Sl. No.	Crop/Commodity	Year	Farming situation	Problem/opportunity identified for which such intervention was taken	FP	Technology option tested	Results	Feedback	Remarks if any	Action photograph
01	Green gram	2009	Rainfed	Low yield in Green gram	Use of no Rhizobium	Rhizobium 200gms per acre as seed inoculants before sowing.	6 qtl per ha	Application of Rhizobium @ 200gms per acre as seed inoculants before sowing increases yield by 20%.	Timely availability of Rhizobium	
02	Ground nut	2009	Rainfed	Low yield in Ground nut	Non use of soil reclamation chemicals	Application of 10 kgs of elemental sulphur per acre at the time of land preparation.	20 qtl per ha (Pod)/ 13 qtl seed	Application of 10 kgs of Sulphur per acre in black soil	Assured irrigation	
03	Okra	2009	irrigated	Low yield in Okra	Untimely and in balanced doze of fertilizers and irrigation	Application of vermicompost at seeding & 5 tons per ha, 20% of N & K + all P as basal, 40 % of N & K at 30 DAS, 40% of N & K at 60 DAS of sowing.	10 ton per ha	Application of vermicompost at seeding & 5 tons per ha, 20% of N & K + all P as basal, 40 % of N & K at 30 DAS, 40% of N & K at 60 DAS of sowing.	Water management is a critical factor so assured source of irrigation is required	
04	Scented Paddy	2009	Rainfed	Scented Paddy	Use of local variety	Use of high yielding variety, soil test based fertilizer application	28 qtl per ha	Use of high yielding scented variety along with soil test based fertilizer	Timely availability of Ketakijoha seeds	

								application.		
05	Paddy	2009	Irrigated	Low yield due to heavy disease incidence	Improper identification and indiscriminate use of pesticide	Seed treatment with Tricyclazole @ 2 gms.kg seed and seed soaking with Streptocyclin @ 1gm./10 ltr., spraying of Carbendazim @ 2gm/lt in nursery, application of cowdung slury@ 10 kg/acre and need based spraying of Tricyclazole & streptocyclin	32 qtl per ha	Following the IDM practice the disease can be suitable managed and yield enhancement is possible.	1. Occurrence of multiple disease problem 2. Pesticide application is a troublesome process due to erratic rainfall	
06	Cowpea	2009	Rainfed	Low yield due to YMV infestation	Improper identification and indiscriminate use of pesticide	Seed treatment with Imidacloprid @ 5mg/ 1kg seed, spraying with neem pesticide2.5 lt/acre, alternate spraying with Acepamiprid 20% SP & Thiamethoxam 25% WG @ 100 g/ha	73 qtl per ha	IPM practice can enhance the yield of cowpea managing the YMV problem	Timely availability of seed and plant protection chemicals	
07	Okra	2009	Rainfed	Low yield due to jassid problem	Improper identification and indiscriminate use of pesticide	Seed treatment with Imidacloprid @ 5mg/ 1kg seed, spraying with neem pesticide2.5 lt/acre, alternate spraying with	72 qtl per ha	IPM practice can enhance the yield of okra managing the jassid problem	Timely availability of seed and plant protection chemicals	

						Acepamiprid 20% SP & Thiamethoxam 25% WG @ 100 g/ha				
08	Cauliflower	2009	Irrigated	Low yield & low market value of curds due to browning	Application of fertilizers but not micro nutrient	Soil test based fertilizer application (150:50:60 kg./ha.) and spraying of Borax @ 2 gm./lit. water at 25 & 45 DAT	212 qtl per ha	Micro nutrient mixture multiplex can be used at 25 & 45 DAT for best result	Non availability of micro nutrient at right time	
09	Watermelon	2009	Rainfed	Non utilization of dried out reservoir land	Non utilization of dried out reservoir	New introduction of water melon variety Sugar Baby. Soil application of recommended dose of NPK & boron		Yet to recommend	Timely availability of seed and plant protection chemicals	
10	Pumpkin	2009	Irrigated	More of male flower & less yield	No use of growth regulator in traditional practice	Application of ethrel 100ppm at two leaf and four leaf stage		Yet to recommend	Timely availability of seed and plant protection chemicals	
11	Prawn	2009	Irrigated	Low yield of prawn from polyculture of prawn with fish	Polyculture of prawn with fish	1. Initial pond preparation like liming, manuring and fertilization 2. Rearing of prawn from PL to juvenile for 2 months in cement tank 3. .Stocking of prawn		The technology is appreciable for the people who live near forest area.	Collection of anola from forest is time consuming.	

						juveniles@30, 000 nos/ha 4. Feeding, water quality monitoring, grading and cull harvesting as per recommendation				
12	Aonla supari	2009	-	Wastage of Anola due to lack of knowledge in value addition.	-	Preservation of anola putting in Brine solution, sun drying, followed by dehydration through frying in ghee	0.4 kg/1 kg anola			

