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Governance of Non-Timber Forest Products (NTFPs) Djansang (*Ricinodendron heudelotii*) and Wild Mango (*Irvingia gabonensis*) and Its Influence on the Livelihood of Rural Communities of Yokadouma in the East Region of Cameroon

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Abstract

The objective of the study is to contribute to the sustainable governance of Non-Timber Forest Products (NTFPs) (Djangsa and Wild mangos) on rural livelihood of communities surrounding the rainforest in Yokadouma. The economic potential of Non-Forest Timber Products (NTFPs) and its influence on rural livelihood and development has made it a constant national and international policy debate. However, Cameroon policies and institutional Legal framework is inconsistent with the exploitation and valorisation of these important rural livelihood activities. This study was carried out in Yokadouma in the East Region of Cameroon between February and July of 2020. Respondents were drawn from a cross-section of NTFPs exploiters and marketers. Data was collected through the administration of semi-structured questionnaire design with the aim to answer the research objective. During the recognisances survey, 172 persons concerned in these activities were identified within the 09 villages in the Yokadouma division. Out of these 172 identified persons involved in this economic sector, 165 were interviewed accounting for 96%. Data analysis was done in SPSS version 21 software. Results showed that the NTFPs sector is organized by 02 actors within the value chain who are the producers and retailers. Economic analysis of value chain revealed that producers were able to make 272,780 and 322,367 FCFA per person per season form djansang and wild mangos respectively. The constraints to sustainable management of NTFPs are the gradual disappearance of these tree species, instability of the production cycle, and stumpy involve-

ment of economic operators in the processing chain, the harassments linked to inadequate legislation and the absence of standard measurement units used by retailers of these products. If NTFPs is well managed, it will create jobs and contribute to the economic development and subsequent improvement of livelihood of these rural communities.

Keywords

NTFPs Value Chain, Governance, Djansang, Wild Mangos, Livelihood

1. Introduction

The world's forests cover an area of 4 billion hectares in the world, i.e. around 31% of the planet's submerged land (FAO, 2011). These forests are of paramount importance especially since they provide goods and services that are essential for more than 1.2 billion people around the world (FAO, 2004). The dense forest of the Congo Basin is the second largest forest in the world after the Amazon Basin (ECOFAC, 2004). The rainforest covers an area of approximately 204 million hectares (Mbongu et al., 2006). The Cameroonian part of this forest covers an area of more than 22 million hectares or 47% of the national territory (GFW, 2000). This dense forest has a great diversity of biological resources, including Non-Timber Forest products (Abanda, 2013). FAO (2009) considers all resources other than timber to be non-timber. However, arguments remain divided on the products that fall into this category. For some, resources of the animal kingdom such as shrimps, snails and various insects found in forests are Non-Timber Forest Products (FAO, 2009). However, non-timber forest products are the products of plant origin and some species of micro-fauna whose importance remains capital for the populations (Abanda, 2013).

In Cameroon, as in most developing countries with forest cover, Non-Timber Forest Products ensure the maintenance of food security for many rural households (Guedje et al., 1998). They use these products to heal themselves, feed or earn the necessary income to meet basic necessities (Ingram et al., 2016). Activities related to the exploitation of Non-Timber Forest Products contribute to financial resources of rural women, who represent the most active people in the recovery sector (Awono et al., 2009a). Rural communities get most of the craft material, food, medicine and spirituality (Abanda, 2013). The sustainable management of Non-Timber Forest Products is now a constant talk in national and international forestry police framework, which makes these non-wood resource an economic potential (Ingram et al., 2010). According to the same author, the rules governing the exploitation of these products are recorded in all texts relating to the management of forest resources. Forest code which is the Cameroonian forest policy guide penalize the valorisation of these products with inconsistency of laws that do not encourage efficient management and marketing of these important forest resources (Awono et al., 2009b; Tieguhong et al., 2010).

