


On Farm Trials of KVK, Nayagarh




Sl. No	Crop/Commodity	Year	Farming Situation	Problem/opportunity identified for which such intervention was undertaken	Farmers practice	Technology options tested	Results	Feedback	Remarks if any	Action Photograph
1	Sugarcane	2007-08	Irrigated Medium land	High density planting which increases the seed cost	Normal trench method of planting.	Putting 2 two buded sets in a pit of 1 ft x 1 ft size with 4 ft x 2 ft spacing	14 unit			
2	Paddy	2007-08	Rainfed medium land	Incorporation is difficult in absence of rain at 30-45 DAS	Dhanicha seeds were sown with paddy seeds & knipping is done at knee high stage	T1- only paddy T2-Seeds of dhanicha 15 kg/ha were sown with paddy seeds & knipping at knee ht. stage.	Treatment.- 27.12q/ha	Farmers are satisfied with green manuring Dhanicha in paddy cultivation		
3	Paddy	2007-08	Irrigated medium land	Increasing cost of production and reducing yield response	30 to 45 days old seedling, 3 to 4 seedling per hill and HYV with random spacing.	Planting of 10 to 12 days of old seedling of high yielding or hybrid seed, one seedling per hill with a spacing of 25 X 25 cm	40.43q/ha	Raising seedling(mat), maintaining spacing & transplanting properly		


4	Green gram	2007-08	Rain fed upland	Severe weed infestation reduced seed yield & profitability	Hand weeding	Application of Quizalofop –Ethyle 5%ec @ 1lt/ ha between 10-30days of sowing.	5.95q/ha	Chemical weed control in greengram has been accepted by the farmers		
5	Colocasia		Irrigated up/Medium land	Heavy weed infestation in early growth stage of colocasia reduced the yield	Manual weeding	Application of Quizalofop –Ethyle 5%ec @ 1lt/ ha between 10-30days of sowing	128.12q	Weed control in colocasia by application of QuizalofopEthyle 5%ec has been accepted by the farmers.		
6	Groundnut	2007-08	Rainfed upland	High mortality due to fungal wilt at early stages of crop growth	Spraying of bavistine ``	T1-Farmers practice T2- Treatment with Tricoderma viridae @ 4gm. In 10 ml of water for 1kg seed and spraying plant with 5gm/lt of water	7.28q/ha	Tricoderma viridae is quite effective in controlling wilt in groundnut		
7	Paddy	2008-09	Rainfed medium land	Low yield in paddy due to use of low yielding variety	Farmer's variety Lalat.	Performance of paddy variety Manaswini	40.0q/ha	Paddy variety Manaswini has higher Yield potential than Lalat and performing Well under late Planting condition		
8	Groundnut	2008-09	Irrigated Medium land	Low yield in ground due to continues application of sulphur deficient fertilizers.	No sulphur application.	Application of bentonite sulphur @ 25Kg/ha before sowing	17.4q/ha	There is considerable increase in pod number/plant, kernel size oil content and pod yield due to application of		

								sulphur		
9	Groundnut	2008-09	Irrigated up/medium land	High mortality due to fungal wilt at early stage of crop growth	No seed treatment	Seed treatment with vitavax power @ 2.5 gm /Kg of seed	Demo- 13.64 q/ha Germination % age- 96%	Seed treatment by the farmer is quite encouraging & farmers are satisfied by the use of pesticide		
10	Green gram	2008-09	Rainfed up/medium land	Reduction in yield due to rootrot and YMV attack.	No seed treatment, No use of multineem	Seed treatment with vitavax power (Carboxyn 37.5% + thiram 37.5% D.S) @ 2.5gm/kg of seed & spraying multineem @ 5ml/lit (Two spraying at 10days interval)	Demo- 4.42q/ha	Farmers are quite satisfied with the mgt. practices followed in the demo plot.		
11	Teak	2008-09	Rainfed upland	Low soil moisture content in uplands causes mortality and poor growth of teak plantation.		Soil conservation through mulching of Karanja leaves in 1 st year teak plantation) Height- 72 cm (ii) collar diameter-6 cm (iii) Mortality percentage- 14 %	Teak planting with mulching shows better growth and survivality than plants having no mulching.		
12	Groundnut	2009-10	Medium	Low yield in groundnut due to use of old and genetically deteriorated var. AK 12-24.	Cultivation of low yielding var. AK 12-24	Use of HYV of groundnut var. Devi	19.70	Farmers are satisfied with the performance of the variety.		
13	Greengram	2009-10	Medium	Yield unstability in greengram	Cultivation of greengram without	Two sprays of 2% DAP at pre flowering condition and 15 days later				

