

ASSESSING THE SOCIAL AND ENVIRONMENTAL LINKS IN DEVELOPMENT STRATEGIES FOR CAMEROON: A PROCESS APPROACH TO SUSTAINABILITY

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ABSTRACT

The links between the social and environmental pillars are particularly under-developed in scientific literature. This article bridges this knowledge gap by applying a social-environmental conceptual framework which consists of a check-list of 33 questions. It used same to review various strategy documents of the Government of Cameroon. These comprised one national strategy document, three sectoral strategy documents and two sub-sectoral strategy documents. To triangulate and enrich these documents analysis, unstructured interviews with 21 key stakeholders was held. The findings revealed some inconsistencies in participatory processes. Findings also revealed insufficient consideration of benefits sharing from the exploitation of natural resource for local social development. Bio-piracy issues were also not well considered in the documents analyzed. Nevertheless, natural and human-induced risk management, environmental awareness, generation and use of data, and commitments to infrastructure planning that concurrently promotes social integration and environmental sustainability simultaneously are well considered in the strategy documents reviewed.

Keywords: development strategies, Cameroon, check-list, social and environmental links.

INTRODUCTION

Many developing countries were able to maintain a stable macro-economic framework and sustain positive growth rates up to 2008 by implementing their Poverty Reduction Strategy Papers (IMF, 2010). However, the general pace of growth has been too slow to significantly reduce poverty. For example, in Cameroon during the implementation phase of the Poverty Reduction Strategy Papers (PRSP), the Gross Domestic Product (GDP) average growth rate stood at 3.32 per cent between 2003 and 2007 (Republic of Cameroon, 2009). To correct weaknesses identified during successive evaluations of first generation PRSP's implementation, many African countries, have recently launched national strategy of vision that aims at making them emerging countries between 2020-2035 (The World Bank, 2011). Driscoll and Evans (2005) note that these countries have also revised their PRSPs and prepared a second-generation of PRSPs with focus on growth and job creation as the basis of future poverty reduction programs. Cameroon for example has prepared a growth and employment strategy paper (GESP). It is presented as: i) an integrated development framework; ii) a financial coherence framework; iii) a government action and external support coordination framework; iv) an advisory and consultation framework with civil society organizations, the private sector and development partners; and v) a guide for analytical works to inform the management of development.

Based on the GESP, the government of Cameroon has prepared sectoral development strategies, sub-sectoral development strategies and Priority Action Plans (PAPs). One can ponder whether the process of preparing these strategies replicates past weaknesses such as the mechanistic breakdown of sustainability into its parts or a simple compilation of economic, social and environmental objectives as underscored by Volkery, Klaus, Bregha, Pintér & Swanson, (2004). Much of work was done on the greening of PRSPs and major policy documents in Africa (Bojő, Kishore, Pilapitiya & Reddy, 2004; Hugé and Hens, 2009; Hambira, 2009; MINEP, 2009; Alemagi, 2011; Bele, Somorin, Sonwa, Ndi Nkem & Locatelli, 2011) did not place much focus on social and environmental links. Within the framework of its Economic and Social Inclusion Program, the Ministry of the Economy, Planning and Regional Development with a financial support from The United Nations Development (UNDP) initiated in 2013 a review of development strategies with focus on mainstreaming environmental sustainability, HIV/AIDS, gender and concerns of vulnerable persons. However, this ongoing work does not explicitly focus on simultaneous social and environmental links.

It can therefore be argued that there is a need to understand and evaluate the development of social and environmental links in development strategies for Cameroon. The links between the social and environmental pillars are particularly underdeveloped (Murphy, 2012). The literature indicates the necessity of developing greater linkage between the social and environmental pillars (Murphy, 2012; Cuthill, 2009; Gough et al. 2008; Littig & Griessler, 2005). The central issue is not how the environmental pillar, affects the social pillar or how the social pillar affects the environmental pillar (Harms, 1999). It is how social and environmental considerations simultaneously come together at the moment of choice, and how the resulting options/directions lead to sustainability. This paper seeks to explore to what extent state planners and ministries in Cameroon develop social and environmental links in development strategies.

STRATEGIC PLANNING IN CAMEROON AND SUSTAINABILITY

In Cameroon, strategic planning is done at national, sectoral, sub-sectoral and local levels. At the national level, Cameroon inaugurated five-year development plans after its independence in 1960. This practice was interrupted in the late 1980s through the adoption of structural adjustment programs. With the achievement of the completion of the Heavily Indebted Poor Countries initiative, Cameroon returned to strategic planning in the context of the development of Poverty Reduction Strategy Paper in the early 2000s. In order to tap the country's major development potential, the Government of Cameroon drew up a second-generation poverty reduction strategy paper in 2009 – the growth and employment strategy paper-which covers the period 2010 to 2020. This GESP is part of a long-term development vision – Vision 2035, which set itself the objective of becoming an emerging, industrialized and democratic country by 2035. The GESP as a national strategy was planned to be broken down to three types of strategies as shown on Table 1.

Table 1: Different types of strategies

Type of development strategy	Planning unit	Time frame
Sectoral strategies	Can cover one sector or encompass related government activities in a sector	10 years
Thematic strategies	Can involve many sectors or ministerial departments	5 to 10 years
Sub-sectoral strategies	Ministerial department level or public institution	5 to 10 years

Source: MINEPAT, 2011.

To support the appropriate planning, the Ministry of the Economy, Planning and Regional Development (MINEPAT) in 2011 published a planning guide. The planning guide is currently the key planning tool in Cameroon and provides a vehicle or mechanism through which sustainability principles can be integrated into the development planning. The guide outlines a process whereby all ministries in Cameroon have to prepare sectoral, sub-sectoral strategies, or thematic strategies, which are strategic documents that outline the key development priorities. The sectoral planning process is phased so that there is, not only logical sequence, but such that the results are comparable. Principally there are five distinct phases, namely: (1) preliminary activities; (2) analysis of the existing situation and diagnosis; (3) strategic choice; (4) design the action plan for strategy's implementation; monitoring and evaluation, and (5) approval. The planning guide also outlines five guiding principles for each strategy to be developed: (i) flexibility/dynamic; (ii) selectivity/equity, (iii) participation of stakeholders, (iv) realism of actions/constraints, and (v) search of vertical and horizontal linkages-integration. Strategic planning principles in Cameroon and sustainability principles are outlined in Table 2.

