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World Conservation Monitoring Centre

FEASIBILITY STUDY FOR NATIONAL FOREST RESOURCE ACCOUNTING IN CAMEROON

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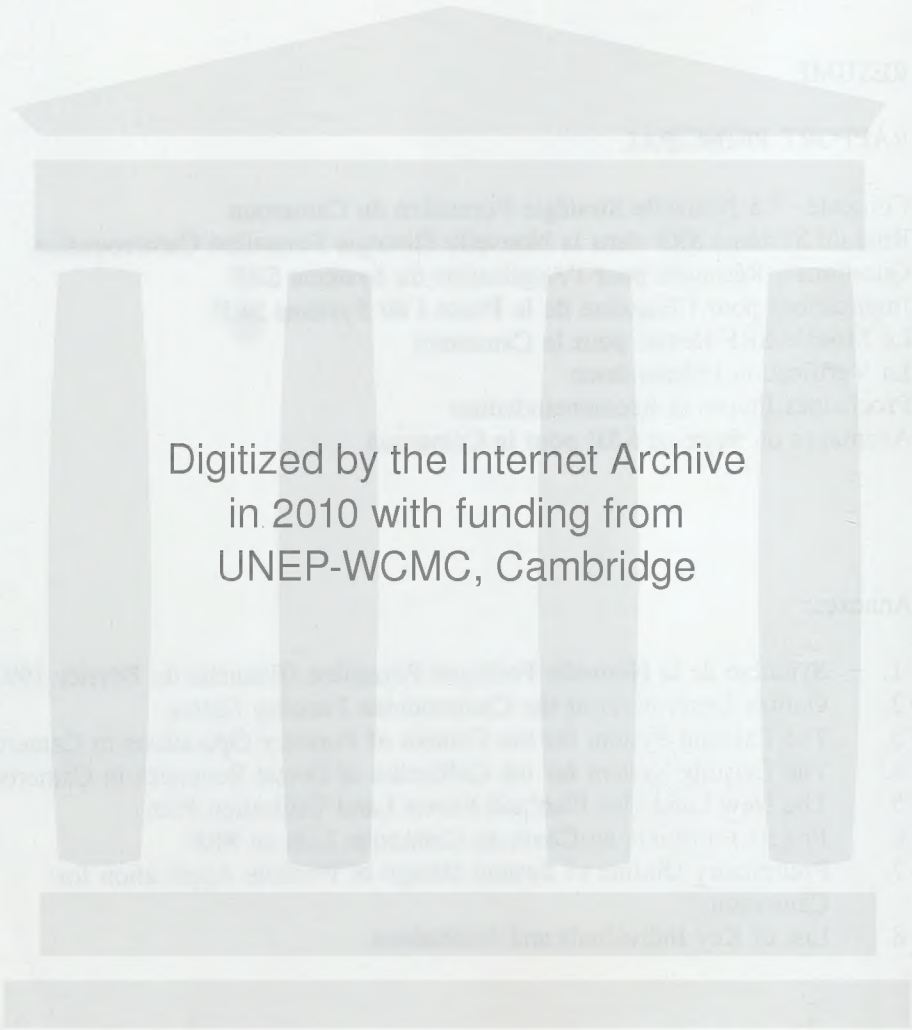

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FEASIBILITY STUDY FOR NATIONAL FOREST RESOURCE ACCOUNTING IN CAMEROON

RESUME

1. Actuellement il n'est pas possible d'appliquer le système SRF au Cameroun, même dans sa forme revisée. Le domaine forestier permanent (DFP) n'est pas délimité sur le terrain, des données correctes ne sont pas colléctionnées et la législation forestière actuelle ne permet pas la gestion durable de la forêt au Cameroun suivant les critères de l'OIBT.

2. Il est envisagé qu'avant la fin de 1993 le Cameroun se dote d'une nouvelle politique forestière, d'une nouvelle loi forestière et son décret d'application. D'ici là le pays aura déjà défini le cadre pour une nouvelle stratégie forestière, laquelle, si appliquée, pourrait donner une base pour un système SRF revisé. Le système SRF pourrait aussi donner une impulsion et une orientation à la nouvelle stratégie forestière.

3 La mise en application de la nouvelle stratégie forestière sera difficile. Un certain nombre de questions à résoudre ont été identifiées, la plus pressante de celles-ci est la délimitation sur le terain du DFP et l'impact des communautés riveraines sur la forêt. En plus, quelques conditions préalables doivent être satisfaites. A savoir: la volonté politique pour l'adoption et l'application de la nouvelle législation forestière; et suffisament de fonds pour la mise en oeuvre de la nouvelle stratégie forestière.

4 Dans les circonstances actuelles

SUMMARY

At present it is not possible to implement the FRA, even in its revised format, in Cameroon. The permanent forest estate is not demarcated on the ground, accurate data on the forest resource are not being collected and the existing forest legislation does not allow for sustainable management of Cameroon's forests according to ITTO criteria.

It is expected that before the end of 1993 Cameroon will be endowed with a new forest policy, a new forest law and decree of implementation. The country will have then set the framework for a new forest strategy which, if implemented, could provide the base for a revised FRA. The FRA could also provide impetus and direction for the new forest strategy.

Translating the theory of the new forest strategy into practice will be difficult. A number of issues to be resolved have been identified, the most pressing of which are ground demarcation of the PFE and the impact of local communities on the forest. In addition, certain pre-requisites must be met. These include: the political will to enact and enforce the new forest legislation; and sufficient funds to implement the new forest strategy.

Under current circumstances the

l'administration forestière semble inefficace et, à cause de la crise économique, le phénomène risque de perdurer. Celà constitue déjà un frein pour l'application de la nouvelle stratégie forestière. La privatisation de certaines activités forestières pourrait aider à résoudre le problème. Les domaines d'intervention productifs serraient des tâches uniques comme la délimitation du DFP et des activités essentielles comme le contrôle de mouvements des grumes.

forestry administration seems ineffective and, because of the economic crisis, is likely to remain so for some time. This is already hampering implementation of the new forest strategy. Privatisation of certain forestry activities could help to overcome this problem. Productive areas would be one-off tasks such as PFE demarcation and essential activities such as control of log movements.

5 Pour que le système SRF soit crédible, une vérification independente est nécessaire. Deux eventualités sont suggérées: que les ONG's jouent un rôle d'avant-garde et qu'il y ait un audit privé ou un programme de surveillance des activités forestières. Une telle vérification créditerait positivement les données rapportées et donnerait une base pour un programme de certification de bois. Cela pourrait propulser le Cameroun à une position compétitive sur le marché international des bois tropicaux.

For FRA to be credible, independent verification will be required. Two forms are recommended: a NGO watching brief and private audit or monitoring of forest operations. Such verification will give necessary credibility to reported figures and could provide the basis for a wood certification programme. This could boost Cameroon's position in an increasingly competitive international market for tropical hardwood products.

RAPPORT PRINCIPAL

MAIN REPORT

Contexte - La Nouvelle Stratégie Forestière du Cameroun

1. Avec l'objectif de prévoir une utilisation plus rationnelle et durable de ces ressources forestières le Cameroun est en train de réviser l'ensemble des textes régissant le secteur forestier. Le pays est un membre producteur engagé de l'OIBT et signataire de l'AIBT. La nouvelle orientation de son programme forestier témoigne de son engagement au "Cible 2000" de l'OIBT. Le document relatif à cette nouvelle politique forestière (en train d'être finalisé) se trouve résumé à l'annexe 1 et participe de son souci aux problèmes environnementaux et socio-économiques.

2. La législation forestière actuelle (Loi no 81-13 du 27 novembre 1981 et Décret 83-169 du 12 avril 1983) précise les règles de l'exploitation des produits ligneux ainsi que la collecte des revenus forestiers. Les régles de l'aménagement forestier ainsi que les mesures de protection de l'environnement ne sont pas explicites dans ce document. Une description générale du secteur forestier se trouve en annex 2; les annexes 3 et 4 décrivent et font des commentaires sur les systèmes utilisés pour le contrôle de l'exploitation ainsi que la collecte des revenus forestiers.

3. Les nouveaux projets de loi et décret seront bientôt soumis à l'Assemblée Nationale.

4. Il y a trois activités principales qui sont

Context - The New Forestry Strategy in Cameroon

With the objective of providing for a more rational and sustainable use of its forest resources, Cameroon is in the process of revising many of the documents regulating its forestry sector activities. The country is a committed producer member of ITTO and signatory to the ITTA. The new direction of its forestry programme is evidence of the country's commitment to ITTO's "Target 2000". The new forest policy documentation (currently being finalised) is summarised in Annex 1 and allows for both environmental and socio-economic concerns.

The existing forest legislation (Law no 81-13 of 27 November 1981 and Decree 83-169 of 12 April 1983) set out the rules whereby forests can be exploited for their wood and forest revenues collected. Forest management rules and environmental concerns are not explicitly covered. Annex 2 provides an outline description of the forest sector whilst Annexes 3 and 4, respectively, describe and comment on the current systems used to control forest exploitation and collect forest revenues.

The new Forest Law ~~and associated Decree~~ will soon be submitted to the national assembly.

There are three main activities which

en cours de réalisation en appui à la nouvelle stratégie forestière pour le Cameroun. Il s'agit notamment de:

(a) ***Schéma d'utilisation des sols forestiers*** Des inventaires de reconnaisance (phases I à IV) couvrant la zone forestière située au sud d'une ligne Douala-Batouri à une échelle de 1:200,000 ont été réalisés. Ce travail a etabli 9 millions d'hectares comme "domaine forestier permanent" (DFP) sur une supérficie totale de 14 millions d'hectares. Avec l'adoption de la nouvelle Loi Forestière, les forêts qui constituent le DFP seront délimitées sur le terrain et légalement classées comme DFP par un décret de zonage. Le DFP fera l'objet des plans d'aménagement à long terme qui ont pour but la gestion durable de la forêt. Les éléments du schéma d'utilisation des sols sont inclus en annexe 5.

(b) ***L'aménagement des forêts*** Comme partie de la nouvelle stratégie forestière, des normes d'aménagement forestier seront établies. Actuellement des projets pilotes sont en train de démarrer dans des ecosystèmes forestiers variés afin de développer des systèmes de gestion appropriés.

(c) ***Organisation de l'exploitation*** Il est envisagé la tranformation du système actuel de "Licences d'Exploitation Forestières" en "Concessions d'Exploitation Forestières" pour permettre l'usage à long terme de la

have been embarked upon as part of the new forestry strategy for Cameroon. They are:

A forest land utilisation plan Reconnaisance inventories (phases I to IV) covering forested areas to the south of a line from Douala to Batouri to a scale of 1:200,000 have now been completed. This work has established 9 million hectares as "permanent forest estate" (PFE) out of a total land area of 14 million hectares. With ratification of the new Forest Law those forests which make up the PFE will be demarcated on the ground and legally classified as PFE by a zoning decree. The PFE will be covered by long term management plans aimed at sustainable management of the forest. Annex 5 describes the elements of the new forest land utilisation plan.

*/ with ratification of the land utilisation plan

Forest management As part of the new forestry strategy forest management standards will be established. Pilot projects are currently under way in various forest types to develop appropriate forest management practices.

Organisation of forest operations The current system of "Logging Licences" will be changed to a "Concession" system to allow for long term use of the forest resource. It is planned that concessions will be

Figure 1 - The Rôle of the "Forest Resource Accounting" (FRA) System in Cameroon's Forestry Sector Activities