					application of nutrients.	(Flowering condition)				
14	Brinjal	2009-10	Up and medium land	Low yield in Brinjal due to heavy infestation of fruit and shoot borer	Indiscriminate use of granular pesticides.	Soil application of Neem oil cake @ 2q/ha + destruction of infested plants at 7 days interval 1inch below the infested hole + spraying of CH@ 1.5g + CSI @0.5gm/lit of water 4 to 5 times at 10days interval.	241.23	Farmers are satisfied with the technology.		
15	Chilli	2009-10	Up and medium land	Low yield due to severe thrips attack	No use of pesticides	Soil application of Neem oil cake @2 q/ha + removal of infested twigs + spraying of carbosulfan @ 1lt/ha for 3 to 4 times at 15 days interval.	182.21	Farmers are satisfied with the technology.		
16	Pointed Gourd	2009-10	Up and medium land	Low and unstable yield due to cultivation of local variety	Cultivation of local varieties	Use of improved Pointed Gourd variety SwarnaRekha	85	Farmers are satisfied with the technology.		
17	Mushroom	2009-10	NA	High price of paddy straw mushroom in off season	Cultivation of local practices	Low cost UV stabilized poly house for off season paddy straw mushroom cultivation	1.1	Farmers are satisfied with the technology.		
18	Groundnut	2009-10	NA	Drudgery of farm women in decorticating groundnut	Hand decortications	Decortication of groundnut by using groundnut decorticator developed by CIAE, Bhopal.	29kg	Farmers are satisfied with the performance of the variety.		
19	Prawn	2009-10	Low land	Less income from only fish culture	Only fish culture with IMC and exotic carps	Floating fish feed was used instead of sinking fish feed in pisciculture	22.33			
20	Fish	2009-10	Low land	More FCR of feed due to feed wastage during feeding in pisciculture	Use of sinkable fish feed	Freshwater prawn (Scampi) was stocked in the pond instead of mrigal and common carp bottom layer fishes	42.4	Farmers are satisfied with the technology.		

21	Lac	2009-10	Upland	Unutilized forest resources	Lac cultivation not prevalent	Introduction of lac on kusum trees	0.68quintals/ha	Farmers are satisfied with the performance of the variety.		
22	Kendu/Bidileaves	2009-10	Upland	Low yield in kendu	Coppicing at ground level	Coppicing 2cm below the ground level followed by light burning	13kg/tree			
23	Paddy	2010-11	Rainfed Low land	Low yield in paddy under semi deep low land situation due to use of low yielding local varieties	Cultivation of local paddy variety Pooja	Upahar	53.95q/ha	Paddy var. Poojapossess better grain quality than paddy var. Upahar. The seed material of paddy var. Upahar may be made available at block level for better adaptation.	-	
24	Sugarcane	2010-11	Irrigated				29	Farmers are quite satisfied with the performance of Fipronil. More emphasis should be given for its easy availability.		
25	Paddy	2010-11	Medium land				1.5lakh/ha			





26	Chilli	2010-11	Rainfed	Low yield due to severe thrips attack			Av ht of seedlings -74 cm Girth - 6 cm Surv%-75	Farmers are satisfied with the technology.		
27	Mushroom	2010-11	Low and medium land				Av ht -73.5 cm Collar dia- 1 cm Shoot spread-1.7 cm			
28	Groundnut	2010-11	Flow irrigation	Low yield in groundnut due to use of old and genetically deteriorated var. AK 12-24.			Av ht (teak) -1.89m Av yield -15.5 kg/farmer Girth-5.2 cm. Survival %-89	Seed treatment and foliar spray of vitavax power is quite encouraging and farmers are satisfied by the use of this fungicide. Higher motivation is required to the farmers for soil drenching of the chemicals.		
29	Indian major carps	2010-11	Up & medium land				2.1q/ha			
30	<i>Eucalyptus</i>	2010-11		Unavailability of genuine planting materials of superior clones	Use of planting materials purchase	Planting of JK4, a proven superior clone by JK paper mill @ 3.5x1mt	25q/ha	The seedlings are browsed by cattle, more frequently than		