However, the localities bordering the forests where non-timber forest products are being exploited should also take advantage of these benefits, as they remain more vulnerable to dieback resource.

The Sustainable Development Goals in 2015 (SDGs) constituting a set of decisions that improve the living conditions of the present without putting endangered resources for future generations. This new international policy places human beings at the centre of concerns for sustainable development and its objective 15 places a special emphasis on the integration of rural communities in the management and conservation of forest resources. At the level of Cameroon, Non-Timber Forest Products occupies an important place in the lives of populations, especially those who depend on the products for their livelihood, and the scientific community with increasing research and publications (Arnold & Pérez, 2001; Schreckenberg & Newton, 2006; Ingram et al., 2016). This work demonstrates the existence of important markets for these products, both within national borders (Shackleton et al., 2007) and export (Pérez et al., 1999). It is in this perspective that this study was conducted on the governance of Non-timber forest products and its contributions on the livelihood of the populations of Yokadouma sub-division of (East Cameroon) for the case of djansang (*Ricinodendron heudelotii)* and wild mango (*Irvingia gabonensis*). This subject is justified by the economic challenges inherent in the sustainable management of products. The decentralised local administrations in the study area need to find options for viable and inclusive solutions for improving the living conditions of populations using these products.

2. Material and Methods

2.1. Study Area

Yokadouma is located in the Division of Boumba-et-Ngoko, of East Region of Cameroon. It was created in 1955 and covers an area of 109,002 km^2 which makes it the largest division in Cameroon. It is boarded to the East by the Central African Republic and to South by Congo Republic (**Figure 1**). It is geographically located on latitude 3˚31'N, and longitude 15˚03'E with an elevation of 560 m above sea level. It has population of 75,648 inhabitants (Census, 2012). Temperatures range between 25˚C and 35˚C. The tribes inhabiting this area are the Baka, Bantu, Fulbe and others. This area is rich in biodiversity with the Boumba-Bek National park at the centre. The wildlife species found in this park are: the elephants, Gorillas, Chimpanzees' and many species of ungulates there is also an abundances plants species such as Combretaces, Sterculiaces, Meliacees and Ochnaces. The biggest challenge to conservation in this area is parching and illegal lumbering (PNDP, 2012). The primary activities of majority of the population in this area are farmers, herders and small traders.

2.2. Districts in the Study Area

Yokadouma Division has 09 districts out of which 06 districts are areas of

NTFPs production hub. The six (06) districts that are production hubs are (Figure 2 and Table 1).

2.3. Methodological Approach

The methodological approach adopted for this study was essentially participatory,

