

Environmental and social impacts assessment of forest management unit n° 11 006 in Eyumojock subdivision

Bambila F.¹, Mougoue B.², Tchoffo B.³

1) Establishment: CRESA Forêt-Bois, Faculty of Agronomy and Agricultural Sciences, University of Dschang, Cameroon.

e-mail : bamfrank2006@yahoo.com.

2) Professor, Geography Department, Faculty of Arts, Letters and Human Sciences, University of Yaounde I, Cameroon.

3) Environmentalist, Executive Director of the African Centre for Applied Forestry Research and Development (CARFAD).

1. Main objective

To contribute to the rational management of the adverse effects of the exploitation of FMU 11 006 in Eyumojock Subdivision.

2. Specific Objectives (SO)

SO1: To describe the components of both physical and human milieus;

SO2: To describe the logging activities of SEFECAM in FMU 11 006;

SO3: To identify the impacts of this forest exploitation project on the environment;

SO4: To propose mitigation measures for the adverse effects and enhancement measures for the positive impacts of the project in the form of an Environmental and Social Management Plan.

3. Hypothesis

The logging activities of SEFECCAM in FMU 11 006 generate significant negative and positive impacts on the physical and human milieus that can be effectively managed in order to foster the sustainable management of natural resources in Eyumojock Subdivision.

4. Methodology

This work was guided by the collection of data from secondary and primary sources with the aid of various research tools.

- Location of the Study Area

FMU 11 006 is found between Eyumojock and Upper Bayang Subdivisions in Manyu Division, in South West Region of the Republic of Cameroon. This study is limited in the Eyumojock part of the FMU with 6 villages upon which the logging project has direct implications.

- Data collection tools and techniques

This work was facilitated by the use of research tools such as: interview guide and questionnaire, GPS, digital camera, Leopold's interrelation matrix, Martin Fecteau grid, dictaphone, etc.

The collection of data from secondary sources through the consultation of documents related to the project provided some information concerning the study area. Primary data were collected in a consultative manner, encouraging participants of all works of life to partake in the evaluation process. This was done through interviews with various actors in the forestry sector, direct observations of the activities of logging and Focus Group Discussions with the local populations. The impact assessment models of Leopold and Martin Fecteau were used in the characterisation, evaluation and analysis of the impacts related to this project.

5. Results

R1.1: The physical milieu of this project is characterised by the equatorial climate of the Cameroonian type with an average annual rainfall between 2 000 and 4 500 mm. The annual average temperature is 26.3oc. In terms of pedology, this project area is dominated by ferralitic and sandy clay soils covered by dense evergreen rainforest with many tree species.

R1.2: Common human activities in this area include agriculture, characterised by the cultivation of food and cash crops, animal husbandry, hunting, fishing and the harvesting of NTFPs.

R1.3: On the Socio-cultural aspect, the study area consists of 6 direct impact villages with a total population of 4 971 inhabitants. They harbour archaeological features and sacred sites some of which are within the FMU and may be hampered by the activities of the project.

R2.1: The actual logging activities of SEFECCAM

in FMU 11 006 include the demarcation of the FMU and logging units, exploitation inventory, opening of logging roads and landings, tree felling, skidding, log scaling and marking, loading and transportation.

R2.2: SEFECCAM also carries out other activities in and around the FMU such as: the maintenance of equipment at the logging site garage, Road maintenance, anti-poaching activities and fight against illegal logging, payment of forest royalties and the realisation of charity work.

R3.1: The project has affected the physical, biological and human milieus.

R3.2: A total of 18 impacts were identified, with 14 being negative and 4 being positive. The major negative impacts identified include: threats to wildlife biodiversity, increase in road and job side accidents, increase in poaching, risk of conflicts, etc.

R4.1: Measures for mitigation and enhancement were proposed for negative and positive impacts respectively. Sensitization of workers and local populations, construction of speed breaks within settlement zones, use of protective gears during work and provision of first aid kits are some of the measures that could be implemented to mitigate some of the negative impacts of the projects.

R4.2: A synthesis table for the ESMP was developed for 16 impacts classified as significant.

6. Discussion

Apart from the economic benefits, the logging activities of SEFECCAM in FMU 11 006 constitute a threat to the environment. Road degradation for example, is mostly caused by log transportation vehicles, especially where the roads are unpaved.

This goes in conformity with the idea of Wasseige et al (2009) who in a report entitled "State of the Congo Basin Forest in 2008" stress that road degradation in most countries in the Congo basin is fostered by log transportation trailers which sometimes rupture traffic flow, especially in the rainy season.

7. Recommendations

The **promoter** of the project (SEFECCAM) should:

- Respect the norms of commercial logging as stipulated by laws;
- Fully integrate the ESMP into the project programme.

The Government should;

- Ensure the effective management of FMU 11 006 through constant follow-up;
- Effectively implement all regulatory texts on matters concerning forest exploitation.

Keyword: *Environment, management, impact, FMU, Eyumojock, Cameroon.*

Acronyms: *ESMP : Environmental and Social Management Plan ; FMU : Forest Management Unit ; GPS : Global Positioning System ; NTFP : Non Timber Forest product; SEFECCAM : Société d'Exploitation Forestière et Commerciale Camerounaise.*

A Professional Master's dissertation in Environmental Impact Assessment defended on July 25th, 2014 in CRESA Forêt-Bois, Yaounde, Republic of Cameroon.