Table 2. Strategic planning guiding principles versus sustainability principles

Strategic planning guiding principles	Sustainability principles
1. Search of vertical and horizontal linkages-integration during the diagnosis, scoping and analysis of the existing situation	1'. Integrated analysis aiming at progress towards sustainability
2. Selectivity/equity. Strategy promotes equitable growth and equal opportunities for all social categories	2'. Ensure equity of opportunity for everyone, particularly the poorest and most vulnerable members of the community and seek to create a good quality of life for everyone.
3. Participation of stakeholders at all stages of the planning process. A participatory monitoring and durable dialogue between the different actors (State/private sector/civil society/development partners) are also required.	3'. Democracy and governance: Ensure that proposals are developed through active public participation in transparent decision-making processes
Flexibility/dynamic	Immediate and long-term integration: Decision-making processes should reflect the equal importance of each principle of sustainability and mutually supportive benefits should be sought without compromising any individual principle.
Realism of actions/constraints	Precaution: Sustainability requires caution, avoiding poorly understood risk and promoting 'no-regrets' options.
	Ecological integrity and biological diversity: Protect biological diversity and maintain essential ecological processes and life support systems.

Adapted from MINEPAT (2011); (Hugé, Waas, Eggermont & Verbruggen, 2011), Ngouana and Tchoffo (2011), and Morrison-Saunders and Hodgson (2009).

The planning guide allows for the inclusion of mechanisms which can help to respond to changing circumstances in developing the sectors or sub-sectors. Flexibility also allows for the wide range of conditions in which sectors or sub-sectors are developing, variety in governance, administrative and legal structures. This flexibility ensures that the approach should be appropriate for each strategy in considering contextual factors, national and local environments. Sustainability principles allow for – a degree of – interpretive flexibility (Hugé et al. 2011).

It is clear that apart from immediate and long-term integration, ecological integrity and biological diversity that are subsumed in strategic planning guide, the approaches rest on common ground. It is therefore a process that is closely aligned with the principles of sustainable development.

Principles 1 and 1' acknowledge the opportunity of coupling sectors activities with other sectors and policies. They also highlight the fundamental role of coordination between sectors to the delivery of sustainable development. Current

attempts to develop integrated approaches are largely unsuccessful due to lack of coordination between key agencies, which resulted in conflict and wasted resources (Partidário, Paddon, Eggenberger, Minh Chau & Van Duy, 2008) Principles 2 and 2' seek to ensure that development strategy provides equal opportunities for development and does not result in any loss to any groups of the society, especially vulnerable groups. These principles reveal the necessity of taking into consideration the concerns of vulnerable groups.

Principle 3 and 3' acknowledge broad stakeholder participation in the wider social, economic and environmental contexts of a sector or sub-sector. They also recommend an inclusive process for decision-making regarding development.

Ecological integrity and biological diversity principle unveils the dependence relationship between any human activity and the environment and also underscore the necessity of reducing threats to system integrity. This principle is thus based on the concept of strong sustainability (SS), which means no substitution of natural capital with other kinds of capital (Ngouana and Tchoffo, 2011). The alternative to SS is weak sustainability, which allows full substitution among all forms of capital. Weak sustainability would allow depletion of the natural capital (Dietz and Neumayer, 2007).

Immediate and long-term integration principle seeks to apply sustainability pillars at once, seeking mutually supportive benefits and multiple gains. This principle underpins our conceptualization of sustainability which is in line with Caffey, Kazmierczak & Avault (2001). The huge gap is due to the fact that, the three dimensions are often given different priorities (Burton, 2000), and they are placed roughly next to one another without being integrated into a whole (Littig and Griessler, 2005).

This article elaborates the conceptual framework for understanding the social and environmental links outlined in a prior study (Murphy, 2012). The study outlined thirteen policy objectives with both social and environmental dimensions, grouped under the four conceptual classifications of equity, awareness for sustainability, participation, and social cohesion. The framework was set to be understood primarily in a northern context but this article "tropicalizes" and extends the Murphy conceptualization by adding new policy objectives.

The research methodology is outlined in the next section, followed by a presentation and a discussion of the results of the research, which encompasses a focus on selected key social and environmental link issues in the analyzed strategies. The paper concludes with a discussion of the identified areas where the analyzed strategies perform well and areas where more information and/or action may be needed.

RESEARCH METHODOLOGY AND USE OF THE CHECKLIST

The question addressed in this paper is: To what extent do development strategies portray social and environmental links? In order to answer this fundamental question, we used an exploratory research approach because according to Murphy (2012) and Gough et al. 2008, the links between the social and environmental pillars are particularly underdeveloped. Exploratory research seeks to investigate an area that has been under-researched (Nagy, Hesse-Biber & Leavy, 2011). It isn't designed to come up with final answers or decisions.

The overall exploratory research strategy includes:

- a literature review and development of a check-list of questions to analyze one national strategy, three sectoral strategies and two sub-sectoral strategies aligned with the GESP (**Step 1**);
- Unstructured interviews (**Step 2**).

Step 1: Analysis according to checklist.

We reviewed existing checklists, relevant literature on social sustainability, social and environmental links and environmental sustainability. Then we extracted the items, grouped them under five conceptual categories (commitment to social and environmental links, equity, awareness for sustainability, stakeholder participation and social cohesion) to develop a checklist consisting of 33 questions.

Furthermore, to complete an acceptable version of the checklist, a medical sociologist, an environmentalist, an environment/energy consultant and researcher, a researcher (applied)-heritage and tourism, and a human resource management scientist were asked to comment on the clarity of directions, question wording and content validity. Yin (2009) and Fink (2003) acknowledged the use of a pilot test of the critical feedback and the use of an expert panel with diverse backgrounds as a means to assure reliability and validity of a checklist design. The final five categories are:

1. Commitment to social and environmental links (eight questions)

This assessed whether these strategies reflected the thrust of relevant national, regional and international goals and agreements promoting social and environmental links. It also assessed if these strategies acknowledged sustainable development. Questions for this category were informed by the work of Turcu (2013); Ngouana and Tchoffo (2011); MINEPDED (2010) and Hugé and Hens (2007).