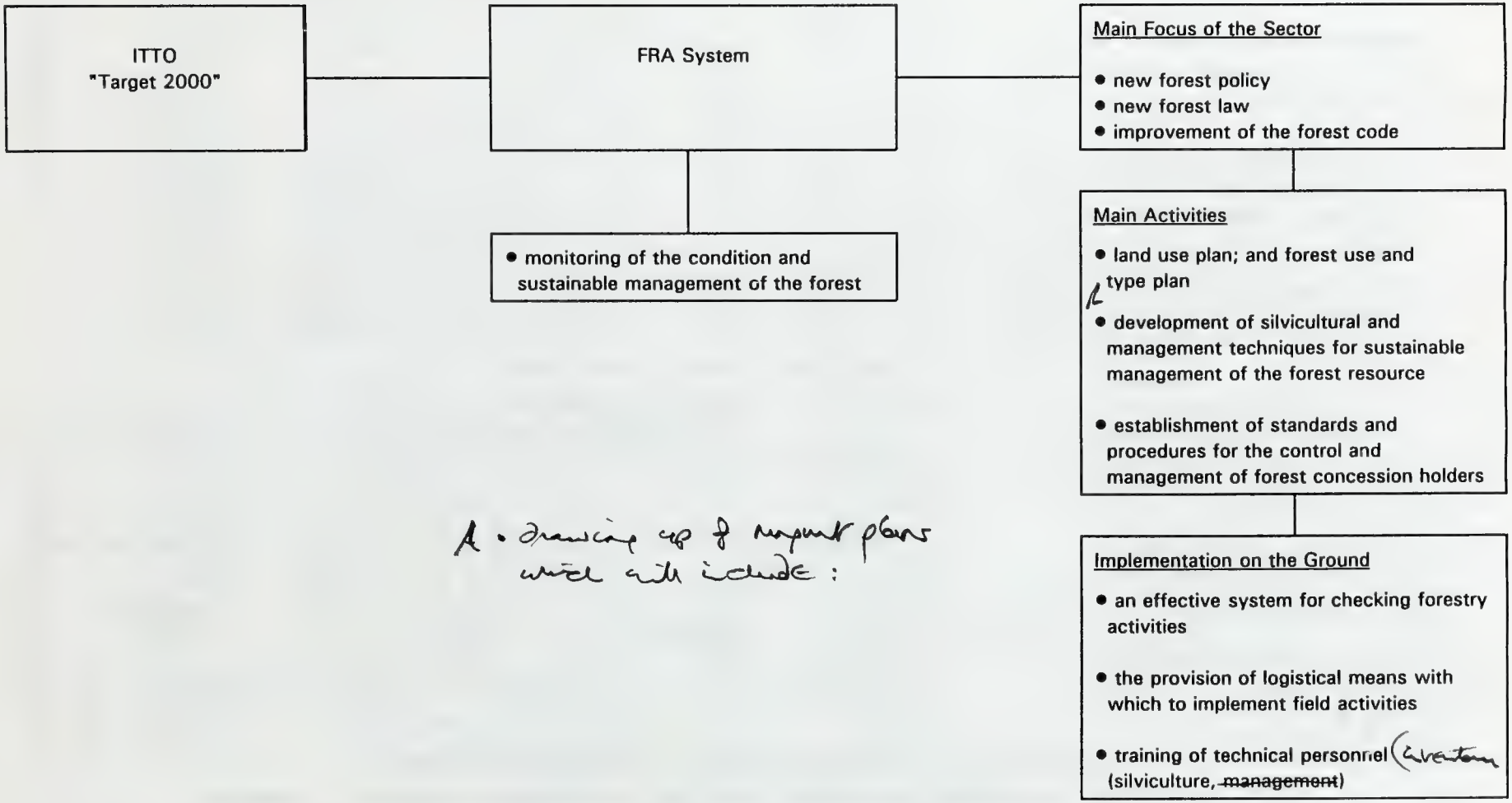
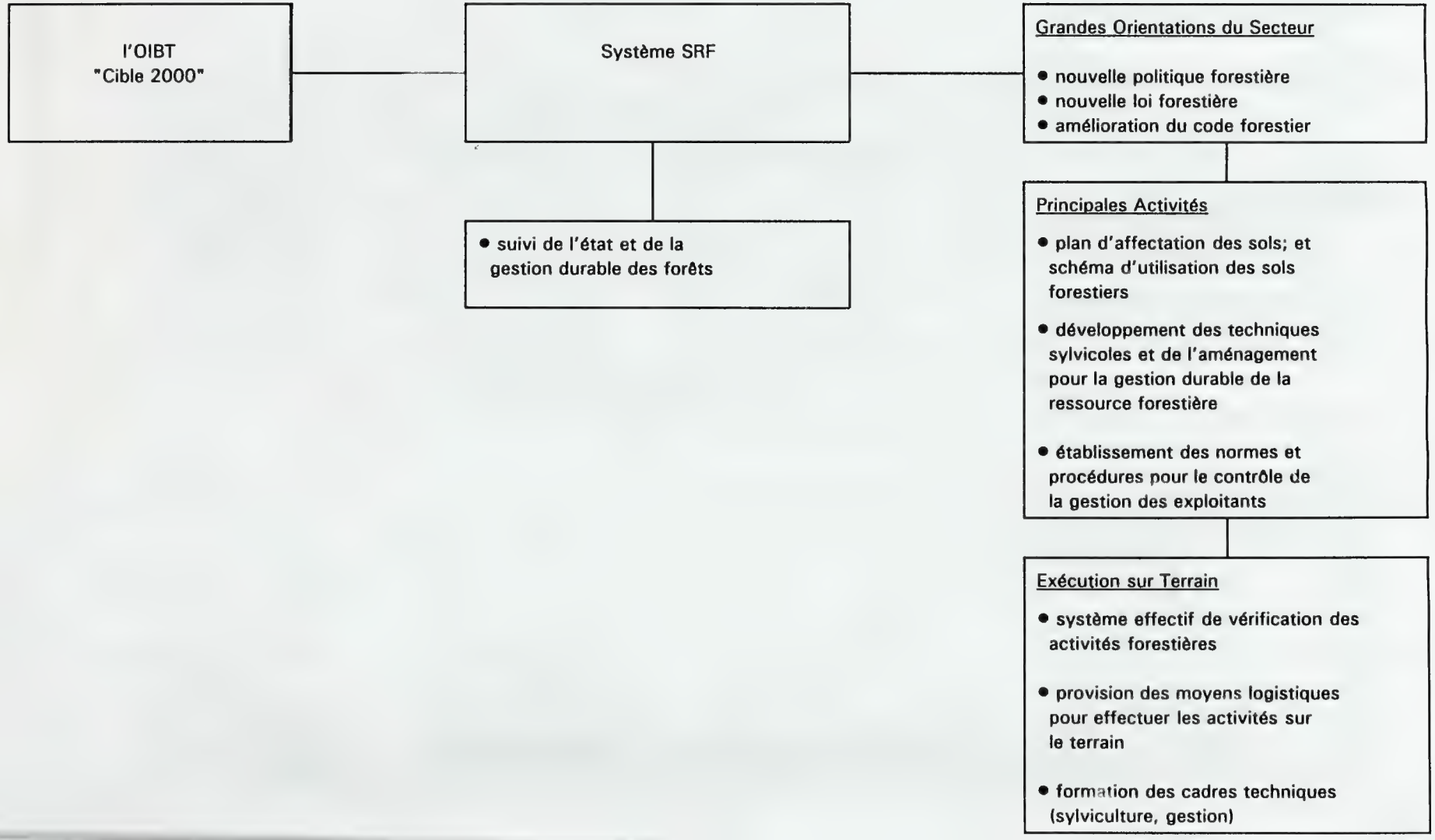


Tableau 1 - Le Rôle du Système "La Surveillance des Resources Forestières" (SRF) dans les Activités du Secteur Forestier au Cameroun



ressource forestière. Il est prévu que les concessions seront attribuées pour une période renouvelable de 25 ans sujet à une évaluation tous les 5 ans. Le contrôle des exploitations forestières sera exercé par les agents de l'administration forestière. La vérification par une organisation indépendante n'est pas actuellement prévue. Suivant la nouvelle législation les exploitants seront résponsables du contrôle de l'invasion des populations riveraines dans les zones du DFP où ils travaillent.

issued for renewable 25 year periods subject to a review of operations every five years. Control will be exercised by forestry administration personnel. Independent verification is not currently allowed for. Under the new legislation concession operators will be responsible for the control of encroachment by farmers into the PFE where they are working.

5. Des projets financés par des bailleurs de fonds sont en train d'être mis en oeuvre pour aider le Cameroun à formuler et appliquer la nouvelle stratégie forestière. Ceux qui sont liées au système SRF sont resumés en Annex 6.

Aid funded projects are being implemented to help Cameroon formulate and implement the new forestry strategy. Those of relevance to FRA are summarised in Annex 6.

Rôle du Système SRF dans la Nouvelle Statégie Forestière Camerounaise

Rôle for the FRA System Within Cameroon's New Forest Strategy

6. Le système SRF vise à assister le Cameroun pour suivre le progrés des changements dans son secteur forestier vers le "Cible 2000" de l'OIBT. Le Tableau 1 montre schématiquement comment le système SRF sera impliqué dans la nouvelle stratégie forestière. Le domaine d'action du système SRF est détaillé dans les paragraphs 22 et 23. L'application du système SRF au Cameroun implique un investissement important. Une liste des activités prioritaires est incluse en paragraphes 29 et 30.

The FRA system is designed to assist Cameroon track the progress of changes in its forest sector towards ITTO's "Target 2000". How FRA relates to Cameroon's new forest strategy is shown schematically in Figure 1. The scope of FRA is elaborated in more detail below in paragraphs 22 and 23. Implementation of the FRA system in Cameroon implies considerable investment. A list of priority activities is included in paragraphs 29 and 30.

7. La mise en application de la nouvelle politique forestière du Cameroun sera émaillée de beaucoup de difficultés qui nécessiteront beaucoup de

Translating the theory of Cameroon's new forest strategy into practice is expected to entail numerous difficulties which will require many readjustments.

réajustements.

8. Il est donc essentiel que des solutions à ces problèmes soient trouvées pour mettre en oeuvre les activités prioritaires afin de permettre au Cameroun d'atteindre le "Cible 2000" de l'OIBT.

It is thus essential that solutions to these problems are found so as to put into place the priority actions required for Cameroon to reach "Target 2000"

9. La réussite du système SRF est subordonnée à un certain nombre de conditions préalables dont les principales sont:

The success of FRA is dependent upon a certain number of pre-requisites of which the most essential are that:

(a) l'adoption de la nouvelle politique forestière, de la nouvelle loi et du décret d'application;

the new forest policy, law and code are passed;

(b) la volonté politique pour la mise en place en application de la nouvelle législation forestière, condition sans laquelle le système SRF n'aura aucun sens;

the political will to enforce the new forest legislation exists, without which the FRA has no meaning;

(c) la volonté politique se manifeste d'élaborer et d'appliquer des programmes de vérification indépendente et de privatisation de certaines activités forestières; et

the political will to elaborate and implement programmes of independent verification and privatisation of certain forestry activities emerges; and

(d) disponibilité d'un fonds suffisant pour assurer l'application de la nouvelle stratégie forestière.

sufficient funds are available for implementation of the new forest strategy.

10. La superficie du DFP constitue la base du rapportage régulier du système SRF. Le rapportage régulier donnera la superficie en hectares qui à été vérifiée comme étant durablement gérée. La performance du Cameroun pour atteindre le "Cible 2000" peut être ainsi évaluée en comparant le chiffre raporté avec la superficie totale du DFP tel que aussi raporté à l'OIBT.

The area of PFE is the base for the regular reporting of the FRA system. Regular reporting will provide the area of PFE which has been verified as being sustainably managed. Cameroon's performance towards meeting "Target 2000" can then be measured by comparing the reported figure against the total area of PFE as also reported to ITTO.

11. Avec la poursuite du plan d'affectation

As the land use plan is extended to

des sols dans les autres zones, la superficie du DFP devra augmenter. A présent quatre phases d'inventaire couvrant 14 millions d'hectares sur une superficie nationale de 47,5 millions d'hectares ont été réalisées. La phase cinq est en cours. Les autres phases suivront suivant la disponibilité des fonds. Avec la réalisation de la cinquième phase toute la zone de la forêt tropicale humide sera inventoriée.

cover the remaining parts of Cameroon the area of PFE will increase. At present four phases of the inventory are complete covering 14 million hectares out of a total national land area of 47.5 million hectares. Phase five is currently ~~in progress~~. The other phases will follow as funding becomes available. With the completion of phase five virtually all the closed humid forest will have been inventoried.

12. Au Cameroun le DFP comprend: parcs nationaux, réserves écologiques intégrales, les réserves de faune, les sanctuaires, les forêts de protection, les forêts d'enseignement et de recherche, les forêts de récréation, les forêts de production de matière ligneuse et les forêts des collectivités publiques. Pour le système SRF cette définition se rapporterait à une superficie de forêt durablement gerée pour le "Cible 2000" de l'OIBT.

For Cameroon, definition of the PFE includes: national parks, complete ecological reserves, wildlife reserves, sanctuaries protection forests, forests for research and teaching, amenity forests, production forests and ~~public~~ forests. In the context of FRA this definition would be used as the ITTO "Target 2000" definition of forest area to be sustainably managed.

13. L'application effective de la nouvelle stratégie forestière permettra au Cameroun d'atteindre les objectifs fixés. Cette nouvelle stratégie forestière cadre bien avec les objectifs du système SRF.

Effective implementation of the new forest strategy will assist Cameroon meet its ITTO "Target 2000" obligations. The new forest strategy also fits in well with the objectives of FRA.

14. L'application de la nouvelle stratégie forestière donnera *aussi* un sens logique au système SRF. A travers le système SRF le Cameroun pourra: (a) faire connaître progéssivement son tas d'avancement vers le "Cible 2000" en fonction de sa nouvelle stratégie forestière; et (b) mesurer son progrés général, en termes des procedures quantitatives de rapportage, vers le "Cible 2000".

Implementation of the new forest strategy will *also* provide the rationale for FRA. Using the FRA system Cameroon is able to: (a) show the extent of its progress towards "Target 2000" as a result of its new forestry strategy; and (b) measure its general progress, in terms of quantitative reporting procedures, towards "Target 2000".

Questions à Résoudre pour l'Application du Système SRF

Issues to Resolve for Implementation of the FRA System

15. En plus des conditons préalables qui ont

In addition to the pre-requisites

étés énonçées au paragraphe 9 il y a un certain nombre de questions qui doivent être résolues pendant la phase d'élaboration et lors de l'application du système SRF. Elles sont:

discussed in paragraph 9 above there are a number of issues which will need to be resolved during detailed design and implementation of the FRA system. These are:

(a) ***délimitation et zonage du DFP sur le terrain*** Comment et quand est-ce que cela aura lieu? Car sans délimitation du DFP sur le terrain il n'y aura pas une base de rapportage; et sans zonage le DFP n'aura pas de base légale.

ground demarcation and zoning of the permanent forest estate How and when will this take place? For, without ground demarcation of the PFE there will be no reporting base; and without zoning the PFE has no legal basis.

