

## KEY TECHNOLOGIES DEMONSTRATED

Agro Climatic Zone	Agro-Ecological Zone	Year and Season	Crop/ Commodity	Micro Farming Situation	Identified Problem	Detail of Technology	Result	
							Yield	Additional Income
<b>2012-13</b>								
North Western Plateau zone	High rainfall Black brown forest soil (AES-V)	Rabi, 2012-13	Watermelon	Irrigated	Low yield of watermelon due to use of local seeds	Use of Hybrid water melon seed Black Magic – 1 kg./ ha., application of balanced manure & fertilizer, use of growth regulator & adequate plant protection measure.	335	80000
	High rainfall Black brown forest soil (AES-V)	Rabi, 2012-13	Marigold	Irrigated		Use of healthy seedlings of Pusa Narangi, spacing of plants 30x45 cm., application of recommended nutrients	127.0	80500
	High rainfall Black brown forest soil (AES-V)	Rabi, 2012-13	Mushroom	Rainfed		Bag method, use of spawn, straw treatment	1.23 kg./ bed	
	Medium rainfall Red & Black soil (AES-II)	2013-14 Rabi	Tomato	Irrigated	Low yield due to wilt susceptible varieties	Demonstration on wilt tolerant Tomato Utkal Raja	290.0	129900
	Medium rainfall Red & Black soil (AES-II)	2013-14 Rabi	Capsicum	Irrigated	Low yield due to use of local seed	Demonstration of Capsicum Var. California Wonder	187.0	158000
	High rainfall Black brown forest soil (AES-V)	2013 kharif	Radish	Irrigated	Low yield due to imbalanced nutrition	Demonstration of Nutrient Management in Kharif Radish	250.0	158700
<b>2013-14</b>								
	Medium rainfall Red & Black soil (AES-II)	2013-14 Rabi	Citrus	Irrigated	Low yield due to fruit drop in citrus	Demonstration of Planofix in controlling fruit drop in Citrus	120000 fruits	54000
	Medium Rainfall Black brown forest soil (AES-IV)	2013-14 Rabi	Sunflower	Irrigated	Low yield due to unfilled head and cracking of head	Demonstration on Boron in Sunflower	14.4	15100

	High rainfall Black brown forest soil (AES-V)	2013 Kharif	Brinjal	Irrigated	Low yield due to imbalanced nutrition	Demonstration on Nutrient Management in Brinjal	340.0	203000
	Medium rainfall Red & Black soil (AES-II)	2013 Kharif	Okra	Irrigated	Low yield due to imbalanced nutrition	Demonstration of Nutrient Management in Okra	170.0	155000
	Medium rainfall Red & Black soil (AES-II)	2013-14 Rabi	Tomato	Irrigated	No use of organic nutrition supplements	Demonstration on Effect of Vermicompost in Tomato for yield enhancement	320.0	175000
	High rainfall Black brown forest soil (AES-V)	2013 Kharif	Niger	Rainfed	Low yield due to use of local degenerated seeds, improper crop management	Demonstration on Oilseed	8.0	23000
	High rainfall Black brown forest soil (AES-V)	2013-14 Rabi	Mustard	Irrigated	Low yield due to use of local degenerated seeds, improper crop management	Demonstration on Oilseed	11.0	28000
	High rainfall Black brown forest soil (AES-V)	2013 Kharif	Blackgram	Rainfed	Low yield due to use of local degenerated seeds, improper crop management	Demonstration on Pulses	10.0	26000
	High rainfall Black brown forest soil (AES-V)	2013-14 Rabi	Greengram	Irrigated	Low yield due to use of local degenerated seeds, improper crop management	Demonstration on Pulses	7.6	29000
	High rainfall Black brown forest soil (AES-V)	2013-14 Rabi	Poultry	Homestead	Low return from the local poultry	TSP on backyard poultry	2.25kg/bird	2700/ 10birds
	Medium rainfall Red & Black soil (AES-II)	2013-14 Rabi	Bantala	Irrigated	Low return from traditional	TSP on Banana cultivation	430	210000

