Level of Integration of Sustainable Land Management in the Development Strategies and Policies in Cameroon

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Abstract

This study has assessed the level of integration of Sustainable Land Management (SLM) measures by the The Vision 2035, National Development Strategy – 2030, Rural Sector Development Strategy (RSDS), and Decentralization Policy, four documents for harmonious implementation of land-based development activities In Cameroon. Interviews provided additional information. It was found that provisions for SLM measures were contained at the stages of analysis of the existing situation and diagnosis and formulation of strategic choices for the four documents. Only the RSRS has prescribed activities' monitoring and evaluation. Constrains included (i) lack of criteria and indicators for SLM practices (ii) gaps in information regarding the flows of funding for SLM, and (iii) limited logistic and technical capacities, to name a few. Developing a land change information sharing system and revising existing documents were proposed to better integrate and enhance funding for SLM.

Keywords: Land degradation, SLM mainstreaming, resource mobilization, Cameroon

1. Introduction

Up to 25% of the world's land is severely degraded, 36% is slightly or moderately but in stable condition, and only 10% is in the process of being improved(FAO, 2011). In Cameroon, the pressure on land and natural resources appears to be increasing, whether for subsistence needs, fuelwood, grazing, loggingor the implementation of development projects. The most recent estimates put deforested areas and degraded lands at around 12 million hectares, with a general tendency to worsen the phenomenon due to both natural and anthropic factors (MINEPDED, 2018). Based on land cover, land productivity, carbon stocks, three indicators retained by the Land Degradation Neutrality (LDN) process that give a good knowledge of the state of the land's natural capital and the ecosystem services it provides (UNCCD, 2017), it was noted in Cameroon that between 2000 and 2010 forest has shrunk by 619 km² and cultivated land has increased by 321 km². With regard to the dynamics of land productivity, 8,245 km² of land have declined. In addition, 438,723 tonnes of carbon i.e. 0, 02% of its carbon stock were lost via the conversion of forest areas into cultivation areas (MINEPDED, 2018). Subsequently, desertification and land degradation are widespreading and affect all ecosystems including the wettest. However, since at least the Earth Summit in Rio de Janeiro, Cameroon has developed and timidly implemented strategies and actions within the framework of several initiatives, both national and international, using own funds or with the technical and financial support of partners. Therefore, SLM should be promoted to increase the mobilization of resources including financial resources for its effective implementation.

The concept of SLM was an outgrowth of the 1992 UN Conference on Environment and Development. Guidelines for SLM have been proposed by FAO (FAO, 2021) and outline four criteria for sustainable land management notably (i) production should be maintained (maintenance of land productivity), (ii) risks should not increase (control of risks) (iii) quality of soil and water should be maintained (maintenance of the quality of soil and water), and (iv) systems should be economically feasible and socially acceptable (economic feasibility and social acceptance of systems).Integrating SLM measures in development strategies and policiesto ensure sustainable development has been discussed widely and land quality/issues suggested as input into the development planning process and, relevant sectoral plans and policies(Bastidas, 2019).It also deals with processes that enable to manage the risk of land degradation or desertification when using land, natural resources and environment to meet the needs of human populations.

Land is a critical productive asset on which many livelihoods depend. In fact, it undergoes several modifications and adaptations during the processes of production of goods for humansand livestock that usually lead to its degradation overtime. Logic holds thatdifferent sectors and actors whose activities are land-based should incorporate SLM measures in their policies, strategies and plans to help minimizing land degradation, as well as enabling resource mobilization for SLM among other things. Agriculture, land-based infrastructures, mining and biodiversity share many common concerns regarding land use that could be used as a basis for capturing sectorial financial flows for the implementation of SLM measures.

