

ASIA AND PACIFIC COMMISSION ON AGRICULTURAL STATISTICS

TWENTY-SEVENTH SESSION
Nadi, Fiji, 19 – 23 March 2018
Agenda Item 7.3b
Cost of Production Statistics for Plantation Crops (Mango) in Bangladesh

Contributed by: **Anthony Burgard**
Consultant,
Regional Office of the Global Strategy to Improve
Agricultural and Rural Statistics

Agenda Item 7.3b

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

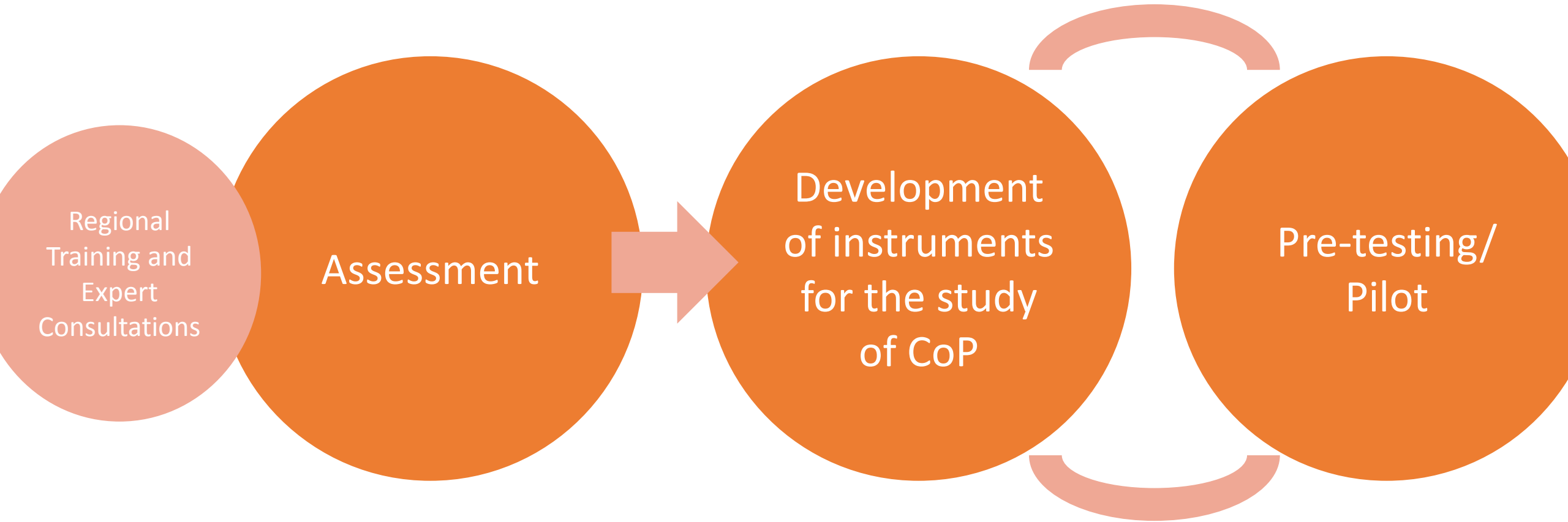
Anthony Burgard, Consultant
Asia and Pacific Commission on Agricultural and Rural Statistics
Nadi, Fiji
19 – 23 March 2018



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



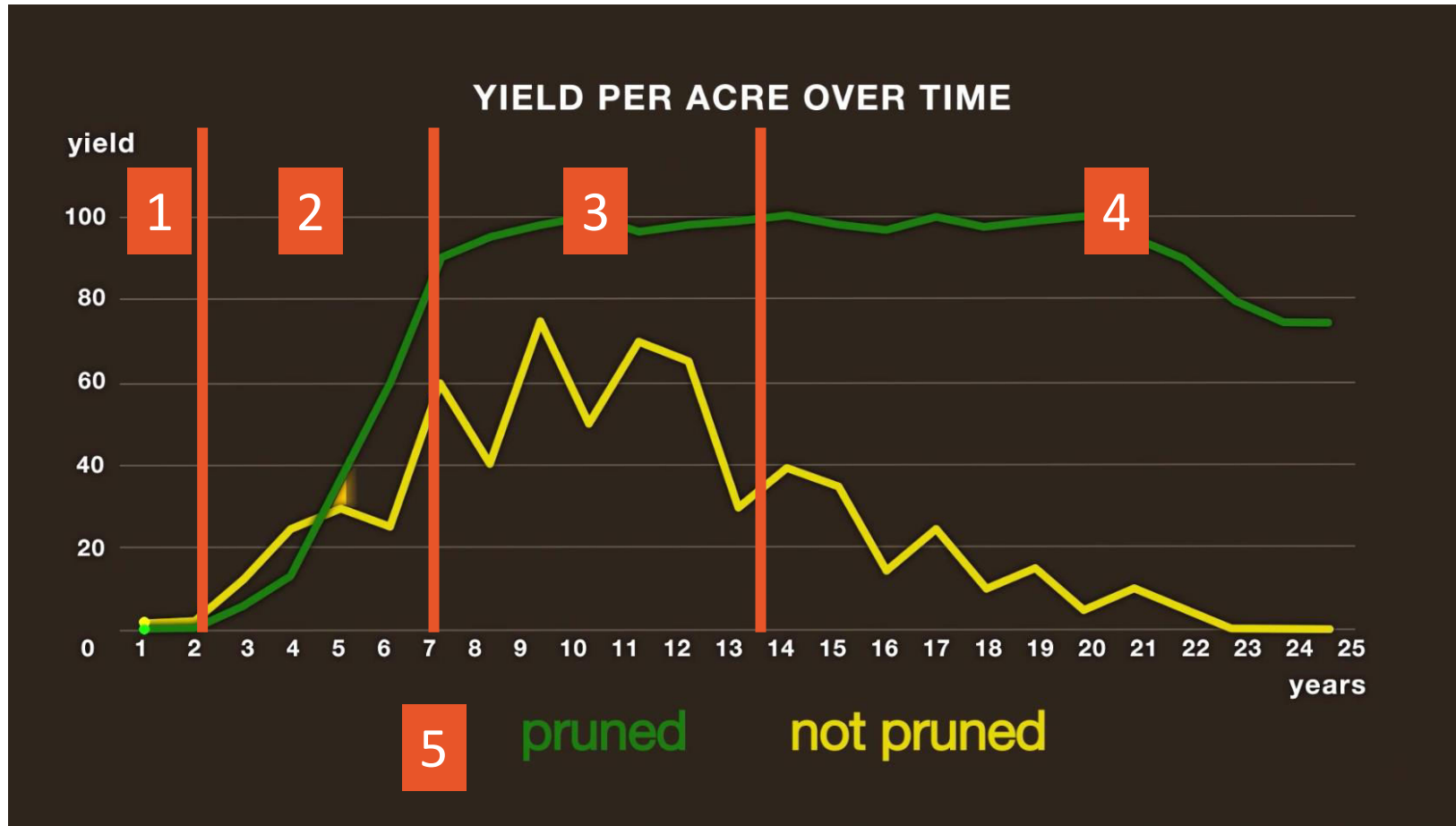
Background on Mango in Bangladesh

- 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
 - *GutAam* 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?

Anthony.Burgard@fao.org