Falling into place

Ghanaian forestry is in the process of rediscovering its past, consolidating what it does best, and learning from innovative new forest management initiatives. Falling Into Place charts the evolution of policies that affect forests. It describes how the 'timber-first' orientation of forestry is giving way to more collaborative policy and forest management for a greater range of forest values, and how tactical approaches led by key opinion-formers and policy-makers have been successful at overcoming resistance to change. There are major challenges ahead: combining the economic potential of forest resources with maintaining environmental quality and human well-being; and rooting decision-making in places where people are really motivated to take action. Yet, after years of 'things falling apart', it seems that Ghanaian forestry is beginning to fall into place.

"Through a careful compilation and analysis of data and case studies, Falling Into Place provides a brilliant examination of forest policy and policy processes in Ghana. Its conclusions and recommendations indicate plausible future directions for improved policy. It will be extremely useful for all those interested in understanding and explaining forest policy in particular, and policy in general."

E.O Nsenkyire, Chief Conservator of Forests, Forestry Department, Ghana

Policy that works for forests and people series

Forest issues often concern large amounts of money, long timeframes, huge areas of land, and diverse livelihoods. The issues are complex and vary from place to place. However, a pattern of forest problems is common to many countries: continuing loss of natural forests; over-concentrated control and inequitable access to forests; an ill-informed public; and poorly-resourced, inflexible forestry institutions. Policy is the root cause of many of these forest problems.

This series consists of six country studies - from Costa Rica, Ghana, India, Pakistan, Papua New Guinea and Zimbabwe - and an overview report. The series aims at a better understanding of the forces at play in contests over policy, the winners and losers, and the factors that affect policy outcomes. It also describes the processes that make and manage good policies and the policy instruments that work in different contexts. By dealing with policy in practice - in the 'real world' of people and their institutions - the series aims to go beyond the frequently heard complaint that there is a lack of 'political will' to change, by showing how policy can change for the better.

This report was financed by the UK Department for International Development (DFID) and the Ministry of Foreign Affairs, Netherlands Development Assistance (NEDA)
Figure 3.2 Forests and protected areas containing forest of Ghana
Dry semideciduous forest on the Mpraeso scarp. Eastern region

Trees in the savannah zone, near Navrongo. The savannah zone of northern Ghana does not support large commercial timber stocks, but the trees in the landscape are vital sources of products for local use and are actively managed by local people.
In northern Ghana, colonial foresters planted mahogany trees along roadsides to shade the District Commissioner on his travels.

Nongondi woman with fuelwood
Independent chainsaw operators are active all over the forest zone and their activities can be only partially regulated. They produce much fuelwood and a considerable quantity of timber which does not appear in government statistics.

Fuelwood market, Koko village. More than 75 per cent of all energy requirements in Ghana are met from fuelwood and charcoal. It has been estimated that annual fuelwood consumption in the country as a whole is about 16 million m$^3$. Much urban fuelwood originates in the savannah and transitional zones, where there is increasing local scarcity.
Sorting palm nuts for making palm oil
A durbar for Nana Asiedu Agyemfra, in Larteh. Stool communities, headed by chiefs, are generally the landholding authorities in the high forest zone. They are key forest stakeholders.
Making palm wine, Volta Region. Palm wine is made from the sap of raphia or oil palm. Raphia palms are tapped upright but oil palms are felled prior to tapping. In many villages, palm alcohol is distilled from the wine.

Harvesting cocoa in Ashanti Region. Cocoa was Ghana’s number one foreign exchange earner, until recently overtaken by gold. It is found on farms throughout the high forest zone, although it is declining in eastern areas where climate and soil are less favourable and crop diseases more severe. Farmers in some areas retain considerable numbers of high forest trees amongst the cocoa bushes, for their shade and nutrient qualities.
Survey work to establish a community-managed forest. Since the early 1990s, the Forestry Department has been working to establish such “dedicated forests” to be managed on the basis of agreed management plans.

Village-level discussions with the Forestry Department on options for collaborative forest management, Abonsuo, Brong Ahafo Region.
Falling into place

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Nii Ashie Kotey • Johnny Francois • JGK Owusu • Raphael Yeboah • Kojo S Amanor • Lawrence Antwi

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James Mayers

Study coordinated by
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Cover photo: A meeting between forest department staff and local independent chainsaw operators in Abonsuso, Brong Ahafo Region by James Mayers
Design and production by Eileen Higgins at IIED.
Illustration © Christine Bass: based on a lizard motif incorporated into the painted decoration of traditional compounds since the lizard is “always around where humans live”.
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Policy that Works for Forests and People is a project coordinated by the Forestry and Land Use Programme of the International Institute for Environment and Development (IIED) supported by the Netherlands Ministry of Foreign Affairs and the UK Department for International Development. The Policy that Works for Forests and People Series derives from this project. Other studies in the series to date are:

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These studies are available from IIED at the address above.
Natural resource policy development is often a minefield, while forest policy implementation can resemble a battleground; an arena littered with skirmishes, stymied campaigns, a few important victories and a frontline that is gradually moving forward. This is as true in Ghana today as it is elsewhere.

Since 1994 the Government of Ghana’s overall aim for the forestry sector has however been clear:

*The Forest and Wildlife Policy aims at the conservation and sustainable development of the nation’s forest and wildlife resources for maintenance of environmental quality and perpetual flow of optimum benefits to all segments of society.* (1994 Forest and Wildlife Policy)

Using the information gathered from extensive surveys, our sector agencies have now prepared strategies to address protection, production and local people’s interests in the forest resources of the high forest zone within the context of our overall policy goal. It appears to us that these different interests in the resource can be reconciled at the policy, strategic and operational levels; they need not inherently be in conflict.

Problems arise when one of the interests gains the upper hand and is able to pursue its agenda to the detriment of the rest. When this happens, the Government has to be prepared to redress the imbalances; to challenge those agencies, industries and individuals that prefer the old ways of doing business. As we begin to implement the natural resource management programme across the high forest zone we believe that collaboration with the rural forest fringe communities will be a key strategy for successful implementation of our new forest policies.

The report series being prepared by IIED describes the processes behind the making and implementing of policies in six countries. It tries to understand which policies have worked, which have not worked and why. The report
prepared by the Ghana team provides a snap-shot of our situation: the resource base, the stakeholders, the history of official forest policy and four case studies of policy being put in practice. As the report explains, we believe that sustainable forest management is now within our reach.

The Ghana report is also the story of a few prime movers and shakers - key individuals who possess the drive to change things. One such crusader for change was Ben Aninakwa, the late Planning Officer of the Forestry Department. If things are now falling into place in Ghana it is largely due to the courage, determination and ability of people like Ben. This report is a testimony to Ben and all that he stood for.

E. Kofi Smith
Technical Director
Ministry of Lands and Forestry, Accra.

2 February 1998
Executive summary

Time for reflection on forests, people and policy
These are exciting times for forest management in Ghana. Innovative new forest management initiatives are being combined with a process of rediscovering the past and consolidating what Ghanaian forestry does best. Forests play key roles in national and local economies, cultural life and environmental quality. Policies affecting forests thus also affect national development and the prospects for poverty alleviation and sustainable livelihoods. Yet, while there is widespread consensus that sustainable forest management is an important goal which requires “good policies”, there is much disagreement about what these good policies are, and how they should be made and put into practice.

It is a good time to take stock of the situation, to examine where we are and how we got here, what has been done well and what not so well. This study does this. It focuses on policy and policy processes as they affect people and forests in Ghana. It aims to understand which policies have worked, which have not worked, and why. The study answers some key questions: who and what have been important in shaping forest policy; what are the trade-offs between different interests, and between forest policy and other sectoral policies; and what are the impacts of policy on both forests and people? The work was carried out between 1996 and 1997 by a team with a mix of skills and experience in forest, people and policy issues from both within and outside the forestry sector. It builds on important recent work by the Forestry Department and the Ministry of Lands and Forestry by putting the focus on tracing the processes behind the making and implementing of policy over the years.

The forests in question
Ghana’s forests are found in two main zones - the savannah woodlands in the north, and the tropical high forest in the south. Tropical high forest covers about seven per cent of Ghana’s land area. Almost all of this forest is found in the forest reserves, and the Forest Department estimates that about half of this forest area is in reasonable condition. Considerable forest
resources are found outside the reserves in small forest patches and trees on farms. The Forestry Department has recently re-oriented its strategy for managing protection and production on reserves and has set an annual allowable cut for timber at 500,000 m³. Although the government does not have ultimate jurisdiction over the off-reserve resource, it has set a target of 500,000 m³ annually from these areas. Current timber production is lower than the on-reserve annual allowable cut, but about double the off-reserve target.

The people in question
A range of people have rights and interests in, or impacts on, the forests. These include traditional land- and forest-holding authorities, forest fringe communities, farmers, the state and its forest sector agencies, and the timber industry. Recent detailed work has shown the importance of forest products in local livelihoods and efforts are increasing to ensure that this is recognised in the actions of government, traditional landholding authorities and the timber industry. People with a less direct interest, but none the less some “stake”, in forests include civil society groups, and even the global community.

The evolution of policy
The consultative phase (1874 to 1939). The period stretching from the formal introduction of colonial rule to the outbreak of World War II saw the beginnings of formal forestry, the emergence of the timber trade, the introduction and rapid expansion of cocoa production, the establishment of the Forestry Department, and the establishment of a string of forest reserves across the high forest zone. Reservation policy was in large measure influenced by the need to protect watersheds and maintain climatic and soil quality conducive to cocoa production, the main export crop. Cash crop production and efficient use of timber resources were the key concerns that led to the off-reserve policy of liquidation of the forest prior to its conversion into cocoa farms.

Colonial policy of indirect rule led to the strengthening and formalisation of traditional institutions, particularly chieftaincy, which became the main vehicle of local government. In the early years the colonial authorities tried to nationalise forest lands to form public forest reserves. However, this failed due to effective use of the courts by the traditional land owners. Later, the process of forest reservation emphasised by necessity the role of consultation with, and persuasion of, landholding chiefs and local communities. The rights of communities in forest reserves, including access to harvest non-timber forest products, were “admitted”. In the emerging
timber trade chiefs negotiated their own concession agreements with loggers, and both determined and collected royalties.

**The “timberisation” phase (1940 to 1953).** During this period timber output was the dominant concern in forestry policy. Cocoa production also continued to be a major consideration; but the focus on environmental concerns was much-reduced and non-timber forest products became less and less emphasised. Political priorities, the War and the independence movement were key factors. The nation began to be emphasised at the expense of the locality or community.