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01	Paddy	Kharif 2009-10	Irrigated	Low yield & loss of nutrient due to low soil organic matter	Addition of no/ less quantity of organic manure,	1. Green manuring with Dhanicha @ 20 kg per ha 2. Addition of all P fertilizers required by	31.5	Suitable for medium & low land condition and highly	Govt. of A.P	

					imbalanced doze of fertilizers	rice to Dhanicha 3. Incorporating in soil at 40 DAS 4. Addition of soil test based fertilizers		responsible to fertilizers		
02	Cotton	Kharif 2009-10	Rainfed	Low yield	No addition of micro nutrient	Spraying of magnesium sulphate & zinc EDTA 2%@ 40 DAS & 60 DAS	12.5	Suitable for rainfed up land/ medium land	Govt. of A.P	
03	Okra	Rabi 2009-10	Irrigated	Low yield	Untimely and in balanced dose of fertilizers and irrigation	Application of vermicompost at seeding & 5 tons per ha, 20% of N & K + all P as basal, 40 % of N & K at 30 DAS, 40% of N & K at 60 DAS of sowing.	10	Suitable for rabi season	Govt. of Karnataka	
04	Paddy	Kharif 2009-10	Rainfed	Low yield	Traditional variety	Substitution of local variety with Pratikhya, soil test based fertilizer application	30.5	Suitable for medium land condition and resistance to insect pest & diseases.	OUAT, 2004	
05	Paddy	Kharif 2009-10	Irrigated	High cost of weed control	Only manual weeding	One chemical weeding @10 DAT+ one hand weeding at 15 days interval	30.5	Suitable for medium land rice	-	
06	Paddy	Kharif2009-10	Irrigated	Low yield due to high incidence of insect pest	Indiscriminate use of pesticide	Summer ploughing, seed treatment, use of bio agent and need based insecticide application	44	Suitable for medium & low land condition and highly responsible to fertilizers	Govt. of A.P	
07	Cotton	Kharif2009-10	Rainfed	Low yield due to high incidence of insect pest	Indiscriminate use of pesticide	Summer ploughing, seed treatment, use of bio agent and need based insecticide	16.3	Suitable for rainfed up land/ medium land	Govt. of A.P	

						application				
08	Tomato	Rabi2009-10	Irrigated	Low yield due to wilting	Wilting of plants	Cultivation of wilt tolerance tomato variety 'Utkalakumari'	260.18	Indeterminate type, round shaped, matured in 92-95 days, resistance to bacterial wilt, average yield 400 qtl per ha	OUAT,1997	
09	Cowpea	Rabi 2009-10	Rainfed	Low income due to high cost of staking material & incidence of YMV disease	Use of local variety & Bamboo staking	Cultivation of high yielding variety'Utkalamanika'	73	Early type, bushy, 1st harvesting at 45 DAS, yield potential 100 qtl per ha	OUAT, 2001	
10	Fish-prawn	Round the year	Irrigated	Less income from composite fish farming	Composite fish farming	Polyculture of fresh water prawn with Indian major carps	-	Faster growth rate.	CIFA, 2000	
11	Fish	Round the year	Irrigated	Low yield due to imbalanced nutrition.	Carp culture without nutritional balanced artificial feed	Pre-stocking managementStocking of mixed carp fingerlings @ 5000 nos/ha Feeding of nutritionally balanced diet @ 2 times per day based on prescribed dose.	-	Feed conversion ratio 2:1 and water stability for 3 hrs	Godrej Pvt. Ltd.,2003	
12	Fish-duck	Round the year	Irrigated	Lack of organic fertilizer and poor water quality in fish pond	Composite fish culture	Stocking of mixed carp fingerlings of 15-20 gms @ 7000 nos/ ha Rearing of 250 ducks/ha to provide optimal aeration & fertilization	-	Fish: faster growth rate Duck: 90-110 eggs /yr	-	

13	Paddy straw mushroom	Kharif, 2009	-	Wastage of paddy straw	Non utilization of agricultural waste.	Utilization of agricultural waste-paddy straw with the use of mushroom spawn and gram powder.	1.27 kg	High yielding, good taste, black surface, grown in 25^0C to 38^0C and 85-90% humidity	Dept. of Plant pathology, OUAT (1987-88)	
14	Oyster mushroom	Rabi 2009-10	-	Wastage of paddy straw	Non utilization of agricultural waste.	Utilization of agricultural waste-paddy straw with the use of mushroom spawn and whole wheat.	1.43 kg	High yielding, off white colour and shell like surface grown in 25^0C to 30^0C temperature and 70-95% humidity	Dept. of Pathology, OUAT (1996-97)	
15	Poultry	Rabi 2009-10	-	Low income from rearing of local birds	Rearing of local poultry bird	Rearing of chicks of second week with proper vaccination	-	Multi coloured bird laying 160-180 eggs per year, 4-4.5 kg wt./3.5 months	OVC, OUAT (2004)	

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01	Fish	2010	Lowland & Rainfed	Poor growth of fingerlings in seasonal ponds	Poor growth of fingerlings in seasonal ponds	Assessment of yearlings for carp production	Wt. gain/month:132gm FCR:1.2:1 Yield/ha:26.4 qtl	Yearlings reaches to marketable size in about 4 to 5 months	Production & management	

								where as fingerlings takes double of its time. In the same period 2 crops can be taken up and return will be 2 folds as compare to fingerlings		
02	Fish	2010	Rainfed and Lowland	Off –flavour and bloom infestation in fish pond	Off – flavour and bloom infestation in fish pond	Assessment of probiotics in pisciculture	pH:7.6 Wt. gain/month:66gm Yield/ha:23.76 qtl	Probiotics when used along with the lime and manure, it keeps environment free from disease and maintain optimum oxygen level in pond water and results additional yield of more than 3 qtl/ha.	Production & management	
03	Fish	2010	Rainfed and Lowland	Insufficient production of natural benthic fish food organisms i.e. periphyton	Insufficient production of natural benthic fish food organisms i.e. periphyton	Assessment of periphyton based aquaculture in fish pond	Periphyton thickness: good wt. gain/month: 67 gm Yield/ha: 24.12 qtl	Suitable locally available substrate like bamboo can be used to hold benthos population at least in 30% water area with the investment of additional Rs.	Production & management	