					from local nurseries			local seedlings		
31	Teak	2010-11	Rainfed	Non utilization of the interspaces in the teak plantation	Interspaces left unutilized	Pre sprouted planting materials of HYV of EFY var. Gajendra planted in the interspaces of teak @ 1 EFY corm/4teak saplings.	4.03	Teak is the most preferred tree species in any programme		
32	Green gram	2010-11	Rainfed	Low yield in green gram due to use of local varieties.	Cultivation of local green gram varieties	LGG460	275.6q/ha	LGG 460 is superior to local var. of Moong with respect to grain yield, no of pods /plant, pod length. Seeds of the variety should be made available at block level.		
33	Paddy	2011-12	Irrigated	Low yield in paddy	Paddy var. Mrinalini	Cultivation of paddy var. Mrinalini	49.2	Performance of Mrinalini is good. It has average grain quality. It can replace paddy var. Swarna & Puja		
34	Paddy	2011-12	Irrigated	Yield plateau in medium land paddy	Paddy var. MTU-1001	Paddy hybrid Ajaya	57.12	Grain weight should be improved		
35	Green gram	2011-12	Rainfed	Low yield in green gram due to soil acidity	Lack of awareness	Growing green gram var. LGG460 with application	5.93			






					s & no use of PMS in pulses	of PMS @ 5q/ha acid soil as soil ammendment acid soil				
36	Sugarca ne	2011-12	Irrigated	High density planting reduces cane yield and increases production coist	Normal plantatin g of sugarcane	Introduction of Sustainable Sugarcane Initiative (bud chip) method of planting	Crop is in tillering stage			
	Paddy	2011-12	Rainfed	Yield un-stability due to severe BPH incidence	Indiscriminate use of granular insecticides leads to residual toxicity	Making alleys + use of potashic fertilizers + spraying of neonicotinoid, thiaomethoxam@ 170gm/ha 2-3 times at 10 days interval	52.5	Higher motivation & awareness on use of neonicotinoids application is to be required		
37	Greengram	2011-12	Rainfed	Low yield in greengram due to severe Root Rot and YMV problem	No seed treatment and no use of bio-pesticides	Soil treatment with <i>T viridae</i> @ 2.5 kg/ha, Seed treatment with carboxyn 37.5% + thiram 37.5% @1.5 g/Kg of seed + foliar spray of multineem @2.5ltr/ ha for 2-3 times at 10 days interval	4.98	Higher motivation and awareness is required to the farmers for seed treatment with the new fungicides		
38	Maize	2011-12	Irrigated	Heavy cob borer incidence in maize	Use of only granular insecticides	Soil application of carbofuran @ 12 kg/ha + use of tricho-cards @ 50,000/ha for 5-6 times at 10 days interval + need based spraying of triazophos @ 1 ltr/ha for 2-3 times	47.3			
39	Cauliflo wer	2011-12	Irrigated	Low yield in yam due to local variety	No boron applicati	Foliar spray of Borax @ 0.25% at 45 and 60 days	224.5			



					on, only RDF (120-60-60-kg NPK/ha)	after planting along with RFD (120-60-60kg NPK/ha)				
40	Ground nut	2011-12	Canal irrigated	High mortality due to fungal wilt at early stage of crop growth	No seed and seedling treatment	Seed treatment with carboxyn 37.5% + thiram 37.5% @1.5 g/Kg of seed + foliar spray of carboxyn 37.5% + thiram 37.5% @ 0.75 kg/ha for 2-3 times at 10 days interval.	17.2	Higher motivation is required to the farmers for soil drenching of the chemicals		
41	Yam	2011-12	Rainfed	Low yield in yam due to local variety	Use of local cultivar without recommended practices	Var-Odisha Elite, seed rate-20 q/ha, optimum tuber weight-200g., spacing 90x75 cm., staking, NPK 80:60:80 kg/ha	234.2			
42	Pointed gourd	2011-12	Flow irrigation	Severe pest & disease incidence in local varieties	Injudicious use of fertilizer	Propagation by root suckers, bower system of training ,NPK 90:60:40 Kg/ha, irrigation at regular interval	204.5	Need refinement		
43	Maize sheller	2011-12		Drudgery due to manual stripping of Sugarcane leaves	Manual	Use of Maize Sheller	27.1 Kg/Hr			
44	Sugarcane Stripper	2011-12		Problem in primary processing	Manually stripping by Sickle	Use of Sugarcane stripper	46Kg/Hr			
45	Poultry	2011-12	Rainfed,	Less income from pond based pisciculture	Only Pisciculture practice	Pisciculture practice with dual purpose poultry	34.62qt/ha	Fish-horti-livestock (Poultry) will be best farming		





