Dogmo Pokem, Sicco Dany

**Working Paper**

Linking normative and strategic planning in a unique forest management planning framework: A theoretical proposal

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Linking normative and strategic planning in a unique forest management planning framework

A Theoretical Proposal

Sicco Dany Dogmo Pokem
**Forewords**

This working paper is the first of a series of three papers constituting a part of the author’s PhD thesis titled “Design of a planning system for sustainable forest management in the Congo Basin”. In addition to the focus of this paper on value and strategic system (VSS) of forest management planning, the other two working papers examine the “Forest management planning framework: Property rights and decentralisation - A theoretical overview” (Working Paper 53 - 2008) and the “Institutional governance system (IGS) for forest management planning: a possible theoretical model” (Working Paper 54 - 2008). All three papers have been discussed in colloquia and revised by the author.

Adopting as a starting point, the works of Oesten & Roeder (2002) as well as other relevant literature¹ form the basis of this paper in relation to common pool resources (CPR) and their management. This is supplemented by the author’s experience on forestry in the Congo Basin. The focus is placed on the need to link the normative and strategic forest planning in one unique, comprehensive and dynamic system, in order to understand the way to secure the long term or the future existence of the forestry. The present model aims therefore to improve the flow of information from one (value or normative planning) to another (strategic planning). This paper provides ideas, methods and techniques for managing the co-existence of forest management planning actors and/or stakeholders, particularly in building trust, confidence, which is essential for sustainable forest management. It (paper) focuses on forest concessions and/or forest management units, and is also relevant to forest councils in the tropical rainforests of the Congo Basin, and specifically in Cameroon. It also focuses on the management of other CPR in other tropical countries. This paper will be of considerable interest to managers, practitioners and academics active in the area of tropical forest management planning in the Congo Basin.

I wish you a pleasant and inspiring read.

Sicco Dany Dogmo Pokem² (Freiburg, Germany).

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¹ Hanewinkel (2001); Kreikebaum (2001); Oesten & Roeder (2002); Smith (1982); Pfohl & Stölzle 1997; Van Kooten & Wang 2000; Fargeot et al. (2004); Présidence de la République du Cameroun (PRC) (1994, 1995); Nasi et al. (2006); Elliot et al. 2002.; Association Technique Internationale des Bois Tropicaux (ATIBT) (2005a,b, 2007); Kovac (2002); Abdullah et al. (1998); Forest Monitor (FM) (2001).
² Sicco Dany Dogmo Pokem, d.dogmo@ife.uni-freiburg.de.
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<th>Description</th>
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<tbody>
<tr>
<td>AFLEG</td>
<td>African Forest Law Enforcement and Governance</td>
</tr>
<tr>
<td>ATIBT</td>
<td>Association Technique Internationale des Bois Tropicaux</td>
</tr>
<tr>
<td>ATO</td>
<td>African Timber Organization</td>
</tr>
<tr>
<td>BFT</td>
<td>Bois et Forêts des Tropiques</td>
</tr>
<tr>
<td>CSA</td>
<td>Canadian Standard Association</td>
</tr>
<tr>
<td>C&amp;I</td>
<td>Criteria and indicators</td>
</tr>
<tr>
<td>CBD</td>
<td>Convention on Biological Diversity</td>
</tr>
<tr>
<td>CBFP</td>
<td>Congo Basin Forest Partnership</td>
</tr>
<tr>
<td>CEFDHAC</td>
<td>Conference of the Central African Moist Forest Ecosystems</td>
</tr>
<tr>
<td>CF</td>
<td>Council Forest</td>
</tr>
<tr>
<td>CIFOR</td>
<td>Centre for International Forestry Research</td>
</tr>
<tr>
<td>CPR</td>
<td>Common Pool Resources</td>
</tr>
<tr>
<td>CSR</td>
<td>Corporate Social Responsibility</td>
</tr>
<tr>
<td>COMIFAC</td>
<td>Conference of Ministers in Charge of Forests in Central Africa</td>
</tr>
<tr>
<td>EA</td>
<td>Ecosystem Approach</td>
</tr>
<tr>
<td>EM</td>
<td>Ecosystem Management</td>
</tr>
<tr>
<td>FAO</td>
<td>Food and Agriculture Organization</td>
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<tr>
<td>FESP</td>
<td>Forest Environment Sector Programme</td>
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<tr>
<td>FMP</td>
<td>Forest management planning</td>
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<tr>
<td>FMU</td>
<td>Forest Management Unit</td>
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<tr>
<td>FSC</td>
<td>Forest Stewardship Council</td>
</tr>
<tr>
<td>GFW</td>
<td>Global Forest Watch</td>
</tr>
<tr>
<td>G.G</td>
<td>Good Governance</td>
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<tr>
<td>GTZ</td>
<td>Gesellschaft für Technische Zusammenarbeit</td>
</tr>
<tr>
<td>IIED</td>
<td>International Institute for Environment and Development</td>
</tr>
<tr>
<td>ILO</td>
<td>International Labour Organisation</td>
</tr>
<tr>
<td>IPCC</td>
<td>Intergovernmental Panel on Climate Change</td>
</tr>
<tr>
<td>ITTO</td>
<td>International Tropical Timber Organization</td>
</tr>
<tr>
<td>IUFRO</td>
<td>International Union of Forest Research Organizations</td>
</tr>
<tr>
<td>MBI</td>
<td>Market-Based Instrument</td>
</tr>
<tr>
<td>MINEF</td>
<td>Ministère de l’Environnement et des Forêts</td>
</tr>
<tr>
<td>Acronym</td>
<td>Description</td>
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<tr>
<td>--------------</td>
<td>-----------------------------------------------------------------------------</td>
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<tr>
<td>NGOs</td>
<td>Non-Governmental organizations</td>
</tr>
<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
</tr>
<tr>
<td>PEFC</td>
<td>Pan-European Forest Certification</td>
</tr>
<tr>
<td>PCI</td>
<td>Principles Criteria and indicators</td>
</tr>
<tr>
<td>PMI</td>
<td>Plus Minus Interesting</td>
</tr>
<tr>
<td>PPP</td>
<td>Public-Private Partnerships</td>
</tr>
<tr>
<td>PRC</td>
<td>Presidency of the Republic of Cameroon</td>
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<tr>
<td>RAPAC</td>
<td>Réseau des Aires Protégées d'Afrique Centrale</td>
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<tr>
<td>SD</td>
<td>Sustainable Development</td>
</tr>
<tr>
<td>SFD</td>
<td>Sustainable Forest Development</td>
</tr>
<tr>
<td>SFM</td>
<td>Sustainable Forest Management</td>
</tr>
<tr>
<td>SGS</td>
<td>Société Générale de Surveillance</td>
</tr>
<tr>
<td>TFAP</td>
<td>Tropical Forest Action Plan</td>
</tr>
<tr>
<td>UN</td>
<td>United Nations</td>
</tr>
<tr>
<td>UNCED</td>
<td>United Nations Conference on Environment and Development</td>
</tr>
<tr>
<td>UNEP</td>
<td>United Nations Environment Programme</td>
</tr>
<tr>
<td>UNCED MAB</td>
<td>United Nations Educational, Scientific and Cultural Organization</td>
</tr>
<tr>
<td></td>
<td>Man and the Biosphere</td>
</tr>
<tr>
<td>US</td>
<td>United States</td>
</tr>
<tr>
<td>SFM</td>
<td>Sustainable Forest Management</td>
</tr>
<tr>
<td>VSS</td>
<td>Value and Strategic System</td>
</tr>
<tr>
<td>WCFSD</td>
<td>World Commission on Forests and Sustainable Development</td>
</tr>
<tr>
<td>WRI</td>
<td>World Resources Institute</td>
</tr>
<tr>
<td>WWF</td>
<td>World Wildlife Fund</td>
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1 Introduction

Over the last decade, emerging social and environmental concerns with regard to the global ecosystem as a whole and the management of the world’s forests in particular, led to significant changes in perceptions of forest management planning (FMP). This shift in emphasis from the production of a single commodity, notably timber, to a comprehensive ecosystem management for multiple-uses and benefits requires considerable changes in the way forestry activities are planned, implemented and controlled. In this respect, Oesten & Roeder (2002) argued that in these times of more rapidly and deeply seizing transformations of the social surroundings field, forestry can only survive and further develop, if it makes constant contributions to solving social, economic and ecological problems. They argued that forest management may, therefore, not orient itself exclusively inward, and that to maintain its autonomy, the management requires on one hand the social support, agreement of stakeholders, legitimacy and on other hand it requires to secure its long term existence. In this framework, the present paper argues on the importance of integrating in the classical (medium term) FMP process, the normative and strategic aspect (of planning). This because of ideology, beliefs, ethics, morals and strategy (future orientation) which can act powerfully as driving forces in providing incentives or restrictions to pursue the FMP process or the implementation of its outcome. In this respect, “efficient and effective” classical tactical and operational FMP level is necessary, but not sufficient for conflict resolution, for legitimating

3 Clement (1997); Association Technique Internationale des Bois Tropicaux (ATIBT) (2007); Kovac (2002); Bois et Forêts des Tropiques (BFT) (2004); Nasi et al. (2006); Atyi & Mbolo (2006); Kreikebaum (2001); Pfohl & Stölzle 1997; Hanewinkel (2001); Smith 1937,1982; Burger & Mayer (2003).
4 Kovac (2002); BFT (2004); Nasi et al. (2006).
5 Forestry understand here as forest management has to be understood as the art, science, and practice of studying and managing forests and plantations, and related natural resources according to Wikipedia, the free encyclopaedia (13.09.2007). It is also known according to CAB International (CABI) (2004) and the International Union of Forest Research Organizations IUFRO (2005) as formal or informal process of planning and implementing practices aimed at fulfilling relevant environmental, economic, social and/or cultural functions of the forest and meeting defined objectives. Note - further detailed definitions, such as those of timeframe, intensity, impacts, management level and resource requirements can be applied, depending on the purposes, such as reporting, forest resources assessment, policy formulation or resource allocation. The aforementioned definition has been elaborated in the process on harmonising forest-related definitions for use by various stakeholders, an initiative of Food and Agriculture Organisation (FAO) with Centre for International Forestry Research (CIFOR), Intergovernmental Panel on Climate Change (IPCC), International Union of Forest Research Organizations (IUFRO), International Tropical Timber Organization (ITTO) and United Nations Environment Programme (UNEP).
6 Here classical forest management planning can be designated as the theory of medium-term economic planning in the forest enterprise. The medium-term economic planning is an established term in economic sciences and in the handling language (Speidel (1972)).
7 Adapted from Sabatier & Weible ((2006); Sabatier & Jenkins-Smith (1999); Sewell (1985) quoted by Clement (2007)).
the FMP outcome, for social (social responsibility, personal management responsibility...), economic value and ecological value (ecological responsibility).

This working paper is concerned with following questions: Which normative and strategic approaches should be pursued in the FMP framework? Which sets of guidelines should be developed to safeguard the long-term or future of forest management (the forest enterprise) and how should the outcomes of normative and strategic planning be integrated into one system? To answer these questions, the VSS was built as the integrated model based on normative and strategic aspect of planning with the strategy intent as intersection of the model. In contrast to the price oriented value, the VSS integrates also the non-price values. It (VSS) is the ultimate purpose of this paper which allows information flow and interaction from the normative planning to the strategic one through the strategic intent. This paper aims to shows how these two approaches of planning can be merged to provide the basis for the VSS in forest management planning. This model should provide forest planners, forest managers and forest enterprises the motivation to act sustainably and to produce ‘green’ products for common welfare. The paper involves the chapter one (1) which gives an account of the context information for this VSS model design with a briefly synthesis of the paper. In this framework, the chapter two (2) taken in this paper is to describe the approach or the way use in the design of the VSS. Thus, the sources used in the collection of information for the design of the VSS model are highlighted. It constitutes an interdisciplinary framework based on one hand on normative source like the institutional frame, namely international and regional forest policy, with an emphasis on cases from Cameroon (specifically the national constitution, forest law and the forest legislative mandate, governance) and the management concepts, such as ecosystem management, the ecosystem approach, sustainable forest management and certification. On other hand the strategic planning sources which is essentially the secondary data on strategic planning. Those two sources of inspiration represent the framework for the VSS model design (refer to Figure 2). The chapter 3 describes the architecture of the VSS model and clarify the meaning by the definition of the normative and strategic intention as well as the strategic planning. This architecture highlights about the elements of the VSS model, showing the structure and inter-connexion between elements of the VSS. It contains eight identifiable stages devised from the combination of the following

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According to Oesten & Roeder (2002): „Die Funktionsfähigkeit der Waldsökosystem“ (Verantwortung für die „Natur“ in German)
three blocks (refer to Figure 3-1, p. 26): The first one (first block) highlights the normative aspect of planning, which consists of vision, mission, guiding images,\textsuperscript{10} and norms or principles of behaviour. The second block shows the strategic intent, which in the context of this working paper is the link between normative and strategic planning. The third block concerns the strategic planning, which is further elaborated by focusing on the strategic analysis, synthesis and analysis, and the strategic implementation as tactical planning. Lastly, the chapter 4 draw the conclusion on the general lessons learnt from this working paper.

\textsuperscript{10} or ‘Leitbild’ in German
2 Working approach in designing the value and strategic system

The value and strategic system (VSS) is of the opinion of the author understood as a code of good conduct for the classical or tactical FMP. It is a set of guidelines developed from a variety of data from a range of sources to safeguard the future or success of the FMP process and outcome. It is to be followed when carrying out the tactical and operational FMP processes. Indeed, it is in the nature of systems that they operate in the real world and are continuously engaging the environment, which in this case is Cameroon; therefore, the system design focuses on the FMP’s Cameroon. The method used in the design of the VSS was based on secondary data or documentations analysis from various sources dealing with legislation (constitution, forest law), economic, political, institutional literature (both national: Cameroon and international) and from literatures focusing on sustainable forest management (SFM), governance and certification. The Figure 2-1 displays below, shows that the VSS design is based on the following fundamental considerations or sources: the national (Cameroon) constitution, Forest law, good governance (G.G), ecosystem management (EM) and the ecosystem approach (EA), certification, international forest policy and strategic planning theories and methods.

![Figure 2-1 Conceptional framework of the value and strategic system (VSS)](image-url)
2.1 Institutional frame for value and strategic system (VSS) model approach

2.1.1 International and regional forest Policy and outcomes

The role of forests for biological diversity, non-timber forest products, cultural values and ecological services is now recognised worldwide. As a result, forestry has become a more complex, more demanding discipline. In recent years, several major events have drawn the attention of the public to the importance of forestry and the global environment. Cabarle (1992) showed that the Tropical Forest Action Plan (TFAP), launched in 1985, was a major international attempt to tackle tropical forest deforestation. The plan has made billions of dollars available to projects to save forests.\(^{11}\) These efforts culminated with the Earth Summit held in Rio de Janeiro in 1992, organised by the United Nations Conference on Environment and Development (UNCED). Not only was this the most important conference ever to focus on environmental issues, it was also the largest intergovernmental conference of any kind in history. A total of 178 United Nations (UN) member countries were represented; 102 of them represented by their head of state or government. Also represented were international financing institutions, technical cooperation agencies such as the FAO, private companies and associations and approximately 1000 Non-Governmental Organisations (NGOs). A number of important documents were produced by UNCED that will influence forest policies and guide the work of development-assistance agencies for years to come. The following documents are among the most important of these, with respect to the development of codes of forest practice:\(^{12}\)

a) Rio Declaration: this declaration consisted of 27 guiding principles focusing on the rights and obligations of sovereign states with respect to the environment and development. The intention was to further elaborate the principles of this declaration in time for the presentation of an Earth charter at the fiftieth anniversary of the United Nations in 1995;\(^{13}\)

b) Forest principles is the informal name given to the “non-legally binding authoritative statement of principles for a Global Consensus on the Management, Conservation and Sustainable Development of All Types of Forests,” adopted at the UNCED. It captured the general international understanding of sustainable forest management at that time and

\(^{11}\) Cabarle (1992).

\(^{12}\) Burger & Mayer (2003); Earth Summit (2002); Dogmo 2004.

\(^{13}\) UNCED (1992a); Dogmo 2004.
recognising national sovereignty over forest resources as well as the right to develop those resources;\textsuperscript{14}

c) United Nations Framework Convention on Climate Change (UNFCCC): This convention was signed by 150 countries as a broad commitment to reducing greenhouse gas emissions;\textsuperscript{15}

d) United Nations Convention on Biological Diversity (UNCBD): This convention, signed by 154 countries, formalised a commitment to maintaining natural biological diversity, especially through measures designed to protect natural ecosystems and endangered species;\textsuperscript{16}

e) Agenda 21: this document was developed as an ‘action plan’ for the period 1993 to 2000. It included 115 programme areas described in 40 chapters. Chapter 11, “Combating deforestation,” is specifically devoted to forestry, and, in spite of the apparent emphasis on deforestation suggested by its title, describes a balanced programme that covers four priority areas:

- Sustaining the multiple roles and functions of all types of forests and woodlands;
- Enhancing the protection, sustainable management and conservation of all forests, and the rehabilitation of degraded areas;
- Promoting efficient utilisation and assessment to recover the full value of the goods and services provided by forests and woodlands;
- Establishing or strengthening capacities for assessing and systematically reporting data on forests and forestry activities, including commercial production and trade.\textsuperscript{17}

The second and the last priorities are particularly relevant to the development of Value Goal System model.

