Solidaridad
SERVICE DELIVERY MODELS IN THE WEST AFRICAN COCOA SECTOR:

A PROPOSED SMART MIX TO CLOSE THE INCOME GAP FOR COCOA FARMERS IN A RESPONSIBLE AND SUSTAINABLE MANNER

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1. Problem analysis
Market-based Service Delivery Model (SDM)
The average cocoa farmer in West Africa earns less than $2 a day and is, therefore, unable to invest in good practices.

- Largely male farmers
- Average age: 48 years in Ghana, 46 years in Côte d’Ivoire
- Largely male headed households: 100% in Côte d’Ivoire, 90% in Ghana
- Average household size: 6 in Ghana, 8 in Côte d’Ivoire
- Educated to the basic level

Source: 2021 CORIP II Outcome Survey
How does the average daily income of these cocoa farmer compare with the living income benchmark?

An estimated 75% of cocoa-growing households in Cote d’Ivoire and Ghana earn below a living income (Kiewisch & Waarts, 2021)
Today, there are various interventions for closing this income gap?

Key:
- Legacy
- Contemporary

- Good Agricultural Practices
- Production Subsidies
- On/Off Farm Diversification
- Premiums
- Payment for Ecosystem Services
- Living Income Reference Price
- Living Income Differential
- Value Chain / Ownership Models
The income gap, however, persist

1. Though necessary, legacy intervention are not sufficient inclosing the income gap
2. Though contemporary interventions may contribute to closing the income gap, their full impact is yet to unfold.
3. The implementation of these interventions are siloed.
Various studies indicate that the siloed approach to service delivery creates barriers to the development of private markets for services and inputs.

“The [...] challenges we have faced over the years is with government policies [interventions]. So, the farmers pay for services rendered to them, but the government would give it for free. So, you would not have the required numbers of farmers that you want; that’s a big risk.”

CORIP I Final Evaluation, Institute of Social Statistical and Economic Research, University of Ghana, 2019

“Lack of access to appropriate capital to set up, consolidate gains and grow service delivery business. Subsidized inputs and services from government crowds-out private entrepreneurs. Continuous provision of subsidies inputs will discourage the development of private markets going forward.”

CORIP II Mid Term Evaluation, Directorate of Research, Innovation and Consultancy, University of Cape Coast, 2020

“Subsidised inputs and services affect the input sale of the RSCs and limit the frequency at which they visit the farmers to provide services to them.”

CORIP II Final Evaluation, SEO Amsterdam Economics, 2021
2. Our approach to the study
This study uses good agricultural practices as the entry point: Take advantage of synergies between direct results and an enabling environment.

Source: 2022 Living Income Compendium
Research questions;

• Which service delivery models (subsidized versus market-based) closes income gaps among cocoa farmers?
• What smart-mix of interventions do stakeholders believe can better deliver decent incomes to cocoa farmers?

After answering the above questions, we make two propositions;

• A formalized smart-mix, emphasizing market-based service delivery, is commercially viable and holds promise to overcoming the challenges to closing the income gap for cocoa farmers.
• A financing pathway that considers the production cycle of the cocoa tree is key to providing the critical investments in sustainable cocoa production needed to close the income gap of cocoa farmers.
3. The high level findings
Question 1
Which service delivery models (subsidized versus market-based) close the income gaps among cocoa farmers?
Closing the income gap: Synergies between good practices and an enabling environment is key.

<table>
<thead>
<tr>
<th></th>
<th>Côte d’Ivoire</th>
<th>Ghana</th>
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</thead>
<tbody>
<tr>
<td>Baseline (€) 2018</td>
<td>1,617</td>
<td>1,015</td>
</tr>
<tr>
<td>Endline (€) 2021</td>
<td>1,288</td>
<td>1,120</td>
</tr>
<tr>
<td>Change in income</td>
<td>(20%)</td>
<td>10%</td>
</tr>
<tr>
<td>Farmers with better income</td>
<td>31%</td>
<td>68%</td>
</tr>
</tbody>
</table>

Significant adoption of recommended agroforestry practices and the use of appropriate labor are observed among cocoa farmers who sourced services from market-based service providers relative to baseline.

Source: 2021 CORIP II Outcomes Survey
Question 2

What smart mix of interventions do stakeholders believe can better deliver decent incomes to cocoa farmers?
Opportunities exist for exploiting synergies in service provision

<table>
<thead>
<tr>
<th>Service Delivery Model (SDM)</th>
<th>Mapping of unproductive farms</th>
<th>Payment of compensation</th>
<th>Land preparation</th>
<th>Farm establishment</th>
<th>Farm maintenance: First 2 years after establishment</th>
<th>Farm maintenance after Year 2</th>
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<tbody>
<tr>
<td>Public SDM</td>
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<tr>
<td>Market SDM</td>
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<tr>
<td>Supply Chain SDM</td>
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</table>

Key:
- Fully or partially subsidized services
- Fully paid services
- Partially subsidized services (input credit schemes, cocoa seedlings)
### Why the call for a smart mix?