(b) ***conflit concernant le droit d'utilisation des sols*** Au Cameroun il existe un conflit entre les droits traditionnaux d'utilisation des sols et l'allocation des sols décrétée par l'Etat. Ces conflits devront être résolus pour que la délimitation du DFP soit effective.

conflict over land rights In Cameroon there is conflict between traditional land use rights and state decreed land allocation. These conflicts will have be resolved for demarcation of the PFE to be effective.

(c) ***envahissement des terres forestières, braconnage et l'exploitation illegale par les populations*** Quel recours aura l'administration forestière contre ces activités? Comment est ce que les exploitants forestiers pourront lutter contre cette envahissement des terres forestières dans le cadre de la nouvelle loi?

encroachment, poaching and illegal logging What recourse will the forestry administration have against such activities? how will the concession holders prevent encroachment as they are supposed to under the new law?

(d) ***l'aménagement des forêts*** Quelles seront les normes pour la gestion durable des forêts? Comment vont elles être appliquées? Qui donnera l'instruction nécessaire aux agents de l'administration des forêts et les sociétés d'exploitation?

forest management What will be the standards of sustainable forest management? How will they be applied? Who will provide the necessary training to both forestry administration staff and concession operators?

(e) ***l'incitation*** Comment peut on inciter le personnel de l'administration forestière pour qu'il applique la nouvelle stratégie forestière? Actuellement le personnel n'est pas productif, il est démoralisés et n'est pas sûr de l'appui politique. Le manque de moyens logistiques et d'encadrement approprié fait partie de cet échec. Le manque d'organisation et d'expertise en gestion sont aussi des points importants. Les responsabilités ne sont pas bien définies, le personnel donne l'apparence d'être mal informé; il y a une impression de désintéressement et une manque d'initiative. Probablement les racines de cette contrainte sont plus profondes et liées à un manque de confiance du personnel de terrain dans un système qui n'a pas réussi à les aider dans le passé. La restauration de cette confiance nécessitera une grande volonté et des progammes de privatisation devan être sérieusement établis et apliqués.

motivation How can forestry department staff be given the right incentives to implement the new forest strategy? At present forestry staff are unproductive, demoralised and unsure of political support. The lack of logistical support and means is part of the reason as is the lack of appropriate training. Lack of organisation and management expertise are also important factors. Responsibilities are not clearly defined, staff seem uninformed; there is an impression of poor motivation and lack of initiative. The roots of the problem probably go deeper and could be related to a lack of grass roots confidence in a system that has failed to provide support in the past. Restoring this confidence will require commitment and programmes of privatisation should be seriously established and implemented.

(f) ***les contraintes institutionelles*** Quel sera le rôle de la Direction des Forêts et de l'ONADEF dans le système SRF? Qui fera quoi? Que sera l'effet du programme de privatisation sur l'administration forestière?

institutional constraints What will be the rôle of the Direction des Forêts and l'ONADEF in the FRA system? Who will be doing what? What will be the effect of the privatisation programme on the forestry administration?

Implications pour l'Esquisse de la Phase I du Système SRF

16. Pour le cas particulier du Cameroun plusieurs changements sur l'esquisse préliminaire, qui à été présentée entre pages 36 et 43 du rapport de la Phase I,

Implications for the Phase I FRA Design

The particular case of Cameroon requires several changes to the preliminary outline of the system design presented on pages 36 to 43 of the

doivent intervenir. Une esquisse adaptée est presentée en annexe 7.

Phase I report. An amended outline is given in Annex 7.

17. La plupart des aspects du système SRF qui concernent le statut juridique des zones forestières et les modalités de gestion sont inclus dans l'esquisse adaptée avec quelques modifications. La principale modification provient du manque d'informations sur les limites digitisées des zones forestières. Au Cameroun la définition des classements des zones forestières du DFP est différente de celle proposée dans le rapport de la Phase I. Il est aussi suggéré que les classements supplementaires qui donnent des sous totaux n'sont pas nécessaire et, en plus, ne seront pas facilement comparables entre pays producteurs de l'OIBT. L'esquisse revue rapportera simplement la superficie totale en hectares du DFP vérifiée comme etant gerée d'une manière durable. Il est à noter que pour la forêt de production l'unité de gestion sera soit la concession soit l'assiette de coupe selon la spécificité du volet 3 (rapportage national).

Most of the FRA requirements covering legal and management status forests can be included in the revised design, although with some changes. The main change regarding legal status is due to the lack of digitised boundary information. The definition of forest types within the PFE is different in Cameroon to that proposed in the Phase I report. It is also suggested that further classification into subtotals is not necessary and would also probably not be comparable between ITTO producer countries. The revised design would simply report the total area of PFE verified as being sustainably managed. It is to be noted that, for production forests, the management unit will be either the concession or the "assiette de coupe" depending upon the specification of component 3 (national reporting).

18. En ce qui concerne les modalités de gestion il est suggeré que le système SRF sera limité à des indicateurs quantitatifs. L'inclusion de grandes quantités d'informations qualitatives pourra rendre le système lourd et difficile à analyser. Avec la nouvelle stratégie forestière du Cameroun l'obligation de produire l'information détailé sur l'aménagement des forêts, particulièrement les forêts de production, sera vérifiée à un niveau local et ne sera pas nécessairement inclus dans le système de rapportage destiné à l'OIBT.

Regarding management status it is suggested that the FRA be confined to quantitative indicators. The inclusion of large amounts of qualitative management information is likely to make the system unwieldy and difficult to analyse. Under the new forest strategy for Cameroon the obligation to produce most of the detailed management information, especially for production forest, will be verified at a local level and will not necessarily enter the ITTO reporting system.

19. Certaines informations concernant l'état physique de la forêt pourront être ultérieurement exploitées mais non pas

Measures of forest condition could be included in the future but are not a realistic option at the outset. In

de champs d'application immédiates. De plus des informations de l'état physique de la forêt feront partie des activités du projet TREES etde celles de la FAO portant sur les inventaires des forêts. Une fois q'un système de rapportage géographique et systématique deviendra une réalité pour le Cameroun, des indications détaillées sur l'état de la forêt pourront être incorporées dans le système SRF. La collecte des données pour ce volet du système SRF devra requérire l'encadrement des agent forestiers au niveaux provinciaux et départementaux.

addition, measures of forest condition, particularly encroachment, are also to be covered by the TREES project and the FAO forest inventory programme. Once a more systematic geographic reporting of forestry data becomes a reality for Cameroon detailed indicators of forest condition could be incorporated into the FRA system. The collection of data for this component of FRA will also require prior training of provincially and ~~departmentally~~ based forestry personnel.

Divisionally

20. Il est souhaitable que les données concernant le type de végétation soient deliées du système SRF. Au niveau de la forêt ce genre d'information est mieux indiqué pour l'élaboration des plans de gestion. De plus les charactéristiques des végétaux ne sont pas un critère requis par l'OIBT et seront mieux analysées en dehors du système SRF. Actuellement au Cameroun le gouvernement s'attèle à la production des cartes de végétation qui définissent mieux ces charactéristiques.

It is suggested that data covering the type of vegetation present be deleted from the FRA system. At a forest level such information would best be confined to the production of management plans. Vegetation characteristics are also not an ITTO reporting requirement and are best covered outside the scope of FRA. In Cameroon, at present, the government is producing vegetation maps which better define its characteristics.

21. Dans le cadre du système SRF revisé les données historiques sont moins importantes que les données actuelle vraies et les données futurs qui seront régulièrements produites et vérifiées.

In the revised FRA past time series data are less important than the provision of current accurate data together with regular verified future data.

Le Modèle SRF Revisé pour le Cameroun

A Revised FRA Model for Cameroon

22. Le modèle SRF revisé qui convient au Cameroun aurait trois volets principaux. Le Tableau 2 donne une répresantation générale et schemmatique du système SRF et le Tableau 3 montre la position actuelle du Cameroun dans cette esquisse. L'esquisse du système SRF incluera les critères generaux de l'OIBT ainsi que les critères spécifiques de

A revised FRA model suitable for Cameroon would have three main components. Figure 2 gives a schematic general representation of the FRA and Figure 3 illustrates Cameroon's current status within this framework. The FRA scope would cover the ITTO general and specific "sustainable forest management" criteria[1]. Each

Figure 2 - General Framework of the "Forest Resource Accounting" System

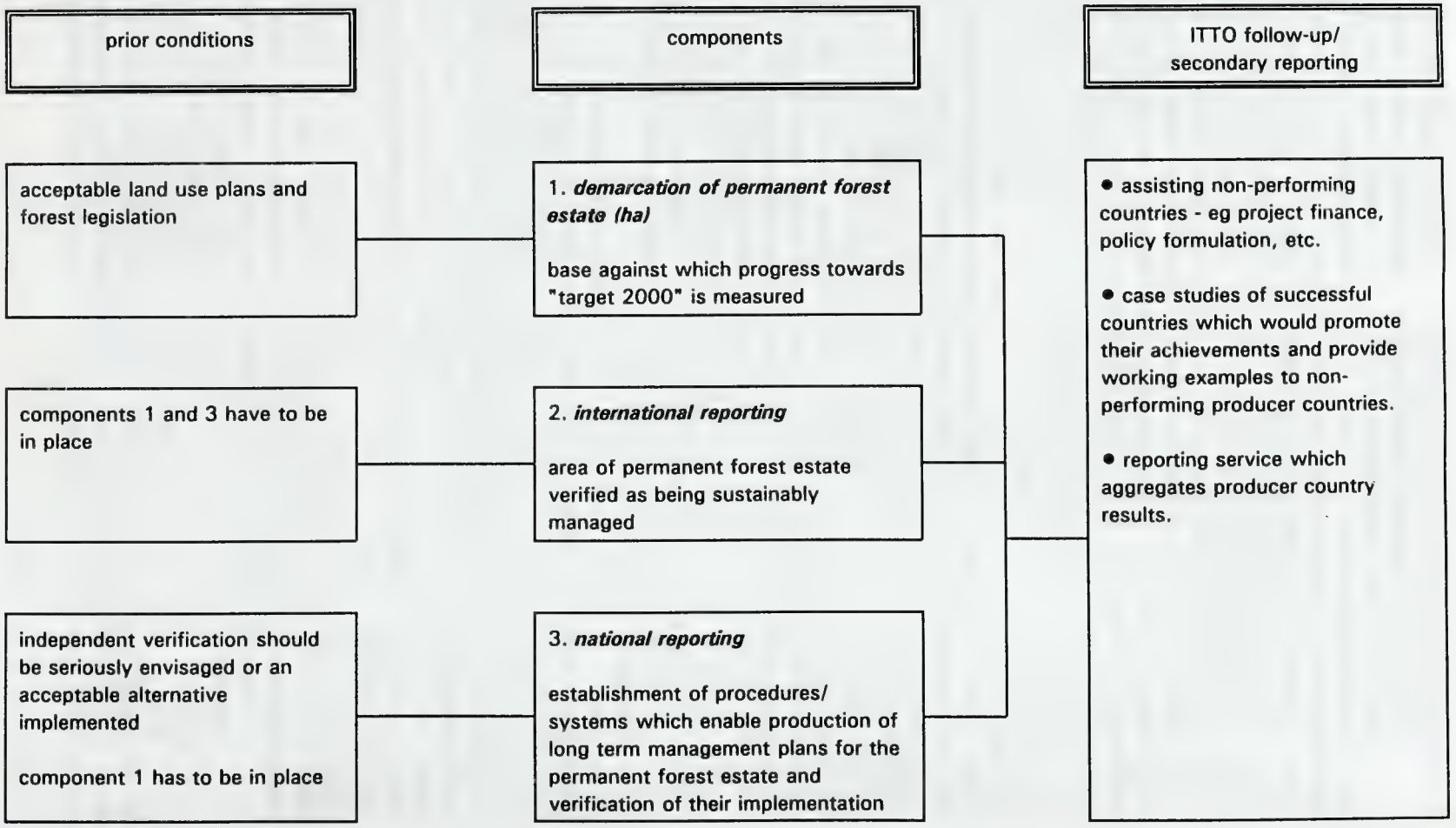


Tableau 2 - Cadre Général du Système "La Surveillance des Ressources Forestières"