					cropping practices			
	Medium Rainfall Black brown forest soil (AES-IV)	2013-14 Rabi	Vegetables	Irrigated	High price of vegetables unable the tribal families to fulfil daily requirement of vegetables in diet and they suffer from various deficiency diseases	TSP on Kitchen Gardening	2-5 vegetables/day	1015
	Medium Rainfall Black brown forest soil (AES-IV)	2013-14 Rabi	Mushroom	Homestead	No subsidiary income of Farm Women, wastage of rice straw	Demonstration on Oyster mushroom cultivation	110 kg./100 bags	7700
	High rainfall lateritic soil (AES- III)	2013-14 Kharif	Mushroom	Homestead	No subsidiary income of Farm Women, wastage of rice straw	Demonstration on rice straw mushroom	120kg./100beds	16000
	High rainfall Black brown forest soil (AES-V)	2013-14 Kharif	Poultry	Homestead	Rearing of local breed of poultry yields low production of meat and egg	Demonstration on Banaraja poultry in backyard	22 kg./100birds	1500
	Medium rainfall Red & Black soil (AES-II)	2013-14 Kharif	Okra	Homestead	Drudgery in plucking of okra	Demonstration on Bhindi Plucker	1180 plucking/hr	
<b>2014-15</b>								
	Medium rainfall Red & Black soil (AES-II)	2014-15 Kharif	Tomato	Irrigated	Low yield due to incidence of blossom end rot	Demonstration of application of Calcium Nitrate in kharif Tomato	230.5	146550
	Medium rainfall Red & Black soil (AES-II)	2014-15 Kharif	Paddy	Rainfed	Low yield from local upland paddy	Demonstration of short duration paddy variety sahabagi	31.25	10500

	Medium rainfall Red & Black soil (AES-II)	2014-15 Kharif	Turmeric	Irrigated	Low yield of local varieties	Demonstration of turmeric variety Roma	94.5 (wt of dry rhizome)	222650
	High rainfall Black brown forest soil (AES-V)	2014-15 Kharif	Onion	Irrigated	Low return from upland paddy	Demonstration of Kharif Onion Agri found Dark Red	173	157000
	Medium rainfall Red & Black soil (AES-II)	2014-15 Rabi	Chilly	Irrigated	Low yield due to use of local varieties	Demonstration of Chilly Variety Utkal Ava	110	99800
	Medium Rainfall Black brown forest soil (AES-IV)	2014-15 Rabi	Pumpkin	Irrigated	Low yield due to occurrence of male flower	Effect of Ethrel in Pumpkin	307	88800
	High rainfall Black brown forest soil (AES-V)	2014-15 Kharif	Niger	Rainfed	Low yield due to use of local degenerated seeds, improper crop management	Demonstration on management of Niger	7.6	21200
	Medium rainfall Red & Black soil (AES-II)	2014-15 Kharif	Blackgram	Rainfed	Low yield due to use of local degenerated seeds, improper crop management	Demonstration on management of Blackgram	8.8	21700
	Medium Rainfall Black brown forest soil (AES-IV)	2014-15 Rabi	Mustard	Irrigated	Low yield due to use of local degenerated seeds, improper crop management	Demonstration on management of Mustard	10.4	26650
	High rainfall Black brown forest soil (AES-V)	2014-15 Rabi	Green gram	Irrigated	Low yield due to use of local degenerated seeds, improper crop management	Demonstration on management of Greengram	8.5	40250
	Medium rainfall Red & Black soil (AES-II)	2014-15 Rabi	Pea	Irrigated	Low yield due to use of local degenerated	Demonstration of Pea cultivation under TSP	98	110500

