6.44

Interventions	Technology demonstrate	No. of farmers	Area (ha)	Measurable indicators of output* q/ha		% increase	Economics of demonstration (Rs./ha)				Economics of Local (Rs./ha)			
				Demo	Local		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
2	3	5	6	7	8	9	10	11	12	13	14	15	16	17
delayed monsoon														
Custom hiring centres for timely planting	Timeliness and precision in field operations even under erratic and low rainfall situations better utilization of stored water. Use in zero till seed drill sowing method	47	23	11.79	9.99	4.43	5311.25	18485.25	13174.00	3.48	5650.00	15550.00	9900.00	2.75
Location specific intercropping systems with high sustainable yield index	Intercropping systems ,	66	25	10.28	6.91	78.42	8975.00	25152.80	16226.90	2.80	8215.00	16224.60	8009.60	1.97
Any other (Pl. specify)	Demonstration of IDM module for controlling powdery mildew,	174	86.6	25.40	21.36	15.28	15656.00	48464.00	33408.00	3.10	15452.00	40684.00	25232.00	2.63
Chhattisgarh														
Introducing flood / drought / temperature tolerant varieties	Crop veriety Rice, maize	251	69.7	48.36	28.94	61.55	17138.07	44893.93	27755.86	2.62	14958.32	27526.89	13278.93	1.84
Advancement of planting dates of rabi	Gram JG11 &JG64	20	10	6.05	3.15	17.40	4526.67	13316.33	8456.33	2.94	2775.00	6933.00	3109.00	2.50

Interventions	Technology demonstrate	No. of farmers	Area (ha)	Measurable indicators of output* q/ha		% increase	Economics of demonstration (Rs./ha)				Economics of Local (Rs./ha)			
				Demo	Local		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
2	3	5	6	7	8	9	10	11	12	13	14	15	16	17
crops in areas with terminal heat stress														
Water saving paddy cultivation methods (SRI, aerobic, direct seeding)	Paddy MTU1010 , Wheat, SRI in Paddy	34	14	30.93	20.35	33.79	14935.75	33936.75	19001.00	2.27	12183.25	22666.25	10483.00	1.86
Frost management in horticulture through fumigation		0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Community nurseries for delayed monsoon		0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Custom hiring centres for timely planting		0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Location specific intercropping systems with high sustainable yield index		0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Any other (Pl.	Mustard, Tiwra	17	7.8	2.53	1.76	7.08	3050.00	5092.27	2692.27	1.67	3650.00	4024.33	1857.67	1.10

Interventions	Technology demonstrate	No. of farmers	Area (ha)	Measurable indicators of output* q/ha		% increase	Economics of demonstration (Rs./ha)				Economics of Local (Rs./ha)			
				Demo	Local		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
2	3	5	6	7	8	9	10	11	12	13	14	15	16	17
specify)														
Odisha														
Introducing flood / drought / temperature tolerant varieties	Drought tolerant variety (lalat, khandagiri, kalinga-iii, udaygiri, Jogeshetc.)with INM, IPM in Paddy; Varietal upland paddy replacement; Demonstration on Improved Paddy var. Naveen, INM in Maize	239	80.4	37.09	20.99	26.05	21027.78	37895.33	16867.56	1.80	11758.89	20362.67	8603.78	1.73
Advancement of planting dates of rabi crops in areas with terminal heat stress	Green Gram Variety (Durga), IPM schedule, **High yielding varieties (OBG-17), IPM schedule, Improved Blackgram var. PU-31**	125	20.4	82.01	59.01	35.88	10738.33	31425.08	21448.33	2.93	9721.25	22323.25	16946.67	2.30
Water saving paddy cultivation methods (SRI, aerobic, direct seeding)	SRI method of rice cultivation; SRI in Paddy	9	3	36.60	26.70	24.69	13950.00	11393.33	6443.33	0.82	4526.67	9060.00	4533.33	2.00
Frost management in horticulture through			0	0.00	0.00	0.00								