2. Equity (seven questions)

This attempted to assess how the concept of equity was linked to environmental imperatives and what policy implications emerged from these synergies. Questions focused on vulnerable groups, climate-induced changes, land grabbing, etc. The concept of vulnerable groups is relative, open to interpretation, contestable and dependent on the context in which it is used (Larkin, 2009). Definition of vulnerable groups used in this paper is drawn from Cameroon's social services sector development strategy (MINEPAT, 2013). According to MINEPAT (2013), vulnerable populations are underprivileged persons because of their social position, marginalization, poor mental and physical health, low income or other factors. Eleven vulnerable groups are outlined in this strategy: aging; sex workers; refugees and internal displaced persons, people with disabilities; inmate; ethnic minority groups; youth; children (homeless; separated from parents; lone; disable; etc.). Questions for this category were extracted and adapted from Alessa, Kliskey & Altaweel (2009); Murphy (2012); Bele et al. (2011).

In this paper, equity refers to a wide spectrum of policy areas ranging from the provision of clean water, nutrition, employment, education, shelter, essential medicines, and an unpolluted environment and access to social networks (Murphy (2012)). It also includes the promotion of freedom from discrimination on the grounds of gender, religion, or race.

3- Awareness for Sustainability (five questions)

Awareness for sustainability is a key social concept in Sustainable Development discourse (Murphy, 2012). Attention was also paid to information sharing and knowledge. This category was informed by Murphy (2012), Franks et al. (2014), Davis and Franks (2014) and, Ngouana and Tchoffo (2011).

4. Participation (seven questions)

Participation is another critical concept in Sustainable development discourse. Numerous observers also view participation as important for promoting environmental goals (Murphy, 2012). Questions assessed the extent to which desires, views and preferences of vulnerable groups, weaker groups, including future generations, are reflected in the strategies analyzed. Ideas for this category were extracted from Murphy (2012), Esteves, Franks & Vanclay (2012), Hugé et al. (2011) and, Ngouana and Tchoffo (2011).

5. Social cohesion (six questions)

Social cohesion is a salient concept in social policy discourse and debates (Murphy, 2012; Cuthill, 2009). This assessed whether the strategies show commitment to developing initiatives that combat the kinds of environmental conditions that promote social disharmony or upheaval. This category was guided by the works of Murphy (2012), Keitumetse (2014), Owen and Kemp (2014).

Based on the relevant literature review and critical feedback from experts, Table 3 presents the details of the checklist questions whereas Table 4 presents strategies assessed.

Table 3: social and environmental links checklist questions

<p><u>1. Commitment to social and environmental links (08 questions)</u></p> <p>1.1 Has sustainable development been explicitly acknowledged in the development strategy?</p> <p>1.2 Does the strategy refer to national and regional non-binding agreements promoting social and environmental links?</p> <p>1.2.1 Libreville Declaration on health and environment in Africa (2008)? 1.2.2 The Bamako Convention on the Ban of the Import into Africa and Control of Transboundary Movement and Management of Hazardous Wastes within Africa (1991)1.2.3 Other: Corporate Social Responsibility (CSR) requirements; African Convention on Conservation of Nature and Natural Resources, Algiers (1968).</p>
<p>1.3 Does the strategy refer to international binding agreements promoting social and environmental links?</p> <p>1.3.1 ILO Convention 169 on Indigenous and Tribal Peoples? 1.3.2 The Bali Declaration on Waste Management for Human Health and Livelihood (2008)1.3.3 The Platform for Action, adopted by the Fourth World Conference on Women in Beijing in 1995, which identified the need to actively involve women in environmental decision making at all levels, and to incorporate a gender perspective in all strategies for sustainable development1.3.4 Others: Millennium Development Goals (MDGs); green economy, Basel convention, International Organization for Standardization (ISO)</p>
<p><u>2. Equity (07 questions)</u></p> <p>2.1 Does the strategy include commitment to assist vulnerable groups coping with the effects of large infrastructure projects (dam, thermal plants, mining, high ways, etc.)?</p> <p>2.2 Does the strategy show commitment to guide vulnerable groups to diversified enterprises evolving due to infrastructure projects, e.g. setting up of social safety nets; community-based health insurance?</p> <p>2.3 Does the strategy show commitment to dedicate/capture revenues from the exploitation of natural resources to/for local social development priority areas (health, education, gender empowerment, farmer organizations, skills, etc.)?</p> <p>2.4 Does the strategy include commitment to avoid appropriation of productive resources such as land, medicinal plants, water, etc. by the rich /multinational and powerful?</p> <p>2.5 Does the strategy show commitment to address/minimize the environmental effects of vulnerable groups?</p>

2.6 Does the strategy show commitment to assist vulnerable groups adapting to the effects of extreme environmental degradation and climate-induced changes (floods, storms, drought, fires, disease, exotic migrations of pests and parasites, drought, etc.)?

2.7 Does the strategy show commitment to protect vulnerable groups from the adverse impacts of fiscal policies designed to mitigate climate change or to protect environment?

3- Awareness for Sustainability (05 questions)

3.1 Does the strategy typically include “green” advertising campaigns, Corporate Social Responsibility (CSR), awareness-raising events, environmental education programs, and education for sustainable development (ESD) programs?

3.2 Does the strategy include gauges to measure commitment to ESD or environmental awareness?

3.3 Does the strategy show commitment to designing and implementing programs of ESD through the formal education sectors?

3.4 Does the strategy show commitment to designing and implementing programs of ESD through the informal education sectors?

3.5 Does the strategy promote all forms of relevant information, including scientific, indigenous, local innovations and practices?

4-Stakeholder Participation (07 questions)

4.1 Does the strategy elicit concerns, views and preferences of weaker groups, including future generations?

4.2 Does the strategy development process offer possibilities for alternatives, reversibility and caution?

4.3 Have measures been taken to ensure that key vulnerable groups are informed about trade-offs and contributed to the debates and decisions that affect their lives?

4.4 Does the strategy development process organize decentralized workshops to involve those who can be excluded from the process by geography, cultural traditions and lack of resources?

4.5 Are there mechanisms which can promote inter-sectoral co-operation, involvement of other sectors, policies and goals?

4.6 Are there mechanisms which can ensure transparency regarding uncertainties, generation and use of data?

4.7 Are there mechanisms which can ensure continued research & development and monitoring and evaluation?

5. Social cohesion (06 questions)

5.1 Does the strategy explicitly show commitments to infrastructure planning that concurrently promotes social integration and environmental sustainability simultaneously?

5.2 Are there mechanisms which intend to address conflict over distribution of revenues from the exploitation of natural resources (timber, oil, mining, etc.)?

5.3 Are there mechanisms which intend to promote equitable access to/and control over natural resources for women and men?

5.4 Does the strategy explicitly show commitment to the promotion of social activities aimed at environmental goals? (Cultural properties, sacred sites; tourism benefit redistribution; indigenous, local innovations and practices)

5.5 Does the strategy explicitly show commitment to combating the kinds of environmental conditions that cause civic strife?