					seeds, improper crop management			
	Medium Rainfall Black brown forest soil (AES-IV)	2014-15 Rabi	Backyard poultry	Homestead	Rearing of local breed of poultry yields low production of meat and egg	Backyard poultry	2.4 kg. body wt.	4200
	High rainfall lateritic soil (AES- III)	2014-15	Mushroom	Homestead	No subsidiary income of Farm Women during winter	Demonstration on Oyster mushroom cultivation	140 kg./100 bags	5800
	High rainfall lateritic soil (AES- III)	2014-15	Mushroom	Homestead	No subsidiary income for farm women	Demonstration on rice straw mushroom	120kg./100 beds	16000
	Medium Rainfall Black brown forest soil (AES-IV)	2014-15	Poultry	Homestead	Rearing of local breed of poultry yields low production of meat and egg	Demonstration on Rainbow rooster poultry in backyard	22.10kg/10 birds	1685
	Medium Rainfall Black brown forest soil (AES-IV)	2014-15	Parboiling	Homestead	Drudgery, High consumption of fuel and time consuming and eco- hazard	Demonstration on Paddy parboiling drum	75 kg/sitting( duration of 5 hours)	
	Medium rainfall Red & Black soil (AES-II)	2014-15	Gladioli	Homestead	Low return from Marigold	Demonstration of Gladioli in Backyard for Income Generation of Farm women	200000 spikes/ ha. + 200000cor ms/ ha.	238000
	Medium rainfall Red & Black soil (AES-II)	2015 Kharif	Ginger	Irrigated	Low yield from traditional ginger varieties	Introduction of High Yielding Ginger	213 wt. of Fresh Rhizome	271800
	Medium rainfall Red & Black soil (AES-II)	2015 Kharif,	Colocasia	Rainfed	Low yield from traditional Colocasia varieties	Demonstration of Colocasia var. Muktakeshi	228	156200

	Medium rainfall Red & Black soil (AES-II)	2015 Late Kharif	potato	Rainfed	Low return from upland paddy	Kharif Potato var. Kufri Jyoti	172	105750
<b>2015-16</b>								
	Medium rainfall Red & Black soil (AES-II)	2015-16 Rabi	brinjal	Irrigated	Low yield due to heavy weed incidence	Application of weedicide Pendimethalin in Brinjal	340	96000
	Medium rainfall Red & Black soil (AES-II)	2015 Late Kharif	Tomato	Irrigated	Low yield of local varieties	Tomato var. Swarna Sampad	427	186250
	Medium Rainfall Black brown forest soil (AES-IV)	2015 Kharif	Niger-	Rainfed	Low yield due to use of local degenerated seeds, improper crop management	Demonstration of Niger var. Utkal Niger-150	6.6	21200
	High rainfall Black brown forest soil (AES-V)	2015 Kharif	Black gram	Rainfed	Low yield due to use of local degenerated seeds, improper crop management	Demonstration of Blackgram var. Prasad	7.5	21700
	Medium Rainfall Black brown forest soil (AES-IV)	Rabi, 2015-16	Garden pea	Irrigated	Low yield due to use of local degenerated seeds, improper crop management	Improvement in NRM and Cropping Intensity in Sundargarh-II District through cultivation of Pea in Rice-Fallow system	108	128000
	High rainfall Black brown forest soil (AES-V)	Rabi, 2015-16	Poultry	Homestead	Rearing of local breed of poultry yields low production of meat and egg	Backyard poultry for Economic empowerment of Tribal Women in Sundargarh-II district	2.12kg/bird	1870/ 10birds
	Medium Rainfall Black brown forest soil (AES-IV)	2015-16 Rabi	Mustard	Irrigated	Low yield due to use of local degenerated seeds,	Cluster Demonstration of Mustard	7.8	17360

					improper crop management			
	Medium Rainfall Black brown forest soil (AES-IV)	2015-16 Rabi	Green gram	Irrigated	Low yield due to use of local degenerated seeds, improper crop management	Cluster Demonstration of Greengram	7.9	30900
	Medium Rainfall Black brown forest soil (AES-IV)	2015-16 Rabi	Chick pea	Irrigated	Low yield due to use of local degenerated seeds, improper crop management	Cluster Demonstration of Chickpea	14.8	21500
	Medium Rainfall Black brown forest soil (AES-IV)	2015-16 Rabi	Ground nut	Irrigated	Low yield due to use of local degenerated seeds, improper crop management	Cluster Demonstration of Groundnut	19.5	38500
	Medium rainfall Red & Black soil (AES- II)	2015 Kharif	<i>Mushroom</i>	Home stead	No subsidiary income for farm women	Cultivation of paddy straw mushroom	140kg./100 beds	28000
	Medium Rainfall Black brown forest soil (AES-IV)	2015-16 Rabi	Parboiling unit	Home stead	Drudgery, High consumption of fuel and time consuming and eco- hazard	Use of paddy parboiling unit	78kg/sitting	
	Medium Rainfall Black brown forest soil (AES-IV)	2015 August	Gladioli	Home stead	Low return from Marigold	Cultivating Gladioli variety Peter pear, Red beauty	200000 spikes/ ha. + 200000cor ms/ha.	249000
	High rainfall lateritic soil (AES- III)	2016 Rabi	<i>Mushroom</i>	Home stead	No subsidiary income of Farm Women during winter	Cultivation of Oyster mushroom	170kg./100 bed	11900