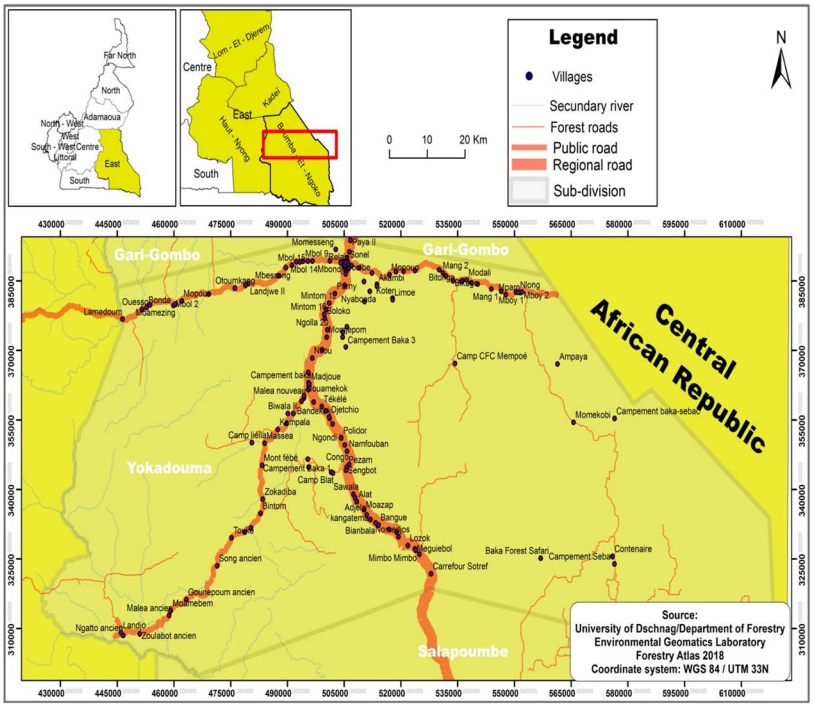

Figure 1. Map of the study area.

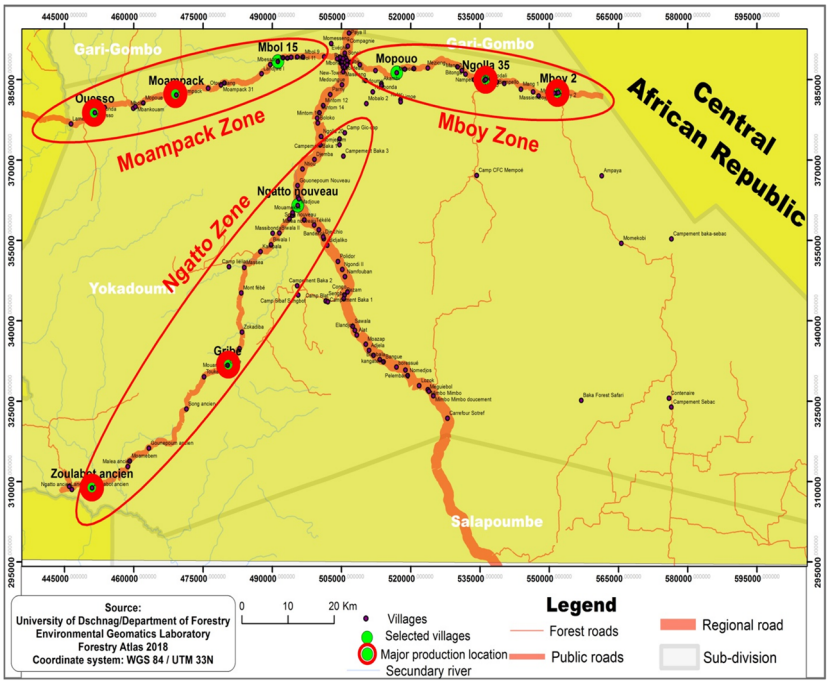

Figure 2. Map showing areas of NTFPs production Hub.

Table 1. Villages of NTFPs production hubs.

Production zones	Number of districts	NTFPs Production hubs
Zone Mboy	02	Nboy 2, Ngolla 35
Zone Moampack	02	Moampack, Ouesso
Zone Ngatto	02	Gribe, Zoulabot ancien
Total	06	

involving all the socioeconomic and organizational configurations of the communities in Yokadouma. A total of 172 respondents were identified during the reconnaissance survey with the assistance of the divisional delegate of Forestry and wildlife for Boumba-et-Ngoko out of which 165 respondents were interviewed that accounted for 96% of the respondents. This approach is corroborated by Thomas and Middleton, 2003 guidelines for planning of forest resource management where all actors involved in the exploitation of NTFPs (djansang and wild mangoes) are invited to participate in decision regarding their economic activity.

2.4. Data Collection Techniques

Data was collected through the administration of semi-structured questionnaires and an interview guide. Triangulation technique was involved to cross verify information. It consisted of the administration of semi-structured questionnaires to stakeholders (Producers and retailers of NTFPs). Interview guides was also administered to technical ministries (DD-MINFOF, DD-MINADER), Municipality of Yokadouma and international technical partners (WWF and GIZ).

2.5. Data Analysis

Data analysis was carried out using 02 approaches namely: quantitative data was process using SPSS version 21 software and qualitative data was done base on content analysis. This made it possible to propose a mode of governance for NTFPs in the study area so as to improve its management.