The UNCED documents include a number of additional conclusions and statements that are potentially quite important for the system value design. Perhaps the most important of these is the explicit, public recognition by policy makers at the highest levels that forests are essential for sustainable economic development and also for the cultural legacy and physical well-being of current and future generations. In this context, the Congo basin renowned for its biodiversity and environmental and socio-economic services now receives great attention from the international community. In regional terms, the issue of sustainable forest

\textsuperscript{14} UNCED (1992 b); Dogmo 2004.
\textsuperscript{15} UNCED (1992 c); Dogmo 2004.
\textsuperscript{16} UNCED (1992 d); Dogmo 2004.
\textsuperscript{17} UNCED (1992 e); Dogmo 2004.
management, conservation and poverty alleviation is now being given very high priority on the political agendas of the countries of Central Africa. Due to the importance of the sub-region, there are growing numbers of efforts to bring about sustainable forest management, with the establishment of institutions, discussion and reflection fora and political decision making structures such as the African Timber Organization (ATO), the Conference of the Central African Moist Forest Ecosystems (CEFDHAC), the Conference of Ministers in Charge of Forests in Central Africa (COMIFAC), and more recently also the Congo Basin Forest Partnership (CBFP), the African Forest Law Enforcement and Governance (AFLEG) and the Réseau des Aires Protégées d' Afrique Central (RAPAC). The ratification of agreements and conventions also shows the will of governments to manage their forests sustainably, as do the implementation of active regional programmes (the Conservation and Rational Use of Forest Ecosystems in Central Africa (ECOFAC) Programme, the Regional Environment Information Management Programme, etc.) and the establishment of sub-regional networks.18 In this working report the International Labour Organization (ILO) perspective on sustainable forest management is also taken into consideration. In fact, it has been suggested by various authors that ILO texts could provide a basis for shared criteria and indicators of the social aspects of sustainable forest management.19 Therefore, included in this report are some of the outcomes of the ILO texts, the most relevant of which are presented in Annex 1. In national terms, special institutional frameworks concerned with the environment are being set up; forest laws (Law 94)20 are being revised to adapt them to new international developments, national environmental NGOs are being promoted,21 etc.

2.1.2 Institutional approach for value and strategic system based on Cameroon cases

2.1.2.1 Constitution

A constitution is set of rules, often codified as law or a written document, determining the rules and fundamental political principles upon which a government or an organisation is founded and regulating the division of sovereign powers, directing which of these powers is to be granted to which person, and the manner in which they are to be exercised.22 Van Kooten & Wang (2000) argued that it refers to the study of how society chooses the rules for making

18 Fargeot et al. (2004); Lescuyer (2000); Dogmo (2004); Nasi et al. (2006).
19 For more information referred to Poschen (2000,2003).
21 For more information referred to Dogmo (2004).
22 Economic Expert (2009); See also Hutchinson & Wikipedia (2002); Wikipedia (2007)
rules under the social system, and operates procedures for making selections from alternative possibilities. The term constitution is sometimes employed to define a set of doctrines and practices that form the fundamental organising principle of a political state. It is a fundamental principle of law by which a government is created and a country is administered. Modern constitutional ideas developed during the Enlightenment (in the 17th century), when philosophers such as Thomas Hobbes, Jean-Jacques Rousseau and John Locke (1670) proposed that a constitutional government which refers to the theory of the social contract, should be stable, adaptable, accountable and open; that they should represent the governed, and divide power according to its purpose. Cameroon’s constitution was born on 1st October 1961 and was last amended in January 1996. An analysis of the constitution in the context of the focus of this study reveals that the natural resources of Cameroon are exclusively for the Cameroonian common welfare (well-being), to be employed to raise living standards. The constitution also affirms the attachment of the Cameroonian people to ratified international policies and recognises the fundamental principle of democracy, as well as that of social justice and of good governance. This is for instance, underlined in the statements, “the republic of Cameroon shall be a decentralised unitary State” and the “views of minorities are taken into account”.

2.1.2.2 Forest Law or forest legislative mandates

The word law derives from the late Old English lagu of probable northern Germanic origin; a legal theory which can coincide with moral principles or legal obligation. In the context of forestry, it expresses a set of rules or principles or norms of conduct which forbid, permit or mandate specified actions and relationships between people and organisations dealing with forestry within a legal system or political framework that enforce it, and attempt to ensure the impartial treatment of those suspected of breaking the rules and to administer justice. These are rules of conduct or procedure established by government. Another consideration in examining law is that it is also defined as the legislative pronouncement of rules to guide forestry activities within any organised society. In Cameroon, the law enforcement agency is the Ministry of Forest and Fauna (MINFOF). However, in establishing a proper definition of law, one must also question the authority upon which it lies. The sociologist Max Weber,
Working approach in designing the value and strategic system

quoted by the Wikipedia (2007), identified the legal-rational form as a type of domination. It showed that some commentators have gone a step further and argued that since the most influential groups control the political institutions of society, they will enjoy the most success in getting laws passed and judgements made in their favour. Thus, in contrast to Weber & Marx & the legal philosopher Fuller, quoted by Wikipedia (2007) argued that a legal system has authority because it must satisfy certain principles, which establish an ‘inner morality’ if it is to succeed.29 Cameroon adopted new law on forests, wildlife and fisheries30 which was approach in 1994 and supporting decrees on wildlife31 and forests32 issued from the old one (1983), in 1995 after five years process. The main underlying principle is that of ensuring the sustainability and development of the economic, ecological and social functions of the nation’s forests, through integrated management leading to the sustained conservation and utilisation of the resources and forest ecosystems. These policies have five goals.33

a) To ensure the protection of forests, safeguard the environment and conserve biological diversity;
b) To improve the integration of forest resources in rural development and to increase the participation of rural populations in forest conservation and management in order to raise their living standards;
c) To develop forest resources sustainably with a view to increasing the contribution of forest production to the GDP;
d) To ensure forest renewal through regeneration and reforestation; and
e) To set up an efficient institutional system involving all concerned parties in the management sector.

In addition, the new forest law and its application decree were approved as a good basis for the introduction of sustainable forest management, and they stress in particular good forest management practices through the following provisions:34

29 For more information refer Wikipedia (2007).
30 PRC 1994, for more see also WRI (2000); Ministère de l’Environnement et des Forêts (MINEF) (2000); Cerutti et al. (2006).
33 for more Lescuyer (2000); Nasi et al. (2006); BFT 2004; Atyi (2000); Foahom (2004); Cerutti et al. (2006); Atyi & Mbolo (2006).
34 For more information refer to Cerutti et al. (2006); Bois et Forêts des Tropiques (BFT) (2004); Global Forest Watch (GFW) (2005); FAO (2005); MINEF (2000).
a) The introduction of a zoning management plan, the replacement of the former forest licence system with the concession system, the compulsory preparation and implementation of forest management plans in concessions and council forest, and a simple forest management plan in forests allotted to communities;
b) Within the forest management planning framework the concession holder has to make arrangements with any stakeholders involved, particularly the forest users;
c) The allocation of a concession is carried out by adjudication following a public offer;
d) The introduction of provisions in respect of the allocation of concessions, and the creation of forest brigades and an inspection panel at national and provincial levels for forest control;
e) Law 94 stipulates that the silvicultural standards for forest management and the felling cycle are set at 30 years and minimum harvesting diameters are indicated for each species. The standards further describe the designation of potential final crop trees, the tending of natural regeneration, thinning, enrichment planting and refinement.

2.1.2.3 Governance

Bass et al. (2002) stated that governance is complex. It covers global-local links and sector-sector links as well as differing values. They showed however that, it is increasingly recognised that governance problems underlie many forest-related problems. Furthermore, they argued that in recent years there are some progresses which have been made in developing better enabling conditions for forest governance in many countries. Therefore, governance is considered to be fundamental to forestry by determining the manner in which power and influence are exercised over management. In this respect, institutions as described in Dogmo (2008b) working paper 53, play a range of roles in forest governance and affect forestry which should provide economic and nutritional security, and livelihood benefits.\textsuperscript{35} According to Sandström & Widmark (2006), co-management, joint management and collaborative management all stress the need for G.G, which takes into consideration the process of interaction between different societal and political actors, and the interdependence between them. Bass et al. (2002) highlighted that governance is guided by policy, enforced by laws and executed through institutions. All of these aspects of governance span the hierarchy of levels from local to global, and cover a breadth of multi-stakeholder and multi-sector interactions. They are also deeply concerned with issues of values and structure.\textsuperscript{36}

\textsuperscript{35} Bass et al. (2002); Ostrom (1999a,b); Ostrom (2000); Ostrom (1998); Agrawal & Ribot (1999); Berkes (2005).
\textsuperscript{36} Bass et al. (2002).
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In this framework, Naciri (2008) in his book on corporate governance defined the governance as a system of managerial regulations. He showed that this definition leads directly to an institutional perspective, a natural result in sociology, law and political sciences, and strongly renewed in economics over the past three decades with the emergence of the neo-institutional approach. The governance system represents a set of institutional mechanisms, an institutional matrix, designating the rules of the game for managers. \(^{37}\) In this spirit, Van Kooten & Wang (2000) argued that the function of a governance mechanism or, more generally, a governance system, is to contribute to the efficiency of the enterprise. According to them and Charreaux, (2004), the principle of natural selection adapted to the field of governance, only efficient systems that ensure the regulation of the enterprise can lead to the creation of long term value. Governance also refers to an institutional framework within which contracts are initiated, negotiated, monitored, adapted, enforced and terminated. The Marquarie dictionary (2007) defined governance as: government, exercise of authority, control or method or system of government or management. The term governance also deals with the processes and systems by which an organisation or society operates. Frequently a government is established to administer these processes and systems.\(^ {38}\) According to the WB (1991) governance can be defined as the exercise of political authority as well as the use of institutional resources to manage society's problems and affairs.

It is estimated that over the past few years, poor governance\(^ {39}\) has led to annual global market losses of over US$ 10 billion from the illegal logging of forests, and annual loses in government revenues of about US$ 5 billion. Corruption, illegal logging, unclear tenure and use rights, and the trade in the associated products, have become increasingly acknowledged as key barriers to achieving sustainable forest management and conservation. Several initiatives, partnerships and intergovernmental processes have been launched to address these problems, but establishing good forest governance and strengthening the rule of law continues to be a major challenge facing the sector. Furthermore, governance problems underlie many forest management problems. The attainment of SFM depends critically upon matters far from the forest itself. It depends on the extent and quality of enabling policy, legal and institutional conditions and on good forest governance. Bass et al. (2002) showed that together, these conditions influence how a society organises itself in order to develop and manage forest

\(^{37}\) Naciri (2008).

\(^{38}\) See also J. M. Carver (2009); see also Wapedia (2009) Wikipedia (2009) for review.

\(^{39}\) World Bank (2006); Cerutti et al. (2006).
wealth, to produce forest goods and services, and to consume them. It is increasingly clear that the underlying causes of bad forest management are invariably disabling policy, legal and institutional conditions, and these causes often work through the market. Weak forestry institutions cannot enforce legislation. Weakened social norms mean that forest abuse is unpunished by other stakeholders. It is these weaknesses of governance that tend to underlie the dramatic problems at forest level clearance of primary forests, afforestation that does not respect local peoples’ rights and needs, forest management that extinguishes biodiversity, etc. The authors also highlighted that in the past decade an increasing number of initiatives have been developed to help assess and plan SFM at the level of the forest enterprise, forest estate, and the forest stand. Several criteria and indicators initiatives have attempted to define the dimensions of good forest management. Environmental and quality management systems have helped to build and assess the capacity of management to work towards SFM. Certification schemes have emerged to audit performance in either forest management, or management systems, or both. All of these essentially field- and enterprise-based approaches have had a significant impact on our understanding of what should be happening at this local level, and of the actual outcomes in terms of forest condition. They have also helped to either confirm or to build the capacity of forest managers\(^\text{40}\). However, their impact so far may be summed up as simply ‘making good managers even better’. Poor managers (or indeed forest asset-strippers) have been little affected.

In Cameroonian forestry, forest governance encompasses topics relating to how forest resources are managed, how decisions concerning forest use are made, how forest laws and policy are enforced on the ground and who is involved in the decision-making process by providing opportunities for stakeholder dialogue, sharing knowledge and by promoting equitable and efficient forest management practices. The aim of forest governance is to enhance accountability in the forestry sector and to contribute to a better understanding of forest law enforcement. In this thesis, the emphasis will be on good forest governance according to the major characteristics outlined in an analysis carried out by the African Forest Law Enforcement and Governance (AFLEG)\(^\text{41}\) and presented in their declaration on forest governance. It is participatory, consensus oriented, accountable, transparent, responsive, effective and efficient, equitable and inclusive, and follows the rule of law. It assures that corruption is minimised, the views of minorities taken into consideration and the voices of the

\(^{40}\) Bass et al. (2002); Lescuyer (2000, 2006); African Timber Organization (ATO)/ International Tropical Timber Organisation (ITTO) (2003).

\(^{41}\) Sustainable Development (SD) (2003).
most vulnerable in society heard in the decision-making process. It is also responsive to the present and future needs of society. The review of forest governance in Cameroon shows that there has been some progress on G.G, although as yet this effort has been insufficient to ensure the implementation of good governance in Cameroon.\textsuperscript{42} The main issues are as follows:

a) Policy objectives (Law 94) have expanded, from the overriding perception of forests as timber resources or land banks for development to an interest in a wider range of forest goods and services, and stakeholder needs;

b) The rights of forest-dependent communities are beginning to receive recognition; policy debate and implementation tends now to involve multiple stakeholders and partnerships, and not merely government and members of social elite, enabling them to become effective forest managers;

c) The installation of the national strategy of forest and fauna controls;

d) Information, education, communication and the promotion of G.G;

e) The creation of a committee to combat corruption;

f) The fight against illegal logging and the application of the forest and fauna legislation;

g) The definition of the rules regulating the drafting, implementation and controlling of the forest management plans drawn up for forest concessions. This provides a practical guide for all of the actors involved in sustainable forest management;

h) The creation of the Forest Environment Sector Programme (FESP), the aim of which is to contribute to the implementation of its policy of sustainable and participatory management of national forest and wildlife resources. The programme was put in place by the government, and is open to financing from all funding bodies and contributions from civil society and NGOs.

All of these issues provide building blocks, but there is a long way to go.

2.2 Management concepts for value and strategic system (VSS) model

The early definition of sustainable forestry devised by German foresters concentrated on the timber resources, with management targeting the sustainable yield of a limited number of wood products (mostly from uniformly structured or even aged forests). In recent times, the terms ecosystem management, ecosystem approach and sustainable forest management have served to demonstrate recognition of the importance of the other products and services

\textsuperscript{42} Nasi et al. (2006); ATIBT (2005a, b); Foahom & Jonkers (2004); Fomete (2001); Oyono (2004a, b).
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provided by forests, and broader social concern has brought about changes in the way forests are planned. As a consequence, forest management planning is currently in a state of transition. The value of these approaches is underlined by the creation of numerous certification schemes. These new concepts are frequently regarded as the outcome of different trends that have developed around the question of the management of natural resources over the last few centuries. A plethora of literature on the subject outlines the origins and development of these approaches.43 Other authors have emphasised the differences between the ecosystem approach (EA) and sustainable forest management (SFM), both of which are of interest in the context of this study, particularly in relation to their connections with the concept of ecosystem management (EM) developed in the 1980s.44 In this section, the focus will be on the normative framework that we see in these new approaches as a starting point for changed perspectives in forest management planning.

2.2.1 Ecosystem management (EM)

Until the early 1980s, forestry was restricted to a few groups of actors, essentially the classical state and private users of these resources (forestry administration and timber processing industry). It wasn’t until the 1980s, when the attention of a wide section of the public was drawn to the depletion of the rainforests as a result of unsustainable use, to overexploitation and to the forest dieback phenomenon in the temperate zone by the various NGOs that the picture changed, even in the industrialised nations. It was against this background that an approach was developed that was intended to combine the interests of ecosystem science, scientific and traditional nature protection, resource managers, economics and a number of different pressure groups from society at large. It was during this period that the use of the term “ecosystem management”, meaning an integration of the biophysical and human dimensions in the management of natural resources, became common.45 This approach (EM) was interpreted in very different ways by different groups. The conservationists and scientists advanced what can best be described as an eco-centric or bio-centric approach, according to which the functional conservation of an ecosystem takes priority. The viewpoint of the social scientist and the humanist was referred to as anthropocentric, the ultimate goal of which is the long-term use of the ecosystem. A critical view has been taken by Elliot & Schlaepfer (2002). In this case the approach favoured by EM is placed firmly in the tradition of technocratic approaches and evaluated overall as a clear example of the top-down approach. The

43 Hartje et al. 2003, Flitner et al. 2006 among others.
44 Flitner et al. (2006).
45 Elliot et al. 2002
ecosystem approach was adopted by the Convention on Biological Diversity (CBD) as a central strategy in order to achieve the integrated management of land, water and living resources.

