Annual Report 2012-13

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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Indian Council of Agricultural Research

Adhartal, Jabalpur – 482 004 (Madhya Pradesh)

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Year of publication: 2013

Published by

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CONTENTS

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Foreword

Indian agriculture is said to be the gamble of nature probably due to its major part being under rainfed condition. In India, 60 percent agriculture is rainfed mainly depending on south-west monsoon. Further, almost half of the area of these regions (Madhya Pradesh, Chhattisgarh and Odisha) is drought prone adding to instability of agricultural production, frequently occurring drought, scanty rains, major dry spells and uneven distribution of rain further aggravates the problem. Even though it is a matter of pride that food production in India is record 257.44 million tones despite many regions suffer from droughts every year.

Rainfed areas are complex, diverse, fragile, under-invested, risky, ethno-economically unique and distress prone. Though, in India, rainfed region contribute 60 percent of the net sown area, 100 percent of the forest, 66 percent of the livestock and provide livelihood, income, employment and environmental security. About 84-87 percent of pulses/minor millets, 80 percent of horticulture, 77 percent of oil seeds, 66 percent of cotton and 50 percent of cereals are cultivated under the un-irrigated conditions. Management of the precipitation being the ultimate source of river flows, reservoirs, lakes, ponds, tanks, in situ moisture and ground water resources is the key factor for enhancing productivity.

Delayed onset and early withdrawal of monsoon, dry spells, uneven distribution of monsoon, cold and heat weaves, humidity and such other factors adversely affect the agriculture production and productivity. To overcome this situation understanding the behaviour of south west monsoon, other weather parameters and suitable crop management are required for suitable contingent planning to maintain sustainability in agriculture production. NICRA project is timely initiation for combating the climatic variations and protecting the farmers from its negative consequences through planned technological interventions and farmers capacity building.

I compliment the project team for their untiring efforts in publishing the activities and performance as **'Annual Report- 2012-13'** a valuable document. I hope the document will be highly useful to researchers, extension agencies and farmers and all concerned in preparing and implementing the activities related with climatic aspects.

(Anupam Mishra)

PREFACE

Indian agriculture, the backbone of the Indian economy, is on decreasing trend apropos contribution to our national GDP i.e. 17.5 percent. Through around 55 percent people derive their livelihood from this sector. Due to continuous price hike of fuel and all inputs, farmers trying for higher production to get sufficient income to fulfill their farm as well as household needs

In fact, agriculture is the mainstay for the farmers and farms women of Madhya Pradesh, Chhattisgarh & Orissa. The sustainable and equitable development could be made through speedy growth and development of agriculture in these regions. Krishi Vigyan Kendra has been considered as a driving force for promoting climate resilient agriculture through technological interventions at the district level. It aimed at increasing the productivity on regular basis and creating greater opportunities for hirer income and employment in agriculture and allied sectors at village level. Basically, NICRA KVKs identify the need and problems of the farming communities cover with climate change and make endeavour to solve the same through available technologies using various extension methods viz., training, demonstrations, exhibitions, farmers fairs, field days and farmers friendly literature. All the activities are planned well in advance and implemented at the proper time for cater the needs of the farming community. Particularly in combating the climate variations Zonal Project Directorate Zone VII, have 14 NICRA KVKs situated in three states namely Madhya Pradesh, Chhattisgarh & Orissa.

It is great pleasure to publish this Annual Progress Report -2012-13. This report is based on the progress of activities reported by the NICRA KVKs working under ZPD Zone VII. All the officers and staffs of the NICRA KVKs deserve appreciation for their efforts that has resulted in higher productivity and economic prosperity of the farmers in their respective districts. We sincerely thank to all the Vice Chancellors, Chairman (NGO KVKs), Director of Extension Education and other concerned Senior Officials of the host organizations for their support to the NICRA KVKs activities.

Our team expresses profound gratitude to Dr. K.D.Kokate, Deputy Director General (Agricultural Extension), for giving thrust to the NICRA KVKs in all ICAR programmes with full support. His valuable suggestions and guidance works as source of motivation for the professionals involved in the technological dissemination all over the country. Our team expresses hearty thanks to TDC-NICRA, Dr. B. Venkateswarlu, Director, CRIDA, Hyderabad and all his NICRA team member specially Dr. Sreenath Dixit, Principal Scientist (AE) for their clouts guidance and support in implement & evaluation. We are highly grateful to Dr. Anupam Mishra, Zonal Project Director Zone VII, ICAR for his regular guidance and support in better implementation of these programmes in KVKs through Zone VII.

Place: Jabalpur
Date :

(**S.R.K.Singh**)
I/C NICRA Project ,
ZPD,Zone VII

Executive Summary

Zonal Project Directorate, Zone VII monitors the performance of 14 NICRA KVKs namely Balaghat, Chhattarpur, Datia, Guna, Morena, Satna, Tikamgarh in Madhya Pradesh, Bhatapara, Bilaspur, Dantewara in Chhattisgarh, Kendrapara, Ganjam, Jharsuguda, Sonepur in Odisha. These KVKs are conducting the field activities as per the approved action plan by ZPD Zone VII & CRIDA, Hyderabad.

During 2012-13, under **Natural Resource Management module,** a total of 1338 farmers benefited and cover the 968.2 ha area in the Zone VII. Out of 1238 farmers (670 for M.P, 154 for CG, and 514 for Odisha) and covered the area 689.1 ha in M.P, 142.3 ha in CG, and 136.8 ha in Odisha in all intervention BC ratio ranged from 1.31 to 3.9 in these activities.

In Crop Production module, 2095 farmers benefited and covered the 1038.58 ha area in the Zone VII during the year 2012-13. Out of 2095 farmers (1299 for M.P, 217 for CG, and 579 for Odisha) and covered the area 730.68 ha in M.P, 57.4 ha in CG, and 250.5 ha in Odisha in all intervention. BC ratio ranged from demonstration 2.5 to 7.2 and 1.5 to 6.1 in farmer practice.

In Livestock and Fisheries module, 2707 farmers benefited and covered the 4170 Unit in the Zone VII during the year 2012-13. Out of 2707 farmers (1844 M.P, 193 CG, and 670 Odisha) and covered the units 2172 in M.P, 260 in CG, and 1738.2 in Odisha in all intervention Output (Q/ha) percent increased range 5.3 to 80.43 and BC ratio ranged from demonstration 1.7 to 4.4 and 1.8 to 4.4 in local. The maximum BC ratio 4.4 was obtained in "Use of community lands for fodder production during droughts / floods" intervention.

In Institutional interventions module, 5608 farmers benefited and covered the 3317.6 Unit/No/ha area in the Zone VII during the Year 2012-13. Out of 5609 farmers (3821 farmers in M.P, 26 + 1(SHG group) in CG, and 1761 in Odisha) and covered the area 2080 ha in M.P, 14.7 ha in CG, and 1223 ha in Odisha in all intervention. A total of 3895 farmers benefited through capacity building in the Zone VII. Out of 3895 farmers (1646 male and 258 female in M.P, 842 male and 209 female in CG, and 612 male and 328 female in Odisha) during the training, 129 courses were covered.

In order to create awareness among the farmers in region, large numbers of extension activities were organized by KVK at the farms and the farmer's fields. A total of 5130 farmers benefited of which 970 farmers through Field day, 243 farmers by Animal Health camp, 276 farmers by Soil Health Camp, 21 farmers by Nursery Seedlings, 876 farmers by group discussion and 231 farmers benefited through Exposure Visit in during the year.

The testimony of the success of NICRA activities is the number of visitors including dignitaries to the custom hiring centers at NICRA village also wide publicity by the print and electronic media as well as through ICAR website and CRIDA newsletter.

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.

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 status 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 four modules.

Modules I: Natural Resources Management

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.

Silent Achievements of NRM Intervention under NICRA Villages in Zone VII

- 18 Percolation pond newly developed these are recharge by wells.
- 19 rain harvesting structure newly developed in this year out of 19 structure 6 are Check Dam and 10 Bori bandhan.
- 18 old Farm Pond and 12 Community Pond renovated in NICRA villages.
- 55 Tube well recharges in the villages.
- 31 open well recharge were renovated during the year.
- 488 ha additional area was increased under irrigation (nearly 40%).

Intervention I: In-situ moisture conservation

In this intervention Balaghat, Chhatarpur,Datia, Morena, Tikamgarh,Guna and Satna KVK **(Madhya Pradesh)** have worked moisture conservation through Deep Summer Ploughing in Balagart, Chhatarpur, Datia Tikamgarh and Guna . Sowing Across the slope in Ground nut and Braod bed Furrow Method of Sowing in Soybean in Datia, Green Manuring dhaincha (Sesbania) One harrowing +Two ploughing + planking and sowing through seed cum fertilizer drill in Wheat (MP 1203) Mustard (NRCDR-2) crop in Morena, Check bunds for soil and water conservation in Guna and Ridge and Furrow technique in Pegionpea, Black gram, Green gram, Sorghum + Red gram in Satna KVK. Highest BCR ratio 4.3 obtained in Alkali soil reclamation (Gypsum 50 % + Green manuring in Mustard (NRCHB -101)in Morena KVK. 252 Farmers have benefited and 163.2 ha area covered in NICRA villages.

KVK	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses)	No. of farmers	Area (ha)	Measurable indicators of output*	Economics of demonstration (Rs./ha)			
						Gross Cost	Gross Return	Net Return	BCR
Balaghat	Deep Summer Ploughing		12	12	54	15936	42420	26484	2.66

KVK	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses)	No. of farmers	Area (ha)	Measurable indicators of output*	Economics of demonstration (Rs./ha)			
						Gross Cost	Gross Return	Net Return	BCR
Chhatarpur	Summer Ploughing		12	6	Soil moisture increase, less pest/weed infestation	18256	55720	37464	2.05
Datia	Deep Summer Ploughing in Soybean		12	25	Moisture Percent At harvest - 8.36	15436	42120	26684	2.73
Datia	Sowing Across the slope in Ground nut		22	2	Moisture Percent At harvest - 8.78	17635	54501	36866	3.09
Datia	Braod bed Furrow Method of Sowing in Soybean	Seed & BBF Seed drill	20	10	Moisture Percent At harvest - 9.34	15436	54241	38805	3.51
Morena	Green Manuring dhaincha (Sesbania)	Wheat (MP 1203)	12	10	51.6	28040	87400	59360	3.11
Morena	Green Manuring dhaincha (Sesbania) same above	Mustard (NRCDR-2)	14	8	22.5	21800	84750	62950	3.88
Morena	Alkali soil reclamation Two ploughiung and planking. Sowing in line	Gypsum 50 % + Green manuring , Mustard (NRCDR -2)	1O	10	26.3	22800	98050	75250	4.3
Tikamgarh	Summer deep ploughing		20	24	Yield (q/ha)	18056	55420	37364	3.07
Tikamgarh	Ridge & Furrow method in sowing		32	27	Yield (q/ha)	15947	57278	41331	2.5
Guna	Check bunds for soil and water conservation	Check bunds	13	4	Check soil erosion , land leveling and moisture conservation	-	-	-	-
Satna	Ridge and Furrow technique in Pegionpea	Ridge and furrow seed drill	12	3	Yield = 7.96 q	10030	25467	15437	2.54
Satna	Ridge and Furrow technique in Blackgram	Ridge and furrow seed drill	18	5	Yield= 3.97 q	9370	13487	4117	1.44
Satna	Ridge and Furrow technique in Green gram	Ridge and furrow seed drill	20	5	Yield= 4.07 q	8120	13462	5342	1.66
Satna	Ridge and Furrow technique in Soybean	Ridge and furrow seed drill	11	5	Yield= 13.47 q	13875	40391	26516	2.91
Satna	Ridge and Furrow technique in Sorghum + Red gram	Ridge and furrow seed drill	11	4	Yield= 4.03 q + 2.6 q	11425	15164	3739	1.33
Satna	Line sowing technique in Sesame	Seed drill	11	3.2	Yield= 4.25 q	7999	19145	11146	2.39

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.) and Conservation crops demonstrated to stop runoff and increasing infiltration (Crops (Green Gram-Pusa vishal, Black gram-TAU-1, Hourse gram-BK-1 and Groundnut-AK-159) in Dantewara KVK and sowing of Gram with Zero till Seed cum fertilizer drill and highest BCR ratio 2.1 obtained. Sowing of Chickpea (JG-130) through Zero till Seed cum fertilizer drill in Bhatapara KVK. A total of 65 Farmers have benefited and 16.5 ha area covered in NICRA villages.

KVK	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses)	No. of farmers	Area (ha)	Measurable indicators of output*	Economics of demonstration (Rs./ha)			
						Gross Cost	Gross Return	Net Return	BCR
Dentewara	Plantation of mixed (Fruit and Timber plants) Convergence with MGNREGA	Seedlings of Mixed Plants (Mango, Nilgiri, Acasia Mengium, Acasia Nilotika etc.)	3	3	1-Soil erosion checked , 2-Soil & water conservation, 3-after 4-5 year Fruit & Timber production	-	-	-	-
Dentewara	Distribution of fruit plants	Seedling (Jack fruit , Aonla, Karonda, Drum Stick (640 seedlings) and FYM	28	2	1-Soil & water conservation, 2-after 4-5 year Fruit & Timber production	5000	-	-	-
Dentewara	Grasses & pasture development on sloppy land	Seed/rhizome/ runner (maize/anjan Grass) and fertilizer	7	2	Cover crops stop excess run off. Increased infiltration	5000	-	-	-
Dentewara	Conservation crops demonstrated to stop runoff and increasing infiltration	Crops (Green Gram-Pusa vishal, Black gram-TAU-1, gram-BK-1 and Groundnut-AK-159	17	5.5	1-Soil & water conservation, 2-excess runoff, stopped , 3-Infiltration increasing	56250	119050	62800	2.1
Bhatapara	Zero till Seed cum fertilizer drill	Kanchan,50kg DAP	5	2	No. of panicles /m2	16000	20479	4489	1.28
Bhatapara	Zero till Seed cum fertilizer drill	JG-130 , 40kg DAP	5	2	% of germination	15400	26089	10689	1.69

In **Orrisa**, this intervention Ganjam, Sonepur and Kendrapara KVK have worked moisture conservation in paddy using Ploughing by MB plough in Ganjam KVK, Forest plant cultivation with Sunajhari, Subobul, vermin compost, biofertilizer in Sonepur KVK, Moisture conservation in mango, lemon and forest plant Kendrapara KVK have worked and highest BCR ratio 1.64 obtained. 48 Farmers have benefited and 7.5 ha area covered In NICRA villages.

KVK	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses)	No. of farmers	Area (ha)	Measurable indicators of output*	Economics of demonstration (Rs./ha)			
						Gross Cost	Gross Return	Net Return	BCR
Ganjam	Moisture conservation in Paddy	Ploughing by MB plough	15	5		22500	36800	14300	1.64
Sonepur	Forest plant cultivation	Sunajhari, Subobul, vermin compost, biofertilizer	10	1		-	-	-	-
Kendrapara	Moisture conservation in mango, lemon and forest plant	Pitting and Labour Payment	23	1.5		3500	-	-	-

Intervention II : Water harvesting and recycling for supplemental irrigation

In this intervention Datia, Guna and Morena KVK (Madhya Pradesh) have worked Water harvesting and recycling for supplemental irrigation through Bori – Bandhan, Excavation of Farm pond and Renovation of old WHS in Datia KVK, Water harvesting tanks to improve ground water recharge and partial irrigation in Guna KVK and Farm pod 170x80 Meter (7) repairing and maintenance in storage of water use in Rabi crop irrigation in Morena KVK . 119 Farmers have benefited and 253 ha area covered in NICRA villages. Balaghat and Datia KVK have observed maximum BCR 4.63 through interventions.

KVK	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses)	No. of farmers	Area (ha)	Measurable indicators of output*	Economics of demonstration (Rs./ha)			
						Gross Cost	Gross Return	Net Return	BCR
Datia	Bori - Bandhan		76	105	Yield of Mustard - - 1515 Kg/ha	11071	48480	37409	4.38
Datia	Excavation of Farm pond		3	19	Integrated economics of Field crop and Fish culture	30154	139685	109531	4.63
Datia	Renovation of old WHS		13	95	Yield of Field crops - 1562	13779	48400	34621	3.51
Guna	Water harvesting tanks to improve ground water recharge and partial irrigation	Water harvesting tanks	2	12	improve ground water recharge and partial irrigation	-	-	-	-
Morena	Farm pod 170x80 Meter (7) repairing and maintenance in storage of water use in Rabi crop irrigation	Wheat (MP 4010)	25	22	51.4	27400	83100	55700	3

In **Chhattisgarh,** this intervention Bilaspur and Dantewara KVK have worked on Water harvesting and recycling for supplemental irrigation through Farm Pond in Bilaspur KVK and 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) etc. and Digging open wells with ring fitting 5.0 nos. 67 Farmers have benefited and 120 ha area covered In NICRA villages.

KVK	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses)	No. of farmers	Area (ha)	Measurable indicators of output*	Economics of demonstration (Rs./ha)			
						Gross Cost	Gross Return	Net Return	BCR
Bilaspur	Farm Pond	Dugging	15	-	Under progress	150,000	-	-	-
Dentewara	Renovation of defunct water harvesting structure (Stop Dam) (30.0 ha area irrigated)	Stone (40 & 20 MM), Sand, Cement & Labour	16	30	1-5 ha. Area increased during Rabi. 12-13 without fencing, 2- Ground water table increased up to 25-30 cm, 3- some rural youth started to make cement bricks for selling	145000	40000.0 approx.	-	-
Dentewara	Renovation of defunct water harvesting structure (Stop Dam) (30.0 ha area irrigated	Stone (40 & 20 MM), Sand, Cement & Labour	25	25	1-7 ha. Area increased during rabi 12-13	85000	20000.0 approx.	-	-
Dentewara	Renovation of defunct irrigation pond (40X40X1.8)	Labour Payment	4	20		100000	-	-	-
Dentewara	Digging of Irrigation Pond (50X50X1.7m)	Labour Payment	7	25		250000	-	-	-
Dentewara	Digging of Irrigation Pond (40X40X1.3m)	Labour Payment	4	15		100000	-	-	-
Dentewara	Digging open well with ring fitting 5.0 nos.	Labour Payment Rings, Brick and cement	5	5		350000	-	-	-

In **Odisha,** this intervention Sonepur KVK have worked on water harvesting and recycling for supplemental irrigation through Rain water harvesting structure (farm pond) in Sonepur KVK and , Renovation of old farm ponds & old water harvesting structure in Ganjam & Kendrapara KVK. 80 farmers have benefited and 6 ha area covered In NICRA villages.

KVK	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses)	No. of farmers	Area (ha)	Measurable indicators of output*	Economics of demonstration (Rs./ha)			
						Gross Cost	Gross Return	Net Return	BCR
Sonepur	Rain water harvesting structure (farm pond)		5	2		-	-	-	-
Ganjam	Renovation of old farm ponds	Labour Payment	25	1		-	-	-	-
Kendrapara	Renovation of old farm ponds	Labour Payment	25	1		50000	98000	48000	1.96
Kendrapara	Renovation of old water harvesting structure	Labour Payment	25	2	Life saving of paddy, vegetables-Fish, Brinjal, Tomato and pointed gourd	100000	232000	222000	2.32

Intervention III : Improved drainage in flood prone areas

In this intervention, Guna and Morena KVK **(Madhya Pradesh)** have worked on improved drainage in flood prone areas through Drainage channels to avoid flood hazard in Soybean crop in Guna and Bed planting sowing method Green gram, Black gram, wheat, Pigenpea and Maize etc.A total of 161 Farmers have benefited and 89.5 ha area covered in NICRA villages. 2.29 to 8.0 BCR ranged was recorded in NICRA villages.