								component for more production, income and employment.		
46	<i>Pangasius</i>	2011-12	Irrigated, medium land	Low production from Indian major carps	Only Pisciculture practice like IMC	<i>Pangasius suchi</i> culture	42.82q/ha	Supplementary feed is essential for more production		
47	Goatery	2011-12	Open forest land	Performance of local desi goat on milk and meat production is low	Local desi goat for goatery	Jamunapari buck for goatery	Result awaited	Growth rate and no. of kids/female goat		
48	Mahul	2011-12	Upland Rainfed	Unexpected summer showers and cloudy weather make the mahul flowers blackish and inferior in quality due to insufficient drying	Sun drying	Use of solar dehydrator	No. of days taken for drying 3% wastage-27.2%			
49	Black Pepper	2011-12	Upland Rainfed	Underutilized interspaces of old mango orchards	No intercropping practised	Use of black pepper as intercrop in mango orchards	Exp. result			
50	Teak	2011-12	Upland Rainfed	Slow growth rate and establishment of seed originated seedlings	Transplanting naturally grown seedlings	Stump planting in Teak	1.5 kg/vine after 3 yrs			
51	Tomato	2011-12	Irrigated	Low yield from local	Use of local cultivar with low yield	Var-Utkal Raja, Seed rate-500 g/ha, spacing-75x75 cm., staking of tomato plants, NPK-120:60:50 Kg/ha foliar	Av ht of seerling-1.2 m Av cd- 9.1 cm, survival% 90			




55	Sugarcane	2012-13	Irrigated	High density planting reduces cane yield and increases production cost	Conventional method of sugarcane planting.	SSI method of sugarcane cultivation	1252			
56	Rice	2012-13	Rainfed	Reduction of yield due to severe BPH infestation	Indiscriminate use of granular insecticides leads to residual toxicity.	Making Alleys of 1 m in every 10 line of rice, proper drainage, Spraying of thiomethoxam @ 170gm/ha 2-3 times at 10 days interval for BPH mgt.in rice	52.9 q/ha			
57	Maize	2012-13	Rainfed	Yield instability due to heavy borer incidence	Use of only granular insecticides at the time of planting	Soil application of cartap hydrochloride @ 25kg/ha + use of tricho-cards @ 1,20,000/ha for 2-3 times at 10 days interval + need based spraying of triazophos @ 1 ltr/ha	52.1 q/ha			
58	Greengram	2012-13	Canal Irrigated	Heavy YMV & root rot in green gram	No seed, seedling treatment with fungicides	Early sowing, seed treatment with carboxyn 37.5% + thiram 37.5% @1.5 g/Kg of seed + foliar spray of multilineem @2.5ltr/ ha for 2-3 times at 10 days interval, instalation of yellow sticky traps @ 20nos/ha.	5.71q/ha			



59	Groundnut	2012-13	Canal irrigated	Severe wilt problem in groundnut at early stage of crop growth	No seed and seedling treatment with fungicides.	Seed treatment with carboxyn 37.5% + thiram 37.5% @1.5 g/Kg of seed + foliar spray of carboxyn 37.5% + thiram 37.5% @ 0.75 kg/ha for 2-3 times at 10 days interval.	18.5 q/ha			
60	Sugarcane Stripper	2012-13		Problem in primary processing	Manual stripping of sugarcane leaves by sickle	Use of sugarcane stripper	46			
61	Turmeric	2012-13	Rainfed, upland	Low yield from local cultivar, poor dry recovery	Growing of local cultivars with low yield potential	Var. Lakadong, seed rate-20q/ha, seed size-20g. Planting in ridge & furrow-30x20cm.(rxp) ,mulching with dry leaves @15T/Ha	101.2q/ha			
62	Marigold	2012-13	Irrigated, medium land	Poor yield, low keeping quality.	Raising of local tall growing poor yielding (yellow) plants.	Var. ceracola, double row system of planting, bed-bed-1ft, within bed-2ftx1.5ft (RXP	49.5q/ha			