2.2.2 Ecosystem approach

There is no agreed definition of the ecosystem approach although it is recognised to be the primary framework of action to be taken under the Convention on Biological Diversity (CBD) and United Nations Educational, Scientific and Cultural Organization’s Man and the Biosphere (UNESCO MAB) programme. The ecosystem approach for forest biological diversity could be described as a strategy for the integrated management of forests that promotes their conservation and sustainable use in an equitable way. Humans, with their cultural diversity, are an integral component of forest ecosystems.\(^{46}\) The ecosystem approach requires adaptive management to deal with the complex and dynamic nature of forest ecosystems and an incomplete knowledge or understanding of their functioning.\(^{47}\) According to the ecosystem approach, forest ecosystems should be managed for their intrinsic values and for the tangible benefits they provide to human beings, in a fair and equitable way. Forest ecosystem managers should consider the effects actual or potential of their activities on forest ecosystems, to avoid unknown or unpredictable effects on their functioning and, therefore, on their values. Flitner et al. (2006) argued that forest ecosystems should also be understood and managed in an economic context. In particular, the costs and benefits associated with forest ecosystems should be internalized to the extent feasible. In addition, market distortions that adversely affect forest biological diversity should be reduced and incentives that promote forest biodiversity and sustainability aligned.

Finally, the ecosystem approach stresses that forest ecosystems should be managed within the limits of their functioning. Therefore, the conservation of their structure and functioning should be a priority target. This is a prerequisite for maintaining their values in full, including the goods and services that forests provide human beings. The CBD (2007) described ‘ecosystem’ as, “a dynamic complex of plant, animal and micro-organism communities and their non-living environment acting as a functional unit”. Decision V/6\(^{48}\) suggests an ecosystem approach defined on the basis of 12 principles and five operational guidelines. According to the CBD, a general application of the ecosystem approach will help achieve a

\(^{46}\) For more information refer CBD (2007).

\(^{47}\) Flitner et al. (2006).

\(^{48}\) CBD (2007).
balance of three objectives: conservation, sustainable use and the fair and equitable sharing of the benefits arising from the utilisation of genetic resources. However, a very different emphasis is to be found with respect to the significance of participation as a condition and expression of ‘societal choice.’ In the context of EM this clearly plays a subordinate role. Once more the concept of decentralisation is central in light of the CBD, and also comprehensively expounded upon in the implementation guidelines.

2.2.3 Sustainable Forest Management

After the Rio Summit, sustainable forest development (SFD) arose as a paradigm to follow, understood as development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It is assumed that SFD is the forest component of sustainable development. It is recognised clearly that as the health of the forest deteriorates all of its functions and services are threatened. The effects on the environment, economy and society are linked, transcending national boundaries, and undermining our ability to maintain the forests and development. People understand these issues, worry about them and are increasingly willing to change the way things are done. Much of the existing controversy over this topic derives from differing interpretations of the terms. Consequently, the following definitions, among others, serve as a basis for discussion. The ITTO definition of SFM is, “the process of managing a forest to achieve one or more clearly specified objective of management with regard to the production of a continuous flow of desired forest products and services, without undue reduction of its inherent values and future productivity and without undue undesirable effects on the physical and social environment.” Another example is the definition of the Ministerial Conference of Helsinki, which highlighted that good management and utilization of forest and forested areas in such a way and at such intensity that their biological diversity, productivity and regenerative capacity, their vitality, and their capacity to fulfil, now and for the future, their pertinent ecological, economic and social functions at the local, national and global levels, be maintained, without thereby doing harm to other ecosystems. The term SFM is the management of forests according to the principles of sustainable development. It is also the current culmination in a progression of basic forest management concepts preceded by sustainable forestry, and sustainable yield forestry before that. Sustainable forest management

49 Burger & Mayer (2003); UN (1992a); Earth Summit (2002).
is the term currently used to describe approaches to forest management that set very broad social, economic and environmental goals. A number of sets of criteria and indicators have since been developed to evaluate the achievement of SFM at both the country and management unit level. There is a multitude of initiatives to define the major components of sustainable forest management, but the majority have the following elements as a common denominator: a legal policy framework, a sustained and optimal production of forest products, an environmental management system, social issues, and some considerations related to plantations. As far as the further development and implementation of the above principles within the framework defined by the Intergovernmental Panel on Forests (IPF) and the Intergovernmental Forum on Forests (IFF) and the newly created UN Forum on Forests (UNFF) are concerned, the aim initially was to implement those decisions that had been arrived at in the course of the UNCED conference. These included the development of criteria and indicators (C&I) for SFM. This was formulated by the codification of current practice and guidelines for forest management. According to Schlaepfer et al., these C&I can clearly be viewed as an indispensable SFM tool and it was through the indicators that the operational quality of the approach was targeted. This is the reason why sustainable forest management should be used while designing a normative framework for the combined planning system. In Cameroon various criteria and indicators (C&I) systems have been prepared for or tested in the forests, including the ITTO’s C&I, the C&I toolkit of the Centre for International Forestry and more recently the ATO/ITTO Principles Criteria and indicators (PCI). A national working group developed the basis for national C&I that are compatible with Forest Stewardship Council (FSC) standards. However, none of these processes has so far been implemented beyond experimental field-testing and capacity building. Cameroon participated in the development of the convergence plan for forest management in the Congo Basin, which was endorsed by a conference of African heads of state in March 1999. This plan aimed to increase coordination and cooperation among countries of the Congo Basin in all activities relating to forests.

53 UN (1987); Earth Summit (2002); Burger & Mayer (2003).
56 Elliot & Schlaepfer (2002).
57 Boyle et al. (1997).
58 CIFOR (1998); ATO/ITTO (2003).
2.2.4 Certification

Over decades, a broad reflection is led on the criteria and indicators (C&I) of sustainable forest management in Central Africa and on their potential variation out to be instruments of certification within the forest concessions framework. In fact, Certification was proposed initially because of frustration with the inability and often unwillingness of governmental agencies and programmes as alternative to the tropical timber boycott on the Western markets by some NGOs. It standard spread at the whole world forests, forest certification has been conceived as a new instrument to promote sound forest management practices in all forest types, ranging from boreal to tropical rainforests, through communicating to consumers that wood products were verified as originating from well-managed forests. It is essentially a communication tool to link ‘good producers’ with market demand. The idea was to reshape consumer behaviour by creating a value for products from sustainably managed forests and by “branding” these products in the hope of generating a price premium for the producer. Insofar as certification relies on financial incentives to improve forest management, it may be characterised as a market-based instrument (MBI). MBIs are thought capable of internalising the costs of environmental protection with greater efficiency (and legitimacy) than traditional administrative regulation.

As can be seen from the example of the Congo Basin, certification has exerted an influence and provided useful guidelines for the development of new forest policies, and has helped to develop capacities for SFM. These new policies were subsequently incorporated in the existing arsenal of forest policies in the Congo Basin as voluntary instrument.

Forest certification gives rise to new concepts for the evaluation of forestry operations at various levels. From a common sense perspective, forest certification implies according to Elliot et al. (2002) that:

a) One understand what it means to take care of a forest properly;
b) A trustworthy person who understands proper forest management;
c) Visits the forest and assesses the work of the people who manage it and
d) Certifies for others that things are being done correctly. Conversely, if the forest is not being managed properly, certification is withheld.’ These concepts for the evaluation of forest

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60 Nasi et al. (2006).
61 like World Wildlife Fund (WWF), Green Peace; Rainforest Alliance
62 Elliot et al. (2002); Lescuyer (2006).
63 Virgilio (2002); Thornber (2002); Markopoulos (2002); Nash (2002); Shannon (2002).
64 Thornber (2002); Markopoulos (2002); Nash (2002).
65 Lescuyer (2006); Buttoud & Karsenty (2001).
management include certification systems such as the FSC (2000)\(^\text{66}\) and the Pan-European Forest Certification (PEFC)\(^\text{67}\) systems, the registration of environmental management systems of the International Standard Organization such as the sustainable forest management system of the Canadian Standard Association (CSA),\(^\text{68}\) as well as the concept of concept of criteria and indicators (C&I) for SFM. Forest certification is widely seen as the most important initiative of the last decade for the promotion of better forest management. It is also designed to send a market signal to buyers that the products they purchase are derived from forests that are managed to particular environmental and social standards. Forest certification is a system of forest inspection plus a means of tracking timber and paper through a ‘chain of custody’ - following the raw material through to the finished product. This is all to ensure that the products have come from forests that are well managed meaning they take into account environmental, social and economic principles and criteria.

The WWF considers the Forest Stewardship Council (FSC) certification system to be the only credible system in place at present capable of ensuring the environmentally responsible, socially beneficial and economically viable management of forests. WWF therefore recommends the FSC system to consumers, forest managers, policy makers, businesses and the public. The key to improving the way forests are managed through forest certification is the credibility and quality of a certification system. In the last decade, however, the inflation of the number of certification systems of dubious quality has made it difficult for companies and consumers to judge the effectiveness of these tools. Forest certification is a voluntary tool available to forestry organizations who want to demonstrate corporate responsibility by having their forest management planning and practices independently certified according to a sustainable forest management standard that goes beyond regulatory requirements and takes environmental, economic and social values into consideration.\(^\text{69}\)

The passion for forest certification is real. This is all the more manifest as the obligation to carry out a forest management plan for all concession forests constitutes an incentive for the certification of the forest companies. If a number of companies which have turned indeed to certification are growing for a few years, update however, little of them is officially certified in the basin of Congo. There are currently two certified concessions forests in Gabon, and

\(^{66}\) See also Elliot et al. (2002); Lescuyer (2006); ATO/ ITTO (2003).

\(^{67}\) Pan-European Forest Certification (PEFC) (2001); Elliot et al. (2002); Lescuyer (2006); PEFC (2004) ; Nash (2002).

\(^{68}\) Canadian Standard Association (CSA) (1996a,b cited by Elliot et al. (2002)); Lescuyer (2006).

\(^{69}\) Burger & Mayer (2003); Nash (2002); Shannon (2002).
only one in Cameroon (the FSC-certified Dutch Wijima Doaula SARL forest enterprise). However, the government of Cameroon is actively involved in the development of the African Timber Certification Scheme, and many other certification initiatives are also being developed. However, these face many significant obstacles such as competition from varying systems of certification, the ambivalence of existing C&I and PCI, and the prohibitive costs of certification for the owners of companies of average size. However, one of the greatest obstacles to certification is that the discrepancy between the C&I established by great institutions and the needs of rural populations is very real. Several investigations and public awareness campaigns were carried out in two communities (Djoum and Gambe-Tikar) in Cameroon to allow them to define their own criteria for sustainable forest management. The final list showed that there is a lack of consideration of the local criteria of sustainable forest management. According to the authors the ecological and/or silvicultural criteria were of minor importance (5 of 12), whereas the socio-economic criteria formed the majority (9 of 12). This runs contrary to other forest certification criteria and indicators, which focus more on ecological and silvicultural aspects, such as the PEFC (refer to Annex 2). Consequently, the majority of FSC certificate holders to date are from northern countries (84% of the certified area is in Europe and North America). In terms of the forest types certified, it is the temperate and boreal forests that dominate (83% of the area).

Additionally, the certification schemes in Canada and Europe are rapidly catching up with the FSC certified area. Indeed, PEFC is overtaking it. Furthermore, according to Bass, although forest certification also represents an attempt to ensure equitable outcomes of forest management by assessing the impacts on vulnerable social groups, this is not a reality. In order for forest certification to be viable it must promote corporate social responsibility by stressing that good forest management must incorporate social concerns. It has been expected implicitly that certification would benefit enterprises at community level, and improve equity in the forest industry. The expectation that certification can promote the equitable sharing of power over forests, and benefits from forest management, continues - with development agencies and NGOs often seeing certification as a tool to improve livelihoods. However, only a few of the actors involved in certification have made improved equity an overt goal. Current certification standards tend to reflect the interests and values of enterprises that

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70 Lescuyer (2006).
71 For more information refer to Bonis-Charancle et al. (2005 cited by Lescuyer 2006).
72 Bass et al. (2002).
73 Thornber (2002).
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concentrate on production forestry, where fibre production is the main objective of management. Forest enterprises that are not familiar with formal, documented management systems and concepts of inspection, but which nevertheless produce sustainable results through less formal checks and balances, are likely to be at a disadvantage.

In Cameroon the Swiss-based auditing firm Société Générale de Surveillance (SGS) is responsible for checking timber exports and ensuring that the government collects the correct levies, and has developed a computerised log-tracking system with bar codes for this purpose. Cameroon is also participating in an ITTO project that is helping to build capacity for the implementation of the ATO/ITTO PCI at the national level in the ITTO member countries. The aim is to train at least sixty forestry staff in each country in the implementation of the PCI, develop an auditing framework for African forests, and to train at least sixty more people to provide instruction in the procedures for conducting audits based on the PCI at the FMU level. Bass also proposed a framework to monitor the development of certification and impacts. The provisions to meet the critical requirements of certification schemes are agreement, transparency, access, independence, participation, consistency, accreditation, and continuous improvement, assessment to be informed by questions covering effectiveness, efficiency, equity and credibility, baseline assessment, and reporting on changes/innovations.

2.3 Strategic management planning literatures for value and strategic system (VSS)

Adding to the previously described inspiration sources for value and strategic system (VSS) design, suitable literature was reviewed for strategic forest management planning that is able to address and solve the problems described in section 1. It was assumed that assumed that some of the forest management planning problems are well covered by existing literatures in strategic forest management planning. This trust resulted in clear deduction of elements which makes the strategic planning process. These literatures are as followed Pfohl & Stölzle (1997), Boston Consulting Group (1988, 2004); Bea & Haas (2001), Hanewinkel (2001), Kreikebaum (2001), Oesten & Roeder (2002), Bos (1994); Kurth (1994); Kovac (2002). However, there is a lack of literature on strategic planning because most of the study in forest

75 Bass (2002).
76 Hanewinkel (2001); Kreikebaum (2001); Smith (1982); Pfohl & Stölzle (1997); Bos (1994); Kovac (2002).
management planning has been based essentially on tactical planning or medium term forest planning.\textsuperscript{77}

\textsuperscript{77} See for reviewed Kurth (1994); Speidel (1972).
3 Architecture of the value and strategic system (VSS)

3.1 Overview of the value and strategic system (VSS)

The traditional or classical FMP technique was primarily timber oriented and based not only on the centralised policy (forest legislation) but also on the forest authority prescriptions. This affected negatively the implementation of tactical and operational planning and was an inefficient means of addressing the problems of uncertainty, risk and conflict, which are increasingly important nowadays. These traditional FMP techniques are increasingly being replaced or completed by modern instruments of the management sciences, like normative and/or strategic planning, which are central to the planning as management function within the system model of forestry, specifically securing the long-term existence of the forest enterprise or management. This new approach to planning (normative and strategic) has found little application so far. The principal purpose of normative and/or strategic planning is to provide the answer to the question: Are we doing the correct things? Success is to be secured, so that the enterprise can continue to exist in the future.

Searching agreement over the normative and strategic intent is the foundation of the VSS in the FMP framework which would be a signalling mechanism to stakeholders and market. Thus, the task of the VSS is to look at enterprise policy for promptly communication and potential image protection in relation to all reference groups of the forestry (stakeholders). This task should be considered as securing the signalling and the learning mechanism of the forestry (economic demands and interests). So, the VSS should ensure the legitimacy of the forestry in the long-term. Oesten & Roeder (2002) pointed out the need for a strategic intent, which in this context described as the link between the two planning approaches (normative and strategic). The strategic intention is the intersection of the two main headings: normative and/or values and strategic planning process and/or goal in one model. It is the opinion of the

78 Speidel (1972); Atyi (2000); Mantel (1959).
79 Cerutti et al. (2006); MINEF (2000).
80 Control by area, by volume, even-aged method, combined method, control method, etc. For more information refer to Speidel (1972).
81 Kovac 2002.
82 For example with respect to the future of the forest landscape, the future market, principles of behaviour, vision, guiding images, etc.
83 Adapted from Oesten & Roeder (2002).
84 Oesten & Roeder (2002) presented the element of normative planning but not link it to strategic planning. The strategic intent, in their view the last step in the normative planning process, has been adopted as the link in this report, because inherent in the strategic intent is a strategy concept.
author that the merged system should allow information to flow from the normative planning, in the form of emerging value as ethic, morals, guidelines, to the strategic planning one, inwardly focused on securing the long-term planning process, thereby enhancing the overall effectiveness of tactical FMP activities. The legitimacy in the eyes of the stakeholders and the public, and their confidence in FMP draft highlight to an extent the fundamental argument behind this working report. Indeed, the VSS decisions and instruments within the FMP process has to be converted in the form of targets for tactical and operational planning which will not be addressed in this working paper.

