



CocoaSoils

The interface between expert and farmer knowledge and practices of pruning in cocoa

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Context

Cocoa sector experiencing:

- Increasing incidence of pest and diseases
- Reduction in yield/supply

Pruning has the potential to:

- Improve aeration –reduction of pests and diseases
- Maximise light capture and nutrient use – yield increase

Objective

Examine interfaces where expert and farmer knowledge on pruning of cocoa meet, assess the kinds of interactions therein and detect emerging spaces for exchange and hybridisation.

Introduction

Scientists, firms and governments have researched and developed cocoa pruning recommendations and intensified farmer trainings on such recommendations. However, farmers' adoption of recommended practice remains low. The continued engagement of experts with farmers on pruning creates interfaces where expert and farmer knowledge and practices of pruning converge. Yet such interfaces and the interactions therein have received little scholarly attention.

Data collection and methods

The study triangulated:

- Analysis of training manuals from public and private extension delivery.
- Interviews with technical officers, field officers, field trainers, pruners and farmers.
- Observations of pruning activities in the 2017/18 and 2018/19 cocoa seasons.

Results and discussion

- The settings in which experts and farmers meet on cocoa pruning include:
 - Mass trainings,
 - Demonstration farms,
 - One-on-one or group coaching
 - Gang pruning

The knowledge, practices and biases of experts and farmers converge in these settings and create unique interfaces.

- Within each interface, there is a dominant narrative that influences expert-farmer interactions.

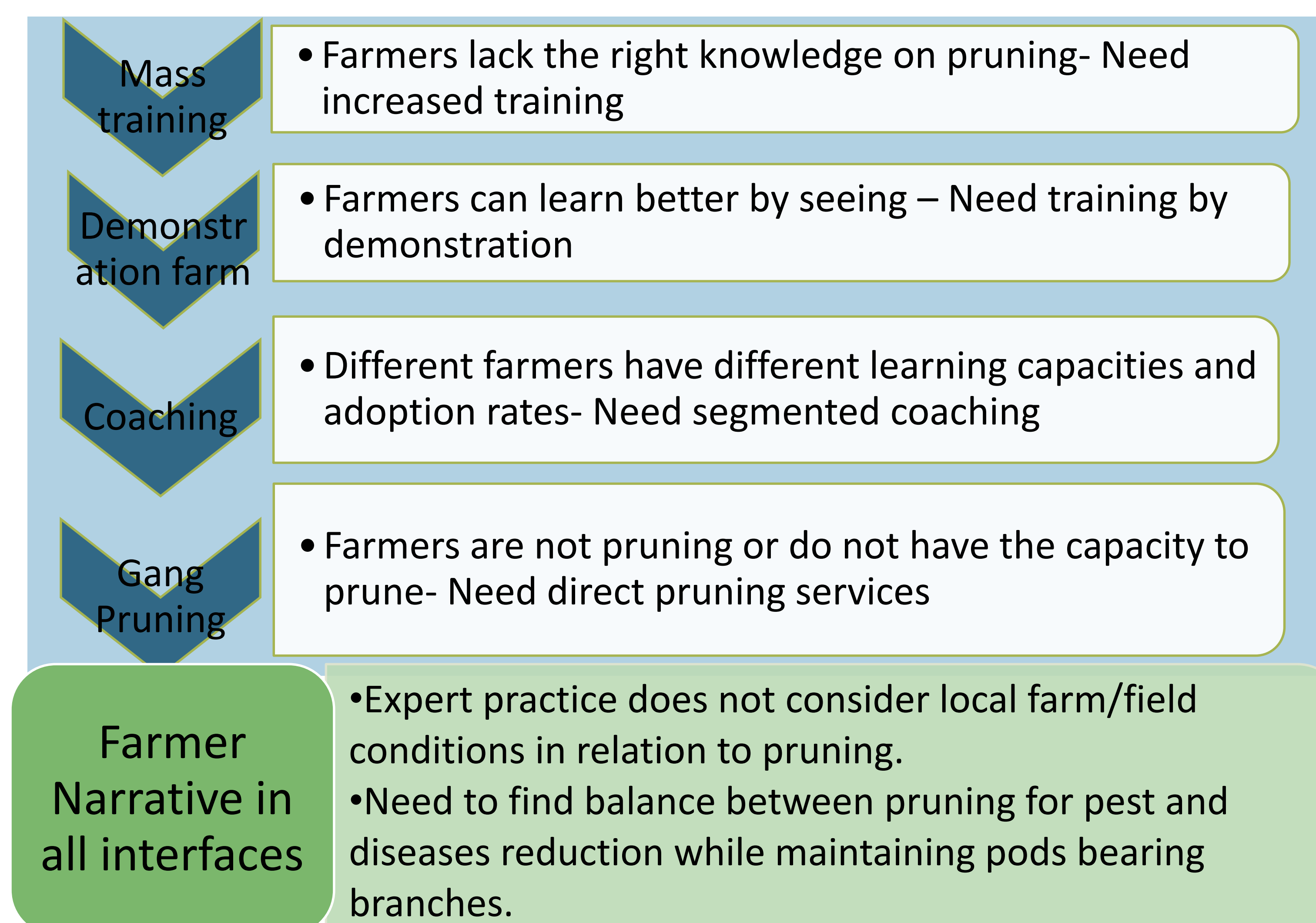


Fig. 2: Interfaces and dominant narratives of experts and farmers

- Choice and use of setting is driven by expert narrative and quest to make sure farmers prune.
- Thus, choice of setting has evolved from mass training to gang pruning.
- Interactions largely follow top-down approaches to knowledge transfer.
- Farmers show both active and passive resistance



Plate. 1: Left. Mass training of farmers on pruning by technical officer. Right: Firm trained gang pruner pruning a farmer's farm

Experts

Acknowledge formative, structural and sanitary pruning.
Knowledge is largely focused on the act of pruning. Relatively unitary and generic.

Develop recommendations and manuals for farmer training and adoption.
Practice is biased towards structural pruning that is relatively deep or heavy.

Farmers

Acknowledge pruning as a balancing act between shade, sunlight and **pod bearing**.
Knowledge is largely focused on tree response to pruning. Relatively composite and situated.

Develop adaptations of recommended practice to find a balance between pest and diseases reduction and pod bearing.
Practice is biased towards sanitary pruning which is relatively light. Hardly cut pod bearing branches.

Conclusions

- Interactions in the interface is fashioned around different knowledge streams, associated practices and seemingly entrenched narratives.
- However, expert knowledge, practice and narrative is dominant and influences the top-down nature of knowledge transfer in the interface.
- There is less room for exchange, hybridisation and alignment of knowledge and practices in the interface.
- Emerging space for exchange evident in coaching and gang pruning settings with field trainers and pruners who are farmers and or locally recruited.