In 1999, Cameroon has ratified the Framework Convention of the United Nations to Combat Desertification (UNCCD) to mark its interest in the SLM. Then, in 2007, its Government has also developed and validated a National Action Plan to Combat Desertification (NAP/CD) that promotes (i) participatory land use management,(ii) sustainable management of natural resources,(iii) restoration of degraded lands and improvement of soil fertility, (iv) capacity building, and (v) concerted management of shared resources. Among the major challengesfacing the NAP/CD are the availability of substantial financial resources, the integration of SLM into major development processes, and the monitoring and evaluation of NAP's implementation. In 2010, the Government has developed an Integrated Financing Strategy (IFS) in order to increase the financial resources for SLM (MINEP, 2010).

Given the projected increase of financial flows within a number of land-related sectors namely agriculture, mining, energy, water and sanitation, tourism, there was a clear need to examine the level of SLM integration in the development policies and in the national and sectorial strategies as well. In Cameroon, much of work done on environmental mainstreaming into policies, national and sectorial strategies did not place focus on sectoral resource mobilization for SLM which maintains production and ecosystem services that sustain human welfare (Ngouana Kengne & Tchoffo, 2011).

This study focused on the assessment of the level of integration of SLM in the development policies and strategies in Cameroon.

2. Materials and methods

Four policies and strategies frameworks were used in the evaluation of the level of integration of SLM measures in the development planning in Cameroon including (i) The Vision 2035, (ii) National Development Strategy (NDS-2030), (iii) Rural Sector Development Strategy (RSDS), and (iv) Decentralization policy. They are frameworks that address quite comprehensively the key issues related to land management.

The vision 2035 was elaborated by the Government in 2009 to strengthen economic recovery by the year 2035 with the participation of civil society, the private sector and development partners. The four goals were to (a) reduce poverty to a socially acceptable level, (b) make the transition to a middle-income country, (c) achieve newly industrialized country status, and (d) strengthen national unity and consolidate the democratic process. The NDS-2030 covers the period 2020 to 2030. It focuses on spurring growth, creating formal employment and reducing poverty. It highlights the Government's commitment to the achievement of the Sustainable Development Goals. The inter-ministerial RSDS under revision to cover 2020-2030 envisaged (i) developing large-scale farming in various regions, according to their agro-ecological characteristics, (ii) achieving economies of scale and a substantial production growth, and (iii) promoting access to production areas to enable the full potential of estates and small-scale operations to be realized. Expected achievements were the modernization of rural infrastructure and of factors of agricultural production, and a sustainable natural resources management among others. The Decentralization policy created by the Law No. 2004/017 of 22 July 2004 sets the guidelines for decentralization in Cameroon. In fact, the Cameroonian government is currently transferring the implementation and monitoring of the environment and natural resources management-related activities to regional administrations and councils.

The methodological approach was essentially qualitative based on qualitative content analysis of relevant documents (Hsiu-Fang & Shannon, 2005) and interviews to gather and analyze critical information and data. Interviews and literature review were iterative. The integration of SLM measures was searched at the four steps of the planning guide outlines for all ministries and municipalities in Cameroon namely (i) analysis of the existing situation and diagnosis, (ii) formulation of strategic choices, (iii) design the action plan for strategy's implementation, (iv) monitoring and evaluation.

From February to March, 2020, 24 persons were interviewed among authorities responsible of the environment, sectorial administrations, technical and financial partners of the government and civil society (Table 1). Interviewees suggested few criteria for assessing documents. The study gathered 15 key stakeholders among those who were interviewed in February and March 2020.