								4000/- which gives additional 20% yield per ha.		
04	Soyabean	Kharif 2010-11	Rainfed	Low return from upland paddy	Low return from upland paddy	Assessment of yield of soyabean in upland condition	Yield: 18q/ha	Soyabean can be substituted by paddy in upland condition.	Crop substitution	
05	Rice	Kharif 2010-11	Rainfed	Low yield due to imbalanced dose of fertilizer	Low yield due to imbalanced dose of fertilizer	Assessment of STBFR in medium rice	Yield: 36q/ha	STBFR is recommended in medium land rice	Soil testing	
06	Green gram	Rabi 2010-11	Rainfed	Low yield due to non application of bio fertilizer	Low yield due to non application of bio fertilizer	Assessment of yield of green gram with use of host specific rhizobium	Yield: 6.8q/ha	Host specific rhizobium increases yield of green gram by 13.3 percent.	Soil fertility	
07	Okra	Rabi 2010-11	Irrigated	Low yield of Okra due low application of bio-fertilizer	Low yield of Okra due low application of bio-fertilizer	Assessment of yield of Okra with use of azotobactor/azospirilum	Yield: 4.7t/ha	Use of bio fertilizer increase the yield of Okra by 17.5%	Soil fertility	
08	Ground nut	Rabi 2010-11	Irrigated	Low yield of ground nut due to non application of Boron	Low yield of ground nut due to non application of Boron	Assessment of foliar application of Boron in ground nut	Yield: 19.2q/ha	Yield of ground nut can be increased by 12.9 percent by foliar application of Boron before flowering.	Micro nutrient management	
09	Onion	Kharif 2010-11	Irrigated	Less renumeration from upland paddy Var. Khandagiri	Less renumeration from upland paddy Var. Khandagiri	Assessment of Kharif onion Variety Agrifound Dark Red	Yield: 250q/ha	Agrifound dark red kharif onion can be suitably culture in the district to lift	Varietal evaluation	

								economic standard of the farmers		
10	Tomato	Rabi	Irrigated	Low yield and wilt problem	Low yield and wilt problem	Assessment of yield potential of Tomato variety Utkal Raja	Yield: 300q/ha	Utkal raja is more suitable for rabi season as compare to utkal kumara for its higher yield.	Varietal evaluation	
11	Chilli	Rabi	Rainfed	Low yield and leaf curl virus affect in local cultivars	Low yield and leaf curl virus affect in local cultivars	Assessment of chilli variety Utkal Ava	Yield: 100q/ha	Utkal Ava is suitable both for raw and dry chilli purposes	Varietal evaluation	
12	Eucalyptus	Kharif	Rainfed	Slow growth rate of local Eucalyptus seedlings	Slow growth rate of local Eucalyptus seedlings	Assessment of growth of JK clone -2 samplings	Avg. height 43.4 cm & 4 no. of new leaves after 6 months		Varietal evaluation	
13	Teak	Kharif	Rainfed	Slow growth rate of local Teak stump cuttings	Slow growth rate of local Teak stump cuttings	Assessment of growth of budded teak stump.	Avg. height 49 cm & 4 no. of leaves after 6 months.		Varietal evaluation	
14	Paddy straw mushroom	Kharif		Non availability of paddy straw of 2 ft	Non availability of paddy straw of 2 ft	Assessment of bed size of paddy straw mushroom	Yield/bed: 0.7 kg	Though the benefit cost estimation is less than the normal bed size,due to non vailability of 2 feet length paddy straw in the district , the 1*1*1 bed size can be recommended.	Income generation	
15	Maize sheller	Rabi		Low efficiency and high drudgery	Low efficiency	Assessment of tubular maize sheller	17 kg maize/hr	Tubular maize sheller is a	Drudgery reduction	

				during maize shelling	and high drudgery during maize shelling			user friendly tool. This can be recommended for its better efficiency and low drudgery requirement.		
16	Sunflower threshing bench	Rabi		Low efficiency and high drudgery during sunflower threshing	Low efficiency and high drudgery during sunflower threshing	Assessment of manual sunflower threshing bench	20kg seed/hr	Faster rate of threshing(8kg/ hr compare to manual removal 20kg/hr) and low drudgery in threshing bench found suitability to the locally. Hence the technology can easily be recommended.	Drudgery reduction	

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01	Fish	2010	Plankton management in fish pond	Production and management		Eradication of aquatic weed, predatory & weed fishes manually; Liming @ 250 kg/ ha water	yield/ha : 16.0qtl	Plankton density/50 lt (in ml) Wt. gain/month (in gm) FCR(in ratio) Fish yield (in	**-**	

						area; Manuring with raw cow dung @ 3-4 tones/ ha. as basal dose 15 days prior to stocking; Fortnightly application of cow dung @ 0.5 ton/ ha, Urea @ 10 kg/ ha and SSP @ 15 kg/ ha throughout the culture period		q/ha)		
02	Fish	2010	Biological control of aquatic weed in fish pond	Production and management		Grass carp is stocked based on weed infestation in fish pond. In heavy infested pond grass carp can be stocked upto 40-50% of stocking density @5000nos/ha. In less infested pond grass carp may be stocked @ 4-5% i.e., 500 nos/ha with carp culture pond.	yield: 32.6 qt/ha	Weed control: kg/m^2 Body weight/month: gm Fish yield:qt/ha	**-**	
03	Fish-Prawn	2010	Mixed fish farming with freshwater prawn	Production and management		Pre-stocking management like liming and manuring, stocking of carp fingerlings @ 5000 nos./ha.	Fish yield:18.2 q/ha Prawn yield: 1.13 q/ha	Fish yield (in q/ha) Prawn yield (in q/ha)	**-**	