Interventions	Technology demonstrate	No. of farmers	Area (ha)	Measurable indicators of output* q/ha		% increase	Economics of demonstration (Rs./ha)				Economics of Local (Rs./ha)			
				Demo	Local		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
2	3	5	6	7	8	9	10	11	12	13	14	15	16	17
fumigation														
Community nurseries for delayed monsoon	Vegetable variety improved Brinjal, Caouliflower	50	4	123.75	92.25	21.08	26973.75	88192.50	158718.75	3.27	22956.25	67978.75	40197.50	2.96
Custom hiring centres for timely planting	Line sowing of paddy, seed cum fertilizer	5	2	11.80	9.65	5.57	3712.50	8545.00	4832.50	2.30	3395.00	6795.00	3400.00	2.00
Location specific intercropping systems with high sustainable yield index	Maize-Arhar intercropping; High yielding varieties, Bio fertilizers and need based IPM schedule	9	1.4	11.60	10.65	4.46	6955.00	14550.00	7595.00	2.09	6915.78	12246.53	5330.76	1.77
Any other (Pl. specify)	Varietal replacement disease & pest tolerant varieties of paddy, Hybrid Maize, Greengram cultivation, INM in Okra -Aparajita, Avantika, Introduction of Yam Bean Var-Rajendramishrikhanda, CTCRI, IDM for control of Tikka disease in Groundnut, IPM for control of Black headed caterpillar in green gram	295	62.6	55.50	39.82	21.99	10880.95	26715.00	20752.38	2.46	8442.86	21350.00	12907.14	2.53

Module-3: Livestock & Fisheries

Interventions	Technology demonstrate	No. of farmers	Unit/ No./ Area (ha)	Measurable indicators of output*		% increase	Economics of demonstration (Rs./ha)				Economics of demonstration (Rs./ha)			
				Demo	Local		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
Madhya Pradesh														

Interventions	Technology demonstrate	No. of farmers	Unit/ No./ Area (ha)	Measurable indicators of output*		% increase	Economics of demonstration (Rs./ha)				Economics of demonstration (Rs./ha)			
				Demo	Local		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
Use of community lands for fodder production during droughts / floods	Growing drumstick by submerged pitcher and pit depression system of planting, preparation of high; Demonstration of high yielding fodder crop variety of Barseem	77	44.8	116.13	89.88	6.3975	8386.67	37333.33	28946.67	4.45	7930.00	29208.33	21278.33	3.68
Improved fodder/feed storage methods	Growing drumstick Agast.Katchnar.Bahera by Sub merged pitcher and pit depression system of planting. Use of mineral mixture for balance nutrition in milch animals	75	75	295.80	186.60	8	4017.86	9367.86	5350.00	2.33	3260.00	5885.71	2768.57	1.81
Preventive vaccination	Dairy animals-FMD and HS-vaccination ; Vaccination against Ranikhet and Gumboro disease. Animal	112	262	1.17	0.57	0	1314.29	3600.00	2285.71	2.74	1157.14	2057.14	900.00	1.78

Interventions	Technology demonstrate	No. of farmers	Unit/ No./ Area (ha)	Measurable indicators of output*		% increase	Economics of demonstration (Rs./ha)				Economics of demonstration (Rs./ha)			
				Demo	Local		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
	Vaccination programme ; Training animal disease vaccination and management													
Improved shelters for reducing heat stress in livestock	Training animal camp and new brides cross available	60	130	0.00	0.00	0	625.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Management of fish ponds / tanks during water scarcity and excess water	Fisheries Programme; Training Maintenance of fish point , proper dose food ,grain and disease control of fish ;	7	3.3	19.64	10.63	9.56	5143.75	25850.00	17857.14	5.03	2750.88	10625.00	7875.00	3.86
Any other (Pl. specify)	NADEP Compost and Wormi compost, Technical guidance and worms	114	42	0	0	0	0	0	0	0	0	0	0	0
Chhattisgarh														
Use of communit	Pasture Development	7	2	0	0	0	0	0	0	0	0	0	0	0

Interventions	Technology demonstrate	No. of farmers	Unit/ No./ Area (ha)	Measurable indicators of output*		% increase	Economics of demonstration (Rs./ha)				Economics of demonstration (Rs./ha)			
				Demo	Local		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
y lands for fodder production during droughts / floods														
Improved fodder/feed storage methods		0	0	0	0	0	0	0	0	0	0	0	0	0
Preventive vaccination	Animal Health Camp	37	250	0	0	0	0	0	0	0	0	0	0	0
Improved shelters for reducing heat stress in livestock		0	0	0	0	0	0	0	0	0	0	0	0	0
Management of fish ponds / tanks during water scarcity and excess water	Renovation and Digging of Ponds for Irrigation cum fish cultivation	15	3	0	0	0	0	0	0	0	0	0	0	0
Any other (Pl. specify)	Distribution of Piggery , goatry	264	627	0	0	0	0	0	0	0	0	0	0	0