Table 1: Details on persons interviewed in the study

Type of organization	Name of the organization	Number of persons interviewed
Sectorial administrations	- Ministry of the Economy, Planning and Territorial Development	1
	- Ministry of the Environment, Nature Protection and Sustainable Development	1
	- Ministry of Forests and Wildlife	1
	- Ministry of Agriculture and Rural Development	1
	- Ministry of Livestock, Fisheries and Animal Industries	1
	- Ministry of Scientific Research and Innovation	1
	- Ministry of Arts and Culture	1
	- Ministry of Employment and Vocational Training	1
	- Ministry of Water and Energy	1
Decentralized territorial communities	- Lagdo Council	1
Producers organization	- Agro-Sylvo Regional Platform	1
	- Association for the Promotion of Livestock in the Sahel and Savannah	1
Civil Society	- Cameroon Forum of the Conference on Dense and Moist Forest Ecosystems of Central Africa	1
	- Cameroon Association for the Environmental Assessment	1
	- Diocesan Development Committee of Maroua	1
Private sector	- Cameroon Inter Patronal Group	1
	- Cameroon Timber Sector Group	1
International technical and financial partners	- GIZ : Deutsche Gesellschaft für Internationale Zusammenarbeit	1
	- World Resources Institute	1
	- International Union for Conservation of Nature	1
Universities and Research Institutes	- Soil Science Department of the Univesity of Dschang	1
	- Agricultural Research Institute for Development	1
	- National Institute of Cartography	1
National technical structures	- National Participatory Development Program	1
Total		24

The review of existing documents on the strategies and policies development frameworks in Cameroon provided knowledge, streamline and develop criteria for their assessment vis-à-vis the integration of SLM measures. Criteria developed were informed by the work of (Ngouana Kengne & Tchoffo, 2011) (Table 2)

Table 2: Development planning stages and selected criteria for SLM integration assessment

Development planning stages	Objectives of the stage	Identified criteria	Importance of the stage
1. Analysis of the existing situation and diagnosis	Summarize the main issues covered by the elaboration of the development strategy, their causes and effects, the main strengths, weaknesses opportunities and threats	Reference to SLM in the problem definition	- Decisive step which allows to analyse the overall balance of the strategy as a basis to identify the elements of a good perspective for formulating strategic choices. - At this stage, the analysis of the interrelation between the strategy considered and SLM ensures the inclusion of SLM in the formulation of intervention areas. - If SLM are not part of the challenges, there is little chance it finds itself at the stage of defining objectives and areas of intervention
2. Formulation of strategic choices	Provides solutions to the major problems identified in the diagnostic phase	Reference to SLM at the stage of strategic choices formulation	- Choices depend on the development vision of the nation and the main principles of the policy prevailing in the strategy concerned. However, it is important that SLM is considered to ensure that it ranks among the strategic objectives which will be translated into strategic choices and concrete interventions. - The lack of reference to SLM at this stage would make its translation in terms of concrete interventions in favour of SLM less visible
3. Design the action plan for strategy's implementation	Provides short and mid- terms actions for strategy's implementation	Reference to Specific actions related to SLM	
4. Monitoring and evaluation	Establishment of a monitoring and evaluation of the implemented strategy and in particular the development and definition of criteria to serve as the base of the monitoring and evaluation	Reference to SLM by monitoring and evaluation criteria	- Reference to SLM by these criteria reflects the commitment to trace its effectiveness throughout the implementation of the Strategy. - This also means that SLM will be taken into account when assessing the success or failure of the strategy
5. All the stages	Determination of the degree to which the strategy involves SLM as part of the entire process	The consideration of SLM as a cross-sector driver.	- Desire to address SLM in silos is presented by several analysts as a default of understanding of the integration principle

Reference to SLM is translated by generic expressions associated with SLM, land use types and components[1].
Documents were explored to determine to which degree SLM was taken into account and to what extent they address resource mobilization for SLM. Relevant information was included in an Excel Spread Sheet.
A focus group discussion was held in October 2020 to present and discuss the preliminary findings of this work. The discussion was based on factors that hinder SLM and financial resource mobilization for SLM and suggestions were gathered for analysis of the level of integration of SLM using fishbone diagram.