5.6 Does the strategy consider decent job creation and the reduction of unemployment?

The checklist has been applied to one national development strategy, three sectoral development strategies and two sub-sectoral development strategies listed in Table 4.

Table 4: Overview of the assessed strategies

Scope of the strategy	Key stakeholders involved	Title of the strategy	Publication year
National	Ministry of the Economy, Planning and Regional Development (MINEPAT)	Growth and Employment Strategy Paper	2009
Social services	MINAS (Ministry of Social Affairs), MINPROFF (Ministry of Employment and Vocational Training), MINTSS (Ministry of Labour and Social Security) and MINSEP (Ministry of Sports and Physical Education), MINAC (Ministry of Arts and Culture), MINCOM (Ministry of Communication)	Social Services Sectoral Development Strategy (2014-2020) : Diagnosis and analysis of the existing situation	2013
Health	MINSANTE (Ministry of Public Health)	Health sector strategy 2009-2015	2009
Industry and services	MINCOMMERCE (Ministry of Trade), MINPMEESA (Ministry of Small and Medium-sized Enterprises, Social Economy and Handicrafts), MINTOUL (Ministry of tourism and leisure), MINMIDT (Ministry of Industry, Mines and Technological Development)	Industry and Services Sector Development Strategy and action plans	2008
Livestock, Fisheries and Animal Husbandry	Ministry of Livestock, Fisheries and Animal Husbandry	Livestock, Fisheries and Animal Husbandry Sub-sector strategy	2012
Environment and sustainable development	Ministry of Environment, Protection of Nature and Sustainable Development	Environment, Protection of Nature and Sustainable Development sub-sector strategy	2012

Table 4 also provides an overview of the titles and publication years of the assessed strategies. The Education sector strategy and the rural sector development strategy (RSDS) are not aligned with the GESP. They are under review and were not assessed. The RSDS involves four ministries (Forestry and wildlife; Environment, Protection of Nature and Sustainable Development, Agriculture and Rural Development; Livestock, Fisheries and Animal Husbandry). Infrastructures development strategy and governance sector strategy are under formulation. In checklist approaches, assessment is done qualitatively (Olsen and Fenhann, 2008) and quality is best measured on an ordinal scale (Batschelet, 1979). Answers to the questions are scored on a three-point *ad hoc* ordinal scale (Forrest and Bjorn, 1986), where 1 stands for ‘issue not mentioned’, 2 for ‘issue mentioned but not elaborated’ and 3 for ‘issue elaborated’. We did not consider a score of 0 because it will not be sensible and will exclude a category from the analysis.

Questions were entered into an Excel spreadsheet and each checklist question per category received one of the above scores. These scores referred to the number of questions in each category of questions. This ranking scale has mutually exclusive and exhaustive categories; there is no absolute magnitude of the difference between 1st and 2nd or between 2nd and 3rd category (Altman, Gore, Gardner & Pocock, 1983) but there is order between them, as indicated by expressions such as ‘not mentioned’, ‘not elaborated’ or ‘elaborated’.

The central tendency descriptive statistical method used in this research is median, which is appropriate for an ordinal scale (Stevens, 1946; Forrest and Bjorn, 1986).

Step 2: Unstructured interviews

To supplement document analysis, we conducted unstructured interviews. Unlike structured and semi-structured interviews, where interviewees are presented with preset questions, unstructured interviews take the form of a personal conversation with a respondent on a specific issue (Minichiell, Aroni, Timewell & Alexander, 1990; Punch, 1998). Unstructured interviews were thus held from November 2013 through June 2014, with those who were involved in the strategy development process (listed in strategies) and those who were not involved but were better placed to offer credible and valuable perspectives on social and environmental links, integration and sustainability in Cameroon. Since exploratory research usually involves only a relatively small group of people, and (2) these people are almost never randomly selected to participate, we limited the number of key informants to 21. Interviewees include members of personnel from the Ministry of social Affairs (03), Ministry of Economy, Planning and Regional Development (04), executives and managers of Civil society Organizations (04), Ministry in charge of the Environment (03), The World Bank (01), Ministry of public health (01), University of Yaounde I (03), Ministry of women empowerment (02). All interviewees were promised full anonymity regarding their identity. For example, the following questions were asked to respondents: how do you think social-environmental links were developed in the strategy formulation process? Were there any debates/discussions on the inclusion of social-environmental links? Were there any internal or external forums, for stakeholders/sectors which have been set – up to discuss and debate sectoral strategy issues?

RESULTS AND DISCUSSION

Based on checklist categories, Table 5 portrays a selection of key social-environmental link issues in the analyzed development strategies.

Table 5: Consideration of selected key social and environmental links in the analyzed strategies.

Key social and environmental link categories	GESP	Health sector strategy	Social services sector development strategy	Industries and services development strategy	MINEPIA subsector strategy	MINEPDED subsector strategy
MEDIAN (MD)	MD	MD	MD	MD	MD	MD
1.Commitment to social and environmental links (08 questions)	3	1	1	1,5	1	3
2. Equity (07 questions)	2	1	2	2	2	3
3- Awareness for Sustainability (05 questions)	2	3	3	3	2	3
4-Stakeholder Participation (07 questions)	3	3	2	2	2	2
5. Social cohesion (06 questions)	2,5	2,5	3	3	2,5	3

As ordinal variables allow us to rank the items, we measure them in terms of which has less or more of the quality represented by the variable (Ngouana et Tchoffo, 2011; Stevens, 1946).

Table 5 shows that commitment to social and environmental links is well considered in the GESP but not in the subsequent sectoral strategies. In general, social and environment are often treated separately and links between them are weak. The exception to this trend is Environment, protection of nature and sustainable development sub-sector strategy which consistently recognized social and environmental linkages although its sectoral strategy aligned with the GESP is absent. Table 5 also shows that awareness for sustainability and social cohesion are well addressed in most strategies. Except Environment, protection of nature and sustainable development sub-sector strategy, emphasis on equity is lacking in most of the strategies. Stakeholder participation is less considered in four strategies analyzed. Table 5 suggests disconnect between various levels of planning, and a combination of both “top-down” and “bottom-up” decision-making processes.

The next section discusses the qualitative appreciation of some selected aspects within checklist categories in the light of interview results.