The colonial government and local politicians held sway with an authoritarian approach to forest policy. The influence of foresters and timber merchants grew steadily, while the landholding chiefs’ influence on policy declined and local communities began to be marginalised. The first formal forest policy further established forestry as a technical exercise, to be carried out without the encumbrance of having to deal with people. Elected district councils were created, which divorced the landholding chiefs from forestry and land use decisions. The seeds of future trouble were being sown.

**The “diktat” phase (1954 to the early 1990s).** The post-independence government’s statist ideology saw the state as the deliverer of development. The chiefs and traditional authorities, on the other hand, were seen as having sided with the “opposition” during the independence struggle. In 1962 government took formal control of land and trees - “in trust” for the chiefs and people. “Indigenisation” policy in the mid 1960s turned the timber industry from being controlled by a small number of foreign “merchant princes” into a plethora of local companies - many of whom had considerable influence at policy levels. They fought hard to implant the notion into policy and planning that the timber industry could be a driving force for national development. Royalty levels were kept low as a result.

The emergent timber trade began to look at the off-reserve areas of forest, which at that time were still quite extensive in south-western Ghana. Protected Timber Lands were introduced as a means to try and prevent conversion of standing forest into farmland, at least before the timber could be removed. Whilst Forestry Department field staff were struggling with these new responsibilities, rumour was rife that these lands were going to be turned into reserves. Chiefs and farmers acted on this by colonising the areas. When government did indeed then designate the areas as reserves, tensions were exacerbated and full-scale settler “invasions” took place.
Sporadic government attempts to evict these farmers failed, establishing a legacy of mutual mistrust.

The 1980s saw macro-economic reform and structural adjustment which eroded social services and tended to deepen rural poverty. Reform of the timber sector, which had much donor support, sought to inject new life into the industry, at a time when the resource was in a precarious situation and forest management was ill-equipped to cope. By the end of this period the Forestry Department was under-resourced and stretched to the limit. Many reserves had become badly degraded; the annual allowable cut bore little relation to estimates of sustainable yield; and some important timber species were threatened with commercial extinction in twenty years if current policies continued. The landholding authorities and local communities had become marginalised and alienated owners of the resource with few rights and even fewer responsibilities. There was over-capacity and waste in the timber industry. In certain quarters, patronage and corruption was rife. Things simply could not continue as they had been.

**The collaborative phase (since 1994).** In the late 1980s, the perception of a crisis in forest management catalysed a period of studies, reflection and re-appraisal. These efforts began to show how precarious the situation had become. The Ministry of Lands and Forestry became active in fostering coordination amongst donors in the forest sector, and this proved important in stimulating a re-focusing of the strategies of donors, notably the World Bank and the UK’s ODA (now DFID), towards forest management. Policy changes were made which included: a reduction in the annual allowable cut; temporary bans on the export of round logs; indexation of timber royalties, which had become increasingly meaningless due to rapid inflation; and improved collection of royalties. Tertiary processing has begun to be encouraged, although the combination of log export bans and low royalties continue to create high rents for exporters of basic sawnwood. A strategy is beginning to be operationalised for forest protection based on both “fine-grained” stand-level measures - such as respect for riparian strips and non-logging areas within forest concessions - and “coarse-grained” landscape-level measures covering various forms of protected area within the permanent forest estate.

A major landmark in the re-thinking process was the 1994 Forest and Wildlife Policy, which called for creation of the conditions suitable for sustainable forest resource management throughout the country - reversing the policy of “liquidation without replacement” in the off-reserve areas.
This policy coincided with a market-led surge in interest in these off-reserve resources, and widespread uncontrolled felling. The response of the Ministry of Lands and Forestry and the Forestry Department was to initiate a working group process, which set a new precedent for consultation, and led to an improved system of off-reserve controls. Despite constraints to the implementation of this system, the impact on checking illegal felling has been considerable, and revenue collected by the FD has risen dramatically. However, the key legacy of the new system may turn out to be its contribution to re-setting the balance of forest management rights and responsibilities, which for many years has been tipped in favour of the timber industry, and is now swinging towards management by farmers and landholders.

New legislation, already passed or in preparation, provides for the replacement of concessions with timber rights contracts - requiring stronger environmental and social commitments - and improved landholder and farmer rights over trees. As the rights and capabilities of landholders, farmers and District Assemblies increase, the notion that the Forestry Department could, on its own, pursue sustainable resource management off-reserve has become challenged. Collaboration and partnerships have become the watchwords for good management, and a range of possibilities is being experimented with - including arrangements involving timber companies, farmers and the Forestry Department. A process is also under way to re-orient the Forestry Department as a more “client-oriented” Forest Service.

A debate on forest certification - the independent verification that a forest is well-managed, or that a forest product comes from a well-managed forest - has recently begun in Ghana. The Ministry of Lands and Forestry and the Forestry Department are keen to assess the utility of certification as a tool for making progress towards sustainable forest management. Timber trade organisations have become interested since beginning to experience the effects of trading partners discriminating in favour of certified timber. Landowners have also become interested in certification as a means to increase the accountability of those who operate on their lands. A multi-stakeholder process - including the development of a national standard against which certification can apply - is in its early stages. Important questions are still to be tackled, including: how to weight different stakeholder views in the development of the standard; how to distribute costs; how to govern the system; and how to accredit certifiers.
Conclusions on what works, and why

Our analysis does not suggest that current policy is yet providing a framework to which all stakeholders are committed to enable resource-conserving and equitable forest management. However, we believe that Ghana is on the right road. We have identified eight positive lessons:

1. **Negotiation in national fora and working groups.** The relative success of policy for forest reserves owes much to the negotiations that took place with chiefs and local representatives in the early establishment of the reserves. Recent national fora and working groups which have operated in the spirit of negotiation have generated considerable commitment to putting decisions into practice.

2. **Potential of collaborative approaches to address inequalities of power.** Stakeholders don’t have equal stakes, and until recently the status quo has benefited timber interests much more than landowning communities and farmers. However, foresters who have begun to adopt a truly collaborative approach are in a strong position to contribute to new deals for the currently disadvantaged. This is because their position as guardians of valuable land and resources allows them to “trade” some of this value to create incentives for strengthening the resource management capabilities of communities and farmers.

3. **Good information quality and flow are prerequisites for good policy.** The quality of information on forest assets, values and demands has been one of Ghana’s comparative strengths. This has paid off in a strong base, and relatively free flow, of information for forest stakeholders to argue their respective cases.

4. **Institutional structures for adaptive learning linked to policy.** Small, but growing, numbers of staff in the Ministry of Lands and Forestry and the Forestry Department are proving adept at learning from local practice and experiments to improve understanding at policy levels. This adaptation requires further institutionalising through wider involvement of staff in such learning processes.

5. **A mix of complementary instruments** Progress has been made where a good balance of incentives (carrots) and regulations (sticks) has been achieved. Our case studies indicate that this occurs when information, market or institutional incentives become driving forces for improving forest management, allowing the law to become the final recourse rather than the first.
6. **Local knowledge and institutions.** Policy must be firmly linked to local reality. Initiatives to link policy to practice, such as local forest action groups, have begun to work where they have clearly emphasised local knowledge.

7. **Mechanisms for dealing with conflict.** Policy processes always generate conflicting views. Much of this is healthy tension, whilst some is destructive and needs to be dealt with through mechanisms which have the confidence of the stakeholders involved. Judicial process may be appropriate in some circumstances, whilst experience shows that solutions hammered out by local committees are more respected locally than those imposed from outside.

8. **Key individuals - crusaders for change.** The story of policy affecting forests in Ghana provides many examples of the impact of people who possess the drive to change things. Those that have made positive progress have been perceptive at identifying issues that are ripe for change, thereby scoring some initial success and drawing in others to form alliances for tackling bigger issues.

**Challenges ahead**

Despite these positive lessons, the evolution of policy reveals some recurring hazards which those involved in policy processes need to guard against in future. A key lesson is that stakeholders who are passive onlookers in decision-making will not contribute their skills and resources. A secondary lesson is that, where issues are complex and uncertain (such as the business of forestry in general), monopolising information leads to policy failure. Furthermore, poorly communicated policy can do more harm than good, particularly when it is misunderstood.

Developments over the last few years have made much progress but are yet to answer fully some important underlying questions, including: What goods and services do we really want from forests? How can we prioritise and make trade-offs between incompatible goods and services - and who decides this? Who pays for goods and services which we need but which are non-marketed? We outline six main challenges related to these questions:

1. **Preparing to give ground to find common ground.** Forest agencies cannot create, single-handedly, the conditions under which farmers and landholders commit themselves to growing trees and looking after naturally-occurring trees. Negotiation and new alliances are needed in
particular to meet the “off-reserve challenge”. Aspects of this challenge include: the balance of tree rights and benefits between landholders and tenants; and the provision of services and an investment climate for forest-friendly agricultural systems.

2. **Devising mechanisms for true multi-stakeholder negotiation.** The 1994 Forest and Wildlife Policy set a bold participation agenda, yet the lack of direct involvement of farmers and local forest users may prove to be its Achilles Heel. In the immediate future the process through which stakeholder participation is fostered needs more policy attention than the substance of the negotiation. A national forum is needed which can link to district and local processes. The National Development Planning process has much potential. It could be linked to the emerging Forestry Department-initiated approaches to strategic planning for reserves, and on a district basis outside reserves, provide the means to work out what forest goods and services are for, and what roles, size and “shape” state agencies should have in practice at these levels. Capacity for experimentation, innovation and learning needs to be prioritised - such that policy is kept “alive”.

3. **Reconciling equity and environmental quality objectives.** In a multi-stakeholder process, addressing environmental quality issues - which may require further regulatory and institutional development measures - is likely to be more divisive than developing off-reserve timber harvesting rules and stronger farmer tree rights. High quality information and well-targeted proposals on environmental and biodiversity issues will be vital since, at least in the short term, organised environmental interests may be in the minority. In forest certification, on the other hand, addressing equity issues may become a major challenge. For example, environmental quality might increase amongst bigger producers who can “play” certification, while smaller producers cannot. Finally, a concerted effort will be required to address the balance of emphasis towards the savannah zone of northern Ghana, and a study of the key policy processes which influence forests and people in the savannah environment is needed.