3. Results and discussion

Integration of SLM measures at various development planning stages recognized in Cameroon was a function of the development strategy or development policy studied (Table 4)

[1] Some of those generic terms include environment, natural resources, climate change, biodiversity, land management, land degradation, land resources, land cover , land use, land change , quality of soil, land policy, land planning, quality of water

Tableau 4 : Overview of the integration of SLM measures bydifferent development documents

Stages	Vision 2035	NDS-2030	DSRS	Decentralization policy
1. Analysis of the existing situation and diagnosis	✓	✓	✓	✓
2. Formulation of strategic choices	✓	✓	✓	✓
3. Design the action plan for strategy's implementation	✓		✓	✓
4. Monitoring and evaluation			✓	
5. All the stages	✓	✓	✓	

Analysis of documentary sources is one of the major methods of social research and is considered as meaningful and appropriate in the context of qualitative research strategy (Mason, 1996). However, according to Ngouna Kengue&Tchoffo (2011), choosing the types, number of criteria, and documents to determine to which degree an aspect or issue is reflected in policy documents varies.

3.1 Provisions for SLM in The Vision 2035

The Vision 2035 underscores development challenges, issues related to environmental protection and pressure on the environment. Particularly, it unveils the fight against the already visible effects of climate change. The Vision also establishes the correlation between other sectorial objectives and the protection of the environment. For example, it is stated that to achieve the objectives of industrialization, the promotion of industrial projects will among others include the mastering of all industrial and environmental risks. However, specific indicators for monitoring and evaluating (M&E) effective integration of environmental issues are not provided. Furthermore, this document does not contain the concept Sustainable Land Management (SLM). However, one of the development challenges and implementation strategy mentioned in the Vision deals with land planning. This lack of specific indicators for monitoring and evaluation of environmental sustainability has serious implications on measuring Vision outcomes and could lead to the marginalization of some aspects of environmental protection in subsequent strategies. Monitoring is necessary to ensure strategic commitment compliance. In Burundi, M&E is rooted in the 2025 Vision for the country, whereas in the past it was located in the Poverty Reduction Strategy Papers (CLEAR, 2012). Monitoring and Evaluation enable continued research and development. It also enables to adjust, analyze, and discuss process and outcomes (Partidário et al., 2008). Without monitoring and evaluation, effects will not be known. Comments from CSO representatives and sectorial administrations interviewed reveal that Cameroon's M&E mechanism relies on the national statistics system for measurement and data. They also reveal that access to data and information remains a great challenge, particularly access to data to be collected, but also with regard to data already processed.

The potential for resource mobilization for SLM and environmental protection remains important and varied. However, the Vision fails to explore and underscore this opportunity. The Vision unveils the correlation between other sectorial objectives and the protection of the environment. Unfortunately, it does not explicitly give a strategic direction with focus on how environmental protection could be funded from different sectorial (mining, agriculture, water), sub-sectorial and local funding flows. Given the emphasis on sectorial developments supported by sectorial investments, foreign investment both public and private alike can help developing innovative resource mobilization approaches and instruments within different sectors (Kettunen et al., 2013).

3.2 Arrangements for SLM in the NDS-2035

Information from the NDS-2030 is related to the availability of land resources which is considered as an asset which, properly managed, could bring the country to its full growth potential and reduce poverty. Within that perspective, Cameroon has proceeded to develop a national land use planning and sustainable development plan, regional plans and a zoning plan in favour of the SLM. More generally, the preceding actions aim to strengthen adaptation and mitigation measures for the effects of climate change and environmental management to ensure sustainable and inclusive economic growth. Hence, the country would be achievingtheSustainable Development Goals number 13, 14 and 15 with their contextualized targets.

From a cross-sectoral perspective, the NDS-2030 highlights the need for the consideration of environmental issues in development policies, plans, programs and projects through the proper implementation of environmental assessment.
Diagnosis and formulation of strategic choices pay attention to SLM. Unfortunately, priority actions don't include specific actions related to SLM.