1. Commitment to social and environmental links

Sustainable development is mentioned in the majority of the strategies analyzed, but except Environment, Protection of Nature and Sustainable Development sub-sector strategy, these documents portray a mechanistic breakdown of sustainability into its parts. For e.g. the GESP intends to foster economic sustainability, and promotes sustainable management of natural capital as a production base. It is also presented as empirical expression of an integrated framework of a medium-term sustainable human development for Cameroon. The breaking down of sustainability to the various components cannot enable planners to capture social and environmental links. At the visionary level, the Environment, Protection of Nature and Sustainable Development sub-sector strategy reflects on the complex interdependencies between economic, social and environmental phenomena, and the need to balance or harmonize these over time. This is also the definition utilized by Atkisson (1996). This definition is, however, imprecise, too elastic, and does not operationalize sustainability in the Cameroonian context. This lack of operationalization opens ground for more contention because no single way of telling the extent to which sustainability is achieved has been agreed so far (Turcu, 2013; Mustafa and Abdul-Razak, 2011).

References to non-binding and binding agreements promoting social and environmental links vary from one strategy to another. They are not mentioned in the health sector strategy, and in the Livestock, Fisheries and Animal Husbandry sub-sector strategy. The GESP makes references to Indigenous and Tribal Peoples (ITP), environment-health nexus, and Waste Management for Human Health and Livelihood, whereas the Environment, Protection of Nature and Sustainable Development sub-sector strategy and the Industries and Services sector strategy respectively elaborates on green economy and Corporate Social Responsibility (CSR). Green economy as well as CSR focuses business decisions that results in improved human well-being and social equity, and promotes accountability for the economic, social and environmental (UNEP, 2011; UNEP, 2013; GIZ, 2013). The main issue is due to the fact that the rate of social responsibility in Cameroonian companies is low (Sotamenou and Tchoumdop Ndonou, 2013; Ndjéutcheu, 2013; GIZ, 2013). However, green economy and CSR are likely to foster social and environmental links, if appropriate enabling actions (resources are mobilized, awareness, incentives, regulations, compliance and enforcement measures) are undertaken.

2. Equity

The health sector strategy shows commitment to address occupational health and safety but it insufficiently considered commitment to assist vulnerable groups coping with the effects of large infrastructure projects. Many projects are now underway in Cameroon including for example: infrastructure construction, such as Kribi deep-water port, Lom-Pangar dam project, etc. These projects are subjected to Environmental and Social Impact Assessment (ESIA) and their social and environmental impacts are well considered in the Environment, Protection of Nature and Sustainable Development sub-sector strategy. The failure to consider health impacts of large infrastructure projects in a health sector strategy while many large projects are underway, could lead to major shortfalls, and poor joint compliance monitoring. For example, the lack of health baseline data and an incomplete assessment makes it difficult to address long-term issues of global community health in the Chad-Cameroon pipeline project (Harisson and Coussens, 2007).

The Environment, Protection of Nature and Sustainable Development sub-sector strategy shows commitment to develop an Access and Benefit-Sharing (ASB) policy but the Health sector strategy also fails to show its contribution towards avoiding appropriation of productive resources such as medicinal plants by the rich /multinational and powerful, this failure could spur the inequity currently being faced by African communities. Multinational pharmaceutical and biotechnological companies have created profitable private monopolies over Africa's genes, plants and related traditional knowledge (Oyewunmi, 2013), and biopiracy is widespread in Africa (Heong, 2006).

The strategies assessed are committed to dealing with hazard risks (floods, natural disasters, drought, epidemics, fires, etc.) that may derail or constrain their goals. This is important because human-induced hazard could dangerously increase inequality. The strategies are also committed to addressing the environmental impacts on vulnerable groups, but failing to consider refugees environmental impacts could lead to inconsistency in Cameroon's humanitarian contingency strategy. For example, since the beginning of 2014, Cameroon has received 69,389 refugees from Central Africa Republic (CAR), and some 20,000 are now settled in Lolo, Mborguene, Gado and Borgop – all located in the East and Adamawa regions (UNHCR, 2014). Refugees' environmental impacts cannot be neglected in development strategies for Cameroon.

Social Services and, Industries and Services strategies show commitment to guide vulnerable groups to diversified enterprises evolving due to the exploitation of natural resource and infrastructure projects. In as much as these strategies pay attention to social safety nets, other strategies assessed lack a comprehensive view on guiding vulnerable groups to diversified enterprises evolving due to infrastructure projects and the exploitation of natural resources. The adverse impacts on vulnerable groups of regulatory policies designed to mitigate climate change or to protect environment are not considered despite their growing importance.

3- Awareness for Sustainability

Environmental awareness, skills, education for sustainable development, capacity building, research and promotion of all forms of information are considered in most of the reviewed strategy documents. The growth and employment strategy paper commits to promote prevention of human-induced hazards through information of the public, sensitization and education of the people whereas the health sector strategy shows commitment to promote hand and body hygiene, to fight against vectors, etc. Notwithstanding this consideration, according to Civil Society Organizations (CSOs) representatives interviewed education for sustainability is still a challenging issue in Cameroon because many development strategies lack an appropriate communication and awareness strategy. This argument was contested by an

interviewee from the Ministry in charge of the environment who revealed that a National environmental educational and awareness program (2014-2018) was developed in September 2013. He further contended that, this program with a budget estimated at 19.990.639 USD for seventeen sectoral ministries and at 25.056.267 USD for municipalities and regional public administrations will surely bridge the gap if appropriate resource is available for its efficient implementation.

4. Stakeholder Participation

Strategies analyzed paid attention to participation. Most sectoral and sub-sectoral strategies present fragments of the planning process and emphasize that consultation and validation workshops were held in various agro-ecology zones. However, the attempts to include the marginalized groups in the policy discussion lacked credibility. None of these strategies provided data on the number of participants involved; disaggregated either by ethnicity, sex or socio-professional categories. Improving the lives of indigenous peoples (pygmies, bororos and Moko-oh) and other vulnerable groups (refugees, sex-workers, widows, youth, people with disabilities, AIDS orphans, street children and beggars, convicted children, lone children) is at the fore of the GESP. Also evidence of their consultation and participation in the planning processes and monitoring of subsequent strategies was lacking. This weakness is in line with findings of Hughes (2005) who underscored a limited fulfillment of minorities' and indigenous peoples' rights in development policy processes.

In the term of national and sectoral ownership of these strategies, interviewees feel frustrated. Main reasons for this are that the approach confuses consultation for involvement, and there has been no opportunity for debating alternatives development pathways. Furthermore, insights from local Government institutions are not always captured and most funding concentrated at the central level of the ministries.

