

Tropentag, September 18-20, 2019, Kassel

"Filling gaps and removing traps for sustainable resource management"

Filling Gap and Removing Trap: The Interface Between Expert and Farmer Knowledge on Cocoa Pruning

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Abstract

Cocoa trees are generally pruned to increase yields through maximising light capture, reducing unproductive branches and facilitating harvesting. Pruning can reduce the increasing incidence of pests and diseases and an over reliance on pesticides and fungicides use. Additionally, pruning can increase yields by 30 percent positively affecting incomes of cocoa farmers. Hence, governments of producing countries, scientists and lead firms among others, have committed resources to develop pruning recommendations and intensified farmer trainings on such recommendations in the bid to fill the gap in pruning knowledge among cocoa farmers. Yet, the practice of recommended pruning largely remains low among cocoa farmers in Ghana. However, the years of technical trainings on pruning received, coupled with farmers' situated knowledge of farms and fields, have resulted in various adaptations of pruning practices based on other physical conditions that influence tree response to pruning. These adaptations recognise pruning as a practice influenced by slope of land, soil type, presence or absence of shade trees on farm, age of farm, local weather conditions and accompaniment of other farm practices such as fertiliser application and manual pollination. Thus, while expert knowledge on pruning seemingly remains a generic-unitary-static practice, farmer knowledge on pruning is largely a situated-composite-dynamic practice which mostly varies from recommended expert knowledge. In Ghana's cocoa sector, mass trainings, one-on-one and/or group coaching, demonstration farm visits and gang pruning activities by lead firms and government, have become important interfaces where expert knowledge meets the situated knowledge of farmers on pruning. However, these interfaces are generally designed and operated as channels of transferring technical knowledge on pruning to farmers. Rooted in a path of seeing extension as a one-way transfer of knowledge from experts to farmers, these interfaces offer little to no room for manoeuvre, flexibility, hybridisation and/or co-creation of knowledge and solutions between expert and situated knowledge on pruning. Designing an interface that is inclusive and gives recognition to the knowledge and priorities of all actors is thus necessary in removing the trap of lock-ins and path-dependency approaches to filling knowledge gaps on pruning in cocoa farming.

Keywords: Cocoa farming, cocoa yields, extension, farmer knowledge, knowledge co-creation

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