CocoaSoils

Decision Support Tools for sustainable cocoa intensification

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Introduction

To meet market demand for more sustainable products, changes in current farming practices are needed. Soil fertility decline is one of the main drivers of the low productivity in the cocoa sector and its contribution to environmental degradation. Integrated Soil Fertility Management (ISFM) could contribute to tackle these issues by improving cocoa farm productivity. The use of well designed Decision Support Tools (DSTs) can increase learning about ISFM and its adoption by cocoa farmers.

Aim

To understand the factors that affect farmers' decision-making and provide recommendations for the development of DSTs for sustainable cocoa intensification through ISFM adoption.

Research questions

- How diverse are cocoa farmers and how does this diversity affect their current farming practices?
- Do ongoing interventions to increase the adoption of BMP effectively influence farmers practices?
- How do farmers and extensionists evaluate different types of DSTs and their influence on learning and knowledge acquisition?
- How does the use of DSTs affect ISFM adoption and cocoa farm productivity and profitability?

Figure 1: Cocoa farm established on a soil with little forest cover (left) and Cocoa husk abandoned in a farm (right)
Photo by Urcil Kenfack E. (July 2018)

References

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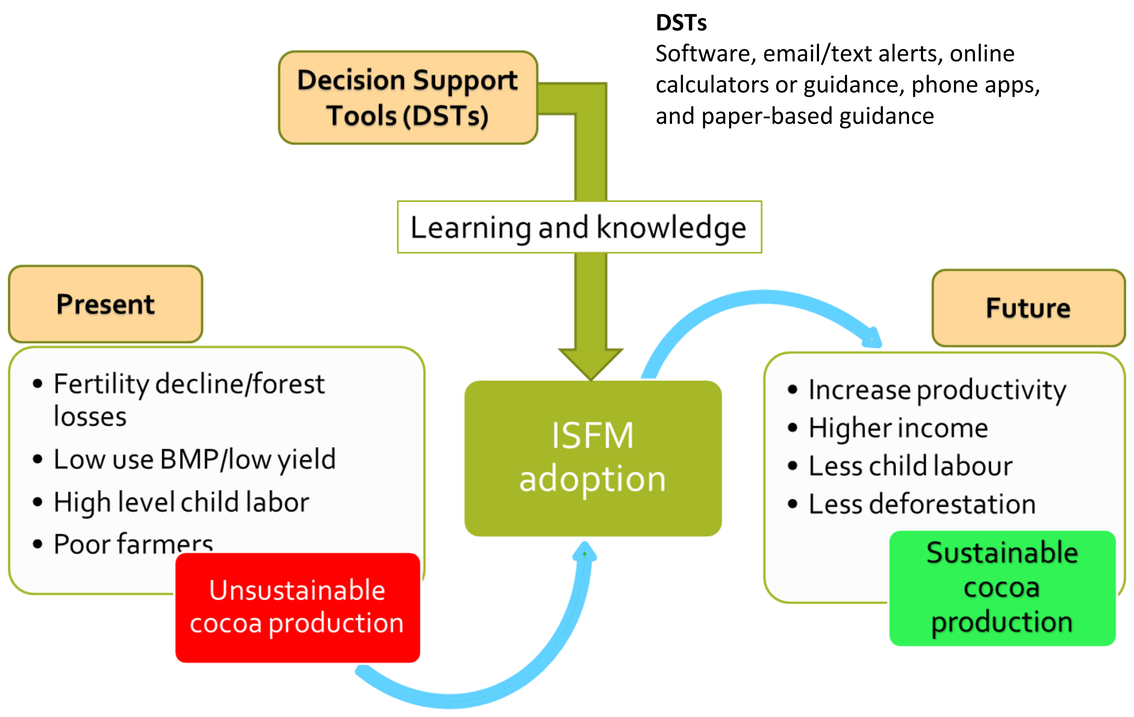

Figure 2: Using appropriate DSTs can increase learning, ISFM adoption and lead to sustainable cocoa production

Research Methods

Research area

Two contrasting Agro-Ecological Zone of Cameroon
Multistage sampling techniques

Target population

Cocoa farmers, Extensionists, Project managers

Data collection Techniques

- Case studies,
- Survey, Focus Groups & Interview,
- Field Experiments: Factors (ISFM options, DSTs, location, demonstration); Dependent variables (Yield, profit, adoption).

Data analysis

- Discourse & Thematic analysis,
- Analysis of Variance & Regression Analysis,
- Cost-Benefits Analysis.

Expected results

- Better understanding of why farmers do what they do.
- Strengths/weaknesses of ongoing interventions are determined and opportunities for synergies identified,
- Users' preferences in terms of DSTs are known,
- The characteristics of appropriate DSTs for ISFM dissemination among cocoa farmers are known,
- The factors determining ISFM adoption by cocoa farmers are known.