

## Year: 2007-08

### A. ON FARM TRIALS

Sl No	Crop/ Commodity	Year	Farming Situation	Problem/Opportunity identified for which such intervention was undertaken	Farmer's Practice	Technology options tested	Result	Feedback	Remarks if any	Action photographs
1	Paddy	Kharif -2007	Rainfed/irrigated	Low yield	-	T <sub>1</sub> -Farmer practice T <sub>2</sub> -Soil application of Azospirillum & PSB @ 5 kg/ha	27% increase in yield over farmers practice	Non-availability of Bio-fertiliser in time	-	-
2	Paddy	Kharif -2007	Rainfed/irrigated Medium land	Lower Yield due to zinc deficiency	-	T1-Non application of Zinc T2-Application of ZnSo <sub>4</sub> @ 10Kg /ha	20% increase in yield over farmers practice	High cost of Zinc	-	-
3	Paddy	Kharif -2007	Rainfed	Less return due to low quality of traditional Rice varieties	-	T-1 =Cultivation of local scentedrice (Chatiaakhi) T-2=Cultivation of Scented Rice (Pusa Sugandha)	Pusa, Sugandha gives 23.1% increase in yield over farmers practice	Good quality grain	-	-
4	Paddy	Kharif -2007	Rain fed/irrigated/Upland	Weed infestation	-	T1-Farmers practice (no application) T2- Application of Butachlor @ 1.0kg/ha.	Reduction of weeding cost from Rs.2750 per ha. In control	Suitable for weed control in paddy	-	-
5	Papaya	Kharif -2007	Rainfed/irrigated	Low yield	-	T1= Local variety T2= Variety honeydew	50% increase in yield over farmers practice	Gives good yield, size of the fruit better than	-	-

								the local		
6	Pumpkin	Kharif -2007	Rainfed/irrigated	Low yield	-	T1-No application of Zinc T2-Application of Zinc Sulphate @ 10Kg/ha.	50% increase in yield over farmers practice	Give good yield, size of the fruit better than the local	-	-
7	Brinjal	Kharif -2007	irrigated	Serious damage of fruits due to shoot & fruit borer	-	T1-No use of trap T2-Introductin of Pheromone trap with lure @ 10nos./acre	Damage fruits are less	Pheromone trap gives good results in trapping the insects	-	-

## B. FRONT LINE DEMONSTRATION

Sl No	Crop/Commodity	Year	Farming Situation	Problem/Opportunity identified for which such intervention was undertaken	Farmer's Practice	Technology Demonstrated	Result	Feedback	Remarks if any	Action photographs
1	G.Gram + Arhar	Kharif 2007	Rainfed/irrigated	-	-	Intercropping	21 % increase in yield over farmers practice	Farmers accepted the technology	-	-
2	Paddy	Kharif 2007	Rainfed/irrigated	-	-	Blast diseasea resistant variety	34 % increase in yield over farmers	Farmers accepted the technology	-	-

							practice			
3	Wheat	Rabi 2007-08	Rainfed/irrigated	-	-	Rice wheat	36 % increase in yield over farmers practice	Farmers accepted the technology	-	-
4	Tomato	Rabi 2007-08	Rainfed/irrigated	-	-	Plantomycin, Bavistin as foliar spray & drenching @ 1gm/ltr.	65 % increase in yield over farmers practice	Farmers accepted the technology	-	-
	Brinjal	Rabi 2007-08	Rainfed/irrigated	-	-	Sparying of Neem leaf Extra50g./ltr. & Trizophos 2ml/lrt.	42 % increase in yield over farmers practice	Farmers accepted the technology	-	-
5	Arhar	Rabi 2007-08	Rainfed/irrigated	-	-	Application of Endosulphan ,Neem leaf Extract	58 % increase in yield over farmers practice	Farmers accepted the technology	-	-
6	Onion	Rabi 2007 – 08	Rainfed/irrigated	-	-	Application of Pottas IndophiM 45 + Roger	65.38 % increase in yield over farmers practice	Farmers accepted the technology	-	-
7	Mango	Rainy 2007-08	Rainfed/irrigated	-	-	Introduction of new var.	38% increase in yield over farmers	Farmers accepted the technology	-	-

							practice			
8	Banana	Rainy - 2007	Rainfed/irrigated	-	-	Introduction of high yielding var.	140 % increase in yield over farmers practice	Farmers accepted the technology	-	-
9	Stump teak + Bamboo	Kharif-07	Rainfed/irrigated	-	-	Farm forestry (Bund Plantation)	Continuing	Farmers accepted the technology	-	-

## Year: 2008-09

### A. ON FARM TRIALS

Sl No	Crop/Commodity	Year	Farmer's Situation	Problem/Opportunity identified for which such intervention was undertaken	Farmer's Practice	Technology options tested	Result	Feedback	Remarks if any	Action photographs
1	Sunflower	Kharif-2008	Irrigated upland.	Low yield and chaffyness of grains	-	T <sub>1</sub> - Farmers practice (No Borax application) T <sub>2</sub> -Basal application of Borax @ 10 kg/ha.	33.3% increase in yield over farmers practice	Higher rate of grain filling	-	-
2	Onion	Kharif-2008	Irrigated upland.	Low yield due to heavy incidence of purple blotch	-	T <sub>1</sub> - Farmers practice (Small size Desi Onion) T <sub>2</sub> - Bhima Super	50% increase in yield over	Low incidence of disease, Palatable	-	-

				disease			farmers practice	taste, less flowering		
3	Water Melon	Kharif-2008	Irrigated upland.	Low yield and high water used	-	T <sub>1</sub> - Farmers practice (Pit method) T <sub>2</sub> - Transplanting of Water Melon seedling at 25 days old	23% increase in yield over farmers practice	Saving of labour and two nos. of irrigation, Bigger size of fruit.	-	-

#### B. FRONT LINE DEMONSTRATION

Sl No	Crop/Commodity	Year	Farming Situation	Problem/Oportunity identified for which such intervention was undertaken	Farmer's Practice	Technology Demonstrated	Result	Feedback	Remarks if any	Action photographs
1	Paddy	Kharif 2008	Rain fed	Low yield due to insect & diseases infestation	-	Varietal replacement	40 % increase in yield over farmers practice	Farmers accepted the technology	-	-
2	Paddy	Kharif-2008	Rain fed	Yield loss due to heavy infestation	-	Application Bio-Fertilizer Azospi & PSB @ 5kg/ha.	30 % increase in yield over farmers practice	Farmers accepted the technology	-	-
3	Paddy	Kharif-2008	Rain fed	Low yield due to insect & diseases infestation	-	Varietal replacement	50 % increase in yield over farmers practice	Farmers accepted the technology	-	-

4	Paddy	Kharif 2008	Rain fed	Yield loss due to heavy infestation of stem borer in paddy	-	Application of Zinc Sulphate @ 10kg/ha.	25 % increase in yield over farmers practice	Farmers accepted the technology	-	-
5	Paddy	Kharif-2008	Rain fed	Low yield due to insect & diseases infestation	-	Application of Weediside Butachlor @ 1.0 a.i./ha.	30 % increase in yield over farmers practice	Farmers accepted the technology	-	-
6	Sunflower	Rabi 2008-09	Canal irrigated	Low yield due to insect & diseases infestation	-	Varietal replacement	50 % increase in yield over farmers practice	Farmers accepted the technology	-	-
7	Mango	Kharif-2008	Rain fed	Low yield due to insect & diseases infestation	-	Introduction of new variety- Dasher	-	Farmers accepted the technology	-	-
8	Banana	Kharif-2008	Rainfed	Low yield due to insect & diseases infestation	-	Introduction of high yielding var.	140 % increase in yield over farmers practice	Farmers accepted the technology	-	-
9	Papaya	Kharif-2008	Rain fed	Low yield due to insect & diseases infestation	-	Varietal replacement(Honey dew)	100 % increase in yield over farmers practice	Farmers accepted the technology	-	-

10	Pumpkin	Rabi-2008-9	Canal irrigated	Low yield due to insect & diseases infestation	-	Guamal	50 % increase in yield over farmers practice	Farmers accepted the technology	-	-	-
11	Onion	Rabi-2008	Canal irrigated	Low yield due to insect & diseases infestation	-	Local	65 % increase in yield over farmers practice	Farmers accepted the technology	-	-	-

## Year: 2009-10

### C. ON FARM TRIALS

Sl No	Crop/Commodity	Year	Farmering Situation	Problem/Opportunity identified for which such intervention was undertaken	Farmer's Practice	Technology options tested	Result	Feedback	Remarks if any	Action photographs
1	Paddy	Kharif - 2009	Rainfed	Low yield due to heavy incidence of blast	No proper control measure	Seed treatment with vitavax power and foliar spray of Tricyclazole @ 500 gm/ha	23.0 % change in Yield over farmers practice	Accepted	-	

2	Paddy	Kharif - 2009	Rainfed	Low yield of rice in traditional method of cultivation	Traditional method of Rice cultivation	Transplanting of 10 days old single seedling at 25 × 25 cm , maintenance of soil moisture at saturation level, interculture by cono weeder	54.0 % change in Yield over farmers practice	Accepted	-	
3	Pedal operated G.Nut Thresher	Rabi 2009-10	-	High labour cost in threshing	Manual threshing of groundnut	Use of pedal operated groundnut thresher	706 % change in threshing	Accepted	-	
4	Brinjal	Rabi 2009-10	-	Low yield due to severe infestation of fruit and shoot borer	No proper control measure	Application of Neem cake @ 250 kg/ha and alternate spray of Triazophos and neem based pesticide	24 % change in Yield over farmers practice	Accepted	-	
5	Paddy	Rabi 2009-10	-	Low yield due to heavy incidence of stem borer	No proper control measure	Application of Cartap hydrochloride 4G @ 20kg/ha and release of egg parasite Trichogramma Japonicum	38.0 % change in Yield over farmers practice	Accepted	-	

6	Okra	Summer 2010	-	Low yield due to heavy infection of YMV	Cultivation of variety susceptible to YMV	Cultivation of YMV resistant variety Akra Anamika resistant to YMV yield = 125 qt / ha , 1 <sup>st</sup> flowering	25.0 % change in Yield over farmers practice	Accepted	-	
7	Onion	Rabi 2009-10	-	Low yield from Variety Nasik Red	Cultivation of Nasik Red variety of Onion	Cultivation of high yielding variety of onion Agrifound Light red (average yield 300-325 qt/ha, 4 to 6 cm bulb, mature in 160 to 165 days)	19.0 % change in Yield over farmers practice	Accepted	-	