						and stocking of prawn juveniles @ 4000 nos./ ha., feeding 2 time/ day, artificial shelter to protect prawn at time of moulting and water quality monitoring				
04	Fish-Duck	2010	Integrated fish farming with duck	Production and management		Pre-stocking management like liming and manuring, stocking of carp fingerlings @ 5000 nos/ha, Rearing of 250 nos. of Khaki Cambell duck/ha in fish pond when fingerlings attain av. body wt. of 20 g, water quality 03management as recommended.	Fish yield: 27.46 q/ha eggs produced/year : 10500 nos meat produced/year : 270 kg	Fish yield (in q/ha) eggs produced/year(in nos) meat produced/year(in kg)	**-**	
05	Paddy	Kharif 2010-11	Swarna	Weed management		Application of Pyrozosulfurol ethyl (Sathi 200gm/ha)@ 2 DAT in standing water for 3-4 days	33.2	Yield: q/ha	**-**	
06	Cotton	Kharif 2010-11	Bunny	Micro nutrient management		Spraying of MgSO4(0.2% acquious) Zn EDTA	18	Yield: q/ha	**-**	

						(0.05%)@ 40DAS & 60DAS				
07	Maize	Kharif 2010-11	Prabala	Integrated nutrient management		Application of azotobactor @ 2.5kg/ha as seed treatment	30.2	Yield: q/ha	-	
08	Paddy	Kharif 2010-11	Swarna	Micro nutrient management		Spraying of 0.02% Boron (1gm Borovit/lt water)before flowering	34	Yield: q/ha	-	
09	Paddy	Kharif 2010-11	Swarna	Nutrient use efficiency		Pre treatment of 50kg Urea with 500ml Neem oil before application in paddy field.	32.8	Yield: q/ha	-	
10	Brinjal	Kharif 2010-11	Muktakeshi	Integrated nutrient management		Application of vermicompost @5t/ha, ½ N, all P and ½ K as basal. Rest fertilizers in two equal split at 15 days interval	18	Yield: t/ha	-	
11	Radish	Kharif 2010-11	Variety. Pusa chetki	Varietal evaluation		Radish seed variety Pusa chetki @ 5kg/ha and all other package of practices	160	Yield: q/ha	-	
12	Banana	Rabi 2010-11	Dark cavendis	Integrated nutrient management		Application of 250gm of N/plant,40gm of P2O5/plant and 200 gm of	60	Yield: q/ha	-	

						K2O/plant and 20 gm boron/plant with all other management practices as per recommended				
13	Arhar	Kharif 2010-11	ICPL-87-119	Varietal evaluation		Intercropping of Arhar in Teak plantation	4	Yield: q/ha	-	
14	Bamboo	Kharif 2010-11	-	Production technology		Propagation of Bamboo through culm cutting method	-	Height of the main Culm(ft) No. of leaves	-	
15	Acacia mangium	Kharif 2010-11	-	Integrated farming system		Acacia mangium is planted in the unutilized farm bunds	-	Height (cm) No. of leaves		
16	Goat	Kharif 2010-11	Deworming of kids by Albendazole suspension.	Disease management		De-worming of kids	2 kg gained/1 kg body wt.	Body wt gained in kg	-	
17	Azolla	Kharif 2010-11	Azolla Pinnata	Nutrient management		Use of azolla as cattle feed	7lt milk per cow/dayy	Lt /cow/day	-	
18	Oyster mushroom	Rabi 2010-11	Pleurotus sajorcaju	Income generation		Cultivation of Oyster mushroom	1.5 kg/bed	Yield: kg/bed B:C ratio	-	

19	Anola	Rabi 2010-11	Local	Value addition		Preparation of 'Anola Suparu'	0.4kg/1 kg raw anola	Yield: kg B:C ratio	-	
20	Poultry	Rabi 2010-11	Banaraja poultry	Small scale income generation		Backyard rearing of poultry	0.8 kg/month	Body wt: kg No.of eggs B:C ratio	-	
21	Cotton	Kharif 2010-11	Bunny,Tul2si	Production technology		FLd on Cotton	15.34	Yield: q/ha	-	
22	Pigeon pea	Kharif 2010-11	ICPL-87-119	Production technology		FLD on Pulse	14.5	B:C ratio	-	
23	Sunflower	Rabi 2010-11	KBSH-1	Production technology		FLD on Oilseed	17.8	Yield: q/ha	-	
24	Black gram	Kharif 2010-11	Prasad	Demonstration for Harnessing Pulses Productivity' programme (NSFM)		FLD on Pulse (NSFM)	6.9	B:C ratio	-	
25	Green gram	Rabi 2010-11	PDM-139	Demonstration for Harnessing Pulses Productivity' programme (NSFM)		FLD on Pulse (NSFM)	7.1	Yield: q/ha	-	
26	Chick pea	Rabi 2010	Annegiri-1	Production technology		FLD on Pulse (RKVY)	12	B:C ratio	-	