KVK	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses)	No. of farmers	Area (ha)	Measurable indicators of output*	Economics of demonstration (Rs./ha)			
						Gross Cost	Gross Return	Net Return	BCR
Guna	Drainage channels to avoid flood hazard in Soybean crop	Drainage channels	5	7.5	avoid flood hazard in Soybean crop	-	-	-	-
Morena	Bed planting sowing method	Green gram (SML-668)	35	15	9.8	16200	37240	21040	2.29
Morena	Bed planting sowing method	Black gram (UITRA)	18	7	9.5	16000	38100	22100	2.38
Morena	Bed planting sowing method	GOUR (RGC 1038)	12	5	16.8	22000	178000	146000	8
Morena	Bed planting sowing method	Maize (PEHM -2)	30	12	50.3	18200	76456	58256	4.2
Morena	Bed planting sowing method	WHEAT (MP 1203)	28	22	51.6	28040	87400	59360	3.11
Morena	Bed planting sowing method	PIGENPEA (ICPL 88039)	24	15	23.4	22500	89900	67400	3.99
Morena	Bed planting sowing method	Soybean (JS-9560)	9	6	13.2	17600	42240	24640	2.4

In this intervention, Kendrapara KVK (**Odisha**) have worked on improved drainage in flood prone areas through Ridge and furrow method. 63 farmers have benefited and 32 ha area covered

KVK	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses)	No. of farmers	Area (ha)
Kendrapara	Ridge and furrow method	Power Tiller	63	32

Intervention IV: Conservation tillage where appropriate

In this intervention Guna, Morena and Satna KVK (**Madhya Pradesh)** have worked on conservation tillage where appropriate through Moisture conservation during crop period in Soybean in Guna KVK, Zero tillage sowing method wheat and Pigeonpea crop in Morena and Deep summer ploughing in paddy in Satna KVK . A total of 114 farmers have benefited and 84.4 ha area covered in NICRA villages. And maximum BCR was recorded 4.4 in Morena NICRA villages.

KVK	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses)	No. of farmers	Area (ha)	Measurable indicators of output*	Economics of demonstration (Rs./ha)			
						Gross Cost	Gross Return	Net Return	BCR
Guna	Moisture conservation during crop period in Soybean	Hand Wheel hoe	20	20	Moisture conservation during drought period	-	-	-	-
Morena	Zero tillage sowing method	wheat (MP-4010)	45	40	52.3	25400	88100	62700	3.46
Morena	Zero tillage sowing method	Pigenpea (ICPL 88039)	32	20	23.4	20400	89900	69500	4.4
Satna	Deep summer ploughing in paddy	Reversible MB Plough	17	4.4	Yield=24.13	14200	27749	13549	1.95

In this intervention Bilaspur KVK (**Chhattisgarh**) have worked on conservation tillage where appropriate through Reduced land preparation period for wheat cultivation after long duration paddy and moisture conservation for rabi. One farmer has benefited and 0.8 ha area was covered.

KVK	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses)	No. of farmers	Area (ha)	Measurable indicators of output*	Economics of demonstration (Rs./ha)			
						Gross Cost	Gross Return	Net Return	BCR
Bilaspur	Reduced land preparation period for wheat cultivation after long duration paddy and moisture conservation for rabi	Seed+Seed drill	1	0.8	27q/ha	16,000	34,695	18,695	2.2

In this intervention Bilaspur KVK (**Odisha**) have worked on conservation tillage where appropriate through using Zero tillage technology in Kendrapara and Maize in ridge & furrow method of planting Maize seed (MH9468) IPM, Cowpea with line sowing Var. Utkal Manik, Blackgram(Variety Prasad, pheromone trap) & Green Gram(Variety TARM-1, pheromone traps) after paddy sowing with seed-cum-fertilizer drill, IPM practice in Sonepur KVK.. 134 farmer has benefited and 46.5 ha area was covered. 2.33 to 4.68 BCR ranged was recorded in NICRA villages.

KVK	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses)	No. of farmers	Area (ha)	Measurable indicators of output*	Economics of demonstration (Rs./ha)			
						Gross Cost	Gross Return	Net Return	BCR
Kendrapara	Zero tillage technology	Power Tiller	100	30		13719	64246	48712	4.68
Sonepur	Maize in ridge & furrow method of planting	Maize seed (MH9468) IPM	5	2.5	23.4qtl/ha	8700	25300	16600	2.9
Sonepur	Cowpea with line sowing	Cowpea(variety Utkala manik)	7	4	29 qtl/ha	9200	28000	18800	3.04
Sonepur	Greengram after paddy sowing with seed-cum-fertilizer drill, IPM practice	Variety TARM-1, pheromone traps etc.	11	5	5.8qtl/ha	8050	20730	12680	2.57
Sonepur	Blackgram after paddy sowing with seed-cum-fertilizer drill, IPM practice	Variety Prasad, pheromone trap	11	5	4.9qtl/ha	7640	17820	10180	2.33

Intervention V : Artificial ground water recharge

In this intervention Balaghat and Morena KVK **(Madhya Pradesh)** have worked Artificial ground water recharge through De Silting of open Wells to improve irrigation water discharge capacity in Guna KVK, using Sprinkler irrigation in wheat crop in Morena KVK and The site selection for reconstruction and renovation of water harvesting bodies were compelled during the

year while fund has not yet to be released in Tikamgarh. A total 15 Farmers have benefited and 22 ha area covered In NICRA villages.

KVK	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses)	No. of farmers	Area (ha)	Measurable indicators of output*	Economics of demonstration (Rs./ha)			
						Gross Cost	Gross Return	Net Return	BCR
Guna	De Silting of open Wells to improve irrigation water discharge capacity	De Silting of open Wells	5	14	Increase availability of irrigation water	-	-	-	-
Morena	Sprinkler irrigation	Wheat (RV 4106)	10	8	52.4	32400	84600	52200	2.61

In this intervention Kendrapara KVK **(Odisha)** has worked Artificial ground water recharge through using Sprinkle irrigation . A total 18 Farmers have benefited and 4 ha area covered In NICRA villages getting 2.81 BCR ratio.

KVK	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses)	No. of farmers	Area (ha)	Measurable indicators of output*	Economics of demonstration (Rs./ha)			
						Gross Cost	Gross Return	Net Return	BCR
Kendrapara	Sprinkle irrigation	4 sets	18	4		28060	72800	42600	2.81

Intervention VI : Water saving irrigation methods

In this intervention Guna and Tikamgarh KVK **(Madhya Pradesh)** have worked Water saving irrigation methods through Sprinklers irrigation. A total 9 Farmers have benefited and 13 ha area covered In NICRA villages.

KVK	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses)	No. of farmers	Area (ha)	Measurable indicators of output*
Guna	Water saving irrigation system in wheat crop	Sprinkler System	5	5	Increasing irrigated area

KVK	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses)	No. of farmers	Area (ha)	Measurable indicators of output*
Tikamgarh	Sprinklers irrigation		4	8	Yield (q/ha)

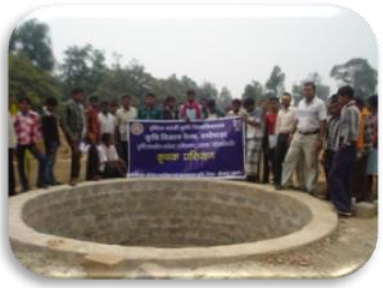
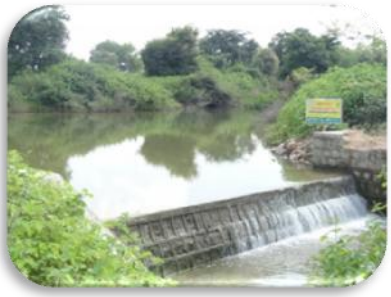
In this intervention Dentewara KVK (**Chhattisgarh**) has worked Water saving irrigation methods using Sprinkler Irrigation demonstrated 2 set (7 nozzle) sprinkler system provided through Custom Hiring Center A total 2 Farmers have benefited and 3 ha area covered In NICRA villages.

KVK	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses)	No. of farmers	Area (ha)	Measurable indicators of output*
Dentewara	Sprinkler Irrigation demonstrated	2 set (7 nozzle) sprinkler system provided through Custom Hiring Center	2	3	Water saving water use efficiency

In this intervention Kendrapara, Sonepur and Jharsuguda KVK (**Odisha**) have worked Water saving irrigation methods using Sprinkler Irrigation demonstrated A total 81 Farmers have benefited and 14.8 ha area covered. 3.06 to 3.5 BCR ranged was recorded in NICRA villages.

KVK	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses)	No. of farmers	Area (ha)	Measurable indicators of output*	Economics of demonstration (Rs./ha)			
						Gross Cost	Gross Return	Net Return	BCR
Kendrapara	Contour farming	Power Tiller	36	7		-	-	-	-
Sonepur	Sprinkler Irrigation	Tomato	5	0.8	208q/ha	39000	121800	82800	3.06
Sonepur	Drip Irrigation	Mango	20	5		-	-	-	-
Jharsuguda	Ridge & furrow practices in Radish	Seeds	20	2	76.8 q/ha	21,500	75,300	53,800	3.5

NRM Activities in NICRA

		
NRM Well Renovation at NICRA Village –Heeranar	**Well Renovation at Dantewara**	**De-silting of open wells Sarkho village of Guna**
		
Renovated pond of Krushnadaspur village	**Farm pond at Sonepur**	**Deep ploughing at Datia**
		
Deep ploughing Tikamgarh	**Check Dam Tikamgarh**	**Farm Pond at Datia**

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.

Silent Achievements of Crop production Intervention under NICRA Villages in Zone VII

- 1253 Farmers benefited using flood / drought / temperature tolerant varieties under crop production and covered 315.9 ha area
- 91 Demonstration Conducted under SRI for water saving in Paddy
- 281 Demonstration Conducted under Advancement of planting dates of rabi crops in areas with terminal heat stress and covered 58.1 ha area
- 139 Demonstration Conducted under Custom hiring centers for timely planting and covered 447.8 ha area

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 wheat, and chickpea. A total 12 farmers benefited and 5 ha area covered under this intervention and resulted BCR ratio 2.2 to 2.7. A total 172 demonstration conducted in **Datia KVK** and covered the area 71.6 ha in Soybean Var. JS 95-60 (Short duration and high yielding variety), Ground nut Var. JGN-3, Sesame Var. JTS-8, Culster Bean Var. HG-563,Gram Wheat and Mustard. BCR ranged from 1.52 to 4.49 in all crops. In **Guna,** 95 demonstrations laid and covered the 38 ha area in different crops viz soybean, Pigeonpea ICPL-88039 and Sesame TKG-8 (using short duration, high yielding variety). BCR ranged from 2.6 to 3.2 in all crops. In **Morena**, 293 demonstrations conducted and covered the area 394.3 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). BCR ranged from 2.4 to 8.0 in all crops. In **Tikamgarh**, 20 demonstrations laid and covered the 8 ha in JS-93-05 and black gram these varieties are short duration and high yielding variety. 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 3.7 in all crops. In **Satna** KVK, 152 demonstrations conducted and covered the 42.5 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. BCR ranged from 1.15 to 3.58 in all crops

Intervention I: Introducing flood / drought / temperature tolerant varieties

KVK	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Area (ha)	Yield (q/ha)		Economics of demonstration (Rs./ha)			
					Demo	Local	Gross Cost	Gross Return	Net Return	BCR
Chhatarpur	drought tolerant Soybean varieties	JS93-05	12	4.8	20	17	10000	40000	30000	4
Chhatarpur	drought tolerant varieties	TPG-41	17	6	11	9.5	11000	33000	22000	3
Chhatarpur	drought tolerant Urd varieties	PU-35	13	5	12	10	7500	30000	22500	4
Chhatarpur	drought tolerant Sesame varieties	JTS-8	27	10	5	4	6000	25000	21000	4.17
Chhatarpur	drought tolerant chickpea varieties	JG-16	40	16	8.96	7.5	6400	25088	18688	3.9
Chhatarpur	drought tolerant Maize varieties	JM-2	13	5.2	11.57	8.63	4600	25100	20500	5.45
Chhatarpur	drought tolerant til varieties	JL-3	15	6	5.02	3.75	5400	15060	9660	2.78
Datia	Improved Soybean Var. JS 95-60	Seed	20	10	1937	1152	15436	54241	38805	3.51
Datia	Improved Ground	Seed	14	5	1569	1048	17635	54915	37280	3.11

KVK	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Area (ha)	Yield (q/ha)		Economics of demonstration (Rs./ha)			
					Demo	Local	Gross Cost	Gross Return	Net Return	BCR
	Nut Variety JGN-3									
Datia	Improved Sesame Variety JTS-8	Seed	25	10	514	370	11883	23141	11258	1.95
Datia	Improved Black Gram Variety – IPU 94-1	Seed	6	2	745	536	13901	29833	15932	2.15
Datia	Improved Hy. Maize var. – MRM-3777	Seed	10	4.8	4663	2377	14274	65282	51008	4.57
Datia	Introduction of Arid Legume Culster Bean Var. HG-563	Seed	5	1	881		17031	105720	88689	6.21
Datia	Timely sown Mustard	Seed	50	22	1475	1100	11941	66375	54434	5.56
Datia	Timely sown Gram. JG-16	Seed	32	12.8	1672	1261	17671	58520	40849	3.31
Datia	Dry Sowing of wheat	Seed	10	4	40.25	34.66	18780	60375	41595	3.21
Morena	Replacement of Long duration Variety by short duration variety	PIGEONPEA (ICPL-88039)	38		23.4	16.8	22500	89900	67400	3.99
Morena	Replacement of Long duration Variety by short duration variety	WHEAT (MP -4010)	25		51.4	43.4	27400	83100	55700	3
Morena	Drought resistant variety	BLACKGRAM (UITRA)	45		9.5	7.6	16000	38100	22100	2.38
Morena	Improved variety Management of phyllody disease, Mid season drought management	TIL (SHEKAR)	10		8.2	5.8	13000	42560	34560	3.65
Morena	Improved variety Management of phyllody disease, Mid season drought management	TIL (JTS-8)	5		7.4	5.14	12200	42920	30720	3.51
Morena	Early maturing variety suitable for rain fed conditions, yellow mosaic disease resistant	Green gram (SML 668)	22		9.8	7.9	16200	37240	21040	2.29
Morena	Evolution of relay cropping in mustard +bar seam suitable for drought condition and mordent resistant disease.	Mustard (NRCDR-2)	19		22.5	18.75	21800	84750	62950	3.88

KVK	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Area (ha)	Yield (q/ha)		Economics of demonstration (Rs./ha)			
					Demo	Local	Gross Cost	Gross Return	Net Return	BCR
Morena	Wilt and heat tolerant variety	Chickpea (JG-11)	12		23	15.8	21000	75200	54200	3.58
Morena	high yielding variety suitable for rain fed condition late Sowing	Chickpea (JG-16)	8		22.4	15.6	21200	73240	52040	3.45
Morena	high yielding variety suitable for rain fed condition late Sowing suitable for pigeon pea, rice wheat cropping system	Wheat (MP-4010)	22		51.4	43.4	27400	83100	55700	3
Morena	high yielding variety suitable for dacha/ soybean and pearl millet - wheat cropping system water management for late sowing minimum tillage and ridge bed planter sowing	Wheat (MP 1203)	47		52.6	46	25900	80380	54480	3.18
Morena	Replacement of low value crop (pearl millet) by high value crop (maize)	MAIZE (PEHM-2)	27		50.3	22	18200	76456	58256	4.2
Morena	Replacement of low value crop	MAIZE (MAHARAJA)	7		48	22	17600	63000	45400	3.58
Morena	Replacement of pearl millet crop by high value crop soybean	SOYBEAN (JS-9560)	25		13.2	18.4	17600	42240	24640	2.4
Morena	Replacement of pearl millet crop by high value crop Gour	RGC 1038	7		22.1	18.4	25000	202000	177000	8.08
Morena	West pond used and economic generate by new crop water chasetnut	WATER CHASETNUT	12		2.5		25000	180000	155000	7.2
Balaghat	Integrated crop management in Chickpea	seed	6	2.5			18000	48000	30000	2.7
Balaghat	Integrated crop management in Wheat	seed	6	2.5			16000	35000	19000	2.2
Tikamgarh	Soybean(short duration variety)	JS-95-60	10	4	22.03	17.31	15947	57278	41331	2.5
Tikamgarh	Black gram (short	Shekhar-2	10	4	6.35	3.24	7600	15500	6400	2.03

KVK	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Area (ha)	Yield (q/ha)		Economics of demonstration (Rs./ha)			
					Demo	Local	Gross Cost	Gross Return	Net Return	BCR
	duration variety)	Seed (@ 06 Kg/acre)								
Guna	Demonstration of drought tolerant short duration variety of Soybean JS 95-60	JS-9560	75	30	19.32	15.28	17785	61824	44039	3. 5
Guna	Demonstration of drought tolerant frost escaping short duration variety of Pigeonpea ICPL-88039	ICPL-88039	7	2.8	14.16	12.64	15829	59460	42652	3.75
Guna	Demonstration of drought tolerant t short duration variety of Sesame TKG-8	TKG-8	13	5.2	7.16	6.4	11254	35800	24546	3.18
Satna	Crop substitution-Paddy substituted with early maturing soybean variety JS-9560	Variety-JS-9560, Seed treatment with Thiomethoxam (1gm/kg seed),	11	5	13.46	10.58	13875	40391	26516	2.91
Satna	Integrated crop management in Sorghum	Variety- PVK-809, organic manure 4 t/ha,, Seed treatment with	5	1.2	7.72	5.85	8100	9339.3	1239.3	1.15
Satna	Crop substitution-paddy substituted with early maturing crop black gram	Variety-IPU-94-1, Seed treatment with Thiomethoxam (1gm/kg seed),	18	5	3.97	2.88	9370	13486.6	4116.67	1.44
Satna	Crop substitution-Sorghum substituted with early maturing crop with Green gram	Variety-Samrat, Seed treatment	20	5	4.07	2.9	8120	13462.3	5342.35	1.66
Satna	Integrated crop management in Sesame	Variety- TKG-306, Seed treatment	11	3.2	4.25	3.19	7999	19145.4	11146.4	2.39
Satna	Integrated crop management in Pigeon pea	Variety- TJT-401,	12	3	7.96	-	10030	25466.6	15436.6	2.54
Satna	Introduction of new crop-okra Variety tolerant to YVMV disease	Variety-VRO-06, seed treatment	4	0.6	88.71	-	18950	87707.5	68757.5	4.63
Satna	Integrated crop management in Mustard	Variety-Pusa tarak,	13	4	9.15	3.38	8870	30182.3	11169.2	3.4
Satna	Integrated crop management in Chickpea	Variety-JG-11, , one spray of	18	5	12.16	8.11	11045	29173.3	19453.3	2.64

KVK	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Area (ha)	Yield (q/ha)		Economics of demonstration (Rs./ha)			
					Demo	Local	Gross Cost	Gross Return	Net Return	BC R
		Trizophos@1 000ml/ha,								
Satna	Integrated crop management in Wheat	Variety- JW-3020,	14	5	24.3	17.29	11632	34025	17830	2.93
Satna	Integrated crop management in Toria	JT-1	10	3	5.05	-	6525	14415	7890	1.99
Satna	Integrated crop management in Barley	K-508	7	1.9	11.79	4.86	9832	14142.8	4310.86	1.44
Satna	Integrated crop management in Fenugreek	PEB	8	0.4	11.9	-	28583	102400	73817	3.58
Satna	Integrated crop management in Pea	Kashi Nandini	1	0.2	85	-	34560	102000	67440	2.95

In **Chhattisgarh, Bilaspur KVK** have worked on introducing drought / temperature tolerant varieties through 22 demonstrations at farmers fields using Indira maheshwari variety for Paddy crops, GW 273 variety for Wheat and covered the area 8.8 ha. **In Bhatapara KVK,** 20 demonstrations conducted under the different crops viz. Rice, Wheat and Gram and 8 ha area covered. BC ratio ranged from 1.28 to 1.82 in all three crops. **In Dantewara KVK,** 147 demonstrations conducted under the different crops viz. Rice, Maize, Gram, Urd, Kodo, Moong, G.nut, Wheat, Brinjal, Cowpea, onion and Okra and covered 29.0 ha area. BC ratio ranged from 1.2 to 3.6 in all crops.