	Medium Rainfall Black brown forest soil (AES-IV)	2016 Kharif	Sweet Corn	Irrigated	Low income from maize	Demonstration of Sweet corn	96 qt green cob	117300
	Medium Rainfall Black brown forest soil (AES-IV)	2016 Kharif	Okra	Irrigated	Low yield due to imbalanced application of nutrients	Nutrient Management in OKra	132	102800
	Medium Rainfall Black brown forest soil (AES-IV)	2016 Kharif	Hybrid Paddy	Irrigated	Low yield due to imbalanced application of nutrients	Nutrient Management in Hybrid Paddy	50	24450
<b>2016-17</b>								
	Medium Rainfall Black brown forest soil (AES-IV)	2016-17 Rabi	Onion	Irrigated	Low yield due to heavy weed incidence	Effect of Oxyfluorfen in weed management of Onion	197	60000
	High rainfall lateritic soil (AES- III)	2016-17 Rabi	Capsium	Irrigated	Low yield due to imbalanced application of micronutrients	Effect of Boron on the yield and quality of Capsium	198	105050
	Medium Rainfall Black brown forest soil (AES-IV)	2016-17 Rabi	Potato	Irrigated	Low yield of local potato varieties	Demonstration of Potato	232	87600
	High rainfall Black brown forest soil (AES-V)	2016 Kharif	Blackgram	Rainfed	Low yield dueto use of local degenerated seeds, improper crop management	Demonstration of Blackgram (Cluster)	7.4	36140
	Medium rainfall Red & Black soil (AES- II)	2016-17 Rabi	Field pea	Irrigated	Low yield dueto use of local degenerated seeds, improper crop management	Demonstration of Field pea (Cluster)	15.0	26000
	High rainfall Black brown forest soil (AES-V)	2016-17 Rabi	Garden Pea	Irrigated	Low yield dueto use of local degenerated seeds,	Demonstration of Garden pea ( TSP)	107	75000



					improper crop management			
	High rainfall Black brown forest soil (AES-V)	2016	Mushroom	Homestead	No subsidiary income of farm women	Cultivation technique Paddy straw mushroom	120kg/100beds	16000
	Medium rainfall Red & Black soil (AES-II)	2016-17	Mushroom	Homestead	No subsidiary income of farm women	Cultivation technique oyster mushroom	160kg/100beds	11800
	Medium rainfall Red & Black soil (AES-II)	2016	Vegetables	Homestead	High mortality of vegetable seedlings during rainy season	Demonstration of Raising of seedling in low cost poly house	4500 (no/10 sq m)	1350
	High rainfall Black brown forest soil (AES-V)	2016-17	Fruits	Homestead	Spoilage of fruits and low price	Value addition in Jackfruit (Pickles)	80kg/100kg of raw fruit	4600
	High rainfall Black brown forest soil (AES-V)	2016-17	Vegetables	Homestead	High price of vegetables unable the tribal families to fulfil daily requirement of vegetables in diet and they suffer from various deficiency diseases	Kitchen Gardening	3.8 kg vegetables/day	1780/ month
	Medium Rainfall Black brown forest soil (AES-IV)	2016	Mahua Seed	Homestead	Excessive drudgery of tribal women in Mahua seed decortication	Mahua Seed Decorticator	9.8kg/hr	
	Medium Rainfall Black brown forest soil (AES-IV)	2016	Poultry birds	Homestead	No subsidiary income of tribal women	Broiler Farming	170 kg of body weight from 100 birds	7900