Interventions	Technology demonstrate	No. of farmers	Unit/ No./ Area (ha)	Measurable indicators of output*		% increase	Economics of demonstration (Rs./ha)				Economics of demonstration (Rs./ha)			
				Demo	Local		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
Odisha														
Use of community lands for fodder production during droughts / floods	Stylo cultivation, Production of hybrid Napier	9	2	0	0	0	0	0	0	0	0	0	0	0
Improved fodder/feed storage methods	High making structures	2	8	0	0	0	0	0	0	0	0	0	0	0
Preventive vaccination	Vaccination of goats and cow	35	500	0	0	0	0	0	0	0	0	0	0	0
Improved shelters for reducing heat stress in livestock	Rearing of poultry bird in backyard var.-Banaraja	6	120	1.8	3.1	72.2	0	0	0	0	0	0	0	0
Management of fish ponds / tanks during water scarcity and excess water	Composite pisciculture	65	5	13.5	20.5	51.8	0	0	0	0	0	0	0	0

Interventions	Technology demonstrate	No. of farmers	Unit/ No./ Area (ha)	Measurable indicators of output*		% increase	Economics of demonstration (Rs./ha)				Economics of demonstration (Rs./ha)			
				Demo	Local		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
Any other (Pl. specify)	Construction of vermin compost pits, Vermicomposting in back yard, Mushroom cultivation	130	965	3.5	1.95	19.875	7.142857143	35.71428571	28.57142857	5	7.142857143	50	42.85714286	7

Module-4: Institutional Interventions

Interventions	Details of activity			Critical input (Breed / Variety / Medicine doses,)	No. of farmers	Unit / No. / Area (ha)
	Name of crops / Commodity groups / Implements	Quantity / Number / Rent / Charges	Technology used in seed / fodder bank & function of groups			
2	3	4	5	6	7	8
Madhya Pradesh						
Seed bank	Participatory seed Production at village level, Paddy and Wheat ; Soybean JS-95-60 ; Training on Commercial seed production in Pigeon pea	200 qtl ; 100 q; Rs. 5.00 lakhs / year	Hybrid seed; Improved variety seed, Creation of revolving fund ; One society had been developed a seed processing unit.	MTU-1081 ; JS-95-60 ; ICPL -88039 , Wheat (MP-4010)	145	140
Fodder bank	Production of fodder on community lands, Wheat Straw , Berseem , Training on Commercial seed production Barseem	250 qtl; 50 q ; 36.8 mt. Green fodder ; Rs. 6.00 lakhs / year	Maize, Creation of revolving fund , Improved variety seed , seed production co. societies were registered and working for farming community	HQPM, JB - 5, Barseem	100	75
Commodity groups	Linkage SHGs and commodity groups. Climate risk management commeity	28	SHG , One society had been developed a climate risk processing unit. in village level	Technology and advice, All facility in maintenances climate seed, implement , fertilizers and other document	100	5
Custom hiring centre	Timeliness and precision in field operations even under erratic and low rainfall situations Better utilization of scarce fodder resources. Soybean, Ground nut, Sesame, Chickpea, Vegetable pea, Mustard , Zero till seed drill, ridge bed planter, Leveller, M.B.Plough, Sprinkler set, Disc harrow, Power sprayer, Custom hiring centre	6 no. of implement used on rent (M.B. Plough, Disk Herrow, Rotavator Ferti-seed Drill, Multicrop thresher, Sprinkler set, Diesel pump) 325/hr	function of groups, In-situ moisture conservation And use in difference NICRA activity	Wheat ,Barley, mustard , chickpea ,Green gram ,maize and soybean	132	240
Collective marketing	Maize ,soyabean , wheat barley , rice ,turmeric and mustard	2	Group, Market facility and high value of input	Feedback Maize ,soyabean , wheat, barley,rice	170	57