In the view of the paradigms of governance,\textsuperscript{85} the VSS decisions can vary widely and explain fundamentally different policies and societies aspirations.\textsuperscript{86} Bass et al. (2002) argued that where there is multi-actors involvement like in the rainforests management, the emerging sets of universal values tend to be more prevalent such as human rights, and values that have recently evolved through the environmental and developmental debate.\textsuperscript{87} Furthermore, the VSS model aims also to improve the uncertainty and risk management situation in FMP, an important issue in support of any forest management decision.\textsuperscript{88} Consequently, the VSS approach in FMP might be used as a tool to assess the FMP process and thus the long-term existence of the forest enterprise.

Although every FMP system is designed uniquely, to fit the specific needs of a particular forest ownership, Figure 3-1, p.25 provides a graphic representation of the steps or elements of the system value (normative and strategic forest planning model), which is quite explicitly placed in the framework of forest management planning process. This “model” assumes that normative forest planning on the one hand and strategic planning on other are interdependent and constitute a necessary function of forest management planning with the aim of improving planning and implementation in tropical forestry, or simply to improve forest management performance. As can be seen in Figure 3-1, p.25 normative FMP begins by identifying a vision and ‘Leitbild’. Once these are clearly defined, a series of norms and principles of behaviour are defined. With these different levels of orientation, a comprehensive picture of the future development of the forest enterprise, and the reliability and legitimacy of the enterprise or management will be marked. The fundamental feature of the design of this

\textsuperscript{85} Which are fundamentally about moral, ethic, strategies, structures and other contextual matters.
\textsuperscript{86} Adapted from Bass et al. (2002), See also Bass (2002).
\textsuperscript{87} E.g. precautionary principle, polluter-pays principle, intra- and inter-generational equity (Bass et al. (2002)).
\textsuperscript{88} Forestry decision-making today typically involves objectives and information concerning ecological, economic and social issues.
A normative view of planning is based on the question: Why do we do something? Therein are the principles, standards and rules defined, and those that are suitable highlight the strategy intent. As can be seen in Figure 3-1, this is the intersection between normative and strategic planning. The second part of this figure concerns securing the future ability of the forest enterprise. It shows the strategic planning process as a product of strategic analysis, synthesis and analysis (strategic formulation as intention), as well as of strategic implementation. The question arising from this strategic view of the system value is: Are we doing the correct things?

Those two concepts are combined as value and strategic system (VSS) in forest management planning. The model consists of eight identifiable stages, which have already been presented (Figure 3-1, p.25). The merged model allows for the transfer of information from the vision through the strategic intent via the external environment in the form of emerging developments to synthesis and analysis within an inwardly focused planning system. This enhances the overall effectiveness of the implementation of planning. More specifically, it shows how to link or to integrate the normative planning aspect with the strategic. As can be seen in Figure 3-1, p.25 this integration is possible through the intercession point of the two concepts, which is in this case the strategy intent, which should be found in the two aspects of functional planning and will be developed in this working report. The purpose of this VSS model is to encourage forest organisations using this approach to learn to think normatively and strategically in order to secure the future of their activities. Immediately below is displayed the proposed VSS model combining normative and strategic planning in one system (Figure 3-1, p.25). The model is placed explicitly within the framework of FMP.

Adapted from Kovac 2002.
3.2 The necessity for integrated normative and strategic forest planning

Why is it necessary to integrate system value aspects in the forest management planning process?

Adding to value from the normative point of view, the strategic planning is also recognised as a means of securing forestry in the long-term. Therefore, the classical tactical planning must be supplemented by the two planning level. These two planning level are of important concern within the FMP framework and would be developed further in this paper. In fact, traditional or classical FMP combined solely with the normative planning is not sufficient to ensure the sustainability of resources. There is a need for a strategic intent, which is built

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90 See for more Oesten & Roeder (2002).
91 Oesten & Roeder 2002.
Architecture of the value and strategic system

upon a strategic planning process and not derived exclusively from the normative planning. However, the normative and the strategic planning level are always presented separately in the literature, without any link made between those two planning levels. This fact suggests that without the integration of normative and strategic planning in one system within the FMP framework, it should be difficult to implement FMP outcome in the field. In other words, the implementation of FMP would be counterproductive and the future of forestry possibly compromised. The arguments made in this paper to suggest this integration are then due to the gap in the flow of information between the two planning level and specifically because of the conflict which can arise between the two levels of planning. These two planning level (normative and strategic planning) are recognised in this working report. The fact that they must co-exist within the same framework and that they need, therefore, to be merged is highlighted. In fact, the forest enterprise as a “quasi social institution” represents according to Oesten & Roeder (2002), a conflict-rich “place” has to deal with conflict towards internal and external stakeholder groups.

One foundation of that value and strategic system (VSS) model is the fact that the forest management plan affects the social outcomes, especially those for the stakeholder’s. Oesten & Roeder (2002) showed that where dependency exists, any fmp failing to integrate “values” such as common welfare and partnership cannot be realised or implemented. The concept of the participants or stakeholders has been used in several different ways. The version that is most applicable in the context of this working report is the utilitarian version, whereby stakeholders are viewed as having an instrumental value that helps a forest enterprise achieve its objective. In other words, it is based on the deontological version and relies on Kantian ideas to lend stakeholders an intrinsic value. Ethics, generally speaking, deals with obligations that arise when decisions taken by an individual or forest enterprise or management affect others. Regardless of precisely what constitutes an ethical decision, decisions made without any consideration of their impact on others are usually thought to be unethical. Donaldson & Preston (1995) captured the implications of this view for stakeholder management well, stating that the stakeholder interests have an intrinsic worth.

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92 Hanewinkel (2001); Kreikebaum (2001); Oesten & Roeder (2002); Smith (1982).
93 For details on normative planning refer to Smith 1982; Burger & Mayer (2003) and for strategic planning refer to Kreikebaum (2001); Pfohl & Stölzle 1997; Hanewinkel (2001).
95 Oesten & Roeder (2002).
96 Freeman (1983).
That is, certain claims of stakeholders are based on fundamental moral principles. They are unrelated to the instrumental value of the stakeholders in a corporation. A forest enterprise cannot ignore or abridge these claims, simply because honouring them does not serve its tactical or strategic interests, or is strategically inconvenient. In a sense, these claims are independent of, and should be addressed prior to, tactical considerations. Stakeholder interests are thought to form the foundation of forest management planning itself. They represent that which a forest enterprise is, and what we think of as important. Given such a normative orientation of forest planning, a forest enterprise/management shapes its tactics around certain moral or strategic obligations to its stakeholders. A Kantian posture,\textsuperscript{100} a feminist perspective\textsuperscript{101} and a fair contracts approach\textsuperscript{102} are all examples of moral principles that can form the normative foundation of forest management planning. Without adding this value, the situation of forestry will continually become more difficult, particularly given controversial public debate over ‘conservation’ vs. ‘logging’, poverty alleviation, active participation, etc.

The second foundation of a value and strategic system (VSS) orientation is based on moral principles that oppose the argument that making a strategic commitment to morality is not only conceptually flawed but is also ineffective. To strategically apply ethical principles means that a forest enterprise only acts according to moral principles when this is to its advantage. However, this is by definition a failure to adhere to ethical principles. Quinn (1995)\textsuperscript{103} considered that if the purpose of acting ethically is to acquire a good reputation that will in turn provide economic benefits, why not pursue the good reputation directly without the intellectual excursion into moral philosophy? In some cases, of course, the behaviour called for will coincide with that dictated by ethics, but in others it may not. What difference does an ethic make if one can act instrumentally without reference to ethics? From a practical perspective, the instrumental benefits of normative planning paradoxically only result from a genuine commitment to ethical principles. Oesten & Roeder (2002)\textsuperscript{104} stated that, apart from the purpose-rational reason addressed, normative planning should also experience a clear ethical reasoning, for example, the social responsibility of the enterprise, which should be embodied in the ‘Leitbild’. Additionally, values give meaning to the norms and behavioural standards in the forest enterprise. Values are strong motivators to act in the best interests of

\textsuperscript{100}Berman et al. (1999); Freeman (1983).
\textsuperscript{101}Eric & Studler (2002); Freeman (2004).
\textsuperscript{102}Freeman (2004).
\textsuperscript{103}Quinn & Jones (1995) quoted by Berman et al. (1999).
\textsuperscript{104}Oesten & Roeder (2002).
the forest enterprise/management. They can provide a rationale for behaviour that is just as strong as strategy, but in another emotional, moral, ethical and right-brain way.

It may be concluded that forest planners who create, and sustain, the normative aspect of the forest enterprise based on the model developed (see Figure 3-1) will have a competitive advantage over other forest enterprises that do not act in this way.\textsuperscript{105} Substantial advantages from the enterprise perspective mean that the normative aspect of planning should basically be public relations (communication as well as the central basic categories of reliability and cooperation). The goal is thereby primarily confidence advertisement, or image grooming. However, the effects of this image grooming will be short-lived where the confidence and reliability problems of the forest enterprise have more profound causes. A confidence crisis between the enterprise and stakeholders is frequently misinterpreted as simply an information deficit on the part of the stakeholder.\textsuperscript{106}

3.3 Normative planning within the forest management planning framework

3.3.1 Definitions and elements of the normative aspect of a forestry

3.3.1.1 Overview of the normative planning

Smith (1982) highlighted that normative planning is also known as a reconsideration of the value (non-price value) premises underlying decisions, the definition of the desired ends and ideals, and also the decisions that determine what ought to be done. He argued that values are desirable qualities and, in the context of values in forest management planning, they are often linked with beliefs and commitments, and what are considered to be the rights of service users. For example, values include people having equal access to services irrespective of their origin and living standard; respecting the worth and dignity of each person and service users having choices in relation to the available services. The values of individuals and organisations (e.g. forest enterprises) will affect their approaches to the drafting of a forest management plan, service delivery and the answers they provide to such questions as:\textsuperscript{107} What

\textsuperscript{105} Oesten & Roeder (2002).
\textsuperscript{106} Oesten & Roeder (2002).
\textsuperscript{107} Adapted from Smith’s (1982).
is quality management planning or service? How is quality management planning or service achieved? And how do you know you are providing quality management planning or service? In this context, rendering an organisation’s (e.g., forest enterprise) values explicit does not of course mean that these explicit values will be acted on all the time. Smith (1982) showed also that, ‘statements of values that are too general (too umbrella like) will not be as useful as more specific statements that identify organisation’s values.’

Normative approaches to FMP in the context of this working paper hold that FMP ought to pay attention to key fundamental moral principles (ethical and moral commitments), rather than to a desire to use the resources solely to maximise profits, as advocated by the scholars of privatisation such as Hardin (1968), Demsetz (1967) and other new classical economists. Based on stakeholders’ theory, normative approach includes the identification of moral or philosophical guidelines for the FMP process operation which is in general is the core of the stakeholder theory. The moral theory (utilitarianism and deontology) based on the definition of the moral point of view, the normative planning process should contains six characteristics which are necessary for a standard or rule to be a moral one: generality, universality, priority, disinterestedness, publicity, and substantive impartiality. The planning approach deals with decisions on the value associated with forest management. Furthermore, forest management planning can also additionally, be located within the general theoretical discourse of democratic theory for three reasons:
a) The normative impetus for sustainability is not guided by theories of ecology alone;
b) One might say that this transference of basic principles of democratic governance to the public and private, local and global, national and international policy arenas is one of the most important consequences of the “sustainability movement”;
c) Indeed, even within the economic literature, there is a realisation that local people need to have a say in development decisions.

Relevant to this report are several key concepts central to democratic theories (popular sovereignty such as coming to stakeholders of the forest management planning judgement specifically public accountability, transparency of decision making, and representation which is based on political equality). Taken together, these concepts create a picture of a self-
governing society. This means deciding on the external adjustment of the forest enterprise or organisation (which basic values should be realised and for whom). The way in which this decision process (normative decision) is carried out is related to the constitution, forest legislation, international forest policies, planning theories, etc. In Cameroon, the decision on normative forest planning is partly addressed in the legal framework. This involves sustainable forest management, the participation of the local population and other stakeholders specifically. This issue will be addressed in this section. It is argued that the resulting normative planning model will show how the forest enterprise/management does business, in particular with respect to how it deals with social, environmental and economic factors. The assumption is that the integration of ‘values’ in the FMP process is conducive to creating incentives and financial performance, specifically based on a signalling mechanism. Consequently, the author proposes that the FMP process started by defining a normative model with reference to how forest planners might ideally plan in order to promote common welfare and justice through SFM and G.G principles. Based on various data sources (see Figure 2-1, p.5), a series of values to be included in order to better manage the tropical forest of the Congo Basin has been formulated. The normative planning model is a combination of objectives, principles, norms and strategic intent that collectively form a vision for FMP, the guiding image. They constitute a single point of reference, and an overarching coherent set of guidelines to direct and steer FMP operations, in all spheres of government and other public and private agencies involved in FMP so that the outcomes are consistent with the national objectives. The objectives, principles, norms and strategic intent are to promote normative FMP. The objective of these variables is to influence directly the substantive outcomes of planning decisions or the forest management plan.

3.3.1.2 Definitions and elements of the normative aspect of a forest enterprise

The normative system covers the whole, and the ranking of all goals, principles, standards and rules to which the enterprise feels obligated, as well as the relationships between them. The normative aspect represents the reference points and evaluation yardsticks for all decisions and measures in the remaining planning process. In order to formulate the value or the normative view, the following two questions have to be answered: What principles or standards should be followed by the forest enterprise? And what values does the organisation believe in? According to the framework described previously, and referred to by Oesten &
Roeder, the normative planning aspect contains the following four elements which should be closely linked, resonating with and reinforcing each other to create strong normative planning: vision and mission, guiding images, norms and principles of behaviour and strategic intent.

a) Vision statement: a statement of the future ideal that the forest enterprise is working towards. It expresses the benefit that an organisation will provide to its customers and refers also to an indicative, motivating and sense-giving framework for strategic, tactical and operational actions, and is associated with the mission, the norms and principles of behaviour and the strategic intent.

b) Mission statement: the fundamental reason for the existence of the enterprise and a concrete expression of the vision statement, explaining how it is to be achieved; the representation of the basic purposes of the enterprise activity. The basic questions are: ‘Who are we?’, ‘What is our business?’ and ‘What role do we play for the stakeholders?’

c) Guiding image: the written form of the vision, instrument of control. It is the basis for strategic planning, the goal education process on all levels, co-personal guidance, public relations, etc.

d) Norms and principles of behaviour: fundamental principles for acting in the frame of different internal and external stakeholders or the organization members (shareholders). The basic question is: ‘why and how should we act?’

e) The strategic intent: provocative and motivating goals for the entire enterprise. It must also be seen as the output of the strategic planning process. The basic question is: On which general fundament or goals should the forest enterprise be developed?

This value or normative aspect bundles the fundamental normative conceptions of worthwhile conditions in social, economic, political, technological and ecological future questions of the enterprise, gives the tactical and operational measures a direction and provides a justification for the tactics and operations. These values communicate the vision, and form the foundation of forest management planning as a whole. The strategic intent, the link between the normative and the strategic aspect of planning, is the basic institutional and tactical planning aspect within the forest management planning process that must be achieved for the implementation of the central vision.

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113 Oesten & Roeder (2002).
3.3.2 Vision

The identification of the forest enterprise’s vision and mission is the first step in any normative planning process. The forest management’s vision sets out the reasons for the organisation’s existence and the ‘ideal’ state that the organisation aims to achieve. The mission identifies major goals and performance objectives. Both are defined within the framework of the forest enterprise’s philosophy, and are used as a context for the development and evaluation of the intended and emergent strategies. One cannot overemphasise the importance of a clear vision and mission. None of the subsequent steps will matter if the organisation is not certain where it is headed.

3.3.2.1 Definition and functions

A vision is an abstract drawn from a wealth of details, and is therefore eminently suited to identifying basic principles. It creates a normative (guiding) framework for concrete goals and directives; it can in principle be realised; it can complete with other visions and may change over time, but remains significantly more constant than situation-specific goals.\textsuperscript{114} The development of a vision requires a comprehensive forecast of the future, its form in the operational environment, the stakeholder and the social like operate-specific value conceptions can be determined by central problems of the enterprise.\textsuperscript{115} According to the Boston Consulting Group,\textsuperscript{116} vision is also “a concrete future picture, close enough that we can still see the feasibility, but already far enough, in order to wake the enthusiasm of the organization for new reality.” Oesten & Roeder (2002)\textsuperscript{117} stated that this definition shows elements in relatively simple terms:

a) The vision should be a reliable and attractive concept for the accomplishment of future challenges;

b) Given its future orientation and goal orientation, vision has an innovative character;

c) The vision is concrete enough to point out ways to solve central problems in a turbulent and complex environment;

d) The vision represents “valuable” advantages both internally and externally;

e) The vision is able to motivate by addressing equally the ‘heart and understanding’ of the personnel.