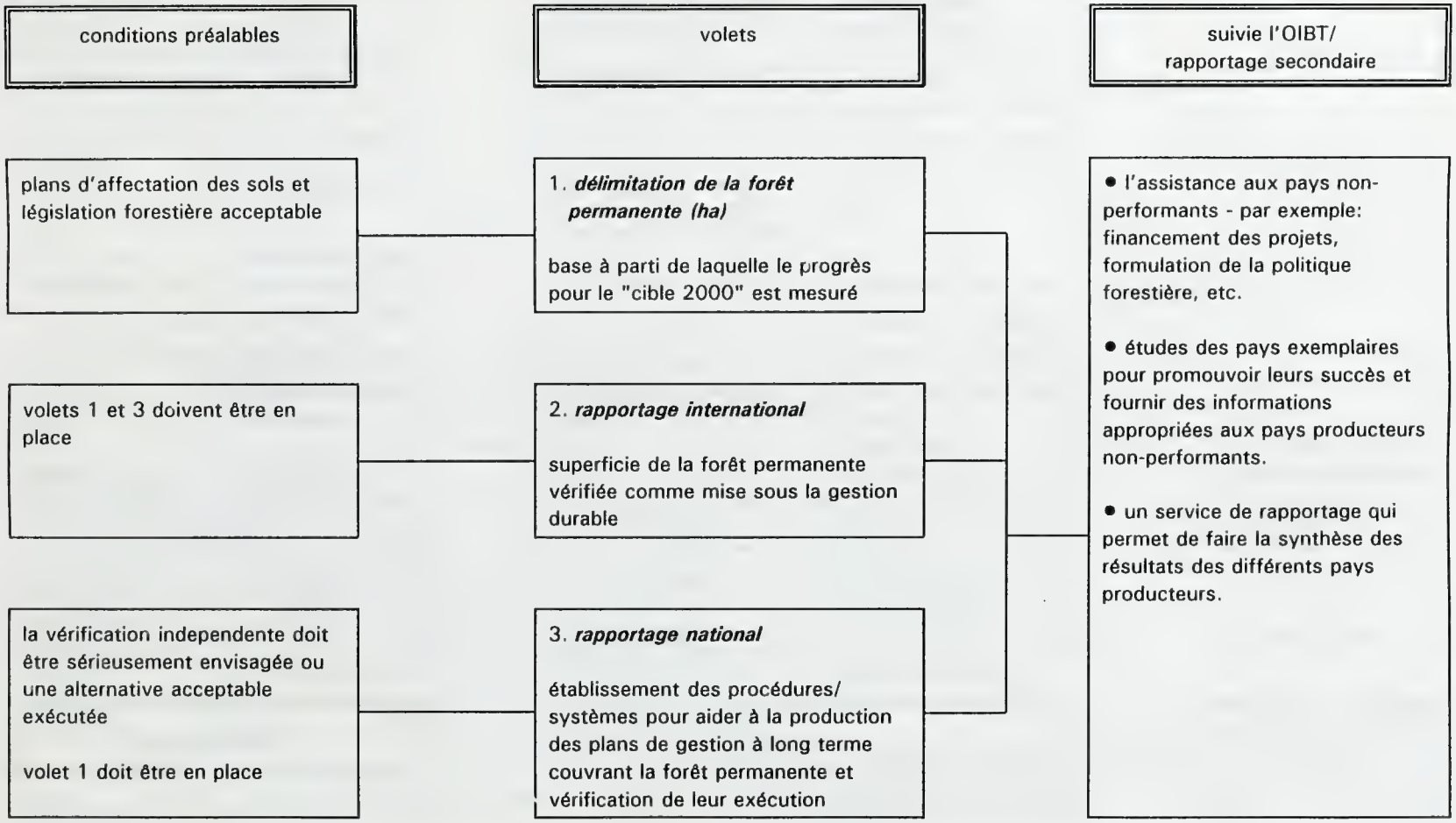


Figure 3 - Framework of the "Forest Resource Accounting" System Related to Cameroon

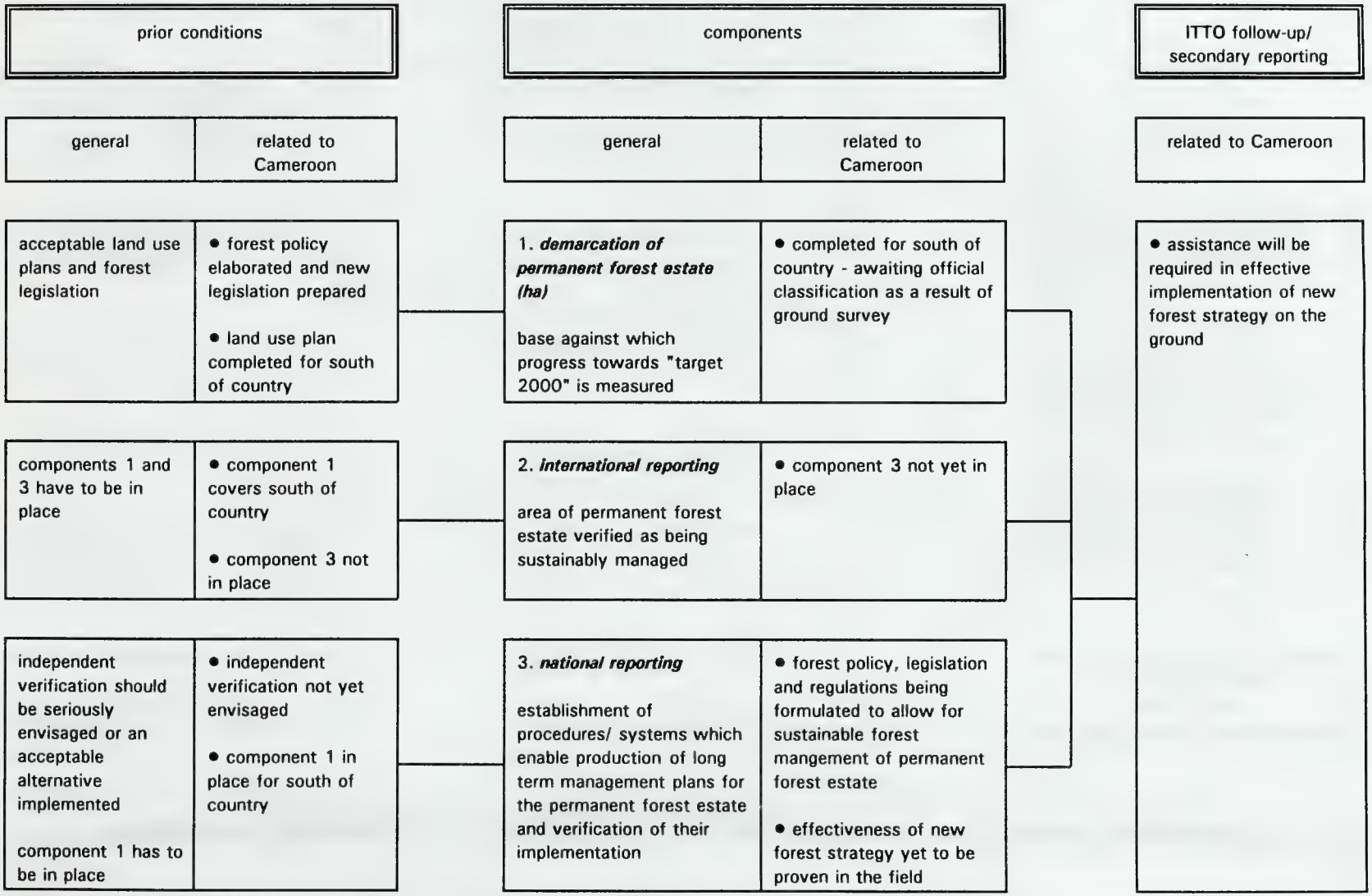


Tableau 3 - Cadre du Système "La Surveillance des Ressources Forestières" Pour le Cameroun

conditions préalables		volets		suivie l'OIBT/ rapportage secondaire
générale	cas du Cameroun	générale	cas du Cameroun	cas du Cameroun
plans d'affectation des sols et législation acceptable	• politique forestière élaborée et la nouvelle législation préparée • plan d'affectation des sols completé pour le sud du pays	1. ***délimitation de la forêt permanente (ha)*** base à parti de laquelle le progès pour le "cible 2000" est mesuré	• complétée pour la partie sud du pays - on attend la délimitation officielle sur le terrain	• l'application effective de la nouvelle stratégie forestière sur le terrain nécessitera une assistance
volets 1 et 3 doivent être en place	• volet 1 couvre le sud du pays • volet 3 n'est pas encore en place	2. ***rapportage international*** superficie de la forêt permanente vérifiée comme mise sous la gestion durable	• volet 3 n'est pas encore en place	
la vérification independente doit être sérieusement envisagée ou une alternative acceptable exécutée volet 1 doit être en place	• la vérification indépendante n'est pas en place • volet 1 pour le sud du pays est déjà en place	3. ***national reporting*** établissement des procédures/systèmes pour aider àla production des plans de gestion à long terme couvrant la forêt permanente et vérification de leur exécution	• la politique forestière, législation et le décret d'application sont en train d'être terminés pour permettre la gestion durable de la forêt • efficacité de la nouvelle stratégie forestière reste à être prouver sur le terrian	

"gestion durable des forêts. Chaque volet aura quelques conditions préalables et pourra aussi avoir des activités de suivi ou des obligation de rapportage secondaires de l'OIBT. Les trois volets peuvent êtres resumés ainsi:

(a) ***délimitation de la forêt permanente*** Un besoin de ce volet est la préparation antérieure d'un plan d'affectation des sols acceptable qui définit le DFP; et d'une législation appropriée pour son utilisation. La superficie du DFP ainsi délimitée formera la base à paritir de laquelle le progrés vers le "Cible 2000" pourra être mesuré. Le plan d'affectation des sols et la délimitation du DFP pourraient être mis en place en phases graduelles pour couvrir tout le pays.

Au Cameroun le plan d'affectation des sols de la partie sud du pays (forêt humide) est pratiquement achevé. La nouvelle politique forestière, une nouvelle loi forestière et un nouveau texte d'application en cours d'élaboration donneront le cadre législatif pour une gestion durable de la forêt. Le "Cible 2000" fait désormais partie intégrante des activités du secteur forestier au Cameroun.

(b) ***rapportage international*** le rapportage international devra situé régulièrement l'importance de la mise en oeuvre de la gestion durable des forêts de manière independente. Cela implique la production des rapports réguliers sur la supérficie du DFP vérifiée

component would have certain pre-requisites and may also require ITTO follow up activities or country secondary reporting obligations. The three components can be summarised as follows:

definition of permanent forest estate This component requires prior preparation of both an acceptable land use plan which would demarcate the area of PFE; and production of appropriate forest legislation governing its use. The area of PFE thus demarcated forms the base against which progress towards "Target 2000" could be measured. The land use plan and demarcation of PFE can be prepared in phases to gradually cover the entire country.

In Cameroon land use plans have now been completed for most of the moist forest areas in the south of the country. The new forest law, policy and code will provide the legislative framework for sustainable forest management. "Target 2000" is now an integral part of Cameroon's forest policy.

international reporting international reporting would provide independent assurances of the progress and coverage of sustainable forest management practices. This would require the provision of regular statements giving the area of PFE verified as being sustainably managed. A prior

comme êtant gerée d'une manière durable. Le condition préalable pour se faire, est que les volets un et deux soit mise en place. Le rapportage intérnational serait standard pour tous les pays producteurs et cromprendra des déclarations régulières de: "le nombre d'hectares durablements gérés du DFP". Ces déclarations devraient être crédibles pour être acceptées par l'OIBT. Elles devraient refléter les critères de l'OIBT. De ce point de vue la possibilité d'un programme de vérification indépendante devrait être sérieusement prise en compte.

condition for this component would be that components one and three have to be in place. The international reporting would be standard for all producer countries and would involve regular declarations of "hectares of PFE under sustainable management". Such declarations would have to be credible so as to be accepted by ITTO and should follow the ITTO sustainable forest management guidelines. The possible requirement for independent verification should be seriously considered.

(c) ***rapportage national*** requiért l'établissement des procédures et systèmes permettant la production des plans de gestion à long terme pour le DFP ainsi que la vérification de leur application. Les procédures de rapportage national seraient différentes pour chaque pays producteur et seraient basées sur leurs politique forestière et textes réglementères en vigueur. L'annexe 7 donne l'esquisse revisée pour le cas du Cameroun.

national reporting would require the establishment of procedures and systems allowing for the production of long term management plans for the PFE and verification of their implementation. National reporting procedures would be different for each producer country and would be based on existing forest legislation, planning and control procedures. A revised FRA system for the Cameroon covering this component is given in Annex 7.

Le système SRF s'intégrerait dés lors dans les systèmes nationaux de rapportage existant. De ce fait, les priorités nationales du secteur forestier seront respectées, les coûts du fonctionnement du système et la quantité de matériel seront minimizés. Ce qui suppose la mise en place préalable du volet un.

The FRA would, as far as possible, be a by product of existing national reporting systems. In this way national forest priorities are addressed, operating costs and costs quantities of consumables are minimised. A prior condition for this component would be that component one is in place.

La troisième volet est le grand défi pour le Cameroun. Car c'est la phase de mise en oeuvre de la nouvelle stratégie forestière. Le pays aura besoin d'une assistance pour affectuer ce travail. Quelques activités prioritaires sont présentées en paragraphes 29 et 30. La conditionalité pour un tel invéstissement (si requis de l'extérieur) devrait être soigneusement étudiée. Les activités succeptibles d'être menées par le secteur privé devraient être encouragées. Comme au deuxième volet un programme de vérification independente devrait faire l'objet d'une option sérieuse.

Component three is the main challenge for Cameroon. It is the point where the theory of the new forestry strategy has to be implemented in the field. The country will need assistance in this area. Certain priority activities are presented in paragraphs 29 and 30. The conditionality accompanying such an investment, if required from external sources, should be carefully considered. Activities capable of being undertaken by the private sector should be encouraged. As in component two the use of independent verification should be a serious option.

23. Les raisons de la révision de l'esquisse générale du système SRF, et cela pour le cas du Cameroun, viennent de quatre points ci-après:

The rationale behind revision of the generic framework for the FRA, and that for Cameroon, as described above has four main points:

(a) remplir les conditions de rapportage de l'OIBT;

it meets the ITTO "Target 2000" reporting requirements;

(b) être simple, peu coûteux et à la portée de tous les pays producteurs de l'OIBT; et

it is simple, cheap and within the reach of every ITTO producer country; and

(c) être transparent donc crédible; et

it is transparent and therefore credible; and

(d) comparer la performance des différents pays producteurs (aider les pays en difficultés et primer les plus performants)

the relative performance of different producer countries can be compared (countries experiencing difficulties can be helped and countries performing well can be rewarded).

