

On Farm Trial

Crop/enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Dairy Cows	Semi intensive system of rearing	Increased cost of concentrate feeding reduced profitability in dairy farming	Introduction of prosopis pod flour as an alternative concentrate feed for dairy cows	2	T-1 Farmers practice- Concentrate feeding (@ 1kg/3.5lit of milk/day + grazing + straw feeding	Milk yield cost reduction per day	8.5 lit/day Rs.0/day	Cost of concentrate feeding remains high			
					T-2 Alternate practice- Replacement of wheat bran in the concentrate feed with prosopis juliflora pod flour and feeding the mix @ 1kg/3.5lit of milk /day +grazing + straw feeding	Milk yield cost reduction per day	8.5 lit/day Rs.3/day	Replacement of Prosopis pod flour instead of wheat bran feeding along with concentrate feed results in same quantity of milk production increase in milk yield	Prosopis pod feeding is seems to have potential to replace the regular concentrate feed ingredient like wheat bran to reduce the cost of concentrate feeding		
Dairy cow	Semi intensive system	Increased intercalving period and infertility in dairy cows	Management of post partum anoestrous in dairy cows	3	T-1 No mineral mixture feeding + AI during the normal oestrus cycles	1)Time required for first heat from calving 2) No.of inseminations required for pregnancy 3) Intercalving period 4) percentage of animals become pregnant	141 days 4.85 585 days 85 %	intercalving period was very high			
					T-2 Mineral mixture @ 50 g daily/3 months + AI during normal oestrus cycles	1)Time required for first heat from calving 2) No.of inseminations required for pregnancy 3) Inter calving period 4) percentage of animals become pregnant	103.8 days 5.63 501.25 days 100 %	it is a very useful technology to reduce the inter calving period in cattle, but still could not able to achieve one calf a year target			
					T -3 Mineral mixture @ 50 g daily/3 months + Priming of the ovaries with pervaginal CIDR Progesterone implant followed by oestrus induction with PGF2alpha and fixed time insemination	1)Time required for first heat from calving 2) No.of inseminations required for pregnancy 3) Intercalving period 4) percentage of animals become pregnant	114.2 days 2.33 392.5 days 100 %	it is a very useful technology to reduce the inter calving period in their cattle Very promising technology to achieve one calf a year target	Very useful technology but required the 100% assistance of the veterinarian. If the drug/hormone used are available in easy to handle form for the farmers themselves then this can pick up very well even in remote villages.		

Backyard Poultry	Semi intensive system of rearing	Mortality in backyard chicks and adults birds due to ranikhet disease	Assessment of oral pellet vaccine in controlling the ranikhet disease in backyard poultry chicks	3	T-1 Farmers practice- no vaccination	1. Occurrence of Ranikhet disease in chicks 2. Occurrence of ranikhet disease in adult birds 3. Mortality in chicks due to ranikhet disease	65 % 85% 100%	Very high mortality in birds due to ranikhet disease was noticed			
		Non availability of veterinary service in the rural villages at the needy time of the farmers,			T-2 Lasota Vaccine – 1 st week + R2B in the 8 th week + RDVK on the 3 rd month	1. Occurrence of Ranikhet disease in chicks 2. Occurrence of ranikhet disease in adult birds 3. Mortality in chicks due to ranikhet disease	0 % 0% 0%	Effective in preventing the ranikhet disease incidence	effective in controlling the disease but vaccine in small dosage is not available and hence can not be adopted for the small backyard poultry units		
		non availability of smaller dose vaccines, and oral route vaccines which require less skill for adoption			T-3 Oral pellet vaccine- 1 st week and in the 8 th week + RDVK on the 3 rd month	1. Occurrence of Ranikhet disease in chicks 2. Occurrence of ranikhet disease in adult birds 3. Mortality in chicks due to ranikhet disease	0 % 0% 0%	Effective in preventing the ranikhet disease incidence in backyard poultry	Effective in controlling the disease and available in smaller dose vials. And hence cost effective . requested regular supply through commercialization of the technology		
Drum stick	Irrigated	Fruiting season heavy incidence of fruit fly damage reduce yield of drumstick production	Drumstick fruit fly Management	3	T-1 Endosulfan 1ml/lit- spray	No of fruit infected Yield / Ha	30% 35 t/ha	Farmers practice is not effective in control of fruity fly incidence	Not effective		
					T-2 Dicholorvas spray + lindane dust soil raking	No of fruit infected Yield / Ha	15% 40 t/ha	Though effective still the fruits are affected results in reduction in yield	Effective but involved chemical usage which is not suitable for organic cultivation		
					T-3 Spinaosad and neem oil spray + grape juice trap	No of fruit infected Yield / Ha	5% 47 t/ha	Ecological fruit fly control using Spinosad and neem oil spray with grape juice trap effectively controlled the fruit fly damage in moringa tree	Very effective but required extra effort		