63	Mango	2012-13	Rainfed, upland	Incidence of heavy fruit drop in mango	No control measure (water spraying)	Planofix @1 ml / 4.5lt. of water & Borovin @1.5g/lt. of water at marble stage of fruit & 2 nd at 15 days interval	86 kg/tree			
64	Jamunapari	2012-13	Open yard	Performance of local desi goat on milk and meat production is low	Keeping local goat	Growing Jamunapari	22.6 Kg/animal			
65	Poultry	2012-13	Backyard	Low growth rate of poultry in backyard	Open grazing	Azolla will be cultivated by low cost polythene sheet base with soil for feeding to poultry				
66	IMC	2012-13	Low land	Fish mortality due to low oxygen depletion	No measures to control oxygen depletion	KMnO ₄ application @ 250 g/Ac/m water area	24.27 q/ha			
67	Maize	2013-14	Rainfed, upland	Less income from traditional maize cultivation	Nilesh	Madhuri	57350 cobs/ha			




68	Maize	2013-14	Irrigated, medium land	Imbalance application of nutrients (without organics) gradually decreasing soil health & fertility	Imbalance nutrient management with least/nil application of organics & more emphasis on nitrogenous fertilizer in absence of soil testing	Application of 25% RDF as organic manure + 75% of RDF as inorganic fertilizer + ZnSo ₄ @ 25kg/ha + application of bio-fertilizer, soil testing for nutrient status	55.2 q/ha			
69	Rice	2013-14	Rainfed, upland	Heavy weed infestation in early stage reduces crop yield	Manual weeding (twice)	Spraying of Azimsulfuron @ 35g a.i./ha at 18-21 DAS effectively controls weeds in direct sown rice	43.88 q/ha			
70	Cabbage	2013-14	Irrigated, medium land	Heavy application of granular insecticides leads to residual toxicity in cabbage	Soil application of carbofuran 10G @ 20kg/ha	Collection & destruction of 3 rd instar larvae, alternate spraying of triazophos + Deltamethrin @ 1ltr/ha with neem based pesticide @ 2.5ltr/ha for 2 times at 10 days interval				





71	Chilli	2013-14	Rainfed, upland	Early planting, soil application of NOC @ 2.5qtl/ha, clipping of infested twigs, Foliar spraying of Carbosulfan @ 1ltr/ha for 2-3 times at 7 days interval	Foliar spray with chloropyrifos @ 1ltr/ha	Early planting, soil application of NOC @ 2.5qtl/ha, clipping of infested twigs, Foliar spraying of Carbosulfan @ 1ltr/ha for 2-3 times at 7 days interval	109.5q/ha			
72	Tomato	2013-14	upland	Severe weed infestation at early stages	No staking, manual weeding	Microbial control for fruit borer in tomato	309.6			
73	Brinjal	2013-14	Rainfed	Less no. of fruits/plant(6), low yield/plant(0.96kg),	Use of local cultivar with poor yield (14.7 T/Ha)	Var. KRANTI seed rate 200g/ac, seed treatment of vitavax power @ 1.5 to 2gm/kg of seed, spacing 75x60cm, NPK 125:50:75kg/ha	30.8q/ha			
74	Rice	2014-15	shallow low	Yield (26.31q/ha) plateau in favourable shallow low land rice (25000 ha), non exploitation of standard heterosis (10 q/ha) in rice	Swarna	CR Dhan 701, T3: Arize 6444 gold, T4: Ajaya , T5: Rajlaxmi)Seed rate 12-15 kg/ha, 600 m ² nursery/ha, 20x15 cm spacing, N:P:K @ 100:50:50 kg/ha,	58.6 62.2 58.4 61.8			