La Vérification Independente

Independent Verification

24. La vérification indépendente est un sujet qui est complexe et souvent mal compris. Parce que soulevant des questions de souveraineté des Etats. Quelles que soient leures origines les informations destinées à l'OIBT doivent être crédibles. Le système SRF doit

Independent verification is a subject that is complex and often poorly understood. It raises delicate questions of sovereignty. For the results of the FRA to be useful to ITTO they must be credible. The quality of the data being provided by FRA is more important

tenir plus à la qualité des information qu'à leur volume. Dans ce contexte le besoin pour un programme de vérification indépendente doit être pris au sérieux. Par exemple, un seul chiffre - indépendamment vérifié - d' "hectares de forêt bien gérées" aurait plus de valeur q'un grand GIS contenant des chiffres non crédibles. La transparence aidera la crédibilité du système SRF.

than its volume. In this context the need for independent verification must be taken seriously. A single figure - independently verified - of "hectares of forest sustainably managed" may be of more value than a large GIS containing data of suspect credence. Transparency will greatly assist credibility of FRA.

25. Dans les cas où la legislation forestière demande la gestion durable de la ressource l'issus n'est pas l'aménagement forestier en soi mais une vérification indépendente ou crédible que la législation forestière est appliquée et que la gestion durable de la forêt est pratiquée sur le terrain.

In instances where forest legislation requires sustainable forest management the issue is not forest management *per se* but independent or credible verification to provide assurance that the national forest legislation is being implemented and that sustainable forest management is being practised on the ground.

26. L'audit indépendent des comptes, par des organisations nationales ou internationales, est reconnu à travers le monde comme un aspect positif des activités d'une organisation. Investisseurs, législateurs, contrôleurs du gouvernement, achéteurs et fournisseurs recoivent ainsi des certificats de bonne gestion. Des audits environnementaux indépendants font, de plus en plus, partie de cette activité. La vérification indépendante de la gestion durable des forêts doit être considérée dans ce contexte.

The independent auditing of accounts, by international or national organisations, is recognised throughout the world as a positive feature of an organisation's activities. Investors, legislators, government regulators, buyers and suppliers are given assurances of sound conduct. Independent environmental audits are increasingly required as part of this activity. Independent verification of sustainable forest management should be treated in this context.

27. Vue sur un plan nationale la vérification independente de la gestion durable des forêts peut faciliter l'établissement d'un programme de certification de bois ou d'un "label écologique". Le label écologique peut aider les industriels d'un pays à accéder au marché international oû les questions de l'environnement deviennent de plus en plus apparentes. Au pays concerné une image "verte" et positive avec effet induit sur les autres secteurs d'activités

From a national perspective independent verification of sustainable forest management can facilitate a wood certification or "eco-labelling" scheme. Wood certification can help the country's wood industries increase market share in increasingly environmentally conscious export markets; and, provide the country in question with a positive green image which will benefit the activities of other sectors - especially tourism. A wood

- notamment le tourisme. Un certificat de bois: attribué au Cameroun pourrait être pour ce pays un bonne investissement.

certificate: "made in Cameroon from sustainably managed forests" could be a good national investment.

28. **Le rôle des Organisations Non Gouvernementales (ONG's) dans la surveillance des activités forestières au Cameroun** Il existe au Cameroun un certain nombre d'ONG's qui travaillent aux niveaux international, national et communautaire. Leurs activités s'étalent de la conservation des écosystèmes forestiers jusqu'à l'amélioration du bien-être des communautés villageoises riveraines. Ceci donne la possibilité d'etablir une structure d'encadrement au niveau national. L'amélioration d'efficacité des ONG's au Cameroun est un des objectifs du projet PVO-NGO/NRMS financé par l'USAID. Le projet travail avec toutes les ONG's jusqu'au niveau des communautés villageoises. Ce sera difficile pour que les ONG's puissent jouer un rôle dans la surveillance des activités forestières. Avec l'évolution de leures activités ce sera possible d'etablir leur rôle d'avant-garde.

The role of Non Government Organisations (NGO's) in the monitoring of forestry activities in Cameroon There are a number of NGO's working in Cameroon. They operate at international, national and community levels. Their activities range from the conservation of forest ecosystems to the improvement in welfare of local communities. This has the potential to provide a useful network of local activity which could be nationally coordinated. Increasing the effectiveness of the NGO's in Cameroon is an objective of the USAID funded PVO-NGO/NRMS project. The project works with all NGOs down to the community level. It would be difficult at present for the NGOs to play a major role in forest monitoring. Given progress in the development of their activities the potential exists for development of a NGO watchdog network.

Prochaines Etapes et Recommandations

Next Steps and Recommendations

29. Actuellement on ne peut pas appliquer le système SRF au Cameroun. Son application suppose au préalable la satisfaction des conditions énumérées au paragraphe 9 et un certain nombre des activités prioritaires financées et éxecutées. Ces activités répondent à beaucoup des questions du paragraphe 15.

At present it is not possible to implement the FRA in Cameroon. Before implementation of the FRA can be contemplated the pre-requisites in paragraph 9 have to be addressed and a number of priority activities funded and implemented. These activities will address many of the issues discussed in paragraph 15.

30. Les activités prioritaires à financer comprennent:

Priority activities that will require financing include:

- délimitation et zonage du DFP;
- sensibilisation des populations

- demarcation and zoning of the PFE;

riveraines des zones DFP;
- achèvement de l'inventaire national (Phases V à VII);
- achèvement du plan d'affectation des terres pour couvrir tout le territoire national;
- établissement des normes d'aménagement des forêts;
- mise en place du système de concession forestière;
- lutte contre envahissements, braconage, exploitation illégale;
- l'amélioration de l'efficacité de l'administration forestière et du système de contrôle;
- developpement d'un programme de vérification independante et de certification de bois

- creating awareness by local forest populations of the PFE;
- completion of national forest inventory (Phases V to VII);
- completion of land use plan to cover the entire national territory;
- creation of forest management standards;
- introduction of the concession system;
- prevention of encroachment, poaching and illegal logging;
- increased effectiveness of the forestry administration and the system of control;
- development of a programme for independent verification and and wood certification.

Avantages du Système SRF pour le Cameroun

31. Le système SRF donnera au Cameroun des avantages autres que le "Cible 2000" de l'OIBT. Ils s'agit de:

(a) ***Augmentation des Revenus du Domaine Forestier*** L'augmentation des revenus sera dûe à la mise en place d'un système effectif de contrôle des grumes et autres produits forestiers par réduction du taux de fraude et une augmentation de productivité.

(b) ***Amélioration du Reseau d'Information de Gestion*** L'application effective de la nouvelle politique forestière, la nouvelle loi et son décret d'application sera difficile. La production d'informations précises de gestion aidera à surveiller sa progression sur le terrain. L'élément du système SRF apportera sa contribution.

Benefits from Implementation of the FRA to Camerooon

FRA will give Cameroon benefits aside from those needed to meet its ITTO "Target 2000" reporting obligations. These are:

Increase in Forest Revenues An effective system of controlling log movements and wood product flows can be expected to increase the collection of forest revenues through the reduction of fraud and increased efficiency.

Improved Management Information Effective implementation of the new forest policy, law and code will be difficult. The production of accurate management information will help to monitor progress on the ground. The FRA reporting function will contribute to this.

(c) ***L'Amélioration de Contrôle des Coûts*** Le contrôle des coûts dans l'administration serait amelioré avec des meilleurs procédures comptables et budgétaires.

Improved Cost Control Cost control within the forest administration could be improved with better accounting and budgeting procedures.

(d) ***Une meilleure acceptation et compréhension par les communautes riveraines du DFP***

Greater acceptance and understanding by local populations of the PFE

(e) ***Certification du Bois*** Un système SRF crédible permettra aux sociétés forestières d'appliquer plus facilement des programmes de certification de bois. De tels programmes certifieront que les produits bois vennant du Cameroun proviennent des forêts durablement gérée. Le marché Européen de bois tropicaux exigeant de plus en plus ce certificat.

Wood Certification A credible FRA system would allow commercial forestry companies to more easily implement wood certification schemes. Such schemes would certify that wood products being exported from Cameroon originated from sustainably managed forests. The European tropical hardwood market is increasingly requesting such certification.

NOTES

1. Concern is sometimes expressed that the ITTO guidelines may suffer from omission in certain areas. For example, in their coverage of socio-economic factors and forest types. This should not detract from the value of that which has been covered.

   On déplore parfois le fait que certaines activitiés de terrain ne sont pas prises en compte par les critères de l'OIBT. Par exemple, dans leurs paramètres socio-économiques et de classements des forêts. Cela n'enlève ce qui ne diminue en rien la valeur des tels paramètres.

ANNEXE 1

SYNTHESE DE LA NOUVELLE POLITIQUE FORESTIERE (EBAUCHE DU FEVRIER 1993)

1. Le Cameroun à maintenant élaboré une nouvelle politique forestière. Un document de politique générale est en train d'être finalisé. Une fois finalisé ce document formera la base du nouvel loi forestier camerounais. La mise en place du nouvel loi est attendu pour la fin de l'année 1993.

2. On constate actuellement que la patrimoine forestier est en nette dégradation. La politique forestière etablie un cadre à long terme de préservation de l'environnement et des ressources afin de faire participer ce secteur et les populations concernées au développement économique national.

3. En face à la crise économique intérieure il est maintenant apprecié que le secteur forestier, si son développement est abordé avec prudence, peut beaucoup contribuer au développement national.

4. Les problèmes sont:

   (a) la couverture forestière diminue, l'environnement se dégrade, la biodiversité s'effrite;

   (b) les populations rurales sont peu impliquées dans la gestion du couvert forestier et ne tirent pas d'avantages substantiels de son utilisation;

   (c) la mise en valaur des resources reste insuffisante, peu rémunératrice et ne participe pas à la conservation du potential productif; et

   (d) la gestions des écosystèmes forestiers est restée fragmentaire du fait d'un système institutionnel inefficace, icapable d'insuffler une dynamique propre à relever les défis environnementaux et économiques.

5. Le paysage forestier est composé de deux ensembles principaux définis par le plan d'utilisation des terres que sont:

   (a) la forêt permanente appelée "forêt du domaine permanent" appartenant à l'Etat (forét domaniale), aux communautés villageoises, aux collectivités publiques, ou au privés. Dans cette forêt l'aménagement forestier procède du souci de disposer d'un couvert forestier permanent représentant la bio-divesité nationale

et composé de massifs forestiers dans les vocations et les modes de gestion sont définis par des plans d'aménagement. La mise en exploitation des resources ligneuses se fera par concessions de longue durée dans les forêts de production;

(b) la forêt à vocation multiple pouvant être affectées à d'autres spéculations et appelée "forêt du domaine national". C'est le lieu prévilégie de la foresterie communautaire développésur la base des programmes de vulgarisation sylvicole, d'agro-foresterie destinés à soutenir la production ligneuse et faunique, à restaurer les sols et à stabiliser l'activité agro-pastorale. La mise en exploitation des resources ligneuses se fera par ventes de coupe annuelles.

6. La nouvelle politique forestière est orientée vers la valorisation des ressources forestières. Elle préconise la diminution progressive et l'arret à l'horizon l'an 2000 des exportations des grumes.

7. Les principales stratégies de la politique forestière sont:

(a) d'intégrer la composante "environment et l'équilibre des écosystèmes" dans la planification de l'utilisation de toutes forêts;

(b) de créer un domaine forestier permanent (un minimum du territoire national) et des aires protégées représentant la bio-diversité nationale;

(c) de développer des mesures de protection, d'amelioration et de conservation de l'ensemble des ressources forestiéres;

(d) de promouvoir la gestion conservatoire des ressources forestières par des collectivités (la forêt fournit à la majorité de la population camerounaise le cadre de vie);

(e) de promouvoir le développement des forêts privées (incitations et informations; sécurisation de la propriété), de l'élevage du gibier en milieu rural;

(f) de développer l'agro-foresterie dans les systèmes agraires;

(g) d'améliorer l'offre en produits de bois-énergie et bois de service (10 millions de m3 par an est l'usage actuel) tout en maintenant le potentiel grâce à une meilleure utilisation des resources disponibles et au développement des moyens de production;

(h) d'orienter la demande vers des moyens moins coûteux en énergie ou vers des solutions de substitution;

(i) de promouvoir une gestion participative des intervenants dans la filière bois-énergie et bois de service;

(j) d'améliorer la gestion de la matière première forestière afin d'optimiser le potentiel productif par la mise en place d'un système d'aménagement à rendement soutenu et durable (contrats d'aménagement-exploitation de long terme, l'exploitation d'un plus grand nombre d'essences, abaisser les coûts de production);

(k) d'assurer le renouvellement des ressources forestières, ainsi que la gestion des plantations forestières, ainsi que la gestion des plantations forestières existantes;

(l) de promouvoir l'utilisation et la diversification des produits transformés en vue d'augmenter le taux de transformation et de favoriser le développement des exportations de produits semi-finis et finis;

(m) de mettre en place un environnement économique favorisant l'intervention du secteur privé et la participation des Nationaux à la gestion des ressources forestières;

(n) d'identifier le potentiel naturel en vue d'une gestion conservatoire des ressources non-ligneuses;

(o) de promouvoir et organiser la mise en marché les produits non-ligneuses au niveau national et à l'exportation;

(p) de maitriser la connaissance du potentiel faunique en vue d'une meilleure utilisation de celui-ci;

(q) d'améliorer la gestion des resources fauniques en vue d'augmenter la production tout en conservant le potentiel productif; et

(r) développer l'ensemble des activités de conservation et de valorisation de la resource faunique, afin de contribuer au développement de l'industrie touristique.