Interventions	Details of activity			Critical input (Breed / Variety / Medicine doses,)	No. of farmers	Unit / No. / Area (ha)
	Name of crops / Commodity groups / Implements	Quantity / Number / Rent / Charges	Technology used in seed / fodder bank & function of groups			
2	3	4	5	6	7	8
				,turmeric and mustard		
Climate literacy through a village level weather station	Forecasting for insect and disease; Zero till seed drill sowing in wheat ,barley and green gram literacy	10	SMS ; Technology development	Technology	200	0
Any other (Pl. specify)	Training on Mushroom Production to Rural youth	10,000 / month	25 rural youth has been involved in Mushroom production	Market linkage	10	8
Chhattisgarh						
Seed bank	Rice (Samleshwari), Rice (Dantehswari), Green Gram (Pusa Vishal), Ragi (GPU-28), Kodo (JK-41), Kutuki (JK-8)	22.0 q ; 10.0 q; 2.0 q; 2.0 q; 1.0 q ; 1.0 q	Training organized for seed production	Seed - Rice and fertilizer	18	6.1
Fodder bank						
Commodity groups						
Custom hiring centre	Reaper 01; MB Plough ; Seed drill	Rs 425/acre; 1 ; 1	Deep ploughing ; Line sowing		75	24.2
Collective marketing						
Climate literacy through a village level weather station						
Any other (Pl. specify)						
Odisha						
Seed bank	Paddy (Lalat,khandagiri)	250 q	Line sowing, IPM	Line sowing, IPM	20	8
Fodder bank	Stylo, hybrid Napier	10 q	Stylo, hybrid Napier	Stylo, hybrid Napier	4	1
Commodity groups	Vermicompost unit ; Azolla unit	5		Cement rings	445	435
Custom hiring centre	M.B. Plough, Rotavator, seed cum fertlizer drill, power weeder, reaper, multi crop thresher, leveller ; Power tiller;	2500 ; Rs.300/hr ;	Custom hiring ; Ploughing;	M.B. Plough, Rotavator, seed cum fertlizer drill, power weeder, reaper, multi crop thresher,	90	93.3

Interventions	Details of activity			Critical input (Breed / Variety / Medicine doses,)	No. of farmers	Unit / No. / Area (ha)
	Name of crops / Commodity groups / Implements	Quantity / Number / Rent / Charges	Technology used in seed / fodder bank & function of groups			
2	3	4	5	6	7	8
				leveller; Implements;		
Collective marketing						
Climate literacy through a village level weather station	AWS, GPS	2	Data recording	AWS, GPS	35	35
Any other (Pl. specify)	Cattles, goats, Poultry, SHG, Agricultural information center	232 animals ; 220 animals ; 1	Diagnosis, mineral & vitamins supplementation; Mushroom production through women SHGs in the village; Vaccination, Treatment, Diagnosis; Books, literature, leaflets, booklets	Medicines, Vitamins, Minerals ; Paddy straw/oyster mushroom; Medicines, Vitamins; Books, literature, leaflets, booklets, flex etc.	409	752

Module 5. Capacity Building (HRD)

Thematic area	Title of training	No. of Courses	No. of beneficiaries		Date
			Male	Female	
1	2	3	4	5	6
CPM, Crop Production, Disease and insect management, Drainage, Drought mitigation, Farmers motivation, Feeding management, Field day, Health &Hygiene; High production, High Yield, Horticultural crops, ICM, IDM, IFM, IFS, INM, IPM, IWM, Livestock management, LPM, Milk production, Nutritive value,	Rain water harvesting Techniques, Resource conservation technologies for rain fed farming, Weed management in Kharif crops, Integrated farming system model for drought prone areas, Organic manure and bio pesticide preparation techniques. Drought mitigation and management technologies for	181	4128	695	

Thematic area	Title of training	No. of Courses	No. of beneficiaries		Date
			Male	Female	
1	2	3	4	5	6
PHM, PHT, Production Technology, Purpose of high yield in zaid pulses production, Rain water harvesting, RCT, Sowing technique, value addition , WA, Water conservation technology, WM, Women empowerment .	kharif crops, Formation & management of SHG/ seed club/ Krishi gyan doot, Soybean, JS 93-05 , Blackgram, Azad -1, Mustard, Pusa Jagannath , Wheat, GW – 322, Planning of crop production, Cultivation of paddy crop ,Cultivation of vegetables crop, Farmer training on Preventive Measures to protect Kharif crops from heavy Rains. Farmer training on Drought mitigation and management technology for Kharif crops. Farmer training on How to protect the crop from drought. Introduction and planning for Nicra project, Animal husbandry(livestock), Soyabean JS 9560 , Mustard NRCHB - 101, Importance of Child education and health , Techniques of orchard establishment and in situ moisture conservation on wasteland, weed management in kharif crop, Farmer training on Production and Management Technology for Kharif season vegetables. Plant propagation in Horticulture , Production Technology for Rabi				