4. **Fostering tripartite partnerships.** Promising examples to date of tripartite partnerships between government, local communities and private enterprises include: the Gwira Banso project, Swiss Lumber Company and the formation of forestry action groups. Social responsibility agreements within timber utilisation contracts also hold much promise. Forest institutions should put a focus on networking amongst these initiatives and groupings. Stimulating investment in plantations, both within and outside forest reserves, represents a particularly vital challenge ahead.
5. **Re-installing trust in local institutions.** The collaborative forest management process has brought local institutions back onto the agenda. Whether the appropriate form of institution for forest resource management will emerge from reinforcing traditional institutions, or by stimulating new forms of organisation, may only become apparent through processes which identify the truly motivated agencies “on the ground”. Priority should thus be put on understanding and supporting local processes which strengthen existing local experience and capabilities to generate effective, equitable and accountable institutions.

6. **Seizing opportunities for “socialising” forest policy.** Forest policy change in Ghana has rarely been the direct result of “rational” analysis, and is more often the outcome of the formation of alliances and factors in the wider political economy. Recent developments in forest policy have been made possible in large part by a growing recognition of the political importance of rural people and their importance in the process of national development. Mechanisms to further spread this recognition are needed since meaningful multi-stakeholder participation, and forestry which is sustainable in social terms, will ultimately rely on further democratisation of Ghanaian society.

Many people in Ghana have a stake in what is going on in the forests; and many more in the outside world are looking on with great interest. Exciting times - yet much remains unresolved. Institutionalising the collaborative approach to forestry - combining economic potential with human well-being - and rooting decision-making in places where people are really motivated to take action - none of these will happen overnight! There are big challenges ahead, but after years of “things falling apart”, it seems that Ghanaian forestry is beginning to fall into place.
Acknowledgements

Over the course of this study, from 1995 to 1997, valuable contributions, ideas and support were provided by many people. We thank them all. In particular, the study team wishes to thank the following people and organisations:

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<td>Annual Allowable Cut</td>
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<td>ATO</td>
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<td>CFMU</td>
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<td>Centre for International Forestry Research</td>
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<td>EMS</td>
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<td>IUCN</td>
<td>International Union for Conservation of Nature and Natural Resources (World Conservation Union)</td>
</tr>
<tr>
<td>LMC</td>
<td>Log Measurement Certificate</td>
</tr>
<tr>
<td>MLF</td>
<td>Ministry of Lands and Forestry</td>
</tr>
<tr>
<td>NGO</td>
<td>Non Governmental Organisation</td>
</tr>
<tr>
<td>NRCD</td>
<td>National Redemption Council Decree</td>
</tr>
<tr>
<td>NTFPs</td>
<td>Non Timber Forest Products</td>
</tr>
<tr>
<td>ODA</td>
<td>Overseas Development Administration of the United Kingdom (now DFID)</td>
</tr>
<tr>
<td>OFR</td>
<td>off-reserve concession</td>
</tr>
<tr>
<td>PNDC</td>
<td>Provisional National Defence Council</td>
</tr>
<tr>
<td>PNDCL</td>
<td>Provisional National Defence Council Law</td>
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Average exchange rates Ghana cedi to US dollar

<table>
<thead>
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<th>Year</th>
<th>Exchange Rate</th>
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<tr>
<td>1997 (to late Nov)</td>
<td>2240 cedis: $1</td>
</tr>
<tr>
<td>1996</td>
<td>1637 cedis: $1</td>
</tr>
<tr>
<td>1995</td>
<td>1200 cedis: $1</td>
</tr>
<tr>
<td>1994</td>
<td>957 cedis: $1</td>
</tr>
<tr>
<td>1993</td>
<td>681 cedis: $1</td>
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<tr>
<td>1992</td>
<td>450 cedis: $1</td>
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<tr>
<td>1991</td>
<td>368 cedis: $1</td>
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<tr>
<td>1990</td>
<td>326 cedis: $1</td>
</tr>
<tr>
<td>1989</td>
<td>270 cedis: $1</td>
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A two-tier rates system was in force from September 1986 to April 1987. A unified rate was then set by auction until March 1992, when the rate was floated.
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A stool chief holding court. The sitting stool is the symbol of chieftancy across southern Ghana.
Introduction

1.1 What this report is about

Ghana’s forests play a big part in people’s lives. They fulfil an important role in national and local economies and in environmental quality. Policies affecting forests thus also affect national development, sustainable livelihoods and poverty alleviation.

There is widespread consensus that sustainable forest management will not be achieved without “good policies”. But there is much disagreement about what “good policies” are, and how they should be generated and implemented. This report is part of an international initiative to improve the understanding and practice of policy processes, so that they improve the sustainability of forest management and optimise stakeholder benefits. The report presents the findings of a study carried out in Ghana between 1996 and 1997. The study focused on policy and policy processes as they affect people and forests. It aimed to address some key questions:

- who and what have been important in shaping forest policy?
- how has policy been developed, implemented, monitored and reviewed?
- what have been the trade-offs between different interests in policy, including between forest policy and other sectoral policies?
- what have been the impacts of policy on both forests and people?
- which policies have worked or not worked and why?

Forestry in Ghana is in the process of rediscovering its past, and consolidating what it does best. A number of developments also make for exciting times for Ghanaian forest management on the threshold of the new millennium:

- A new Forest and Wildlife Policy was adopted in 1994 and has become widely referred to and used within the sector (MLF, 1994). A “Master Plan for the Development of the Forest Sector” was subsequently prepared by the Ministry of Lands and Forestry in 1996 (MLF, 1996)
• A Collaborative Forest Management Unit, established within the Forestry Department has undertaken, over the last five years, key studies and experiments on the dynamics of people’s use of forest resources and collaborative approaches to their management. Some of the Unit’s new approaches are slowly becoming tested and institutionalised within the Department

• A new system for the harvesting of timber, in the areas outside the forest reserves, was introduced in 1995. As well as forestry concession-holders and the Forestry Department who had hitherto been dominant, this formally introduces the involvement of farmers, local communities, land-holding authorities and local government into forest management

• New consolidated legislation is under development. A key element is the introduction of Timber Utilisation Contracts, in place of concessions, as the means to grant timber harvesting rights. These contracts will involve enhanced roles for land-holding authorities, local communities and farmers, and “social responsibility agreements” between loggers and local stakeholders

• A process, involving many key stakeholders, for the development of forest management certification is underway

• A plan for savannah forest and woodland management is being developed

It is a good time to take stock of the situation, to examine where we are and how we got here, what has been done well and what not so well, which processes have largely worked and which have not.

In addition to drawing out experience from the above-mentioned developments, this analysis owes much to a number of key studies and reports on the forest sector, which cover:

• extent, composition, condition and dynamics of forests and biodiversity; and development of a forest protection strategy (Ghartey, 1989; Wong, 1989; Hawthorne and Abu Juam, 1993; FD/FIMP, 1995; FD, 1997a);

• trees and tenure in farming systems, the use of non-timber forest products and the influence of agriculture on forests (Nkyi, 1989; Abbiw, 1990; Antwi, 1992; Falconer, 1992a and 1992b; Kotey, 1993; Amanor, 1994 and 1996a);
the structure and economics of the timber industry (General Woods, 1993; FD/FIMP, 1994; GB Forestry Commission, 1995; Amankwah, 1996);

plantations and plantation strategy (FD, 1993);

collaborative approaches and local institutions for forest resource management (CFMU, 1993; FD, 1995a; Mayers and Kotev, 1996);


This study also draws on work by the Forestry Department and Ministry of Lands and Forestry describing the development of policy measures (Smith et al, 1995; Smith, 1996). It aims to build on such work by putting the focus particularly on tracing the processes behind policy making and implementation over the years. This can provide valuable lessons for shaping and adapting to the short and long term future for forests and people in Ghana. We have attempted to draw out these lessons and to make targeted suggestions on ways forward to improve policy processes.

The report is divided into six sections. Following this introduction, Section 2 sketches the contextual factors that have shaped forest policy in Ghana over the years. Section 3 examines the state, condition and distribution of the forest resource, both on and off-reserve. It highlights the importance of the off-reserve forest and the significance of non-timber forest products. Section 4 focuses on the tenurial, social and institutional landscape of forestry, the problems associated with the tenurial arrangements and the rights and responsibilities of stakeholders and their formal and informal relationships.

Section 5 analyses the formal forest policy and legislative framework within which forestry has operated. In order to examine policy at work more concretely, this study undertook detailed examination of particular policy processes. Section 6 presents case studies on: reservation and protected timber lands; royalty policies; off-reserve harvesting and management and the “Interim Measures”; and the development of forest management certification. Section 7 synthesises the report, draws together its key conclusions and lessons and discusses possible ways forward.
1.2 The process of the study

This study was coordinated by Dr Nii Ashie Kotey, a senior lecturer in the Law Faculty of the University of Ghana, who has been involved extensively in forest and land use issues over the last six years. He was joined by: Dr Kojo Amanor, also of the University of Ghana, an expert on farming systems and the history of the forest-farm frontier; Johnny Francois, a highly experienced forester, recently retired as Chief Conservator of Forests of the Forestry Department; Raphael Yeboah, currently involved in many initiatives as a Conservator in the Forestry Department; Lawrence Antwi, formerly with the Planning Branch of the Forestry Department, now Principal of the Sunyani School of Forestry; and J.G.K. Owusu, a leading forestry academic who for many years has been heading the Institute of Renewable Natural Resources at the University of Science and Technology in Kumasi. James Mayers, a forest policy analyst of the International Institute for Environment and Development, also contributed ideas and provided coordination with a wider international project, Policy that Works for Forests and People (see back cover of this report).

The Ministry of Lands and Forestry was particularly keen that the opportunity provided by the study be used to explore the potential for forest certification. Thus, an early focus of the study was to contribute to the emerging debate on the appropriateness and potential of forest certification and labelling in Ghana; the background to the issues; and the directions and challenges ahead. This work helped to bring about the emergence of a substantive process which has enabled options and approaches for certification to be developed and debated. This process is ongoing in 1998 (see section 6.4).

The study team undertook a range of thematic studies, each asking the key questions outlined in section 1.1. These thematic studies produced the following reports:

1. Reflections on Forest Policy in Practice - by J.G.K. Owusu
2. Random Rambling Reflections on Policy in Practice - by J.H. Francois
3. Forestry Department’s Recent Practice of Policy Outside Reserves - by Raphael Yeboah
4. Stakeholder Views on the Practice of Forest Policy Outside Reserves - by Nii Ashie Kotey and Lawrence Antwi
5. Options for Effective Certification and Labelling in Ghana, Part I: International Experiences and Lessons - by Stephen Bass and Christopher Upton

Copies of these reports may be obtained from the Faculty of Law, University of Ghana and from IIED (addresses listed on the inside cover of this report).
This study represents a synthesis of these reports. The thematic studies were conducted in different ways - some desk-based and reflective, others involving a range of interviews with people in sectors affecting forests at policy and operational levels. One study (Kotey and Antwi, 1997) involved fieldwork to garner perspectives from a limited number of farmers, timber men, traditional authorities, field NGOs and district assemblies (see section 6.3). However, most of the work relied primarily on the experience and knowledge of the study team.

