Different households – different challenges?

Understanding the impacts of cocoa producers’ household characteristics on needs and ability to apply sustainable production techniques

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Introduction

• Many efforts to deliver trainings on sustainable cocoa production by value chain actors over past years to enhance farmers’ Living Income.
• Focus on mainstream sustainability interventions on Good Agricultural Practices, Farmer Business School, recent shift towards inclusion of agro-ecological elements, e.g. agroforestry systems and diversification
• Limited insights on adoption rates and reasons for cocoa producers’ decision to apply training contents.

Objective

• To contribute to an improved understanding of impact factors for successful adoption of sustainability interventions.

Research question:

• How do farm and household characteristics impact cocoa farmers’ perceptions towards livelihood and production challenges, including the ability to adapt training contents?

Research area

• PRO-PLANTEURS intervention regions in Côte d’Ivoire (see map)

Farm type description

<table>
<thead>
<tr>
<th>Farm type</th>
<th>Mean years of formal education</th>
<th>Mean household size</th>
<th>Mean number of perennial crops</th>
<th>Mean number of food crops</th>
<th>Mean number of vegetable crops</th>
<th>Mean number of fruit tree species</th>
<th>Mean number of livestock species</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 1</td>
<td>(n=136)</td>
<td>64.29%</td>
<td>5.18 ha</td>
<td>1.44 ha</td>
<td>3.78 ha</td>
<td>0.69</td>
<td>0.62</td>
</tr>
<tr>
<td>Type 2</td>
<td>(n=40)</td>
<td>61.54%</td>
<td>5.97 ha</td>
<td>1.81 ha</td>
<td>4.34 ha</td>
<td>0.88</td>
<td>0.10</td>
</tr>
<tr>
<td>Type 3</td>
<td>(n=34)</td>
<td>66.67%</td>
<td>13.57 ha</td>
<td>6.69 ha</td>
<td>6.88 ha</td>
<td>1.88</td>
<td>2.03</td>
</tr>
<tr>
<td>Type 4</td>
<td>(n=18)</td>
<td>47.06%</td>
<td>3.5 ha</td>
<td>1.17 ha</td>
<td>2.5 ha</td>
<td>0.40</td>
<td>4.85</td>
</tr>
</tbody>
</table>

Outlook/next steps

• Deepening understanding of success determining factors (positive deviance)
• Assessing socio-economic benefits of agroecological practices, esp. regarding reduction of Living Income gap

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Living Income Approach

“The net annual income required for a family in a particular place to afford a decent standard of living for all members of that family. Elements of a decent standard of living include: food, water, housing, education, healthcare, transport, clothing, and other essential needs including provision for unexpected events.”

Mixed methods approach:

• Socio-economic household survey among PRO-PLANTEURS targeted cocoa farmers (N=300, June 2022)
• Expert workshop and focus group discussions (June 2022)
• Semi-structured interviews with cocoa farmers, cooperative representatives, and other PRO-PLANTEURS stakeholders (ongoing)

Data analysis:

• Typology based on Principal Component Analysis and Hierarchical Cluster Analysis based on Principal Components
• Descriptive statistics, statistical tests, and regression analysis
• Qualitative content analysis

Results

Households’ head training priorities

Access to inputs
Support of income
Support of cocoa material
Support of other plant material
Support for transport
Support for labor
Support for food security

Stated support needs by HH head

Cocoa production
Farm diversification
Climate Change adaptation
Nutrition
Agroforestry
Other income sources

Application of selected agroforestry training content

Plating of shade trees
Forest conservation techniques
Wasteland management
Compost

Participants training agroforestry Participants apply training

Type 1: 64.29% 52.50%
Type 2: 61.54% 53.68%
Type 3: 66.67% 58.82%
Type 4: 47.06% 44.44%

Figure: Intervention regions PRO-PLANTEURS 1–2 (© GIZ)