Calculation of the value added on the economy of each producer

To determine this value, the average quantity of each NTFP produced per producer was multiplied by the average selling price as indicated by the following formula (GIZ, 2011):

$$VA = P_m * Qty_m$$

VA: Value added in FCFA per producer per season;

P_m: Average selling price in FCFA;

Qty_m: Average quantity produced per season per producer.

3. Results and Discussions

3.1. Djansang and Wild Mango Value Chain

The organization of the targeted NTFPs sectors gives a general overview of the

different links in the value chain of each of this product; it also represents the actors involved and identified the interrelationships between stakeholders. This organization integrated the activities of production and marketing of NTFPs in the study area.

3.2. Producers

The results obtained from the people surveyed showed that the production of NTFPs is provided by a single category of actors who work in the informal sector, namely the djansang and wild mango sector. Groups of 3 to 5 persons within a household organise themselves to harvest these products. These harvests are usually accompanied with ritual songs. These collectors are mostly from the Baka ethnic group who intern sale the produces to Bantu retailers that reside in urban centres. This is in line with study carried out by Roques et al., 2019 who also found that the Baka are the primary collectors of NTFPs and in turn sale these products to Bantus who then transform and retailers the products in the major cities. This activity takes place at the peripheries of the forest and the reserves of the East Regions of Cameroon. These products are harvested between the period of September and December of each year. The collectors use rudimentary tools such as machete, locally woven basket and bags for the collection and transport of the products from the forest to the village mostly on head or on motor cycles. **Figure 3** shows the average duration as a function of the number of tours carried out during a collection season. It also provides information on the scarcity of the products. The cumulative percentages of collectors 64.29% on average move between 5 to 40 days within the harvest period. Collectors that, move shorter distances away from the village accounts for only 35.71%. These collectors move within the harvest period between 1 and 4 days away from their homestead.

3.3. Transformation

The processing of NTFPs in the study area still remains artisanal. This first

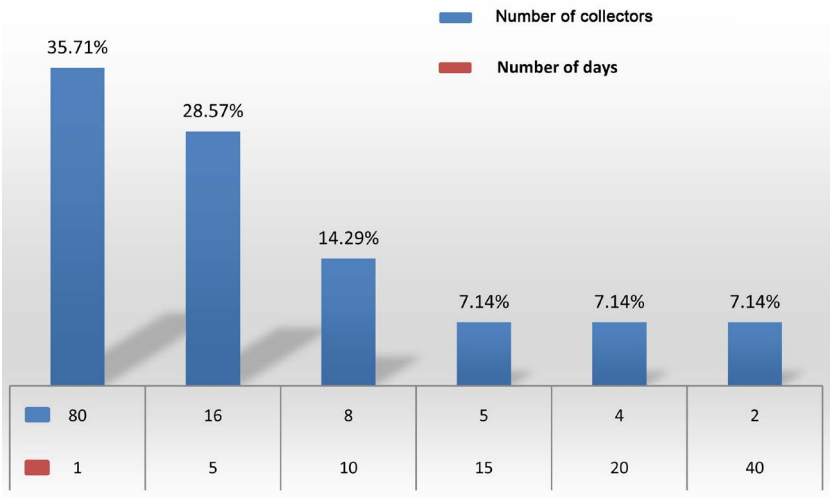

Figure 3. Shows the number of NTFPs collectors and days use in collecting NTFPs.

process in the transformation value chain consists of cleaning, followed by shelling the nuts and drying the nuts (using traditional dryers) and lastly marketing of the products. Women lead cooperative (RAFBN) in Yokadouma that is also involved in the processing of NTFPs. Their processing unit set up in 2019 thanks to the project "improving the value chain of Non-Timber Forest Products (NTFPs)" a support from GIZ. This cooperative is transforming djansang and wild mangos into vegetable oils, butters and powders. The by-products of this transformation unit is paste (57% fats), the paste is use in manufacture of soaps and detergents. This transformation model was adapted from that of the cocoa bean pressing model in the KOMET DD 85-G extruder as described by Roques et al. (2019).

