TOWARD A SUSTAINABLE AGRO-LOGISTICS (TSAL) IN DEVELOPING COUNTRIES: THE CASE OF COCOA’S SUPPLY CHAIN AND NETWORKS IN SAN PEDRO, CÔTE D’IVOIRE.

CHOCOA CONFERENCE: SUSTAINABILITY BEYOND THE FARM GATE
23 February 2018, Beurs van Berlage, Amsterdam
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  • Background & Objectives
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  • Economic impact of Cocoa’s sector in Côte d’Ivoire.

• CONTEXT COCOA SECTOR IN THE REGION OF SAN PEDRO

• COCOA’S LOGISTICS CHAINS IN THE REGION OF SAN PEDRO: CHALLENGES AND OPPORTUNITIES
The overall objective is the improvement of the existing cocoa’s logistics chains and network in the region of San Pedro/Côte d’Ivoire from efficiency, effectivity and sustainability point of view, e.g.: 

1. Assessing the performance and identifying key challenges and bottlenecks at each segment of the supply chain from the farmers to the port e.g. Cost reduction and efficient and effective logistics chain; 
2. Improvement of cocoa supply chain and reduction of losses and wastes, and (Greenhouse) emissions; 
3. To evaluate/improve the performance, (economic) efficiency and sustainability of the cocoa’s logistics chains and networks e.g. Improvement of quality, transparency, speed and reliability of cocoa supply chain.

Results can be scaled/replicated and applied in other logistic supply chains (e.g. other commodities such as Cotton for example), other sectors, port regions and countries.
• State of the Art (literature review) on agro logistics supply chain and networks (i.e., best practices and lesson learned from similar case studies around the world).

• Data collection and data analysis (essential for to evaluate potential impact of existing policies, strategies and performance of cocoa’s logistic chain).

• A mixed research methodology consisting of quantitative as well as qualitative analytical methods (fieldwork, observations, interviews).
  
  • Development of a dynamic simulation model; entails the optimization of the cocoa logistics supply chain (e.g. identification of the structure, processes and significant key factors/parameters influencing the performance of the whole logistics system and logistics chain.
  
  • A serious gaming model/tool to assess network development, sustainability and strategic growth policies of ports and port regions (also relevant for logistics firms and other stakeholders involved in port activities).
## Cocoa’s Economy Wide Multiplier Impacts

<table>
<thead>
<tr>
<th>Countries</th>
<th>Cocoa export as a % of total export earnings*</th>
<th>% of imports covered by cocoa export earnings*</th>
<th>Cocoa export earning % of GDP*</th>
<th>Earnings from cocoa as % of farmers’ total income**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cote d’Ivoire</td>
<td>32%</td>
<td>40.2%</td>
<td>13.3%</td>
<td>80%</td>
</tr>
<tr>
<td>Ghana</td>
<td>31%</td>
<td>21.4%</td>
<td>8.2%</td>
<td>90%</td>
</tr>
</tbody>
</table>

Source: *The Observatory of Economic Complexity **World Cocoa Foundation (2012). Cocoa-Livelihoods-Program*

<table>
<thead>
<tr>
<th>Export value (in $ million)</th>
<th>% total export value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total exports Cocoa paste (excluding defatted) CIV 2016 ($)</td>
<td>3122</td>
</tr>
<tr>
<td>Total exports Cocoa beans, whole or broken, raw or roasted CIV 2016 ($)</td>
<td>658</td>
</tr>
<tr>
<td>Total exports Cocoa butter, fat and oil CIV 2016 ($)</td>
<td>368</td>
</tr>
<tr>
<td>Total exports CIV 2016 ($)</td>
<td>5459</td>
</tr>
</tbody>
</table>

Ref: FAO Database
Geo-distribution of cities, towns, villages and Hamlets_San Pedro-Soubre (Bas-Sassandra)
Thank You for Your Attention!