#### D. FRONT LINE DEMONSTRATION

Sl No	Crop/Commodity	Year	Farming Situation	Problem/Opportunity identified for which such intervention was undertaken	Farmer's Practice	Technology Demonstrated	Result	Feedback	Remarks if any	Action photographs
1	Maize + cowpea	Kharif -2009	Rained	Low yield and high risk from sole crop	Mono cropping	Intercropping of maize with cow pea 2:2 Proportion	26.2 % change in Yield over farmers practice	Accepted	-	
2	Paddy	Kharif -2009	Irrigated	Low yield due to non application of recommended dose of	Non application of	Application of Azospirillli	40.5 % change in Yield	Accepted	-	

				fertilizer	recommended dose of fertilizer	un & PSB each @ 5 kg./ ha. Inoculated with 100kg.of FYM	over farmers practice			
3	Paddy	Kharif -2009	Irrigated	Low yield from local scented rice varities	Cultivation of local scented rice var. Chatei Khia	Cultivation of HYV var.of scented rice Ketakijuha	23.9 % change in Yield over farmers practice	Accepted	-	
4	Paddy	Kharif -2009	Irrigated	Low yield due to weed infestation	Manual weeding	Application of Butachlor @ 2.0 lit/ha at 3-4 days of trans planting	41 % (2.8/sq. m) % change in Yield over farmers practice	Accepted	-	
5	Paddy	Kharif -2009	Irrigated	Low yield due to severe infestation of Gallmidge infestation	No proper control measure	Nursery treatment with Carbofuran 2.5kg/ha. And application of Chloropyri phos @ 1lt./ha in main field	<b>4 1.6 (4.3%)</b> % change in Yield over farmers practice	Accepted	-	

6	Paddy	Kharif -2009	Irrigated	Low yield due to micro-nutrient deficiency	No application of micro-nutrient	Soil application of Zinc Sulphate @25 kg./ha.	<b>42.7</b> % change in Yield over farmers practice	Accepted	-	
7	Sunflower	Kharif -2009	Irrigated	Low yield due to Local Var.	Cultivation local var.	Cultivation of Hybrid Var. KBSH-1	<b>12.3</b> % change in Yield over farmers practice	Accepted	-	
8	Sunflower	Kharif -2009	Irrigated	Low Yield due to Micro-nutrient deficiency	No application of micro-nutrient	Foliar application of Sodium tetraborate @0.5 kg./ha.	<b>15.2</b> % change in Yield over farmers practice	Accepted	-	
9	Vegetable & fruits	Kharif -2009	Irrigated	Malnutrition	Improper utilisation of Backyard space	Cultivation of different var.of fruits & seasonal vegetables	71.6 % change in Yield over farmers practice	Accepted	-	
10	Banana	Rabi-2009-10	Irrigated	Low yield due to Disease infection	No proper control measure	Sucker treatment with Pseudomonas & Trichoderma and Application	43.0 % change in Yield over farmers practice	Accepted	-	

						n of Ridomil 2gm./lt and plantomycin 1gm/lt				
11	Pointed Gourd	Rabi-2009-10	Irrigated	Low Yield due to Wilt	No proper control measure	Root cutting Treated with Tricoderma & pseudomonas formulation & need based application of ridomil @ 1 kg./ ha	147.3 (44.1%) % change in Yield over farmers practice	Accepted	-	
12	Brinjal	Rabi-2009-10	Irrigated	Low Yield due to heavy infestation of FSB	No proper control measure	Use of Pheromone Trap @ !5 no /ha	216.3 (11.6%) % change in Yield over farmers practice	Accepted	-	
13	Water Melon	Rabi-2009-10	Irrigated	High Percentage of mortality in Direct seeding Method	Direct seeding in main field	Sowing seeds in poly bag& transplanting at 10-15 day of sowing	208.4 % change in Yield over farmers practice	Accepted	-	

14	Teak	Kharif -2009	Rainfed	Shortage of fuel wood & Timber	Cultivation of Arhar in field bund	Plantation of Stump teak in field Bund at 3 mt. interval	Continued	Accepted	-	
15	Sisso	Kharif -2009	Rainfed	Shortage of Fodder, fuel wood & Timber	Cultivation of Arhar in field bund	Plantation of Sissoo in field Bund at 3 mt. interval	Continued	Accepted	-	

**Year: 2010-11**

## A. ON FARM TRIALS

Sl No	Crop/Commodity	Year	Farming Situation	Problem/Opportunity identified for which such intervention was undertaken	Farmer's Practice	Technology options tested	Result	Feedback	Remarks if any	Action photographs
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1	Paddy	Kharif-2010	Irrigated lowland, Clay loam	Yield loss due to heavy incidence of sheath blight	No proper control measure	Seed treatment with Vitavax power @ 2g/kg + application of validamycin @ 3 ml/l	15.0 % change in Yield over farmers practice	Farmers accepted the technology	-	
2	Brinjal	Kharif-2010	Irrigated upland Sandy loam	Difficulties in top dressing after 40 days	No foliar feeding	Foliar feeding of Polyfeed @ 5g/lit. for 3 times at 60, 75 and 90 days of planting	20 % change in Yield over farmers practice	Farmers accepted the technology	-	
3	Pigeon pea	Kharif-2010	Rainfed upland, Sandy loam	Low yield due to acidic soil	No soil reclamation	Application of lime @ 500 kg/ha before sowing	20 % change in Yield over farmers practice	Farmers accepted the technology	-	
4	paddy	Kharif-2010	Irrigated Midland Sandy loam	Low yield due to insect & diseases infestation in variety Swarna	Swarna	Ranidhan-140 days, moderately resistant to disease and pest, yield 45 q/ha	14.0 % change in Yield over farmers practice	Farmers accepted the technology	-	
5	Brinjal	Kharif-2010	Irrigated upland, Sandy loam	Low yield due to incidence of fruit rot in Brinjal	No proper control measure	Seed treatment with vitavax power @ 2g/kg + Spraying of Thiophanate Methyl @ 1.5g/l	21.0 % change in Yield over farmers practice	Farmers accepted the technology	-	

6	Greengram	Rabi 2010-11	Irrigated lowland	Low yield and poor grain filling	No application of Boron	Application of Boron	35.0 % change in Yield over farmers practice	Farmers accepted the technology	-	
7	Tomato	Rabi 2010-11	Irrigated upland	Low yield due to heavy infection of leaf curl virus	No control measure	Seed treatment with Imidachloprid and alternate spray of Acetamiprid and Multineem at 7 days interval	20 % change in Yield over farmers practice	Farmers accepted the technology	-	
8	Improved sickle	Rabi 2010-11	-	Drudgery to farm women	Reaping with traditional sickle	Use of improved sickle	5 % change in Parameter	Farmers accepted the technology	-	
9	Potato Digger	Rabi 2010-11	-	Labour and time consuming in manual digging	Digging with spade	Use of potato digger	380 % change in Parameter	Farmers accepted the technology	-	
10	Water melon	Rabi 2010-11	Irrigated Midland	Low yield due to more no. of male flowers	No application of growth regulator	Application of Ethrel at 2 and 4 true leaf stage @ 200 PPM	13.5 % change in Yield over farmers practice	Farmers accepted the technology	-	

## B. FRONT LINE DEMONSTRATION

Sl No	Crop/Commodity	Year	Farming Situation	Problem/Opportunity identified for which such intervention was undertaken	Farmer's Practice	Technology Demonstrated	Result	Feedback	Remarks if any	Action photographs
1	Paddy	Kharif 2010	Irrigated	Low yield due to disease pest problem in old variety <i>Lalat</i>	Cultivation of old rice variety Lalat	Duration 120 days having multiple resistance to disease and pest	16 % change in Yield over farmers practice	Farmers accepted the technology	-	
2	Paddy	Kharif 2010	Irrigated	Low yield in traditional method of cultivation	Traditional method of cultivation	Transplanting of 10 days old seedling at 25 x 25 cm spacing and use of cono weeder	26 % change in Yield over farmers practice	Farmers accepted the technology	-	
3	Paddy	Kharif 2010		Low yield due to micronutrient deficiency	No use of micronutrient	Application of $ZnSO_4$ @ 25kg/ha	15 % change in Yield over farmers practice	Farmers accepted the technology	-	

5	Okra	Rabi, 2010-11	Irrigated	Low yield of Okra due to YMV infection	Cultivation of Okra variety Parbani kranti	Cultivation of Okra variety Arka anamika with package of practices	27 % change in Yield over farmers practice	Farmers accepted the technology	-	
5	Paddy	Kharif 2010	Irrigated	Low yield due to severe infection of blast	No proper control measure	Seed treatment with Vitavax power @ 2g/kg of seed and foliar spray of Tricyclazole @ 300 g/ha	16.9 % change in Yield over farmers practice	Farmers accepted the technology	-	
6	Paddy	Kharif 2010	Irrigated	Low yield due to improper nutrient management	No application of Bio-fertilizer	Application of Azospirillum & PSB @ 5 kg/ha each, along with soil test based fertilizer application	10 % change in Yield over farmers practice	Farmers accepted the technology	-	
7	Pumpkin	Kharif 2010	Irrigated	Heavy fruit damage due to infestation of fruit fly	No control measure	Poison bait prepared of 20 gm Jaggery + 2ml Malathion +1 lit water Placed in small pots in field	11.6 % change in Yield over farmers practice	Farmers accepted the technology	-	

8	Potato	Rabi, 2010-11	Irrigated	<i>Low yield from Local variety</i>	Cultivation of Variety. Lal Patna	Cultivation of HYV Kufri Surya with application of Zinc sulphate & Mancozeb	22.9 % change in Yield over farmers practice	Farmers accepted the technology	-	
9	Sunflower	Rabi, 2010-11	Irrigated	Low yield due to poor grain filling	No application of Boron	Foliar spray of Boron @ 0.1% at flowing stage	17 % change in Yield over farmers practice	Farmers accepted the technology	-	
10	Brinjal	Rabi, 2010-11	Irrigated	Low yield due to heavy infestation of fruit & shoot borer	No proper management of fruit & shoot borer	Soil application of Neem cake @ 250 kg/ha and alternate spray of Triazophos and multineem	28 % change in Yield over farmers practice	Farmers accepted the technology	-	
11	Maize	Kharif 2010	Irrigated	Yield loss due to weed infestation	Manual weeding	Use of Atrazine @ 2 kg/ha as pre-emergence application	12.0 % change in Yield over farmers practice	Farmers accepted the technology	-	