KVK	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Area (ha)	Yield (q/ha)		Economics of demonstration (Rs./ha)			
					Demo	Local	Gross Cost	Gross Return	Net Return	BCR
Bilaspur	Paddy-Indira Maheshwari Drought tolerance	Seed	17	6.8	54.8	45.9	21,000	68,500	47,500	01:03.2
Bilaspur	Wheat-GW 273 Dwarf and Rust resistance,variety responded well in bilaspur region.	Seed	5	2	26	20	16,000	33,410	17,410	01:02.1
Bhatapara	Improved Variety Indira Barani Dhan-1	seed	10	4	32.8	30.2	23000	41984	18984	1.82
Bhatapara	Improved Variety Wheat (Kanchan)	seed	5	2	15.75	12.84	16000	20479	4489	1.28
Bhatapara	Improved Variety Gram (JG-130)	seed	5	2	8.03	7.14	15400	26089	10689	1.69
Dentewara	Improved Variety	Seed	8	5	33.3	19.7	13860	35059	21199	2.5

KVK	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Area (ha)	Yield (q/ha)		Economics of demonstration (Rs./ha)			
					Demo	Local	Gross Cost	Gross Return	Net Return	BCR
	Rice (Samleshwari)									
Dentewara	Improved Variety Rice (MTU1010)	Seed	13	5	34	21.5	13860	35721	21861	2.5
Dentewara	Improved Variety Rice (MTU 1001)	Seed	12	5	39	26.6	15015	41013	25998	1.5
Dentewara	Improved Variety Maize JM-216	Seed Fertilizer	23	5	32.76	19.53	10920	24570	13650	2.2
Dentewara	Improved Variety Maize	Seed Fertilizer	4	1	8.1	4.6	13650	45045	31395	3.3
Dentewara	Improved Variety Ragi (GPU-28)	Seed Fertilizer	9	1	16.2	9.3	8190	29295	21105	3.5
Dentewara	Improved Variety Kodo (JK-41)	Seed Fertilizer	4	1	14.9	8.7	8610	31311	22701	3.6
Dentewara	Improved Variety Moong (Hum-6)	Seed Fertilizer	4	1	3.4	1.8	14175	19057	4882	1.3
Dentewara	Improved Variety Field pea (Prakash)	Seed Fertilizer	9	2	5.9	3.5	11865	14962	3097	1.2
Dentewara	Improved Variety Wheat (GW-273)	Seed Fertilizer & Pesticide	3	2	14.2	7	14700	21849	7149	1.4
Dentewara	Improved Variety Tomato (Laxmi)	Seed	14	0.2	228	110.2	39900	114450	74550	2.8
Dentewara	Improved Variety Brinjal (Muktakeshi)	Seed Fertilizer & Pesticide	15	0.2	204	144	36792	102375	65583	2.7
Dentewara	Improved Variety Cowpea (Gomti)	Seed Fertilizer & Pesticide	19	0.2	117	71.9	33600	94080	60480	2.8
Dentewara	Improved Variety Onion (Nasik lal)	Seed Fertilizer & Pesticide	5	0.2	190	98.5	36750	133696	96946	3.6
Dentewara	Improved Variety Okra (Arka anamika)	Seed Fertilizer & Pesticide	5	0.2	61.5	37.2	21525	62475	40950	2.9

In **Odisha, Ganjam KVK,** 90 demonstrations conducted under the different crops viz. Rice, Green gram, G.nut and Black gram and 38.0 ha area covered. BC ratio ranged from 2.13 to 2.97 in all three crops. **Sonepur KVK** , 25 demonstrations conducted under the Rice crops and 10.0 ha area covered. BC ratio observed 1.9.**In Jharsuguda KVK,** 20 demonstrations conducted under the Rice crops and 2.0 ha area covered. BC ratio observed 2.0. **In Kendrapara KVK,** 10 demonstrations conducted under the Rice crops and 2.0 ha area covered using Swarna Sub-1.

KVK	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Area (ha)	Yield (q/ha)		Economics of demonstration (Rs./ha)			
					Demo	Local	Gross Cost	Gross Return	Net Return	BCR
Ganjam	Draught resistant Paddy Var. Khandagiri	Seeds	40	20	27.4	22.6	12450	27400	14950	2.2
Ganjam	Draught resistant Paddy Var. Sahabhagi Dhan	Seeds	15	5	28.8	21.4	13500	28800	15300	2.13
Ganjam	Greengram V ar. *TARM-1*	Seeds	15	5	8.2	5.8	11300	32800	21500	2.94
Ganjam	Groundnut TMV-2	Seed treatment with Rhizobium, Fertilizer dose N:P:K – 20:40:40 kg./ha	10	5	16.8	12.4	18500	50400	33900	2.7
Ganjam	Blackgram Variety- *Prasad*	Seeds	10	3	7.7	4.9	10800	26800	16000	2.48
Sonepur	Drought tolerant variety (Khandagiri, lalat, Udaygiri, Kalinga3i,) with INM, IPM in paddy	Variety Khandagiri, biofertilizer, IPM	25	10	48.1	38.3	15200	32400	17200	2.13
Jharsuguda	Varietal upland paddy replacement (Var.Sahabhagi)	seeds	20	2	28.5	22.4	12,500	28,600	16,100	2.2

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

In this intervention **In Guna KVK**, 60 demonstrations conducted under different fruit crops and 24 ha area covered and BC ratio observed ranged from 2.93 to 5.75. **In Morena KVK,** 22 demonstrations conducted under wheat in rice-wheat cropping system using zero till seed drill and covered 22.0 ha area. 2.98 BC ratio was observed. **Satna 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) Mustard, Gram and Wheat crops at farmers fields . A total 33 farmers benefited and 12 ha area covered under this intervention and resulted BCR ratio ranged from 1.85 to 2.31.

KVK	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Area (ha)	Yield (q/ha)		Economics of demonstration (Rs./ha)			
					Demo	Local	Gross Cost	Gross Return	Net Return	BCR
Guna	Demonstration of Heat	JG-130	30	12	22.5	15.8	15799	67500	40301	4.27

KVK	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Area (ha)	Yield (q/ha)		Economics of demonstration (Rs./ha)			
					Demo	Local	Gross Cost	Gross Return	Net Return	BCR
	tolerance short duration Gram variety JG-130									
Guna	Demonstration of Heat tolerant , early duration suitable variety for limited irrigated Wheat JW-3020	JW-3020	20	8	43.4	37.5	22174	65100	42926	2.93
Guna	Demonstration of Multicut high yielding fodder variety of Berseem JB-5	JB-5	10	4	187.9	132.3	11430	65765	54335	5.75
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	22	51.4	43.4	27400	83100	55700	3
Satna	Improved Varity Mustard	Varuna	10	4	4.4	3.64	6900	14520	7620	2.1
Satna	Improved Varity Gram	Chani	12	4	9.18	8.06	9550	22020	12470	2.31
Satna	Improved Varity Wheat	Kathia	11	4	13.77	11.91	10440	19281.82	8842	1.85

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 variety. A total 5 demonstration have conducted and 2 ha area covered in NICRA villages and BCR ratio 2.9 obtained by this technology.

KVK	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Area (ha)	Yield (q/ha)		Economics of demonstration (Rs./ha)			
					Demo	Local	Gross Cost	Gross Return	Net Return	BCR
Bilaspur	Gram-JG 11 Medium seed,spreding type,profuse branching after nipping,,wilt resistant.farmers liking	Seed	5	2	9.2	7	9,000	25,760	16,760	2.9

In Odisha, this intervention **In Kendrapara KVK**, 25 demonstrations conducted under black gram and green gram and 5.0 ha area coveredand 2.08 BC ratio was observed in both crops. **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 etc. 135 demonstrations conducted under the different crops viz. black and green gram, Maize, water melon, Cowpea, okra and pumpkin and 15.1 ha area covered. BC ratio ranged from 2.09to 4.03 in all crops.

KVK	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Area (ha)	Yield (q/ha)		Economics of demonstration (Rs./ha)			
					Demo	Local	Gross Cost	Gross Return	Net Return	BCR
Kendrapara	Improved cultivation practices of green gram (var. Tarm-1)	Tarm-1 and paper mill sludge @ 5q per ha	10	2	7.3	6	9000	18750	9750	2.08
Sonepur	Improved cultivation practices of Greengram	Variety TARM-1, IPM scheduled	10	2.5	4.1	3.7	7500	15700	8200	2.09
Sonepur	Improved cultivation practices of Blackgram	High yielding variety (Prasad), IPM schedule	11	2	5.5	4.5	5000	15800	10800	3.16
Sonepur	Improved cultivation practices of Maize	Variety MH 9468	10	2	28.5	19.5	16500	34500	18000	2.09
Sonepur	Improved cultivation practices of Okra	Variety BSS893	10	1	118.6	84.8	18400	58100	39700	3.1

KVK	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Area (ha)	Yield (q/ha)		Economics of demonstration (Rs./ha)			
					Demo	Local	Gross Cost	Gross Return	Net Return	BCR
Sonepur	Improved cultivation practices of Pumpkin	Variety Guhama (IMP)	5	0.4	350	260	15480	55728	40248	3.6
Sonepur	Improved cultivation practices of Bittergourd	Variety Palee F1	10	1	115	85	14500	47600	33100	3.28
Sonepur	Improved cultivation practices of Tomato	High yielding varieties, biofertilizers & need based IPM scheduled	8	1	210	150	48000	185180	137180	3.85
Sonepur	Improved cultivation practices of Cabbage	High yielding varieties, biofertilizers & need based IPM scheduled	10	1	230	165	49500	180760	131260	3.65
Sonepur	Improved cultivation practices of Onion	Variety Prema178	10	0.8	130	98	47200	190500	143300	4.03
Sonepur	Improved cultivation practices of Brinjal	High yielding varieties, biofertilizers & need based IPM scheduled	6	0.8	190	137	45800	155000	109200	3.38

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) rice crops at farmers fields . A total 6 demonstration conducted and covered 2.5 ha area under this intervention and resulted BCR ratio 1.66. **In Morena KVK,** 12 demonstrations conducted under Paddy (Pusabasmathi-1) Demonstrations Resulted BC ratio 4.07 was obtained in paddy crops. **In Tikamgarh KVK,** 5 demonstrations conducted under Paddy (JRH-201) Demonstrations Resulted BC ratio 4.07 was obtained in paddy crops. **In Satna KVK,** 17 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 4.4 ha area. BC ratio was observed 1.95 in paddy crops.

KVK	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Area (ha)	Yield (q/ha)		Economics of demonstration (Rs./ha)			
					Demo	Local	Gross Cost	Gross Return	Net Return	BCR
Morena	SRI, aerobic, direct seeding)	PADDY (PUSABASMATHI -1)	12		48.5	20	22600	92150	69550	4.07
Balagart	Paddy - 1010	seed	6	2.5			21,000	57750	36750	1.66
Tikamgarh	SRI	JR -201 @ seed 02 Kg/acre)	5	2	34.18	18.27	19500	51270	31770	2.62
Satna	Introduction of new variety in Direct seeding	Variety- JR-201, organic manure 4t/ha,	17	4.4	24.13	13.11	14200	27749	13549	1.95

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. 17 demonstrations conducted under paddy and wheat using direct seeding method and covered 6.8 ha area. BC ratio ranged 2.3 to 2.8 in paddy and wheat crops.

KVK	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Area (ha)	Yield (q/ha)		Economics of demonstration (Rs./ha)			
					Demo	Local	Gross Cost	Gross Return	Net Return	BCR
Bilaspur	SRI cultivation of Indira Maheshwari under SRI.Reduced labour cost and increased average yield.	Seed	17	6.8	59.7	48.9	21,000	68,500	47,500	3.2

In Odisha this intervention **Kendrapara KVK**, 34 demonstrations conducted under paddy using SRI method and covered 6.5 ha area.

Intervention IV: Frost management in horticulture through fumigation

In this intervention **Guna KVK (Madhya Pradesh)** have worked on frost management in horticulture through Spray of wettable sulphur @ 0.3% at flowering and seed formation stage (70 & 90 DAS) in arhar. 4 demonstrations conducted and covered 2 ha area. Demonstrations Resulted 1.75 BC ratio in paddy. **Morena KVK**, 5 demonstrations conducted and covered 2.5 ha area.

KVK	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Area (ha)	Yield (q/ha)		Economics of demonstration (Rs./ha)			
					Demo	Local	Gross Cost	Gross Return	Net Return	BCR
Guna	Spray of wettable sulphur @ 0.3% at flowering and seed formation stage (70 & 90 DAS)	RCR-436	4	2	19.5	17.3	21230	107250	86020	5.05
Morena	Irrigation technology and Frost management by fumigation	Guava (GW-27) Lemon (kagji) ,Anola	5	2.5	-	-	-	-	-	-

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. 10 demonstrations conducted under different crops viz. chilli and tomato and covered 2 ha area. BC ratio ranged from 5.75 to 8.26 in different crops. In **Guna KVK** 7 demonstrations conducted under Nutritional garden and covered 0.28 ha area. In **Tikamgarh KVK** 20 demonstrations conducted under Nutritional garden and covered 6.0 ha area.

KVK	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Area (ha)	Yield (q/ha)		Economics of demonstration (Rs./ha)			
					Demo	Local	Gross Cost	Gross Return	Net Return	BCR
Datia	Improved Chilli Var. Kashi Anmol	Seed	5	1	192	162	26750	153760	127010	5.75
Datia	Improved Tomato Vari Kashi Visesh	Seed	5	1	299	228	36200	299000	262800	8.26
Guna	Nutritional garden		7	0.28	-	-	-	-	-	-
Tikamgarh	Paddy & Horticulture crop	Seedling\saplings	20	6	-	-	-	-	-	-

Intervention VI: Custom hiring centers 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. 22 demonstrations conducted and 3.18 BC ratio was observed . In **Guna KVK** 106 demonstrations conducted and covered 443 ha area.

KVK	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Area (ha)	Yield (q/ha)		Economics of demonstration (Rs./ha)			
					Demo	Local	Gross Cost	Gross Return	Net Return	BCR
Guna	Custom hiring for timely operations	MB Plough, Hand wheel hoe, Seed - cum – Fertilizer drill	106	443	-	15710 Revenue generated	-	-	-	-
Morena	Use in zero till seed drill sowing method	Wheat (MP-1203)	22		52.6	46	25900	80380	54480	3.18

In Chhattisgarh , Bilaspur KVK have worked on custom hiring centre Seed drill Reduced land preparation period for wheat cultivation after long duration paddy and moisture conservation for rabi crop. 1 demonstrations conducted and covered 0.8 ha area and resulted 2.2 BC ratio

KVK	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Area (ha)	Yield (q/ha)		Economics of demonstration (Rs./ha)			
					Demo	Local	Gross Cost	Gross Return	Net Return	BCR
Bilaspur	Seed drill Reduced land preparation period for wheat cultivation after long duration paddy and moisture conservation for rabi crop	Seed + Seed Drill	1	0.8	27	19	16,000	34,695	18,695	2.2

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 2.3 BC ratio. **Kendrapara 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 2.3 BC ratio

KVK	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Area (ha)	Yield (q/ha)		Economics of demonstration (Rs./ha)			
					Demo	Local	Gross Cost	Gross Return	Net Return	BCR
Kendrapara	Line sowing of paddy	Seed cum fertilizer drill	5	2	47.2	38.6	14850	34180	19330	2.3
Sonepur	Line sowing of paddy	Seed cum fertilizer drill	5	2	47.2	38.6	15000	34500	19500	2.3

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

In this intervention **In Morena KVK**, 4 demonstrations conducted under Soybean + Maize 2:1inter crop and covered 2 ha area. Demonstrations resulted BC ratio 3.47 in intercropping systems and 5 demonstrations conducted under GOUR + MAIZE 2:1 inter crop. Demonstrations resulted BC ratio 7.8 in intercropping systems **In Satna KVK,** 42 demonstrations conducted in different crops viz. Jowar- PVK-809 + Pegion pea – TJT-401 (4:2), Chickpea-JG-11 + Mustard-PusaTarak (6:2) and Wheat-JW3020 + Mustard-PusaTarak (6:2) all seed treatment with Carbendazim 2.5gm/kg seed, and covered 14.4 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 0.7 to 1.88 in different crops.

KVK	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Area (ha)	Yield (q/ha)		Economics of demonstration (Rs./ha)			
					Demo	Local	Gross Cost	Gross Return	Net Return	BCR
Morena	intercropping systems	Soybean + Maize 2;1	4	2	16.4	10.52+ 38.20	23200	80584	57384	3.47
Morena	intercropping systems	Gour + Maize 2;1	5		17.6	12.4+32. 4	30000	234000	204000	7.8
Satna	intercropping systems	Intercropping system ,Jowar-PVK-809 + Pegion pea – TJT-401 (4:2)	11	4	6.03 + 2.26	5.5	11425	15164	3739.09	1.33
Satna	intercropping systems	Intercropping system ,Chickpea-JG-11 + Mustard-Pusa Tarak (6:2)	17	5.4	6.3 + 1.16	5.1 + 0.88	10358	20520	10162	1.98
Satna	intercropping systems	Intercropping system Wheat-JW-3020 + Mustard-Pusa Tarak (6:2 seed treatment with Carbendazym	14	5	17.12 + 0.95	11.7 + 0.74	12125	26824.2	14699.2	2.21

		2.5gm/kg seed, NPK 60:20:20 Kg/ha, organic manure 2t/ha, spray of Chloropyriphos@2 000 ml/ha								

Intervention VII: Others

In this intervention **In Bilaspur KVK**, 5 demonstrations conducted under Arhar-Upas 120 (Pre-Rabi) Short duration arhar did not disturbed the rabi and Nitrogen fixation in the soil.. Demonstrations resulted BC ratio 1.03.

KVK	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Area (ha)	Yield (q/ha)		Economics of demonstration (Rs./ha)			
					Demo	Local	Gross Cost	Gross Return	Net Return	BCR
Bilaspur	Arhar-Upas 120 (Pre-Rabi)Short duration arhar	Seed	5	2	8	6.9	10,000	30,800	20,800	3.0

In Odisha, In Ganjam KVK, 94 demonstrations conducted under Application of Boron & Zinc in Paddy Var. MTU-1010, Application of Pretilachlor in Paddy, Demonstration on HYV of Maize HYV of Maize - Super-36, Oyster mushroom (Pleurotus sajarcaju) cultivation, Vermi composting and covered 140 ha area Demonstrations resulted BC ratio ranged from 1.5 to 3.0. **In Kendrapara KVK**, 95 demonstrations conducted under Demonstration dhanicha cultivation, Green Manuring in Kharif Paddy, Bio-control measures to minimize less application of pesticides, IPM for control of fruit and shoot borer in Brinjal, Crop management practices to avoid more loses of crop yield , Pointed gourd pointed gourd bitter gourd, watermelon and covered 18.5 ha area. Demonstrations resulted BC ratio ranged from 1.5 to 3.0. **In Jharsuguda KVK**, 40 demonstrations conducted under Crop production in moisture stress condition Hybrid Maize + Cowpea, Disease & pest tolerant varieties of crops, Varietal replacement disease & pest tolerant varieties of paddy and covered 9.4 ha area. Demonstrations resulted BC ratio ranged from 3.0 to 5.1.

KVK	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Area (ha)	Yield (q/ha)		Economics of demonstration (Rs./ha)			
					Demo	Local	Gross Cost	Gross Return	Net Return	BCR
Ganjam	Application of Boron & Zinc in Paddy Var. MTU-1010	Seeds and Micronutrient	37	15	42.2	34.1	18200	42200	24000	2.31
Ganjam	Application of Pretilachlor in Paddy	Weedicide	24	10	32.2	28.6	14600	32200	17600	2.2
Ganjam	Demonstration on HYV of Maize HYV of Maize- *Super-36*	Seeds	14	5	47.5		18300	41800	23500	2.28
Ganjam	Oyester mushroom (*Pleurotus sajarcaju*) cultivation	Inputs i.e. Spawn bottles/Polythene bag (beds)	10	100	1.8	1.2	30	90	60	3
Ganjam	Vermi composting	E. foetida (pits)	10	10	1.4		900	1350	450	1.5
Kendrapara	Demonstration dhanicha cultivation, Green Manuring in Kharif Paddy	Sowing of dhaincha seed @25Kg/ha and incorporating at six week stage	15	5	-	-	-	-	-	-
Kendrapara	Bio-control measures to minimize less application of pesticides, IPM for control of fruit and shoot borer in Brinjal	Installation of pheromone traps @20 no per ha. of land and cartap hydrochloride 2gm/lir	30	6	342	274	-	-	141000	2.41
Kendrapara	Crop management practises to avoid more loses of crop yield , Pointed gourd	Foliar application of micronutrient in pointed gourd and established honey bee unit for more pollination	5	3	252	19.43	100000	252000	152000	2.52
Kendrapara	Demonstration on application of hormone Tricontanol in watermelon	Application of Tricontanol on watermelon (Bejo-2005	5	1.5	265	195	75000	159000	84000	2.12
Kendrapara	Demonstration of Ethrel in bitter	Distribution of Ethrel	5	1,2	95	72	40000	95000	55000	2.37

KVK	Technology demonstrated	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Area (ha)	Yield (q/ha)		Economics of demonstration (Rs./ha)			
					Demo	Local	Gross Cost	Gross Return	Net Return	BCR
	gourd									
Kendrapara	Demonstration on cultivation oyster mushroom in backyard	Distribution of oyster mushroom spawn to SHG	30		1.7		50	153	103	3.1
Kendrapara	Crop management practises to avoid more loses of crop yield, IPM for Leaf curling of pointed gourd	Foliar spraying of Imida clopid 17.8 SL @ .5ml per liter of water	5	3	245	207	100000	245000	145000	2.45
Jharsuguda	Crop production in moisture stress condition Hybrid Maize+Cowpea	seeds	20	3	82.5 q/ha of green cobs+35.8 q cowpea	58.5 q/ha green cobs+28.2 q cowpea	21,500	110000	88,500	5.1
Jharsuguda	Disease & pest tolerant varieties of crops, Varietal replacement disease & pest tolerant varieties of paddy	seeds	20	6.4	38.3	32.4	12,800	39,000	26,200	3

Crop Production Activities in NICRA

		
Black gram variety Shekhar-2 at Tikamgarh	**Sahbhagi at Ganjam KVK**	**Paddy J.R. 201 SRI method at Tikamgarh**
		
Brinjal at Sonepur	**Urd IPU94-1 at Datia**	**Wheat Sowing with zero tillage at Satna**
		
Paddy at Dantewara	**Arhar Crop Upas-120 at Bilaspur**	**Jowar at Jharsuguda**

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.