8. Il est nécessaire de dynamiser le secteur forestier en mettant en place un système institutionnel efficace et en faisant participer tous les intervenants dans la gestion du secteur. Ceci inclus:

(a) redéfinir globalement les tâches des intervenants du secteur (administration, privé, collectivités, ONG);

(b) améliorer l'organisation et la coordination des institutions intervenant dans

l'utilisation des ressources forstières;

(c) promouvoir une formation adaptée aux objectifs de la nouvelle politique forestière;

(d) améliorer la gestion des ressources humaines;

(e) appuyer le développement du secteur forestier;

(f) affecter les resoources fiscales au financement du développement du secteur; et

(g) evaluer périodiquement la mise en oeuvre de la politique forestière.

ANNEX 3 LEGISLATION FOR THE CONTROL OF FORESTRY ACTIVITIES AND THE PROTECTION OF WILDLIFE

1. Control of forestry activities is through Law No.81-13 of 27 November 1981 "Regulations of Forestry, Wildlife and Fisheries". This law and its associated decrees cover state forests, local council forests, private forests, communal forests, wildlife, and fishery resources of public waterways and coastlands. The forestry, wildlife and fishery services are responsible for the management and protection of state, local council and communal forests and for the fishery resources of the public waterways and coastlands.

2. The exploitation of any forest zone is subject to prior inventory (article 23). A permit must be obtained from the state before the inventory is carried out and a maximum of 200,000 ha will be granted to any one exploiter.

State forests

3. State forests include integral nature reserves, national parks, sanctuaries for certain wild animal or plant species, game reserves, production forests, protection forests, recreation forests, forest plantations, zoological and botanical gardens and game ranches belonging to the state; these terms are defined under decree no.83-169 as follows:

Integral nature reserve	-	an area whose various resources enjoy complete protection.
Production forest	-	an area set aside mainly for the production of timber and other forest produce.
Protection forest	-	an area set aside mainly for soil and water conservation purposes, or to protect certain ecosystems that are of some scientific interest.
Recreation forest	-	an area set aside for the setting up for the maintenance of leisure infrastructure on account of aesthetic, artistic, tourist, sporting or health interest.
Forest plantation	-	land set aside for regeneration.
Botanical garden	-	a site of scientific, aesthetic or cultural interest containing plants which have grown spontaneously or have been introduced, all enjoying complete protection.

4. The law states (article 15) that 20% of the total area of the national territory shall be designated as state forest. The reservation of forest as private property of the State is accompanied by a plan of the site and a technical note specifying the purpose of the reservation (decree 83-169, article 4). An inventory of state forests is made to assess the resource of trees over 20 cm in diameter. A management plan for each

forest is then drawn up, stating the purpose of the forest, the infrastructures to be established, the means and conditions of exploitation, the access roads to be opened up or maintained, the areas to be protected, the areas to be regenerated and the silvicultural methods to be adopted (decree 83-169, article 9).

5. Local populations retain customary rights in all state forests except integral nature reserves, forest plantations and botanical gardens.

6. State forests may be exploited under state management, under the supervision of the forest administration or by sale of standing volume (vente de coup). The area of standing volume sold must not exceed 2,500 ha and must be managed in accordance with the management plan drawn up for that forest. Only trees which have been inventoried, marked, measured and designated for sale may be felled. Several forest exploiters may be authorised to exploit simultaneously the same coupe, each exploiting only the trees assigned to him. The duration of the felling operation will be specified in the sale contract and the exploiter will be forbidden to return to the area on the expiry of the felling period.

Local council and private forests

7. These forests remain the property of their owners (local council or individual) provided that the utilisation of these forests complies with rules laid down by regulations.

Communal forests

8. These are defined (article 21) as all forests not classified as state, local council or private forests. Forest produce from communal forests are the property of the state but citizens are allowed exploitation rights under conditions laid down by decree. Prior to exploitation of communal forest, an inventory must be made of all trees of minimum exploitable diameter. The inventory must be made on 2,500 ha sites and authorisation must first be obtained for the Minister. Communal forests may be exploited either by the sale of standing volume (vente de coup) or by the grant of licences for a renewable period of five years.

9. Exploitation by sale of standing volume may be carried out:
   - in areas to be salvaged prior to being developed or in those already inventoried by the forestry services;
   - in enclosed zones whose area is not more than 2,500 hectares; or
   - in the case of the construction of roads, public works or industrial development requiring the felling of trees.

10. The more common form of exploitation, however, is by licence. Licences are issued for a period of five years, renewable, and cover an area not exceeding 200,000 ha. The licence specifies the minimum volume of wood to be processed locally. The

licence specifies the species to be extracted, their minimum diameters and the location of any forest industry plant.

11. Exploitation by licence is subject to a number of annual charges or taxes, as follows (article 31):
    - la taxe de reforestation - regeneration fees calculated per hectare;
    - la redevance territoriale - a territorial tax calculated per hectare;
    - la contribution aux travaux de développement forestier - a contribution to forestry development calculated per hectare;
    - la participation à la réalisation d'infrastructure socio-economique - a contribution to the setting up of socio-economic infrastructures calculated per cubic metre of timber exploited;
    - a tax on the selling price of the timber per cubic metre.

12. In addition, the applicant must pay two one-off charges before the licence can be issued - the tax d'agrément and the constitution d'un cautionnement.

13. The licence is then issued. The licensee divides the licence area into 2,500 ha sections (chantiers) which form the "assiettes de coup" to be worked. These assiettes de coup must be plotted on a map at 1:200,000 and five copies of the map sent to the provincial forest conservancy.

14. Work cannot start until a certificate for the "assiette de coupe" has been obtained from the Direction des Forêts (DIFOR). This certificate is valid for one year and renewable annually for a maximum of three years. In order to get the certificate, the licence holder must plan his activities for the forthcoming year. This involves completing four specified activities:

    - mark out on the ground the assiette de coupe;
    - have the marked area certified by the provincial conservator;
    - prepare an inventory of the assiette de coupe; and
    - map the logging roads.

15. Once these have been completed the licence holder applies for the assiette de coup to be certified. This request is made on form DF05 (figure 1), "Demande d'assiette de coupe", available from the forest conservancy.

16. The Direction des Forêts analyses the application and, if everything is in order gives its approval. The information on the form is computerised and the computer then produces the certificat d'assiette de coupe DF06 (figure 2) which is signed by the authorities and sent to the licensee via the forest conservancy.

17. The commercial company, SFID, estimates that it takes 6 months to complete all this preparatory work before logging can begin.

18. Once the certificat d'assiette de coupe has been issued the felling can begin, subject to the following rules:

- only species listed on the assiette de coupe can be cut;
- minimum diameters to be respected as set out in the cahier des charges;
- using fire to fell trees is forbidden;
- damage to neighbouring trees should be minimised;
- the crown and buttress are removed in the forest;
- sectioning the log in the forest is forbidden (except where essential for moving the log);
- all logs are taken out to the log landing;
- numbering of the stump is done at the time of log removal;
- at the log landing logs should be stacked so that both ends are visible;
- wood left in the forest is not exempt from royalty payments; and
- logs used for road building have to be recovered for processing, numbered and listed in the "carnet de chantier".

19. Measurement and numbering of logs and completion of the carnet de chantier (DF10) is done at the log landing. DF10 forms are individually numbered (at the time of printing) and comprise an original and 4 copies. The forms are issued by the Direction des Forêts who print and distribute them. Each time a set of forms is supplied to the licence holder, a control form with the DF10 identification numbers is completed and sent to the Direction des Forêts. These identification numbers are recorded as forms issued against the licence holder's name. Completed forms are returned to the Direction des Forêts where volume cut is registered and the licence holder billed. Used identification numbers are then removed from the licence holder's record of forms outstanding. At the end of the financial year a list of DF10 forms still held by the licence holder is produced. Their existence is checked. In the case of missing forms a fine is imposed equivalent to twice the average tax collected per form.

20. It is forbidden to make errors and corrections on the DF10 form. If an amendment must be made, for practical reasons, the correction must be made the same day. The person in charge of measurement begins a new DF10 form each day and completes part 1 with information on each log entering the landing.

21. Logs are measured by taking the underbark diameter of each end (taking an average of two cross diameters passing through the centre of the tree) and length to the nearest ten centimetres. Logs that have been bucked (ie cut into sections) should be treated as a single log for measurement purposes. Logs left in the forest must also be recorded on the DF10, their measurements being estimated, if it is not possible to measure them precisely, and their numbers painted onto them. The "remarks" section on the DF10 is used to indicate that these logs remain in the forest.

22. Logs are numbered according to the number of the DF10 followed by the line number

on which the log is recorded eg 18623-01 for the first line of form number 18623. Sections of logs which have been bucked must also show the position of each section within the complete log. Thus, 18623-01-2 indicates the second section of the log, counting from the base upwards. Date of cutting, number of licence and number of the assiette de coup are also marked, as is tree number per species (eg 9 would be marked on the ninth tree cut of a particular species).

23. The log number must be written on both the log and the stump.

24. Generally, all logs felled during the day must be taken to the log landing, measured, numbered and entered on the carnet de chantier the same day. However, very poor logs can be left in the forest provided they are measured and entered on the DF10. These logs are still subject to tax unless specifically exempted by the Conservator.

25. Logs must remain at the log landing for a minimum of two days during which time it is forbidden to move the logs or to cut them further into sections. These conditions ensure that a minimum number of logs are always available to the Conservators. The Conservator marks each log with an official hammer mark to show that it has been checked. The hammer mark carries the number of the post at which the Conservator works. At the end of the third day, or following a visit by the Conservator, the logs can be moved and cut into sections of the size required by the licensee. All sections so produced must carry the same information that was recorded on the complete log in addition to a number indicating the position of the section within the whole log, the lowest number being at the base of the tree.

26. Transport to the factory must commence as soon as the required delay is complete. A consignment note (lettre de voiture) giving the numbers of the log sections being transported is obligatory. The consignment note is prepared by the licensee but must be signed by the Conservator. The lorry is stopped and checked on the road by the government forester, and every log is checked against the lettre de voiture. If all are correct, the forester issues a certificate to enable the load to continue.

27. At the end of each day the foreman removes the fourth copy of each DF10 completed that day and sends the originals and the remaining copies to the office. The fourth copy of every form must, at all times, remain available for inspection at the log landing. It is not necessary to enter the total volumes of logs on this copy of the form.

28. The forms returned to the office must be completed and batched ready for delivery to the Conservators. The following steps are necessary to complete the forms:

- checking of all information on the first section of the form;
- checking of species names and codes;
- checking that all information regarding the measurement of logs has been entered;

- summation of columns.

Calculation of mean diameters and total volumes is undertaken by the Direction des Forêts.

29. At the end of each week the licensee batches together all DF10 forms for each assiette de coup. A control form, DF11, is completed for each weekly batch. This ensures that the loss of any DF10 cannot go unnoticed. The various copies of the DF11 are detached and joined to the corresponding copies of the DF10s. This produces four identical sets of forms of which one is retained by the licensee and the others are handed to the forest conservancy which retains one and distributes the remainder to the Direction des Forêts and the "Section départementale des forêts".

30. Each time the Conservators visit a licensee they verify the areas worked. No more than two weeks must pass between inspections. Every two weeks the licensee must pass on to the conservancy all the batches of forms that he has collected and every month the conservancy passes the relevant copies on the Direction des Forêts.

31. A new system of control has recently been installed at the Direction des Forêts to ensure that:

- marking out of assiettes has in fact taken place;
- logging has only taken place within the approved limits of each assiette;
- the logs cut have been correctly measured and recorded on the carnet de chantier; and
- the rules concerning felling diameters, "éboutages non permis", logs left in the forest, and so on, have been respected.

32. As mentioned above, marking out of the assiettes is verified by a surveyor from the Conservation des forêts. The other three inspections are the responsibility of the head of the Section départementale des forêts who sends one or more teams of inspectors to the site without notifying the licensee. Each assiette is visited two to four times per month and a report completed for each visit.

33. The inspectors search for any felling taking place outside the authorised areas, for example by searching along several of the nearby logging roads. If the inspectors discover logging outside the authorised areas they issue an immediate verbal warning to the foreman and instruct him to stop logging immediately. A list is made of all unauthorised wood found and a fine is imposed when the taxes are collected. The illegally logged wood must be measured and entered on the carnet de chantier. If the wood has been cut outside the area of the licence the inspectors will seize the tools and machinery used for felling and transport, and the sanctions specified by the law are applied.

34. After verification of the location of felling the inspectors return to the log landing and

examine the carnets de chantier completed over the last two days. If any of the relevant logs have been removed from the landing a verbal warning is given immediately and a fine imposed at the time of taxation.

35. Verification of log measurement proceeds as follows:

- carnet de chantier forms for the two preceding days are collected to form the "lot à vérifier";
- from each form the inspectors select four or five logs at random and verify their measurements, the measurements are amended and the volumes calculated.