Monitoring & Evaluation system, capacity building and inter-sectoral co-operation are well elaborated in the strategies analyzed. Most strategies unveil quantified indicators concerning social and environmental links. Notwithstanding this thoroughness, according to CSOs, in Cameroon inter-sectoral cooperation remains a permanent challenge because of poor governance. As noted by the President of Cameroon in his end of year state address in 2013, public institutions are often susceptible to private interests, which is most often in conflict with national interest (Biya, 2013). This lack of coordination between national institutions in Cameroon is also acknowledged by other authors (Ngouana and Tchoffo 2011; Greiber and Schiele 2011). Lack of coordination always results in conflict and wasted resources. Pathways to social and environmental linkages and to sustainability require a multi-stakeholder engagement, coordinated system and a systemic change.

There is a clear commitment to information sharing, generation and use of data, but according to public institution representatives and academics interviewed, Cameroon lacks an operational database for monitoring the social and environmental links which are still in early stages of research. The 1996 Environmental Framework Law obliges the government of Cameroon to improve knowledge of the environment through 'research on the quality of the environment and related substances'. Since the enactment of the 1996 Environmental Framework Law, no complete State of the Environment Report has been produced in Cameroon (Greiber and Schiele, 2011). In addition, social services sector strategy underscores the lack of a Social Information System (SIS).

5. Social cohesion

Social cohesion is a salient concept in social policy discourse and debates (Murphy, 2012). Issues of equitable access to/and control over natural resources for women and men, commitments to combating the kinds of environmental conditions that cause civic strife and commitments to infrastructure planning that concurrently promotes social integration and environmental sustainability simultaneously are usually considered adequately, while the promotion of social activities aimed at environmental goals is poorly considered in the environment, protection of nature and sustainable development subsector strategy.

Also, the government plans to increase the rate of access to sanitation infrastructure from 15 to more than 60 per cent at the end of 2020. Improvement of the environmental living conditions in urban and rural areas, rationalizing the allocation of land resources and improving state property governance; measures to facilitate access by Indigenous and Tribal Peoples to land for agricultural, breeding and fishing activities are underscored in the strategies assessed.

Decent employment opportunities are mentioned in most strategies analyzed. However, they do not operationalize decent employment in the Cameroonian context. They also lack a comprehensive view of decent employment with regards to wages, career prospects, job quality and security.

The industries and services strategy plans to encourage private sector investments in local infrastructures, the environment, protection of nature and sustainable development sub-sector strategy plans to promote Access and Sharing-Benefit within the framework of the Convention on biological diversity (CBD), however, an explicit commitment to capture revenue and promote redistribution of revenue from the exploitation of natural resource (oil, mining, water) is lacking in the strategies assessed. Benefit sharing as a long-term arrangement can provide equitable development, sustainability, and smooth project (Wang, 2012) if local communities properly manage “their share” of revenues (Nodem, Bamenjo, Schwartz, 2012). Specific attention needs to be paid to redistribution of revenue, power imbalances and social issues around large infrastructure and large-scale resource extraction projects. Legacy of past development or commercial projects has enhanced distrust between the community and the site developers of such projects (Ali, 2014). Violence and social breakdown can be the most severe constraint to sustainability.

CONCLUSIONS

The foregoing section has identified and discussed social and environmental strengths of the strategies and areas where more information and/or action may be needed. Evidence has shown that as the first generation PRSPs, the GESP replicates a mechanistic breakdown of sustainability into its parts economy, social and environment. It does not explicitly analyze the social and the environmental factors in a truly integrated way. But otherwise, the Environment, Protection of Nature and Sustainable Development Subsector Strategy underpins that a purely environmental approach or purely economic approach is per se not sustainable and plans to focus on the reconciliation of environment/social and their interactions. As sustainable development, green economy and Corporate Social Responsibility (CSR) are elaborated in few strategies analyzed but there are not much than the “translation” of concepts and standards with little local consultations.

Strategies analyzed recognize and deal with inter-sectoral links. Inter-ministerial, inter-sectoral working groups or committees do exist, but in practice, inter-sectoral inter-sectoral coordination seems to be ineffective. Pathways to sustainability require a robust political will (quality of policy implementation), a planning process with room for disagreement and difference, systemic change and attitudes changing at all levels.

This study has brought out various linkages between the social and environmental pillars, coordination between sectors, the importance of participation in promoting environmental goals, the importance of considering empowerment, education, means of access and level of entitlement for each resource and, most importantly, the plight of the marginalized groups. But in practice, there is a certain inertia associated with the Cameroonian's approach to sustainability. Many issues of importance are not well considered: participation of marginalized groups lacks credibility; benefits sharing are hardly mentioned and if so, in extremely general non binding terms, refugees' environmental impacts are not considered; etc. One limit of this study is that it does not focus on institutions set to achieve social and environmental linkages. In addition, there is a certain level of discomfort using checklist in sustainability assessment process, but the method presented in this paper is intended as a step towards developing greater linkage between the social and environmental pillars in development strategies in developing countries. Although the methodology might be considered to be static and linear though sustainability assessment procedure is dynamic, the information generated will go a long way in strengthening the understanding social and environmental links in Cameroon as well as in other developing nations with similar social and environmental determinants.

REFERENCES

- Alemagi, D., (2011), Sustainable development in Cameroon's forestry sector: Progress, challenges, and strategies for improvement. *African Journal of Environmental Science and Technology* Vol. 5(2), pp. 65-72.
- Alessa, L., Kliskey, A., and Altaweel, M., (2009), Toward a typology for social-ecological systems. *Sustainability: Science, Practice, & Policy*. Spring/Summer 2009 | Volume 5 | Issue 1.
- Ali, H. S., (2014), Social and Environmental Impact of the Rare Earth Industries. *Resources*, 3, 123-134. Doi: 10.3390/resources3010123. OPEN ACCESS, available from: www.mdpi.com/journal/resources
- AtKisson, A., (1996), Developing Indicators of Sustainable Community: Lessons from Sustainable Seattle. *Environmental Impact Assessment Review*, 16(4-6), 337-350.
- Altman, D. G., Gore, S. M., Gardner, M. J., and Pocock, S.J., (1983), Statistical guidelines for contributors to medical journals. *British Medical Journal*, 286, 1489-1493.
- Batschelet, E., (1979), *Introduction to Mathematics for Life Scientists*. Berlin and New York: Springer-Verlag.
- Biya, P., (2013) End of New Year Message. Available from: http://www.cameroon-embassy.nl/wp-content/uploads/2014/01/Biya_message_eng_dec2013.pdf.
- Bele, M. Y., Somorin, O., Sonwa, J. D., Ndi Nkem, J., and Locatelli, B., (2011), Forests and climate change adaptation policies in Cameroon. *Mitig Adapt Strateg Glob Change* 16:369-385.
- Bojő, J. K. G., Kishore, S., Pilapitiya, S., and Reddy, R. C., (2004), *Environment in Poverty Reduction Strategies and Poverty Reduction Support Credits*. Environment Department PAPER N°. 102. World Bank, Washington, D.C.
- Burton, E., (2000), The Compact City: Just or Just Compact? A Preliminary Analysis. *Urban Studies*, 37, 11, 1969-2001.