Silent Achievements of Livestock and Fisheries Intervention under NICRA Villages in Zone VII

- 313 Demonstration Conducted under Improved fodder/feed storage methods and covered 632 animals
- 1757 Demonstration Conducted under Preventive vaccination and covered 2597 animals
- 104 Demonstration Conducted under Management of fish ponds / tanks during water scarcity and excess water
- 194 Demonstration Conducted under Improved shelters for reducing heat stress in livestock and covered 232 animals
- 87 Demonstration Conducted under Use of community lands for fodder production during droughts / floods and covered 59.87 ha

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

In this intervention **KVK Guna and Morena (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. 10 demonstrations conducted and covered 4 ha area. Demonstrations were resulted maximum percent increased Green fodder yield in berseem crop and BC ratio was observed 5.75. **In Morena KVK**, 201 demonstrations conducted under berseem and oat crop and covered 163 ha area. Demonstrations resulted BC ratio ranged 2.89 to 3.68.

KVK	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)			
					Demo	Local		Gross Cost	Gross Return	Net Return	BCR
Guna	Demonstration of Multicut high yielding fodder crop variety of Berseem JB-5	Green Fodder	10	4	187.9	132.3	42.0	11430	65765	54535	5.75
Morena	fodder production	Barseem	145	135	370	310	19.4	20400	90000	69600	4.41
Morena	fodder production	Oat	56	28	360	240	50.0	21000	75000	54000	3.57

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.

In **Odisha,** this intervention **Sonepur KVK** have worked on use of community lands for fodder production during droughts / floods through demonstrations under hybrid Napier cultivation. 5 demonstrations conducted under maize crop and covered 1.2 ha area. And **Kendrapara KVK** Conducted 5 demonstrations under Fodder development for supplementary feed and covered the area 1.0 ha.

KVK	Technology demonstrate	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Unit/ No. / Area (ha)	Measurable indicators of output*		% increase
					Demo	Local	
Sonepur	Production of hybrid napier	Variety	5	1.2	-	-	-
Kendrapara	Fodder development for supplementary feed	Co-3	5	1	2000	2500	25

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 Storage Technology fodder Feed. 10 demonstrations conducted under mineral mixture and covered 300 units. **In Morena KVK**, 250 demonstrations conducted under dry fodder 3-4 kg Green Fodder: 20-30 kg Concentrate: 1.5-2.0 kg Mineral Mix.: 20-40g There is a requirement of 500 g and 400 g concentrate for per litre milk production in buffalos and cows respectively and covered 250 units. Demonstration resulted BC ratio was observed 2.92.

KVK	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)			
					Demo	Local		Gross Cost	Gross Return	Net Return	BCR
Guna	Storage Technology fodder Feed	Wheat Straw	10	300				-	-	-	-
Morena	Augmentation of Fodder production and conservation	A healthy animal requires- Dry Fodder:.	250	250	8	5		9860	28800	18940	2.92

In **Odisha,** this intervention **Ganjam KVK** has worked on improved fodder/feed storage methods through Supplementary feed. 18 Farmers group have formed and 62 ha area covered in NICRA villages. **Kendrapara KVK** has worked on improved fodder/feed storage methods through Supplementary feed mineral mixture. 25 Farmers group have formed and 10 ha area

covered in NICRA villages. **Sonepur KVK** has worked on improved fodder/feed storage methods through Hay making structures. 10 Farmers group have formed and 10 ha area covered in NICRA villages.

KVK	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)			
					Demo	Local		Gross Cost	Gross Return	Net Return	BCR
Ganjam	Supplementary feed	Mineral mixture	18	62	1388	1120	23.92	19500	34700	15200	1.78
Kendrapara	Supplementary feed	Mineral mixture	25	10	1471	928	32	18265	36775	18510	2
Sonepur	Hay making structure	Cement rings, hybrid napier	10	10				-	-	-	-

Intervention III: Preventive vaccination

In this intervention **Datia KVK (Madhya Pradesh)** have worked on preventive vaccination through demonstration under animal vaccination programme 227 demonstrations conducted and covered 227 units and De-worming in Cow, Buffalo, Goat 200 demonstrations conducted and covered 200 units. **Guna KVK (Madhya Pradesh)** have worked on preventive vaccination through demonstration under animal vaccination programme. 40 demonstrations conducted and covered 130 units. **In Morena KVK**, 256 demonstrations conducted and covered 278 units. Demonstration resulted BC ratio was observed 1.77. **In Tikamgarh KVK**, 500 demonstrations conducted. **In Satna KVK**, 31demonstrations conducted and covered 511 units.

KVK	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)			
					Demo	Local		Gross Cost	Gross Return	Net Return	BCR
Datia	Vaccination F.M.D., H.S. In Cow, Buffalo, Goat	Vaccines	227	227				-	-	-	-
Datia	De-worming in Cow, Buffalo, Goat	De wormer	200	200				-	-	-	-
Guna	Training animal disease vaccination and management	Dairy animals- FMD and Galgontu disease vaccination	40	130	7	4	42.85	9200	25200	16000	2.73
Morena	Training animal disease vaccination and management	Dairy animals – FMD and HS – and Galgontu disease vaccination	256	278	7	4	42.85	9200	25200	16000	2.73

KVK	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)			
					Demo	Local		Gross Cost	Gross Return	Net Return	BCR
Tikamgarh	Animal health camp & vaccination (3 time in a year)	Vaccine and other mediation	500					-	-	-	-
Satna	Vaccination and animal health camp	Vaccines(PPR, FMD, Anthrax, HS,)	31	511			76.46	-	-	-	-

In **Chhattisgarh,** this intervention **In Bhatapara KVK** have worked on preventive vaccination through Castration 13 demonstrations conducted and 96 demonstrations conducted by Feed Enrichment. **Dantewada KVK** have worked on preventive vaccination through Animal Health Camp.. 37 Farmers have benefited and covered 250 animals.

KVK	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)			
					Demo	Local		Gross Cost	Gross Return	Net Return	BCR
Bhatapara	Castration		13		-	-	-	-	-	-	-
Bhatapara	Feed Enrichment	Vardhan 50gm ,Purak 50gm	96		-	-	-	-	-	-	-
Dentewara	Animal health camp	Coverage with Veterinary Department	37	250	-	-	-	-	-	-	-

In **Odisha,** this intervention **Ganjam and Kendrapara KVK** have worked on preventive vaccination through Animal health camp with Veterinary Department 160 and 125 demonstrations conducted and covers 422 and 151 units. **Sonepur KVK** have worked on preventive vaccination through Vaccination of goats and cow.. 50 Farmers have benefited and covered 300 goats and 150 cows.

KVK	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)			
					Demo	Local		Gross Cost	Gross Return	Net Return	BCR
Ganjam	Animal Health Camp	Convergence with Veterinary Department	160	422	-	-	-	-	-	-	-
Kendrapara	Animal Health Camp	Convergence with Veterinary Department	125	151	-	-	-	-	-	-	-
Sonepur	Vaccination of goat and cow 300 Goat + 150 Cow	Vaccine, mineral mixture & vitamins etc	50	450	-	-	-	-	-	-	-

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). 160 Farmers have benefited and covered 230 units.

KVK	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)			
					Demo	Local		Gross Cost	Gross Return	Net Return	BCR
Morena	Training animal camp and new brides cross available	Feeding should be minimized during winter. Instead of two only one dose should be applied.	160	230				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. 24 farmers have benefited and 72.2percent increased output in birds. **Ganjam KVK** has 10 farmers benefited and 75 2percent increased output in birds.

KVK	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)			
					Demo	Local		Gross Cost	Gross Return	Net Return	BCR
Kendrapara	Demonstration on Semi intensive poultry farming	Distribution of Blackrock and Banaraja among SHG members	24	1	2	1	72.2	400	1200	800	3
Kendrapara	Demonstration on rearing of duckling in pond	Distribution of ducking Khaki Campbell and white runner among SHG members			3.5	2	75	150	500	350	3.3
Ganjam	Demonstration Poultry breed Vanaraj	Vanaraj	10	1	2.8	1.6	75	210	620	410	2.95

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 3.4. **In Morena KVK,** 12 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 5.6 ha area. Resulted 76.50 percent increased the yield and obtained BC ratio 6.0. **Tikamgarh KVK** 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 3.4.

KVK	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)			
					Demo	Local		Gross Cost	Gross Return	Net Return	BCR
Guna	Fish farming	Rohu , Katla , Mrigala	1	0.4	4.6	2.45	46.73	10800	36800	26000	3.4
Morena	Training Maintenance of fish pond, proper dose food ,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.	12	5.6	150	85	76.50%	25000	150000	125000	6
Tikamgarh	Fishery	Breed of Catla, Rohu, Grass carp, common carp	1	1.6	6	-	100	14800	50000	35200	2.37

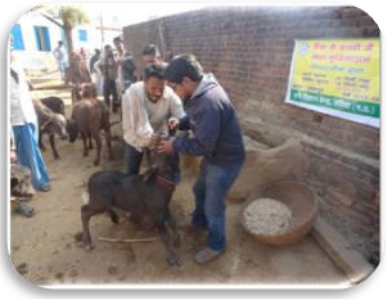
In **Chhattisgarh,** this **intervention Bilaspur KVK** has worked on management of fish ponds / tanks during water scarcity and excess water through 15 SHGs group (distribution of fingerlings to women and old people SHG for the purpose of additional income by week section of society). **Dantewara KVK** has 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	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)			
					Demo	Local		Gross Cost	Gross Return	Net Return	BCR
Dentewara	Renovation and digging of ponds for Irrigation cum fish cultivation	Labour payment	15	3	1-Fish production/ha, 2-Increase in Irrigated area						

In **Odisha,** this intervention **Sonepur KVK** has worked on management of fish ponds / tanks during water scarcity and excess water through psciculture. 25 demonstrations conducted and covered 2.0 ha. **In Kendrapara KVK**, 25 demonstrations conducted under improved pisciculture and covered 2.0 ha. Resulted increased 42.8 percent yield.

KVK	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)			
					Demo	Local		Gross Cost	Gross Return	Net Return	BCR
Kendrapara	Demonstration on Indian major carp	Releasing of fingerling in the community tank (20 farmers)	25	2	20	14	42.8	90000	200000	110000	2.2
Sonepur	Pissiculture	Fish yearlings of Catla:Rohu:Mrigal:Common crapv were distributed in 2 farm pond	35	2	30	20	50	65000	200500	135500	3.08

Livestock Activities in NICRA

		
Animal Health Camp, Bhatapara KVK	**Fish Culture in Pond at Tikamgarh**	**Animal Health Camp at Kanti Village at Tikamgarh**
		
Animal Health Camp, at Datia	**Duckling in Farm pond at Kendrapara**	**Feeding of vitamin and mineral mixture for milk production**
		
Animal camp at NICRA KVK Jharsuguda	**Vaccination programme at NICRA KVK Morena**	**Animal camp at NICRA KVK Morena**

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.

Silent Achievements of Institutional Intervention under NICRA Villages in Zone VII

- 2125 Farmers benefited under Climate literacy through a village level weather station
- 470 Farmers benefited under Collective marketing
- 594 Farmers benefited under Commodity groups
- 167 Farmers benefited under Fodder bank
- 556 Farmers benefited under Seed bank

Intervention I: Seed Bank

In seed bank intervention **Morena KVK (Madhya Pradesh)** have worked.260 demonstrations conducted under participatory seed production program on Pigenpea and wheat crop and covered 125 ha area. **In Guna KVK,** 10 demonstrations conducted under participatory seed production program on soybean and covered 62.5 ha area.

KVK	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			
Guna	Seed bank	Soybean	50q.	1 group has developed	JS 95-60	10	62.5
Morena	Seed bank	Training on Commercial seed production in Pigenpea ,Wheat	Rs. 5.00 lakhs / year	One society had been developed a seed processing unit.	ICPL -88039 , Wheat (MP-4010) & Wheat (RV -4106) , MP-1203	260	125

In Chhattisgarh, Dantewara KVK have worked on seed bank intervention. 16 demonstrations conducted under participatory seed production program on Paddy, Green gram, Kodo, Kutki and Ragi crop and covered 5.7 ha area.

KVK	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			
Dantewara	Seed bank	Rice (Samleshwari)	20	Training organized for seed production	Seed-Rice (Samleshwari) and fertilizer	4	0.8
Dantewara	Seed bank	Rice (MTU-1010)	10	Training organized for seed production	Seed-Rice (MTU-1010) and fertilizer	2	0.4
Dantewara	Seed bank	Green gram (Hum-6)	5	Training organized for seed production	Seed -Green gram (Hum-6)	5	2.5
Dantewara	Seed bank	Ragi (GPU-28)	1.5		Seed-Ragi (GPU-28) and fertilizer	3	1
Dantewara	Seed bank	Kodo (JK-41)	1.5		Seed- Kodo (JK-41) and fertilizer	2	1

In Odisha, Ganjam KVK has worked on seed bank intervention. 95 demonstrations conducted under participatory seed production program on Paddy crop and covered 42 ha area. **Kendrapara KVK** has worked on seed bank intervention. 143 demonstrations conducted under participatory seed production program on Paddy crop and covered 60 ha area. **Sonepur KVK** has worked on seed bank intervention. 20 demonstrations conducted under participatory seed production program on Paddy crop and covered 8 ha area.

KVK	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			
Ganjam	Seed bank	Paddy		High Yield seed	Khandagiri, Sahabhagi Dhan	95	42
Kendrapara	Seed bank	Paddy	30kg	High Yield seed	Lalat	143	60
Sonepur	Seed bank	Paddy(khandagiri)		Line sowing,IPM	Line sowing,IPM	20	8

Intervention II: Fodder Bank

In Guna KVK (Madhya Pradesh) has worked on Fodder bank intervention. 10 demonstrations conducted under participatory fodder production program on community lands and covered 83.0 ha area. **In Morena KVK,** 143 demonstrations conducted under Training on Commercial seed production Barseem and covered 85.0 ha area.

KVK	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			
Guna	Fodder bank	Wheat	300q.	1 group has developed	Wheat Straw	10	83
Morena	Fodder bank	Training on Commercial seed production Barseem	Rs. 6.00 lakhs / year	seed production co. societies were registered and working for farming community	Barseem short duration pigeon pea var. ICP-88039, Terminal heat resistant var of wheat RVW-4106	148	85

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. **In Kendrapara KVK,** 5 demonstrations conducted under hybrid Napier grass and covered 30.0 ha area.

KVK	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			
Kendrapara	Fodder bank	Hybrid Napier grass	Crop damaged		Co-3	5	30
Sonepur	Fodder bank	Hybrid napier		Hybrid napier	Hybrid Napier	4	1

Intervention III: Commodity Groups

In Commodity group's intervention **Guna KVK (Madhya Pradesh)** has worked and 10 groups have developed and covered 10 ha area. **In Morena KVK**, 244 farmers grouped with one society under this intervention.

KVK	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			
Guna	Commodity groups	Climate Risk Management Committee	1	1 group has developed	Technical guidance and practices related to Climate Risk Management Committee	10	10

KVK	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			
Morena	Commodity groups	Climate risk management commeity	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	244	-

In Chhattisgarh, Bilaspur KVK have developed one Commodity groups consisting 15 women farmers mushroom cultivation based grouped..

KVK	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			
Bilaspur	Commodity groups	Mushroom Cultivation/Shri lakshmi women SHG for women empowerment and income generation.	1	Establishment of mushroom Production Unit	Spawn,Chemicals and Physical Inputs(Polybags,Drum,Roops etc.)	1 SHG (15 women member)	

In Odisha, In Ganjam KVK have developed Commodity groups. 187 farmers have benefited and covered 92 ha area. **Kendrapara KVK** have developed Commodity groups consisting total 143 farmers Village Climate Risk Management Committee (CRMC): to take up the overall activities of the project grouped. **Sonepur KVK** have developed Commodity groups consisting 10 farmers Vermi compost unit based grouped.

KVK	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			
Ganjam	Commodity groups	6	16	Village Climate Risk Management Committee (CRMC).	All types of help and commodity during disaster collected from different source.	187	92
Kendrapara	Commodity groups	5	25	do	All types of help and commodity during disaster collected from different source.	143	70
Sonepur	Commodity groups	Vermicompost unit	5		Cement rings	10	

Intervention IV: Custom hiring centre

In Madhya Pradesh, Datia **KVK** has worked on Custom hiring centre intervention in which 228 demonstrations were conducted and covered 632 ha area. Also Custom hiring implements were used on rental basis M.B. Plough, Disk Harrow, Rotavator Ferti-seed Drill, Multicrop thresher, Sprinkler set, Diesel pump etc. **In Guna KVK** has worked on Custom hiring centre intervention in which 106 demonstrations were conducted and covered 443 ha area. Also Custom hiring implements were used on rental basis M.B. Plough, Disk Harrow, Rotavator Ferti-seed Drill, Multicrop thresher, Sprinkler set, Diesel pump.

In Morena KVK has worked on Custom hiring centre intervention in which 280 demonstrations were conducted and covered 150 ha area. Also Custom hiring implements were used on rental basis M.B. Plough, Disk Harrow, Rotavator Ferti-seed Drill, Multicrop thresher, Sprinkler set, Diesel pump. **In Balagart KVK** has worked on Custom hiring centre intervention in which 24 demonstrations were conducted and covered 10.3 ha area. Also Custom hiring implements were used on rental basis Paddy reaper. **In Tikamgarh KVK** has worked on Custom hiring centre intervention in which 19 demonstrations were conducted and covered 44 ha area. Also Custom hiring implements were used on rental basis Plough, Sprinkles and Reaper.

KVK	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			
Datia	Custom hiring centre	Soybean, Ground nut, Sesame, Gram, Mustard, Wheat	8 No. (M.B. plough, Leveler, Disc harrow, Rotavator,	Function of groups	Implements	228	632
Guna	Custom hiring centre	MB Plough, Hand wheel hoe, Seed cum Firti –drill, Rotabater, etc.	Rs. 15,710	Technology Demonstrate In Custom hiring	MB Plough, Hand wheel hoe,	106	443
Morena	Custom hiring centre	Zero till seed drill, ridge bed planter, Leveller, M.B.Plough , Sprinkler Set,	-	In-situ moisture conservation And use in difference NICRA activity	Wheat ,Barley, mustard , chickpea ,Green gram ,maize and soybean	280	150
Balagart	Custom hiring centre	Paddy	Rent-/150	Harvesting of paddy by reaper		24	10.3

KVK	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			
Tikamgarh	Custom hiring centre	Plough	25Rs/hour	-	-	13	30
Tikamgarh	Custom hiring centre	Sprinkles	10Rs/hours	-	-	4	8
Tikamgarh	Custom hiring centre	Reapper	200Rs/hours	-	-	2	6

In **Chhattisgarh, Bilaspur KVK** have worked as Custom hiring through custom hiring Reaper was used on rental basis and conducted 10 demonstration on 1.0 ha area. **In Bhatapara KVK** have worked as Custom hiring centre, these centers 2no. of implement , Seed drill cum fertilizer for sowing of Chickpea and zero till Seed cum fertilizer for sowing of wheat and covered 8 ha area covered.