12	Mushroom	Rabi, 2010-11	-	Low income of farm family	No cultivation of mushroom	Bed preparation and care	60/bed over farmers practice	Farmers accepted the technology	-	
13	Groundnut thresher	Rabi, 2010-11	-	More labour and time consuming in manual plucking of Groundnut	Manual plucking of Groundnut	Use of groundnut thresher in threshing of Groundnut pods from plants	23.8 Parameter (Threshing capacity kg/hr)	Farmers accepted the technology	-	
14	Pedal operated paddy thresher	Rabi, 2010-11	-	More labour and time consuming in manual threshing	Threshing of paddy manually or by bullock	Use of pedal operated paddy thresher for threshing of paddy	2.0 Parameter (qtl/day)	Farmers accepted the technology	-	

Year: 2011-12

## A. ON FARM TRIALS

Sl No	Crop/Commodity	Year	Farmering Situation	Problem/Opportunity identified for which such intervention was undertaken	Farmer's Practice	Technology options tested	Result	Feedback	Remarks if any	Action photographs
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1	Chilli	Kharif 2011	Rainfed upland, Sandy loam	Low yield and wilting of plant	Cultivation of variety suryamukhi	Upward fruiting habit, dual purpose, mature in 125 - 130days, 6.2 cm long fruit, resistant to bacterial wilt ,Yield = 110 q/ ha	19 % change in Yield over farmers practice	Chilli var.Utkal Ava is very much susceptible to leaf curl virus	-	
2	Goatery	Kharif 2011	-	Poor health and mortality of kids	No proper treatment	Treatment with Fenbendazole @ 5 mg/kg of body weight + livotas @ 5 ml/kid	4.5% Paramenter of kid mortality	Farmers accepted the technology	-	
3	drumstic k	Kharif 2011	Irrigated upland, Sandy loam	Low yield from local cultivar	Cultivation of local type drumstick	Drumstick ( PKM-1), Bushy type, flower in 90 to 100 days , 65-70 cm long fruit, Yield: 33-35 kg /plant	27 % Paramenter of kid mortality	Farmers accepted the technology	-	
4	Groundnut	Kharif 2011	Irrigated lowland, Clay loam	High cost in manual weeding	Manual weeding	Pre emergence application of Oxyfluorfen @ 200 ml /ha.	70 % Paramenter* No. of weeds/s q.m	Farmers accepted the technology	-	
5	Paddy	Kharif 2011	Irrigated upland Sandy loam	Low yield due to improper nutrient management	Application of chemical fertilizer only	Green manuring with Dhanicha @ 25 kg / ha, application of Azospirillum , PSB each@ 5kg/ha & 75 % N, P <sub>2</sub> O <sub>5</sub> & full K <sub>2</sub> O	11 % Paramenter No. of Tillers/ hill	Farmers accepted the technology	-	

6	Paddy	Kharif 2011	Clay loam	Yield loss due to heavy infestation of leaf folder	No proper control measure	Foliar spraying of Triazophos @ 1 lit/ha	0.8 % Parameter Damaged leaf/hill	Farmers accepted the technology	-	
7	Arhar	Kharif 2011	Sandy loam	Yield loss due to infestation of pod borer	No proper control measure	Use of pheromone trap @ 20 / ha, Spraying of Bt formulation @ 1 kg / ha & cypermethrine @ 500 ml/ ha at 15 days interval starting from 50 % flowering	6.7 Parameter % of pod damage	Farmers accepted the technology	-	
8	Hill broom	Kharif 2011	Irrigated upland, Sandy loam	Low market price from brooms made from local grass	Making brooms from local grass	Planting Hill Broom at spacing of 1 m x 1 m	13.2 Parameter No of culms/hill	Farmers accepted the technology	-	
9	Sunflower	Rabi, 2011-12	Irrigated	Low yield due to inproper nutrition	No application of sulphur based fertilizer	Soil application of gypsum @ 250 kg/ha	19.6 Parameter Head Diameter in cm	Farmers accepted the technology	-	
10	Cauliflower	Rabi, 2011-12	Irrigated	Yield loss due to heavy infestation of Tobacco caterpillar	No proper control measure	Use of pheromone trap @ 20/ha, spraying of Bt formulation @ 1kg/ha & cypermethrin 10 EC @ 1000ml/ha at 15 days intervals	1.2 Parameter No of caterpillar /plant	Farmers accepted the technology	-	

11	Paddy	Rabi, 2011-12	Irrigated	Yield loss due to BLB infection	No proper control measure	Foliar application of streptocycline @ 50 gm/ha + copper oxychloride @ 1kg/ha	1.5 Parameter % infection	Farmers accepted the technology	-	
12	Onion	Rabi, 2011-12	Irrigated	Yield loss due to heavy infestation of weed	Manual weeding	Oxyflurofen @ 200 ml / ha at 3 DAT & Quizalfop ethyle @ 1 lt /ha at 20 days after transplanting	58 Parameter Weeds/ m <sup>2</sup>	It can not control <i>cyperus rotundus</i> & few dicot weeds	-	
13	Tomato	Rabi, 2011-12	Irrigated	Low yield due to wilting	Cultivation of variety Sel-22,PKM-1 which are susceptible to wilt	Utkal Pragyan, determinate var. Tolerant to bac. Wilt ,mature in 90-95 days ,yield = 412.22 qt/ ha	23 Parameter* No of fruits/pl ant	Farmers accepted the technology	-	
14	Hand ridger	Rabi, 2011-12	-	Drudgery to farm women in earthing up in vegetable	Earthing up with help of spade	Use of hand ridger for earthing up in vegetable	0.1 Parameter ha/day	Farmers accepted the technology	-	
15	Sunflower threshing Bench	Rabi, 2011-12	-	Drudgery to farm income	Manual threshing	Use of sunflower threshing bench	94 Parameter Heart rate Beat/min	Farmers accepted the technology	-	

## B. FRONT LINE DEMONSTRATION

Sl No	Crop/Commodity	Year	Farming Situation	Problem/Opportunity identified for which such intervention was undertaken	Farmer's Practice	Technology Demonstrated	Result	Feedback	Remarks if any	Action photographs
1	Brinjal	Kharif-2011	Irrigated	Yield loss due to heavy infection of fruit rot in brinjal	No proper control measure	Seed treatment with vitavax power @1gm/kg + Spraying of Thiophenate Methyl @1.5gm/lit	22.5 % change in Yield over farmers practice	Farmers accepted the technology	-	
2	Paddy	Kharif 2011	Irrigated	Low yield from traditional method of cultivation	Traditional methods of cultivation	Transplanting of 10 days old seedling at 25 x 25cm spacing & use of cono weeder	30 % change in Yield over farmers practice	Farmers accepted the technology	-	
3	Paddy	Kharif 2011	Irrigated	Yield loss due to severe infection of sheath blight	No proper control measure	Seed treatment with Vitavax power @ 2 g/kg & spraying of validamycin @ 3 ml/l	23.8 % change in Yield over farmers practice	Farmers accepted the technology	-	

4	Brinjal	Kharif 2011	Irrigated	Difficulty in top dressing of fertilizer	No foliar feeding	Foliar feeding of Polyfeed (NPK 19:19:19) @ 5gm/lit. for 3 times at 60, 75 and 90 days of planting	18.2 % change in Yield over farmers practice	Farmers accepted the technology	-	
5	Paddy	Kharif 2011	Irrigated	Low yield due to disease pest incidence in Swarna	Growing of Variety Swarna	Cultivation HYV Rice Variety (Ranidhana) ,NPK @ 60: 30:30 kg/ha	15 % change in Yield over farmers practice	Farmers accepted the technology	-	
6	Paddy	Kharif 2011	Irrigated	<i>Low yield From HYV rice</i>	Cultivation of HYV (Swarna)	Cultivation of Hybrid Rice (Variety- JKRH-401),seed rate @ 15 kg/ha ,NPK @ 120:60:60 kg/ha	36 % change in Yield over farmers practice	Farmers accepted the technology	-	
7	Nutritional gardening	Kharif 2011	Irrigated/Rainfed	Malnutrition	Cultivation of vegetables without planning	Lay out & growing of different vegetables & fruit to meet the family requirement round the year	25 % change in Yield over farmers practice	Farmers accepted the technology	-	

8	Teak	Kharif 2011	Irrigated/Rainfed	Unutilisation of interspace in commercial teak plantation	No intercrop in teak plantation	Cultivation of turmeric in the interspace of teak plantation	Continuing	Farmers accepted the technology	-	
9	Watermelon	Rabi ,2011-12	Irrigated	Low yield due to less no of female flowers	No application of growth regulator	Foliar application of Ethrel @ 200 ppm twice at 2 and 4 true leaves stage	16 % change in Yield over farmers practice	Farmers accepted the technology	-	
10	Tomato	Rabi ,2011-12	Irrigated	Loss in yield due to infection of leaf curl virus	No proper control measure	Seeds soaking with Imidachloprid @ 1 ml/ 4 lt. & spraying of neem based pesticide @ 5 ml/ lt.and Acetamiprid @ 1 gm/4 l of water	19.3 % change in Yield over farmers practice	Farmers accepted the technology	-	
11	Brinjal	Rabi ,2011-12	Irrigated	Yield loss due to heavy infestation of fruit and shoot borer	No proper control measure	Soil application of neem cake @ 250kg/ha and alternate spray of Triazophos and neem based pesticides.	30 % change in Yield over farmers practice	Farmers accepted the technology	-	

12	Paddy	Rabi ,2011-12	Irrigated	Yield loss due to heavy infestation of stem borer in paddy	No proper control measure	Application of Cartap hydrochloride @ 20 kg/ha and release of egg parasite <i>Trichogramma japonicum</i> @ 50,000/ha	21 % change in Yield over farmers practice	Farmers accepted the technology	-	
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## Year: 2012-13