\textsuperscript{114} Barua et al. (2006); see also Lendi (1995) and Lehnes & Härtling (1997) quoted by Boston Consulting Group (BCG) 2004

\textsuperscript{115} Oesten & Roeder 2002.

\textsuperscript{116} BCG (1988).

\textsuperscript{117} Oesten & Roeder (2002).
For the case of this working report, the vision of common welfare and social justice through AFM and G.G principles may be set up as the fundamental feature of the normative forest planning process. It constitutes the motivation behind FMP and is simultaneously considered a constructed, a normative, and a moral or ethical concept as an element of the VSS. This vision implies a process embracing the following dimensions:  

a) An all-embracing process: the nature of the process is such that it embraces all spheres of life, i.e. in terms of location, SFM embraces the entire ecosystem. Ecosystem sustainability in turn embraces and presupposes the strategic, tactical and operational levels of FMP. In human terms, all people, social groups and governments participate in sustainable forest management, both as actors and as stakeholders through a transparent, accountable and flexible institutional framework.  
b) A situation-specific process: the subjects of the FMP process must always find their own path to development, in the framework of ecological, economic, social and cultural conditions that characterise their particular situation.  
c) A consensus building process (see Dogmo 2008c).  

The vision adopted for this working report can be summarised by quoting the preamble to Agenda 21: “...global partnership for an economically viable, socially just, ecologically sound forest management not only for the present, but also for the future.”  

Associated with this vision, the purpose should have three categories, namely shareholder value, stakeholder value and high ideal value: For the benefit of the shareholders: shareholder value perspective; for the benefit of all its stakeholders: stakeholder value perspective; for the benefit of a higher ideal beyond merely satisfying the needs of its stakeholders: higher ideal value.  

3.3.2.2 The vision: magical formula, empty formula or orienting framework  

This section is adapted from the description of Burger & Mayer (2003) and Cogels (2004) who showed that the holistic, all-embracing understanding implicit in the vision of SFM has given rise to serious misunderstanding and controversies. Burger & Mayer (2003) stated that the vision claims to be able to resolve all tensions and conflicts between and within societies and sectors, and to establish clear and consistent directives for action by all countries.

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118 Adapted from Koziell (2001, 3); Cogels (2004).  
119 UNCED (1992); see also Ecosummit (2002); Burger & Mayer (2003).  
120 UNCED (1992 a-e); Oesten & Roeder (2002).  
and social groups. In other words, they argued that it is believed to be a magic formula to solve all problems. However, they (Burger & Mayer (2003)) argued that the vision cannot, nor is it designed to, eliminate or ‘make disappear by magic’ conflicting interests, such as those between industrialised and developing countries, or between urban and rural populations, or conflicting goals, such as those between short and long-term profit, or between agricultural and forestry production goals. Nor can it, or is it designed to, relieve countries and social groups of the responsibility to identify and negotiate their paths to development by prescribing for each actor precisely what to do, and when, where and how. The vision is not designed to resolve conflicts, or to prescribe developments on a deterministic basis. Nevertheless, it can serve as an orientation aid to help identify solutions to conflicts and paths to development.

In this framework, the vision of SFM contains no precise prescriptions determining the actions of individual actors, but only relatively general directives, the conclusion that tends to be drawn is that it is an empty formula, i.e., that any action whatsoever would be compatible with the vision. However, Burger & Mayer (2003) demonstrated that this conclusion is wrong, because general directives also guide people’s actions. Calling a vision an empty formula is particularly inappropriate where a number of directives are put in place to prohibit any behaviour. The sustainable forest management vision is neither a magic nor an empty formula. It should be seen not as deterministic, but rather as a heuristic principle, or as a tool to orient the learning process of seeking and identifying paths to development through negotiation with partners in development. A vision can orient three spheres of human action, namely perception, judgement and intervention. Vision can perform various functions, namely focusing, legitimising, identifying and directing.

3.3.3 Mission

FMP participants are occasionally searching for a purpose and a sense of identity. They want more than just pay, safety and an opportunity to develop their skills. They want a sense of mission. In fact there are a number of functions that a mission can have in any forest organisation or enterprise. These can be internal and external and include, for example, to inspire and to motivate managers, employees, shareholders and stakeholders to higher levels of performance in the implementation of sustainable forest management planning, to guide

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123 Adapted from Campbell (1992).
resource allocation in a consistent manner, to help balance the competing and often conflicting interests of various forest stakeholders, to provide a sense of direction, to promote shared values amongst shareholders and stakeholders and the whole forest enterprise, to refocus an organisation during crisis and to improve corporate performance.

A mission statement is an articulation of a forest enterprise’s mission. An often-used definition of a mission statement is from Pearce (1982): “a broadly defined but enduring statement of purpose that distinguishes the organization from others of its type and identifies the scope of its operations in product (service) and market terms”. According to Campbell (1992), mission statements frequently do more harm than good because they imply a sense of direction, clarity of thinking, and unity that rarely exists. Instead of uplifting employees with elevating ideals, they encourage cynicism. This working report integrates the Ashridge mission model developed by Campbell (1992). This is a method that can be used to create or analyse a mission, sense of mission and mission statement. The Ashridge model integrates two historic schools to determine a mission:

a) The strategic school. A mission is primarily seen as the first step in the strategy process. It defines the business’s commercial rationale and target market;
b) The cultural/philosophy/ethics school. A mission is primarily seen as an expression or statement that should ensure good cooperation between employees. It is the cultural ‘glue’ that enables an organization to function as a collective entity.

3.3.4 Guiding images and/or Mission statements as a written formulation of forestry

The guiding image or ‘Leitbild’ is a meaningful expression of the vision of the forest enterprise/management and enable to communicate both internally and externally. It is a task or a core of normative planning. Generally formulated, the guiding image brings graphically in a written form complex normative conception, like vision over worthwhile in social, economic, political, technological and ecological future questions in expression. All decisions and actions are to be adjusted according to the guiding image, even if the guiding it is to be implemented through the tactical and subsequent operational planning. The guiding

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127 Oesten & Roeder (2002).
128 Adapted from Oesten & Roeder (2002).
Architecture of the value and strategic system

image expresses the forest enterprise’s or management’s vision which is sometimes future-oriented and oriented towards internal and external stakeholders and opened in the ideal case the identity of the forest enterprise. The guiding image may also maintain or create motivation, coherence and commitment. It is the basis for the enterprise’s public relations. Furthermore, it serves as the ‘anchor’ of the vision for orientation. Therefore, the guiding image fulfils mainly the functions of orientation and motivation. It implementation find itself in a consciously arranging process of communication, control and on the strategic, tactical and operational level of planning.

3.3.5 Norms and principles of behaviour in forest management planning

Rising above the FMP framework, the guiding norms and principles are generally of great importance to society nowadays for sustainable development (SD). Therefore, norms and principles of behaviour outline the view within the forest planning design framework. They are designed to orient both the planning of the forest resource, and human social interaction in the widest sense. These guidelines or principles are the structural element, the basic rules of a vision. This basic orientation provides more concrete and objectively verifiable standards of SFM, namely PCI and verifiers. This means the highest fundamental standards and principles of forest management planning in relation to the different internal and external groups of stakeholders or interests. According to the description developed by Oesten & Roeder (2002) and Burger & Mayer (2003), the norms and principles of behaviour are based on ethical or moral principles and can be summarised as the FMP ethics-codex. The Figure 3-2 displays three different levels of the concept of norms and principles of behaviour adopted in this working report. Firstly, at the top of the Figure 3-2, p.37 is the highest level or the overall goal/principle of normative FMP, which includes (social) justice and common welfare. In the centre is the middle level, including SFM and G.G. Finally, the lower level of the figure describes the principles of behaviour, which include the standards and principles of behaviour like partnership and coherency, efficiency and rationality, ecological sustainability and accountability, forest resource management for inter-generational (equity) and integrated sustainability.

129 Oesten & Roeder (2002).
130 For more information refer to FAO 2007; Burger & Mayer (2003); CIFOR (1998); ATO/ITTO (2003).
132 Adapted from Oesten & Roeder (2002); Burger & Mayer (2003).
3.3.5.1 Justice

In this working report the term justice refers to social justice or what is termed ‘Verteilungsgerechtigkeit’ in German. Justice must be included as a highest principle because of its effect on the implementation of FMP, and based specifically on the broad range of stakeholders and interest groups. The principle of social justice requires that the benefits and the drawbacks of resource use, in other words the profits and the costs, as well as opportunities and risks, may be distributed fairly amongst the social groups concerned. In this framework forest is understood as common pools resources and not as private or state goods. The prime imperative of social justice is to prevent structural poverty, i.e., poverty suffered by groups as a result of the inequitable distribution of benefits and opportunities. Social justice does not follow automatically in the wake of free market economics (neo classical economics). The horse and sparrow theory, which states that if a horse is fed more oats more ends up on the road for the sparrows, does not apply in practice. The creation of justice or equality of opportunity, though primarily a matter of social justice, is not just a social objective, but is also a key for building long-term economic performance capacity, and

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133 Oesten & Roeder (2002).
134 Ostrom (1999b,2000).
as such is also an economic objective. Burger & Mayer (2003) demonstrated that efficiency and justice goals stand in a stress ratio: if the determination of performance is reduced by a rearrangement of the load, the fact that fewer resources and goods are available can reduce public interest in a fairer distribution of resources in favour of a less fair, but more efficient use of resources. In the pursuit of efficiency and justice, quite different views exist with respect to the “right measure” of justice and efficiency in a society. In the social or political system, this ‘measure’ is determined again and again as compromises are made between conflicting convictions. In order to identify constraints to sustainable forest management in the sphere of social justice, three thematic areas should be considered:

a) Allocation of the right of access to resources, information and decision-making processes among social groups and countries. This should include not only formal, but also informal and traditional rights, and not only monetary costs and returns but also natural expenditure and returns. New forms of land use, such as plantations, may be perceived as unjust, even though they are in accordance with formal law if they infringe on traditional rights, e.g., rights over hunting, fishing and the collection of forest products. People’s access to resources and especially access to education must be understood in a wider sense, and analysed accordingly.

b) Distribution of opportunities and risks: justice and security are closely linked. Without an agenda for global justice, there can be no global security. Therefore there is a need a new concept of security which incorporates economic, ecological and social aspects. Traditional societies appear to be very aware of risks, and seem to pursue strategies to avert risks that may threaten their livelihoods. At first glance, an observer might perceive such strategies as being hostile to innovation. These risks might include, for instance, the risk posed to a village by erosion as a result of forest clearance above the village. Traditional forms of risk spreading within communities are often difficult to recognise and understand, and dismantling them can lead to a loss of social capital.

c) Forms of power wielding and conflict management: as sustainable forest management becomes more tangible, the conflicts of interests which render it more difficult or even impossible to achieve compromise come to light. The vision for sustainable forest management will not disguise these conflicting interests or make them go away.

Oesten & Roeder (2002).
Adapted from Oesten & Roeder (2002); Burger & Mayer (2003).
However, a discussion of what the various actors understand sustainable forest management to mean in their concrete case would make it possible to at least seek a compromise. Whether rights of access to resources can be effectively exercised, and whether opportunities are allocated fairly across different social strata, will depend not least on the quality of governance and forms of conflict management. The supreme concern of social justice is poverty alleviation.\textsuperscript{139}

3.3.5.2 Common welfare ("Gemeinwohlorientierung" in German)

Welfare economics is concerned with the welfare of individuals, as opposed to groups, communities, or societies because it assumes that the individual is the basic unit of measurement.\textsuperscript{140} It also assumes that individuals are the best judges of their own welfare; that people prefer greater welfare to lesser welfare; and that welfare can be adequately measured, either in monetary terms or as a relative preference. Social welfare refers to the overall utilitarian view. Utilitarianism is the ethical doctrine which shows that the moral worth of an action is solely determined by its contribution to overall utility. The good to be maximised has been defined by various thinkers as happiness or pleasure (versus suffering or pain), though preference utilitarian like Singer (1981)\textsuperscript{141} defined it as the satisfaction of preferences, or "interests". While there is a tendency to consider only the well-being of humans when interpreting this doctrine, some utilitarian count the interests of any and all sentient beings when assessing overall utility.\textsuperscript{142} It is often defined as the summation of the welfare of all the individuals in society. Welfare can be measured either cardinally in terms of dollars or ‘utils’, or measured ordinally in terms of relative utility. The cardinal method is seldom used today because of aggregation problems that make the accuracy of the method doubtful, as well as strong underlying assumptions. Shaw (2007) showed that Welfare is concerns by a collective obligation to provide for the poorest with at least a minimal subsistence. There are two sides to welfare economics: economic efficiency and income distribution. Economic efficiency is largely positive and deals with the “size of the pie”. Income distribution is much more normative and deals with ‘dividing up the pie’.\textsuperscript{143}

\textsuperscript{139} Burger & Mayer (2003).
\textsuperscript{140} From neo classical economics (Demsetz (1967) and Hardin (1968)).
\textsuperscript{142} Shaw (1999).
\textsuperscript{143} Shaw (1999).
Forests are important as a source of income and employment because of the wood products industry, but they also contribute ecosystem services such as a carbon sink and weather regulation functions, absorb pollutants, and protect watersheds.\textsuperscript{144} Therefore, the management of forest land for both commercial timber production and other amenities is vital to the overall well-being of society. Social experience has shown that no community, and specifically no form of forest management or enterprise, can persist in the long-term without welfare. The main maxim of the state is to provide welfare for all. From this arises the state’s original authentication; its legitimacy (velvet force monopoly) to set up valid action frameworks. The Cameroonian constitution of 1996 also adheres to this view of public interest orientation. At its core, the national constitution has a formulation of the connecting and obligatory economic, social, technical, ethical, ecological values of a society or community, among others.\textsuperscript{145}

Common welfare can be understood in forestry as "public interest" (synonymous with “public well-being”, “social welfare”). This means a legal obligation to manage the forests comprehensively and exceeds an exclusively economic interpretation. In fact, the public interest closely corresponds with the well-being of the individual. The well-being of the parts is a necessary component of the well-being of the whole. All economic units - households, private enterprises, public enterprises and administrations - contribute to the public interest to differing degrees.\textsuperscript{146} This includes the forest enterprise. Indeed, the Law 94 argues that the forest enterprise is responsible for welfare, especially for rural people living within forest concessions. It has, therefore, a social responsibility to fulfil. This fact is also recognised by the Organisation for Economic Co-operation and Development (OECD) and is known as corporate social responsibility (CSR), as initiated by the UN through its code of good conduct.

3.3.5.3 Forest resource management to ensure inter-generational equity

Those who argue for inter-generational equity argue that the “human” should not consume all of our natural capital now, leaving none for the people of the future. Similarly, Shannon (2002) showed that “human” should try to maintain not only capital but also options for future generations. This means according her that “human” must view the extraction of resources as

\textsuperscript{144} Ruppert (2004).
\textsuperscript{146} Oesten & Roeder (2002).
the consumption of capital, and not the generation of an income to be discounted if it were delayed until a later time.\textsuperscript{147} In this respect, she argued that measures should be taken now to conserve the forest resource base of future generations, so that a capital stock is available to them in the form of a resource base. Although this resource base will not be identical to the resources to hand today, it is nevertheless of equal value. Consequently, compliance with this principle is designed to create opportunities for present and future generations to enjoy the same quality of life. Having said that Shannon highlighted that the principle is based on the following more general rules which can be drawn up for the inter-generational management of all types of resources:

a) The regeneration rule: the rate at which renewable resources are extracted should not exceed their regenerative capacity. In order to maintain the full functional value of the forest for the environment (e.g., erosion control), the economy (e.g., timber merchant) and society (e.g., cultural value), it is also necessary to preserve species diversity, natural structures, and the dynamics of growth and rejuvenation.

b) Substitution rule: the substitution of resources, and especially natural resources, with material capital (weak sustainability) has generated considerable controversy in the sustainability debate, as it can easily lead to a depletion of resources.\textsuperscript{148}

3.3.5.4 Efficiency – rationality and liquidity – economy – productivity

a) Efficiency

This principle of managing resources as effectively as possible is known in the economic context (the study of how to satisfy unlimited wants with limited resources or handling limited goods and resources to the satisfaction (in principle) of unlimited needs)\textsuperscript{149} as the economic principle, and in the technical and organisational theory contexts as the rationalisation principle.\textsuperscript{150} According to this principle, resources should be managed so that a certain output/impact is achieved with the minimum possible input of resources or financial expenditure.\textsuperscript{151} It is also a general term for the value assigned to a situation by some measure designed to capture the amount of waste or ‘friction’ and other undesirable economic features.

