

Valuing the Cameroonian forest

Editorial

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For twenty years, sustainable forest management and the preservation of a permanent forest domain have been the overarching objectives of forestry policy in Cameroon. Alongside the implementation of this public policy, the low population density, lack of transport infrastructure and rural exodus have limited the damage to forest cover (Rudel 2013). This policy has been supported by many studies that emphasised the significant contribution of forests to national economies and to rural livelihoods, for example by the World Bank (Vedeld *et al.* 2004), FAO (Rametsteiner and Whiteman 2014) and UNFF (Agrawal *et al.* 2013). However, the apparently good status of the Cameroonian forest estate is coming under threat with increasing expansion of agro-industrial exploitation, shifting cultivation, infrastructure construction and selective logging, which are considered the dominant drivers of deforestation (Verhegghen *et al.*, this issue).

The purpose of this Special Issue of the International Forestry Review is to provide an updated estimation of the economic benefits of forest resources in Cameroon, to inform on the financial advantages of forest management and, conversely, on the opportunity costs of deforestation. To do so, we adopted an intermediate approach based on the collection of primary data at the national level and a broad review of scientific and technical literature. This practical direct valuation covers only the subsistence and cash incomes from forest resources that are actually exchanged between economic actors as part of legal or informal harvest and trade. We also made a tentative calculation of the future potential benefit of sequestering carbon under a REDD+ mechanism (Sonwa *et al.*, this issue), but the protection of this ecological function has not received direct payments in Cameroon. Other environmental and non-use values, which could potentially be assigned to certain forest areas or species (Lescuyer 2000) are not included in our estimation. Thus, our analysis provides mainly a financial assessment of the value of forest products based on market values rather than an estimate of the total value of forest resources.

The valuation of forest products is essential to improve the design and implementation of public policies for sustainable development and poverty alleviation from the perspective of an inclusive green economy. The lack of information on the

value of subsistence and informal cash revenues from forests has led to an overemphasis on forest governance of products, such as timber, that are highly visible and with a market value (Agrawal *et al.* 2013). The focus on industrial exploitation of timber has obscured other forms of income derived from forest resources and has downgraded the perceived economic value of forests. Such a perception of forest uses and benefits creates an information asymmetry that poses a bias to policy-makers' knowledge for rational policy hierarchy setting regarding the allocation of land uses (Kengoum *et al.*, this issue).

A secondary objective of this Special Issue is to estimate the capacity of national accounting to evaluate the real contribution of the forest sector to the economy. Although methodological approaches have long existed to integrate informal practices (Blades 1975) and natural assets (Ahmad *et al.* 1989) in national accounts, the lack of a systematic data collection of forest resources in national accounts has created significant biases in data on the Congo Basin countries. We appraise these biases by aggregating our estimates of the added-value of different sub-sectors and comparing them to the macro-economic data provided in the national accounts.

What does the valuation of the current use of forest resources in Cameroon reveal? First, and not surprisingly, the timber sector has the highest value (Cerutti *et al.*, this issue). The fuelwood sector also has a significant value, although it remains largely informal (Eba'a Atyi *et al.*, this issue). Non-timber forest products (NTFPs) (Awono *et al.*, this issue), chainsaw milling (Lescuyer *et al.*, this issue) and hunting (Lescuyer and Nasi, this issue) each contributed around 0.2% to Cameroonian GDP (non oil) in 2013. In contrast, sport hunting (Lescuyer *et al.*, this issue) and tourism (Nlom *et al.* 2013) have a negligible contribution to GDP.

However, it is noteworthy that the contribution to GDP is not a significant indicator of employment. There are many more people involved in hunting, fuelwood, chainsaw milling and NTFP sectors than in the formal sectors, although these jobs are seldom comparable in terms of time spent, working conditions, and social protection.

All of the domestic-oriented forest product sectors rely mainly on informal (i.e. illegal or un-regulated) practices.

Their large extent can be explained not only by opportunities for profit maximization but also by the inadequacy of controlling regulations and capacities of rural small producers to comply with the law. Legal compliance is often unattractive for those engaged in the sectors because regulations are complex and costly and do not provide a clear financial return. The State shares responsibility for the predominance of informal activities in the forestry sector for three reasons. Firstly, the lack of means to enforce regulations is often quoted, but, secondly, public authorities may have little incentive to regulate these informal jobs given the context of high unemployment (Charmes and Adair 2014). Finally, many civil servants improve their low salary through systematically racketing informal producers and traders of forest resources, without increasing pressure on the public budget. Additionally, industrial logging and sport hunting, and some NTFPs which are mainly sold in international markets, which are considered to be within the formal sector, also encounter serious difficulties with the enforcement of regulations, which in turn reduces their economic efficiency.

The results presented in the papers in this Special Issue of the International Forestry Review suggest the need for three approaches to research and action to improve the sustainable management of forest resources in the Congo Basin countries.

- **Firstly, there is a need to recognize the importance of domestic consumption of forest products in the development of forest policy.** Domestic consumption of forest products has been largely ignored in the current forestry policy, despite the overwhelming majority of rural people being ‘producers’ of forest goods that are consumed by almost all Cameroonians. In this context, international conventions covering carbon sequestration, biodiversity protection and timber legality have had a negligible impact on cash incomes from forest revenues. Instead, the achievement of sustainable forest management depends largely on domestic markets for forest products and on commodities – especially agricultural and mineral – produced in and often to the detriment of forest areas. As Sayer *et al.* (this issue) show for the Tri-National Sangha landscape, the evolution of forest resources and implications for local livelihoods has little to do with the interventions of aid agencies and conservation organisations but is largely affected by external influences, such as the global financial crisis in 2008. It is difficult to anticipate the evolution of the forest sector in the long term without a better understanding the interactions with other productive sectors and demand and supply in domestic markets.
- **Secondly, the procedures to integrate informal uses of forest resources in national accounts should be improved.** The comparison of macroeconomic estimates of forest-related activities in national accounts (Nkou and Eba’a Atyi 2013) with our assessments of sub-sector analyses, indicates a significant under-valuation of the economic benefits derived from forest resources in official statistics. Two main reasons

explain this difference. First, the classifications used in public accounting are poorly suited to assess and analyse the diversity of forest resources. Moreover, this failure is due both to the low frequency of surveys and the nature of surveys used, which are often inappropriate to capture the value and extent of highly sensitive, illegal forest activities.

- **Thirdly, the information on the uses of forest resources in Cameroon – and in Central Africa – should be more easily accessible.** Mechanisms to systematically collect, verify and publicize this information have long been proposed and urgently need to be developed. For instance, the website of the Ministry of Forests and Fauna could present statistics on other forest sector activities as well as industrial logging. Similarly, the Observatory of Central African Forests could serve as a receptacle for the many scientific and technical publications on the value and management of forest goods and services. A better dissemination of such data would contribute to show that forests have a far greater economic value beyond timber logging, and could be used to prevent the increasing pressures of forest conversion to other land uses. Valuing forest resources also services to clarify and optimize the interactions between complementary and competing uses of forest resources, and to make a transition from informal exploitation of forest resources to sustainable and legal harvest and trade.

Cameroon has tremendous forest resources but forest policy needs to be revised to include the points made above in order for its potential to be realized and to contribute to the development of a persuasive green economy.

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