75	Arhar	2014-15	Rainfed upland	Low yield (6.44 q/ha) due to use of long duration old and obsolete Arhar Local var. Kandula in upland (320 ha) without maintaining purity	Local var. Kandula	Asha (ICPL 87119)	12.52		
76	Rice	2014-15	Irrigated medium	Heavy incidence and less yield due to BLB	Seed treatment with carbendazim @1.5g with plantomycin @ 1g/kg of seed	T2:Seed treatment with carbendazim @1.5g with plantomycin @ 1g/kg of seed, seedling root dip treatment with streptocycline @ 1 gm/10lt of water T3: Seed treatment with carbendazim @1.5g with plantomycin @ 1g/kg of seed, foliar spray with Copper oxy-chloride @30gm with streptocycline @ 1 gm/10lt of water for 2 times at 10days interval at mid-tillering stage	51.7 55.8		
77	Brinjal	2014-15		Les yield and less marketability due to phomopsis blight in brinjal	Spraying of carbendazim @ 1gm/ltr of water once	T2: Seed/seedling treatment with carbendazim @ 2gm/kg of seed/ltr of water, need based spraying of the same 2g/ltr of water for 2 times at 10 days interval from the appearance of the disease symptoms. T3: Seed/seedling treatment with carbendazim @ 2gm/kg of seed, need based	321.5 307.8		


						spraying of Hexaconazole @ 1ml/ltr of water for 2 times at 10 days interval at flowering and fruiting stage				
78	Chilli	2014-15	shallow low	Indiscriminate use of granular insecticides leads to residual toxicity	Soil application of Carbofuran 3%G @ 20kg/ha.	T2: Soil application of neem oil cake @ 2.5qtl/ha, spraying with carbosulfan 25EC @ 1ltr/ha for 2-3 times at 10 days interval. T3: Soil application of neem oil cake @ 2.5qtl/ha, spraying with neem oil @ 2.5 lt/ha for 2-3 times at 10 days interval and use of blue sticky traps @ 20 nos/ha	121.8 118.3			
79	Cauliflower	2014-15	Rainfed	Indiscriminate use of granular insecticides leads to residual toxicity in crops	Foliar spraying of triazophos @ 0.75 ltr/ha	T2: Intercrop with mustard, alternate spraying of Indoxacarb 14.5SL @500ml/ha and Emamectin benzoate 5%SG @ 200gm/ha T3: Intercrop with mustard, alternate spraying of Fipronil 5%SC @1ltr/ha and Spinosad 480SC @ 200ml/ha for 2 times at 15 days interval from the appearance of the pest attaining ETL.	192.8 199.7			

80	Ivy gourd	2014-15	Irrigated upland	Less no. of fruits /plant, Low yield (1kg per plant per season),50% area affected	Applications of inorganic (50:25:40 kg NPK/Ha) + FYM @2MT/ha	T2: T1 + Soil application of azotobactor + azospirillum+ PSB (3:3:3kg/ha) +FYM @5MT/ha. T3: Application of soil test based fertilizer(84.5:50:60 kg NPK/ha), azotobactor + azospirillum+ PSB (3:3:3kg/ha) +FYM @5MT/Ha	1.43kg/tonne 1.70			
81	Onion	2014-15	Irrigated upland	High incidence of bolters, double bulbs and neck rot, low yield from local cultivar (A-232Ha,P-2756MT,Y-11.88T/Ha),23% area affected.	Use of variety (Nasik Red), transplanting over-aged seedling (10 wk.), irrigating till harvest of crop.	T2: Variety Bhima Shakti T3: Variety agri found light red, seed rate-4-5kg per acre, treatment with vitavax @ 1.5g per kg of seed. transplanting 7-8 wk. old seedlings, spacing at 12.5-15 X 10cm.,foliar spray of water soluble NPK 19:19:19 @1% AT 15,30,45 DAT, followed by NPK 13:0:45@1% at 60,75,90 DAT. Foliar spray of wet table S @1% 15,30,45,60 DAT	356.8 283.7			