\textsuperscript{147} Shannon (2002); UN (1987); UN (1983).
\textsuperscript{148} The burden intensity rule, the precautionary hazard containment rule and the integrated resource budget management rule are the other in inter-generational management.
\textsuperscript{149} Oesten & Roeder (2002); Burger & Mayer (2003).
\textsuperscript{150} Burger & Mayer (2003).
\textsuperscript{151} Oesten & Roeder (2002); Burger & Mayer (2003).
present. This efficiency occurs when the cost of producing a given output is as low as possible. The production of a unit of a good or services is termed economically efficient when that unit of a good or service is produced at the lowest possible cost. There are indications that the efficiency of resource management can still be improved considerably, to such an extent that it would allow for economic growth without increasing resource degradation. The mechanism of control for economically efficient resource management is the market attribute or ecological attribute. Of the three economic principles, maximum-, minimum- and optimal principle, the latter is the most general used in economic as an efficiency principle. These effectiveness and efficiency principles employed in the context of G.G mean that processes and institutions produce results meeting the needs of society while at the same time making the best use of the resources to hand. The concept of efficiency in the context of G.G covers the sustainable use of natural resources and the protection of the environment.

b) Rationality
The activities of a forest enterprise are embedded within areas of social conflict making it ‘a quasi social institution’, the actions of which are connected with an extended socio-economic rationality. By ‘reasonable’ decisions, the forest enterprises usually understand acting in accordance with management principles such as the economic principle, public interest obligation, etc. According to Oesten & Roeder (2002), in forestry common rationality criteria like technological effectiveness and economic efficiency must be adopted as yardsticks for the monitoring of social values and standards (socio-cultural rationality such as legality and legitimacy), and as yardsticks for the monitoring of interest and power positions in society (policy rationality: interspersing/implementation and maintaining autonomy of action). The values and standards (moral value attitudes) of interest groups determine which of the forest enterprises are acknowledged as being legal and/or legitimate. From a socio-cultural perspective, behaviour is “reasonable” if it is both legal and legitimate. The authentication of forestry activities can be called into question with respect to all other interests/requirements not only for moral or legal reasons, but also for economic (efficiency) or technological (effectiveness) reasons. Legitimacy and legality are necessary, but there should be sufficient conditions for socio-economic and ecologically rational behaviour.

c) Liquidity

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154 Oesten & Roeder (2002).
Liquidity (synonymous with: maintaining financial equilibrium) designates the ability of an enterprise to be able to fulfil its obligations at any time. Liquidity must be ensured at all times; otherwise the enterprise risks bankruptcy and signifies to the public and/or the public administration a possible inability to continue to exist. The constant measurement of the liquidity (static liquidity analysis) and the financial plan (dynamic liquidity analysis) are, therefore, of special importance for the enterprise.\textsuperscript{155}

d) Profitability
The appropriateness of economic operations (synonymous with: acting according to the economic principle, e.g. efficiency) may be judged on the basis of two questions: Can the forest enterprise attain the business goals after measuring it in detail and in the whole (effectiveness examination)? Measures one selected, which according to the economic principle the largest value lift (the largest productivity, i.e. an optimal relationship of resources input (costing expenditure) and result or output (achievement, yield) furnished (efficiency evaluation))?\textsuperscript{156}

e) Productivity
Striving for productivity is closely related to striving for profit or financial gain. Productivity designates a quantitative relationship between output and input within the production process (efficiency regards in contrast to this value relations).

3.3.5.5 Partnership and coherency

a) Partnership

Also known as one of the elements of the sustainability principle, partnership has been developed by the social sciences research graduate group at the University of Washington’s College of Forest Resources.\textsuperscript{157} They stated that the sustainable use of resources requires the cooperation and participation of citizens, communities, interest groups, and political, cultural and economic institutions at local, regional and in some cases international levels. Cooperation between actors can be maximised when fora are established for diverse actors to communicate and discuss freely ideas, and to propose competing interpretations and options

\textsuperscript{155} Oesten & Roeder (2002).
\textsuperscript{156} Oesten & Roeder (2002).
\textsuperscript{157} Refer to Shannon (1991).
for action; when decision-making is fair and equitable; when expert and local knowledge are integrated; when communities dependent upon resource production are reasonably certain of an acceptable level of economic stability; and when the rights of diverse cultural and ethnic groups are respected and legally protected. Discussion of sustainability must consider what political structures are best suited to meeting these criteria.\textsuperscript{158}

According to one of the striking findings of a research project from the University of Buffalo,\textsuperscript{159} there is near universal acceptance that the principle of democratic participation in decisions and policies is an essential element of sustainability. Expert decisions and optimisation models alone were an insufficient means to achieve sustainability\textsuperscript{160}. Specifically, in 1994 this project emphasised local knowledge and indigenous rights as essential elements of participation. This involved the “key people”, “stakeholders”, “political interests”, and “affected communities”. It excludes any limiting conception of participation commonly used by government which is not sufficient under the concept of sustainability.\textsuperscript{161} The necessity of using open participatory processes in policy making combined with the essential need for a search for meaning given to the ambiguous concept of sustainability has led to new forms of governance based on strong principles of democratic theory\textsuperscript{162}.

To arrive at a plan that achieves widespread public support, it is crucial that forest management planning design a credible partnership process and coherency. However, Law 94 and Law 96 enacted by the state of Cameroon to guide forest and environmental management are very vague with regard to this important aspect of forest planning. Therefore, forest management planning has to address this issue. It is not sufficient to merely offer a prospective plan and solicit stakeholder comments. "A distinction has to be made between simply listening to the public versus actually allowing them to enter the decision-making process. This distinction is hard to establish as long as decisions to allocate land to various uses occur behind closed doors where no one can be sure who if anyone had any influence. One possible solution is partnership building where individuals or actors have a known and quantifiable effect on how forest management is planned or is allocated. At this point, participation moves from simple comments with unknown effects to a process that the stakeholders can understand and evaluate."

\textsuperscript{158} Shannon (1991).
\textsuperscript{159} Shannon (2002).
\textsuperscript{160} Shannon (2002).
\textsuperscript{161} Shannon (2002).
\textsuperscript{162} Shannon (2002).
Partnerships between states, key sectors of society and persons are called for repeatedly in the Rio documents\textsuperscript{163}. These state that without partnerships, the changes necessary for sustainable forest management can neither be brought about, nor can those that have been achieved be maintained. Partnership means sharing, not in the sense of breaking up and thus destroying a whole, but in the sense of sharing and participating in a whole that should in principle be preserved and further developed. Partnership goes beyond common experience, requiring that the visions providing orientation be shared to some minimum degree at least. The visions of partners can certainly differ, but must contain a certain overlap of common values. Typical features of viable and resilient partnerships are respect for the expertise and culture of the other partner(s), transparent and reliable definition of roles, ability to engage in dialogue, and openness between the partners. Participation can vary widely in scope. There are often major discrepancies between the way the partners involved judge the participation as it is, and the way (they think) it should be. This can seriously jeopardise a partnership. The risk is always present where non-governmental organisations are involved in the private or public sector. The only appropriate response is to regularly ensure a transparency of perceptions and expectations concerning the participation. Sound partnerships rarely emerge in the spur of the moment. They usually grow gradually, passing through the following phases:

- information phase: the actors merely share information, initially concerning questions of common interest; also referred to as the “invite – inform – ignore” phase;
- communication phase: additional feedback is given, including feedback on mutual perception; at this stage the relevance of that feedback to concrete decision-making (consultations, hearings) remains an open matter;
- cooperation phase: tasks and objectives are shared on a case by case basis, and participation is extended beyond information sharing and feedback to include participation in decision-making (co-determination);
- Partnership/alliance phase: long-term formal and informal agreements concerning participation and mutual expectations have been achieved, extending beyond individual cases.

One examination with respect to good governance demonstrated that consensus is one of the most important principles for policy achievement. There are several groups of actors and as many viewpoints in any given society. Good governance requires mediation of the different interests in society to reach a broad consensus on what is in the best interests of the whole community and how this can be achieved. It also requires a broad and long-term perspective.

on what is needed for sustainable human development and how to achieve the goals of such development. This can only result from an understanding of the historical, cultural and social contexts of a given society or community. Equity and inclusiveness are also indispensable in the implementation of any forest management plan. A society’s well-being depends on ensuring that all its members feel that they have a stake in it and do not feel excluded from the mainstream of society. This requires that all groups, particularly the most vulnerable, have opportunities to improve or maintain their well-being. Other definitions of participation include participation by both men and women as a key cornerstone of good governance. Participation may be either direct, or through legitimate intermediate institutions and representatives. It is important to point out that representative democracy does not necessarily mean that the concerns of the most vulnerable in society are taken into consideration in decision-making processes. Participation needs to be informed and organised. This means freedom of association and expression on the one hand and an organised civil society on the other. This means also that good governance requires that institutions and processes try to serve all stakeholders within a reasonable timeframe.

Collaboration with interested parties to identify the issues, values and concerns related to forest management is, therefore, vital to the success of implementation. The advice of a variety of interested parties should be sought, including environmental organisations, trust beneficiaries, land trust organisations, recreational users of forests, forest industry and neighbours. Broader inclusiveness and accountability is ensured through a public review process. Local elected officials and media should be kept informed.

b) Coherency

To some extent, coherency is the hub of sustainable forest management, in that the ultimate long-term aim of the vision is to harmonise the subsystems of human economic activity with the overarching system (Earth). The motto is “think global, act local”. The principle calls for consistency and compatibility between the subsystems of human activities on Earth. Sustainable forest management is a holistic concept that embraces all spheres of human life. However, this holistic aspiration conflicts with the limited human capacity for coping with complexity. People are only able to perceive and address subsystems that are segments of the whole. They are then at risk of mistaking the segments for the whole (reductionism) and of

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overlooking the interactions between the subsystems and their ambient system – as well as the contradictions and risks that these interactions entail. One way out of the dilemma created by the fact that a holistic is impossible and reductionism is dangerous is offered by a constant switch of perspectives\textsuperscript{165}. Other examinations of the word coherency show that politics and concrete action must be coherent and readily comprehensible.

3.3.5.6 Accountability

Accountability is a key requirement of good governance. Not only governmental institutions but also the private sector and civil society must be accountable to the public and to their institutional stakeholder’s.\textsuperscript{166} Who is accountable to who varies depending on whether the decisions or actions taken are internal or external to an organisation or institution. In general, an organisation or an institution is accountable to those who will be affected by its decisions or actions\textsuperscript{167}. Accountability cannot be enforced without transparency and the rule of law. Transparency means that the decisions taken, and their enforcement, are carried out in a manner that follows rules and regulations. It also means that information is freely available and directly accessible by those who will be affected by such decisions and their enforcement. It also means that enough information is provided and that it is provided in readily understandable forms and media. The forest management planning process cannot function without this system value. It is an important key factor in achieving good governance and sustainability in tropical forest management, and specifically in the planning process.

3.3.5.7 Ecological sustainability or maintaining ecological functions, conditions and biodiversity

In addition to the demand for inter-generational equity, accountability, partnership and coherency, and efficiency and rationality in forest planning, the necessity for a "harmonious" introduction of economic operation to the ecological systems surrounding us represents a further normative basis of the economic system. According to Oesten & Roeder (2002),\textsuperscript{168} the natural environment is a basic tenet of human life in two respects, namely nature as habitat and as a basis for production and consumption. Sustainability is the term used to describe developments that meet the needs of today without compromising the ability to meet the needs of tomorrow. It is an attempt to provide the best outcomes for the human and natural environment.

\textsuperscript{165} Burger & Mayer (2003).
\textsuperscript{166} Van Kooten & Wang (2000); Bass et al. (2002); Sandström & Widmark (2006); ATIBT (2005a,b); Foahom & Jonker (2004); Fomete et al. (2001); Oyono (2004a,b).
\textsuperscript{167} Burger & Mayer (2003).
\textsuperscript{168} Oesten & Roeder (2002).
environments, both now and in the future. Ecological sustainability is a term that applies to every aspect of sustainable living, in this case forest planning. The human community is an element of the Earth community, and not the other way around. All human endeavours are situated within the dynamics of the biosphere. In fact, the ideology of industrialism, in both capitalist and communist countries, insists that modern society is superior to nature and should rightly use and despoil the rest of the natural world as it desires. Any loss of ecosystems is merely an "externality" in economic thought, and any problems can be addressed later by means of a technological fix. We are now living through the painful consequences of this arrogant and ignorant perspective. Many of our children suffer from accumulations in their neurological systems of mercury and other toxins; environmentally related cancer is on the rise and our air and water are increasingly polluted. Meanwhile, our ecosystems are being compromised by the spreading presence of genetically engineered organisms. The guidance principles of ecological sustainability should promote social development in such a way that the required or desired use by humans (their economic thinking, their life-styles) is harmonised with natural life-support services (natural resources); that their potential remains to benefit future generations. This guiding principle has two broad sustainability components:

a) the conservation of the substance and "operability or functioning of ecosystems" and "the maintenance of life support systems and the achievement of a 'natural' extinction rate, the diversity of life and the basis of productivity;

b) Natural inter-generational justice.

The condition under which this guidance principle has to be achieved is as follows: forest resources, such as timber and non-timber forest products and environmental services should be used no faster than they are renewed and waste should only be produced within the ability to process or assimilate it. In other words, the amount of goods and services yielded from a forest should be at a level the forest is capable of producing without degradation of the soil, watersheds or seed sources. The concept also assumes that human use will not detract from or degrade the use of forests by other organisms; that human use is ultimately subordinate to healthy ecosystems. The word 'forestry' implies use for human benefit. However, to 'sustain' forests means managing healthy ecosystems, the by-products of which are 'goods and services' like timber, recreation, wildlife and other resources that humans have come to

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expect from forests. The main cause of ecological degradation is that too many people use too many resources and inappropriate technologies, and create too much waste in the process.\textsuperscript{170}

By maintaining habitat, ecological structures, and a proper frequency and intensity of disturbance, it is believed that ecological functions and processes can be maintained. This maintenance of ecological structures and disturbance regimes, resembling those under which the organisms in the system evolved, is believed to maintain the biological diversity and resilience of the system\textsuperscript{171}.

3.3.5.8 Integrated ecological, social and economic sustainability

Current efforts to manage resources sustainably acknowledge the need for the integration of ecological and social systems into the economic system. The economic depends on the productive capacity of ecosystems, and, at the same time, ecosystems can only remain healthy if human economies are sustainable. Additionally, specific social systems such as property rights have a profound effect on natural resources. Sustainable use must integrate the productive capacity of ecosystems; utilise resources efficiently; ensure reasonably equitable distributions of the economic benefits derived from resources used both within and between national, regional and local communities; and requires economic decision-making models that reduce the risk of irreversibility damaging ecosystems. Recognising poverty as a great threat to maintaining ecosystems implies raising the living standards of all people above the poverty level.\textsuperscript{172}

\textsuperscript{170} For more information refer to UN (1983, 1987); Earth summit (2002); Burger & Mayer (2003); Oesten/ & Roeder (2002).
\textsuperscript{171} Shannon (2002).
\textsuperscript{172} Shannon (2002).
3.4 Strategic Intention as link for value/normative and strategic/Goal planning

Gerstein (2009) stated that in the field of management and organisational development, strategic intent is defined as a compelling statement about where an organisation is going that succinctly conveys a sense of what that organisation wants to achieve in the long term. He argued that strategic intent answers the question about what exactly are we trying to accomplish. In the sense of company management, Alagse (2009) showed that a strategic intent is the immediate point of view of a long term future that company would like to create. It is the intent of the strategies that company may evolve i.e. it creates spotlight for directing the strategy in a company. When carefully worded, provides a strategic theme filled with emotion for the whole organisation. In this thesis, the strategic intent is understood as the link by means of which two planning approaches may be merged, namely normative and strategic. It is the intersection and/or outcome between these two aspects (normative and strategic). However, these concepts are used almost interchangeably in the literature: strategies, norms and intention. As Norms, the strategic intention, clarifies the vision and tells everyone (stakeholders and shareholders, personals) about how it is going to realise its vision. In this respect, adapted from Ostrom (2005), strategic intent can be understood as plans of action that individuals and/or organisations adopt primarily for prudential reasons, to achieve preferred outcomes in light of expectations concerning the likely strategies of others. She argued that one of the reasons why formal game theory has been so useful is that it enables the theorist to assume that all participants are fully rational and that all will assume that all of the other participants use the same model of the game, that other players analyse the game as rationally, and that all will choose a best response to what they predict will be the best strategy chosen by others. These best strategies form within the VSS, a result of a normative as well as a strategic planning process. This result can be notified as norms or strategies that represent preferences related to predictions about actions or outcomes that are not focused primarily on short-term payoffs.¹⁷³

More specifically, for the Congo Basin, the traditional norms and strategies for managing the forest has also to be integrated for strategies and/or norms design. In fact, many rules have been crafted by communities over time. In this respect, medium-term or tactical planning and short-term or operational planning are no longer sufficient to guarantee the safeguarding and

¹⁷³ Ostrom (2005).
future success of the forest enterprise. The context within which forest enterprises plan has changed significantly in recent years and continues to evolve at a rapid pace. Forest enterprises responsible for the use, management and protection of forest resources are experiencing major changes in their external operating environments. These changes have significant implications for how they articulate their strategic intention; some of the more noticeable factors influencing planning according to Ostrom (2005) are as follows: 174

a) Demand for greater accountability; the desire to have plans that clearly describe an organisation’s mission and goals, and to set forth a means of periodically reviewing and measuring progress (performance) in the accomplishment of the stated goals. Higher standards of accountability are a reality that must be incorporated into strategic planning;

b) Expectation of greater interactive planning; expectation of more meaningful involvement of the various parties that have an interest in the development and implementation of strategic plans. Especially notable is the reality that many segments of the public (e.g., interest groups) expect to be consulted in decisions on plans for the use and management of forests;

c) Desire for different services from the forest organisation; the desire for government resource agencies to increasingly be a source of technical assistance and related services to facilitate the actions of other organisations and individuals. This involves fewer controlling actions of government and more aid to accomplish the desired goals;

d) Desire for better means of addressing uncertainty; the desire for organisations to be more flexible and innovative. Especially notable is the need to shorten planning horizons, view strategic planning as a continuous rather than a periodic activity, and to increase the frequency with which missions and strategic directions are reassessed;

e) Desire for cooperative implementation of plans; the desire for more cooperation between public and private organisations in the implementation of strategies to accomplish mutually agreeable missions. Especially notable is the engagement of government in collaborative activities (partnerships and cooperatives) that foster the implementation of plans;

f) Desire for order amongst conflicting legal mandates; the desire for clearer statements of mission and legal limitations, conditions often clouded by laws that give conflicting directives regarding the use and management of forest resources. Strategic planning can be a useful process for the sorting out of inconsistencies in legal directives regarding the use and management of forests.