KVK	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			
Bilaspur	Custom hiring centre	1 nos For proper and timely availability of farm equipments to the farmers on justified price in village	11	Running by farmers	Farm Equipments	10	1
Bhatapara	Custom hiring centre	Seed drill cum fertilizer	1	Line sowing in chickpea	Farm Equipments		4
Bhatapara	Custom hiring centre	Zero till seed cum fertilizer	1	Line sowing in wheat	Farm Equipments		4

In **Odisha**, **Ganjam KVK** have worked as Custom hiring centre, these centers implements were used on rental basis like MB plough, Garuda Mini weeder Sprinkler, Power tiller, Power sprayer, Diesel Water pump Set multi crop thresher, leveler, for land preparation and sowing.222 farmers have benefited and covered 78 ha area. **Kendrapara KVK** have worked as Custom hiring centre, these centers implements were used on rental basis like Power tiller, reaper, Power tiller ,Paddy thresher cum winnower, Knapsack Sprayer, etc for spraying and winnowing .330 farmers have benefited and covered 92 ha. **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. 73 farmers have benefited and 54.5 ha cover the area in NICRA village. **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.

KVK	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			
Ganjam	Custom hiring centre	Sprinkler (2 Nos)	Rs. 5/- per pipe Per day	Irrigation	Implements	10	2
Ganjam	Custom hiring centre	Power tiller	Rs.40/- per hour	Ploughing	Implements	84	34
Ganjam	Custom hiring centre	Power sprayer (1 nos.)	Rs. 20/- per hour	Disease control	Implements	25	5
Ganjam	Custom hiring centre	Diesel Water pump Set (2HP)	Rs 20 /- per hour	Irrigation	Implements	32	7
Ganjam	Custom hiring centre	Multi crop thresher cum winnower	Rs. 40/- per hour	Harvesting	Implements	35	18
Ganjam	Custom hiring centre	MB plough	Rs 10 /- per day	Tillage	Implements	18	4
Ganjam	Custom hiring centre	Garuda Mini weeder	Rs 20 /- per hour	Weeding	Implements	18	8
Kendrapara	Custom hiring centre	Sprinkler	Rs. 3/- per pipe per day	Irrigation	Implements	20	5
Kendrapara	Custom hiring centre	Power tiller	Rs.170/- per hour	Ploughing	Implements	50	30
Kendrapara	Custom hiring centre	Power sprayer (2 nos.)	Rs. 5/- per hour	Disease controll	Implements	60	10
Kendrapara	Custom hiring centre	Diesel Water pump Set (3HP)	Rs 10 /- per hour	Irrigation	Implements	50	10
Kendrapara	Custom hiring centre	Diesel Water pump Set (3.5 HP)	Rs 10 /- per hour	Irrigation	Implements	50	10
Kendrapara	Custom hiring centre	Paddy thresher cum winnower	Rs. 100/- per day	Harvesting	Implements	60	7
Kendrapara	Custom hiring centre	Knapsack Sprayer	Rs 20 /- per day	Disease Management	Implements	40	20
Jharsuguda	Custom hiring centre	Power tiller	Rs.350/hr	Ploughing	Implements	20	11
Jharsuguda	Custom hiring centre	Paddy reaper	Rs.350/hr	Reaping paddy	Implements	18	8.5
Jharsuguda	Custom hiring centre	Power sprayer	Rs.50/day	Spraying pesticides	Implements	8	8
Jharsuguda	Custom hiring centre	Thresher	Rs.20/day	Paddy threshing	Implements	15	15
Jharsuguda	Custom hiring centre	Winnower	Rs.20/day	Paddy winnowing	Implements	12	12
Sonepur	Custom hiring centre	M.B.Plough,Rotavator,seed-cum fertilizer		Custom hiring	M.B.Plough,Rotavator,seed-cum		1

KVK	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			
		drill,power weeder,reaper,multicrop thresher,leveller			fertilizer drill,power-weeder,reaper,multi crop thresher,leveller		

Intervention V: Collective marketing

In **Madhya Pradesh, Guna KVK** have worked on Collective marketing. In Collective marketing intervention 45 farmers were benefited and covered 250 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. 350 farmers have benefited and covered 155 ha area.

KVK	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			
Guna	Collective marketing	Soybean, wheat & Coriander	9	Group marketing	Soybean, wheat & Coriander	45	250
Morena	Collective marketing	Maize ,soybean , wheat , Gour , rice ,turmeric and mustard	-	Market facility and high value of input	Maize ,soybean , wheat, barley,rice ,turmeric ,Gour and mustard	350	155

In Odisha, Kendrapara KVK have worked on Collective marketing. In Collective marketing intervention 60 farmers were benefited and covered 50 ha area under these commodities Paddy,Tamato.Pointed gourd,Patato,chilli,Grund nut,Green gram.Black gram

KVK	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			
Kendrapara	Collective marketing	Paddy,Tamato.Pointed gourd,Patato,chilli,Grund nut,Green gram.Black gram		Market facility and high value of input	Paddy,Tamato.Pointed gourd,Patato,chilli, Grund nut,Green gram.Black gram	60	50

Intervention VI: Climate literacy through a village level weather station

In Madhya Pradesh Guna KVK has worked On Climate literacy through a village level weather station. In this intervention Literacy about short duration variety of Soybean to mitigate

late season drought & frost management in Coriander through spraying of Sulpher with Boron 60 farmers benefited . In Morena 2000 farmers benefited using sowing with Zero till seed drill sowing in wheat ,barley and green gram literacy, Maize crop cultivation literacy. In Satna 15 Group discussion conducted using sowing with VRCMC

KVK	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			
Guna	Climate literacy through a village level weather station	Literacy about short duration variety of Soybean to mitigate late season drought & frost management in Coriander through spraying of Sulpher with Boron	1	Technical awareness development	Gram, Wheat & Coriander	60	12
Morena	Climate literacy through a village level weather station	Zero till seed drill sowing in wheat ,barley and green gram literacy, Maize crop cultivation literacy		Technology development		2000	
Satna	Climate literacy through a village level weather station	VRCMC		Group discussion		15	15

In Odisha Kendrapara KVK has worked On Climate literacy through a village level weather station. In this intervention AWS, GPS 50 farmers benefited and covered area 30 ha .

KVK	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			
Kendrapara	Climate literacy through a village level weather station	AWS, GPS	1	Data recording	AWS, GPS	50	30

Institutional Intervention in NICRA

		
Reaper in Custom Hiring Center at Bilaspur	**Thresher in Custom Hiring Center at Dantewara**	**Sowing through Zero seed drill at Bhatapara kvk**
		
Custom hiring centre at Kendrapara	**Custom hiring centre at Balaghat**	**Custom hiring centre at Datia**
		
Sowing of Arhar through Zero seed drill at Morena kvk	**Reaper in Custom Hiring Center at Jharsuguda**	**Thresher in Custom Hiring Center at Datia**

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 3895 farmers benefited through training /Capacity building in the Zone VII during the year 2012-13. Out of 3895 farmers (1646 male and 258 female in M.P, 842 male and 209 female in CG, and 612 male and 328 female in Odisha) during the training, 129 courses were 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. 5130 farmers benefited through 970 farmers Field day, 243 farmers by Animal Health camp, 276 farmers by Soil Health Camp, 21 farmers by Nursery Seedlings, 876 farmers by group discussion and 231 farmers benefited through Exposure Visit in during the year.

Extension activities & Capacity Building in NICRA

		
Farmers Training at NICRA Vill. Dantewra	**Farmers Training at NICRA Vill. Sonepur**	**Woman Farmers Training at NICRA Vill. Kendrapara**
		
Agro Advisory Services At Bhatapara	**Field Day At Bhatapara**	**Training on Soil sample collection NICRA Vill. Datia**
		
Exposure Visit NICRA Villages, Jagdalpur	**Exposure visit of Farmers at IGFRI Jhansi (U.P.)**	**Celebrated Environment day at NICRA Vill. Datia**

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		50	25	250	12
2.	Leveler		02	01	10	05
3.	Disc harrow		60	30	600	11
4.	Rotavator		16	08	80	15
5.	Fert. Cum Seed drill		140	70	1400	15
6.	Sprinkle with Pump Set		360	90	450	25
7.	Rain gun		32	08	20	20
8.	Multi crop thresher		800	400	16000	125

NICRA –KVK Balaghat

S. No.	Name of implements	Date of Purchase	Operational performance		Revenue Generated (Rs.)	No. of Farmers benefited
			No. of hrs.	Area covered (ha)		
1.	Reaper			10.3	150	24

NICRA –KVK Morena

S. No.	Name of implements	Date of Purchase	Operational performance		Revenue Generated (Rs.)	No. of Farmers benefited
			No. of hrs.	Area covered (ha)		
1.	Zero till seed drill,	20/02/2012	165	75.6	3780	250
2.	Seed cum fertilizer drill	20/02/2012	148	32	1600	170
3.	Tractor drawn bad planter	20/02/2012	58	22	1100	120
4.	Multi crop turbo seeder	20/02/2012	35	9.6	480	25

S. No.	Name of implements	Date of Purchase	Operational performance		Revenue Generated (Rs.)	No. of Farmers benefited
			No. of hrs.	Area covered (ha)		
5.	Tractor drawn land leveller	27/02/2012	35	7	350	22
6.	Disc Tractor drawn R.B. plough	27/02/2012	30	5	500	45
7.	Tractor drawn disk harrow	27/02/2012	28	5.24	420	40
8.	High Power sprayer aspee	21/03/2012	15	2.1	210	24
9.	Power sprayer cum duster	27/02/2012	34	11.2	560	140
10.	Hand sprayer	27/02/2012	58	11	550	40
11.	Seed treated drum	27/02/2012	75	48	320	146

NICRA- KVK ARON, Guna

Sl. No.	Name of implements	Date of Purchase	Operational performance		Revenue Generated (Rs.)	No. of Farmers benefited
			No. of hrs./ Days	Area covered (ha)		
1.	MB Plough	18-06-2011	05	5	600	5
2.	Hand wheel hoe	15-07-2011	06	6	300	6
3.	Seed cum Fertilizer –drill	06-06-2011	25	25	2500	25
4.	Rotavater	09-07-2011	20	20	3000	20
5.	Post hole digger	23-07-2011	01	1	-	1
6.	Power sprayer	07-05-2011	43	362	6150	25
7.	Reaper	06-06-2011	20	20	3000	20
8.	Sprinkler set	23-07-2011	08	4	160	4
9.	Engine pump set	05-08-2011	-	-	-	-

NICRA –KVK Tikamgarh

S. No.	Name of implements	Date of Purchase	Operational performance		Revenue Generated (Rs.)	No. of Farmers benefited
			No. of hrs.	Area covered (ha)		
1.	Sprinklers set	17/01/2012	08	08	80.00	04
2.	Wheal hoe	17/01/2012	-	-	-	-
3.	Chef cuter	17/01/2012	-	-	-	-
4.	Reaper	17/01/2012	06	2.2	1200.00	02
5.	M.B. Plough	17/01/2012	66	30	1650.00	13
6.	Rotavetar	17/01/2012	-	-	-	-
7.	Sprayer	17/01/2012	-	-	-	-
8.	Leveler	17/01/2012	17	10	Free of cost	4

Status of Custom Hiring Services

NICRA –KVK - Satna

S. No.	Name of implements	Date of Purchase	Operational performance		Revenue Generated (Rs.)	No. of Farmers benefited
			No. of hrs.	Area covered (ha)		
1.	MB Plough	02.12.11	75	15	7500	18
2.	Seed cum fertilizer drill	30.03.11	10	03	1000	14
3.	Zero Tillage		10	04	4000	02
4.	Shahdol Plough		-	14	-	28
5.	Desi Plough		-	12	-	20

NICRA –KVK Bilaspur

S. No.	Name of implements	Date of Purchase	Operational performance		Revenue Generated (Rs.)	No. of Farmers benefited
			No. of hrs.	Area covered (ha)		
1.	Rotavator	31/03/2011	2	0.8	500	1
2.	Tractor Drawn Land Leveler	31/03/2011				
3.	Seed Cum Fertilizer Drill with Ridge and Furrow Planter	31/03/2011	2	0.8	500	1
4.	Sprinkler set	31/03/2011				
5.	Manually operated	02/03/2012				

S. No.	Name of implements	Date of Purchase	Operational performance		Revenue Generated (Rs.)	No. of Farmers benefited
			No. of hrs.	Area covered (ha)		
	Cono weeder					
6.	Chaff Cutter	31/03/2012				
7.	Self Propelled Riding Type Reaper	31/03/2011	60	24	25,500	45
8.	High capacity Multicrop thresher	31/03/2012				
9.	Power Sprayer	31/03/2012				
10.	Tractor Drawn Mould Board Plough	31/03/2011				
11.	SRI planter Marker	04/07/2012				

NICRA –KVK Bhatapara

S. No.	Name of implements	Date of Purchase	Operational performance		Revenue Generated (Rs.)	No. of Farmers benefited
			No. of hrs.	Area covered (ha)		
1.	Sprinkler Set	29-03-11	24 hrs	2	250	1
2.	HDPE Pipe	29-03-11	9 days	10	1405	8
3.	Adaptor	29-03-11	-	-	-	-
4.	Nozal	29-03-11	-	-	-	-
5.	Connecting Nipple	29-03-11	-	-	-	-
6.	Tee Coupler	29-03-11	-	-	-	-
7.	Bend	29-03-11	-	-	-	-
8.	Seed Drill cum fertilizer	26-03-11	-	-	-	-
9.	Multicrop Thresher	28-03-11	1 hr	2	250	2
10.	Chhaff cutter	26-03-11	-	-	-	-
11.	MB Plough	26-03-11	-	-	-	-
12.	TD Leveller	26-03-11	-	-	-	-

S. No.	Name of implements	Date of Purchase	Operational performance		Revenue Generated (Rs.)	No. of Farmers benefited
			No. of hrs.	Area covered (ha)		
13.	Cycle wheelhoe	31-03-11	-	-	-	-
14.	Hand hoe	31-03-11		-	-	-
15.	Sprayer	-	3 days	2	90	1

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.	Seed cum fert.Drill 9 Tynes	11.01.12	16	10.5	800	18
2.	Hymetic Power Operated Sprayer cum Duster	28.03.11	16 Day	16	800	32
3.	5 HP Botliboi Diesel Pump	28.03.11	4 Day	2	1000	12
4.	Sprinkler set (7 Nozzale)	28.03.11	8 Day	8	400	18
5.	Tractor Drawn Rotavator	28.03.11	8	2.5	400	17
6.	Tractor Drawn Land Leveller	28.03.11	5 Day	2	500	20
7.	Hend Roted Chap Cutter	28.03.11	40	Nil	600	35
8.	Bull Drawn Bhoram Dev Seed Dril	28.03.11	8 Day	4	400	17
9.	Cycle while hend hoe	28.03.11	4 Day	4	300	10
10.	Tractor Drawn Thresher	28.03.11	20	6.5	6000	48

S. No.	Name of implements	Date of Purchase	Operational performance		Revenue Generated (Rs.)	No. of Farmers benefited
			No. of hrs.	Area covered (ha)		
11.	Moter Drawn Reaper	28.03.11	10	3.5	1000	35
12.	Tractor Drawn Cultivator	28.03.11	12	4	600	15
13.	Hand Roted Paddy Weeder	28.03.11	6 Day	3	300	18

NICRA –KVK Ganjam-I

S. No.	Name of implements	Date of Purchase	Operational performance		Revenue Generated (Rs.)	No. of Farmers benefited
			No. of hrs.	Area covered (ha)		
1	Sprinkler (2 Nos)	31th March 2011	35	2ha	700/-	10
2	Power tiller	31th March 2011	120	34ha	4800/-	84
3	Power sprayer (1 nos.)	31th March 2011	15	5ha	300/-	25
4	Diesel Water pump Set (2HP)	31th March 2011	45	7ha	900/-	32
5	Multi crop thresher cum winnower	31th March 2011	60	18ha	2400/-	35
6	MB plough	31th March 2011	18	4ha	180/-	18

NICRA –KVK Kendrapara

S. No.	Name of implements	Date of Purchase	Operational performance		Revenue Generated (Rs.)	No. of Farmers benefited
			No. of hrs.	Area covered (ha)		
1.	Sprinkler (4 Nos)	30th March 2010	104	15	700/-	40
2.	Power tiller	30th March	70	250 ha	2300/-	139

S. No.	Name of implements	Date of Purchase	Operational performance		Revenue Generated (Rs.)	No. of Farmers benefited
			No. of hrs.	Area covered (ha)		
		2010				
3.	Power sprayer (2 nos.)	30th March 2010	72	16 ha	72/-	20
4.	Diesel Water pump Set (3HP)	30th March 2010	100	132ha	100/-	67
5.	Diesel Water pump Set (3.5 HP)	30th March 2010	100	52	100/-	28
6.	Paddy thresher cum winnower	30th March 2010	100	40	100/-	40
7.	Napsack Sprayer	30th March 2010	80	All farmer	200/-	139

NICRA –KVK -SONEPUR

S. No.	Name of implements	Date of Purchase	Operational performance		Revenue Generated (Rs.)	No. of Farmers benefited
			No. of hrs.	Area covered (ha)		
1.	Reaper	March-2011	33	13.2	3300	13
2.	Seed-cum fertilizer drill		17	3.4	510	7
3.	Rotavator	March 2011	52	20.8	1040	10
4.	M.B.Plough	March 2011	20	08	400	8
5.	Land Leveller	March 2011		2.4	720/-	7
6.	Diesel pump set	March 2011		5.4	1040/-	9

6. Publicity of NICRA Intervention

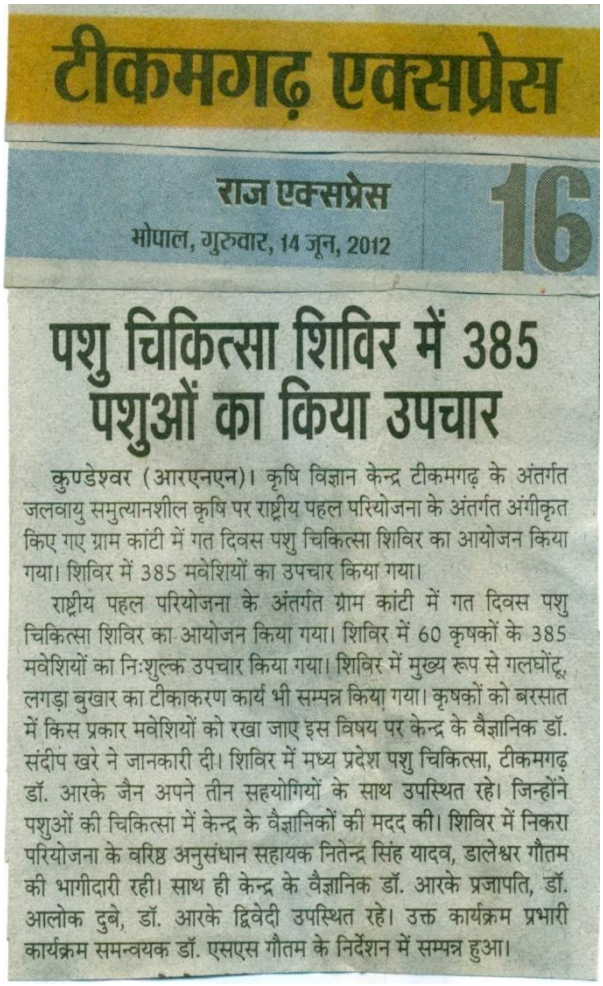
दैनिक भास्कर | टीकमगढ़ | खजुराहो, सोमवार, 11 जून, 2012 8

जापान के कृषि वैज्ञानिकों का दल टीकमगढ़ आया

अध्ययन | दल ने कृषि विज्ञान केंद्र में खरीफ की फसलों के उत्पादन, प्रजातियों और उत्पादकता की जानकारी ली