### 1.3 The notion of policy in this study

Policy is understood to involve content as well as process. Both are equally important; the process by which a policy is developed is as important as the substance of policy. Policy processes include the elements of **policy making, policy implementation, monitoring and evaluation and policy review**. They constitute a cycle. Policy is also more than just official pronouncement. It includes what people are actually committed to and what they try to do. Thus, we are concerned with both intentions and **actual practice**. But the focus is not only on the actions of governments and official agencies. We are also concerned with the decisions and actions of others, particularly landholding chiefs, forest fringe communities and farmers. This is because their decisions and actions sometimes impact the forests more fundamentally than those charged with implementing official policy, and because formal policy has to engage with such actions if they are the source of forest problems related to a valid “national interest”. The study team have found it helpful to use the “water cycle” as a tongue-in-cheek analogy for the policy cycle (see Box 1.1).

Forest policy attempts to provide a framework of objectives, strategies and programmes regarding:

- **Aims** - what benefits are to be aimed at from the forest resources and how to integrate or choose between different objectives, time scales and stakeholders?
Box 1.1 The Policy “Water Cycle”

Policy can be thought of like the water cycle: it comes down from above, having been manufactured by some invisible being, and is absorbed and used by those below - sometimes gratefully, sometimes with much irritation. Much public policy failure stems from a failure by the “rainmakers” to see that a cycle is needed to maintain the process.

Hence public and community level participation which, like evapo-transpiration from local surfaces, should throw water back into the atmosphere and drive the cycle, is kept weak and feeble, limited only to informal feedback processes. Often, like refugees, local communities have to “vote with their feet” (ignore the rules and collect non-timber forest products without permit; illegally farm in the forest reserve, etc) before their influence is felt.

Just as it is not often appreciated that the water that falls on land as rain may have originated from the sea, formal cross-sectoral involvement in policy making has also often been minimal. Two types of cross-sectoral involvement may be recognised: between agencies such as forestry and agriculture or energy and mining; and between central government and traditional authorities, local government,
community level institutions - such as the Town Development Committees and agricultural cooperatives - and timber concession holders and millers.

A third interesting analogy is the idea of rain being made by “a rainmaker up there”. Officers in public institutions, particularly at the middle management level, that is, district forest officers and technical officers, often think of policy as being made by “government” or “the politician”. However, this misses several important realities:

- that much policy is actually formulated by senior civil/ public officials;
- that the ideas and attitudes of such senior officials are often influenced by data (reports) from below (evapotranspiration);
- that the real implications and effects of policy are often felt at the level where policy is interpreted and implemented - that is, ecologically at the forest management unit or forest stand level and, socially, at the community and household/individual level. Few people acknowledge a policy concern at the operational levels.

Finally, it may be noted that without condensation nuclei on which water droplets begin to build, and the processes of collision and coalescence, water molecules in rain-bearing clouds would take too long to grow and fall as rain. Changes in policy often are influenced by key individuals and critical events such as H.N. Thompson’s Report on Gold Coast Forestry (see section 6.1), or more recently, by the Forestry Department teams’ reassessment of the importance of what were previously seen as “minor” forest produce, led by Julia Falconer (see section 3.4). The rate and direction of change may depend on the nature of these individuals and events, and on the time and circumstances.

- **Roles** - what are the main *policy tasks* involved in monitoring, evaluating, advising on formulation, implementation and revision of policy?

- **Means** - which *methodologies* can achieve the aims and manage conflict between stakeholders?

- **Actors** - what *institutions* and *stakeholders* will play the identified roles - farmers, forest dwellers, fringe communities, landholding authorities, local government, voluntary organisations, timber industry and central government; who exercises what *rights*, who bears what *responsibilities* and how would they be held accountable? What *linkages*, supporting *legislation*, *financial arrangements* and other forms of support are required?

Forest policy is a product of its time, of prevailing conditions and of the results of past action. The forest resource changes in quantity and quality;
perceptions of value change; actors change and with those changes, the goods and services obtained by society will change and the strategies for their attainment will change.

There are many contextual factors which need to be weighed up in thinking about forest policy-making and implementation. Issues may arise, and activities may be carried out, at local (even household), national or international levels. Policy decisions may be influenced by economic, social, political, environmental and ecological factors. Important contextual factors involve not only the present and the immediate future, but also the past and the long-term future. For example, the history of land allocation and use circumscribes the choices which may be available for that land in the future.
Contexts and key influences

2.1 Prevailing ideologies and theories of development

This section examines the contexts which have influenced forests and people, and have set some of the “boundaries” for the policies which seek to guide forest management in Ghana.

Prevailing political philosophies and world views have had a significant impact on shaping policy and practice in Ghana’s forests. These influences have been particularly strong on post independence policies and legislation, but are also discernible in the policies of the colonial era.

The colonial government’s first inclination was to vest “unoccupied” or “waste” lands in the Crown, and in the same legislation, make provision for government to regulate forest exploitation. This was an application of the colonial common law doctrine on waste: an obligation on the part of government to ensure that owners of renewable resources do not use them wastefully. However, it was also a reflection of a colonial attitude that saw the peoples of their African colonies as “minors” whose heritage had to be managed in trust for them. When the minors vociferously protested, the choice of forest reservation under native authority by-laws was fully in accord with the then prevailing political doctrine of “indirect rule” - in which chiefs and “traditional authorities” were “given” considerable land and resource allocation powers (see section 5).

The rise of the Soviet Union and China and the general currency of socialist ideas lent credence to centralised planning and the glorification of the State as the protector of “the people”. Leaders in Ghana, like those of other emerging nations of Africa, Asia and Latin America, were products of those times and were also keen to take full advantage of the esteem in which they
were held by their people as a result of their leadership roles in the independence movements.

In Ghana in the late 1950s and early 1960s, “state control over the commanding heights of the economy” became the maxim\(^2\). The centralised development planning pursued a top-down approach. The power of the chiefs was deliberately weakened. Though new local government institutions were set up, real involvement of communities and districts in government declined. This was because of the centralised, socialist model which was adopted, the absence of decentralisation, the distance between the traditional authorities and the new local government structure and the fact that most actors in local government depended on central patronage and lacked an independent, local base.

Paralleling the belief in the efficacy of centralised planning and state control, was an equally strong belief in the ability of science and technology to bring about “progress” and eliminate poverty, hunger, disease and drudgery. Miracle rice, new high-yielding varieties of maize, irrigation, massive application of fertiliser, and mechanised farming would feed the world, and consideration of “real” people featured only secondarily in this process.

### 2.2 The roots of “forestry” and forest policy in Ghana

The extent and condition of forests in Ghana at different periods in the pre-colonial era is debated (see section 3.1). It is clear however, that there were periods of both forest increase and decrease as a result of human and environmental factors, and that many forest areas considered “untouched” at the turn of the century were in fact the products of a long association with people.

Traditional protected areas (sacred groves, burial groves and forests left at the headwaters and along the courses of rivers and streams), and perhaps the existence of Ghana’s forests in general, represent evidence that “forestry” in Ghana, and in particular forest conservation, did not originate with the colonial administration and the establishment of a Forestry Department in 1909. Yet the nature of the management and administration

\(^2\) This phrase was particularly popular among officials of the Nkrumah government which followed colonial rule (1957-1966) and the Akyeampong military regime (1972-1978) which followed the second civilian government.
of these areas were such that when the “new”, colonial, “scientific” forestry began, it could not discern an “old” forester or forestry tradition and practice to which it would relate. If the new forester recognised these protected areas at all, they were seen as “fetish” groves, completely unworthy of any respectable person’s attention. The new forestry therefore had no roots in, or affinity with, an old indigenous forestry tradition.

The roots of colonial forestry in Ghana lay in the classical German-French forest management tradition, as coloured and modified by British colonial forestry experience in the teak forests of India and Burma and in the humid forests of south-east Asia. This was a tradition of manipulating the trees and the soil, largely to produce sustained outputs of timber; a tradition that took little cognisance of non-timber forest products.

2.3 Forestry: by the forester, for the people

Rooted in these colonial traditions the Ghanaian forester has seen himself traditionally as an applied scientist and forestry as an applied science buttressed by various technologies. Until about twenty years ago, forestry training equipped the practitioner principally to manipulate the forest ecosystem to produce maximum continuing yields of certain goods and services. University training, especially, had little to say about people: as late as 1967, Johnston, Grayson and Bradley in their standard text *Forest Planning*, had to point out that people required to be given more attention because “people posed more problems than trees”. The colonial forester expected to be an administrator and, being required in the course of his work to pass a “bar” examination indicating some proficiency in a local language, may have been even better prepared in this respect. One suspects that many of the first generation of Ghanaian professional foresters learned to cope with chiefs and communities because the latter owned the forests, but at heart preferred to be left alone to practise silviculture, regulate timber yields and protect the forests against destructive agencies - including people.
The perception that forestry was a vocation to be practised within reserved enclaves where one manipulated the ecosystem, had its roots also in other historical forces. Reservation was necessary to secure some lands for forestry against the rising tide of forest clearance for cocoa farm establishment. In view of the opposition from traditional landowners to any hint of a take-over of ownership of lands by the colonial government, and the suspicion that reservation was only a ploy to take over ownership through the back door, Government had to persuade the landowners to undertake reservation under their own by-laws and to express its disinterest in the lands outside the reserves. Increasingly, the forester sought to benefit wider society by focusing on those lands reserved as “permanent forest resources”; for example, by establishing a series of “barrier reserves” against the desiccating north-eastern harmattan winds and by increasing the productivity of the productive reserves.

In summary, within the context of widely perceived “omniscient government” and a largely illiterate population, the forestry institutions developed a “technocratic arrogance” and matching style of management which assumed:

- that local people have no worthwhile knowledge in the area of forest management;

- that local people have no interest in conservation or forest protection and would, if not watched with vigilance, quickly liquidate the forest or, at best, constantly nibble away at its resources.

Forestry practised by the forester for the benefit of the people thus became the “conventional wisdom” - the only worthwhile form of forestry.
2.4 The “timberisation” of forestry

Logging and the export trade in logs have always been important in shaping government’s policy on forestry. Nevertheless, when a Forestry Department was established and efforts were made by a landless government to secure some forests and forest lands for forestry, timber did not appear a convincing enough rationale for a large-scale reservation effort. The export trade in logs was quite small and government did not have a policy of encouraging the development of a local wood processing industry. Instead, an acceptable rationale was found in the cocoa industry itself: by reserving part of the forest estate, a forest climate would continue to be maintained in the cocoa growing zone in support of that crop. Clearly, the environmental objective of reservation had an economic motive, at least in part.