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If the strategic and normative aspect of forest planning is left to the tactical and operational planning phase, it is likely to be too late for the re-establishment of operational success because of the changes to the surrounding environment. Therefore, another important aspect of the strategic intention is besides the normative planning, the strategic which constitutes a built of the strategic intent. Strategic planning can be understood as the process of developing and maintaining a viable fit between the organisation’s objectives and resources, and its changing market opportunities. The aim of strategic forest planning is to shape and restore the forest enterprise’s business and products so that they combine to produce satisfactory profits and growth. There are a variety of definitions and models for strategic planning. Some commonly accepted attributes of a strategic plan are that it deals with fundamental questions such as forest conversion and transformation, and it provides a framework for detailed day to day planning. Hanewinkel (2001) argued that without this integration of the strategic aspect of planning, decisions made as part of a classical forest management planning approach will not be implemented because of the ineffectiveness of the forest management plan, which has been developed at great cost. Therefore, the forest management planning decision would be ignored by the foresters and should be taken again only during the next forest planning process (after 10 years). One of the major limitations of the traditional forest planning model is that information about the strategic decision made on the basis of the changing internal and external environment is usually not taken into account systematically or comprehensively. When this omission occurs because of the assumption that external changes cannot be predicted, classical forest planning condemns itself to failure because it is only based on information known from direct experience garnered in the past and the immediate present. According to Oesten & Roeder (2002), not only is a reactionary processing of the changed conditions needed for survival, but also the development of an active, conscious and problem-anticipating attitude. The goal is an early and systematic structure, from strategic success potential to future tactical and operational success. Whereas operational planning is geared towards the present, strategic planning is future-oriented. In other words, tactical or operational planning is concerned with ‘doing things correctly’, and strategic planning focuses on “doing the correct things”. Tactical and operational planning ensures efficiency, whereas strategic planning is concerned with effectiveness.

In the context of this thesis, the strategy intent, as the rationale behind FMP or forestry constitutes the link between normative and strategic planning in FMP. The author proposed

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175 Oesten & Roeder (2002); Hanewinkel (2001).
176 Problem antizipierende in German, translated by the author.
according to Hamel & Prahalad (1994), three (3) main tenets of strategic intent planning which includes: direction, discovery and destiny. In the same view, Alagse (2009) showed that the strategic intent is about clarity, focus and inspiration. Strategy intent is an integral part of normative and of strategic planning, and consequently of the VSS. Although the specific functions of the strategy intent are different in the two processes, they serve the same purpose in the VSS. In many planning model designs, strategy intent constitutes one of the central steps. It is in this step that the real intention of the forestry is identified and/or selected. These intentions are then prepared for the strategy formulation, or syntheses and analysis in the strategy analysis. The forest enterprise and/or management determines its strategic intent based on (and consistent with) its vision, mission, norms and principles of behaviour, and within the framework of strategy analysis (environmental, enterprise and other analyses). The strategic intent is the fundamental intention that the forest enterprise has to address in order to achieve its mission and to move toward its desired future.

3.5 Strategic planning process

The word "strategy" comes from the Greek strategos, referring to a military general and combining stratos (the army) and ago (to lead). Strategic planning in forest management is concerned with the long-term, and frequently little differentiated and structured complex problem fields characterised by a high degree of complexity. In other words, it incorporates decisions that have the potential to cause greater changes than others and thus securing the future of the forest enterprise. Keuning & Eppink (1987) also showed that in

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177 Strategic intent can provide a sense of direction, a particular point of view about the long-term market or competitive position the organization hopes to develop and occupy (Gerstein (2009)).
178 Strategic intent can provide a sense of discovery in that it holds out to the organization’s members the promise of learning about other organizations that operate in the same market, adopting their best practices and avoiding pitfalls (Gerstein (2009)).
179 Strategic intent can provide a sense of destiny, a worthwhile goal around which energies can be focused across the organization (Gerstein (2009)).
180 Adapted from the book of Hamel & Prahlad (2003).
181 How can we define the strategic intent of the company that not only will take the company towards its vision but also clarify the meaning of the vision in such terms that it can influence the day-to-day work of the people?
182 The company may apply its thinking on the competitive factors which are important for the customers and the company and plan for surpassing the competitors performance on these parameters.
183 Strategic intent creates meaning for the people. It must exude confidence in the people that the intended goals that company is focusing on will not only make a difference but also a worthwhile challenge to pursue. Strategic intent is worded in such a way that it arouses passion in the people. The key here is to build emotional energy into the strategic intent of the company, which captures the hearts of the people. Others see Robins (1997); Maritz (2008); Oesten & Roeder (2002).
184 According to Wikipedia, the free encyclopaedia (13.06.2007).
185 Bea & Haas (1995); Smith (1982); see also Wikipedia, the free encyclopaedia (13.06.2007).
Architecture of the value and strategic system

management organisations, one can distinguish two parts: external adjustment (organisation has to supply society with the products that society needs) and internal adjustment (activities within the organisation have to be coordinated and carried out in such a way that the objectives are achieved). Strategic planning is very important in both, and is needed to give direction to tactical planning. This in turn steers operational planning, which determines the execution of activities within an organisation. This boils down to the fact, as stated by Van Soest et al.,\textsuperscript{188} that an organisation that does not allocate time to the future, because it is too busy with daily problems, will ultimately be faced with the problem of no longer being capable of reacting adequately to new events and developments.

Strategic planning within forest management planning is a process based on goal setting in accordance with the findings of enterprise and environment analyses for the selection and design of means to attain the desired goals to be developed and implemented.\textsuperscript{189} Zuurbier et al. (1994)\textsuperscript{190} defined the objective of strategic planning as: mission, goals, strategies, capacities and conditions. Bos (1994) limited its description to objectives, activities and methods. He stated that strategic planning deals with three types of decision, namely the decision on the land use objectives for the forest land, the decision on the desired forest in the future, and the decision on the management activities. Oesten & Roeder (2002) stated that the primary task of strategic planning is to understand the environment, define and identify options and organisational goals, make and implement decisions, and evaluate performance. Therefore, strategic planning aims to exploit the new and different opportunities of tomorrow and tries also to optimise for tomorrow the trends of today. Its central task is the preservation and creation of the potential for success of forest management concerned with long-term, future success or safety device.\textsuperscript{191} Based on the Oesten & Roeder (2002) definition described previously, as a process emphasizes goal setting on the basis of enterprise and environment analyses of the selection of alternative actions, and designing ways to attain the goals to be developed and implemented\textsuperscript{192}. The author recommends for further readings on strategic planning to refer to Sekot (1991); Bos (1994); Oesten & Roeder (2002); Kreikebaum (2001); Pfohl & Stölzle (1997). The strategic planning process can be divided into the three ideal-typical phases, namely strategic analysis, synthesis and analysis, and strategy implementation.

\textsuperscript{187}Keuning & Eppink 1987 quoted by Bos 1994.
\textsuperscript{188}Van Soest et al. cited by Bos 1994.
\textsuperscript{189}Cf. Kreikebaum (2001); Pfohl & Stölzle 1997; Smith 1982.
\textsuperscript{190}Zuurbier et al. (1994) quoted by Bos (1994).
\textsuperscript{191}Smith (1982); Kreikebaum (2001); Oesten & Roeder (2002).
\textsuperscript{192}Comparison with Smith (1982); Pfohl & Stölzle (1997); Kreikebaum (2001).
and control.\textsuperscript{193} The last two elements (implementation and control) of strategic planning will not be addressed in this report because it deals with the tactical level and the medium-term planning.

3.5.1.1 Strategic analysis

The strategic analysis begins with the identification of the strengths and weaknesses,\textsuperscript{194} and the opportunities and threats of forestry.\textsuperscript{195} It consists on the diagnosis of the strategic problem is the goal of the strategic analysis. Identification, analysis and representation of the basic strategic problems of the enterprise are to be determined by means of the enterprise and the environmental analysis, in particular by confronting the risks and chances, and the strengths and weaknesses. Information obtained from the external and internal environment adds important components to classical forest planning.\textsuperscript{196} First, it identifies new and potentially crucial subjects that should be added to those identified during the analysis. Secondly, it identifies possible developments of the forest with the help of new technologies such as simulation, visualisation, etc. These must be used to adjust, for example, the choice of trees species, silvicultural system, to regulate yield, biodiversity and social needs and so on.

According to Daenzer & Huber (1997), Kreikebaum (2001), Oesten & Roeder (2002), there are a number of techniques, e.g. SWOT (strengths and weaknesses, opportunities and threats) analysis and risk analysis.\textsuperscript{197} Strategic analysis facilitates understanding of the current circumstances. As environmental changes are largely unforeseeable and possibly imply strategic decisions of great consequence, the analyses will possess a qualitative character. In this respect, forestry can often successfully build on their strengths and develop strategies to minimise the negative effects of their weaknesses, for example strategic stakeholder analysis.\textsuperscript{198}

\textsuperscript{193} Adapted from Oesten & Roeder (2002).
\textsuperscript{194} examining the strengths and weaknesses of the enterprise’s position, an attempt to analyse performance
\textsuperscript{195} Oesten & Roeder (2002).
\textsuperscript{196} For example, understanding pressures for change; others (e.g., clients) may be pressing for changes to the way things are done. Alternatively, the environment may be changing and it may be necessary to anticipate or respond to this. Pressures may arise from changes to the economy, new legislation, competition, changes to people’s attitudes, new technologies, or changes in government.
\textsuperscript{197} helps identify project risks, weaknesses in the organisation or operation. This allows for planning to neutralise certain risks
\textsuperscript{198} These are some guiding questions fro stakeholders’ analysis: Who are the stakeholders? What are their needs, wants and expectations? Key stakeholders may include funding bodies, clients, staff, management committee members and volunteers. These people have a variety of views and needs that will have an influence on the plans developed, see Freeman (2004); Oesten & Roeder (2002).
3.5.1.2 Strategy formulation: synthesis and analysis

The strategy formulation aims to describe how the forest enterprise intends to structure or to formulate its programmes to respond to the vision and the information contained in the assessment or strategic analysis. The development of a strategy represents an iterative process, which is usually based on three logical elements: concretising the value or normative guideline (see section 4.1.2), the development of strategy options based on strategic analysis (synthesis) and the strategies definitions or identifying strategic choices. The purpose of this stage of the strategic process is to generate as many different ways of achieving the objective as possible, through the synthesis or accumulation of all of the information collected during the strategy analysis, in order to identify key issues and develop strategy options. It consists of generating as many different ways to achieve the value or normative aim as possible. This means searching for a better solution than that which is the most obvious, or possibly improving the most obvious solution by incorporating aspects of other solutions.

This planning phase features two types of decision according to Bos (1994): Decisions on the desired future forest and decision on management activities.

FMP instruments proposed for the achievement of this strategic planning process was developed by Hanewinkel (2001), presented in its brilliant study on “Neuausrichtung der Forsteinrichtung als strategisches Managementinstrument.” It includes:

- Coordination of the forest used: GIS model, 3D visualisation, and landscape planning model, multi-criterion decision-making aids.

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199 Adapted from Bos (1994); Oesten & Roeder (2002).
201 This is a description of the future forest in terms of tree species distribution, regeneration, forest transformation or conversion, etc. It is a strategic approach based on the normative value decided on previously. Decisions on the desired future forest are needed so that a choice can be made between alternative management activities. The activity that achieves the desired future forest most effectively and efficiently has the highest value. Decisions on the desired future forest play a role in the internal adjustment of the organization. The decision on the desired forest has to be further elaborated upon in the tactical planning. The difference between strategic and tactical planning at this point is that in strategic planning only the main points are given. The planning horizon for achieving the desired future forest is very long (several decades). In tactical planning these points are set down in the form of more concrete objectives, which can be achieved within a shorter planning horizon (Bos (1994)).
202 If the characteristics of the desired future forest do not match the characteristics of the current forest, then the current forest has to be transformed into the desired future forest. This calls for transition management. Strategic planning deals with decisions on which parts of the forest have to be transformed from the current forest type into the desired future forest within a certain planning period. These kinds of decisions may be termed transition management decisions. Transition management decisions form the framework of tactical planning, which focus on the elaboration of these decisions for the forest that are not to be transformed to the future desired forest, but most be maintained in this decade.
Architecture of the value and strategic system

- Simulation: forest growth simulators with an economic component and silvicultural options such as Silva, etc.

There are two other useful tools for selecting the best option, namely grid analysis and decision trees.\textsuperscript{203} If the results of the analysis of the options show that the plan will fail to produce sufficient benefits, it is necessary to either return to an earlier stage in the planning cycle or to abandon the process altogether.

3.5.1.3 Evaluation of strategy

Once the course of action has been selected (strategic formulation) and it has been ascertained that it is viable and applicable, it is necessary to examine the strategic planning and draw from it whatever lessons one can.\textsuperscript{204} These are then fed back into future planning. It consists to decide whether it is worth implementing. Evaluating the plan gives the FMP participants the opportunity to either investigate other options that might be more successful, decide to implement the plan or accept that no plan is needed. Periodic evaluations of strategies are essential to assess the success of the strategic planning process. It is important to measure performance often, to evaluate the long-term effects of specific actions, and their influence on the organisation’s vision and mission.\textsuperscript{205} The forest enterprise should measure current performance against previously set expectations, and consider any changes or events that may have impacted upon the desired course of action depending on the circumstances; the following techniques can be helpful in evaluating a strategic plan: PMI (plus/minus/interesting),\textsuperscript{206} cost/benefit analysis,\textsuperscript{207} force field analysis,\textsuperscript{208} cash flow forecasts; thinking hats.\textsuperscript{209} Any analysis of the strategic plan must be tempered by common sense, and specifically by the normative result from section 3.

\textsuperscript{203} Grid analysis is helpful when it is necessary to decide between different options requiring consideration of a number of different factors. Decision trees by contrast allow one to think through the likely outcomes of following different courses of action.\textsuperscript{(Oesten & Roeder (2002).)}

\textsuperscript{204} Oesten & Roeder (2002).

\textsuperscript{205} Dolence et al. (1997).

\textsuperscript{206} This is a good, simple technique for weighing up the pros and cons of a decision. It involves listing the plus points of the plan in one column, the minus points in a second column, and the implications of the plan in a third column. Each point can be allocated a positive or negative score.

\textsuperscript{207} This is useful for confirming that the plan makes financial sense. It involves adding up all the costs involved with the plan, and comparing them with the expected benefits.

\textsuperscript{208} Similar to PMI, the force field analysis helps provide a good overall view of all the forces for and against the plan. This facilitates the identification of areas where adjustments can be made to render the plan more likely to succeed.

\textsuperscript{209} Thinking hats is a very good technique to use to obtain a rounded view of the plan and its implications. It provides a context within which a plan can be examined rationally, emotionally, optimistically, pessimistically and creatively.
4 Conclusions

Over the course of this paper on VSS, it has become clear that the normative and the strategic aspects of planning are often ignored in classical FMP. They are generally missing from the FMP process, although their importance has been demonstrated. In fact, the VSS merging two planning approaches are briefly and vaguely addressed in the current legal framework in Cameroon. Failure to recognise the gravity of this problem has been part of the reason for the unsuccessful implementation of the fmp in tropical Congo Basin rainforest regions.

Without value and strategic thinking, Cameroon or Congo Basin rainforests may continue to be subjected to destruction as said by respondents during the field work in Cameroon (Dogmo 2009). In this section, the need to address this “symptom” was highlighted, along with more fundamental change to the environments and lifestyles that affect the effectiveness of the plan. This section argues also that FMP process requires the linking or merging of the normative or value aspect and the strategic one in the same framework, creating thus a value and strategic system (VSS) (non-price only) as a framework to avoid crisis and to address conflict within FMP drafting and implementation. The common welfare and the (social) justice objectives of the FMP framework cannot be achieved without clear basic principles or normative values as well as it cannot be achieved in the absence of a strategic view of planning. It also highlighted that the input of the normative value in the strategic planning process as strategic system for securing the long term existence of the forest enterprise has to be done through the strategic intent as link between these two aspects of planning. FMP must incorporate values identified so as to create trust, confidence and consequently save on costs.