भास्कर संवाददाता | टीकमगढ़

जापान के छह सदस्यीय कृषि वैज्ञानिकों का दल कृषि विज्ञान केंद्र टीकमगढ़ की गतिविधियों का अवलोकन करने शनिवार को यहां पहुंचा। इस दल का नेतृत्व जापानी कीट वैज्ञानिक डॉ. याडा तयुसी कर रहे थे। बुन्देलखण्ड के विशेष रूप से टीकमगढ़ क्षेत्र में खरीफ फसलों के उत्पादन, प्रजातियों, उत्पादकता आदि पर केंद्र प्रभारी कार्यक्रम समन्वयक, डॉ. एसएस गौतम से जापानी दल ने केंद्र पर विस्तृत चर्चा की। विशेषकर इस क्षेत्र में संसाधित उत्पादन की असीम संभावनाओं पर विचार-विमर्श किया। जापानी दल ने केंद्र द्वारा उपयोग में लाए जाने वाले कृषि यंत्रों को फार्म पद्धति पर-चर्चा के साथ ही केन्द्र द्वारा स्थापित किए गए तकनीकी पार्क का अवलोकन किया। इसके बाद जापानी दल के सदस्यों ने केन्द्र द्वारा अंगीकृत किए गए ग्राम-कांटी का भ्रमण किया। जहाँ जलवायु समुत्थानशील कृषि पर राष्ट्रीय पहल (निकरा) के द्वारा चलाए जा रहे सघन- ग्रीष्मकालीन गहरी जुताई कार्यों का अवलोकन कर सहमति दी कि उत्पादन बढ़ाने के लिए किए जा रहे कार्य सराहनीय हैं। निकरा परियोजना में कार्यरत वरिष्ठ अनुसंधान सहायक नितेन्द्र यादव ने बताया की निकरा ग्राम कांटी में कृषकों के यहां ग्रीष्मकालीन गहरी जुताई का सघन कार्यक्रम चलाया जा रहा हैं। जिसके अन्तर्गत लगभग 25 हेक्टर में गहरी जुताई कराई जाएगी। डालेश्वर गौतम वरिष्ठ अनुसंधान सहायक ने बताया की निकरा ग्राम कांटी के किसानों को खेती में यंत्रीकरण से जोड़ने के उद्देश्य से कांटी ग्राम को विभिन्न अधुनिक यंत्र एम.बी. प्लाक, रीपर, रोटावेटर, स्प्रेकर, लिंड एंड फरो, सीड कम फर्टीलाइजर आदि उपकरण उपलब्ध कराए गए हैं। जिसकी देखरेख का जिम्मा कृषकों द्वारा बनाई गई कृषक समिति कर रही है। जापान से आए दल में डॉ. याडा तयुसी, डॉ.कोजी तासुजी, डॉ. सोहे कोबासी डॉ. टाकु कोकर्या, डॉ. नोरुयि, डॉ. केन तानाबाकी सम्मालित थे। दल के साथ प्रभारी अधिष्ठाता, डॉ. आर.सी.तिवारे, कृषि विज्ञान केन्द्र टीकमगढ़ प्रभारी कार्यक्रम समन्वयक, डॉ. एस.एस.गौतम, कार्यक्रम सहायक डॉ. आरके द्विवेदी, नितेन्द्र यादव एवं डालेश्वर गौतम वरिष्ठ अनुसंधान सहायक विशेष रूप से मौजूद थे।



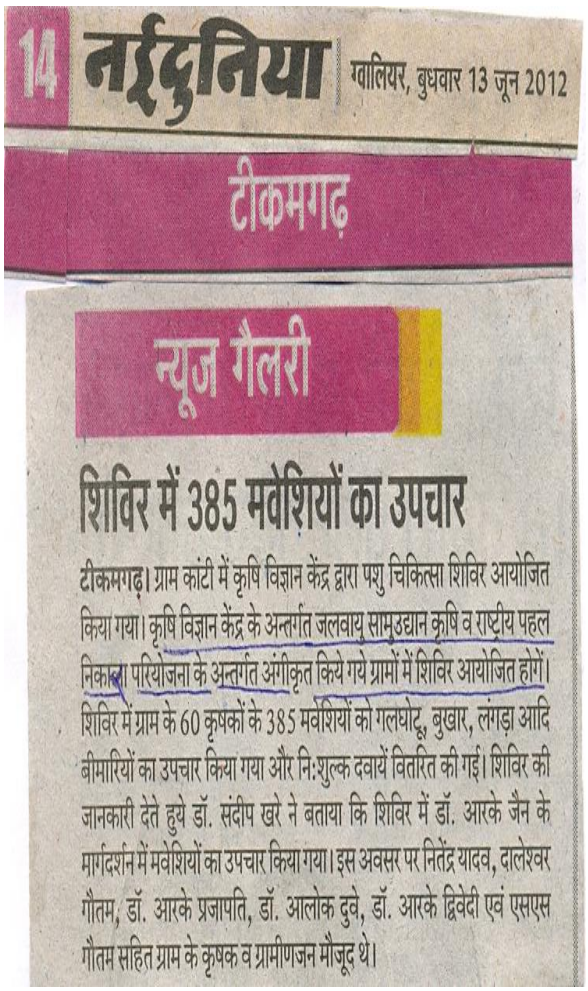
टीकमगढ़ एक्सप्रेस

राज एक्सप्रेस | भोपाल, गुरुवार, 14 जून, 2012 | 16

पशु चिकित्सा शिविर में 385 पशुओं का किया उपचार

कुण्डेश्वर (आरएनएन)। कृषि विज्ञान केन्द्र टीकमगढ़ के अंतर्गत जलवायु समुत्यानशील कृषि पर राष्ट्रीय पहल परियोजना के अंतर्गत अंगीकृत किए गए ग्राम कांटी में गत दिवस पशु चिकित्सा शिविर का आयोजन किया गया। शिविर में 385 मवेशियों का उपचार किया गया।

राष्ट्रीय पहल परियोजना के अंतर्गत ग्राम कांटी में गत दिवस पशु चिकित्सा शिविर का आयोजन किया गया। शिविर में 60 कृषकों के 385 मवेशियों का निःशुल्क उपचार किया गया। शिविर में मुख्य रूप से गलघोंटू, लगड़ा बुखार का टीकाकरण कार्य भी सम्पन्न किया गया। कृषकों को बरसात में किस प्रकार मवेशियों को रखा जाए इस विषय पर केन्द्र के वैज्ञानिक डॉ. संदीप खरे ने जानकारी दी। शिविर में मध्य प्रदेश पशु चिकित्सा, टीकमगढ़ डॉ. आरके जैन अपने तीन सहयोगियों के साथ उपस्थित रहे। जिन्होंने पशुओं की चिकित्सा में केन्द्र के वैज्ञानिकों की मदद की। शिविर में निकरा परियोजना के वरिष्ठ अनुसंधान सहायक नितेन्द्र सिंह यादव, डालेश्वर गौतम की भागीदारी रही। साथ ही केन्द्र के वैज्ञानिक डॉ. आरके प्रजापति, डॉ. आलोक दुबे, डॉ. आरके द्विवेदी उपस्थित रहे। उक्त कार्यक्रम प्रभारी कार्यक्रम समन्वयक डॉ. एसएस गौतम के निर्देशन में सम्पन्न हुआ।



14 नईदुनिया | ग्वालियर, बुधवार 13 जून 2012

टीकमगढ़

न्यूज गैलरी

शिविर में 385 मवेशियों का उपचार

टीकमगढ़। ग्राम कांटी में कृषि विज्ञान केंद्र द्वारा पशु चिकित्सा शिविर आयोजित किया गया। कृषि विज्ञान केंद्र के अन्तर्गत जलवायु सामुउद्यान कृषि व राष्ट्रीय पहल निकरा परियोजना के अन्तर्गत अंगीकृत किये गये ग्रामों में शिविर आयोजित होगें। शिविर में ग्राम के 60 कृषकों के 385 मवेशियों को गलघोटू, बुखार, लंगड़ा आदि बीमारियों का उपचार किया गया और निःशुल्क दवायें वितरित की गई। शिविर की जानकारी देते हुये डॉ. संदीप खरे ने बताया कि शिविर में डॉ. आरके जैन के मार्गदर्शन में मवेशियों का उपचार किया गया। इस अवसर पर नितेंद्र यादव, दालेश्वर गौतम, डॉ. आरके प्रजापति, डॉ. आलोक दुबे, डॉ. आरके द्विवेदी एवं एसएस गौतम सहित ग्राम के कृषक व ग्रामीणजन मौजूद थे।

पशु पालकों को बताईं घास व चारें की प्रजातियां

टीकमगढ़ (नससे)। ग्राम कांटी के 30 पशुपालकों व कृषकों ने झांसी में स्थित भारतीय चारागाह एवं चारा अनुसंधान केंद्र का भ्रमण कर जलवायु परिवर्तन की विपरीत परिस्थितियों में कृषि एवं पशु पालन से अधिक उत्पादन के तरीके जाने।

कृषि विज्ञान केंद्र द्वारा चलाई जा रही जलवायु समुत्थानशील कृषि पर राष्ट्रीय पहल परियोजना के अन्तर्गत अंगीकृत ग्राम कांटी के कृषकों, पशुपालकों को चारागाह व अनुसंधान केंद्र का भ्रमण कराया गया है। झांसी स्थित चारा अनुसंधान केंद्र के प्रधान वैज्ञानिक डा. महाराज एवं डा. उपाध्याय ने कृषकों को बताया कि चारे की प्रजातियों को अपनी बंजर, ऊसर, चट्टानी, वन क्षेत्र या बेकार पड़ी भूमियों पर एक बार यदि लगाया जाए तो वर्ष भर पशुओं को हरे चारे के साथ भूमि कटाव, पर्यावरण संरक्षण के लिए आवश्यक एवं उपयोगी सिद्ध होगा। इसके लिए वनों के अंदर चारागाह को

पशुपालकों व कृषकों को चारे की प्रजातियों के बारे में जानकारी देते वैज्ञानिक।

- जलवायु परिवर्तन में चारा फसल के उपाय बताए
- 30 पशु पालक, कृषकों ने किया भ्रमण

विकसित करना या मौसम के अनुसार चारा फसलें लेना एक महत्वपूर्ण कदम है। अनुसंधान केंद्र के वैज्ञानिकों ने बताया कि अंजनघास व स्टाइलो अमारा-बंजर भूमि, धौली घास चट्टानी जमीन, नंदी घास ऊसर भूमि में किसान लगा कर अपने पशुओं के लिए चारा सुनिश्चित कर सकते हैं। मौसम के अनुसार जैसे वर्षा ऋतु में मक्का, गंगा और विजय की प्रजातियों के साथ लोबिया, ग्वार, बुंदेलखंड ग्वार 1, 2, 3 शीत ऋतु में जई 822, बरसीम, लूर्सन तथा ग्रीष्म ऋतु में एमपी चरी, पायनियर घास की उपलब्धता कर दुग्ध उत्पादन बढ़ा सकते हैं। साथ ही किसानों ने पशुओं के लिए 'साइलेज एवं हे' तैयार करने की विधि पर व्यापक चर्चा की। साथ ही किसानों को बुंदेलखंड की जलवायु के अनुकूल अच्छी नस्लों की गायें, भैंसें एवं बकरियों की विभिन्न प्रजातियों का अवलोकन कराया। भ्रमण दल के साथ डा. आरके प्रजापति, परियोजना प्रभारी निकरा, डा. संदीप खरे विषय वस्तु विशेषज्ञ, नितेंद्र यादव और डालेश्वर गौतम, वरिष्ठ अनुसंधान सहाय, निकरा परियोजनल दल के साथ उपस्थित रहे। केंद्र प्रभारी डा. एसएस गौतम ने बताया कि उक्त अन्तर्राज्यीय भ्रमर जवाहर लाल नेहरू कृषि विद्यालय जबलपुर के प्रदाय निर्देशों के अनुपालन से किया गया है।

30 पशुपालकों को सिखाई चारा तकनीक

पशुपालकों को झांसी अनुसंधान केंद्र का भ्रमण कराया

भास्कर संवाददाता | टीकमगढ़

कृषि विज्ञान केंद्र की ओर से जलवायु समुत्थानशील कृषि पर राष्ट्रीय पहल परियोजना के तहत गांव कांटी के 30 पशुपालकों को भारतीय चारागाह चारा अनुसंधान केंद्र झांसी का भ्रमण कराया गया। भ्रमण में कृषि और पशुपालन से अधिक उत्पादन प्राप्त करने के गुण सिखाए गए। जिससे किसानों को जलवायु परिवर्तन होने पर परेशानी का सामना नहीं करना पड़े।

कृषि विज्ञान केंद्र की ओर से जलवायु परिवर्तन परियोजना तहत 30 किसानों भ्रमण पर भेजा गया था। भ्रमण के दौरान चारा अनुसंधान केन्द्र के प्रधान वैज्ञानिक डॉ. महाराज सिंह एवं डॉ.उपाध्याय ने किसानों को जानकारी देते हुए बताया कि चारे की प्रजातियों को अपनी बंजर, ऊसर, चट्टानी, वन क्षेत्र या बेकार पड़ी भूमियों पर एक बार यदि लगाया जाये तो वर्षभर पशुओं को हरे चारे के साथ साथ भूमि कटाव, पर्यावरण संरक्षण के लिए आवश्यक एवम् उपयोगी सिद्ध होगी।

विशेषज्ञों ने पशुपालकों को विभिन्न प्रकार का प्रशिक्षण दिया।

इसके लिए वनो के अंदर चारागाह को विकसित करना और मौसम के अनुसार चारा फसलें लगाना एवं महत्वपूर्ण कदम हैं। किसानों को भूमि के अनुसार घास की प्रजातियों ही भी जानकारी दी गई। जिसमें अंजनघास व स्टाइलों अमारा- बंजर भूमि, धौली घास- चट्टानी जमीन, नंदी घास- उसर भूमि, में किसान लगा कर अपने पशुओ के लिए चारा सुनिश्चित कर सकते हैं। केन्द्र प्रभारी डा.एस.एस.गौतम ने बताया कि बुंदेलखंड के किसानों को जलवायु परिवर्तन परियोजना के तहत जानकारी दी जा रही है कि कम बारिश में भी उन्नत फसल कैसे प्राप्त की जा सकती है। जिससे किसानों की फसलों पर जलवायु का प्रभाव नहीं पड़ेगा।

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, Barodi	Dr. Shrinath Dixit Coordinator NICRA, CRIDA Hyderabad (AP)	25-07-2012	
2	Datia	Sanora, Barodi	Dr. S.R.K. Singh, Sr. Scioentist, ZPD, Zone VII, Jabalpur (MP)	25-07-2012	
3	Datia	Sanora, Barodi	Programme Coordinators of 14 NICRA KVK of Zone VII (MP, CG & Odisha)	25-07-2012	
4	Datia	Sanora, Barodi	Dr. S.S. Tomar, Director Extension Services, RVSKVV, Gwalior (MP)	24-09-2012	
5	Datia	Sanora, Barodi	Dr. Maharaj Singh, Head Social Sciences IGFRI, Jhansi (UP)	26-10-2012	
6	Datia	Sanora, Barodi	Shri R. P. Sharma Project Director ATMA & Deputy Project Directors of ATMA, Datia (MP)	31-10-2012	
7	Datia	Sanora, Barodi	Dr. A. K. Singh, Hon'ble Vice Chancellor, RVSKVV, Gwalior (MP)	1-11-2012	
8	Datia	Sanora, Barodi	Dr. H.S. Yadav Director Research Services, RVSKVV, Gwalior (MP)	1-11-2012	
9	Datia	Sanora, Barodi	Shri. G. P. Kabirpanthi, Collector, Datia (MP)	8-11-2012	
10	Datia	Sanora, Barodi	16 Students of IIM, Indore (M.P.)	05.12.2012	
11	Datia	Sanora, Barodi	Dr. B. S. Reddy, Senior Scientist, CRIDA, Hyderabad (AP)	28-02-2013	

NICRA –KVK Balaghat

S.No.	Name of KVK	Name of NICRA Village	Name & designation of visitors	Date of visit	Remarks If Any
1	R.H.S.K.V.K balaghat	Koste	Dr. Dubey CIAE Bhopal		
2	R.H.S.K.V.K balaghat	Koste	Shri Dhananjay Kathal ,Research Associate , Zpd Jabalpur	23 March 13	
3	R.H.S.K.V.K balaghat	Koste	Dr. P.K. Bisen,DSW JNKVV Jabalpur		

NICRA –KVK ARON, Guna

S. No.	Name of KVK	Name of NICRA Village	Name & designation of visitors	Date of visit	Remarks If Any
1	Aron	Sarkho	Dr. A.S. Tiwari, Ex.VC, JNKVV, Jabalpur Dr. S.S. Tomar, DES, RVSKVV, Gwalior	17-05-2012	Dr. A.S. Tiwari appreciating the work of Custom hiring centre and instruct to maintain register well about record of Custom hiring
2	Aron	Sarkho	Dr. U.P.S. Bhaduaria, JDE, RVSKVV, Gwalior	24-09-2012	Custom hiring centre running best among all NICRA centre
3	Aron	Sarkho	Dr. S.R.K. Singh, Sr. Scientist, ZPD, Zone VII Jabalpur Dr. Shobhna Gupta, DDE, RVSKVV Gwalior	10-09-2012	Emphasis on exposure visit, water harvesting work excellent
4	Aron	Sarkho	Dr.UPS Bhaduaria, JDE, RVSKVV, Gwalior	06-03-2013	Monitoring of NICRA and KVK activities

NICRA –KVK Morena

S.No.	Name of KVK	Name of NICRA Village	Name & designation of visitors	Date of visit	Remarks If Any
1	Morena	Jigni	Hon'able V.C Prof. B.S Baghel R.V.S.K.V.V. Gwalior (M.P.)	21/09/2012	
2	Morena	Nidhan , Jigni	Dr. Vikas Kumar Yadav Scientiest IGFRI Jhashi (U.P.)	28/09/2012	
3	Morena	Jigni, Nidhan	Dr. S.R.K. Singh ZPD Jabalpur (M.P.) , Dr. Jitendra Chahhan Head Ag. Extension R.B.S. Collage Bichpuri Agra (U.P.) , Dr. Raj Singh Kushwah P.C. R.V.S.K.V.V Krishi Vigyan Kendra Gwalior (M.P.), Dr. O.P. D	07/10/2012	
4	Morena	Jigni, Nidhan	Hon'able V.C Prof. AK, Sing R.V.S.K.V.V. Gwalior (M.P.)	28/09/2012	
5	Morena	Jigni, Nidhan	Dr. U.P.S. Bhadouriya Join director of .Extension Service R.V.S.K.V.V. Gwalior (M.P.)	06/12/2012	
6	Morena	Nidhan , Jigni	ICAR scientist from Delhi	16/01/2013	
7	Morena	Nidhan , Jigni	Dr. S.S.Tomar Directar of Extension Service R.V.S.K.V.V. Gwalior (M.P.)	17/01/2013	

S.No.	Name of KVK	Name of NICRA Village	Name & designation of visitors	Date of visit	Remarks If Any
8	Morena	Jigni, Nidhan	Dr. B.S. Reddy Scientist C.R.I.D.A. Hyderabad (A.P.)	27/02/2013	
9	Morena	Jigni, Nidhan	Dr. A. Dubey Scientist C.I.A.E. BHOPAL (M.P.)	27/02/2013	
10	Morena	Jigni, Nidhan	Hon'able V.C Prof. AK, Sing R.V.S.K.V.V. Gwalior (M.P.)	02/04/2013	
11	Morena	Jigni, Nidhan	Dr. S.S.Tomar Directar of Extension Service R.V.S.K.V.V. Gwalior (M.P.)	02/04/2013	

NICRA –KVK Tikamgarh

S.No.	Name of KVK	Name of NICRA Village	Name & designation of visitors	Date of visit	Remarks If Any
1	KVK Tikamgarh	Kanti	Japanese Scientist Dr. S. Kovayshi (Soybean farming specialist Japan)	09/06/2012	Visited the selected village of Kanti and see summer deep ploughing .
2	KVK Tikamgarh	Kanti	Mr. R.P. Jain (Agriculture Expert PICU Bhopal)	20/09/2012	Visited the Kanti village and seen Paddy demonstration by SRI method under NICRA project.
3	KVK Tikamgarh	Kanti	Dr. D.K. Pahalwan (DES JNKVV Jabalpur)	07/11/2012	Visited in NICRA village and meet to Progressive farmer and seen Biogas plant and Horticulture crops and give voluble suggestion regarding use fertilizer according to soil health card.
4	KVK Tikamgarh	Kanti	Mr. R.K. Pathak (ADA, Sagar)	30/12/2012	Visited in NICRA village with progressive farmers of Sagar District