If the average error found is equal to or greater than 5%, the measurements of the whole batch are automatically rejected and the inspectors demand "sa reprise" (remeasurement?). In addition, the wood must remain at the landing until a new inspection is made and "qu'une mainlevée soit accordée". Once completed, the new measurements are entered on new carnet de chantier forms, with each form bearing the number of the original form which it replaces. The forms cannot be destroyed and it is forbidden to make corrections on the forms. The corrected forms can comprise a new batch or may be included with the original batch. In the latter case, it is important to indicate on the DF11 which forms carry the remeasurements.

36. The inspectors use two forms, DF17 and DF18, to record their findings. The inspectors' measurements, and those of the landing foreman, for all the logs checked, are written on the DF17. This form is used to calculate the error on each log. The DF18 is used to summarise the results, calculate the mean error and indicate whether the licensee's figures are accepted or refused. Computerisation of the data from the DF18 allows DIRFOR to follow the work of the departmental inspectors and gives it an overview of the quality of work of the foresters.

37. The final phase of verification during the inspectors' visit consists of ensuring that the licensee has complied with the rules of logging, removal of logs, and checking of logs, stumps and trees left in the forest without being measured. The procedure is as follows:

- with the help of a map, the inspectors travel over the logging roads opened since their last visit; they also visit the stumps of felled trees and search for infringements of the rules;
- if an infringement is found the inspectors measure the wood and enter the information on form DF21; the number of the form and the line number are marked on the wood;
- the inspectors give the licensee a copy of any DF21s completed during the inspection.

When the section heads send the batches of DF10s to the conservators, they also

include any DF21 forms which they hold at that time. The conservators also send copies of all these forms to the Direction des Forêts.

38. As described above, the various forms are sent, once a month, to the Direction des Forêts where they are computerised and used to calculate the amount of tax due. An account is produced for each licence, comprising the following:

- the sale price of felled wood for each batch of DF10s collected since the last account;
- the sum of fines imposed for infringements discovered during inspections;
- the sum of fines imposed by means of verbal warnings given during inspections.

In addition, at the end of each financial year the system calculates the fixed taxes based on the land area of the licence. The account is sent to the licensee together with a report showing the volumes cut per species. The licensee must pay these taxes and fines within three months of receiving the account.

39. At the end of each financial year the licensee must supply four copies of a map of the license area to the Section départementale des forêts, having hatched in the areas which he has worked during the course of the year. The inspectors check that the area shown has, in fact, been worked. The maps supplied by the licensee are used by DIRFOR to create a map of the country showing logged areas together with their year of cutting.

Wildlife protection

40. Chapter 4 of Part III of Law No.81-13 sets out details of the protection of wildlife and the environment. Decree No.83-170 defines the various reserves as follows:

Integral nature reserve	-	an area whose various resources shall enjoy total protection.
Game reserve	-	an area set aside for the conservation, management and propagation of wildlife and for the protection and management of its habitat.
National park	-	an area in a single block whose fauna, flora, soil, subsoil, atmosphere, waters and natural environment as a whole are of special interest and should be preserved from any natural deterioration and protected against any human interference likely to change their outlook and evolution.
Sanctuary	-	an area within which only specially designated animal or plant species are given full protection.
Zoological garden	-	a site set up and managed around dense

		population centres for recreational, aesthetic, scientific or cultural purposes, and containing fully protected wild, indigenous or exotic animal species.
Game ranch	-	an area protected and managed for the purpose of reproducing animals and their ultimate exploitation for food.
Buffer zone	-	a protective belt around each national park, integral nature reserve or game reserve, intended to mark a transition between the above-mentioned areas and the zones where cynegetic, agricultural and other activities may be freely carried out.
Cynegetic zone	-	any area reserved for hunting and controlled by the administration in charge of wildlife or managed by a natural person or corporate body, and in which any hunting activity is subject to the payment of a fee laid down by the Finance Law.

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ANNEX 5: THE NEW LAND USE STRATEGY AND FOREST INVENTORY

The Cameroon government has developed a land use strategy for the dense forest area which is a product of consensus between ten government ministries. Each ministry contributed a thematic map and these maps were then combined and used to delimit the permanent forest estate (PFE). The thematic maps showed population, ecology, vegetation, susceptibility to erosion, forest resources, hydrology, mining, agriculture and other potentials. Projections were made for each theme, anticipating requirements until the year 2020 and then a further 50-100% expansion was added to ensure that there would be no pressures on the forest.

The method used to carry out the land use zoning depended on the determination of ecological units, each representing land belonging to one bioclimatic zone and relatively homogeneous with respect to topography, geology, soils and phytogeography. The methodical distribution of biophysical conditions within these units facilitates the definition of potentials for, and constraints against, various forms of land use.

The thematic maps used for development of the strategy were as follows:

Map 1. Demography

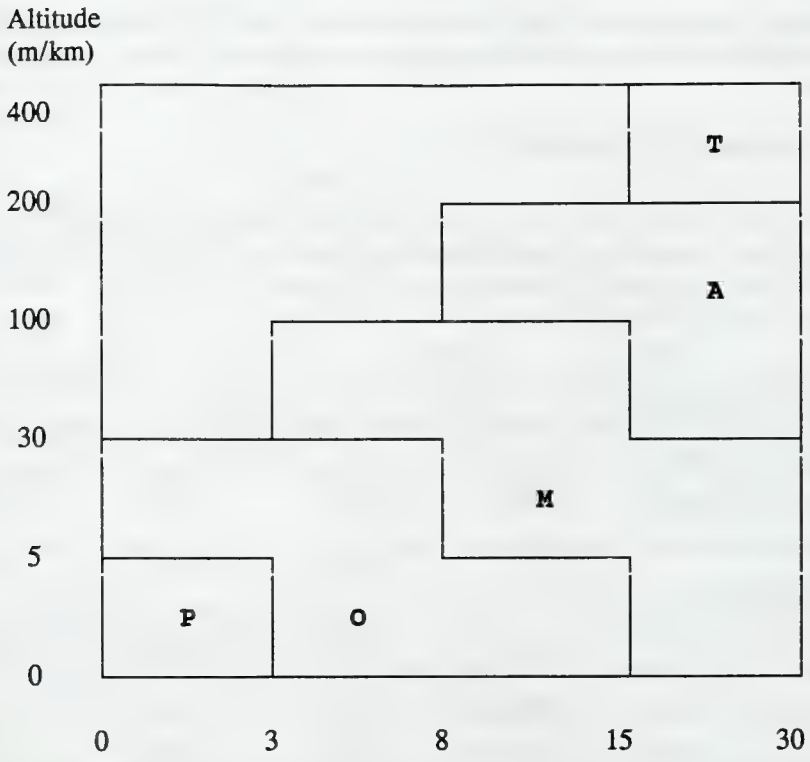
Map 1 shows the administrative boundaries, "zones of influence of human activity", population densities and the proposed and existing road network. The term "zones of influence of human activity" indicates the classification of disturbed land according to human activities other than forest exploitation, for example land used for settlement, farming and fallow. These areas were determined by interpretation of aerial photography (from 1983 to 1989) and satellite images (from 1984 to 1987). The demographic data were taken from the most recent census of 1987 and were mapped as number of inhabitants per km^2 in eight classes.

Map 2. Ecological units

The ecological units are defined as areas characterised by bioclimatic conditions, relief, geology and regional vegetation. The criteria used for the classification were as follows:

a) Bioclimatic conditions were based on the vegetation classes of Letouzey (1985) taken as an indication of distinctive regional climate as defined by Jurdant et al (1977).

b) Relief was derived from a combination of altitude and dominant slope according to the following classification, where P=plat (flat), O=ondulé (undulating), M=moutonné (hilly), A=accidenté and T=très accidenté:



c) Slope was calculated from the contours shown on the 1:200,000 maps produced by CGN, using a set of four scales showing contour spacing for slopes of 1.5%, 3%, 15% and 25%, to produce four slope classes of 0-3%, 3-15%, 15-25% and greater than 25%.

d) Geology was based on the 1:500,000 maps provided by the Ministry of Mines, Energy and Water (MINMEE).

e) Vegetation type was taken from the phytogeographic map of Cameroon produced by Letouzey in 1985 at 1:500,000.

The ecological units were then produced in the following way:

- the geological and phytogeographic maps were superimposed and redrawn at a scale of 1:200,000.
- the units were delimited on the basis of relief, geology and vegetation [check translation p15]
- verification of unit boundaries using satellite imagery where available.

It is essential for the identification of constraints and potentials to have access to

information on soil characteristics. Unfortunately, this is not currently available for forest areas and therefore the soil types had to be inferred from the information on geology.

Map 3. Susceptibility to erosion

This was derived from the map of ecological units, using the table below to infer the soil erodibility from the dominant slope class, climatic severity and topography. Soil erodibility was expressed as tonnes per km^2 per year in five classes: 200-600, 600-1000, 100-1500, 1500-2000 and over 2000.

Table for slopes of less than 15%				
Severity of climate and topography / Erodibility of substrate	slight (A)	average (B)	high (C)	very high (D)
slight	slight	slight	slight	average
average	slight	slight	average	high
high	average	average	high	high

Table for slopes of more than 15%				
Severity of climate and topography / Erodibility of substrate	slight (A)	average (B)	high (C)	very high (D)
slight	slight	average	average	high
average	average	average	high	high
high	average	high	high	high

Map 4. Agricultural potential

The map of agricultural potential is also derived from the map of ecological units. It integrates data relating to abundance of marshy areas, relative fertility, dominant slope and susceptibility to erosion. Agricultural potential is then defined as good, average, conditional and poor. Land is defined as conditional if it can attain average potential with the application of certain measures such as drainage, seasonal farming or anti-erosion practices. For marshy

areas the agricultural potential is based on fertility as follows: average potential for fertility class 1 and low potential for fertility classes 2 and 3. For non-marshy areas, the classes were derived using the following table:

Fertility class 1	Soil erodibility / Slope	slight	average	high
	0-3 %	good	good	average
	3-15 %	good	good	average
	15-25 %	good	average	average
	> 25 %	average	average	poor

Fertility class 2	Soil erodibility / Slope	slight	average	high
	0-3 %	good	good	average
	3-15 %	good	average	average
	15-25 %	good	average	poor
	> 25 %	average	poor	poor

Fertility class 3	Soil erodibility / Slope	slight	average	high
	0-3 %	average	average	poor
	3-15 %	average	average	poor
	15-25 %	average	poor	poor
	> 25 %	poor	poor	poor

Map 5. Accessibility

The map of accessibility was also derived from the map of ecological units using the table below:

AQUATIC CONSTRAINTS			LAND ACCESSIBILITY (DOMINANT SLOPE CLASS)		
Density of river network	presence of important rivers	presence of important flood zones	0-15 %	15-25 %	> 25 %
poor or average	no	no	good	average	poor
good	no	no	good	poor	poor
poor or average	yes	no	average	average	poor
good	yes	no	average	poor	poor
poor or average	no	yes	average	average	poor
good	no	yes	poor	poor	poor
poor or average	yes	yes	poor	poor	poor
good	yes	yes	poor	poor	poor

Map 6. Forest resources

The forest resource map is, in fact, the 1:200,000 map of the national inventory, which allows division into zones of good forest potential, degraded areas and areas under cultivation. It also helps to delimit industrial areas.

Map 7. Forest management

This map gives a picture of actual forest activity. In effect, it shows the limit of forest exploitation licences and indentifies the holders of these licences. It also shows the boundaries of existing and proposed reserves as well as the location, type and holders of the different timber yards and saw mills.

Map 8. Other potential

This map shows the locations of mineral-bearing seams, the hydroelectric barrage project being undertaken by MINMEE and sites with potential for tourism identified by MINTOUR.

Map 9. Actual and potential conflicts

This map synthesises the information from all the preceding maps and identifies areas of actual and potential conflict.

Map 10. Plan of zonation

It is map 10 which is the final product of the exercise and sets out the proposed land use zones. It shows the integrated ecological reserves, the protection forest, sanctuaries, fauna reserves, national parks, recreation forests, forests for education and research and production forest which together make up the permanent forest estate (les forêts domaniales).

In summary, the following land use categories are delimited:

a) Within the permanent forest estate -
- national parks
- integrated ecological reserves
- fauna reserves
- sanctuaries
- protection forests
- education and research forests
- recreation forests
- production forests
- communal forests

b) Outside the permanent forest estate -
- areas affected by human habitation (housing, agriculture, agroforestry, industrial areas etc)
- agroindustrial areas
- mining
- flood basin of the hydroelectric project

The strategy is now at the planning stage but still has to be awarded legal status and approved by Presidential decree. It must also be approved by the World Bank before it can be submitted to the prime minister. The procedures for this are being carried out right now and it is expected that the decree will be submitted to the cabinet within one month (from end February 1993) and will be approved by June 1993. Once the decree has been signed the Minister of Forestry and Environment has to enact it. The decree will define the total area of PFE and the classification of forest within it. The Ministry (MFE) then has to mark out the boundaries on the ground. The decree empowers the Ministry to mark out the subdivisions without reference to anything else. MFE works with MINPAT to delimit the PFE but once this has been done, MFE does the rest of the work alone. The Forest Administration will undertake the delimitation of PFE on the ground and, although currently they do not have the resources to do this, they are anticipating assistance from the World Bank.

An inventory is being undertaken to classify land within the PFE, primarily for strategic purposes. The inventory is being carried out in a series of seven phases, of which four are complete and the fifth is in progress. 14 million hectares of forest were identified during the

first four phases of the inventory and of these, 8.7m ha have been designated as PFE. Another 8m ha will be surveyed during the final three phases, making 22m ha surveyed in total, but it is not yet known what the total area of the PFE will be. Land outside the PFE can still be managed as forest but there is no obligation to do so.