3.4. Marketing

The marketing activity of djansang and wild mango is conditioned by obtaining a permit to collect NTFPs and the regular payment of taxes in the District of Yokadouma to conduct local and national business transactions. The collectors do not have permits but majority of the retailers and the transformation units are oblige to own permits and pay taxes. This activity involves an interaction between producers, processors, forestry administration, finance administration and traders in NTFPs.

3.5. Producers and Traders Relationship

In this relationship, traders move from the city of Yokadouma to the interior villages to buy products that have undergone the first transformation (shelling and drying). Here, the retailers set up the purchase price depending on the distance of the village to Yokadouma, condition of the road and the period of plenty. The price of the djansang varies from 1000 to 3500 FCFA per kilogram and that of the wild mango 1500 to 4000 FCFA.

3.6. Relationship between Retailers, Forestry Administration and Finance Officers

The retailers buy their products from wild collector/producers who in turn stock these products in local warehouses. The retailers them invite the forestry administrator who will assess the product quality and quantity. The latter then issues them an authorization to pay the regeneration tax against receipt to the public treasury or in any of the competent finance collections centres set at 10 FCFA/per kg as stipulated by finance law n˚ 2016/018 of 14 December 2016. Retailers after payment of these taxes can transport the goods to the different markets within the country and also export to neighbouring countries like Nigeria, Gabon, Congo, etc.

3.7. Producers and Processors Relationship

Co-operative members collect NTFPs for the co-operative (RAFBN) that does

the primary processing. After transformation, the plan makes the finished products available to the retailers based in Douala for export. After the sale, the profits are redistributed to the members of the cooperative in proportion to the amount of product contributed to the cooperative.

3.8. Transport

NTFPs traders who transport their products are provided with a consignment note taken from a logbook of regulatory model, initialled by the divisional delegate of forestry and wildlife for the Boumba and Ngoko, indicating the quantities and specification of the products transported, as well as their origin, which complies with the rules governing the transportation of NTFPs as specified in article 127, paragraph 2 of the decree implementing the forestry regime. Agents of the forest administration can, at any time, carry out checks to ensure that NTFPs transported comply with the indications given on the documents presented. GIZ in 2014 found similar results in the Mbang and Lomié council in the East of Cameroon where NTFPs retailers were issued with the same destination permit. The study showed 25% for wild mango; and about 45% for djansang is consumed locally while wild 75% wild mango and 55% for djansang is being exported to the neighbouring countries. Ingram et al. (2016) observe 67% of the NTFP produce in Cameroon is exported to neighbouring countries.

3.9. The Role of NTFPs on the Local Economy

The economic analysis of value added by NTFPs (djansang and wild mango) sectors on the local economy of producers who are mainly populations bordering the forests. This added value is, in this case, the total value of the sale of these produced during a period of one year without counting the contribution of the other income generating activities (agriculture, petty trade, livestock, etc.) in the study area.

3.10. Measurement Unites of NTFPs

The measurement unites for NTFPs in the rural communities are not standardized. In the production area, local producer's instants use buckets which are usually in litters (**Table 2**). The study has tried to convert the local measurement unites into standard measurement unites which is the kilogram.

3.11. Selling Price on the Local Market

The selling prices of products are taken as the average between the price in times of abundance and in times of scarcity (see **Table 3** below) on the local market.

3.12. Quantity Collected Per Person for Each Production Season

Regarding the evaluation of the quantity of each product, the average was found between the quantity brought back from the forest in times of abundance and in times of scarcity (**Table 4**).

Table 2. Measurement device for djansang and wild mango.

