ASIA AND PACIFIC COMMISSION ON AGRICULTURAL STATISTICS

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Agenda Item 7.3b

Cost of Production Statistics for Plantation Crops (Mango) in Bangladesh

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Outline

• Technical Assistance on CoP under the Global Strategy
• Background on Mango production in Bangladesh
• Objective of Technical Assistance
• The life of a Mango tree and accounting for changes in the cost structure across age-groups
• Design considerations for CoP of Mango
• Resources
Technical Assistance for CoP under the GS

- Regional Training and Expert Consultations
- Assessment
- Development of instruments for the study of CoP
- Pre-testing/Pilot
Background on Mango in Bangladesh

• The average survival age of a Mango tree is generally 50 years – and can be as high as 100!

• Multiple varieties of Mango produced – typical cultivator has multiple varieties growing on one plot.

• Mango varieties are propagated through grafting, locally known as KalamAam. Trees planted through seedling are known locally as GutiAam.
  • KalamAam trees tend to bear fruit faster after 2 – 3 years of planting
  • GutiAam trees bear fruit 5 - 6 years after planting

• Cultivators have recently been adopting fruit bags to protect fruits.
Objective for TA

• **Background**: While a number of CoP surveys have been carried out by BBS for temporary crops, none had been completed for plantation crops.

• **Objective**: To improve understanding of the cost structure for Mango over the life-time of the tree. In particular, the establishment cost and the maintenance cost.

• **Outputs**:  
  • Develop questionnaire  
  • Draft tabulation plan  
  • Design of study given the objective
The life of a Mango tree

1. Non-fruit bearing period
2. Long maturation phase before optimal yield is reached
3. Periods of optimal yield (variety dependent)
4. Yield falls as the tree ages
5. Technology and crop management techniques
Examples of cost items

• Land – Rent on land
• Casual Labour – Land preparation, Regular Pruning and Training leaves
• Machinery/ equipment – Depreciation on costs of capital, machinery hire
• Indirect costs – payment for factors of production with share of production
• Physical input – Seeds, fertilizer, Plant protection services
Other design considerations CoP on Mango and Next steps

- Determining optimal number of age-groups
- Allocation of costs over time
- Types and classification of producers
- Auxiliary data sources
- Data collection mode for Mango and other plantation crops (single vs omni-bus)
- Representative farm/ survey
Resources

• Training Course on Agricultural Cost of Production
• Agricultural Cost of Production: Country Field Test and Desk-Study Reports
• Handbook on Agricultural Cost of Production
• Agricultural Cost of Production Statistics brochure
• Literature Review on Cost of Production Methodologies
Thank You

Questions?
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