Perhaps if forestry had recognised the many non-timber forest products that people used as being important as a fit subject for forestry, it might not have made climatic influences the major rationale for reservation in the early days, and might not then have had the problem of “explaining atmospheric humidity in a native language that had no word or form of words by which the idea can be expressed” (Thompson, 1910).

It is interesting that a rationale was not found in the demands of food farming or of agriculture in general, but of another export commodity, cocoa.

Economic considerations were important in shaping policy in another way. Events during World War II helped to push timber considerations to the forefront of forest policy objectives. Forest management became timber management, and the objective of forest policy in practice was sustained production of timber.

Some of the key policy actions which continue to condition the current situation, and future possibilities for forests and people in Ghana, stem
from the prevailing ideologies and conventional wisdom on forestry outlined above. These include:

- the vesting of forest reserves and of rights in timber in the state;
- the legal conversion of by-law reserves into reserves deemed to have been created under the Forest Ordinance, 1927;
- the enactment of the Protected Timber Lands Act, 1959;
- the cessation of financial agreements between the Forestry Department and landowners and the unilateral decision-making by the Department as to what proportion of revenues would be paid to the landowners; and
- the establishment of wildlife reserves “by proclamation” instead of by some process requiring local involvement.

Discussion of the legacy of policy actions like these is taken up later in this report (section 6).

In the 1980s and 1990s, much attention in world forestry turned to “community”, and “participatory” forestry. In Ghana, “collaborative” forestry emerged and is represented in policy actions over the last five years such as the Forest and Wildlife Policy, the Interim Measures, the proposed consolidated Forest Act, and forest management certification. Momentum for this in part stems from world developments, but in greater part from a recognition of the failure of the state and of the importance of the individual and small communities for forest management in Ghana. Understanding is growing that participatory forestry is unlikely to flourish in a non-participatory society.

### 2.5 Influence of international forestry debates in Ghana

International concerns, perspectives and factors have influenced forest policy in several ways. Forestry policies and their implementation have always been more than a local or national concern. From the beginning, Gold Coast forestry was part of empire forestry. For example, the statement of Indian Forest Policy 1894, “the greatest good to the greatest number of people... for all time” became the aim of much colonial tropical forestry. Most foresters would therefore have felt rather uncomfortable with policies that suggested management of forest reserves exclusively or mainly for the benefit of those who owned them. Ghana’s Statement to the 1928 Empire Forestry Conference proclaimed “the reservation of areas of permanent forest suitably distributed through the cocoa growing zone... to maintain
Falling into place

that zone as a forest climate...”. This reflected a regional benefit (greatest good to the greatest number of people) rather than a benefit for particular groups of people.

Recent initiatives towards community participation in forestry owe much to the ideas prevalent on the world forestry scene since the mid 1970s. The Ghanaian government has been an influential member of the International Tropical Timber Organisation (ITTO) and a participant in the Inter-governmental Panel on Forests, which stemmed from the 1992 UN Conference on Environment and Development (UNCED). Although there was no formal adoption of FAO’s Tropical Forestry Action Programme approach in Ghana, the government has similarly collaborated in shaping this initiative worldwide. The World Bank has had major influence on Ghana’s forestry scene since the early 1980s (see section 2.6), whilst of the bilateral donors the UK’s Department for International Development (DFID, formerly the Overseas Development Administration, ODA), has been of particular importance (see sections 5.4 and 6.3).

In more recent years, a plethora of international initiatives has emerged. Other agencies, notably the International Institute for Environment and Development (IIED) and the UK’s Forestry Commission have derived lessons from international experience and analysed them in the Ghanaian context in collaboration with government. They have had some specific influence on the forestry agenda in Ghana.

2.6 Extra-sectoral influences

Policy affecting land use - and hence forest resources - comes from many “directions”. The impact of policies, particularly those relating to agricultural extension and pricing, land ownership and management, mining and macro-economics, have major impacts on the way people treat forest resources. Some of these “extra-sectoral” policy influences are discussed below.

Agricultural policy and markets have had particularly strong impact on forests over the years. Eastern Region districts produced the first major export cash crop, oil palm, in the early nineteenth century. They were marginalised when forests in Southeast Asia were opened up for oil palm in the 1860s (Amanor, 1996c). A comparative advantage for cocoa was established in neighbouring areas in Ghana in the latter part of the century and farmers responded to it. By the early 1900s, the cocoa “frontier” had
Figure 2.1 Movement of the cash crop frontier in southern Ghana

Source: Amanor (1996) with permission
moved on into Ashanti Region (Amanor, 1994). This was further emphasised in the 1920s and 1930s as diseases of cocoa were devastating the Eastern Region cocoa belt. As land became scarce and degradation increased in Ashanti, Western Region became the new frontier in the 1960s (Hill, 1963).

During the 1970s and early 1980s, government policies to maximise revenue from cocoa led to low producer prices and subsequent neglect and over-ageing of the cocoa stock. Cocoa diseases and droughts also hit at this time. The period culminated in the bushfires of 1983, which were exacerbated by the over-mature condition of cocoa trees. The fires led to a great reduction in the area under cocoa as well as destroying much forest reserve and remaining unreserved forest. Some farmers emigrated to the west and south. For a period many farmers switched to concentrate on other crops (largely annuals) and some continue to favour this strategy. But the market for food crops is finite and prices fluctuate greatly.

Amanor (1994) describes how the government has little control over the internal marketing of food, but through controlled pricing and vigorous cocoa extension campaigns in areas defined as lying within the “cocoa belt”, the government effectively creates disincentives for food crop production, and incentives for the rehabilitation of cocoa. Cocoa has thus returned as the only main option for many farmers and they have planted cocoa on much of the area previously destroyed by fire.

For thirty years the Western Region has been the main destination for farmers and labourers migrating from other areas where land is scarce or degraded and is now the major cocoa producing area. In this period, land was relatively plentiful and the Wassa and Sefwi people were grateful to gain tenants on the land to expand their cocoa. The influx of migrants continued after the fires of 1983 but by the late 1980s was declining to low levels. The increased population density in the area is likely to reduce fallow periods and there are very few blocks of unreserved forest remaining. The soils and ecology of the area are fragile however, and in many parts, problems have set in causing an increasing number of farmers to look for solutions outside cocoa.

Policy in the forestry “sector” has also been heavily influenced, directly and indirectly, by Government’s interest in cocoa. (Exports of cocoa were the

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1 By the mid 1980s the chiefs and people of Sefwi and Wassa had become alarmed at the vast tracts of land granted to migrants and the terms of the grants. Harassment of the migrants, and renegotiation of the terms of the grants, was widespread. This was documented in the unpublished report of the Asare Committee of Enquiry into the Problems of Settler Farmers in the Western Regions, in 1988.
country’s number one foreign exchange earner, until overtaken recently by gold). Providing favourable climatic and soil conditions for its economic production was a crucial factor in determining and shaping the policy and process of forest reservation. Cocoa was equally dominant in determining the course and direction of the Protected Timber Lands policy (see section 6.1.4). It should also be noted that land under cocoa is often of considerable interest to timber interests, since cocoa cultivation is typically accompanied by considerable shade tree cover and these trees may be timber species. The potential which this suggests, for alliances between cocoa farmers and loggers, is as yet poorly realised - relations between these groups are often hostile.

Government’s adoption of the structural adjustment programme in 1983 resulted in increased foreign investment and the revamping of the timber industry. Between 1983 and 1986 about US$ 140 million was committed to the timber industry, coordinated largely through the World Bank’s Export Rehabilitation Project. This was primarily earmarked for the purchase of equipment and the promotion of value-added timber processing. This resulted in the rapid expansion of logging capacity and increasing volume of exports. The volume of the timber harvest increased rapidly from about 400,000 m³ in 1981 to about 1,200,000 m³ in 1988. However the logging capacity of the timber industry by that time exceeded the annual availability of the resource (see section 4.2.4).

With insufficient supplies of available timber in the forest reserves, timber companies turned increasingly to farmland for sources of timber. By the early 1990s, up to 80 per cent of timber exports originated in off-reserve areas and without controls many of these areas became rapidly depleted of timber stocks. With new international processing technologies and
changing market preferences, the number of species being logged was expanded to include species which previously were of little commercial interest (see section 3.3.2).

Mining policy and activities have also had direct effects on the forest. In the past, mines for iron ore and bauxite have come and gone as world prices changed. Over the last ten years, gold mining has become an increasing threat to the forests. Economic reforms of the 1980s also targeted the restructuring and revamping of the mining sector. Reforms included legalisation of small-scale mining activities, recapitalisation and retooling of companies and a more liberal legislative and fiscal regime. This has resulted in a very active, dynamic and profitable mining sector. However, forestry and biodiversity interests are particularly concerned that gold surface mining in the wet evergreen forest zone (see section 3) is damaging forest, notably the Neung North Forest Reserve, which is amongst the country’s most important for biodiversity (Hawthorne and Abu Juam, 1993).

Changes in land use, including the conversion of forest outside the permanent forest estate to other land uses, have generally been the result of private decisions and economic considerations largely unaffected by environmental or “public” concerns. Government-instigated land and land-use planning, despite considerable planning exercises, has in practice been ad hoc, at best, and often non-existent.

### 2.7 Summary

Ghanaian forestry has been shaped and influenced by a wide range of contextual factors over the last century. Many of these factors continue to condition the present. Colonial policies of indirect rule, and prescriptions about the proper role of the forester, have their legacy to this day. Indirect rule gave the chiefs power over land and forests. Farmers and national
governments alike have been battling with the consequences of this ever since. Forestry was confined to the technical exercise of manipulating trees and soil for the general good, to be carried out without the irritation of having to deal with people. And while forest reserves were created with maintenance of a forest climate necessary for cocoa cultivation in mind, the potential alliance between forestry and cocoa cultivation, which this suggests, has never been actively fostered.