82	Tomato	2014-15	Irrigated medium land	Less no. of fruits /plant, low yield from Laxmi (A-2902ha,P-40299MT, Y-10.88t/ha), 28% area is affected by the problem.	Use of variety Laxmi, nursery raising in open condition , flat bed method	T2:Swarna Sampad,. T3: Var. Utkal raja, seed rate-350g/ha, nursery preparation-under 50% shade net, spacing -60x45cm, NPK 75:100:50kg/ha Borax-10kg/ha	812.5 439.8			
83	IMC	2014-15	Clay loam rainfed	Low yield due to single harvest with Indian major carps (IMC) like catla, rohu, mrigal No intermediary income during the culture period Avg. 65% ponds of ACZ is associated with the problem	Stocking IMC fry 10000nos/ha for 10 month	T2: IMC fry @ 10000 nos/ha for 10 month + minor carp (<i>Labeo fimbriatus</i>) fry @5000 nos/ha for 5 month, T3: IMC fry @ 10000 nos/ha for 10 month + silver barb (<i>Puntius gonionotus</i>) fry @5000 nos/ha for 5 month, T4: IMC fry @ 10000 nos/ha for 10 month + Combination of minor carp and silver barb fry @5000 nos/ha for 5 month	28.6 27.1 28.05			
	IMC	2014-15	Clay loam rainfed	Less fish production (10q/ha) due to insufficient feed as feed cost is more (Rs 35000/- per acre), 60% of water area of Nayagarh district affected by this problem	Feeding ricebran as supplementary feed	T2: Feeding fish with ricebran:sesamum oil cake 40:60 (with 2% vit. and mineral), feeding is provided at 5% of stocked biomass in the first month and 3-2% of stocked biomass in subsequent months. T3: Feeding fish with ricebran:mustard oil cake 40:60 (with 2% vit. and	28.6 30.37			

						mineral) at by weight, (as same as T2)				
84	Paddy	2014-15	Homestead	Low income due to store grain pest attack in rice		T ₁ -FP(No use of any measures) T ₂ -RP(Use of TNAU traps) T ₃ -RP(Use of EDB ampules)	8.1			
85	Paddy	2014-15	Homestead	Less output and more drudgery of farmwomen in traditional practice	Use of traditional winnowing basket	T ₁ -FP(Use of traditional winnowing basket Kula) T ₂ -RP(Use of fan type winnower) T ₃ -RP(Use of hopper type winnower)				
86	Arhar	2015-16	Rainfed upland	Low yield (6.44 q/ha) due to use of long duration old and obsolete Arhar Local var. Kandula in upland (320 ha) without maintaining purity	Local var. Kandula	Asha (ICPL 87119)	12.52Q/ha			
	Rice	2016-17	Rainfed Medium	Low yield in rice due to heavy incidence of rice sheath blight		Spraying of hexaconazole, carbendazim+mancozeb mixed fungicides	53.8			

87	Bitter gourd	2016-17	Irrigated medium	Less yield and less marketability due to severe melon fruit fly infestation in bittergourd.		Spraying of Chloropyriphos @ 1ltr/ha two times at weekly interval at fruiting stage	278.9			
88	Mango	2017-18	Rainfed Medium	Low yield of mango due to high infestation of fruit flies	Spraying of triazophos @ 1ltr/ha for two times at weekly interval at flowering stage	<p>TO1: Male annihilation technique (MAT) @ 10 blocks/ha using methyl eugenol at post marble stage</p> <p>TO2: Male annihilation technique (MAT) @ 10 blocks/ha using methyl eugenol at bait application technique (BAT) as bait spray (16ml malathion 50EC+ 800gm jaggery in 8ltrs of water per hectare) at weekly interval at post marble stage</p>	35	Traps and lures should be available in the near-by input dealers		
89	Tomato	2017-18	Rainfed Medium	Less no. of fruits /plant, low yield from Laxmi (A-2902ha,P-40299MT, Y-10.88t/ha), 28% area is affected by the problem.	Laxmi	<p>TO1- -Swarna Sampad</p> <p>TO2- Arka Rakshyak, Spacing 3'x3'</p>	<p>TO1- 425.6</p> <p>TO2- 485.3</p>			
90	Jackfruit	2017-18	Homestead		Raw jack fruit	TO1-Value addition of Jackfruit pickle	0.8 Kg (Pickle)			

91	Rice Transplanter	2017-18	Irrigated medium	High cost of cultivation, more labour and time requirement	Manual random transplanting	TO1-3- row rice transplanter TO2-8-row Self-propelled transplanter	41.5	Intime availability of machineries and establishment more agro sevice centers.	
92	Rice Transplanter	2017-18	Irrigated medium	High cost of cultivation, more labour and time requirement	Manual random transplanting	TO₁ -3- row rice transplanter. Row to row spacing- 20-24 cm, Area coverage- 0.66ha/hr TO₂ -8-row Self-propelled Row to row spacing- 23.8cm, Area coverage- 1.0 ha/hr	42.3 45.2	Intime availability of machineries and establishment more agro sevice centers.	