OFT -1

Crop/Enterprise	Cattle
Title	Assessment of different management practices in preventing bovine mastitis.
Problem diagnose	High incidence of clinical mastitis and Decrease milk yield, Low economic return
Farming situation	Integrated farming system
Production system & thematic area	Udder health management
Year of commencement	2023-24
Experimental details	**F. P.:** Use of Antibiotics, Anti-inflammatory for treatment against Mastitis
	T.O. 1: 0.5 g alpha-Tocopherol acetate + 0.25 mg sodium selenite (Vitamin E and Selenium Powder) orally daily for last 30 days before calving.
	T.O. 2: Blanket dry cow treatment (BDCT) (infused with 7.5 g Dicloxacillin sodium in each quarter) immediately after the last milking of lactation and 0.5 g alpha-tocopherol acetate + 0.25 mg sodium selenite (E-Selenium Powder) orally daily for last 30 days before calving.
Source of technology	GBPUAT, Pantnagar
Critical inputs	Vitamin E and Selenium Powder and dicloxacillin sodium
Observation to be taken	i) Technical : Udder condition , Milk P.H., Milk Colour, C.M.T. test
	ii) Economics : Total Milk production , B.C. Ratio
No. of Cattle	21

Result: On Going

OFT -2

I.	**Title of the OFT**	**Effect of supplementary feeding on performance of Grampriya poultry under Backyard System.**
II.	**Thematic Area:**	Poultry Production
III.	**Problem diagnosed**	Low body wt. gain and Egg production of local poultry.
IV.	**Important Cause**	Low Egg production and small size
V.	**Production system:**	Backyard System
VI.	**Micro farming system:**	Semi intensive System
VII.	**Technology for Testing:**	Supplementary Feeding on Grampriya poultry
VIII.	**Existing Practice:**	Local poultry
IX.	**Hypothesis:**	➢ More Weight Gain ➢ High Egg Production ➢ Gain Egg wt.
X.	**Objective(s):**	Empowerment of rural women & provide nutritional Security
XI.	**Treatments**	**Farmers' Practice: -** Local poultry **Technology Option 1:-** Grampriya + Maize @ 50gm daily from 25^{th} weeks of age to 35^{th} weeks. **Technology Option 2:-** Grampriya + Marble chips adlibitum daily from 25^{th} weeks of age to 35^{th} weeks.
XII.	**Critical Inputs:**	Chicks + Supplementary Feed
XIII.	**Unit Size:**	25
XIV.	**No of Replications:**	10
XV.	**Monitoring Indicator:**	**I.** Body Wt. **II.** Egg production **III.** Egg Wt.
XVI.	**Source of Technology (ICAR/AICRP/SAU/ Other, please specify):**	BVC, Patna

Results: *On Going*

OFT-3

I.	**Season:**	Rabi
II.	**Title of the OFT**	**Assessment of Bio-intensive management practices for major pests in Tomato**
III.	**Thematic Area:**	Bio control of pests and diseases
IV.	**Problem diagnosed**	In-discriminate use of chemical pesticides in Tomato cultivation
V.	**Important Cause**	Lack of Bio intensive measures.
VI.	**Production system:**	Upland Irrigated
VII.	**Micro farming system:**	Tomato cultivation
VII I.	**Technology for Testing:**	Bio-intensive practices for major pests in Tomato
IX.	**Existing Practice:**	Chemical pesticides for major pests in Tomato
X.	**Hypothesis:**	Bio-intensive management practices for major pests may reduce cost of cultivation, higher yield and net return
XI.	**Objective(s):**	Bio-intensive management practices for major pests
XII.	**Treatments**	**Farmers practice:** use of chemical pesticides. **T.O. 1:** Application of Bio-consortia of IIHR (Soil application) Seed treatment by P.fluorescens @ 10g/kg Nursery bed treatment by P.fluorescens @ 20g/m^2, Soil application of P.fluorescens @ 5 kg/ha mixed with 500 kg Vermi-compost at 30 DAT. Spray of HNPV @ 250 LE/ha **T.O. 2:** Application of Bio-consortia of IARI (Soil application) Seed treatment by Trichoderma viride @10g/kg Nursery bed treatment by Trichoderma viride @ 20g/m^2, Soil application of Trichoderma viride @ 5kg/ha mixed with 500 kg Vermi-compost at 30 DAT. Spray of HNPV @ 250 LE/ha
XII I.	**Critical Inputs:**	Bio- consortia, Bio-Control Agents
XI	**Unit Size:**	400 sq. metre

V.		
XV.	**No of Replications:**	10
XVI.	**Unit Cost:**	100
XVII.	**Total Cost:**	10000
XVIII.	**Monitoring Indicator:**	Yield, Disease and Pest incidence, Net Return, B:C Ratio
XIX.	**Source of Technology (ICAR/AICRP/SAU/ Other, please specify):**	ICAR

Results: *On Going*

OFT-4 Plant Protection:

I.	**Season:**	Summer
II.	**Title of the OFT**	**Management of Insect pests of Makhana crops.**
III.	**Thematic Area:**	IPM
IV.	**Problem diagnosed**	Insect pests of Makhana damage the crop and reduce the yield widely.
V.	**Important Cause**	Insect pests.
VI.	**Production system:**	Low-land Irrigated
VII.	**Micro farming system:**	Low land pond
VIII.	**Technology for Testing:**	Use of pesticides for control of Makhana pests.
IX.	**Existing Practice:**	Indiscriminate use of chemical pesticides in Makhana.
X.	**Hypothesis:**	Management of pests of Makhana may give higher yield and net return.
XI.	**Objective(s):**	Management of Makhana pests insect pests
XII.	**Treatments**	**Farmers practice:** Chlorpyrifos @ 1.5-2.0 litre/ha. **T.O. 1:** * Seed treatment by Imidacloprid 70 WG @ 2g/kg; *Root dip in solution of Imidacloprid 70 WG @ 2g/litre water for half hour at the time of transplanting. *Foliar spray of NSKE @ 5% at 25 days interval starting from 40 DAT. **T.O. 2:** * Seed treatment with Thiomethoxam 25 WG @ 5 g/kg. *Root dip in solution of Thiomethoxam 25 WG @ 5g/litre water for half hour at the time of transplanting. *Foliar spray of NSKE @ 5% at 25 days interval starting from 40 DAT.
XIII.	**Critical Inputs:**	Pesticides
XIV.	**Unit Size:**	2000 Sq. metre
XV.	**No of Replications:**	10
XVI.	**Unit Cost:**	Rs. 1500
XVII.	**Total Cost:**	Rs. 15,000
XVIII.	**Monitoring Indicator:**	Yield, Pest incidence, Net Return, B:C Ratio
XIX.	**Source of Technology (ICAR/AICRP/SAU/ Other, please specify):**	ICAR