Thematic area	Title of training	No. of Courses	No. of beneficiaries		Date
			Male	Female	
1	2	3	4	5	6
	vegetables , Production Technology for Maize, Training on Production techniques of Mustard, Training on Production techniques of Chickpea, Training on suitable varietal selection and improved production techniques in wheat, Crop Seminar- Gram, Field Day on Soybean crop at milk filling stage, Field Day on Mustard Crop at flowering Stage , Method Demonstration on Nutritional Feed Preparation for Animals, Field Visit of farmers to demonstration on Mustard and Chickpea , Importance of Summer Deep Plaughing, Integrated Farming , Farmer training on Integrated farming system model for drought prone area. Rain water harvesting techniques, Information about climate change and NICRA Project, Resources conservation technologies for rainfed farming, Farmer training on Integrated Nutrient Management. Integrated Pest management Soybean, Farmer				

Thematic area	Title of training	No. of Courses	No. of beneficiaries		Date
			Male	Female	
1	2	3	4	5	6
	training on Weed Management in Kharif crops.				
Weed Management , Fertilizer Management, Vegetable production, Crop Production, Livestock Management, Vermicompost, Nursery Management, Farm Machinery, Gram Production, Wheat Production, Storage, Horticulture Crops, NRM, ICM, IPM, Exposure visit, Seed production, Entrepreneurship	Control of weeds by Conoweeder, Balanced Application of fertilizer, Importance of Vegetables, Preparation of Nursery bed, Gram Package & Practices, Improving Milk Production By Green Fodder, Vermicompost, Importance of rabi crops, Importance of Seedlings, Reaper Management, Importance of gram sowing by seed drill, Wheat sowing , Maintenance of farm implements, Importance of Storage, Production of Ginger & Banana, Arhar Diwas , Mini Paddy Thresher, Farmers Training cum meeting on Need and importance of Soil Testing, method of soil sampling, NRM & Livestock production, Production Technologies for Kharif crops under NICRA, Pulse production techniques & discussion about site selection for small weather station under NICRA, Farmers training cum meeting on NRM, Farmers Training cum meeting for Agril. Implements	42	830	88	

Thematic area	Title of training	No. of Courses	No. of beneficiaries		Date
			Male	Female	
1	2	3	4	5	6
	and rate fixation for custom hiring center, Production technology for Rabi crops, Kisan Gosthi, Awareness Camp, Climate change and Crops, Visit of watershed aream, Farmers and farm women training on production techniques of ginger & turmeric, Farmers and farm women training on seed production techniques , Farmers and farm women training on "Maintenance of farm machinery and implements", Farm and farm women training on improved cultivation of paddy, Farm and farm women training on improved techniques of crop production, Farmers and Farm women training on "Edible oyster mushroom farming", Farmers and Farm women training on " weed management ".				
Crop production, Cultivation techniques, Disease management, Diversification of Agriculture, Drudgery reduction, Entrepreneurship development, Farm machineries, Fish farming, Floriculture, Group dynamics, ICM, IDM, IGA, INM,	Farmers scientist interaction programme on kharif crops and their pest and disease managements , Awareness campaign on vegetable cultivations and pest, disease managements, Green manuring by incorporation of dhanicha in paddy, Ridge & furrow	87	2211	922	

Thematic area	Title of training	No. of Courses	No. of beneficiaries		Date
			Male	Female	
1	2	3	4	5	6
Integrated Crop Management, IPM, Livestock, Micro-irrigation, Mushroom cultivation, Pisciculture, Plant protection, Small Scale income generating enterprises, Soil and water conservation, Women empowerment	practices in radish & cowpea, IDM in fish farming, Cultivation Technique of commercial fruit, Improved method of greengram cultivation, Improved cultivation techniques of rose, Vermicomposting technique, Exposure visit of farmers to CHES, CTCRI, APCA Farm, Vocational Training on Maintenance of farm machineries of custom hiring centre				