Action Plan for On Farm Trials - **Crop Production (2nd Year)**

Title of OFT	**Assessment of performance of different varieties of summer Green gram under irrigated condition**
Problem Identified	Low productivity of Green gram due to non use of improved.
Objectives	To find out suitable variety
Micro-farming Situation	Irrigated, Sandy loam soil
Treatments	Farmers Practice (T1) Green gram (cv.GAM 5)
	Assessed Practice (T2) Green gram (cv.GM 7)
	Assessed Practice (T3) Green gram (cv. GAM-8)
No. of Trials	03
Source of Technology	(T1) AAU,Anand (2015) (T2) NAU,Navsari(2021) (T3) AAU,Anand(2022)
Critical Inputs to be used and its cost in Rs.	**Seed** of cv.GAM 5 ,cv.GM 7 ,cv. GAM-8 (8 kg) **Cost Rs. 5000/-**
Observations to be recorded	• Yield of Variety • Disease index for MYMV • No. of effective pods • Maturity days

Action Plan for On Farm Trials - Crop Production (2nd Year)

Title of OFT	Assessment of performance of different varieties of Pigeon pea under un irrigated/ rainfed condition
Problem Identified	• Low productivity of Pigeon pea due to non use of improved varieties
Objectives	To find out suitable variety
Micro-farming Situation	Irrigated, Medium black Soil, Rainfall 800-1000 mm
Treatments	Farmers Practice (T1) **(cv. GJP- 1)**
	Assessed Practice (T2) **(cv.GT-106)**
	Assessed Practice (T3) (**cv.GT-105)**
No. of Trials	03
Source of Technology	(T1) JAU, Junagadh (2015) (T2) AAU, Anand (2022) (T3) NAU, Navsari (2020)
Critical Inputs to be used and its cost in Rs.	**Seed** of cv.GT 106 ,cv. GT-105 (2kg) **Cost Rs. 2000/-**
Observations to be recorded	• Yield of Variety • No. of seed per pods • Maturity days • No. of branch per plant

Action Plan for On Farm Trials - Crop Production (2nd Year)

Title of OFT	Assessment of INM in wheat
Problem Identified	High cost & shortage of nitrogenous fertilizer.
Objectives	Reduce the cost of Cultivation through Nano urea
Micro-farming Situation	Irrigated, Medium black Soil, Rainfall 800-1000 mm
Treatments	Farmers Practice (T1) 140- 60-0 kg NPK/h
	Assessed Practice (T2)) 120- 60-0 kg NPK/h , , **AAU, Anand (2021)**
	Assessed Practice (T3) 50% N as a form of Urea + 50 % (Nano Urea) 2-spray of NANO urea at tillering and Joining Stage (4 ml/ liter). IFFCO approved
No. of Trials	03
Source of Technology	(T2) AAU,Anand (2021) (T3) **IFFCO approved**
Critical Inputs to be used and its cost in Rs.	NANO urea (2 ltr) **Cost Rs. 4500/-**
Observations to be recorded	• Cost of Cultivation • Yield • BCR

Action Plan for On Farm Trials - Horticulture

Title of OFT	Assessment of varieties in tomato
Problem Identified	• Low yield • Poor Knowledge of improved cultivation practices • Improper use of fertilizer and pesticides.
Objectives	To identify suitable cultivar for local area
Micro-farming Situation	Irrigated, Sandy loam soil, Rainfall 800-1000 mm
Treatments	Farmers Practice (T1) **Local Varieties**
	Assessed Practice (T2) **cv. Guj Anand tomato 8 (GAT 8) Roma**
	Assessed Practice (T3) **cv. Guj Tomato 6** (GT 6)
No. of Trials	03
Source of Technology	(T2) **AAU,Anand (2021)** (T3) **JAU,Junagadh(2018)**
Critical Inputs to be used and its cost in Rs.	**Seedling of cv. Guj Anand tomato 8 (GAT 8) Roma (10000 Nos.)** **Seedling of cv. Guj Tomato 6 (10000 Nos.)** **Cost Rs. 30000/-**
Observations to be recorded	**Technical Observation:-** • Plant Population per unit area, No. of fruits per plant. Insect pest Infestation, **Economic Indicator:-** • Yield and B:C ratio

Action Plan for On Farm Trials - **Horticulture**

Title of OFT	**Assessment of Varieties of Okra.**
Problem Identified	Low productivity of Okra
Objectives	To assess Okra cultivars for local suitability.
Micro-farming Situation	Irrigated, Sandy loam Soil
Treatments	Assessed Practice (T1) **Local Varieties**
	Assessed Practice (T2) **cv. Guj. Anand Okra (GAO) 8 Anand Komal**
	Assessed Practice (T3) **cv. Guj. Okra 6 (GO 6)**
No. of Trials	03
Source of Technology	(T2) **AAU,Anand (2021)** (T3) **JAU,Junagadh (2018)**
Critical Inputs to be used and its cost in Rs.	**Seed** of (T2) **cv. Guj. Anand Okra (GAO) 8 Anand Komal** (T3) **cv. Guj. Okra 6 (GO 6) Cost Rs. 15000/-**
Observations to be recorded	**Technical Observation:-** • No. of Plant infected due to YVMV at 30, 45, 60 DAP Plant Population, Suitability of variety for area specific cultivation. **Economic Indicator:-** • Yield of variety, Benefit cost ratio