27	Sunflower	Rabi 2010	Jwalamukhi	Production technology		FLD on Oilseed (RKVY)	18	Yield: q/ha	-	

Sl. No.	Crop/ Commodity	Year	Farming situation	Problem/ opportunity identified for which such intervention was taken	FP	Technology Demonstrated	Results	Feedback	Remarks if any	Action photograph
01	Paddy	Kharif, 2011	Varietal evaluation	IPM in Kharif rice		1. Timely planting of high yielding variety. 2. Nursery bed treatment with granular insecticides 3. Use of recommended NPK dose 80:40:40 kg/ha. 4. Installation of bird percher up to	Tiller/hill No. of panicle/ sq. m Yield B:C ratio	Growing variety 'Manaswini'	Duration – 132 days, photo insensitive, plant- 100 cm., Avg. yield – 4.7 t/ha., multiple resistance to disease and pest	

						vegetative stage and pheromone trap @ 5/ha. 5. Release of *Trichogramma japonicum* parasite @ 50,000/ha. 6. Foliar spray of neem based insecticides @ 2 ltr. & chloropyriphos @ 1 ltr./ha. based on ETL				
02	Cotton	Kharif, 2011	Weed management	IPM in cotton		i) Growing castor and marigold as trap crop ii) Sowing of imidaclopride treated hybrid Seed iii) Neem pesticide for management of sucking pests and bollworm at early vegetative stage @ 2 ltr/ha. iv) Topping at 90-100 days after sowing v) Application of HaNPV @ 500LE/ha. vi) Release of *Trichogramma chilonis* @1,00,000 eggs per acre	Weed control efficiency, weed population/m^2 Yield, B:C ratio	Chemical weed management	Application of post emergence pyrazo sulfurol ethyl @ 80 g/acre after in 10-12 days of germination.	

						vii) Handpicking of harmful larvae viii) Application of Endosulfan and chlopyriphos @ 1ltr./ha. and based on ETL ix) Installation pheromone traps @ 2/ha and bird perches @ 20/ha.				
03	Cotton	Kharif, 2011	Feed and fodder	Application of Mg and Zn in cotton		Spraying of MgSO4(0.2% acquious) Zn EDTA (0.05%) @ 40DAS & 60DAS	Fodder yield, milk yield, B: C ratio	Fodder cultivation in backyard/ field bonds	Growing hybrid Napier (cv-CO3) with green forage yield 130-300 t/ha(Avg 6 kg/plant/cut)	
04	Brinjal	Kharif, 2011	INM	Biological control of wilting in brinjal		Cultivation of bacterial wilt tolerant variety Utkal Kesari along with soil and seed treatment of *Trichodermma* and *Pseudomonas* for wilt management	No. of effective tillers/hill, % chaffyness, 1000 grain weight Yield (Q./ha.), B:C ratio	Soil test based fertilizer application in medium land rice	Fertilizer recommendation based on soil testing	
05	Fish	Kharif, 2011	INM	Use of supplementary feed for fish production		Feeding of mixute of GNOC/ mustard oil cake and rice bran at 1:1 by weight @ 5% of body weight for first month followed by sliding rate of 3 to 2 % of	Foliar spraying of 0.25% Borax and 0.25% ZnSO4 3 times at 10 days interval before flowering	Application of B and Zn in rice	Foliar spraying of 0.25% Borax and 0.25% ZnSO4 3 times at 10 days interval before flowering	

						estimated bio mass in subsequent months 2 time per day for 10-12 months of culture period				
06	Fish-Duck	Kharif , 2011	INM	Integrated fish farming with duck		Liming of fish pond, stocking of carp fingerlings of size 25 gm. @ 5000-6000 nos./ha. and introduction of khaki Campbell ducks @ 250 nos. per ha. to consume insect pest from water body, making safe environment for fish and dropping & aeration can directly go into fertilizing water and aerating & dabbing pond bottom. Need not necessary to apply cow dung as manure.	No. of sympodial branch, Boll no./ plant Yield (Q./ha.), B:C ratio	INM in cotton	FYM 5 t/ha. + NPK (120:60:60 kg/ha.) + Azotobacter (5kg/ha) as basal, Zn (0.05%) + Mg (0.2%) at 40 & 60 DAS(25 % N + all P + 50% K as basal; 50% N+ 50% K at 3 week stage; 25% N at 8 week stage)	
07	Fish- Prawn	Kharif , 2011	NM	Mixed fish farming with fresh water prawn		Pre-stocking management like liming and manuring, stocking of carp fingerlings @ 5000 nos./ha. and stocking of prawn juveniles @ 4000 nos./ ha., feeding 2 time per day, artificial shelter to protect		INM in Arhar		

						prawn at time moulting and water quality monitoring				
08	Mushroom	Rabi, 2011-12	INM	Paddy straw mushroom cultivation		Mushroom cultivation by using paddy straw		Boron in sunflower		
09	Poultry	Kharif, 2011	Production and management	Rearing of Banaraja variety of poultry bird		interactive lecture, group meeting, result demonstration, publication	Plankton density(ml/lt), transparency test(cm), Fish yield(q/ha), B:C ratio	Plankton management practices	Liming @ 250kg/ha water area, manuring with raw cow dung@ 3-4 t/ha as basal dose 15 days prior to stocking and fortnightly application of cow dung @ 0.5t/ha, urea@ 10kg/ha and SSP@15 kg/ha through out culture period	
10		Kharif, 2011	Production and management				Avg body wt/month, final body wt(gm), FCR, fish yield and B:C ratio	Stunted fingerlings(yearlings) as stocking material in carp farming	Stocking of stunted fingerlings (40-50gms size) @ 10,000 nos./ ha of water area.	
11		Kharif, 2011	Production and management				pH, Avg body wt./ month, fish yield, Disease incidence, B:C ratio and change in FCR	Pro-biotic application to augment water quality in fish pond	Application pro-biotics @ 5kg /ha in uniform monthly split doses after 2 days of manuring.	