In conclusion, the unequivocal statement of the FMP’s VSS is the starting point for the derivation of an appropriate planning system designed to secure the long-term future of the forest enterprise. This new approach to FMP, the VSS is a process that may contribute to making good, well-considered, robust plans. The VSS as a signalling and learning mechanism has been developed in the FMP framework and may provide forest planners and others participants in FMP with the motivation to act sustainably, to produce ‘green’ products and services as well as to act for the common welfare. The VSS is a tool for long-term existence of the forestry as well as for the legitimacy and confidence of the stakeholders or FMP participants in the planning process. FMP needs value and strategic thinking for sustainable

210 medium-term or tactical forest management planning
211 Oesten & Roeder (2002).
212 Refer to PRC (1994); Nasi et al. (2006); Cerutti et al. (2006); BFT (2006).
use. However, the present legal framework influencing FMP in Cameroon requires some reform for the VSS approach to be implemented.
5 References


References


References


Hutchinson & Wikipedia (2002): The free encyclopaedia; see also law resource page with links to the Columbia constitution: www.washlaw.edu/forint/america/columbia.html (accessed 17.06.2007).


References


6 Annexes

Annex 1 International Labour Organisation (ILO) Texts

See also Poschen (2003)

Table 1: Schematic overview of coverage of social and labour aspects in forest policy initiatives

<table>
<thead>
<tr>
<th>Forest Policy</th>
<th>Intergovernmental initiatives</th>
<th>Research</th>
<th>Timber trade initiatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human input</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Right to organise and collective bargaining (C87 &amp; 98)²</td>
<td>(+)</td>
<td>(+)</td>
<td></td>
</tr>
<tr>
<td>- Elimination of child labour (C138 &amp; 182)</td>
<td>(+)</td>
<td>(+)</td>
<td></td>
</tr>
<tr>
<td>- Elimination of forced labour (C29 &amp; 105)</td>
<td>(+)</td>
<td>(+)</td>
<td></td>
</tr>
<tr>
<td>- Non-discrimination (C100 &amp; 111)</td>
<td>(+)</td>
<td>(+)</td>
<td></td>
</tr>
<tr>
<td>- Training programmes (C142)</td>
<td>+</td>
<td>+</td>
<td>(+)</td>
</tr>
<tr>
<td>- Safety and health (ILO CFSHF)²</td>
<td>+</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sharing benefits

- Remuneration (C131)                  | (+)                           | +                     | (+)                        | +++                       | +++   | ++   |
- Employment and training opportunities for local and forest-dependent people (C169) |
- Respect of traditional land use rights and cultural values (C169) |
- Quality of life of local population² | (+)                           | +                     | (+)                        | +++                       | +++   | +++  |

Participation and conflict resolution

- Right to information and participation in decision making |
- Right to organise and defend interest collectively |
- Conflict resolution based on consultation and consensus |

(+) Aspect not explicitly mentioned, but included depending on interpretation
+ Aspect just mentioned
++ Aspect specified
+++ Aspect covered clearly and/or in detail

¹ Formerly known as Helsinki Process.
² C refers to ILO Convention.
³ ILO Code of Practice on Safety and Health in Forestry Work, but this text is not a legal instrument.
⁴ Examples: provision of recreation, right to forest access for leisure, non-commercial mushroom picking etc.
### Table 2: Schematic overview of coverage of social and labour aspects in forest certification standards

<table>
<thead>
<tr>
<th>Forest certification standard</th>
<th>PEFC (based on Pan-European FSC, C&amp;I 1998)</th>
<th>UKWAS</th>
<th>FFCS</th>
<th>CSA</th>
<th>LEI</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Human input</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Right to organise and collective bargaining (C87 &amp; 98)</td>
<td>+++</td>
<td>+++</td>
<td>++</td>
<td>(+)</td>
<td></td>
</tr>
<tr>
<td>- Elimination of child labour (C138 &amp; 182)</td>
<td>+</td>
<td>(+)</td>
<td>(+)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Elimination of forced labour (C29 &amp; 105)</td>
<td>+</td>
<td>(+)</td>
<td>(+)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Non-discrimination (C100 &amp; 111)</td>
<td>+</td>
<td>(+)</td>
<td>(+)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Training programmes (C142)</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
</tr>
<tr>
<td>- Safety and health (ILO CPISHF)</td>
<td>+++</td>
<td>+++</td>
<td>(+)</td>
<td>++</td>
<td></td>
</tr>
<tr>
<td><strong>Sharing benefits</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Remuneration (C131)</td>
<td>(1)</td>
<td>(+)</td>
<td>(+)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Employment and training opportunities for local and forest-dependent people (C169)</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
</tr>
<tr>
<td>- Respect of traditional land use rights and cultural values (C169)</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
</tr>
<tr>
<td>- Quality of life of local population</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
</tr>
<tr>
<td><strong>Participation and conflict resolution</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Right to information and participation in decision making</td>
<td>++</td>
<td>+++</td>
<td>++</td>
<td>++</td>
<td>++</td>
</tr>
<tr>
<td>- Right to organise and defend interest collectively</td>
<td>+</td>
<td>+</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Conflict resolution based on consultation and consensus</td>
<td>+++</td>
<td>++</td>
<td>++</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

UKWAS = United Kingdom Woodlands Assurance Scheme  
FFCS = Finnish Forest Certification System  
CSA = Canadian Standards Association  
LEI = Lembaga EkoLabel Indonesia  
(+) Aspect not explicitly mentioned, but included depending on interpretation  
+ Aspect just mentioned  
++ Aspect specified  
+++ Aspect covered clearly and/or in detail

---

5 FSC Principle 1.3: “In signatory countries, the provisions of all binding international agreements such as ILO Conventions […] shall be respected”

6 ILO Code of Practice on Safety and Health in Forestry Work, but this text is not a legal instrument.

7 Like provision of recreation, forest access right, …
### Table 3: Criteria and indicators – human input (labour)

<table>
<thead>
<tr>
<th>Human input:</th>
<th>ILO basis for minima:</th>
<th>Legal status of text:</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ right to organize and bargain collectively</td>
<td>Conventions 87 and 98</td>
<td>Fundamental right (ILO Declaration)</td>
</tr>
<tr>
<td>✓ elimination of child labour</td>
<td>Convention 138</td>
<td>Fundamental right (ILO Declaration)</td>
</tr>
<tr>
<td>✓ elimination of forced labour</td>
<td>Conventions 20 and 105</td>
<td>Fundamental right (ILO Declaration)</td>
</tr>
<tr>
<td>✓ non-discrimination</td>
<td>Conventions 100 and 111</td>
<td>Fundamental right (ILO Declaration)</td>
</tr>
<tr>
<td>✓ qualified workforce</td>
<td>ILO Code of Practice on Safety and Health in Forestry Work provisions enterprise and worksite level</td>
<td>Not legally binding</td>
</tr>
<tr>
<td>✓ safety and health</td>
<td></td>
<td></td>
</tr>
<tr>
<td>✓ workers, contractors, self-employed</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 4: Criteria and indicators – sharing of benefits (social and labour)

<table>
<thead>
<tr>
<th>Sharing of benefits:</th>
<th>ILO basis for minima:</th>
<th>Legal status of text:</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ remuneration/minimum wage</td>
<td>Convention No. 131 and Recommendation No. 135</td>
<td>Convention for ratification</td>
</tr>
<tr>
<td>✓ employment and training opportunities for local and forest-</td>
<td>Convention No. 169 extended by analogy to local</td>
<td>Convention for ratification</td>
</tr>
<tr>
<td>dependent people</td>
<td>communities</td>
<td></td>
</tr>
<tr>
<td>✓ respect of traditional use rights and cultural values</td>
<td>Convention No. 169, Arts. 13, 14, 15, 20, 23</td>
<td>Convention for ratification</td>
</tr>
</tbody>
</table>

### Table 5: Criteria and indicators – participation and conflict resolution (social and labour)

<table>
<thead>
<tr>
<th>Participation and conflict resolution:</th>
<th>ILO basis for minima:</th>
<th>Legal status of text:</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ the right to information and participation in decision making</td>
<td>Convention 169</td>
<td>Convention for ratification</td>
</tr>
<tr>
<td>✓ the right to organize and defend interests collectively</td>
<td>local communities C. 141, workers C. 87, 98, indigenous peoples C. 169</td>
<td>Convention for ratification</td>
</tr>
<tr>
<td>✓ conflict resolution based on consultation and consensus</td>
<td>Convention 169, Arts. 6, 7</td>
<td>Convention for ratification</td>
</tr>
</tbody>
</table>
Making use of ILO texts according to

Table 6: Criteria, indicators and verifiers for human input (labour)

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Indicator(s)</th>
<th>Verifiers</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>C 1</td>
<td>Respect of fundamental social rights</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C 1.1</td>
<td>Right to organize and to bargain collectively</td>
<td>I 1.11 All workers are able to form and join a trade union of their choice without fear of intimidation or reprisal.</td>
<td>Convention No. 87, Convention No. 98, ILO Tripartite Declaration 1998 or equivalent national legislation</td>
</tr>
<tr>
<td></td>
<td>I 1.12 Collective bargaining with representative trade unions is carried out in good faith and with best efforts to come to an agreement.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C 1.2</td>
<td>Child labour</td>
<td>I 1.21 Strict adherence to minimum age provisions of national labour laws and regulations, or where those are defective, of the international standards.</td>
<td>Convention No. 138, Convention No. 182, ILO Tripartite Declaration 1998 or equivalent national legislation</td>
</tr>
<tr>
<td></td>
<td>I 1.22 No workers under the age of 18 in hazardous or heavy work except for purposes of training.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Criterion</td>
<td>Indicator(s)</td>
<td>Verifiers</td>
<td>Reference</td>
</tr>
<tr>
<td>-----------</td>
<td>--------------</td>
<td>-----------</td>
<td>-----------</td>
</tr>
<tr>
<td>C 1.3 Prohibition of forced labour</td>
<td>I 1.31 No workers in debt bondage or other forms of forced labour engaged (incl. Employees, self-employed and contractors).</td>
<td>- Interviews with union representatives and workers - Records of labour inspectorate</td>
<td>Convention No. 29 Convention No. 105 ILO Tripartite Declaration 1996 or equivalent national legislation</td>
</tr>
<tr>
<td>C 1.4 Equality of opportunity and treatment</td>
<td>I 1.41 Policies and procedures make qualifications, skill and experience the basis for recruitment, placement, training and advancement of staff at all levels.</td>
<td>- Interviews with union representatives and workers - Payroll (of enterprise and/or contractors) - Findings of employment surveys - Records of labour inspectorate</td>
<td>Convention No. 111 Convention No. 100 ILO Tripartite Declaration 1996 or equivalent national legislation</td>
</tr>
<tr>
<td>C 2 Workforce qualification</td>
<td>I 2.11 Managers and supervisors are in possession of an appropriate qualification, preferably one that is nationally recognized, ensuring that they are able to plan and organize forest operations.</td>
<td>- Skill certificates, records of training and skills testing (national or enterprise) - Field observation - Interviews with union representatives and workers</td>
<td>Convention No. 142 ILO Code of Practice on safety and health in forestry work (1996) or equivalent national legislation and regulation</td>
</tr>
<tr>
<td>C 3 Occupational safety and health</td>
<td>I 13.11 A safety and health policy and a management system are in place which systematically identify hazards and preventive measures and ensures these are taken in the operations.</td>
<td>- Safety and health policy statement - Organigramme with safety and health management system - Documented requirements for planning and work organization - Job descriptions of supervisors - Field observations - Interviews with union representatives and workers - Records of labour inspectorate and/or accident insurers</td>
<td>Convention No. 155 ILO Code of Practice on safety and health in forestry work (1996) or equivalent national legislation and regulation</td>
</tr>
<tr>
<td></td>
<td>I 13.12 All necessary equipment, tools, machines and substances are available at the workplace and in safe and serviceable condition.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>I 13.13 Safety and health requirements are taken into account in the planning, organization and supervision of operations.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>I 13.14 Where workers stay in camps, conditions for accommodation and nutrition comply at least with ILO Code of Practice on Safety and Health in Forestry.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 7: Criteria, indicators and verifiers for sharing of benefits of forest management

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Indicator(s)</th>
<th>Verifiers</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>C 4</td>
<td>Sharing of benefits</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C 4.1</td>
<td>Fair remuneration</td>
<td>I 4.11 Wages or income of self-employed and contractors are at least as high as those in comparable occupations in the same region and in no case lower than the established minimum wage.</td>
<td>- Interviews with union representatives and workers&lt;br&gt; - Payroll (of enterprise and/or contractors)&lt;br&gt; - Findings of employment surveys&lt;br&gt; - Records of labour inspectorate</td>
</tr>
<tr>
<td>C 4.2</td>
<td>Employment opportunities for local and forest-dependent people</td>
<td>I 4.21 Local and forest-dependent people have equal access to employment and training opportunities.</td>
<td>- Interviews with representatives of local communities, of unions and workers&lt;br&gt; - Payroll and training records (of enterprise and/or contractors)&lt;br&gt; - Findings of employment surveys</td>
</tr>
<tr>
<td>C 4.3</td>
<td>Respect of traditional land use rights</td>
<td>I 4.31 Cultural and traditional values are respected.&lt;br&gt; I 4.32 Traditional access for subsistence uses and traditional activities is granted.&lt;br&gt; I 4.33 Rights of local communities to natural resources pertaining to their land are respected and communities participate in the use, management and conservation of the resources. Note: for both I 4.32 and I 4.33 it is assumed that traditional uses are on a scale that does not threaten the integrity of the resource or the management objective.</td>
<td>- Interviews with representatives of local communities, of unions and workers</td>
</tr>
<tr>
<td>Criterion</td>
<td>Indicator(s)</td>
<td>Verifiers</td>
<td>Reference</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------</td>
</tr>
<tr>
<td>C 5 Participation and conflict resolution</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C 5.1 Right to information and participation in decision making</td>
<td>I 5.11 All interested parties have access to relevant information. I 5.12 All interested parties have the opportunity to affect decision making.</td>
<td>- Interviews with representatives of local communities, of unions and workers - Records of fora for participation (round tables, committees, hearings etc.)</td>
<td>Convention No. 169 or relevant national legislation and collective or other agreements</td>
</tr>
<tr>
<td>C 5.2 Right to organize and defend interests collectively</td>
<td>I 5.21 All interested individuals are able to form and join organizations of their choice without fear of intimidation or reprisal. I 5.22 Organizations of interested parties are accepted as participants in decision making.</td>
<td>- Interviews with representatives of local communities, of unions and workers - Records of fora for participation (round tables, committees, hearings etc.)</td>
<td>Convention No. 169 No. 87 and 98, No. 141 or relevant national legislation and collective or other agreements</td>
</tr>
<tr>
<td>C 5.3 Conflict resolution</td>
<td>I 5.31 Every reasonable effort is made to resolve conflicts through fair consultation aiming at achieving agreement or consent.</td>
<td>- Interviews with representatives of local communities, of unions and workers - Records of fora for participation (round tables, committees, hearings etc.) - Records of ombudsmen, courts or similar institutions</td>
<td>Convention No. 169 or relevant national legislation and collective or other agreements</td>
</tr>
</tbody>
</table>
Annex 2 PEFC Diagram of sustainable forest management

Figure 1: PEFC Diagram of SFM Criteria (Gunneberg 2000)

Pan-European Criteria And Example Indicators For Sustainable Forest Management

Table 1: Surfaces de forêts tropicales certifiées

<table>
<thead>
<tr>
<th>Antioque</th>
<th>ha</th>
<th>Asie-Pacifique</th>
<th>ha</th>
<th>Amérique latine</th>
<th>ha</th>
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</thead>
<tbody>
<tr>
<td>Afrique du sud</td>
<td>1404 249</td>
<td>Îles Salomon</td>
<td>39 042</td>
<td>Argentine</td>
<td>49 681</td>
</tr>
<tr>
<td>Gabon</td>
<td>1191 642</td>
<td>Indonésie</td>
<td>90 240</td>
<td>Bolivie</td>
<td>95 800</td>
</tr>
<tr>
<td>Honduras</td>
<td>61 130</td>
<td>Malaisie</td>
<td>4188 646</td>
<td>Bolivie</td>
<td>946 688</td>
</tr>
<tr>
<td>Ouganda</td>
<td>35 000</td>
<td>Philippines</td>
<td>14 800</td>
<td>Brésil</td>
<td>1551 513</td>
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<td>Thaïlande</td>
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<td>Colombie</td>
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<td></td>
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</tr>
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<td>Zimbabwe</td>
<td>157 285</td>
<td>Costa Rica</td>
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<td></td>
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<td>3000 000</td>
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Forest certified in tropical forests region