Action Plan for On Farm Trials **Plant Protection (2nd Year)**

Title of OFT	**Assessment of technologies for the management of false smut disease in paddy**
Problem Identified	Higher infestation of false smut disease
Objectives	To assess the technology for management of false smut disease
Micro-farming Situation	
Treatments	**Farmers Practice (T1)** Farmers practices (Conventional fungicides and recent chemicals are used as tank mixture with higher dose)
	Assessed Practice (T2) To be assessed :Spray of *Tebuconazole 50% + Trifloxystrobin 25% WG* 0.06% (8 gm/10 liter of water) at the time of 50% panicle formation and second spray at the time of 100% panicle formation
	Assessed Practice (T3) To be assessed : Spray of *Propiconazole 25EC* 0.0025% (10 ml/10 liter of water) at the time of boot leaf stage and second spray at the time of milking stage.
No. of Trials	03
Source of Technology	(T2) AAU, Anand (2021) (T3) NAU, Navsari (2020),
Critical Inputs to be used and its cost in Rs.	*Tebuconazole 50% + Trifloxystrobin 25% WG* 0.06% (8 gm/10 liter of water) Spray of *Propiconazole 25EC* 0.0025% (10 ml/10 liter of water) **Cost Rs. 2000/-**
Observations to be recorded	➢ Incidence percentage at 60,75 and 90 days after transplanting ➢ Yield of Crop, Cost of Cultivation, Benefit Cost Ratio

Action Plan for On Farm Trials **Plant Protection (1st Year)**

Title of OFT	**Assessment of effective management of black thrips in chilli**
Problem Identified	Crop loss due to black thrips in chilli.
Objectives	To assessed the effective management of black thrips in chilli
Micro-farming Situation	
Treatments	**Farmers Practice (T1)** Farmers practices (Spray of Imidacloroprid)
	Assessed Practice (T2) : Furrow application of Carbofuran 3% CG, 33.3 kg/ha at the time of transplanting followed by sequential single spray of *Spinetoram* 11.7 SC, 0.012% (10 ml in 10 liter of water) at 10 days interval starting from the initiation thrips
	Assessed Practice (T3) : To be assessed : Spray *Fipronil 5% SC* (20 gm in 10 liter of water) at starting from the initiation thrips
No. of Trials	03
Source of Technology	(T2) AAU,Anand (2022) , (T3)DPPQS, Faridabad (2022)
Critical Inputs to be used and its cost in Rs.	Spinetoram 11.7 SC, 0.012% (10 ml in 10 liter of water) Fipronil 5% SC (20g in 10 ltr. of water)Cost Rs. 6000/-
Observations to be recorded	No.of thrips / flower Yield of Crop Cost of Cultivation Benefit Cost Ratio

Action Plan for On Farm Trials **Home Science 1st year**

Title of OFT	**Assessment on use of Cotton Picking Machine**
Problem Identified	Drudgery involved in farm women during harvesting of Cotton
Objectives	Drudgery reduction
Micro-farming Situation	
Treatments	**Farmers Practice (T1)** Traditional method
	Assessed Practice (T2) Use of Cotton Picking Machine
No. of Trials	02
Source of Technology	(T2) FRM Dept, College of Home Science, MPUAT, Udaipur-2012
Critical Inputs to be used and its cost in Rs.	Cotton Picking Machine **Cost Rs. 10000/-**
Observations to be recorded	Work done/ Unit (Kg/hr) Energy expenditure (kJ/min) Increase in work efficiency (%) Time Saving (%) Physiological cost reduction (%)

Action Plan for On Farm Trials **Home Science 1st year**

Title of OFT	Assessment on use of Hanging type Grain cleaner with sack holder
Problem Identified	Drudgery involved in farm women during cleaning Pigeon pea crop/rice/grain
Objectives	Drudgery reduction
Micro-farming Situation	
Treatments	**Farmers Practice (T1)** Traditional method
	Assessed Practice (T2) **To be Assessed – Use of Hanging type Grain cleaner with sack holder**
No. of Trials	02
Source of Technology	(T2) Inventory on Women Friendly Tools. ICAR-ATARI, Jabalpur-2016
Critical Inputs to be used and its cost in Rs.	Hanging type Grain cleaner with sack holder **Cost Rs. 13000/-**
Observations to be recorded	Work done/ Unit (Kg/hr) Energy expenditure (kJ/min) Increase in work efficiency (%) Time Saving (%) Physiological cost reduction (%)