12			Production and management				-	Integrated fish farming with duck		
13			Production and management				-	Improvement of fish production through periphyton based compositecarp practice		
14		Kharif, 2011					-	Raising bamboo (Bambusa vulgaris) plantation through culm cutting method		
15		Kharif, 2011	Varietal evaluation				Height collar diameter up to 1-2 years or DBH after 2 years	Budded teak plantation	Buds from elite trees are collected and grafted in conventional raised seedlings & have faster growth rate	
16		Kharif, 2011	Small scale income generation				Body wt/bird/month Egg / bird B:C ratio	Backyard rearing of 'Banaraja' poultry	Rearing of Banaraja (Avg body wt 3.5kgin 6 month and 120-160 egg/yr) with vaccination	
17		Kharif, 2011	Varietal evaluation				Yield/ha B:C ratio	Backyard floriculture.	Cultivation of 'Bengal red 'variety with proper application of fertilizer and disease management.	
18		Kharif, 2011	Production technology				Yield/ ha., B:C ratio, No. of plant	Pulse production (Arhar)	Line sowing of High Yielding Variety	

							per square meter, No. of pod per plant		Seed treatment with Rhizobium culture Application of NPK @20:40:20 kg/ha as basal application, spraying of chloropyriphos and carbendazim.	
19		Kharif , 2011	Production technology				Yield/ ha., B:C ratio, No. of plant per square meter, No. of pod per plant	Pulse production Blackgram	Line method of sowing, seed treatment with rhizobium culture, Application of NPK @20:40:20 kg/ha , spraying of chloropyriphos and sulfex	
20		Rabi, 2011-12	Production technology				Yield/ ha., B:C ratio, No. of plant per square meter, No. of pod per plant	Pulse production	Line method of sowing, seed treatment with rhizobium culture, Application of NPK @20:40:20 kg/ha , spraying of chloropyriphos	
21		Rabi,	Production technology				Yield/ ha., B:C ratio, No. of plant per square meter, No. of pod per plant	Pulse production	Line method of sowing, seed treatment with rhizobium culture, Application of	

									NPK @20:40:20 kg/ha , spraying of chloropyriphos	
22		2011-12	Production technology				Yield/ ha., B:C ratio, Size of the flower	Sunflower production	Line method of sowing, seed treatment with tricoderma viride, sprayin of imidacloprid	

Sl. No.	**Crop/Commodity**	**Year**	**Farming situation**	**Problem/opportunity identified for which such intervention was taken**	**FP**	**Technology option tested**	**Results**	**Feedback**	**Remarks if any**	**Action photograph**
23	Paddy	Kharif 2013	Rainfed	Low yield due to local cultivar and susceptible to insect pest	Low yield due to local cultivar and susceptible to insect pest	Assessment of Paddy Var. Tejaswini in medium land	41.52	Varietal evaluation		
24	Maize	Kharif2013	Rainfed	Replacement of local cultivar due to low yield	Replacement of local cultivar due to low yield	Assessment of Maize Var MM-1107 in upland	25.3	Varietal evaluation		
25	Paddy	Rabi-2014	Irrigated	Heavy weed infestation leading to low yield	Heavy weed infestation leading to low yield	Assessment of herbicide Oxyfluorfen(0.04kg ai/ha) in transplanted		Weed management		

						paddy				
26	Mustard	Rabi-2014	Rainfed	Heavy weed infestation leading to low yield and quality	Heavy weed infestation leading to low yield and quality	Assessment of weedicide Pendimethalin (1lt ai/ha) in Mustard	6.8	Weed management		
27	Ground nut	Rabi-2014	Rainfed	Low yield due to lack of micro nutrient management	Low yield due to lack of micro nutrient management	Assessment of Cobalt in Groundnut	21	Micro-nutrient management		
28	Cotton	Kharif-2013	Rainfed	Low yield due to lack of micro nutrient management	Low yield due to lack of micro nutrient management	Assessment of foliar spray of boron in cotton	18	Micro-nutrient management		
29	Tomato	Kharif-2013	Rainfed	Low yield due to lack of Integrated nutrient management	Low yield due to lack of Integrated nutrient management	Assessment of Integrated nutrient management in tomato	220	Integrated nutrient management		
30	Mustard	Rabi-2014	Irrigated	Low yield due to lack of micro-nutrient management	Low yield due to lack of micro-nutrient management	Assessment of sulphur in Mustard	18	Nutrient Management		
31	Tomato	Kharif-2013	Irrigated medium land	Low yield and poor crop growth	Low yield and poor crop growth	Assessment of Tomato Var. Swarna Sampad	910	Varietal evaluation		
32	Brinjal	Kharif-2013	Irrigated Medium land	Lack of crop mangement practices	Lack of crop mangement practices	Assessment of INM in Brinal	280	Integrated Nutrient Management		
33	Onion	Rabi-2014	Irrigated	Poor shelf life and	Poor shelf	Assessment of	332	Micro		