This shortfall is not in line with findings of Hugé & Hens (2007), which reveal an appropriate consideration of property rights, land reform and institutional strengthening of land ownership security in Benin Poverty Strategy Reduction Paper. Given large-scale land acquisitions for agricultural investments in Africa (Friis & Reenberg, 2010; Cotula et al., 2009) failing to include land management for enhanced production as well as ecosystem services and land reform in priority actions is a major breach and should be highlighted in a subsequent land tenure policy. Land use has caused declines in biodiversity through the loss, modification, and fragmentation of habitats; degradation of soil and water; and overexploitation of native species. The NDS 2030 does not come with a framework for allocation or mobilization of financial resource for SLM specific expenditures. These shortfalls widen the gap in the planning process as well as the potential added value of considering SLM and environmental management indicators in the Vision-2035. However, meeting the NSD-2030 objectives could contribute indirectly to sustainable land management through other programs such as Forest and Environment Sector Program, the Agriculture and livestock Program, and Strategy Development for the Rural Sector, to name a few.

3.3 Plans for SLM in the RSDS

The Rural Sector Development Strategy involves four ministries notably the Ministry of Agriculture and Rural Development, Ministry of Animal Husbandry, Fisheries and Animal Industries, Ministry of Forest and Wildlife, and the Ministry of Environment, Nature Protection and Sustainable Development. Environmental degradation is considered in this strategy as a potential major constraint to the sector's contribution to national Gross Domestic Product. Therefore, the sustainable management of natural resources (land included) is a clearly targeted objective. The logical framework matrix of the strategy comprises several indicators relating to SLM. However, up to date, the Government of Cameroon has not specified criteria and indicators for sustainable land management per agro-ecoregion. Criteria and indicators provide effective and practical direction and requirements for sustainable land management and they channel the research effort (Dumanski, 1997). Financial needs of the SDDRS were estimated at some 930 billion CFA francs for eighteen sub-programs with five of them belonging to programs related to sustainable management of natural resources (a component of SLM) worth some 200 billion CFA francs. In practice, at ministerial level, the financing of SLM could better be appreciated with budget allocations to projects.

3.4 Plans for SLM in the Decentralisation Policy

If the transfer of responsibilities to local councils is accompanied by a substantial transfer of financial and technical resources and if SLM considerations are core elements of councils development plans, then resources for SLM would increase with decentralization. Unfortunately, in most countries, there is a severe lack of local capacity. In Sustainable Land Management, Ouedraego, 2005) found that local authorities need to be able to survey land, maintain records and manage local land administration. Local administration includes categories such as land registration, cadastral surveying and mapping, fiscal, legal, multipurpose cadastres, and land information systems (Enemark, 2004). Interviewed persons mentioned that local land administration in Cameroon faces poor coordination between land management institutions and also an imbalance of technical resources between decentralized and local institutions. The conflict between immediate gains and local interests (poverty alleviation) on one hand, and the global and long-term interests promoted by SLM on other hand, is growing. Of course, decentralization is a more democratic way to manage natural resources and a more efficient way to promote local development, but it is not a panacea (Ouedraogo, 2005). Many policies (credit, land, market liberalization, infrastructure development) and institutions affect land management so that examining development pathways and their relationship to land management is crucial (Jagger & John, 2001).

3.5 Mainstreaming of SLM into development planning

Factors that hinder the integration of SLM into development strategies and policies were underscored during the Focus Group Discussion and are presented on the fishbone diagram (Figure 1)