### A. ON FARM TRIALS

Sl No	Crop/Commodity	Year	Farmering Situation	Problem/Opportunity identified for which such intervention was undertaken	Farmer's Practice	Technology options tested	Result	Feedback	Remarks if any	Action photographs
1	Pigeon pea	Kharif 2012	Rain fed	Wilting in Pigeon pea	No control measure	Seed treatment with Vitavax power @ 2gm/kg of seed & Soil application of <i>T. viridae</i> @ 5 kg/ ha incubated with FYM	42.2 % change in Yield over farmers practice	Farmers accepted the technology	-	

2	Ground Nut	Kharif 2012	Rain fed	Low yield due to infection of <i>Cercospora</i> leaf spot in ground nut	Application of DAP @ 75 kg/ ha	Soil application of Gypsum @ 250 kg/ha along with NPK @ 20:40:40 kg/ha	17.72 % change in Yield over farmers practice	Farmers accepted the technology	-	
3	Onion	Kharif 2012	Irrigated	High cost of planting material	Planting of onion bulb in Kharif	Onion var. N-53, seed rate 10kg/ha, fertilizer NPK @120:60:100 kg/ha	4.67 % change in Yield over farmers practice	Farmers accepted the technology	-	
4	Cauliflower	Rabi 2012-13	Irrigated	Browning in cauliflower resulting low yield	Application of NPK @ 100:50:50 kg /ha	Application of FYM @ 15 ton/ha ,foliar spray of boron @ 2gm/lt along with RDF (NPK @ 125:50:75 kg/ha )	14.3 % change in Yield over farmers practice	Farmers accepted the technology	-	
5	Onion	Rabi 2012-13	Irrigated	Yield loss due to heavy infestation of Onion thrips	No proper control measure	Soil application of neem cake @ 100 kg/ha during transplanting & foliar spray of Imidacloprid 125 ml/ ha	22.1 % change in Yield over farmers practice	Farmers accepted the technology	-	
6	Tomato	Rabi 2012-13	Irrigated	Yield loss due to heavy wilting	Cultivation of variety Selection-22	Var. Utkal Raja, seed rate 500 gm/ha, fertilizer NPK @ 125:65:75 kg/ha	20.5 % change in Yield over farmers practice	Farmers accepted the technology	-	

7	Paddy	Kharif 2012	Irrigated	High labour cost due to manual weeding	Manual weeding	Application of herbicide fenoxaprop- p-ethyl @ 750 ml/ha+ Almix @ 20gm/ha at 25 days after transplanting	18.22 % change in Yield over farmers practice	Farmers accepted the technology	-	
8	Brinjal	Kharif 2012	Irrigated	Low yield in Brinjal	No proper nutrient management practices	Soil application of Azotobacter @ 5 kg/ha & PSB @ 5kg/ha along with 75 % RDF (NPK 120:60:60 kg/ha)	19.58 % change in Yield over farmers practice	Farmers accepted the technology	-	
9	Ground Nut	Kharif 2012	Rain fed	Low yield due to infection of <i>Cercospora</i> leaf spot in ground nut	No proper nutrient management practices	Seed treatment with vitavax power @ 2 gm/kg & foliar application of Carbendazim 12 % + Mancozeb 63 % @ 2 gm / lit.	19.0 % change in Yield over farmers practice	Farmers accepted the technology	-	
10	Feeding management	Kharif 2012	Rainfed	Low yield due to improper nutrition management	Traditional fish culture without supplementary feeding	Use of GNOC+RB (1:1)@2kg/ha for first three months and then @4kg/ha in consecutive months	26.3 % change in Yield over farmers practice	Farmers accepted the technology	-	
11	Production & management	Kharif 2012	Rainfed	Stocking of fry results in high mortality	Culture of fry as grow-out culture	Stocking of yearling @ 5000 nos /ha	25 % change in Yield over farmers practice	Farmers accepted the technology	-	

12	Green gram	Rabi 2012-13	Irrigated	Low yield due to improper nutrition	Application of DAP @ 50 kg /ha	Seed treatment with Rhizobioum culture @ 200 gm/ 10 kg of seeds & PSB 250 gm/10 kg seeds with 75 % RDF ( NPK @ 20:40:20 kg/ha)	39.6 % change in Yield over farmers practice	Farmers accepted the technology	-	
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#### B. FRONT LINE DEMONSTRATION

Sl No	Crop/Commodity	Year	Farming Situation	Problem/Opportunity identified for which such intervention was undertaken	Farmer's Practice	Technology Demonstrated	Result	Feedback	Remarks if any	Action photographs
1	Paddy	Kharif -2012	Irrigated	Low yield due to improper nutrition	Improper nutrient management practices	Green manuring with Dhanicha @ 25 kg / ha, application of Azospirillum , PSB each @ 5 kg /ha and 75 % RDF	22.0 6 % change in Yield over farmers practice	Farmers accepted the technology	-	
2	Ground nut	Kharif -2012	Irrigated	No improper weed management	<i>Manual weeding</i>	Pre emergence application of Oxyfluorfen @ 200 ml /ha.	20.0 % change in Yield over farmers practice	Farmers accepted the technology	-	

3	Chilli	Kharif -2012	Irrigated	Low yield due to improper nutrition	Cultivation of var. Suryamukhi	Utkal Ava, seed rate 500 gm/ha , fertilizer NPK @ 120:60:100 kg/ha	19.1 % change in Yield over farmers practice	Farmers accepted the technology	-	
4	Pigeon pea	Kharif -2012	Irrigated	Low yield due to improper nutrition	No proper control measure	Use of Pheromone trap @ 20 nos/ha, Application of Bt @ 1 kg/ha & Cypermethrin 10 EC @ 1 lit/ha alternatively	49.0 % change in Yield over farmers practice	Farmers accepted the technology	-	
	Paddy	Kharif -2012	Irrigated	No proper line sowing	Traditional methods of cultivation	Transplanting of 10 days old seedling at 25 cm x 25cm spacing & use of cono weeder 2-3 times at 10 days interval	31.3 % change in Yield over farmers practice	Farmers accepted the technology	-	

5	Cauliflower	Rabi 2012-2013	Irrigated	Low yield due to improper nutrition	No proper control measure	Use of Pheromone traps @ 20 nos. /ha , Alternate application of Bt @ 1 kg/ha and Cypermethrin 10 EC @ 1 lit/ha	22.7 % change in Yield over farmers practice	Farmers accepted the technology	-	
6	Composite fish culture	Kharif-2012	Irrigated/Rainfed	Low yield due to improper nutrition	Traditional fish culture with improper stocking	Stocking of fingerlings of IMC at the ratio of 4:3:3 @ 8000 Nos/ha	25.7 % change in Yield over farmers practice	Farmers accepted the technology	-	
7	Integrated fish farming	Kharif-2012	Irrigated/Rainfed	Low yield due to improper nutrition	Traditional fish culture of IMC fry only	Integration of horticultural crop like banana, drumstick and papaya with composite fish culture	12 % change in Yield over farmers practice	Farmers accepted the technology	-	
8	Tomato	Kharif-2012	Irrigated/Rainfed	Low yield due to improper nutrition	Cultivation of variety Sel- 22	Variety <i>Utkal Pragyan</i> , Seed rate 500 gm/ha fertilizer NPK @ 125:65:75 kg/ha	15.3 % change in Yield over farmers practice	Farmers accepted the technology	-	

9	Onion	Kharif-2012	Irrigated/Rainfed	Low yield due to improper nutrition	Manual wedding	Spraying Quizalfop ethyle @ 1 l/ha + Oxyfluorfen @ 200 ml/ha at 20 days of transplanting	12.2 % change in Yield over farmers practice	Farmers accepted the technology	-	
10	Sunflower threshing bench	Rabi 2012-2013	-	High labour cost	Manual threshing	Use of sunflower threshing bench for threshing sunflower	462 % change in Yield over farmers practice	Farmers accepted the technology	-	

## Year: 2013-14

### A. ON FARM TRIALS

Sl No	Crop/Commodity	Year	Farmer's Situation	Problem/Opportunity identified for which such intervention was undertaken	Farmer's Practice	Technology options tested	Result	Feedback	Remarks if any	Action photographs
1	Cauliflower	Kharif 2013	Rainfed	Low yield from farmers variety Early Kuanri	Cultivation of cauliflower var. Early Kuanri in kharif season with recommended cultural	Cultivation of cauliflower var. Pusa Katki in late kharif season with recommended cultural practices	71 % change in Yield over farmers practice	Farmers accepted the technology	-	

					practices					
2	vegetable seedling in low cost plastic tunnel	Kharif 2013	Rainfed	Mortality of seedling during rainy season	Vegetable seedling raising in open condition	Raising vegetable seedling in low cost plastic tunnel constructed using bamboo & transparent polyethelene sheet in rainy season	52.2 % change in Yield over farmers practice	Farmers accepted the technology	-	
3	Paddy	Kharif 2013	Rainfed	Low productivity from HYV paddy- Naveen	Cultivation of HYV paddy var. Naveen	Hybrid Paddy Rajalaxmi, Seed rate 15 kg/ha NPK @ 120:60:60 kg/ha	49 % change in Yield over farmers practice	Farmers accepted the technology	-	
4	Paddy	Kharif 2013	Rainfed	Low productivity in upland paddy- Khandagiri	Cultivation of Khandagiri var. of paddy	Variety: Sahabragi dhan , NPK @ 60:30:30 kg/ha	19.6 % change in Yield over farmers practice	Farmers accepted the technology	-	
5	Enterprise (IMC + <i>M.rosenbergerii</i> )	Kharif 2013	Rain fed	Low fish production due to improper stocking density & pond feed management	Culture of indian major carp	Stocking of fresh water prawn @ 2000 nos. PL /ha along with IMC	1.45 Yield of prawn (qtl) over farmers practice	Farmers accepted the technology	-	

