❖Soil Fertility Advisory Report

A **Soil Fertility Advisory Report** provides farmers with a detailed guide on improving soil health and fertility based on soil test results. Here's a suggested format for presenting the advisory, which can be customized based on the client's soil conditions and crop requirements.

1. Client Information

- Client Name:
- Farm Location:
- Date of Soil Testing:
- Sample ID:
- Land Area:
- Intended Crop:

2. Soil Test Summary

- **Soil Type:** (Sandy, Loamy, Clayey)
- Soil pH:
- Organic Carbon (%):
- Electrical Conductivity (EC):
- Cation Exchange Capacity (CEC):
- Water Holding Capacity (%):
- Overall Soil Fertility Status: (Good, Medium, Poor)

3. Nutrient Status and Deficiencies

Nutrient	Current Soil Level	Ideal Range	Deficiency Status	Remarks
Macro-Nutrients				
Nitrogen (N)	(Soil Test Result)	(Ideal Range)	(Deficient/Sufficient)	
Phosphorus (P)	(Soil Test Result)	(Ideal Range)	(Deficient/Sufficient)	
Potassium (K)	(Soil Test Result)	(Ideal Range)	(Deficient/Sufficient)	
Secondary Nutrients				
Calcium (Ca)	(Soil Test Result)	(Ideal Range)	(Deficient/Sufficient)	
Magnesium (Mg)	(Soil Test Result)	(Ideal Range)	(Deficient/Sufficient)	
Sulfur (S)	(Soil Test Result)	(Ideal Range)	(Deficient/Sufficient)	
Micro-Nutrients				
Zinc (Zn)	(Soil Test Result)	(Ideal Range)	(Deficient/Sufficient)	
Iron (Fe)	(Soil Test Result)	(Ideal Range)	(Deficient/Sufficient)	
Manganese (Mn)	(Soil Test Result)	(Ideal Range)	(Deficient/Sufficient)	
Boron (B)	(Soil Test Result)	(Ideal Range)	(Deficient/Sufficient)	
Other Factors				
Soil Organic Matter (OM)	(Soil Test Result)	(Ideal Range)	(Low/Moderate/High)	
Cation Exchange Capacity (CEC)	(Soil Test Result)	(Ideal Range)	(Low/Moderate/High)	

4. Fertilizer Recommendations

Based on the soil test results, the following fertilizer plan is recommended to improve soil fertility for the intended crop.

Nutrient	Recommended Fertilizer	Dosage (kg/acre)	Timing of Application	Application Method	Remarks
Silica/SiO2	Biosil/Biosil-H/ Biosilo-DE	(kg/acre)	(Pre-sowing, Top-dressing)	(Broadcast, Band placement)	Apply in split doses
Nitrogen (N)	Urea/Ammonium Sulfate	(kg/acre)	(Pre-sowing, Top-dressing)	(Broadcast, Band placement)	Apply in split doses
Phosphorus (P)	DAP/SSP	(kg/acre)	II(AI SOWING)	(Banding with seed)	Avoid over- application
Potassium (K)	МОР	(kg/acre)	(Pre-sowing, Top-dressing)	(Broadcast)	
Calcium (Ca)	Gypsum/Lime	(kg/acre)	(At planting)	(Soil application)	Corrects acidity
Zinc (Zn)	Zinc Sulfate	(kg/acre)	`	(Soil or foliar application)	Necessary for grain quality
Organic Carbon	Farm Yard Manure (FYM)/Compost	(tons/acre)	II(Pre-sowing)	(Incorporate into soil)	To increase organic matter

5. Soil Amendment Recommendations

If there are issues with soil structure, salinity, or pH, the following soil amendments are advised.

Issue	Amendment	Dosage (kg/acre)	Application Method	Timing	Remarks
Acidic Soil (pH <6)	Biosil/Biosil-H/Lime	littons/acre)	` 1	(Pre-sowing)	Apply before rainy season
Sodic Soil (pH >8)	Biosil-DE/Biosil-H/Gypsum	(tons/acre)	(Broadcast)	`	Improves soil structure
11	Bioforce/Compost/Farm Yard Manure	(tons/acre)	· /	`	Increases soil fertility

6. Irrigation and Water Management

- Water Requirement: (Liters/acre or mm/week based on crop)
- **Frequency of Irrigation:** (e.g., Weekly, Bi-weekly)
- Water Quality Issues: (If any, provide recommendations for improving irrigation water quality)

7. Crop-Specific Recommendations

- **Crop:** (e.g., Wheat, Rice, Maize)
- **Optimal Planting Time:** (e.g., Early Monsoon)

- Fertilizer Timing: (Split application during vegetative and flowering stages)
- Additional Soil Management Practices: (e.g., Mulching, Cover cropping)

8. Long-Term Soil Health Management

- Organic Practices: (Suggestions for using organic fertilizers and reducing chemical inputs)
- **Crop Rotation:** (Recommendation for rotating crops to improve soil health)
- **Soil Testing Frequency:** (Retest soil every 6-12 months for continued monitoring)

Prescribed by:

- Name:
- Agronomist/Lab Name:
- Date of Report:
- Contact Information:

Notes:

- **Follow-up:** Re-test soil after implementing these recommendations to check for improvements.
- **Seasonal Considerations:** Adjust fertilizer and irrigation based on seasonal conditions.

This **Soil Fertility Advisory Report** format provides a comprehensive plan for improving soil health, focusing on nutrient management, soil amendments, and crop-specific recommendations. It helps guide the farmer through practical steps for optimizing soil fertility for higher yields and sustainable farming.