- Caffey, R. H., Kazmierczak, R. F., Avault J.W., (2001), Developing Consensus Indicators of Sustainability for Southeastern United States Aquaculture. *Louisiana State University Agricultural Center, Bulletin 879*, 40pp.
- Cuthill, M., (2009), Strengthening the social in sustainable development: developing a conceptual framework for social sustainability in a rapid urban growth region in Australia. *Sustainable Development* 18(6):362–373.
- Davis, R., and Franks, D. M., (2014), “*Costs of Company-Community Conflict in the Extractive Sector.*” Corporate Social Responsibility Initiative Report No. 66. Cambridge, MA: Harvard Kennedy School. Available from: http://www.hks.harvard.edu/m-rcbg/CSRI/research/Costs%20of%20Conflict_Davis%20%20Franks.pdf.
- Dietz, S., and Neumayer, E., (2007), Weak and strong sustainability in the SEEA: concepts and measurement. *Ecological Economics*, 61(4), 617–626.
- Driscoll, R., and Evans, A., (2005), "Second-Generation Poverty Reduction Strategies: New Opportunities and Emerging Issues". *Development Policy Review* 23 (1): 5–25.
- Esteves, A. M., Franks, D., & Vanclay, F., (2012), Social impact assessment: the state of the art. *Impact Assessment and Project Appraisal*, 30:1, 35-44.
- Fink, A., (2003). *The Survey Handbook*, 2nd edition. Thousand Oaks, CA: Sage.
- Franks, D. M., Davis, R., Bebbington, J. A., Ali, H.S., Kemp, D., and Scurrah, M., (2014), Conflict translates environmental and social risk into business costs. *SUSTAINABILITY SCIENCE* vol. 111 No. 21. Available from: <http://www.pnas.org/content/111/21/7576.full>.
- Forrest, M., and Bjorn, A., (1986). Ordinal scale and statistics in medical research. *British Medical Journal*, 292, 537.
- GIZ (Gesellschaft für Internationale Zusammenarbeit), (2013), *Shaping Corporate Social Responsibility in sub-Saharan*. Guidance Notes from a Mapping Survey. Bonn: GIZ.
- Greiber, T., and Schiele S. (Eds.), (2011), *Governance of Ecosystem Services*. Gland, Switzerland: IUCN. Xii + 140 pp.
- Gough, I., Meadowcroft, J., Dryzek, J., Gerhards, J., Lengfeld, H., Marandya, A., & Ortiz, R., (2008), JESP symposium: climate change and social policy. *Journal of European Social Policy* 18(4):325–344.
- Hambira Wame, L., (2009), Poverty reduction strategies and the environment: the case of Botswana. *IAIA09 Conference Proceedings, Impact Assessment and Human Well-Being 29th Annual Conference of the International Association for Impact Assessment*, 16-22 May 2009, Accra International Conference Center. Ghana: Accra. Available from: http://www.iaia.org/iaia09ghana/documents/cs/CS64_Hambira_Poverty_Reduction_Strategies.pdf.
- Harms, R., (1999), *Games against nature an eco-cultural history of the Nunu of Equatorial Africa*. Cambridge (MA).
- Harrison, M., and Coussens, C., (2007), *Global Environmental Health in the 21st Century: From Governmental Regulation to Corporate Social Responsibility*. Washington, DC: National Academies Press. Available from: http://www.nap.edu/catalog.php?record_id=11833.
- Heong, C. Y., (2006), New report points to widespread biopiracy in Africa. *THIRD WORLD RESURGENCE* #186. Available from: <http://www.twinside.org.sg/title2/twr186.htm>.
- Hugé, J. & Hens, L., (2009), The greening of poverty reduction strategy papers: a process approach to sustainability assessment. *Impact Assessment and Project Appraisal*, 27:1, 7-18.
- Hugé, J., Waas, T., Eggermont, G., and Verbruggen, A., (2011), Impact assessment for a sustainable energy future—Reflections and practical experiences. *Energy Policy* 39 (2011) 6243–6253.
- Hughes, A., (2005), *PRSPs, Minorities and Indigenous Peoples – An Issues Paper*. Minority Rights Group International-London, MRG.
- International Monetary Fund (IMF), (2010), Country Report No. 10/257 *Cameroon: Poverty Reduction Strategy Paper*. IMF, Washington, D.C. Available from : <http://www.imf.org/external/pubs/ft/sctr/2010/cr10257.pdf>.

Keitumetse, S.O., (2014), Cultural Resources as Sustainability Enablers: Towards a Community-Based Cultural Heritage Resources Management (COBACHREM) Model. *Sustainability* 6(1):70-85. Available from: <http://www.mdpi.com/2071-1050/6/1/70>.

Larkin, M., (2009), *Vulnerable groups in Health and Social Care*. Sage Publications.

Littig, B., and Griessler, E., (2005), Social sustainability: a catchword between political pragmatism and social theory. *International Journal of Sustainable Development* 8(1–2):65–79.

Morrison-Saunders, A., and Hodgson, N., (2009), *Applying sustainability principles in practice: guidance for assessing individual proposals*. Paper presented at: IAIA09 Impact Assessment and Human Well Being, 29th Annual Conference of the International Association for Impact Assessment, 16-22 May 2009, Accra, Ghana. Available from : http://researchrepository.murdoch.edu.au/1707/1/Applying_Sustainability_Principles_2009.pdf.

Murphy, K., (2012), The social pillar of sustainable development: a literature review and framework for policy analysis. *Sustainability: Science, Practice, & Policy*. Winter 2012 | Volume 8 | Issue 1. Available from: http://sspp.proquest.com/static_content/vol8iss1/1008-041.murphy.pdf.