6	Enterprise (IMC, Grass carp, Silver carp, Common carp)	Kharif 2013	Rain fed	Low fish production due to improper stocking density & pond feed management	Culture of indian major carps	Proportionate stocking of fishes (Catla 20%, Silver carp 20%, Rohu 20%, Grass carp 10%, Mrigal 15%, Common carp 15%)	33 % change in Yield over farmers practice	Farmers accepted the technology	-	
7	Groundnut	Kharif 2013	Rainfed	Low production due to high weed infestation	Hand weeding	Post emergence application of Imazethapyr 10 SL@ 1000 ml/ha 15-20 days after sowing	29 % change in Yield over farmers practice	Farmers accepted the technology	-	
8	Brinjal	Kharif 2013	Rainfed/ upland	Yield loss due to wilting	No proper control measures	Seedling root dip (Carbendazim 20 gm + Streptocyclin1 gm in 10 lit water) + soil application of <i>T.viridae</i> and <i>P. fluroscence</i> each @ 5 kg/ ha with FYM at 21 days of transplanting	26.70 % change in Yield over farmers practice	Farmers accepted the technology	-	
9	Chilli	Kharif 2013	Rainfed/ upland	Yield loss due to dieback disease in chilli	No proper control measures	Soil application of <i>T.viridae</i> @ 5kg/ha with FYM and spraying of Ridomyl @ 1 kg/ha	21.17 % change in Yield over farmers practice	Farmers accepted the technology	-	

10	Tomato		Irrigated	Low yield due to imbalance nutrition	Improper nutrient management	Soil application of Azotobacter & PSB each @ 5 kg/ha, 75 % of RDF & foliar application of micronutrient @ 2 ml/lt.	13.82 % change in Yield over farmers practice	Farmers accepted the technology	-	
11	Watermelon	Rabi-2013-14	Irrigated	Yield loss due to fruit cracking	Improper nutrient management	Variety- Sugar baby, FYM = 20 ton /ha, soil application of Borax @ 10 kg /ha along with NPK 200:100:100 kg/ha	15.50 % change in Yield over farmers practice	Farmers accepted the technology	-	
12	Watermelon	Rabi-2013-14	Irrigated	Loss in yield & quality of watermelon due to infestation of <i>Spodoptera</i> in watermelon	No proper control measures	Use of pheromone trap @ 20 trap/ha and alternate spraying of BT 1 kg/ha and Cypermethrin 25 EC 500 ml/ha	15.0 % change in Yield over farmers practice	Farmers accepted the technology	-	
13	Cabbage	Rabi-2013-14	Irrigated	Loss in yield due to Alternaria blight in cabbage	No proper control measures	Soil application of <i>T. viridae</i> @ 5 kg/ha along with FYM and spraying of Carbendazim 12 % + Mancozeb 63 % @ 1 kg / ha	22.0 % change in Yield over farmers practice	Farmers accepted the technology	-	
14	Drudgery reduction	Kharif-2013	-	High physiological stress of farm women during fertilizer broadcasting	Application of fertilizer by hand	Use of fertilizer broadcaster in Paddy	12.58 Energy Expenditure (K J/Min) over farmers practice	Farmers accepted the technology	-	

## B. FRONT LINE DEMONSTRATION

Sl No	Crop/Commodity	Year	Farming Situation	Problem/Oportunity identified for which such intervention was undertaken	Farmer's Practice	Technology Demonstrated	Result	Feedback	Remarks if any	Action photographs
1	Weedicide	Kharif-2013	Irrigated	Low yield due to improper weed management	No improper management	Application of Weedicide Fenoxaprop-p-ethyl 10 EC @ 60 gm a.i. /ha + Almix 20 WP @ 4 gm a.i. / ha at 20-25 DAT	24.8 % change in Yield over farmers practice	Farmers accepted the technology	-	
2	Groundnut	Kharif-2013	Irrigated	Low yield due to no nutrient management	Application of DAP @ 75 kg/ ha	Soil application of Gypsum @ 250 kg/ha along with RDF (NPK @ 20:40:40 kg/ha)				
3	Onion	Kharif-2013	Irrigated	Low yield due to no proper fertilizer management	Planting of onion bulb in Kharif	Onion var. N-53, seed rate 10kg/ha, fertilizer NPK @120:60:100	6.0 % change in Yield over farmers practice	Farmers accepted the technology	-	

4	Brinjal	Kharif-2013	Irrigated	Low yield due to no proper nutrient management	No proper nutrient management practices	Soil application of Azotobacter @ 5 kg/ha & PSB @ 5kg/ha along with 75% RDF	14.3 % change in Yield over farmers practice	Farmers accepted the technology	-	
5	Pigeon pea	Kharif-2013	Irrigated	Low yield due to no proper management for wilt control	No control measure	Seed treatment with Vitavax power @ 2 gm / kg, Soil application of <i>T. viridae</i> @ 5 kg/ ha incubated with FYM	34.2 % change in Yield over farmers practice	Farmers accepted the technology	-	
6	Groundnut	Kharif-2013	Irrigated	Low yield due to no proper management for leaf Cercospora	No control measure	Seed treatment with Vitavax power @ 2 gm/kg & foliar application of Carbendazim 12 % + Mancozeb 63 % @ 2 gm / lit.	23.0 % change in Yield over farmers practice	Farmers accepted the technology	-	
7	Composite fish culture	Rabi-2013-14	Irrigated /Rainfed	Low yield due to no proper management	Culture of fry as grow-out culture	Stocking of yearling @ 5000 nos /ha	25.0 % change in Yield over farmers practice	Farmers accepted the technology	-	

8	Composite fish culture	Rabi-2013-14	Irrigated /Rainfed	Low yield due to no proper management	Traditional fish culture without supplementary feeding	Use of GNOC+ Rice bran (1:1)@2kg/ha for first three months and then @4kg/ha in consecutive months	26.3 % change in Yield over farmers practice	Farmers accepted the technology	-	
9	Integrated fish farming	Rabi-2013-14	Irrigated /Rainfed	Low yield due to no proper management	Traditional fish culture of IMC fry only	Integration of horticultural crop like banana, drumstick and papaya along with composite fish culture with proper care	12.0 % change in Yield over farmers practice	Farmers accepted the technology	-	
10	Tomato	Rabi-2013-14	Irrigated /upland	Low yield due to no proper management	Cultivation of Sel -22	Var. Utkal Raja, seed rate 500 gm/ha, fertilizer NPK @ 125:65:75 kg/ha	11.25 % change in Yield over farmers practice	Farmers accepted the technology	-	
11	Cauliflower	Rabi-2013-14	Irrigated /upland	Low yield due to no proper management	No proper nutrient management	FYM- 15 ton/ha, NPK@125:50 :75 kg/ha, foliar spray of boron @ 2gm/lt	14.3 % change in Yield over farmers practice	Farmers accepted the technology	-	

12	Onion	Rabi-2013-14	Irrigated /upland	Low yield due to no proper management	No proper nutrient management	Soil application of neem cake @ 100 kg/ha during transplanting & foliar spray of Imidacloprid 125 ml/ ha	19.6 % change in Yield over farmers practice	Farmers accepted the technology	-	
13	Cucumber	Rabi-2013-14	Irrigated /upland	Low yield due No proper Integrated Disease Management	No proper control measure	Soil application of <i>T. viride</i> @ 5 kg / ha with FYM & spraying Mancozeb @ 3 gm /lit	26.55 % change in Yield over farmers practice	Farmers accepted the technology	-	
14	Mushroom cultivation	Kharif-2013	-	Low yield due to no proper management	Mushroom cultivation without sterilization of paddy straw	Sterilization of paddy straw taking 10gm lime in 1 Lit. water while soaking, bed preparation and care	87.5 % change in Yield over farmers practice	Farmers accepted the technology	-	
15	drudgery reduction	Kharif-2013	-	Low yield due to no proper management	Manual weeding	Use of rotary peg weeder in Brinjal	17.0 % change in Yield over farmers practice	Farmers accepted the technology	-	

## Year: 2014-15

### A. ON FARM TRIALS

Sl No	Crop/Commodity	Year	Farmering Situation	Problem/Opportunity identified for which such intervention was undertaken	Farmer's Practice	Technology options tested	Result	Feedback	Remarks if any	Action photographs
1	Groundnut	Kharif 2014	Rainfed/Upland	Low return due to high cost of bulb used for planting	Application of pre-emergence herbicide Oxyflourofen @ 200 ml/ha (0-3 DAS) T <sub>2</sub> : Post-emergence application of Quizolofop ethyl @ 1000 ml/ha (15-20DAS) T <sub>3</sub> : Post-emergence application of Imazethapyr @ 750 ml/ha (15-20DAS)	T <sub>1</sub> : Application of pre-emergence herbicide Oxyflourofen @ 200 ml/ha (0-3 DAS)	19.4 % change in Yield over farmers practice	Farmers accepted the technology	-	
2	Onion	Kharif 2014	Rainfed/Medium land	Low yield due to heavy weed infestation	Cultivation of onion var. N-53 in kharif season	T <sub>1</sub> - Cultivation of Onion var.-N-53 T <sub>2</sub> - Cultivation of Onion var.- Agri-found Dark Red	30.7 % change in Yield over farmers practice	Farmers accepted the technology	-	

3	Brinjal	Kharif 2014	Rainfed /Medium land	Economic loss due to wastage in sinking feed	Labour intensive manual weeding	T <sub>1</sub> -Two-Three hand weeding T <sub>2</sub> -Pre-emergence application of Pendimethalin @ 0.5 kg a.i / ha + 1 hand weeding 45 DAP	16.8 % change in Yield over farmers practice	Farmers accepted the technology	-	
4	Pisciculture	Kharif 2014	Pond based	Lower growth rate of fishes	Use of sinking pellet feed	T <sub>1</sub> - Use of sinking pellet feed T <sub>2</sub> -Feeding of floating feed @ 2% of biomass	23.2 % change in body wt. over farmers practice	Farmers accepted the technology	-	
5	Pisciculture	Kharif 2014	Pond based	Low yield due to improper nutrition	Non-inclusion of vitamin-mineral mixture	T <sub>1</sub> - Supplementary feeding without vitamin & minerals T <sub>2</sub> - Use of Envomin, a mixture of vitamin and mineral ,@ 0.1% along with conventional feed	21.3 % change in body wt. over farmers practice	Farmers accepted the technology	-	
6	Okra	Rabi-2014-15	Dug well irrigated /Medium land	Low yield from var. Bhima Super	Improper nutrient management	T <sub>1</sub> -Application of lower dosage imbalanced nutrients T <sub>2</sub> -FYM @10 t/ha, Soil application of Azospirillum & PSB each @ 5kg/ha + 75% RDF	50.9 % change in Yield over farmers practice	Farmers accepted the technology	-	

