



Integrated Assessment of the Liberalisation of the Cocoa Sector on Biodiversity in Cameroon

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OUTLINE

- Focus of the assessment
- Methodology
- Selected results of the integrated assessment
- Policy recommendations
- Action plan
- Main achievements and constraints

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- Members of the steering committee

FOCUS OF THE ASSESSMENT



To assess the environmental, social and economic impacts of the liberalization of cocoa commercialisation by the law N° 2004/025 of December 30, 2004, on biodiversity.

The main preoccupation is to understand how this law and other related policies affect biodiversity in the cocoa producing regions in Cameroon.

The integrated assessment is an ex-post. The analysis was oriented toward the identification of the measures and policies capable to mitigate the negative impacts and to optimize the positive impacts.

FOCUS OF THE ASSESSMENT (cont.)



The focus is on the Cocoa sector because of :

- the geographical distribution of cocoa in the country (400 000 ha in 7 Regions out of 10)
- its importance as first export crop, contributing up to 11.42% of the total export returns
- the high number of people concerned (400 000 to 600 000 people (81% with no other profession)
- the income generated (up to 50 to 75% of the total revenues of 90% of households) in the 80's
- the implantation of farms at the expense of forests
 - any policy affecting the cocoa sector would have impacts on the environment and biodiversity.

METHODOLOGY

The point of departure for the analysis is at the onset of the liberalisation process of the cocoa trade (in the late 80's).

The main economic, social and environmental indicators used to assess the impacts include:

- yields
- price paid to producers
- income from cocoa and other crops sales
- contribution to local and national economies,
- number and types of jobs
- rate and amount of forest land conversion,
- agricultural and non agricultural biodiversity,
- etc.

METHODOLOGY (cont.)

Data and information were obtained from :

- Literature
- Interviews
- Talks
- Group discussions
- Field observations.

Main assessment methods included :

- Analysis of the chain of causality
- Scenario development
- Trend analysis.

Impacts were presented in relation to ecosystem services: Provisioning, Regulating, Supporting and Cultural as suggested by the conception framework

Results of the Integrated Assessment: Selected impacts on provisioning services



| Indicators | Values or trends observed |
|-------------------------------|--|
| Revenue from cocoa sales | Increased revenues due to price increase from less than 250 F CFA/kg in 1989 to more than 1 000 F CFA/kg (in 2008) |
| % of revenue from cocoa sales | Cocoa sales contributed 50 to 75% of family cash income of 90% of households in Southern Cameroon |
| Profitability | Intensive cocoa systems are the most profitable compared to other systems |
| Income from NTFP and T | Income from wild plants sales and hunting may reach up to 16% and 50% of total family income, respectively |

Selected impacts on provisioning services



| Indicators | Values or trends observed |
|--------------------------------|---|
| Jobs | The job offer is to the rise; Needs are 148 and 97 days/ha/year for the establishment and maintenance |
| Other crops production | The tendency is to grow cocoa on better soils Food security is a major problem where cocoa is dominant |
| Children Participation to work | 26% of households use children for farm work; 4 000 and 19 000 children less than 15 years were involved; Young workers are paid 42% less than adults |
| Women exploitation | Women participate in stand establishment and harvest but have no access to revenues from cocoa sales. |

Selected impacts on supporting services



| Indicators | Values or trends observed |
|-------------------------------|--|
| Forest conversion | <ul style="list-style-type: none">- Producing 320 000 T of cocoa will result in more than 100 000 ha forest converted- New cocoa plantations represent 78,7% |
| Agricultural biodiversity | <ul style="list-style-type: none">- Crops: banana, cassava, tania, etc.- Fruit trees: Africa plum, Avocado, Mango, Orange- Cocoa hybrids represent 25% of cocoa trees |
| Non agricultural biodiversity | <ul style="list-style-type: none">- 71 tree plant species identified in forests next to cocoa plantations- 44 tree plant species identified inside cocoa plantations including 09 fruit tree species- Proportion of non planted tree species : 33 to 82% |
| Animal biodiversity | <ul style="list-style-type: none">- Wild animals produce 90% of proteins of the diet- More than 120 species are threatened |