Ideology dominated the forests again in the post-independence era as the state called on the forest industry to become an engine for national development, and sought to assume all decision-making powers over the generation and distribution of forest benefits. The increased “timberisation” of forestry which resulted led to the state forestry role essentially becoming that of a procurement agency for the timber industry. Donors and international organisations have become key players with the emergence of forest issues on the international agenda in more recent years. International financial agency influence has also grown, with direct consequences for the growth of the timber and mining industries; the latter causing the direct loss of forests in some areas. Indirectly, macroeconomic effects have a major influence on the forest-farm landscape through the rise and fall in the fortunes of cocoa and other cash crops.
The forest resources of Ghana are divided into two broad ecological zones; the moist tropical high forests of southern Ghana and the savannah woodlands of northern Ghana. This report deals primarily with the high forest zone. This is because formal “forestry” in Ghana has to date largely been concerned with the high forest zone; a phenomenon linked to the “timberisation” of forestry, particularly since the outbreak of World War I (see sections 2.4 and 6.1). One result of this is the relative paucity of information on forest resource condition and use in northern Ghana. This does not justify neglect of savannah forestry, it is to be hoped that before long it would be possible to undertake a similar study in Northern Ghana.

The “high forest zone” is an ecological description covering seven main forest types found in southern Ghana (Hall and Swaine, 1981). These forest types are shown in Figure 3.1. It will become clear in subsequent discussion that these zones refer to potential rather than actual forest.

Box 3.1 Biodiversity in Ghana’s forests

Over 2,100 plant species have been found in the high forest zone, 23 of them endemic (Hall and Swaine, 1981). In total 730 tree species have been recorded from the closed forests (Hawthorne, 1989). The wet evergreen forest is floristically the most rich while the drier southern marginal forest is species-poor. The moist evergreen and moist semi-deciduous forest zone are the most important for commercial timber species. The fauna of the forest zone includes over 200 species of mammal, many of which are rare or endangered, including the bongo, *Tragelaphus euryceros*, Ogilby’s duiker *Cephalophus ogilbyi*, Golden cat *Felis aurata*, chimpanzee *Pan troglodytes*, forest elephant *Loxodonta africana cyclotis* and the pygmy hippopotamus *Choeropsis liberiensis* (Mensah - Ntiamo, 1989). The high forest zone also supports 74 species of bats, 37 species of rodents, a variety of reptiles and over 200 species of birds (IUCN, 1992).
Figure 3.1 Southern Ghana, with forest zones and regions
3.1 Closed-canopy forest area and deforestation estimates

In 1992 IUCN estimated that there was about 15,000 km², of “intact closed forest” remaining in Ghana, covering about seven per cent of the country’s land area (total 230,020 km²) (IUCN, 1992). This has conventionally been thought of as representing the current state of a deforestation process which began accelerating about a century ago and reached a peak between the 1950s and the 1970s. About a third of Ghana’s forest has been estimated to have disappeared in the 17 years between 1955 and 1972 (Hall, 1987) whilst the average annual rate of deforestation since the turn of the century has been estimated at 750 km² (World Bank, 1988). However, recent critical analysis has challenged assumptions about the nature and extent of “original” forest cover and the rates of deforestation in the early part of this century (Fairhead and Leach, 1996). Certainly, the annual rate of deforestation slowed in the 1980s and 1990s and is now likely to remain low since all but a tiny fraction of closed canopy forest outside the demarcated forest reserves has been converted, primarily to farmland.

3.2 Permanent forest estate

3.2.1 Categories of protection

With the intention to maintain climatic quality, protect watersheds and ensure an environment conducive to cocoa, the colonial government decided that a permanent forest estate must be established. Most forest reservation took place in the 1920s and ’30s, although some reserves were being created up until the end of the 1940s.

Today, about 20-25 per cent of land in the “high forest zone” is under reservation. The area permanently protected is 1.77 million hectares, of which 1.634 million hectares is under the management and control of the Forestry Department.

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*Defined as ‘forest with greater than 40 per cent canopy closure’ (IUCN, 1992).*
and 136,000 hectares under the Wildlife Department. Of the area under Forestry Department control, recent Forestry Department categorisation has divided it as shown in Figure 3.3. This categorisation was developed by the Forestry Department’s Planning Branch (see Hawthorne and Abu Juam, 1993) and appears now to have been adopted by the Forestry Department. The categorisation is the basis of a new “Forest Protection Strategy” designed to take the place of the old system-based on production, protection and conversion “working circles” - which for years had been largely ignored in practice.

Figure 3.3 Area of forest reserves in Ghana

The permanent protection areas consist largely of hill sanctuaries, but also include swamp sanctuaries, shelter belts, special biological protection areas, intact forest sanctuaries, provenance and fire protection areas. Of this area, 69 per cent is inaccessible for logging (except at very high cost) and 16 per cent is degraded. Only 15 per cent (which is protected on grounds of genetic diversity) is well stocked and accessible.

The convalescence areas are those with reduced stocking, but which are considered capable of rehabilitation within one felling cycle. Stocking has been reduced through the combined effects of historical over-exploitation, fire and poor management and will eventually return to productive natural forest. Conversion areas require planting, and the FD proposes that the areas that were not inventoried fall into this category. The areas designated for permanent protection are forests from which logging is to be permanently excluded. Areas earmarked for conversion to plantations are those with a very high risk and with very few residual natural trees.
3.2.2 Condition of forest reserves

The condition of each of the 214 reserves has been assessed drawing attention to the general trends and forest quality within the reserve boundaries. A single score has been applied to each forest reserve to summarise the general condition (Hawthorne and Abu Juam, 1993). The condition score runs from 1 to 6, with condition 1 forest reserves showing minimal signs of disturbance and condition 5 forest being seriously degraded with few upper canopy trees. Condition 6 reserves have no significant forest at all.

Condition scores 1-3 refer to low to moderate disturbance, with healthy vital parts of the forest mosaic in the ascendance and regeneration of timber trees and other forest plants usually abundant. Well-managed, selective logging should generate condition 2-3 forest by the end of a felling cycle. Scores 4-6 are applied to forests that have suffered slight degradation over more than half the reserve or heavy degradation over more than 25 per cent of it. Very often there is poor regeneration. Figure 3.4 shows the condition of forest reserves, while Figure 3.5 shows their distribution.

Figure 3.4 Condition of forest reserves


Note: Total = 1,774,500 ha. This total differs from that in Figure 3.3 because it includes Ankasa, Bia and Assin-Attandanso Game Production Reserves and Kakum National Park - all now under the jurisdiction of the Game and Wildlife Department. These were formerly forest reserves.
Figure 3.5  Forest reserves in the high forest zone of Ghana


Notes: Reserve conditions. Each reserve has been given a single score:

1  Excellent with few signs (<2%) of human disturbance (logging/ farms) or fire damage, with a good canopy and virgin or late secondary forest throughout.
2  Good with <10% heavily disturbed. Logging damage restricted or light and well dispersed. Fire damage none or peripheral.
3  Slightly degraded. Obviously disturbed or degraded and usually patchy, but with good forest predominant. Maximum 25% with serious scars and poor regeneration; maximum 50% slightly disturbed, with broken upper canopy.
4  Mostly degraded. Obviously disturbed and patchy, but with bad forest predominant; 25-50% serious scars but maximum 75% of heavily disrupted canopy. Or forest lightly burnt throughout.
5  Very poor. Forest with coherent canopy <25% (more than ¼ disturbed), or more than half the forest with serious scars and poor or no forest regeneration; or almost all heavily burnt with conspicuous Eupatorium and other pioneers throughout.
6  No significant forest left. Almost all deforested with savanna, plantation or farm etc; <2% good forest; or 2-5% very disturbed forest left; or 5-10% left in extremely poor condition eg. as scattered trees or riverine fragments. Remnants with little chance of surviving 10 years.
In summary, about half of the reserved forest, some 900,000 ha, is in “reasonable condition” and the remainder is “mostly degraded” or worse (Hawthorne and Abu Juam, 1993).

3.3 Off-reserve forest-farm mosaic

3.3.1 Areas and types of off-reserve forest resources

Much forest land outside forest reserves has been converted to agriculture through the course of this century. Today, the area outside forest reserves is a mosaic of agricultural fields, fallow lands, secondary forest patches and settlements. The off-reserve area can be categorised into:

- Patches of “old-growth” forest, some as large as several hundred hectares, scattered in swamps and sacred groves. The total area of these patches may be in the order of 20,000 ha;
- Secondary forests regenerating from agricultural lands;
- Riparian forest strips, ranging from 5-50 metres wide along most streams;
- Isolated trees left standing in agricultural fields, collectively representing considerable tree resources (see below);
- Tree plantations. These occur, covering a few hectares at a time, in some farmland areas. In addition the state has successfully established about 16,500 ha of plantation (Apumasuh, 1992).

The Forestry Department and others (see section 4) are concerned at the depletion of these ecosystems, arguing that collectively these areas: provide products, recycle nutrients, protect soils, stabilise hydrological systems, and are active in carbon sequestration.

The off-reserve forest-farm mosaic provides important habitat for many species. Although large mammals and some forest birds tend to disappear from the area, certain primates, birds, and insects thrive in this ecosystem. The farm and fallow areas also host substantial forest resources. Due to the nature of the dominant farming system in the high forest zone, trees on farms are very common. There is still therefore, great potential timber in these forests. Since 1994, there has been an attempt through policy to
control off-reserve exploitation and to install incentives for the replacement of removed trees to maintain supplies of timber outside the reserves (see section 6.3).

### 3.3.2 Importance of off-reserve areas for forest goods and services

The off-reserve forest resource provides much of the country’s timber and is an important source of non-timber forest products. Prior to 1970 the total timber offtake was very high and the large proportion of this from off-reserve areas represented a high level of clearance of land for agriculture. The economic downturn in the country from the early 1970s to the early 1980s was paralleled by decreasing rates of exploitation from the off-reserve areas. The bulk of production was the result of a policy of “salvage” felling of “over-mature” trees in most productive reserves. The introduction of a structural adjustment programme and attempts to revive the timber industry led to an increase in the rate of exploitation, which had tripled by the early 1990s. Whilst tightened controls on-reserve eventually brought down on-reserve production, off-reserve production rose correspondingly.

Figure 3.6 shows that between 1960 and 1972 the off-reserves areas were the source of over 70 per cent of the timber harvest recorded by the Forestry Department. The proportion of timber from off-reserve areas declined to about 50 per cent of total log production between 1974 and 1992. In 1994 production from off-reserve rose again to nearly 80 per cent of total production. It should also be noted that there are many chainsaw operators producing logs which are not recorded.

This off-reserve trend was effectively sanctioned by forest policy prior to 1994; that is the policy allowed the progressive utilisation of the forest resources not dedicated to permanent forestry prior to its clearance for farming. Between 1993 and 1994, tighter management strategies in the reserves were being implemented with the aid of the ODA-funded Forest Inventory Management Project (FIMP) and World Bank-funded Forest A timber market in Accra. Domestic timber consumption in Ghana is in the order of half a million cubic metres per year.
Resources Management Project (FRMP). Log production from the reserves fell in this period. The protection strategy implemented in the early 1990s also contributed, by withdrawing substantial areas of reserve lands from logging - as described above.