Volume in Litter	Weight in Kilogram (kg)	
	Wild mango	Djansang
1 glass cup 120 ml	0.11	0.11
1 metal cup 158 ml	0.13	0.13
1 metal cup 1 L	0.72	0.74
1 Plastic bucket 2 L	1.66	1.71
1 Bucket 5 L	3.60	3.70
1 Bucket 15 L	10.79	11.11
1 Bucket 30 L	21.58	22.23
1 Jut bag 100 L	86.32	88.91
1 Jut bag 200 L	172.64	177.82

Table 3. Shows local prices of products.

Product	Price per period (FCFA)/Kg		Average price per kg (FCFA)
	Abundance	Scarcity	
Djansang	2565	6840	4703
Wild Mango	1660	5810	3735

Table 4. Average quantity of produce collected per season per person.

Products	Quantity (Kg) per season per person		Average Quantity (Kg)
	Abundance	Scarcity	
Djansang	74.12	41.89	58.01
Wild Mango	114.77	57.85	86.31

According to the results in Table 4 above, djansang producers collected an average quantity of 58.01 Kg per person for a period of 35 days within the production season. However, for wild mango the average quantity collected per person was 86.31 kg within the pick production season.

3.13. The Economy Value Added to Producers

To determine the value, the average quantity of each NTFPs collected per producer was multiplied by the average selling price as indicated by the following formula (GIZ, 2011). Applying this formula, we find Value Added by djansang to the local economy = 272,780 FCFA per producer per season and that for wild mango = 322,367 FCFA per producers per season respectively. This result is different from that found by Awono et al., 2010 who calculated the average income of a producer of wild mango in Cameroon to be a little more than 200,000 FCFA per season. This difference can be explained by the product scarcity and stringent policies on the exploitation of NTFPs in Cameroon. Furthermore, there is an increase in the demand for NTFPs from the neighbouring countries. How-

ever, when the purchase price of products becomes too high it will also increase the retail price in the local markets. The greatest challenge is to find the best conciliation between fair prices from producers and retailers which is profitable to all and that which will attract consumers to sustain the sector (Roques et al., 2019).

3.14. Constraints to the Sustainable Management of NTFPs

These therefore constitute the basis of the mode of governance. This situation does not favour the valuation efforts undertaken by various operators. However, the djansang and wild mango sectors also offer many opportunities. Thanks to their food, economic and medicinal values, these sectors contribute to irrefutable way to achieve the Sustainable Development Goals. The shelf life of these products that can range from 6 to 12 months makes it possible to conquer more distant markets. This analysis integrates mainly the production and marketing of NTFPs taking into account the processing which will gradually gain momentum and ultimately constitute to a source of wealth creation from the NTFPs. This result is similar to the results obtained by MINFOF in 2018 where the study diagnosis the strengths and constraints of NTFPs sectors for the preparation of the national product development plan for Non-timber Forest products in Cameroon. The results are also similar to that of Awono et al., 2010 which shows that the NTFP sector faces a certain number of constraints, among which is the gradual disappearance of tree species, instability of the production cycle, low involvement of economic operators in the processing chain, the various harassments linked to inadequate legislation and the absence of standard units of measurement for these products at the rural community level.

3.15. Governance Approach to Improve the Djansang and Wild Mango Sectors

To enable the djansang and wild mango sectors contribute to the local economy growth and create jobs over the next 5 years, the vision of forest governance should be to develop NTFPs sector through trainings on the production and processing of these resources. A new model should be developed based on sustainable management practices, which will integrate equitable access to all, human capacity building, economic and technological development with poverty reduction at the centre. The proposed governance approach should comprise of 04 programs based on the 03 pillars of forest governance: 1) Improve legal policies, institutional and regulatory frameworks. 2) Integrate participatory planning and decision making. 3) Interaction of different stakeholders and local people in the implementation process.

The general objective of this mode of governance is to increase the contribution of NTFPs to the income of the local population by at least 20% within the next five years and to reduce poverty in the locality through a sustainable and more meticulous development of the latter. Its implementation should be based on consultation with the public administration, financial and technical partners

and the active involvement of local people in the planning, implementation and monitoring of activities.