NICRA –KVK - Satna

S.No.	Name of KVK	Name of NICRA Village	Name & designation of visitors	Date of visit	Remarks If Any
01	KVK Satna	Bhargawan	Dr. S. R. K. Singh, PI NICRA Project Zone VII, Jabalpur,M.P.	23/05/2012	
02	KVK Satna	Bhargawan	Dr. Tushar Athare, Scientist ZPD, Zone VII, Jabalpur,M.P.	23/05/2012	
03	KVK Satna	Bhargawan	Dr.K.K.Saxena, DES, JNKVV, Jabalpur,M.P.	25/07/2012	
04	KVK Satna	Bhargawan	Mr. Dhananjay Kathal RA, ZPD, Zone VII, Jabalpur,M.P.	20/03/2013	

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.K.L.Nandeha	02/02/2013	
2.	Bilaspur	Khargahna	Dr.S.R.K Singh	20/03/2013	

NICRA –KVK Bhatapara

S.No.	Name of KVK	Name of NICRA Village	Name & designation of visitors	Date of visit	Remarks If Any
1	Bhatapara	Bakulahi	Dr. S.R.K. Singh Senior Scientist ZPD, Jabalpur	09-01-2013	-
2	Bhatapara	Bakulahi	Dr. A. P. Dwivedi Senior Scientist ZPD, Jabalpur	09-01-2013	-

NICRA –KVK DANTEWADA

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 C.G.	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	
9	Dantewada	Heeranar	Shri Chaitram Atami, Adhyaksh Laghuvanopaj Sangh	09/10/12	
10	Dantewada	Heeranar	Shri V.N. Ukey C.E.O. Katekalyan	09/10/12	

11	Dantewada	Heeranar	Dr. V.K. Tripathi, Deputy Ragistrar,Dantewada	10/11/12	
12	Dantewada	Heeranar	Dr. R.K. Dwivedi, Principal Scientist, SGCARS Jagdalpur	09/10/11	
13	Dantewada	Heeranar	Shri Gautam, J.D.A. Agriculture	10/10/12	
14	Dantewada	Heeranar	Shri Dinesh Chandel,APO, MGNAREGA,Geedam	15/11/12	
15	Dantewada	Heeranar	Ku. Eng. Pratiksha Chandrakar,APO,MGNAREGA,Geedam	17/11/12	
16	Dantewada	Heeranar	Shri Lalit Baghel, APO,MGNAREGA,Katekalyan	07/09/12	
17	Dantewada	Heeranar	Shri Nand Kishor Sahu, APO,MGNAREGA,Kuakonda	07/09/12	
18	Dantewada	Heeranar	Shri Kiran Oberoy APO,MGNAREGA,Dantewada	07/09/12	
19	Dantewada	Heeranar	Shri Dilip Devangan, Co-ordinator Social Audit, MGNAREGA, Dantewada	02/11/12	
20	Dantewada	Heeranar	Shri S.K. Durgam Account Officer, MGNAREGA, Dantewada	02/11/12	
21	Dantewada	Heeranar	Shri Rakesh Sahu,T.A., MGNAREGA,Dantewada	02/11/12	
22	Dantewada	Heeranar	Dr. A.P. Dvivedi Sr. Scientist, ZPD, J.N.K.V. Jabalpur	21/03/2013	

NICRA –KVK, Bhanjanagar, Ganjam-I

S.No.	Name of KVK	Name of NICRA Village	Name & designation of visitors	Date of visit	Remarks If Any
1	Ganjam-I	Chopara	Mr. Prasanta Ku. Panda, SMS (P.P), Debasis Sadangi, SMS (Soil.Sc.) Co-PI,	16-04-2012 03-05-2012 7-05-2012 11-05-2012	Discussion made on Soil test and collection n of soil samples
2	Ganjam-I	Chopara	Debasis Sadangi, SMS (Soil.Sc.) Co-PI Prasanta Ku. Panda, SMS (P.P), Dr. Geetanjali Subudhi, SMS (Home Sc.), Mr. Debasis Sadangi, SMS (Soil.Sc.), Mr. S.S.Das, SMS (Fishery Science), Dr. Smrutirekha Mallick SMS (Animal Sc.)	24-05-2012 28-05-2012 07-06-2012	Group discussion was made on disease and pest incidence and its management and its practices
3	Ganjam-I	Chopara	Prasanta Ku. Panda, SMS (P.P), Debasis Sadangi, SMS (Soil.Sc.) Co-PI, Mr. S.S.Das, SMS (Fishery Science), Dr. Smrutirekha Mallick SMS	08-06-2012	Discussion made on short duration Paddy variety

S.No.	Name of KVK	Name of NICRA Village	Name & designation of visitors	Date of visit	Remarks If Any
			(Animal Sc.)		
4	Ganjam-I	Chopara	Dr S.K.Satapathy, Programme Coordinator (PI. of the project), Mr. Prasanta Ku. Panda, SMS (P.P), Debasis Sadangi, SMS (Soil.Sc.) Co-PI, Mr. S.S.Das, SMS (Fishery Science), Dr. Smrutirekha Mallick SMS (Animal Sc.)	10-06-2012 11-06-2012	Interaction made on area specific high yielding variety of Paddy
5	Ganjam-I	Chopara	Prasanta Ku. Panda, SMS (P.P), Debasis Sadangi, SMS (Soil.Sc.) Co-PI, Mr. S.S.Das, SMS (Fishery Science), Dr. Geetanjali Subudhi, SMS (Home Sc.), Dr. Smrutirekha Mallick SMS (Animal Sc.)	16-06-2012 19-06-2012 28-06-2012	Suggest for supplementary feeding & Nursery preparation for Paddy & Green manuring
6	Ganjam-I	Chopara	Dr S.K.Satapathy, Programme Coordinator (PI. of the project), Debasis Sadangi, SMS (Soil.Sc.) Co-PI Prasanta Ku. Panda, SMS (P.P), Dr. Geetanjali Subudhi, SMS (Home Sc.)	02-07-2012 06-07-2012	Discuss about cultivation Maize cultivation
7	Ganjam-I	Chopara	Dr S.K.Satapathy, Programme Coordinator (PI. of the project), Debasis Sadangi, SMS (Soil.Sc.) Co-PI Prasanta Ku. Panda, SMS (P.P), Dr. Geetanjali Subudhi, SMS (Home Sc.),	07-07-2012 10-07-2012 16-07-2012	Discuss about custom hiring centre & maintenance of implements
8	Ganjam-I	Chopara	Dr S.K.Satapathy, Programme Coordinator (PI. of the project), Prasanta Ku. Panda, SMS (P.P) Co-PI, Dr. Geetanjali Subudhi, SMS (Home Sc.), Mr. Tiryak Ku. Samant SMS (Agronomy)	20-07-2012 04-08-2012 17-08-2012	Transplanting and application of Weedicide
9	Ganjam-I	Chopara	Dr S.K.Satapathy, Programme Coordinator (PI. of the project), Prasanta Ku. Panda, SMS (P.P) Co-PI, Dr. Geetanjali Subudhi, SMS (Home Sc.), Mr. Tiryak Ku. Samant SMS (Agronomy)	10-08-2012 18-08-2012	Management of Insect, pest in Paddy & groundnut
10	Ganjam-I	Chopara	Prasanta Ku. Panda, SMS (P.P) Co-PI, Dr. Geetanjali Subudhi, SMS (Home Sc.), Mr. Tiryak Ku. Samant SMS (Agronomy)	21-08-2012	Application of Micro nutrient

S.No.	Name of KVK	Name of NICRA Village	Name & designation of visitors	Date of visit	Remarks If Any
11	Ganjam-I	Chopara	Dr S.K.Satapathy, Programme Coordinator (PI. of the project),Prasanta Ku. Panda, SMS (P.P) Co-PI, Dr. Geetanjali Subudhi, SMS (Home Sc.), Mr. Tiryak Ku. Samant SMS (Agronomy), S.K.Samantaray SMS (Agril. Extension)	06-09-2012 10.09.2012 15-09-2012	Improved Cultivation Practices of Groundnut
12	Ganjam-I	Chopara	Prasanta Ku. Panda, SMS (P.P) Co-PI, Dr. Geetanjali Subudhi, SMS (Home Sc.), Mr. Tiryak Ku. Samant SMS (Agronomy), S.K.Samantaray SMS (Agril. Extension)	03-10-2012 05-10-2012	Field day, Discussion about Vermii composting & Oyster mushroom in backyard
13	Ganjam-I	Chopara	Dr S.K.Satapathy, Programme Coordinator (PI. of the project),Prasanta Ku. Panda, SMS (P.P) Co-PI, Dr. Geetanjali Subudhi, SMS (Home Sc.), Mr. Tiryak Ku. Samant SMS (Agronomy), S.K.Samantaray SMS (Agril. Extension)	06-10-2012 12-10-2012	Discussion about Vermii composting & Oyster mushroom in backyard
14	Ganjam-I	Chopara	Prasanta Ku. Panda, SMS (P.P) Co-PI, Dr. Geetanjali Subudhi, SMS (Home Sc.), Mr. Tiryak Ku. Samant SMS (Agronomy), S.K.Samantaray SMS (Agril. Extension)	18-10-2012 30-10-2012	Demonstration on Oyster mushroom, Diagnostic visit
15	Ganjam-I	Chopara	Prasanta Ku. Panda, SMS (P.P) Co-PI, Mr. Tiryak Ku. Samant SMS (Agronomy), S.K.Samantaray SMS (Agril. Extension)	03-11-2012 24-11-2012	Discussion made on Greengram/ Blackgram cultivation
16	Ganjam-I	Chopara	Dr S.K.Satapathy, Programme Coordinator (PI. of the project),Prasanta Ku. Panda, SMS (P.P) Co-PI, Dr. Geetanjali Subudhi, SMS (Home Sc.), S.K.Samantaray SMS (Agril. Extension)	13-12-2012 21-12-2012	Discussed about importance of seed treatment
17	Ganjam-I	Chopara	Dr S.K.Satapathy, Programme Coordinator (PI. of the project),Prasanta Ku. Panda, SMS (P.P) Co-PI, Dr.	07-01-2013 18-01-2013	Field visit and monitoring of disease/ pest

S.No.	Name of KVK	Name of NICRA Village	Name & designation of visitors	Date of visit	Remarks If Any
			Geetanjali Subudhi, SMS (Home Sc.), S.K.Samantaray SMS (Agril. Extension), Dr. Smrutirekha Mallick SMS (Animal Sc.)		
18	Ganjam-I	Chopara	Dr S.K.Satapathy, Programme Coordinator (PI. of the project),Prasanta Ku. Panda, SMS (P.P) Co-PI, Dr. Geetanjali Subudhi, SMS (Home Sc.), S.K.Samantaray SMS (Agril. Extension), Dr. Smrutirekha Mallick SMS (Animal Sc.)	11-02-2013 18-02-2013	Field visit and monitoring of disease/ pest and Marketing linkages
19	Ganjam-I	Chopara	Dr S.K.Satapathy, Programme Coordinator (PI. of the project),Prasanta Ku. Panda, SMS (P.P) Co-PI, S.K.Samantaray SMS (Agril. Extension), Dr. Smrutirekha Mallick SMS (Animal Sc.)	20-02-2013 23-02-2013	Group discussion was made on disease and its management in domestic animals
20	Ganjam-I	Chopara	Prasanta Ku. Panda, SMS (P.P) Co-PI, Dr. Geetanjali Subudhi, SMS (Home Sc.), S.K.Samantaray SMS (Agril. Extension), Dr. Smrutirekha Mallick SMS (Animal Sc.)	28-02-2013 07-03-2013	Interaction made with farmer group on cultivation of summer vegetables, feed management of domestic animals
22	Ganjam-I	Chopara	Prasanta Ku. Panda, SMS (P.P) Co-PI, Dr. Geetanjali Subudhi, SMS (Home Sc.), S.K.Samantaray SMS (Agril. Extension), Dr. Smrutirekha Mallick SMS (Animal Sc.)	12-03-2013 16-03-2013	Discussed about desilting of Farm wells and collection of soil samples
24	Ganjam-I	Chopara	Dr S.K.Satapathy, Programme Coordinator(PI. of the project),Prasanta Ku. Panda, SMS (P.P) Co-PI, Dr. Geetanjali Subudhi, SMS (Home Sc.), S.K.Samantaray SMS (Agril. Extension), Dr. Smrutirekha Mallick SMS (Animal Sc.)	26-03-2013 30-03-2013	Discussed about renovation of farm pond and collection of Soil sample

NICRA –KVK Kendrapara

S.No.	Name of KVK	Name of NICRA Village	Name & designation of visitors	Date of visit	Remarks If Any
1	Kendrapara	Krushnadaspur	Mrs. Anjali Ray, Programme Coordinator(**PI. of the project),** Mr. Sasanka Lenka, SMS (Agril. Extension) **Co-PI,** Mr. Lalita Ku. Mohanty, SMS(Agronomy)	18.04.2012	Discussion made on Soil test and collection n of soil samples
2	Kendrapara	Krushnadaspur	Mr. Sasanka Lenka, SMS (Agril. Extension) **Co-PI,** Mr. Lalita Ku. Mohanty, SMS (Agronomy), Mr. Manoj Ku. Rout, SMS (Plant Protection), Mr. Nabakishor Sial, SMS (Fishery Science),	20.04.2012	Group discussion was made on disease and pest incidence and its management ant its practices
3	Kendrapara	Krushnadaspur	Mr. Lalita Ku. Mohanty, SMS (Agronomy), Mrs. Namita Mahapatara, SMS (Home Science), Mr. Manoj Ku. Rout, SMS (Plant Protection), Mr. Nabakishor Sial, SMS (Fishery Science),	25.04.2012	Discussion made on application n of hormones in vegetables
4	Kendrapara	Krushnadaspur	Mrs. Anjali Ray, Programme Coordinator, **PI. of the project,**Mr. Manoj Ku. Rout, SMS (Plant Protection), Mr. Sasanka Lenka, SMS (Agril. Extension) **Co-PI,** Mr. Lalita Ku. Mohanty	28.04.2012	Interaction made on area specific high yielding variety of Paddy
5	Kendrapara	Krushnadaspur	Mr. Nabakishor Sial, SMS (Fishery Science), Mr. Manoj Ku. Rout, SMS (Plant Protection) Mr. Sasanka Lenka, SMS (Agril. Extension) **Co-PI,** Mr. Lalita Ku. Mohanty	4.06.2012	Suggest for supplementary feeding
6	Kendrapara	Krushnadaspur	Mrs. Namita Mahapatara, SMS (Home Science), Mr. Nabakishor Sial, SMS (Fishery Science), Mr. Manoj Ku. Rout, SMS (Plant Protection)	13.06.2012	Discuss about cultivation oyster mushroom in backyard

S.No.	Name of KVK	Name of NICRA Village	Name & designation of visitors	Date of visit	Remarks If Any
7	Kendrapara	Krushnadaspur	Mr. Nabakishor Sial, SMS (Fishery Science, Mr. Manoj Ku. Rout, SMS (Plant Protection), Mr. Sasanka Lenka, SMS (Agril. Extension) **Co-PI,** Mr. Lalita Ku. Mohanty	18.07.2012	Discuss about custom hairing centre.
8	Kendrapara	Krushnadaspur	Mr. Sasanka Lenka, SMS (Agril. Extension)**Co-PI,** Mr. Nabakishor Sial, SMS (Fishery Science, Mr. Manoj Ku. Rout, SMS (Plant Protection)	17.08.2012	Liming of pond advise for Yearling release
9	Kendrapara	Krushnadaspur	Mrs. Anjali Ray, Programme Coordinator, **PI. of the project,** Mr. Nabakishor Sial, SMS (Fishery Science, Mr. Manoj Ku. Rout, SMS (Plant Protection), Mr. Sasanka Lenka, SMS (Agril. Extension) **Co-PI,** Mr. Lalita Ku. Mohanty	28.08.2012	Suggested for supllimentary feeidng and manuring
10	Kendrapara	Krushnadaspur	Mr. Lalita Ku. Mohanty, SMS(Agronomy), Mr. Sasanka Lenka, SMS (Agril. Extension) **Co-PI,** Mr. Nabakishor Sial, SMS (Fishery Science, Mr. Manoj Ku. Rout, SMS (Plant Protection)	5.09.2012	Application for cifax for disease management
11	Kendrapara	Krushnadaspur	Mrs. Namita Mahapatara, SMS (Home Science), Mr. Lalita Ku. Mohanty, SMS (Agronomy), Mr. Sasanka Lenka, SMS (Agril. Extension)**Co-PI,**	11.09.2012	Improved Cultivation Practices of Greengram
12	Kendrapara	Krushnadaspur	Mrs. Anjali Ray, Programme Coordinator, **PI. of the project,**Mr. Nabakishor Sial, SMS (Fishery Science), Mr. Lalita Ku. Mohanty, SMS(Agronomy), Mr. Sasanka Lenka, SMS (Agril.	21.09.2012	Time time to check health of fish

S.No.	Name of KVK	Name of NICRA Village	Name & designation of visitors	Date of visit	Remarks If Any
			Extension)**Co-PI,**		
13	Kendrapara	Krushnadaspur	Mr. Manoj Ku. Rout, SMS (Plant Protection), Mrs. Namita Mahapatara, SMS (Home Science), Mr. Lalita Ku. Mohanty, SMS(Agronomy)	24.09.2012	Distribution of ducking Khaki Campbel among SHG members
14	Kendrapara	Krushnadaspur	Mr. Sasanka Lenka, SMS (Agril. Extension)**Co-PI,** Mr. Manoj Ku. Rout, SMS (Plant Protection), Mrs. Namita Mahapatara, SMS (Home Science), Mr. Lalita Ku. Mohanty, SMS(Agronomy)	29.09.2012	Distribution of Blackrock and Banaraja among SHG members
15	Kendrapara	Krushnadaspur	Mrs. Anjali Ray, Programme Coordinator, **PI. of the project,** Mr. Lalita Ku. Mohanty, SMS (Agronomy, Mr. Sasanka Lenka, SMS (Agril. Extension) **Co-PI,** Mr. Manoj Ku. Rout, SMS (Plant Protection),	4.10.2012	Discussion made on application n of hormones in vegetables
16	Kendrapara	Krushnadaspur	Mrs. Namita Mahapatara, SMS (Home Science), Mrs Dibyajyoti Parida (SRF), Mr. Sasanka Lenka, SMS (Agril. Extension) **Co-PI,** Mr. Manoj Ku. Rout, SMS (Plant Protection),	10.10.2012	Interaction made on area specific high yielding variety of Paddy
17	Kendrapara	Krushnadaspur	Mr. Nabakishor Sial, SMS (Fishery Science), Mr. Lalita Ku. Mohanty, SMS (Agronomy, Mr. Sasanka Lenka, SMS (Agril. Extension) **Co-PI,** Mrs Dibyajyoti Parida (SRF),	30.10.2012	Discussion made on Soil test and collection n of soil samples.
18	Kendrapara	Krushnadaspur	Mr. Manoj Ku. Rout, SMS (Plant Protection),Mr. Nabakishor Sial, SMS (Fishery Science), Mr. Lalita Ku. Mohanty,	9.11.2012	Interaction made on post harvest management and Marketinglinkages