Off-reserve production, however, rose progressively between 1991 and 1995. Rates of exploitation accelerated as the timber industry continued to expand and log export markets in the Far East opened up. Species previously of little commercial interest were in demand, including *Ceiba pentandra, Antiaris toxicaria* and *Terminalia superba*. These species are common on farmland and are deliberately preserved by farmers because they are considered as important in maintaining soil fertility and facilitating regeneration in fallow (Amanor, 1996a; Mayers and Kotey, 1996). Widespread speculative felling and port congestion led to an atmosphere of crisis in 1994. The Ministry of Lands and Forestry then instituted a process resulting in new felling controls known as the “Interim Measures”. The impact of these measures on log production on- and off-reserve is discussed in section 6.3 and has been more significant than its name would imply. The


Figure 3.6 Log production in Ghana from 1960 to 1996
dip in production in 1995 and 1996, shown in Figure 3.6, is in part, a direct result of the introduction of these measures.

Off-reserve forest resources, unlike those in the forest reserves, are not strictly under Forestry Department management, but the control of individual and communal owners. The off-reserve lands are not being managed for timber production, but for agriculture and other forms of land use by their owners. In reality most of the off-reserve timber is now located on farms and fallow areas. Many of the non-timber forest products (NTFPs) such as canes, chew sticks, leaves and fruits which play an important role in livelihoods of many rural and urban dwellers are found on farms and fallow areas off-reserve (see section 3.5). The off-reserve situation therefore offers greater scope for learning and experimentation by stakeholders (government, local communities, farmers, the Forestry Department, and industry) with various approaches, strategies, instruments and incentives in combining forest goods and services with agricultural production.

Although the off-reserve forest was known to be significant in terms of economic timber tree species, until recently very little was known of the population dynamics of the trees in these areas. An inventory of economic tree species, carried out by the Planning Branch of the Forestry Department in 1995 and 1996, has generated reliable data on the stocking of timber in the off-reserve areas (FD, 1997a). The inventory reveals that presently the off-reserve forest area has about 268 million m$^3$ of standing tree volume of suitable form to be classified as timber. About 101 million m$^3$ of the total volume is reported to be contained in trees greater than the minimum felling limits, and about 58 million m$^3$ of this is in good quality trees of species currently in trade.

Figures 3.7 to 3.9 show some results from the Forestry Department off-reserve inventory. The area of land carrying timber off-reserve is estimated at about 5,000,000 ha (compared to about 760,000 ha of timber production area on-reserve). Figure 3.7 shows that the average density of trees over 30cm diameter at breast height across all vegetation zones in the “high forest zone” of southern Ghana is about 73 per hectare. Figure 3.8 shows that a total of 363 million star-rated trees over 30cm diameter at breast height were recorded in the off-reserve forests.

The Forestry Department has developed some estimates of how long the timber resource would last under different Annual Allowable Cuts (FD, 1997a). In making the calculations, the key assumption was that the total utilisable natural timber now existing is the only stock available to be distributed over the years for felling, i.e. that there will be no young natural
A classification of “economic” timber species was developed for the forest reserves by Hawthorne and Abu Juam (1993) and revised by Wong (1994). It concerns species in trade, according to current harvest levels set against standing volume, and was developed as a sub-section of a larger classification of all forest plant species according to criteria of biological rarity. In this classification, each species is assigned a “Star” category based on its rarity in Ghana and internationally, with subsidiary consideration of the ecology and taxonomy of the species. The top star category in terms of conservation priority is the Black Star - these species are rare internationally and uncommon in Ghana; urgent attention to conservation of these species is needed. Following Black, are Gold Star species, which are fairly rare internationally and/or locally, and the Blue Star species, which are widespread internationally but rare in Ghana, or vice-versa.

“Reddish” Star species are those in trade, and may be of concern because of degree of exploitation. The Reddish species are sub-divided into Scarlet, Red and Pink in order of decreasing degree of exploitation relative to the standing crop. All Reddish species are at least relatively common in terms of biological rarity - indeed that is what allows them to become widely traded timber species. However, exploitation of Scarlet and Red species may undermine their status as commodities. Some of the main species currently exploited outside forest reserves are Scarlet (e.g. Wawa *Triplochiton scleroxylon*) and Red species (e.g. Kyenkyen *Antiaris toxicaria*). Green Star species follow the Red Star category; these are the species which are not currently in commercial trade and are of no particular conservation concern.

Felling limits have recently been revised in line with the species star-rating system. Felling limits of 50, 70, 90, 110 or 300 cm minimum diameter at breast height (dbh) have been assigned on a species-by-species basis. The 300 cm dbh felling limit is assigned with the aim of preventing certain species from being logged. Most tree species currently in trade (“reddish star” species) have been assigned felling limits of 70 or 110 cm minimum dbh, whilst other tree species (“black, blue, gold, green and unknown” star species) have been assigned felling limits of 70 cm or 300 cm minimum dbh (FD, 1997b).

Box 3.2  Classification of economic tree species

With an AAC of 500,000 m³, if only scarlet star species are felled it is estimated that the resource lifespan is 20 years (if the current felling limit system is respected). If scarlet and red star species are felled, the lifespan is 36 years under the same AAC, whilst the lifespan would be a little over 55 years if scarlet, red and pink star species are felled (FD, 1997a).
Figure 3.7 Timber trees* per hectare outside reserves

Source: Yeboah, 1997 - based on information from Planning Branch, Forestry Department.
Notes: *Greater than 30cm diameter at breast height (dbh). **See Box 3.2 for explanation of species classification.
Figure 3.8 Total timber trees* outside reserves

Source: Yeboah, 1997 - based on information from Planning Branch, Forestry Department.
Notes: *Greater than 30cm diameter at breast height (dbh). **See Box 3.2 for explanation of species classification.
After a period of deliberation, a period of 55 years over which the off-reserve timber stock should be “eked out” has been used by the Forestry Department as the basis for planning a district quota system (FD, 1997a). An AAC of 500,000m$^3$ has been set for off-reserve production. This means that the current total AAC is 1,000,000m$^3$. However, the present rates of off-reserve exploitation have been well over 500,000m$^3$ in each of the last five years (see Figure 3.6). Since on-reserve harvesting cannot be increased

**Figure 3.9 How long could the outside-reserve timber resource last?**

Examples of the Annual Allowable Cuts which would need to be respected to give different lifespans to the timber resource.

![Diagram showing the number of years over which a constant supply of timber could be maintained with different annual allowance cuts and timber tree species classification.]

Source: FD, 1997a
Notes: *Assumes that all Scarlet and Red star species, and 50% of Pink star species, are unutilised. ** See Box 3.2 for explanation of species classification.

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5 Although the concept of an Annual Allowable Cut does not strictly apply to off-reserve trees, the FD hopes to institute a system of off-reserve quotas which can be used to guide allocation of timber trees - (see section 6.3)
in the short term, the FD has stated that total harvest rates will have to fall at least until the “sustainability” of the off-reserve harvest can be secured (FD/FIMP, 1995).

3.4 Non-timber forest products

Forests contribute to all aspects of rural life providing food, fodder, fuel, medicine, building materials, and household items, as well as many more intangible benefits such as cultural symbols, ritual artefacts and sacred sites. In addition, trade in non-timber forest products (NTFPs) is an important economic activity in all corners of the high forest zone, involving a great number of people including gatherers, producers, and wholesale and retail traders, often operating within complex trading channels. Commonly traded NTFPs include (Abbiw, 1990; Falconer, 1992a):

- foods (snails, bushmeat, mushrooms, fruit and seeds);
- spices;
- chewsticks (*Garcinia* spp.);
- chewing sponge (made from the stems of the forest climbers *Acacia pentagona* and *A. kamarunensis*);
- cola nut (*Cola nitida*);
- charcoal;
- medicines (e.g. *Piper guineensis*, *Aframomum* spp, *Monodora myristica* and *Xylopia aethiopica*);
- cane used in building and to make baskets, furniture and other products (mostly *Eremospatha* spp, *Laccosperma opacum* and *Calamus deeratus*);
- household goods (sponges, mortars, pestles, utensils, wooden trays and grinders);
- food-wrapping leaves (mostly species in the *Marantaceae* family); and tool handles.

Falconer’s (1991) study of NTFPs revealed the importance of farm and fallow forest area as sources of NTFPs. Even where access to forest reserves...
is good, people tend to collect products from fallow and farm lands. Forest areas, essentially the reserves, are entered for rarer products such as medicines, canes and building materials unavailable on fallow lands. Furthermore, the NTFPs traded in significant quantity, such as bushmeat, canes, chewing sticks, food wrapping leaves and medicines, largely originate from reserves (Falconer, 1992b; Mayers and Kotey, 1996). These goods are far from being “minor” forest products - they represent the economic mainstays of some villages and many households and often provide the only income source for poor or marginalised families or those temporarily in need during the hungry season or in poor farming years.

Bushmeat is consumed regularly by a large portion of the Ghanaian population (Asibey, 1986). The Department of Game and Wildlife estimates that game is the main source of meat for 80 per cent of the rural population (Asibey, 1987). In the high forest zone, most species of mammal are eaten but the main bushmeat species in trade are all pests on farms.

Canes, which are derived from the stems of various climbing palm species, are widely used to produce household and commercial goods. The most common products are baskets; Falconer (1992b) estimated that over 90 per cent of all households in southern Ghana owned an average of 3.4 baskets. The market for cane furniture is ever-increasing.

Fuelwood and charcoal account for more than 75 per cent of all energy consumed in Ghana and an even higher percentage of energy for household cooking and water heating in rural and urban areas alike (Owusu et al, 1989).
Most of the fuelwood requirement of rural households in the high forest zone is collected by women from farm and fallow lands. Generally it is not scarce, although local scarcities arise due to the high fuelwood demands for processing of palm oil or distillation of “akpeteshie” gin (Mayers and Kotey, 1996). The World Bank (1988) estimated that fuelwood consumption in Ghana was 15.9 million m\(^3\) in 1988, and will rise to 17 million m\(^3\) by the turn of the century. It was estimated that there will be a 0.7 per cent per annum decline in wood availability in these years resulting in a fuelwood deficit of 11.6 million m\(^3\) by the year 2000. As noted, this deficit will be primarily in the savannah and transitional zones. Wood resources will also become increasingly scarce outside forest reserves in the high forest zone, while pressure for wood from within reserves will intensify.