The development of this governance model takes into account the direct and indirect constraints that influence the emergence of NTFPs. The issues identified in this process relate to political, legal, technical, technological, scientific and economic considerations. In this regard, 04 programmes are examined in this paper which are:

- Improving the legal and regulatory framework;
- Sustainable resource management and increasing productive;
- Promotion of processing and marketing;
- The organization, structuring and collaboration of stakeholders.

Programme 1: Improving the legal and regulatory framework

The objective of this program is to promote sustainable management, equitable access, resource development and poverty reduction in the Yokadouma through an adequate legal and regulatory framework. Indeed, the flexibility of the legal and regulatory framework noted in the field can mean lack of precision and non-adaptation to the practical realities of different stakeholders. It can thus constitute an obstacle to the taking of measures or the implementation of concrete actions. Specifically, the expected results of this program at the end of year 5 period of implementation of this mode of governance, adapt legal and regulatory framework governing the valorisation of NTFPs; the adopted legal and regulatory texts are popularized; the passage of actors from the informal sector to the formal sector is effective; the adequate taxation governing the taxes of the sectors is reviewed and implemented.

The appropriate legal and regulatory framework governing the evaluation of NTFPs is adopted

It was noted in the field that there is a great deficit in the legislation governing the exploitation of NTFPs, and those that exist at present have many inconsistencies, in this regard, there is an urgent need to proceed with the improvement of policy and legal procedures through the promotion of NTFPs legislation that encourages local initiatives rather than reinforcing sanctions. Furthermore, based on the analyses of the considerations for integrated governance of NTFPs, the main activities to be planned and implemented by the 5th year to achieve this outcome are:

- Monitoring the ongoing process of adopting the legal and regulatory framework; and
- Formulation and finalization of proposals to improve the regulatory framework.

Adopted legal and regulatory texts are popularized

It is a question of taking into account the possibilities of violation of the new laws, interpreting the different measures such as principles, procedures and sanctions and disclosing them to the different actors. Understanding of the legal texts has an enormous influence on the management options to be put in place. Hence, there is the need to define and implement a system for popularising these

texts. It will be necessary to proceed with:

- The editing of the texts concerned;
- Raising awareness and popularising the new texts.

The migration of actors from the informal to the formal sector is effective

The observation made in the field is that all the actors involved in the exploitation of djansang and wild mango operate informally and therefore without planning and monitoring of their activity. It is therefore vital to remedy this by creating conditions for formalisation where the producer feels secure. To achieve this, the following activities will be carried out:

- Organisation of local actors into common initiative groups (CIG);
- Accompanying the actors in the formalisation process.

Appropriate levies governing the charging of fees is reviewed and implemented

Information obtained from the field shows that only actors involved in the commercialisation of NTFPs are holding a licence to exploit these products and pay taxes. Seen from this angle, these sectors do not contribute enough revenue to public treasury despite its potential. The following activities should be implemented:

- Conducting a study of the economic effects of the regulatory framework;
- Extension and continuation of the tax reform on NTFPs exploitation and valorisation.

Programme 2: Sustainable resource management and increasing productive capital

The objective of this program focuses on the overall improvement of knowledge and productivity for the sustainable management of djansang and wild mango. Interviews with potential financial and technical partners have shown a strong willingness on their part to participate in the enhancement and development of these sectors. The main results expected in the 5th year of implementation of the present mode of governance are:

- The potential for djansang and wild mango is estimated in the division;
- More plantations of these products should be created to support the domestication initiatives;
- A system for collecting and producing reliable statistical data on NTFPs is functional.