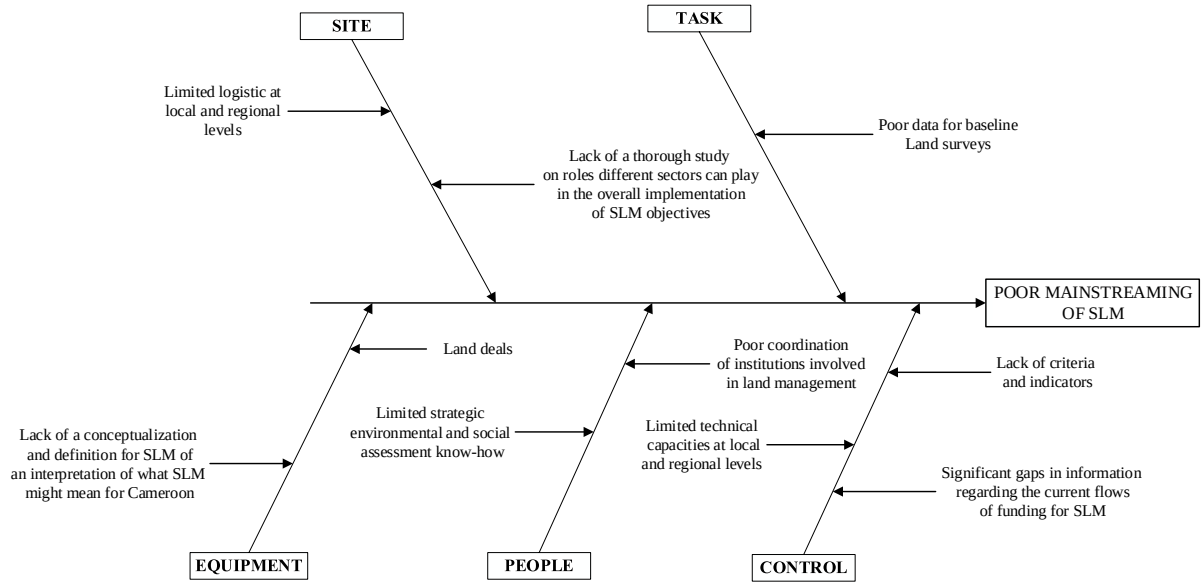

Figure 1: Factorshindering the integration of SLM in the developmentstrategies and developmentpolicies in Cameroon

Civil Society Organizations (CSOs) representatives and development partners interviewed revealed that land deals constitute a factor that could hinder SLM. The consequences of land deals can be expected to be very large for the local population and environment. In Cameroon, land is state property, providing the government with the rights to lease or sell land that is in reality used by local farmers land tenure systems (Friis & Reenberg, 2010) .

To facilitate the mainstreaming of SLM in development strategies and policies, actions identified include (i) baseline inventories and natural resource inventories, and assessments of land change per agro-ecology region; (ii) development of SLM criteria and indictors within a framework of land change information sharing system; (iii) strengthening SLM financing mechanism; (iv) revising the National Action Plan to Combat Desertification (NAP/CD); (v) developing detailed information on the sources, sizes and national distributions of funding to help develop approaches and strategies for future resource mobilization for SLM; (vi) assessing in more detail the roles different sectors can play in the overall implementation of SLM objectives; (vii) support capacity development; (viii) enhancing the role of SLM in development process; (ix) monitoring the implementation of the measures relating to SLM contained in the environmental management plans developed during the environmental assessment. With the increasing number of Environmental and Social Impact Assessment (ESIA) of projects this may result in a relatively good percentage of SLM mainstreaming; (x) leveraging the development strategy of the ministry responsible for the environment to clearly display the cross-setting aspects of SLM and the actions planned for its integration into development strategies.

4. Conclusion

To scale up and mobilize financial resources for SLM, it is good to integrate SLM into development policies and strategies frameworks. The exploration of Cameroon Vision-2035, National Development Strategy – 2030, Development Strategy of the Rural Sector and one and the Decentralization policy indicated that the level to which they integrate SLM and the extent to which they address resource mobilization for SLM are relatively low.

There are numerous structural and capacity constrains inhibiting the mainstreaming of SLM into development strategies and policies in Cameroon. They include poor land baseline surveys, lack of criteria and indicators for SLM, significant gaps in information regarding the current flows of funding for SLM within different sectors, poor coordination of institutions involved in land management, limited technical logistic, and technical capacities at local and regional levels.The country should develop a land change information sharing system, assess in more detail the roles different sectors can play in the overall implementation of SLM objectives.

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