The new decree contains about 150 articles and, in addition to the strategy, covers issues such as forest management, nature conservation and community forest. There are currently no forest licences within nature reserves or other protected areas but licences may be held within both the PFE and the non-PFE. Once the law is enacted, the licences will need to be converted to concessions. However, a concession system requires much larger areas than the licence system. For example, a concession which exploits 10,000 ha per year on a 40-year rotation will require an area of 400,000 ha. Currently, the average area covered by a single licence is between 80,000 and 100,000 ha. Yield is estimated as approximately four cubic metres per hectare in the non-PFE and 10 cubic metres in the PFE. Limitations on logging within the PFE may be changed from minimum exploitable diameter to maximum allowable cut; however, this has not yet been decided.

Once concessions are given within the PFE, the exploiter will have to manage the forest properly and will need to employ a forester to look after the management side. The exploiter will be given three years within which to carry out a 1% inventory, which will cost about 400-500 CFA per hectare. This will allow the government to calculate more precisely the annual allowable cut. Although the concessions are for 25 years, the exploiter's permit will be renewable annually subject to submission of an annual plan. A number of pilot management projects are also being undertaken which, it is hoped, will provide more information on factors such as regeneration rates. This will enable the government to apply this information on a larger scale to the management concessions. Increased production would be the result if they were able to demonstrate the a particular silvicultural treatment in any given type of forest result in an improvement in productivity.

The government has already set out regulations on how to write management plans. However, they require, in addition, a manual by way of explanation. There are many other regulations in the law relating to management, but again, some kind of manual is probably needed to explain them.

Most foresters are very aware that they will soon need a green label to enable them to sell their produce on foreign markets. The Dutch in particular are becoming more and more strict on this.

Creation of forest concessions

Initially, forest management units will be created using a combination of geographic boundaries, existing forestry operations and species groupings. These units will be created primarily for administrative purposes, but each concession will then comprise one or more of these units and management plans will be required for each unit, not for the whole concession.

REF:

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Letouzey, R. (1985) "Carte phytogéographique du Cameroun au 1:500,000 - cartes et notic explicative", Institut de la Carte Intenationale de la Végétation, Toulouse, France.

ANNEX 6 - Projets Forestiers en Cours au Cameroun Liés au Système de Surveillance des Ressources Forestières (SRF)

pricipales activités du secteur forestier	*titre du projet (agence de financement)*	*objectif/description*
plan d'affectation des sols; et schéma d'utilisation des sols forestiers	Inventaire National (ACDI)	• réalisation d'un inventaire national en vue de connaitre la resource • sept phases sont prevues dont quatres sont finies (14 millions de ha) et la cinquième est en cours (4,9 millions de ha). • production des documents techniques: manuel de photointerprétation forestière, manuel de dendrologie de forêt dense; manuel de dendrologie de savane; liste des essences des forêts dense du Cameroun; normes de stratification forestière de territoire au 1/50 000 et au 1/200 000; normes d'inventaire d'aménagement et de préinvestissement; normes de vérification des travaux d'inventaire d'aménagement de reconnaisance et de préinvestissement; canevas de plan d'aménagement forestier; normes d'inventaire de reconnaissance; normes d'études d'arbres; normes de cartographie forestière du territoire au 1/50 000 et 1/200 000.
développement des techiques sylvicoles et de l'aménagement pour la gestion durable de la resource forestière	Schéma d'Utilisation des Terres Forestières dans le Sud-Est du Cameroun (OIBT)	• réaliser à partir des inventaires de reconnaissance de la partie Sud-Est du Cameroun et du plan d'affectation des sols un plan de développement des industries forestières de cette zone. • recherche sur la demande actuelle en produits forestiers; l'analyse des futurs projets dans l'industrie forestière; l'adoption du logicel de traitement des donnes d'inventaire; la détermination du regroupement des espèces selon l'utilisation; revue des connaissances en aménagement et sylviculture.
	Projet d'Aménagement Pilote de la Réserve Forestière de So'o Lala (Akonolinga) (l'OIBT/Japon)	• concevoir et mettre au point des techniques sylvicoles prenant en compte les besoins de l'exploitation forestière et les exigences des populations locales; et former des encadreurs sylvicoles. • trois volets sont actuellement actifs: sensibilisation des populations riveraines; élaboration des trames d'enquêtes socio-economiques; et rédaction du cahier des charges à soumettre à l'exploitant forestier, partenaire privé du projet.
	Projet d'Aménagement Durable de la Réserve Forestière du Sud-Bakundu (l'OIBT/Japon-USA)	• la mise en application des techniques d'amélioration des peuplements forestiers naturels par dévitalisation. • assurer un développement équilibré de la zone du projet par la promotion des activités forestière et autre. • plan détaillé des activités du projet a été elaboré.
	L'Impact des Populations Rurales Sur le Développement Forestier (l'OIBT/Japon-USA-Norvège)	• projet démonstratif de gestion des ressources en forêt dense, faisant intervenir les populations rurales dans le cadre d'un développement de l'agroforesterie et de la foresterie sociale. • plan détaillé des activités d'étude d'avant projet a été transmis à l'OIBT.

	Projet d'Aménagement de la Réserve Forestière de Mbalmayo (ODA)	• l'amélioration de la capacité de gestion et de conservation de la forêt ombrophile. • la mise en place d'un guide technique de régénération forestière artificielle. • la récolte des données sur les paramètres socio-économiques et environnementaux de la zone du projet. • la mise en place d'une unité de formation continue. • l'identification et la production des plants génétiquement améliorés. • projet en cours: mise en place d'une pépinière; démarrage du programme d'amélioration génétique; production de 20 000 clones; inventaire à 100% sur 700 hectares; préparation de terrain et plantation de 10 ha de forêt suivant cinq différenetes méthodes sylvicoles à savoir; mise en place d'un comité villageois de liaison et sensibilisation; production d'une revue sur les besoins en formations forestière.
	Projet d'Aménagement Durable au Sud-Est Cameroun - Projet API (CIRAD Forêt/France)	• projet demonstratif de gestion des ressources en forêt dense, faisant intervenir les populations rurales dans le cadre du projet afin de diminuer la colonisation spontanée des forêts exploitées; et d'établir les normes sylvicoles et de gestion appropriés. • le projet travaille avec un partenaire industriel (la SFID) et couvre 600 000 hectares de forêt sous licence d'exploitation. • le projet vise d'assurer un développement équilibré de la zone du projet par la promotion des activités forestière appropriées. • travaille sur le terrain vient de commencer.
	Projet d'Aménagement Durable d'une Forêt du Sud-Cameroun (ACDI)	• un projet pour assurer l'aménagement durable des forêts secondaires présentant les mêmes caractéristiques écologiques. • la prospection du site de ce projet est en cours.
établissement des normes et procédures pour le contrôle de la gestion des exploitants	Projet de Monitoring en Aménagement des Forêts (Pays-Bas)	• élaborer des directives nationales d'aménagement durable des forêts naturelles en conformité avec les directives d'aménagement durable des forêts tropicales naturelles adoptées par l'OIBT. • étude d'avant-projet vient d'être réalisée. Le document du projet a été présenté a l'OIBT pour recherche de financement.
	Surveillance des Ressources Forestières (l'OIBT/ODA)	• voir rapport principal
	Evaluation de l'Impact de l'Exploitation Forestière et la Transformation de Bois sur l'Environnement (l'OIBT)	• mesurer l'impact forestière et la transformation de bois sur l'environnement pour une meilleure utilisation des ressources foretières par la réduction des déchets à divers stades. • mettre à la disposition du Cameroun des éléments techniques d'évaluation pour une exploitation rationelle des forêts tropicale humides. • missions préparatoires d'identification des sites d'études sont en cours.

ANNEX 7 PRELIMINARY OUTLINE OF SYSTEM DESIGN OF POSSIBLE APPLICATION FOR CAMEROON

National Context

1. At present the data that are collected in Cameroon regarding the forest resource are of two types:

   (a) periodic and incomplete land use and forest inventory data; and

   (b) data regarding the issuing of forest licences for wood extraction and the collection of forest revenues.

   In neither case are the data collected used as management information or to assist planning except on an *ad hoc* basis - usually at the insistance of aid donors.

2. Cameroon is in the process of finalising its new forest policy, law and forest code. These three instruments will provide a planning and legal framework for the sustainable management of the country's forests - according to both environmental and socio-economic criteria.

3. Translating the theory into practice is expected to be difficult. There will be numerous problems and changes required from time to time. A management information system will be required to monitor implementation of the new forest strategy and to assist planners monitor performance.

4. Such a management information system would complete requirements for the *national reporting* and *international reporting* components of the revised FRA. If well designed such a system could also be used for other functions such as financial control of the Direction des Forêts and l'ONADEF; and the collection of forest revenues. If it were possible to incorporate the collection of forest revenues, the system could be self financing.

5. It should be stressed that for such a system to be successful there are a number of pre-requisites of which the most important are that:

   (a) the new forest policy, law and code are passed;

   (b) the political will to enforce the new forest legislation exists, without which the FRA system has no meaning;

   (c) the political will to elaborate and implement programmes of independent verification and privatisation of certain forestry activities emerges; and

   (d) sufficient funds are available for implementation of the new forest strategy.

6. So that the system can be used to fulfill the *international reporting* component of the revised FRA, independent verification or auditing of the system should be seriously considered.

7. As part of its new forest strategy the Cameroon has completed a forest land utilisation plan for the south of the country - which is where most of the moist dense tropical forest is (see Annex 5 for a description of this). Production of this plan involved overlaying ten thematic maps with competing land uses. After allowing for all other land uses the permanent forest estate in these areas was demarcated. Virtually all future forest management in Cameroon will be of the permanent forest estate. Forest not included in the permanent forest estate will not require management plans nor will data regarding its use be collected. For this reason the FRA system for Cameroon will only concern the permanent forest estate.

8. The permanent forest estate has so far been demarcated for the southern four provinces. Much work remains for the rest of the country to be covered. Even in the first four areas delimitation of boundaries on the ground has not yet started and cannot start until the new forest law is passed. Component one of the revised FRA: *demarcation of permanent forest estate* is likely to be phased over a period of time and would probably proceed in parallel to implementation of some sort of management information system which would allow component 3 of the revised FRA system to be implemented.

Revision of Phase I Design for Cameroon

9. Component three of the revised FRA envisages the collation of national forest statistics which could be reported to ITTO. Pages 36 to 43 of the Phase I report set out a preliminary outline as to the type of data this could cover. As the Phase I design also points out the FRA national reporting framework would be particular to the country concerned and build on existing national forest information systems. The paragraphs below give a revised outline design which would be suitable for the Cameroon once the new forest strategy has been implemented. It should be noted that, at present, the collection of national forest statistics in Cameroon is virtually non existant.

10. The revised design suggested here would need substantial investment to be implemented as the existing national capacity for doing so is inadequate. A possible option would be the development of an MIS for the forestry administration - which would aim to have substantial other national benefits. The FRA reporting requirements would as far as possible be a by product of the installed MIS.

11. On the basis of the principles outlined above the following types of data could be provided:

    11.1 **The legal status of forest types within the permanent forest estate (PFE)** The unit for recording legal status would be the legally designated forest type

within the PFE. This information would be provided as part of implementation of the forest land utilisation plan; and would be the result of ground surveying against general inventory and landuse data (which has already been compiled for the four southern provinces). Such data, at least initially, would not be available in a digital format. For each legally designated area the following information could be recorded:

- the name of the legal area
- the legal designation of the PFE forest type
- the date the area was designated
- the area (in hectares) of the area
- the ownership of the area including the area of production forest operated by logging concessions
- the date of the above information (year only)

In Cameroon the legal status of forest types within the PFE has been defined using the following classes:

a. National Parks
b. Complete Ecological Reserves
c. Wildlife Reserves
d. Santuaries
e. Protection Forests
f. Forests for Research and Teaching
g. Amenity Forests
h. Production Forests
i. Public Forests

11.2 **The management status** The unit for recording management status would be the legally designated area. For production forests this would be broken down into concessions (management units). The management status would be:

11.2.1 according to whether acceptable management plan drawn up (for example management plans for production forest should cover ITTO forest management criteria; and those for protected ecosystems IUCN criteria).

11.2.2 according to whether management plan implemented (independent verification may be required) - this would be the key information as to how much of the PFE forest types are in fact being sustainably managed at any given time.

11.2.3 reason for non-implementation of management plan (could be used to identify weaknesses and areas for

donor assistance - particularly important in providing early notification of damage to key ecosystems).

For each management unit the following information could be recorded (for all forest types except for production forest general information is likely to be the same as the designated legal area; and it is questionable whether separate collection is worthwhile):

- name of the management unit
- area (in hectares) of the management unit
- date of the information (year only)
- legal area containing this management unit
- whether management plan exists
- date of production of latest management plan
- whether management plan based on ITTO criteria (production forest) or IUCN criteria (protected ecosystems) etc.
- whether the management plan is being applied
- length (25 years) and expiry date of awarded concessions

Particular reasons for non application of the management plan could be highlighted -this could include the effect on forest condition due to encroachment from agriculture, illegal logging and poaching (all of which are current problems in Cameroon). For Cameroon such information is likely not to be available in the first instance.