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Public Service Delivery Model</th>
<th>Supply Chain Service Delivery Model</th>
<th>Market Service Delivery Model</th>
</tr>
</thead>
</table>
| • Resource for farm rejuvenation  
• Good relationship with cocoa farming communities  
• Network of community extension Agents | • Innovative | • Last-mile desirable services  
• Youth-led/Rural job creation  
• Vehicle for widespread adoption of GAPs |
| Weaknesses | • High operating cost | • Farmers may have to source labor services themselves | • Lack of access to finance  
• Weak ‘competitive’ position |
The proposed smart-mix
The smart mix to deliver better farmer income at scale

Public SDM Activities:
1. Co-create production strategy with stakeholders
2. Train skilled labor
3. Outsource service delivery

Public SDM Outcomes:
1. Production strategy around farmer welfare
2. Outsourced production & input services

Market SDM Activities:
1. Build entrepreneurship capacity
2. Collaborate with Public & Supply Chain SDMs for service delivery

Market SDM Outcomes:
1. Last mile good services
2. Jobs/Succession
3. Strong balance sheet

Supply Chain SDM Activities:
1. Share knowledge on innovative production and income boosting interventions

Supply Chain SDM Outcomes:
1. Outsourced services
2. Better farmer income

Enablers: Income labs, enterprise support organizations, Agtech, Fintech, traceability systems (blockchain), patient capital providers, CSOs/NGOs, FBOs, Regulators (cocoa, financial, producing and consuming countries), retail chains, research institutions, certification bodies, donors, traders, chocolate manufacturers, etc

ASSUMPTIONS: Favorable power dynamics among actors, efficient allocation of resources (capital, knowledge, expertise etc), readiness to collaborate, favorable cultures, norms, values & biases, profitable and sustainable production, enabling public and private policies, appropriate fund and financing structures, fair value distribution models etc

Fair Remuneration

Productivity enhancement

Zero Child Labor
Zero Deforestation

- Improved Social Outcomes
- Improved environmental outcomes
- Continuous investments in sustainable cocoa production

• Improved Social Outcomes
• Improved environmental outcomes
• Continuous investments in sustainable cocoa production
The proposed financing pathway
## Proposed financing structures for the smart mix

### Income Status

<table>
<thead>
<tr>
<th>Year 0</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
<th>Year 7</th>
<th>[...]</th>
<th>Year 30</th>
<th>[...]</th>
<th>Year 45</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scope</strong></td>
<td><strong>Compensate &amp; Establish</strong></td>
<td><strong>Maintenance</strong></td>
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#### ‘Value of Death’ Period (No Significant Income from the Farm)

- **Grants/Farmer (high value annual crops)**
- **Impact Capital/Farmer**

#### Commercial Period (Significant Income from the Farm)

- **Grants/Farmer (high value annual crops)**
- **Recoverable Grants/Concessional financing/Farmer**
- **Impact Capital/Farmer**

- **10-year, Zero-Coupon Green Bond**
- **Impact Capital/Farmer**

- **Investment by Farmer/high value annual cropus**

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2022 International Symposium on Cocoa Research (ISCR), Montpellier, France
Our recommendations
**Recommendations:** A system approach is needed

1. Engage all relevant stakeholders to co-create the smart mix which is necessary and sufficient in closing the income gap
2. Rigorously test and improve the smart mix and its financing structures through pilot projects
3. Harvest lessons and scale up the smart mix.
THANK YOU
Q&A
Are market-oriented service delivery models financially viable?

Source: ISSER, 2019
Methodology: How the study was conducted

Mixed-Methods (Qualitative and Quantitative) involving pre-post and with-without comparative analysis

- Interviews
  - Managers of RSCs (n=12)
  - Cocoa farmers (n=12)
  - CHED Regional Extension Officers (4)
  - Contracted Market SDMs (n=1)
  - Impact Investors (n=2)
  - Supply Chain SDM (n=3)
  - Cooperatives (n=4)

- Desk Research using PRISMA (n =54)

- Survey Farmers (n=1,358)

- Data Analysis
  - Interviews-Inductive analysis
  - Survey: Percentages, averages, t-test and regression

Discussions, conclusions and recommendations