7	Onion	Rabi-2014-15	Irrigated /Medium land	Low net return from onion cultivation due to heavy weed infestation & expensive manual weeding	Manual weeding	T <sub>1</sub> - 3-4 Hand weeding T <sub>2</sub> - Pre-emergence application of Pendimethalin @ 2.5 lit/ha at 2-3 DAT T <sub>3</sub> - Post emergence application of Quizolofop ethyl @ 1000 ml/ha (15-20DAS)	9.3 % change in Yield over farmers practice	Farmers accepted the technology	-	
8	Greengram	Rabi-2014-15	Irrigated / Medium land	Low yield of Greengram due to heavy aphid infestation	No pest management practice	T <sub>1</sub> - No pest management practice T <sub>2</sub> -Installation of yellow sticky trap @ 8 Nos./ha & application of Imidacloprid @ 50ml/ha twice at 10 days interval	8.9 % change in Yield over farmers practice	Farmers accepted the technology	-	
9	Mushroom	Rabi-2014-15	-	Low biological efficiency of existing variety	Existing variety <i>P. sajarkaju</i>	T <sub>1</sub> - <i>P. sajarkaju</i> T <sub>2</sub> - <i>P. florida</i> T <sub>3</sub> - <i>P. eryngii</i>	30.7 % change in Yield over farmers practice	Farmers accepted the technology	-	

## B. FRONT LINE DEMONSTRATION

Sl No	Crop/Commodity	Year	Farming Situation	Problem/Opportunity identified for which such intervention was undertaken	Farmer's Practice	Technology Demonstrated	Result	Feedback	Remarks if any	Action photographs
1	Cauliflower	Kharif 2014	Irrigated/ Medium land	Low yield due to improper management	Cultivation of cauliflower var. Pusa Katki in kharif season being sown in mid June with maturity in mid October	16.7 % change in Yield over farmers practice	Farmers accepted the technology	-		
2	Plastic tunnel	Kharif 2014	Irrigated/ Medium land	Low yield due to improper management	-	Construction of plastic tunnel using bamboo & transparent polyethylene for raising vegetable seedling	21.0 % change in Yield over farmers practice	Farmers accepted the technology	-	
3	Pisiculture	Kharif 2014	Irrigated/ Medium land	Low yield due to improper management	Culture of Indian major carps only	Stocking ratio @ Catla 20%, Silver carp 20%, Rohu 20%, Grass carp 10%, Mrigal 15%, Common carp 15%	22.4 % change in Yield over farmers practice	Farmers accepted the technology	-	

4	Pisiculture	Kharif 2014	Irrigated/ Medium land	Low yield due to improper management	Culture of fry	Stocking of yearling @ 5000 / ha	24.0 % change in Yield over farmers practice	Farmers accepted the technolog y	-	
5	Paddy	Kharif 2014	Irrigated/ Medium land	Low yield due to improper management	HYV Paddy var. MTU- 1001/Na veen	Hybrid paddy Rajalaxmi, Seed rate 15 kg/ha NPK 120:60:60 kg/ha	93.8 % change in Yield over farmers practice	Farmers accepted the technolog y	-	
6	Paddy	Kharif 2014	Irrigated/ Medium land	Low yield due to improper management	Cultivati on of local var.	Variety: Sahabhagi dhan ,seed @ 75 kg/ha , NPK 60:30:30 kg/ha	37.7 % change in Yield over farmers practice	Farmers accepted the technolog y	-	
7	Brinjal	Kharif 2014	Irrigated/ Medium land	Low yield due to improper management	Cultivati on of local var.	Seedling root dip treatment (Carbendazim 20 gm + Streptocyclin 1 gm in 10 lit) + soil application of <i>T.viridae</i> and	37.7 % change in Yield over farmers practice	Farmers accepted the technolog y	-	

						<i>P. fluroscens</i> each @ 5 kg/ha with FYM at 21 days of transplanting				
8	Chilli	Kharif 2014	Irrigated/ Medium land	Low yield due to improper management	Cultivation of local var.	Soil application of <i>T. viridae</i> @ 5kg/ha with FYM and spraying of Ridomyl MZ @ 1 kg/ha	22.1 % change in Yield over farmers practice	Farmers accepted the technology	-	
9	Tomato	Kharif 2014	Irrigated/ Medium land	Low yield due to improper management	Application of imbalanced chemical fertilizer	Soil application of Azotobacter & PSB each @ 5 kg/ha, 75 % of RDF & foliar application of multi micronutrient @ 2 ml/lt.	59.6 % change in Yield over farmers practice	Farmers accepted the technology	-	
10	Watermelon	Rabi 2014-15	Irrigated/ Medium land	Low yield due to improper management	No proper nutrient management	FYM = 20 ton /ha, soil application of Borax @ 10 kg /ha along with RDF NPK @200:100:100 kg /ha	59.6 % change in Yield over farmers practice	Farmers accepted the technology	-	
11	Watermelon	Rabi 2014-15	Irrigated/ Medium	Low yield due to improper	Indiscriminate use	Use of pheromone	24.6 % change	Farmers accepted	-	

			land	management	of pesticide s	trap @ 20 trap/ha and alternate spraying of BT 1 kg/ha and Cypermethrin 25 EC 500 ml/ha	in Yield over farmers practice	the technolog y		
12	Cabbage	Rabi 2014-15	Irrigated/ Medium land	Low yield due to improper management	No proper control measure	Soil application of <i>T. viridae</i> @ 5 kg/ha along with FYM and spraying of Carbendazim 12 % + Mancozeb 63 % @ 1 kg / ha	24.6 % change in Yield over farmers practice	Farmers accepted the technolog y	-	

## Year: 2015-16

### A. ON FARM TRIALS

Sl No	Crop/Commodity	Year	Farmering Situation	Problem/Opportunity identified for which such intervention was undertaken	Farmer's Practice	Technology options tested	Result	Feedback	Remarks if any	Action photographs
1	Paddy	Kharif 2015	Rainfed	Crop loss due to water scarcity in the later stage	Cultivation of var. Khandagiri	T <sub>1</sub> - Cultivation of rice var. Khandagiri with ICM T <sub>2</sub> -Cultivation of rice var. Jyotirmayee with ICM T <sub>3</sub> -Cultivation of rice var. Heera with ICM	36.8 % change in Yield over farmers practice	Farmers accepted the technology	-	
2	pigeon pea	Kharif 2015	Upland	Lack of suitable early var. in upland condition	Cultivation of local var. in un-bundled upland	T <sub>1</sub> : Cultivation of local variety T <sub>2</sub> : Pigeon pea var. ICPL- 30325 with ICM T <sub>3</sub> : Pigeon pea var ICPL- 30326 with ICM	11.6 % change in Yield over farmers practice	Farmers accepted the technology	-	
3	Onion	Kharif 2015	Upland	Low yield from Local onion varieties	Cultivation of onion var. N-53	T <sub>1</sub> - Cultivation of Onion var.-N-53 T <sub>2</sub> - Cultivation of Onion var.- Agri-found Dark Red T <sub>3</sub> - Cultivation of Onion var.- Bhima Super	196.2 % change in Yield over farmers practice	Farmers accepted the technology	-	

4	Onion	Rabi-2015-16	Upland	Low yield from var. N-53	Cultivation of onion var. N-53	T <sub>1</sub> - Cultivation of N-53 T <sub>2</sub> - Cultivation of Agrifound light red	26.7 % change in Yield over farmers practice	Farmers accepted the technology	-	
5	Onion	Rabi-2015-16	Upland	Heavy weed infestation & expensive manual weeding	Manual weeding	T <sub>1</sub> - 3-4 Hand weeding T <sub>2</sub> - Pre-emergence application of Pendimethalin @2.5 lit/ha at 2-3 DAT T <sub>3</sub> - Post emergence application of Quizolofop ethyl @ 1000 ml/ha (15-20DAS)	26.7 % change in Yield over farmers practice	Farmers accepted the technology	-	
6	Tomato	Rabi-2015-16	Irrigated	Low yield from farmer's variety	Cultivation of hybrid available in market like Laxmi	T <sub>1</sub> - Laxmi T <sub>2</sub> - Swarna Sampad	56.5 % change in Yield over farmers practice	Farmers accepted the technology	-	
7	Watermelon	Rabi-2015-16	Irrigated	Low plant stand & yield	Direct seeding in field	T <sub>1</sub> - Direct seeding in field T <sub>2</sub> - Nursery raising in poly bags/leaf trays / pro trays, transplanting of 7 – 10 days old seedling in prepared pits(4)	18.7 % change in Yield over farmers practice	Farmers accepted the technology	-	

						seedlings /pit at 5'X5' spacing T <sub>3</sub> - Nursery raising in poly bags/leaf trays / pro trays, transplanting of 15 days old seedling in prepared pits(2 seedlings /pit at 5'X5' spacing				
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## B. FRONT LINE DEMONSTRATION

Sl No	Crop/Commodity	Year	Farming Situation	Problem/Opportunity identified for which such intervention was undertaken	Farmer's Practice	Technology Demonstrated	Result	Feedback	Remarks if any	Action photographs
1	Ground nut	Kharif-2015	Irrigated	Low yield due to improper management	No pest control	Cultivation of high yielding Groundnut variety <i>Devi</i> with integrated nutrient, weed and pest management practices	16.8 % change in Yield over farmers practice	Farmers accepted the technology	-	

2	Pigeonpea	Kharif-2015	Irrigated	Low yield due to improper management	No pest control	Cultivation of high yielding variety Pigeonpea <i>Asha</i> with integrated nutrient & pest management practices	9.5 % change in Yield over farmers practice	Farmers accepted the technology	-	
3	Brinjal (Wilt)	Kharif-2015	Irrigated/ upland	Low yield due to improper management	No pest control	Seedling root dip treatment (Carbendazim 20 gm + Streptocyclin 1 gm in 10 lit) + soil application of <i>T.viridae</i> and <i>P.fluorescence</i> each @ 5 kg/ ha with FYM at 21 days of transplanting	22.9 % change in Yield over farmers practice	Farmers accepted the technology	-	
4	Watermelon	Rabi-2015-16	Irrigated/ upland	Low yield due to improper management	No proper nutrient management	FYM = 20 ton /ha, soil application of Borax @ 10 kg /ha along with RDF NPK @200:100:10 0 kg /ha	14.6 % change in Yield over farmers practice	Farmers accepted the technology	-	