			medium and	low yield of crop	life and low yield of crop	Effect of Sulphur on growth & yield of onion		nutrient management		
34	Water melon	Rabi-2014	Irrigated medium land	Low yield due to Anthracnose, Powdery mildew & Downy Mildew	Low yield due to Anthracnose, Powdery mildew & Downy Mildew	Assessment of watermelon var. Arka Manika		Varietal evaluation		
35	Turmeric	Kharif-2013	Rainfed	Interspaces of teak are remain unutilized	Interspaces of teak are remain unutilized	Assessment of performance of turmeric as intercrop in the teak plantation	110	Varietal evaluation		
36	Bamboo	Kharif-2013	Rainfed	Fallow and unculturable lands are available	Fallow and unculturable lands are available	Assessment of performance of *Bambusa nutans* in western undulating region	--	Varietal evaluation		
37	Teak	Kharif-2013	Rainfed	Slow growth rate of local Teak stump cuttings	Slow growth rate of local Teak stump cuttings	Assessment growth of Budded Teak in block plantation		Varietal evaluation		
38	Acacia mangium & Sesamum	Rabi-2014	Irrigated	Mono-cropping of Acacia mangium	Mono-cropping of Acacia mangium	Assessment of yield of sesamum as intercrop in Acacia mangium plantation	7.5	Intercrop management		

Sl. No.	Crop/Commodity	Year	Farming situation	Problem/opportunity identified for which such intervention was taken	FP	Technology option tested	Results	Feedback	Remarks if any	Action photograph
01	Paddy	2014-15	Rainfed	Low yield is witnessed due to weed infestation.	Low yield is witnessed due to weed infestation.	Assessment of Brown manuring in upland paddy .	32.31-	Integrated Nutrient Management	Assessment	
02	Paddy	2014-15	Rainfed	-	-	Assessment of scented rice'Nua Acharmati' 'Purunabhog' and 'Kalajira' in medium land	20.5 18.3 20.0	Varietal evaluation	Assessment	
03	Groundnut	2015	Irrigated	The crop Yield gets hampered due to heavy weed infestation.	The crop Yield gets hampered due to heavy weed infestation.	Assessment of Integrated weed management in Groundnut (Oxyfluorfen, quizalofop	20.2 19.7 18.6	Integrated Weed Management	Assessment	

						Ethyl, imazethapyr)				
04	Sugarcane	2015	Irrigtaed	Lesser yield due to use of local sugarcane sett.	Lesser yield due to use of local sugarcane sett.	Assessment of Sugarcane variety “Nilamadhab	Continuing	Varietal evaluation	Assessment	
05	Paddy	2014-15	Rain fed	Low yield and low productivity due to no use of zinc in paddy	Low yield and low productivity due to no use of zinc in paddy	Assessment of Zinc enhancement in paddy	35.24	Integrated Nutrient Management	Assessment	
06	tomato	2014-15	Rain fed	Lesser yield due to non use of required amount of NPK and Bio-fertilizer.	Lesser yield due to non use of required amount of NPK and Bio-fertilizer.	Assessment of biofertilizer application in Tomato	206.5	Integrated Nutrient Management	Assessment	
07	Mustard	2015	Irrigated medium land	Lesser yield of Mustard due to no use of zinc sulphate and Boron	Lesser yield of Mustard due to no use of zinc sulphate and Boron	Assessment of INM in Mustard	6.91	Integrated Nutrient Management	Assessment	
08	Greengram	2015	Irrigated medium land	Low fruiting and less yield	Low fruiting and less yield	Assessment of foliar application of DAP 2% and NAA in Greengram	7.8	Integrated Nutrient Management	Assessment	
09	Rice	2014-15	Rainfed	The crop growth is stunted due to blast	The crop growth is stunted due to blast	Assessment of Isoprothialine (Fuji one) for management of blast disease	44.6	Disease management	Assessment	

						in paddy				
10	Cotton	2014-15	Rainfed	Sucking pest causes maximum damage to the plant during vegetative growth	Sucking pest causes maximum damage to the plant during vegetative growth	Assessment of Thiomethoxam (Actara) for management of sucking pest in cotton	30	Pest Management	Assessment	
11	Tomato	2015	Irrigated	The yield gets hampered due to leaf curl in Tomato	The yield gets hampered due to leaf curl in Tomato	Assessment of *Virex-H* for management of leaf curl in tomato	377	Pest management	Assessment	
12	Ground nut	2014-15	Irrigated	Low yield is observed due to lack of proper disease management.	Low yield is observed due to lack of proper disease management.	Assessment of IDM of collar rot in ground nut.	15.4	Disease management	Assessment	
13	-	2014-15	Rainfed	The pond dike is remain unused and occupied with various noxious weed.	The pond dike is remain unused and occupied with various noxious weed.	Assessment of Pond based Horticulture farming system	Fish- 17 H.Crops - 220	Integrated Farming System	Assessment	
14	Marigold	2014-15	Rainfed	Lack of proper management practices, farmers face a heavy loss in flower cultivation.	Lack of proper management practices, farmers face a heavy loss in flower cultivation.	Assessment of foliar application of Gibberellic Acid on Growth 13& Yield of 13African Marigold	115	Production Management	Assessment	
15	Snow pea	2014-15	Irrigated	Use of local degenerated seed farmer witness a low yield.	Use of local degenerated seed farmer witness a low yield.	Assessment of snow pea variety “Swarna Trupti”	220	Varietal evaluation	Assessment	