Bhendi	Irrigated	Low yield due to YMV and poor varietal selection	Assessment of suitability of bhendi hybrid variety for pest and disease resistance	3	T-1 Arka Anamika	YMV incidence Fruit borer Yield	50% 25%	Highly susceptible to YMV	Not fetching good return of the money invested		
					T-2 MH 60	YMV incidence Fruit borer Yield	5% 15%	Resistant to YMV	Very good market preference and suitable for cultivation without high pesticide usage to contain white fly		
					T-3 Co(Bh)-1	YMV incidence Fruit borer Yield	5% 15%	Co(Bh)-1 is Resistant to YMV and recorded the minimum YMV incidence of 5% against farmers practice 50% incidence.	Very good market preference and suitable for cultivation without high pesticide usage to contain white fly		
Banana	Irrigated	Low bunch weight and yield in banana due to poor soil fertility	Assessment of application of enriched biocharcoal soil sinking in improving the soil fertility and yield in banana	3	T-1 Soil application rice hull ash @ 2kg/sucker	Soil physical and microbial properties Root growth Bunch weight	OFT is in progress crop is in harvest stage				
					T-2 FYM @ 12.5 t/ha	Soil physical and microbial properties Root growth Bunch weight	OFT is in progress crop is in harvest stage				
					T-3 Soil application of enriched biocharcoal @ 2kg/sucker	Soil physical and microbial properties Root growth Bunch weight	OFT is in progress crop is in harvest stage				

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Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
T-1 Farmers practice- Concentrate feeding (@ 1kg/3.5lit of	TANUVAS	2550	Lit/cow/305day milk yield	8500/cow	1.59

milk/day + grazing + straw feeding					
T-2 Alternate practice- Replacement of wheat bran in the concentrate feed with prosopis juliflora pod flour and feeding the mix @ 1kg/3.5lit of milk /day +grazing + straw feeding	CAZRI, Jodhpur	2550	Lit/cow/305day milk yield	9400/cow	1.65
T-1 No mineral mixture feeding + AI during the normal oestrus cycles	TANUVAS	1)Time required for first heat from calving 2) No.of inseminations required for pregnancy 3) Intercalving period 4) percentage of animals become pregnant	141 days 4.85 585 days 85 %	Rs.5500/annum	1.1
T-2 Mineral mixture @ 50 g daily/3 months + AI during normal oestrus cycles	TANUVAS	1)Time required for first heat from calving 2) No.of inseminations required for pregnancy 3) Inter calving period 4) percentage of animals become pregnant	103.8 days 5.63 501.25 days 100 %	Rs.7000/annum	1.3
T -3 Mineral mixture @ 50 g daily/3 months + Priming of the ovaries with pervaginal CIDR Progesterone implant followed by oestrus induction with PGF2alpha and fixed time insemination	TANUVAS	1)Time required for first heat from calving 2) No.of inseminations required for pregnancy 3) Intercalving period 4) percentage of animals become pregnant	114.2 days 2.33 392.5 days 100 %	Rs.10000/annum	1.9
T-1 Farmers practice- no vaccination	Farmers practice	1. No.of survived birds per unit of 10 2. Aveg.body weight at 4 th month	6.5 1.22 kg/bird	7.93kg/unit	1.4
T-2 Lasota Vaccine – 1 st week + R2B in the 8 th week + RDVK on the 3 rd month	TANUVAS	1. No.of survived birds per unit of 10 2. Aveg.body weight at 4 th month	10 1.25 kg/bird	12.5kg/unit	2.21
T-3 Oral pellet vaccine– 1 st week and in the 8 th week + RDVK on the 3 rd month	TANUVAS	3. No.of survived birds per unit of 10 4. Aveg.body weight at 4 th month	10 1.23 kg/bird	12.3kg/unit	2.24
T-1 Endosulfan 1ml/lit- spray	FP	Moringa fruit yield	35 T/ha	Rs.65000/ha/yr	1.35
T-2 Dicholorvas spray + lindane dust soil raking	TNAU	Moringa fruit yield	40 T/ha	Rs.75000/ha/yr	1.48
T-3	TNAU	Moringa fruit yield	47 T/ha	Rs.90000/ha/yr	1.72

Spinaosad and neem oil spray + grape juice trap					
T-1 Arka Anamika	TNAU	Bhendi fruit yield	35qtl/ha	Rs.8500/ha	1.35
T-2 MH	Mahy.co Pvt.ltd.	Bhendi fruit yield	97qtl/ha	Rs.38500/ha	4.2
T-3 Co(Bh)-1	TNAU	Bhendi fruit yield	90qtl/ha	Rs.32000/ha	3.8
T-1 Soil application rice hull ash @ 2kg/sucker	Farmers practice (ITK)	Crop is in harvest stage			
T-2 FYM @ 12.5 t/ha	TNAU	Crop is in harvest stage			
T-3 Soil application of enriched biocharcoal @ 2kg/sucker	International Biochar research, U.K.	Crop is in harvest stage			