5	Paddy	Kharif-2015	Irrigated/ upland	Low yield due to improper management	Cultivation of Khandagiri var. of paddy	Variety: Sahabhagi dhan ,seed @ 75 kg/ha , NPK 60:30:30 kg/ha	33.5 % change in Yield over farmers practice	Farmers accepted the technology	-	
6	Watermelon (Spodoptera)	Rabi-2015-16	Irrigated/ upland	Low yield due to improper management	Indiscriminate use of pesticides	Use of pheromone trap @ 20 trap/ha and alternate spraying of BT 1 kg/ha and Cypermethrin 25 EC 500 ml/ha	19.1 % change in Yield over farmers practice	Farmers accepted the technology	-	
7	Pisciculture	Kharif 2015	Irrigated/ Rainfed	No proper disease control	Culture of fry	Stocking of yearling @ 5000 / ha	21.05 % change in Yield over farmers practice	Farmers accepted the technology	-	
8	IMC, Exotic carps	Kharif 2015	Irrigated/ Rainfed	No proper disease control	Culture of Indian major carps only	Stocking ratio @ Catla 20%, Silver carp 20%, Rohu 20%, Grass carp 10%, Mrigal 15%, Common carp	26 % change in Yield over farmers practice	Farmers accepted the technology	-	

						15%				
9	Tomato	Rabi-2015-16	Irrigated/ upland	Low yield due to improper management	Application of chemical fertilizer in low dose	Soil application of Azotobacter & PSB each @ 5 kg/ha, 75 % of RDF & foliar application of multi micronutrient @ 2 ml/lt.	47.4 % change in Yield over farmers practice	Farmers accepted the technology	-	
10	Onion	Rabi 2015-16	Irrigated/ upland	Low yield due to improper management	improper nutrient management	Application of 110:40:60:40 kg NPKS / ha & Azospirillum & PSB each @ 5 kg/ha	47.4 % change in Yield over farmers practice	Farmers accepted the technology	-	

## Year: 2016-17

### A. ON FARM TRIALS

Sl No	Crop/Commodity	Year	Farmering Situation	Problem/Opportunity identified for which such intervention was undertaken	Farmer's Practice	Technology options tested	Result	Feedback	Remarks if any	Action photographs
1	Pigeon pea	Kharif 2016	Rainfed	Low yield potential of local variety	Farmer cultivating local variety arhar – Local ( <i>Kandula</i> )	T <sub>2</sub> : HYV -Asha with improved package of practices T <sub>3</sub> : HYV -Laxmi with improved package of practices	6.9 q/ha change in Yield over farmers practice	Farmers accepted the technology	-	
2	Paddy	Kharif 2016	Irrigated /Medium land	Low yield from Khandagiri due to inadequate moisture condition	Farmer cultivating paddy var. Khandagiri (18 qt/ha)	T <sub>2</sub> -Cultivation of paddy var. Sidhant with ICM T <sub>3</sub> - Paddy var. Jogesh with ICM	25.3 q/ha change in Yield over farmers practice	Farmers accepted the technology	-	

3	Greengram	Rabi-2016-17	Rainfed	Cultivating green garm in Rice fallow without any seed treatment & manuring	Farmer Cultivating green gram local – kalamuga (3 qt/ha)	T <sub>2</sub> : Seed treatment with Rhizobium(20gm/Kg) + Sodium molybdate (3 gm/10 Kg seed) T <sub>3</sub> : Seed treatment with rhizobium(20gm/Kg) + Sodium molybdate(3 gm/10 Kg seed) + RDF (20:40:40)	5.8 q/ha change in Yield over farmers practice	Farmers accepted the technology	-	
4	Paddy	Kharif 2016	Irrigated	Low yield of paddy due to heavy weed infestation	Manual weeding at 21 DAT	T <sub>2</sub> - Bensulfuron (0.6%) + Pretilachlor (6%) @660g/ha at 3-7 DAT. T <sub>3</sub> -Bispyribac-sodium @ 25g/ha at 20-25 DAT	40.8 q/ha change in Yield over farmers practice	Farmers accepted the technology	-	
5	Banana	Kharif 2016	Irrigated	Low yield & poor bunch quality	Imbalance dose of fertilizer (150:50:50 gm/plant)	Application of Azotobactor & PSB each @ 20 gm/plant, 75% of RDF at 3,5,7 month of planting, foliar application of NPK (13:0:45) & NPK (19:19:19) each for 5 times alternately at 15 days interval T <sub>3</sub> - 100% of RDF (300: 50:300 gm NPK/plant ) in three splits at 3, 5, 7 month of planting .	29.71 q/ha change in Yield over farmers practice	Farmers accepted the technology	-	

6	Chilli	Kharif 2016	Irrigated	Low yield of chili due to improper nutrient management	Imbalance dose of fertilizer application(75:50:50 kg/ha)	$T_2$ - Soil application of Azospirillum & PSB each @ 5kg/ha incubated with FYM + 75 % of RDF (120:60:80 kg NPK/ha) $T_3$ - Soil application of Azotobactor & PSB each @ 5kg/ha incubated with FYM + 75 % of RDF (120:60:80 kg NPK/ha)	102.14 q/ha change in Yield over farmers practice	Farmers accepted the technology	-	
7	Okra	Rabi-2016-17	Medium land	Low yield & high cost of manual weeding	2 times manual weeding	$T_2$ -Pre-emergence application of pendimethalin @ 2.5 lit/ha within 2-3 DAS $T_3$ -Pre-emergence application of pendimethalin @ 2.5 lit/ha and post emergence application quizalofop ethyl 5EC @1 lit/ha 20 DAS	98.7 q/ha change in Yield over farmers practice	Farmers accepted the technology	-	
8	Bitter gourd	Rabi-2016-17	Irrigated/ Medium land	Low yield due to less no. of female flower /plant	No use of growth regulator	$T_2$ - Foliar application of ethrel @ 200 ppm at 2 & 4 leaf stage $T_3$ - Foliar application of ethrel @ 250 ppm at 2 & 4 leaf stage	105.4 q/ha change in Yield over farmers practice	Farmers accepted the technology	-	

9	Okra	Rabi-2016-17	Irrigated/ Medium land	Low yield due to YMV	No proper vector control measure (triazophos @ 1li/ha)	T <sub>2</sub> - Installation of Yellow sticky trap 50/ha and application Neem based pesticide 2.5 lit/ha of water and Acetameprid -100 gm/ha T <sub>3</sub> -Installation of Yellow sticky trap 50/ha and application Neem based pesticide 2.5 lit/ha of water and Solomon 300 OD (Beta-Cyfluthrin + Imidacloprid ) @ 60 gm a.i. /ha	98.2 q/ha change in Yield over farmers practice	Farmers accepted the technology	-	
10	Brinjal	Rabi-2016-17	Medium land	Low yield due to heavy mite infestation	No proper control measure (use of sulfex 1kg/ha)	T <sub>2</sub> : Application Etoxazole 10 % SC @ 40 gm a.i /ha T <sub>3</sub> :Application Proparigite 57 EC @ 570 gm a.i/ha	235.2 q/ha change in Yield over farmers practice	Farmers accepted the technology	-	
11	watermelon	Rabi-2016-17	Medium land	Low yield due to heavy infestation of thrips	No proper control measure (Dimethoate 1 lit/ha	T <sub>2</sub> -Use of Blue sticky trap @ 50/ha and application of Abamectin @ 15 gm a.i./ha T <sub>3</sub> -Use of Blue sticky trap @ 50/ha and application of Beta cyfluthrin @ 12.5 gm a.i/ha	246.4 q/ha change in Yield over farmers practice	Farmers accepted the technology	-	

## B. FRONT LINE DEMONSTRATION

Sl No	Crop/Commodity	Year	Farming Situation	Problem/ Opportunity identified for which such intervention was undertaken	Farmer's Practice	Technology Demonstrated	Result	Feedback	Remarks if any	Action photographs
1	Paddy	Kharif- 2016	Irrigated/ upland	Low yield due to drought (21qt/ha)	Low yield due to drought.	Variety: Sahabhagi dhan ,seed @ 75 kg/ha , NPK 60:30:30 kg/ha	259.8 q/ha change in Yield over farmers practice	Farmers accepted the technology	-	
2	Paddy	Kharif- 2016	Irrigated/ upland	Low yield (38qt/ha) due to improper nutrient management	Low yield ( 38 qt/ha due to improper nutrient management	Green manuring of Dhaincha @ 25 kg / ha, application of Azospirillum, PSB & 75 % N, P <sub>2</sub> O <sub>5</sub> & full K <sub>2</sub> O	29.5 q/ha change in Yield over farmers practice	Farmers accepted the technology	-	

3	Paddy	Kharif- 2016	Irrigated/ upland	Low yield of hybrid JKRH-401(45qt/ha)	Low yield of hybrid JKRH-401 ( 45 qt/ha)	Hybrid paddy Rajalaxmi, Seed rate 15 kg/ha NPK 120:60:60 kg/ha, 130 days duration ave. Yield 50-58 qt/ha	48.6 q/ha change in Yield over farmers practice	Farmers accepted the technology	-	
4	Onion	Kharif- 2016	Irrigated/ upland	High cost of cultivation due to planting of bulb (45K)	High cost of cultivation due to planting of bulb (45 K)	Cultivation of Onion var.- Bhima Super A red onion variety, average yield of 20 - 22 t/ha in <i>kharif</i> and 25- 27 t/ha in late <i>kharif</i> . Bulbs attain maturity within 100- 105 days after transplanting (DAT) in <i>kharif</i> and 110-120 DAT in late <i>kharif</i> .	48.6 q/ha change in Yield over farmers practice	Farmers accepted the technology	-	
5	Brinjal	Kharif- 2016	Irrigated/ upland	Low yield due to incidence of fruit rot in Brinjal (260qt/ha)	No seed treatment and no control measure	Seed treatment with Vitavax power @ 1gm/kg, spraying of Thiophenate methyl @ 1.5gm/lit.	259.8 q/ha change in Yield over farmers practice	Farmers accepted the technology	-	