Selected impacts on supporting services



| Indicators | Values or trends observed |
|--------------------------------|--|
| Creation of cocoa agro-forests | <ul style="list-style-type: none">- Increased biodiversity- Diversification of revenues- Increased social, economic and environmental benefits |
| Restitution of nutriment | 6 to 8,5 T organic matter par ha producing : <ul style="list-style-type: none">- 50 to 55 kg N/ha;- 3,5 to 4 kg P/ha;- 35 to 40 kg K/ha ; |
| Nutrient deficit | <ul style="list-style-type: none">- 9,7 to 18,6 kg N/ha/year- 2,1 to 3,9 kg P/ha/year- 7 to 13,3 kg K/ha/year |

SELECTED POLICY RECOMMENDATIONS



1. Improving the laws by taking into consideration the linkages between trade and biodiversity (MINCOMMERCE, MINEP, MINFOF, MINADER, etc)
2. Promoting cocoa production based on agro-forestry including valorisation of local knowledge and certification (MINADER, SODECAO, NGO, Research, etc)
3. Intensification of cocoa production using innovations and practices in favour of biodiversity (MINADER, SODECAO, Research, NGO, etc)
4. Intensification of food and other crops production to spare space for biodiversity (MINADER, SODECAO, Research, NGO, etc)

SELECTED POLICY RECOMMENDATIONS (cont.)



5. Supporting producers in achieving more sustainable use of adjacent ecosystems (MINCOMMERCE, MINEP, MINFOF, MINADER, NGO, Research, etc)
6. Capacity building of stakeholders (MINESUP, MINCOMMERCE, MINEP, MINFOF, MINADER, CSO, NGO, etc)
7. Improving the land tenure system as to encourage investments (MINATD)
8. Facilitating the access to biodiversity (MINFOF)

SELECTED POLICY RECOMMENDATIONS (cont.)



9. Synergy among institutions (Ministries, NGO and all other stakeholders)
10. Research on specific issues including : varieties improvement, ecosystem fragmentation control, pest and disease control, carbon sequestration, intensification schemes, landscape planning, etc. (MINRESI, MINESUP, etc)
11. Conservation of critical forest ecosystems, by establishing and/or improving the network of protected areas.

PRIORITY RECOMMENDATIONS

1. Improve the laws by taking into consideration the linkages between trade and biodiversity in the agricultural sector
2. Develop and implement strategic plans for:
 - Promoting cocoa production based on agro-forestry
 - Intensification of cocoa production
 - Supporting producers in achieving more sustainable use of adjacent ecosystems

ACTION PLAN (cont.)



ACTIONS TO BE TAKEN

1. Validation workshop of the integrated assessment study by key ministries (MINCOMMERCE, MINEP, MINADER, MINFOF, etc) and institutions (Research, CSO, NGO, etc)
2. Diffusion of the integrated assessment report (workshops at local level, etc)
3. Capacity building workshops for various stakeholders
4. Development and implementation of strategic plans for:
 - Cacao production based on agro-forestry
 - Intensification of cocoa production
 - Sustainable use of adjacent ecosystems

ACTION PLAN (cont.)



ACTORS TO BE INVOLVED:

All stakeholders in the cocoa sector (from production to commercialisation)

IMMEDIATE ACTIONS

1. Validation workshop for the integrated assessment study by key ministries and institutions
2. Diffusion of the integrated assessment study (workshops at local level)
3. Capacity building workshops for various stakeholders

TIME FRAME ??????

Main Achievements and Constraints



Main achievements:

- Capacity building on the integrated assessment procedure
- Review, synthesis and analysis of information from various sources helping to understand the relationship between the liberalization of the cocoa sector and biodiversity

Main constraints:

- Participants not having the same understanding of the process. Being new to most actors, it needed time and practice to be more understood.
- Budget constraints.