S.No.	Name of KVK	Name of NICRA Village	Name & designation of visitors	Date of visit	Remarks If Any
			SMS(Agronomy), Mrs Dibyajyoti Parida (SRF),		
19	Kendrapara	Krushnadaspur	Mrs. Anjali Ray, Programme Coordinator, **PI. of the project,**Mr. Sasanka Lenka, SMS (Agril. Extension)**Co-PI,** Mr. Manoj Ku. Rout, SMS (Plant Protection), Mr. Nabakishor Sial, SMS (Fishery Science), Mrs Dibyajyoti Parida (SRF)	1.11.2012	Group discussion was made on disease and pest incidence and its management ant its practices
20	Kendrapara	Krushnadaspur	Mr. Sasanka Lenka, SMS (Agril. Extension) **Co-PI,** Mr. Manoj Ku. Rout, SMS (Plant Protection Mr. Nabakishor Sial, SMS (Fishery Science), Mrs Dibyajyoti Parida (SRF),	26.11.2012	Interaction made with farmer group on cultivation practices vgetables
21	Kendrapara	Krushnadaspur	Mrs. Anjali Ray, Programme Coordinator, **PI. of the project,**Mr. Nabakishor Sial, SMS (Fishery Science), Mr. Sasanka Lenka, SMS (Agril. Extension)**Co-PI,** Mr. Manoj Ku. Rout, SMS (Plant Protection), Mrs Dibyajyoti Parida (SRF),	11.12.2012	Possible suggestion given to farmers regarding demonstration trails
22	Kendrapara	Krushnadaspur	Mr. Lalita Ku. Mohanty, SMS(Agronomy), Mr. Nabakishor Sial, SMS (Fishery Science), Mr. Sasanka Lenka, SMS (Agril. Extension) **Co-PI,** Mr. Manoj Ku. Rout, SMS (Plant Protection), Mrs Dibyajyoti Parida (SRF),	18.12.2012	Suggested for pond preaparation
23	Kendrapara	Krushnadaspur	Mr. Sasanka Lenka, SMS (Agril. Extension)**Co-PI,** Mr. Lalita Ku. Mohanty, SMS(Agronomy), Mr. Nabakishor Sial, SMS (Fishery Science), Mrs Dibyajyoti Parida (SRF),	2.01.2013	Application of Cifax

S.No.	Name of KVK	Name of NICRA Village	Name & designation of visitors	Date of visit	Remarks If Any
24	Kendrapara	Krushnadaspur	Mr. Debasis Behrea, SMS (Horticuture), Mr. Lalita Ku. Mohanty, SMS(Agronomy), Mr. Nabakishor Sial, SMS (Fishery Science), Mrs Dibyajyoti Parida (SRF)	3.01.2013	Suggested for pond preaparation
25	Kendrapara	Krushnadaspur	Mr. Sasanka Lenka, SMS (Agril. Extension)Co-PI Mr. Debasis Behrea, SMS (Horticuture), Mr. Lalita Ku. Mohanty, SMS(Agronomy), Mr. Nabakishor Sial, SMS (Fishery Science), Mrs Dibyajyoti Parida (SRF),	8.01.2013	Liming of pond advise for Yearling release
26	Kendrapara	Krushnadaspur	Mrs. Anjali Ray, Programme Coordinator, **PI. of the project ,**Mrs. Namita Mahapatara, SMS (Home Science), Mr. Sasanka Lenka, SMS (Agril. Extension)Co-PI, Mr. Debasis Behrea, SMS (Horticuture), Mr. Lalita Ku. Mohanty, Mrs Dibyajyoti Parida (SRF),	14.01.2013	improved method of paddy cultivation var.-Lalat
27	Kendrapara	Krushnadaspur	Mr. Manoj Ku. Rout, SMS (Plant Protection), Mr. Sasanka Lenka, SMS (Agril. Extension)Co-PI Mr. Debasis Behrea, SMS (Horticuture), Mr. Lalita Ku. Mohanty, Mrs Dibyajyoti Parida (SRF),	17.01.2013	Application for cifax for disease management
28	Kendrapara	Krushnadaspur	Mrs. Anjali Ray, Programme Coordinator, **PI. of the project,** Mr. Lalita Ku. Mohanty, SMS(Agronomy), Mrs. Namita Mahapatara, SMS (Home Science), Mr. Sasanka Lenka, SMS (Agril. Extension)Co-PI, Mrs Dibyajyoti Parida (SRF),	4.02.2013	IPM for paddy Stem Borer
29	Kendrapara	Krushnadaspur	Mr. Manoj Ku. Rout, SMS (Plant Protection), Mr. Sasanka Lenka, SMS (Agril.	5.02.2013	Time time to check health of fish

S.No.	Name of KVK	Name of NICRA Village	Name & designation of visitors	Date of visit	Remarks If Any
			Extension)Co-PI Mr. Debasis Behrea, SMS (Horticuture), Mr. Lalita Ku. Mohanty Mrs Dibyajyoti Parida (SRF),		
30	Kendrapara	Krushnadaspur	Mr. Manoj Ku. Rout, SMS (Plant Protection), Mr. Debasis Behrea, SMS (Horticuture), Mr. Lalita Ku. Mohanty, Mrs Dibyajyoti Parida (SRF),	12.02.2013	Application of Cifax
32	Kendrapara	Krushnadaspur	Mrs. Namita Mahapatara, SMS (Home Science) Mr. Debasis Behrea, SMS (Horticuture), Mr. Lalita Ku. Mohanty, Mrs Dibyajyoti Parida (SRF),	6.03.2013	Foliar application of micronutrient in pointed gourd
33	Kendrapara	Krushnadaspur	Mr. Nabakishor Sial, SMS (Fishery Science Mr. Debasis Behrea, SMS (Horticuture), Mr. Lalita Ku. Mohanty, Mrs Dibyajyoti Parida (SRF),	8.03.2013	Suggested for supllimentary feeidng and manuring
35	Kendrapara	Krushnadaspur	Mr.Debasis Behera. SMS (Horticulture), Mr. Manoj Ku. Rout, SMS (Plant Protection), Mr. Sasanka Lenka, SMS (Agril. Extension)Co-PI, Mrs Dibyajyoti Parida (SRF),	13.03.2013	IPM for control of fruit and shoot borer in Brinjal
38	Kendrapara	Krushnadaspur	Mrs. Anjali Ray, Programme Coordinator, **PI. of the project,** Mr. Nabakishor Sial, SMS (Fishery Science Mr. Debasis Behrea, SMS (Horticuture), Mrs Dibyajyoti Parida (SRF),	19.03.2013	Suggested for pond preaparation

NICRA –KVK Sonepur

S.No.	Name of KVK	Name of NICRA Village	Name & designation of visitors	Date of visit	Remarks If Any
1	Sonepur	Badmal	Dr. S. Mohapatra & Dr. B. Mohapatra, DEE, OUAT, BBSR	1st Nov 2012	Appreciated the NRM work , vegetable demo field and paddy cultivation field
2	Sonepur	Badmal	Dr. R.K. Raj, DEE, OUAT, BBSR	18th Dec 2012	Appreciated the Agri. Information center, custom haring centre and vegetable demo field.

8. Budget Allotted & Utilized for 2012-13

Zone/KVK	Opertional Expenses	TA	Total (Rs in Lakhs)	Utilized (Rs in Lakhs)
ZPD Zone VII	3.50	2.00	5.50	2.25
Balaghat	10.50	0.70	11.20	2.99
Bilaspur	9.00	0.70	9.70	3.40
Chhatarpur	9.00	0.70	9.70	2.05
Dantewara	11.00	0.70	11.70	9.49
Datia	9.00	0.70	9.70	9.45
Ganjam	9.00	0.70	9.70	9.53
Guna	9.00	0.70	9.70	9.55
Jharsuguda	9.00	0.70	9.70	3.69
Kendrapara	9.00	0.70	9.70	6.74
Morena	9.00	0.70	9.70	16.17
Raipur	9.00	0.70	9.70	2.80
Satna	9.00	0.70	9.70	9.14
Sonepur	9.00	0.70	9.70	3.75
Tikamgarh	9.00	0.70	9.70	2.11
Total	133.00	11.80	144.80	

Zonal Summary of Module-wise Progress Report

Format NICRA Report (April, 2012 to March2013)

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	3	4	5	6	7	8	9
Artificial ground water recharge	De Silting of open Wells to improve irrigation water discharge capacity, Sprinkler irrigation etc.	33	26	Increase availability of irrigation water	30230	78700	47400	2.60
Conservation tillage where appropriate	Moisture conservation during crop period in Soybean, Zero tillage etc.	249	131.7	Moisture conservation during	15154	44832	29557	2.96
Improved drainage in flood prone areas	Drainage channels to avoid flood hazard in Soybean crop, Bed planting sowing method	224	121.5	Avoid flood hazard in Soybean crop	20077	78477	56971	3.91
In-situ moisture conservation RCT	Deep Summer Ploughing in Soybean, Sowing Across the slope in Ground nut etc	365	187.2	Soil moisture increase, less pest/weed infestation	22398	46418	24022	2.07
Water harvesting and recycling for supplemental irrigation	Bori - Bandhan, Excavation of Farm pond, Renovation of old WHS, Water harvesting tanks to improve ground water recharge and partial irrigation etc	275	379	Integrated economics of Field crop and Fish culture, Tomato and pointed gourd	70200	91639	36438	1.31
Water saving irrigation methods	Water saving irrigation system in wheat crop, , sprinkler system provided through Custom Hiring Centre etc	92	30.8	Increasing irrigated area Yield (q/ha), Water saving water use efficiency	30250	98550	68300	3.26
Any other (Pl. specify)	Bio gas plants, Conservation of excess soil moisture present in th paddy fields etc.	100	92	Production of NADEP compost q/unit	12613	29399	16786	2.33

Module: 2. Crop Production

Interventions	Technology demonstrate	No. of farmers	Area (ha)	Measurable indicators of output* q/ha		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
Advancement of planting dates of rabi crops in areas with terminal heat stress	Demonstration of Heat tolerance short duration Gram variety JG-130, Demonstration of Heat tolerant , early duration suitable variety for limited irrigated	280	58.1	62.79	45.98	15879	51769	35348	3.26	14237	42875	23548	3.01
Community nurseries for delayed monsoon	Chilli Var. Kashi Anmol, Tomato Vari Kashi Visesh, Nutritional garden, Paddy & Horticulture crop	37	8.28	245.50	195.00	31475	226380	194905	7.19	29432	179100	149533	6.09
Custom hiring centers for timely planting	Custom hiring for timely operations MB Plough, Hand wheel hoe, Seed - cum –Fertilizer drill, Rotavator, Post hole	139	447.8	42.27	34.53	18942	49805	30863	2.63	17420	40302	22882	2.31
Frost management in horticulture through fumigation	Spray of wettable sulphur @ 0.3% at flowering and seed formation stage (70 & 90 DAS) RCR-436 , Irrigation technology and Frost management	9	2.00	19.50	17.30	21230	107250	86020	5.05	20850	95150	74300	4.56
Introducing flood / drought	Soybean Var. JS 95-60, Ground Nut	1253	315.9	120.64	81.09	15979	45359	29420	2.84	13738	29646	15909	2.16

Interventions	Technology demonstrate	No. of farmers	Area (ha)	Measurable indicators of output* q/ha		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
/ temperature tolerant varieties	Variety JGN-3, Sesame Variety JTS-8, Black Gram												
Location specific intercropping systems with high sustainable yield index	Intercropping systems SOYBEAN + MAIZE 2:1	46	14.4	0.00	0.00	14277	35773	21496	2.51	12379	18962	6583	1.53
Water saving paddy cultivation methods (SRI, aerobic, direct seeding)	SRI, aerobic, direct seeding Var. PADDY (PUSABASMATHI-1), Paddy - 1010, SRI Var. JR -201 @ seed 02 Kg/acre), SRI cultivation of I	91	22.2	47.65	33.01	20163	62865	42702	3.12	16271	39205	22851	2.41
Any other (Pl. specify)	Intercropping systems GOUR + MAIZE 2;1, Arhar-Upas 120 (Pre-Rabi)	240	169.9	46.43	51.44	24483	116539	92056	4.76	23549	50868	27393	2.16

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
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Improved fodder/feed storage methods	Storage Technology Wheat Straw , Augmentation of Fodder	313	632	718.75	514.50	39.70	14371	32269	17898	2.25	12030	21800	10270	1.81
Improved shelters for reducing heat stress in livestock	Training animal camp and new brides cross	194	232	2.77	1.53	80.43	253	773	520	3.05	193	413	220	2.14
Management of fish ponds / tanks during water scarcity and excess water	Fish farming Rohu , Katla , Mrigala,Training Maintenance of fish point ,	104	14.6	51.15	30.36	68.48	47183	139592	92408	2.96	39200	83825	44625	2.14
Preventive vaccination	Vaccination F.M.D., H.S. In Cow, Buffalo, Goat,	1757	2597	7.00	4.00	75.00	9200	25200	16000	2.73	8100	14400	6300	1.77
Use of community lands for fodder production during droughts / floods	Demonstration of Multicut high yielding fodder crop variety of Berseem JB-5 , Barseem, Oat	87	59.87	305.97	227.43	34.53	17610	76922	59378	4.37	14859	54102	39242	3.64
Any other (Pl. specify)	Green fodder (Jawar+Bajra), Poultry, Deshi buffalo crossed	252	635	4.46	4.56	5.03	663	1118	455.14	1.69	52	225	174	4.37

Module: 4. Institutional Intervention

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
Climate literacy through a village level weather station	Literacy about short duration variety of Soybean to mitigate late season drought & frost management in Coriander through spraying of Sulpher with Boron, Zero till , AWS, GPS	5	Technical awareness development, Technology development , Group discussion, Data recording	Gram, Wheat & Coriander, AWS,GPS	2125	57
Collective marketing	Soybean, wheat & Coriander , Maize ,soybean , wheat , Gour , rice ,turmeric and mustard, Mushroom Cultivation	10	Group marketing , Market facility and high value of input , Establishment of mushroom Production Unit, Market facility and high value of input	Soybean, wheat & Coriander, Maize ,soybean , wheat, barley,rice ,turmeric ,Gour and mustard, Spawn, Chemicals and Physical Inputs	470	455
Commodity groups	Climate Risk Management Committee, 11, VermiCompost unit	48	1 group has developed , One society had been developed a climate risk processing unit. in village level, All types of help and commodity during disaster	Technical guidance and practices related to Climate Risk Management Committee, All facility in maintenances climate seed, source. Cement rings	594	172
Custom hiring centre	Soybean, Ground nut, Sesame, Gram, Mustard, Wheat, MB Plough, Hand wheel hoe, Seed cum Ferti –drill, Rotavator, Post hole digger, Power sprayer,	8 No. (M.B. plough, Leveler, Disc harrow, Rotavator, Fert. Cum Seed drill, Sprinkle with	Function of groups, Technology Demonstrate In Custom hiring, In-situ moisture conservation And use in difference NICRA activity , Harvesting of paddy by reaper, Running by farmers ,	MB Plough, Hand wheel hoe, Seed-cum- fertilizer-drill, Rotavater, Post hole digger, Power sprayer, Reaper, Sprinkler set, Engine pump set. Wheat ,Barley, mustard , chickpea	1292	1514

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
Fodder bank	Wheat 300q. , Training on Commercial seed production Barseem Rs. 6.00 lakhs / year, Hybrid Napier grass	300q. , Barseem Rs. 6.00 lakhs / year, Crop damaged	1 group has developed , seed production co. societies were registered and working for farming community, Hybrid napier	Wheat Straw, Barseem short duration pigeon pea var. ICP-88039, Terminal heat resistant var of wheat RVW-4106, Co-3, Hybrid Napier	167	199
Seed bank	Soybean, Training on Commercial seed production in Pigenpea ,Wheat , Rice (Samleshwari), Rice (MTU-1010), Green gram (Hum-6), Ragi (GPU-28), Kodo (JK-41), Paddy, Paddy(khandagiri)	50 q., Rs. 5.00 lakhs / year, 68	1 group has developed, One society had been developed a seed processing unit. Seed grading, safe storage, exchange of grains with seed, Training organized for seed production, High Yield seed, Line sowing,IPM	JS 95-60, ICPL -88039 , Wheat (MP-4010) & Wheat (RV -4106) , MP-1203, Samrat, Seed-Rice (Samleshwari), Rice (MTU-1010), Green gram (Hum-6), Ragi (GPU-28), Kodo (JK-41) and fertilizer, Khandagiri, Sahabhagi Dhan, Lalat, Line sowing, IPM	556	306
Any other (Pl. specify)	Training on Mushroom Production to Rural youth; Animal Health Camp Cattles, Goats, Poultry,	10,000 / month, 1.50000/year, 453	40 rural youth has been involved in Mushroom production, Vaccination, Treatment, Diagnosis, Books,	Market linkage, Medicines, Vitamins, Books, literature, leaflets, booklets, Medicines, Vitamins, Minerals, Paddy straw/oyster mushroom	367	585

Capacity Building (HRD)

Thematic area	Title of training	No. of Courses	No. of beneficiaries	
			Male	Female
1	2	3	4	5
Animal health camp	Disease and health management in milch animals	1	36	4
Crop diversification	Cultivation of Non Paddy crop in upland	1	25	0
Crop Production	Crop management in kharif , Integrated crop	16	222	33

Thematic area	Title of training	No. of Courses	No. of beneficiaries	
			Male	Female
1	2	3	4	5
	management, Use of bio fertilizers and its important kharif crops,			
Drudgery Reduction	Use of improved sickle in harvesting	1	0	22
Exposure visit	OUAT Golden jubilee celebration and visited exhibition stalls and participate farmer scientist interactions programme at G.Udaygiri, CIFA,DRWA, OUAT and Farmers field,	11	215	105
Farm Mechanization	Food preservation of women, Use of MB plough for deep summer ploughing, Use of Rotavator for field preparation, Use of Farm implements and machineries,	12	203	28
Farmers motivation	Introduction and planning for Nicra project	1	44	6
Fertilizer management	Fertilizer management in Lathyrus , Fertilizer application in Wheat & Chickpea	2	38	0
Field day	Soybean JS 9560, zero tillage technology in Pigeon pea, Field day on Intercropping on maize with cowpea,	6	216	95
Fishery	Evaluation of fugacious suchi	1	45	0
Fodder and feed management	Cultivation of hybrid Napier in Wasteland	1	20	5
Horticulture cultivation	Fruit plant plantation, Ber budding	2	141	6
ICM	Production technology of Kharif onion, Production Technology of Soybean, Production technologies for Rabi crops under NICRA	10	234	31
Income generation	Income generation activities for empowerment of women	1	0	25
INM	INM practices in summer vegetable cultivation, Integrated nutrient Management , Kisan gosthi	6	101	20
IPM	Integrated Pest Management , Pest and disease management, Benefits of seed treatment,	10	163	46
IWM	Weed Management in Kharif Crops & Rabi Crops, Weed management in Kharif crops, Wheat	4	90	1
Kishan Mela	Kishan Mela	1	102	48

Thematic area	Title of training	No. of Courses	No. of beneficiaries	
			Male	Female
1	2	3	4	5
Livestock managements	Awareness camp on animal health, Animal Nutrition Management, Feed enrichment of livestock, Production of livestock feed and fodder , Vaccination camp, Vaccination programme in galgontu diseases, Vaccination programme in FMD Animal disease	8	366	99
Mushroom cultivation	Oyster mushroom, Mushroom Production Technique ,Paddy straw mushroom cultivation	4	100	125
NRM	Natural resource management, Rain fed water management technology ; In-situ moisture conservation and water saving methods.	12	369	52
Nursery raising	Permanent nursery bed preparation and its management	1	25	10
RCT	Training on soil sample collection, Scientific method of composting, Importance of green manuring, Soil Conservation technologies,	10	211	7
Vegetable Production	Vegetable production for farm women, Package of practices seasonal vegetables and orchards,	5	112	27
Water management	Rain water harvesting technique, Water management in Wheat	2	22	0

Extension Activity

Thematic area	Title of Field Day	No. of Courses	No. of beneficiaries	
			Male	Female
1	2	3	4	5
Climate change	Farmers Awareness Programme	1	77	26
Diagnostic visits	SRI Paddy, pointed gourd cultivation, hormone application, management practices of crops, use of Pheromone trap for NRM Work under NICRA	19	243	113
Exposure visit	Exposure visit at IGFRI Jhansi (U.P.), Farmers visit to RVSKVV GWALIOR, ZARS MORENA, KVK AGRA, CIAE BHOPAL ,	6	213	18
Field Day	Field day on Gram , Pigeonpea day, Paddy day, Chickpea day, Field day Mustard Pusa Bold, Field day on Gram (JG-130), Field Day on Vegetable cultivation, Field day on drought resistant variety Khandagiri	18	829	141
Group discussion	Discuss about IPM for paddy Stem Borer, Foliar application of micronutrient in pointed gourd, Interaction made with farmer group on cultivation practices vegetables,	71	589	287
ICM	Visit of trainees under ATMA programme, Visit of IIM Students, Kisan ghosti, Group meeting	86	1408	512
IPM	Discuss about IPM for paddy Stem Borer, Foliar application of micronutrient in Paddy and pulses, Short duration Paddy variety	12	98	16
LPM	Animal Health Camp,	4	219	24
Nursery management	Nursery Seedlings Providence	1	19	2
RCT	Soil Health Camp, Special day celebration “Environment Day”	3	260	16
Other	News Paper Coverage	20	20	0