Ministère de l'Environnement, de la Protection de la Nature et du Développement Durable (MINEPDED), (2013), Stratégie du sous secteur environnement, protection de la nature et développement durable. 247p. MINEPDED, Yaounde (Cameroon).

Ministère de l'Environnement et de la Protection de la Nature (MINEP), (2009), Renforcement de l'intégration de la gestion durable des terres dans les processus politiques majeurs/sectoriels. MINEP, Yaoundé (Cameroun).

Ministry of the Economy, Planning and Regional Development (MINEPAT), (2013), Stratégie sectorielle de développement des services sociaux : état des lieux et diagnostic. 161p. MINEPAT, Yaoundé (Cameroun).

MINEPDED (Ministère de l'Environnement, de la Protection de la Nature et du Développement Durable), (2010), Rapport de l'analyse situationnelle et estimation des besoins dans le domaine de santé en environnement au Cameroun. 184p. Yaounde (Cameroon): MINEPDED. Available from: www.afro.who.int/fr/downloads/doc_download/5791-cameroon.html.

MINEPAT (Ministry of the Economy, Planning and Regional Development), (2011), Guide méthodologique de planification stratégique au Cameroun. MINEPAT, Yaoundé-(Cameroon). Available from: <http://minepat.gov.cm/dgpat/index.php/planification/outils-de-planification/guide-de-planification-strategique>.

Minichiello, V., Aroni, R., Timewell, E., and Alexander, L., (1990), *In-depth Interviewing: Researching People*. Hong Kong:Longman Cheshire Pty Limited.

Mustafa, D., Abdul-Razak N. A., (2011), Islamic Development Bank (IDB), Foreign Aid and the Challenges for Sustainable Development in Africa. *International Journal of Business and Social Science* Vol. 2 No. 4.

Nagy. S., Hesse-Biber, Leavy, P. (2011), *The Practice of Qualitative Research*. Second Edition SAGE Publications, Inc.

Ngouana Kengne, C. V., and Tchoffo, B., (2011), The sustainability assessment of the National Aquaculture Strategy for Cameroon. *Impact Assessment and Project Appraisal*, 29(2), June 2011, pages 141–150.

Ndjetcheu, L., (2013), Governance of sub-Saharan African companies in the era of corporate social responsibility: The case of Cameroonian companies. *Business and Management Research Journal* Vol. 2(1), pp. 29 – 43.

Nodem. V., Bamenjo, J. N., and Schwartz, B., (2012), subnational natural resource revenue management in Cameroon. Forest and Mining Royalties in Yokadouma, East Cameroun. RELUFA: Yaounde. Available from :<http://www.reluфа.org/documents/subnationalrevenuestudy.pdf>.

Turcu, C., (2013), Re-thinking sustainability indicators: local perspectives of urban sustainability. *Journal of Environmental Planning and Management*, Vol. 56, No. 5, June 2013, 695–719.

The United Nations Environment Programme (UNEP), (2011), *Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication*. Nairobi: UNEP. Available from: <http://www.unep.org/greeneconomy/GreenEconomyReport>.

The United Nations Environment Programme (UNEP), (2013), *Green Economy Scoping Study: South African Green Economy Modeling Report (SAGEM)* – Focus on Natural Resource Management, Agriculture, Transport and Energy Sectors. Nairobi: UNEP.

United Nations High Commissioner for Refugees (UNHCR), (2014), *CAR refugees attacked as they flee to Cameroon*, Briefing Notes. Available from: <http://www.unhcr.org/print/5347bde09.html>.

Sotamenou, J., and Tchoumdop Ndonou E.M., (2013), Corporate Social Responsibility (CSR) among SMEs in Cameroon: entrenching environmental conservation within small business. *ICBE POLICY BRIEF*, N°14. TrustAfrica, Dakar-Sénégal. Available from: <http://www.africaportal.org/dspace/articles/corporate-social-responsibility-csr-among-smes-cameroon-entrenching-environmental>.

Oyewunmi, A. O., (2013), Sharpening the Legal Tools to Overcome Biopiracy in Africa through Pro-development Implementation of Normative International Standards: Lessons from Brazil, South Africa and India. *African Journal of International and Comparative Law*. Volume 21, Page 447-466.

Olsen, K. H., and Fenhann, J., (2008), Sustainable development benefits of clean development mechanism projects. A new methodology for sustainability assessment based on text analysis of the project design documents submitted for validation. *Energy Policy*, 36, 2819–2830.

Owen, J. R., and Kemp, D., (2014), ‘Free prior and informed consent’, social complexity and the mining industry: Establishing a knowledge base. *Resources Policy*; Volume 41, Pages 91–100.

Partidário, M. R., Paddon, M., Eggenberger, M., Dao, M. C., and Nguyen, V. D., (2008), Linking strategic environmental assessment (SEA) and city development strategy in Vietnam. *Impact Assessment and Project Appraisal*, 26(3), pages 219–227.

Punch, K. F., (1998), *Introduction to Social Research: Quantitative and Qualitative Approaches*. Thousand Oaks, CA: Sage.

Republic of Cameroon, 2009. Growth and employment strategy paper 2010/2020. Available from: <http://www.imf.org/external/pubs/ft/scr/2010/cr10257.pdf>.

Stevens, S. S., (1946), *On the theory of scales of measurement*. Science, New Series, 103(2684) (7 June 1946), pp. 677–680.

Volkery, A., Klaus, J., Bregha, F., Pintér L., and Swanson, D., (2004), Coordination, Challenges and Innovations in National Sustainable Development Strategies-Based on a 19-Country Analysis. Paper presented at the 2004 *Berlin Conference on the Human Dimension of Global Environmental Change “Greening of Policies: Inter-linkages and Policy Integration”*. Panel B3 “National Policy Integration 2”. Berlin: Germany.

Wang, C., (2012), *A guide for local benefit sharing in hydropower projects*. Social development papers ; no. 128. Social sustainability and safeguard. Washington, DC: World Bank. Available from : <http://documents.worldbank.org/curated/en/2012/06/16465910/guide-local-benefit-sharing-hydropower-projects>.

The World Bank, (2011), *Africa’s Future and the World Bank’s Support to It*. Washington, DC: World Bank. 46 p (Available from: http://siteresources.worldbank.org/INTAFRICA/Resources/AFR_Regional_Strategy_3-2-11.pdf.)

Yin, R. K., (2009), *Case Study Research: Design and Methods*, 4th edition. Thousand Oaks, CA: Sage.

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