6	Cauliflower	Rabi- 2016-17	Irrigated/ upland	Yield loss due to heavy infestation of tobacco caterpillar	No proper control measure	Use of Pheromone traps , Alternate Application of Bt @ 1 kg/ha & Cypermethrin @ 1 lit/ha	259.8 q/ha change in Yield over farmers practice	Farmers accepted the technology	-	
7	Brinjal	Rabi- 2016-17	Irrigated/ upland	Low yield due to heavy infestation of FSB (231.4 qt/ha)	Low yield due to heavy infestation of FSB ( 231.4 Qt/ha)	Soil application of Neem cake @ 250 kg/ha, release of T. chilonis @ 50000/ha 6 times & alternate spray of neem oil @ 2.5 lit/ha & Emamectin benzoate 5 SG @ 0.4 gm/lit of water.	261.7 q/ha change in Yield over farmers practice	Farmers accepted the technology	-	
8	Onion	Rabi-2016-17	Irrigated/ upland	Poor return from onion cultivation due to heavy weed infestation & expensive manual weeding	Manual weeding	Pre-emergence application of Pendimethalin @2.5 lit/ha at 2-3 DAT	238.8 q/ha change in Yield over farmers practice	Farmers accepted the technology	-	

9	Watermelon	Rabi-2016-17	Irrigated/ upland	High plant mortality (19.5%) and Low yield (207.5 qt/ha)	Direct seeding in mainfield	Nursery raising in poly bags/leaf trays / pro trays, transplanting of 15 days old seedling in prepared pits(2 seedlings /pit at 5'X5' spacing, mortality reduced to 5.5%, yield- 246.4 qt/ha	244.6 q/ha change in Yield over farmers practice	Farmers accepted the technology	-	
10	Onion	Rabi-2016-17	Irrigated/ upland	Low yield due to heavy infestation of thrips (202.6 qt/ha)	No proper control measure	Soil application of Neem cake @ 250 kg/ha during transplanting, Use of sky blue trap 50 nos/ha with foliar spray of Neem oil 300 ppm, spray of thiomethoxam 100 gm/ha with sticker 0.5ml/lit	246.3 q/ha change in Yield over farmers practice	Farmers accepted the technology	-	
11	Paddy	Rabi-2016-17	Irrigated/ upland	Heavy infestation of stem borer in paddy	No proper control measure	Soil application of cartap hydrochloride @ 20 kg/ha & release of Trichogramma egg parasite (50,000/ha four time in 15 days interval)	40.3 q/ha change in Yield over farmers practice	Farmers accepted the technology	-	

## Year: 2017-18

### A. ON FARM TRIALS

Sl No	Crop/Commodity	Year	Farmering Situation	Problem/Opportunity identified for which such intervention was undertaken	Farmer's Practice	Technology options tested	Result	Feedback	Remarks if any	Action photographs
1	Paddy	Kharif-2017	Irrigated /medium land	Low yield from farmers cultivated varieties	Cultivation of paddy var. Swarna	TO-1= 24 (Tillers/hill) 327 Gr/Panicle TO-2= 23(Tillers/hill) 322Gr/Panicle	59.1 q/ha change in Yield over farmers practice	Farmers accepted the technology	-	
2	Paddy	Kharif-2017	Irrigated /medium land	Low yield due to improper nutrient management	Application of NPK @ 80:40:40 kg/ha	TO-1 = Application of RDF NPK @ 120:60:60 kg/ha TO-2 = Application of RDF NPK @ 120:60:60 kg/ha + ZnSO <sub>4</sub> @ of 25 kg/ha	55.0 q/ha change in Yield over farmers practice	Farmers accepted the technology	-	
3	Onion	Kharif-2017	Irrigated /medium land	Low yield from farmer's cultivated var. ADR	Cultivation of Onion var. Agrifound Dark Red	TO-1 = Bhima Super TO-2 = Bhima Dark Red	192.0 q/ha change in Yield over farmers practice	Farmers accepted the technology	-	

4	Tomato	Kharif-2017	Irrigated /medium land	Low yield due heavy weed infestation & high cost of manual weeding	Manual weeding	TO-1 = Pre-emergence application of pendimethaline @2.5 lit/ha TO -2 = Pre-emergence application of pendimethaline @2.5 lit/ha + Post emergence application of quizalfopethyle @ 1 lit/ha	217.1 q/ha change in Yield over farmers practice	Farmers accepted the technology	-	 
5	Tomato	Rabi, 2017-18	Irrigated /medium land	Low yield from farmer's cultivated variety	Pusa Ruby	TO-1 = BT 136 TO-2 = Utkal Pragyan	271 q/ha change in Yield over farmers practice	Farmers accepted the technology	-	 
6	Onion	Rabi, 2017-18	Irrigated /medium land	Low yield & high cost of manual weeding	Manual Weeding	TO-1= Pre-emergence Application of Pendimethalin TO-2= Pre-emergence Application of Oxyflurofen	235.0 q/ha change in Yield over farmers practice	Farmers accepted the technology	-	 

7	Chilli		Irrigated /medium land	Low yield due to thrips infestation	No proper control measure.( Imidacloprid 17.8 SL)	TO-1= Blue sticky trap (20 traps/ha) +alternate spray of acetamiprid 20 SP @ 125 gm/ha and neem oil 0.15 % @ 1lit/ha TO -2= Blue sticky trap (20 traps/ha) + alternate spray of Acephate 95 SG @ 75gm ai/ha and neem 0.15 % @ 1lit/ha.	125.8 129 no.s chilli/plant change in Yield over farmers practice	Farmers accepted the technology	-	
8	Brinjal	Kharif-2017	Irrigated /medium land	Low yield due heavy infestation Shoot and fruit borer	Indiscriminate use of pesticides. (Triazaphos)	TO-1 = Pheromone trap @ 20 traps/ha+ alternate spray of neem oil 0.15 % @ 1lit/ha and flubendamide 39.35 SC @ 200 ml/ha. TO-2 = Regular clipping of wilted twigs+ pheromone trap (20 traps/ha)+ alternate spray of neem oil 0.15 % @ 1 lit/ha and spinosad 45 SC @ 150ml/ ha.	248.97 q/ha change in Yield over farmers practice	Farmers accepted the technology	-	

9	Bittergourd	Rabi-2017-18	Irrigated /medium land	Low yield due fruit fly infestation	Indiscriminate use of insecticides	TO-1 = Installation of Cuelure trap @ 20 traps /ha+ alternate spray of neem oil 0.15% @ 1lit/ha and spinosad 45 SC @ 150 ml/ha+ hoeing/raking the soil periodically at 15 days interval. TO-2 = Use of poison bait (1 lit water+ 100 gm gur + 2ml Malathion)+ alternate spray of neem oil 0.15 % @ 1 lit/ha and spinosad 45 SC @ 150 ml/ha.	67.1 q/ha change in Yield over farmers practice	Farmers accepted the technology	-	
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## B. FRONT LINE DEMONSTRATION

Sl No	Crop/Commodity	Year	Farming Situation	Problem/Opportunity identified for which such intervention was undertaken	Farmer's Practice	Technology Demonstrated	Result	Feedback	Remarks if any	Action photographs
1	Paddy	Kharif, 2017	Irrigated/ medium land	Low yield due to improper nutrient management	Application of chemical fertilizer only	Green manuring with Dhanicha @ 25 kg / ha, application of Azospirillum , PSB & 75 % N, P <sub>2</sub> O <sub>5</sub> & full K <sub>2</sub> O	3.2 Yield (Ton/ha) in Yield over farmers practice	Farmers accepted the technology	-	
2	Paddy	Kharif, 2017	Irrigated/ medium land	Low yield due to improper nutrient management	Application of chemical fertilizer only	Pre-emergence application of Pretilachlor (6%) @ 660g/ha at 3-7 DAT	31.6 Yield (qt/ha) in Yield over farmers practice	Farmers accepted the technology	-	
3	Chilli	Kharif, 2017	Irrigated/ medium land	Low yield(74 qt/ha) of chili due to improper nutrient management	Imbalance dose of fertilizer application(75:50:50 kg/ha)	Soil application of Azospirillum & PSB each @ 5kg/ha incubated with FYM + 75 % of RDF (120:60:80 kg NPK/ha)	125.8 129 no.s chilli/plant over farmers practice	Farmers accepted the technology	-	

4	Brinjal	Kharif - 2017	Irrigated/ upland	Yield loss due to wilting	Indiscriminate use of pesticides	Seedling root dip treatment (Carbendazim 20 gm + Streptocyclin 1 gm in 10 lit) + soil application of <i>T. viridae</i> and <i>P. fluroscence</i> each @ 5 kg/ ha with FYM at 21 days of transplanting	265.2 q/ha 5.1 infection % over farmers practice	Farmers accepted the technology	-	
5	Okra	Rabi 2017-18	Irrigated/ upland	Low yield (105 qt/ha) & high cost of manual weeding	Manual weeding	Pre-emergence application of pendimethalin @ 2.5 lit/ha and post emergence application quizalofop ethyl 5EC @1 lit/ha 20 DAS	103q/ha 13.5 weeds /ha over farmers practice	Farmers accepted the technology	-	
6	Bitter gourd	Rabi 2017-18	Irrigated/ upland	Low yield (94 qt/ha) due to less no. of female flower /plant	No use of growth regulator	Foliar application of ethrel @ 200 ppm at 2 & 4 leaf stage	117q/ha 32.6 fruit/plant over farmers practice	Farmers accepted the technology	-	

7	Okra	Rabi 2017-18	Irrigated/ upland	Low yield (78 qt/ha) due to YMV	No proper control measure (Triazophos @ 1li/ha)	Installation of Yellow sticky trap 50/ha and application Neem based pesticide 2.5 lit/ha of water and Solmon 300 OD (Beta-Cyfluthrin + Imidacloprid ) @ 60 gm a.i. /ha	98.1 q/ha % increase over farmers practice	Farmers accepted the technology	-	
8	Brinjal	Rabi 2017-18	Irrigated/ upland	Low yield (280 qt/ha) due to heavy mite infestation	No proper control measure (use of sulfex 1kg/ha)	Application Etoxazole 10 EC @ 570 gm a.i/ha	180.3 q/ha % increase over farmers practice	Farmers accepted the technology	-	
9	Watermelon	Rabi 2017-18	Irrigated/ upland	Low yield (250qt/ha) due to heavy infestation of thrips	No proper control measure (Dimethoate 1 lit/ha)	Installation of Yellow sticky trap 50/ha and application Neem based pesticide 2.5 lit/ha of water and Solmon 300 OD (Beta-Cyfluthrin + Imidacloprid ) @ 60 gm a.i. /ha	247.4 q/ha 4.7 thrips/vine over farmers practice	Farmers accepted the technology	-	