16	Onion	2015	Irrigated	Weed management is very crucial in onion and lack of this practice farmer suffer loss in onion cultivation.	Weed management is very crucial in onion and lack of this practice farmer suffer loss in onion cultivation.	Assessment of herbicides for weed management in Onion	343	Weed management	Assessment	
17	Sisu	2014-15	Rainfed	Unavailability of fodder crops & wasteland development	Unavailability of fodder crops & wasteland development	Assessment of Sisu in block plantation	-	Agro forestry management	Assessment	
18	Bamboo	2014-15	Rainfed	Fallow and unculturable lands are remain unused.	Fallow and unculturable lands are remain unused.	Assessment of performance of *Bambusa nutans* in western undulating region	-	Varietal evaluation	Assessment	
19	Teak	2014-15	Rainfed	Slow growth rate of local Teak stump cuttings	Slow growth rate of local Teak stump cuttings	Assessment growth of Budded Teak in block plantation	-	Agroforestry management	Assessment	
20	Sesamum	2014-15	Rainfed	Interspaces of plants are remain unutilized	Interspaces of plants are remain unutilized	Assessment of yield of sesamum as intercrop in Acacia mangium plantation *Var-Prachi*	5.5	Intercrop Management	Assessment	

Sl. No.	Crop/ Commodity	Year	Farming situation	Problem/opportunity identified for which such intervention was taken	FP	Technology Demonstrated	Results	Feedback	Remarks if any	Action photograph
01	Paddy	2014-15	Kharif	Plant Height (cm) Effective tiller/hill Panicle length (cm)	Use of old and degenerated varieties	Performance of high yielding Paddy Var. Tejaswini in medium land	41.29	Varietal evaluation	Paddy Var. Tejaswini	
02	Maize	2014-15	Kharif	Plant Height (cm) Weed dry weight (g/m2) Weed control efficiency(%)	Improper weed managemen t	Performance of herbicide Atrazine 1kg a.i/ha in Maize	23.6	Weed management	herbicide Atrazine 1kg a.i/ha	
03	Sweet Corn	2014-15	Kharif	Plant Height (cm) Cobb. Weight (gm)	Indigenous maize promoting laser yield	Performance of Sweet Corn variety 'Mishti'	55000 no. Cob	Varietal evaluation	Sweet Corn variety 'Mishti'	

04	Toria	2015	Rabi	Plant Height (cm) No. of Branches No. of Siliqua//plant	Use of old and degenerated varieties	Performance of Toria Var. Parvati in upland	7.80	Varietal evaluation	Toria Var. Parvati	
05	Maize	2014-15	Kharif	Cobs/plant(Nos) Cob length(cm)	Improper nutrient management	Demonstration on Bio-fertilizer integrated with inorganic fertilizer in Maize	54.7	Integrated Nutrient management	Maize Var.CP1818	
06	Banana	2014-15	Kharif	No of fruit/plant Bunch weight (Kg) Bunch length (Cm)	Improper nutrient management	Demonstration of nutrient management in tissue culture banana	392	Integrated Nutrient management	Var.G-9	
07	cauliflower	2015	Rabi	Curd Wt (Kg)	Improper nutrient management	Performance of Biofertilizer application in cauliflower	235	Integrated Nutrient management	Rear ball	
08	groundnut	2015	Rabi	No. of nodule /plant No.of pod/plant	Improper nutrient management	Demonstration on Application of lime & Rhizobium in groundnut	24.9	Integrated Nutrient management	Smruti	
09	Rice	2014-15	Kharif	Disease incidence (%)	Haphazard use of pesticides and no other application of pesticides for pest management	Demonstration on Management of sheath blight of rice	44.8	Disease management	Management of sheath blight of rice	
10	Sugarcane	2014-15	Kharif	No. of dead heart/m2	Haphazard use of	Demonstration on Integrated	1172	Pest management	Integrated Management of	

					pesticides and no other application of pesticides for pest managemen t	Management of Sugarcane Stem borer			Sugarcane Stem borer	
11	Bitter gourd	2014-15	Kharif	No. of Damaged fruit/plant	Haphazard use of pesticides and no other application of pesticides for pest managemen t	Demonstration of Management of fruit fly in bitter gourd	70.9	Pest management	Management of fruit fly in bitter gourd	
14	Pointed Gourd	2015	Rabi		Improper nutrient managemen t	Assessment of micromutrient application in pointed Gourd	352	Micro-nutrient application	Micronutrient application in pointed Gourd	
16	Turmeric	2014-15	Kharif	Average Rhizome wt/Culm (gm)	Sole crop cultivation enhances chances of yield loss as well as economic yield	Performance of turmeric as intercrop in the teak plantation var-Roma	110	Intercrop management	turmeric as intercrop in the teak plantation	
17	Bamboo	2014-15	Kharif	Ht. of new culm (ft) No. of sprouts No. of new branch-	-	Demonstration of Bamboo (*Bambusa vulgaris*) Plantation through binodal culm cutting method	400	Production management	Bamboo (*Bambusa vulgaris*) Plantation through binodal culm cutting method	
18	Stylo grass	2014-15	Kharif	Yield (q/ha) No. Of cuttings /year	Sole crop cultivation enhances chances of	Demonstration of stylo grass as intercrop in *Acacia*	62	Intercrop management	stylo grass as intercrop in *Acacia mangium* plantation	

					yield loss as well as economic yield	*mangium* plantation (silvi-pasto model)				