Programme 3: Promotion of processing and marketing

The promotion and development of djansang and wild mango processing is aimed at adding value to these products by ensuring decent employment. Further processing of these resources will help stabilise raw material prices and reduce clandestine exports of these NTFPs. Indeed, at the national level, Cameroon has significant achievements in the field of NTFP processing thanks to the support of NGOs and other development partners. Particularly, the project "Mobilisation et renforcement des capacités des PME/PMI impliquées dans les filières PFNL" with the participation of SNV has facilitated the manufacture of a splitting tool for wild mango fruits in 2009 (MINFOF, 2018). ICRAF has also

developed a machine for crushing djansang; the Italian NGO ACCRA supported the establishment of a modern high-value Neem oil production unit in Yagoua for the international market. ANOICO has set up a modern shea butter production unit in Garoua for the international market. In the same vein, processing units could be set up in the Yokadouma for the valorisation of NTFPs. The expected results for this programme are:

- The work of training institutes, research institutes and projects on techniques, technologies and machines developed is recorded, capitalised and disseminated;
- At least one djansang processing unit and one wild mango processing unit is set up;
- Standardization unit for different NTFPs is defined, approved and used;
- The plan to promote the use of djansang and wild mango products is being implemented;
- The stabilisation of prices for raw materials and by-products of primary processing is supported.

Programme 4: Organisation and structuring of actors

The objective of organising and structuring stakeholders is to promote the grouping of stakeholders into categories (producers, processors, traders) in order to facilitate capacity building and the sharing of experience; their participation in the formulation and implementation of policies and strategies for the development of the sectors and businesses; and to benefit all the opportunities offered by the national and international environment in relation to the promotion of the green economy. The expected results are:

- The list of the main actors of the meetings by category is known;
- The (organisational, technical, material) capacities of the actors are strengthened;
- Stakeholders' concerns are taken into account in NTFPs policies and strategies;
- Synergy, communication and sharing of experiences are improved.

4. Conclusion

The objective of this study is to contribute to the improvement of the living conditions of forest dwellers by proposing sustainable governance of Non-Timber Forest Products (djansang and wild mango) in Yokadouma. The study analysed the value chain of djansang and wild mango, identify the constraints and opportunities for the sustainable exploitation of these Non-Timber Forest Products at the local level and propose a mode of governance to optimise this sector. The districts of Mboy, Moampack and Ngatto were selected for the study because of the abundances of these products in these areas.

The result showed that the value chains integrate the production activities carried out by local populations, who are generally gathered in groups of 3 to 5 people per household. The processing units of NTFPs in these localities are essentially artisanal and present semi-finished products to consumers, but the

good news is that, modern processing is gradually taking place with one operational processing unit put in place in Yokadouma.

Marketing activity remains conditional on obtaining NTFPs collection permit and regular payment of taxes to the local council of Yokadouma.

Regarding the value added to these products, the economic analysis of the overall value production chain on the local economy showed that the sales of these products over the course of a year, without counting the contribution of intermediate income-generating activities which are agriculture, small-scale trade, livestock farming, etc., is estimated at 272,780 CFA francs and 322,367 CFA francs respectively for djansang and wild mango per producer per season.

The constraints and opportunities of each link in the value chain (production, processing, and marketing) were identified. The results revealed that, NTFPs has not significantly improved the living conditions of the local people of Yokadouma despite its economic potential in the region, To this end, the shared governance mode centred on 04 programmes and oriented towards the 03 pillars of forest governance which are, the improvement of the legal and regulatory framework, the sustainable management of natural resources and the increase production capital, the promotion of processing and marketing, the organisation, structuring and collaboration of actors and stakeholders. The vision of this style of governance is to develop the sectors, ensures sustainability and valorisation of these NTFPs through better knowledge, sustainable management and further processing of the resources that will integrate equitable access, economic and technology development and the end results will be poverty reduction and improve standard of living of the rural communities of Yokadouma.

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Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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Appendix: Photos of NTFP

Photo 1. Collectors of wild mango.

Photo 2. Wild mango processors.

Photo 3. Processed wild mangos.

Photo 4. Processed djsanang.