Assessment of the status of the NTFP resource is very difficult, since the range of products exploited is so great and their sources so diverse. A limited NTFP inventory was instituted by the FD in 1991 to be carried out alongside the ongoing tree inventory in the forest reserves. NTFPs of key economic importance are also being included in the FD’s permanent sample plot programme. This will provide basic information on the growth and productivity of selected species. There is currently no programme of assessment of NTFP resources on farm and fallow lands outside forest reserves. Great local variability in the availability and use of NTFPs was found in a recent study, but a general perception of decline in availability of some NTFPs both inside and outside forest reserves was evident (Mayers and Kotey, 1996). Those widely noted to have declined were: canes, chewing sticks and forest bushmeat species.

### 3.5 Summary

Ghana’s forest resources are found in two general zones - the savannah woodlands zone of the north and the tropical high forest zone in the south. This study is focused on the latter. Forest with greater than 40 per cent canopy closure covers about 7 per cent of Ghana’s land area. Most of this area is contained within the system of forest reserves (1,634,000 ha), and some areas annexed primarily for wildlife conservation (136,000 ha). About half of the reserved forest is in “reasonable condition” in ecological terms, and the remainder is quite degraded. A new forest protection strategy has reclassified the areas within the reserves, assigning about 760,000 ha for timber production. It is thought that an Annual Allowable Cut of 500,000 m\(^3\) could be sustained from this area. Production is currently lower than this, but has been much higher in the recent past.
Outside the reserves forest resources are found in: small forest patches; secondary forests regenerating on agricultural lands; strips along rivers and streams; and a wide range of trees left standing or actively nurtured in agricultural fields. There is little land under tree plantation. Trees occurring outside the reserves collectively constitute a huge resource - for local people and the timber industry - and are important ecologically. A wide variety of non-timber forest products play a major role in livelihood strategies in the high forest zone. Many of the economically traded NTFPs originate from the forest reserves, whilst household-use NTFPs often originate from the farm-fallow areas. A recent off-reserve inventory estimates that there is 58 million m³ in good quality timber trees above current felling limits in the farm-fallow mosaic. If current felling limits and an of AAC 500,000 m³ could be enforced off-reserve (making a total national AAC of 1 million m³) the currently economic tree stock could last for 55 years, assuming no replacement. However, current exploitation is about double this figure and has been triple this figure in the recent past. The prospects for replacement and maintenance of timber trees off-reserve are discussed in sections 6 and 7.
Stakeholders and institutions - the people in question

4.1 Tenure of forest lands and resources - some basic realities

Forest reserves are owned by the landholding communities (represented by their chiefs). By statute, they are managed by the Forestry Department on behalf of the government of Ghana. While the establishment of forest reserves does not affect land ownership as such, management and control of land on reserves is by law exercised by the Forestry Department. Outside reserves, all timber resources are vested in the state in trust for the owners.

The establishment of the forest reserves severely curtailed the rights of indigenous peoples and adjoining communities to both timber and non-timber forest products (FD/IIED, 1994). But, the 1994 Forest Policy and Action Plan recognises the importance of “community rights” and various initiatives, notably those steered by the Collaborative Forest Management Unit of the Forestry Department, are under way to explore and implement strategies and mechanisms for enhancing the benefits that local people derive from forest reserves.

Outside reserves, previous law and practice marginalised farmers and local communities, was a disincentive to tree planting, and constrained sustainable management of the resource (FD/IIED, 1994). Recent policy and legislation aims at substantially enhancing the rights of farmers and local communities to the off-reserve resource (CFMU, 1995b; Smith et al, 1995; Smith, 1997a) (see section 6.3.5).

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6 Forest Ordinance, 1927 (Cap. 157); Concessions Act, 1962 (Act 124).
7 Concessions Act, 1962 (Act 124); Trees and Timber Decree, 1974 (NRCD 273).
4.2 Who are the stakeholders?

A number of persons and institutions have a statutory, customary or moral right to use or benefit from the forest, and the power - legal, traditional or moral - to control or regulate conduct and behaviour which has an effect on the forest, and others whose acts or omissions impact on the forest or whose livelihood or well-being is affected by the forest. All such persons and institutions may be said to have a stake in the forest and hence may be considered to be stakeholders. We can think of different “levels” of stakeholders. Some may be in close contact with the forest, others may not. But proximity or directness is not the sole determinant of legitimate interest, nor is the impact of a person’s actions on the forest.

In Ghana, stakeholders include traditional land- and forest-holding authorities, forest fringe communities, farmers, the state and its (forest sector) agencies and the timber industry. Rights and benefits, notably revenue distribution, are discussed further in sections 5 and 6. In addition to such direct stakeholders with rights, powers or direct impacts related to the forest however, it is now increasingly acknowledged that forestry and environmental issues and impacts are so far-reaching and pervasive that civil society groups in the universities, the labour movement, churches, journalists, political parties, students and environmental NGOs have legitimate interests and may be considered as stakeholders (Figure 4.1). Finally, on the outside of the notional concentric circles illustrated in the figure, would be the global community, with interests in global environmental services from forests.

4.2.1 Ministry of Lands and Forestry

The Ministry of Lands and Forestry is the body primarily responsible for the formulation and coordination of forestry and land policy. In recent years it has assumed a dominant position in the forest policy arena and has been the driving force behind the recent policy initiatives that have been noted. The Ministry gives direction to, and coordinates the activities of, all the sector agencies including the Forestry Department, the Game and Wildlife Department, the Forest Products Inspection Bureau, the Timber Export Development Board and also donor funding and projects within the sector. In its effort to provide leadership in forest policy matters, in the last few years the Ministry has established a Policy Planning Monitoring and Evaluation Unit. The constraints imposed by the civil service structure and an embargo on the recruitment of staff has however slowed down the development of the Unit and compelled the Ministry to rely on external consultants and donor project support for some of its initiatives on policy.
There is also a Forestry Commission, which does not fall directly under the Ministry. Originally established in the 1979 Constitution (and later re-established under PNDC Law 42 of 1982), its composition and role were redefined through a specific Act in 1993. This legislation gives the Commission a significant role, in theory, in providing advice, monitoring and coordination of forest policy on behalf of the Ministry. However, the Commission has not yet begun to fully exercise the potential of these provisions.

### 4.2.2 Forestry Department

The Forestry Department (FD) is the lead executing and operational agency responsible for forest management, protection and development. The District Forestry Office is the essential operating unit of the FD. In practice the major management effort by the FD in the high forest zone is geared towards control of logging, revenue collection and protection of the forest reserves, with the former receiving the bulk of the Department’s attention. The major, routine function carried out by the Department to protect forest reserves is the clearing of boundary lines. Other activities may arise from or augment this, such as the apprehension of illegal farm establishment and maintenance of fire breaks. Control and monitoring of NTFP extraction is limited to the issuing of permits and collection of fees for NTFPs harvested from forest reserves.
In more recent years, senior managers of the FD, backed up by a number of consultancy reports, have argued that the FD’s capacity for good forest management is over-constrained by the civil service structure, an embargo on the recruitment of staff at certain levels, an inadequate remuneration and reward system, and logistical difficulties. A programme of institutional reform is under way, and this is linked to consideration of transforming the Department into a more autonomous, partly self-financing, Forest Service outside the civil service.

According to Forestry Department senior managers, a Forest Service hived off from the civil service is necessary to allow development of a more “client-focused” approach whereby a range of forest management services will be offered to the landowners. The Service will prepare and police forest management plans, and the costs of this will be taken from stumpage revenue in addition to improved payments to landowners. It is even reported that outside the reserves the Service will, if necessary, compete with independent forestry consultants or NGOs to deliver the same services (Smith, 1997a).

### 4.2.3 Downstream regulatory frameworks

The Timber Export Development Board (TEDB) is responsible mainly for market intelligence and promotion of Ghana’s timber exports. The Forest Products Inspection Bureau (FPIB) is responsible mainly for: checking logs once they leave the forest, for which it issues a Log Measurement Certificate (LMC); the development of timber grading rules; registering different types of operations; and export vetting. Especially since the introduction of the Interim Measures (see section 6.3), there has been overlap in functions between the FPIB and the FD. However, the FPIB has plans to work with the FD to improve its current log tracking system by introducing hand-held computers and a stump/log tagging or labelling method which facilitates electronic recording of information linking the log with the stump. Coded tags would be provided to each bundle of wood products graded and inspected by FPIB graders. Random sample checking will also be included (Baharuddin and Simula, 1997).
4.2.4 Logging and wood processing industry

In 1994, there were 810 extant concessions (282 in reserves, 528 outside reserves) divided amongst 413 concession holders (FD/FIMP, 1994). Many concession holders are small-scale companies employing less than 10 persons. It is estimated that 50 to 70 per cent of the timber harvest originates from these small companies (General Woods, 1993; GB Forestry Commission, 1995).

In addition to concession holders, independent chain saw operators and “bushmillers” have accounted for a significant proportion of trees felled outside reserves, and in some cases have been (illegally) active inside reserves. Chain saw operators may be preferred by farmers to loggers since there is little extraction disturbance and, not having a legal right to the trees, the farmers are in a much better position to arrange compensation or some other payment because they can demand or confiscate some of the lumber (Mayers and Kotey, 1996).

Few smaller logging companies have a processing capacity. The majority of the timber industry’s value is captured by the larger timber millers, particularly those exporting logs or processed products. In 1992 there were 110 saw-milling entities, 9 plywood mills, and 15 veneer mills in Ghana. In 1996, lumber constituted about 66 per cent of forest product exports by volume and about 56 per cent in terms of earnings. Companies involved in the shipment of air-dried lumber rose from 87 in March 1996 to 93 in the same month in 1997. Those exporting kiln-dried lumber rose from 32 to 48 in the same period, “a significant endorsement of the Ministry’s policy on increased value addition” (Kofi Smith, Ministry of Lands and Forests, quoted in TTJ [1997]). Sliced and rotary veneers delivered about 15 per cent and 22 per cent by volume and value respectively in 1996. In terms of tertiary processing, there are about 200 registered furniture manufacturers, almost all producing for the domestic market, and about 20 other entities producing flooring, doors and profile boards (General Woods, 1993; GB Forestry Commission, 1995).
The over-capacity of saw-milling, given the available wood supply, has been highlighted by observers since the early 1990s. However much high-value timber continues to flow into low-value-added mills. One study estimated the timber industry’s potential saw-milling capacity at 2 million m³ a year (versus the current AAC of 1 million m³ a year) (GB Forestry Commission, 1995). A more recent assessment has put the figure at about 3,700,000 cubic metres a year. Factors which appear to maintain this situation include: competition between the various sectors of the timber industry; and the high political profile and lobbying power of some sections of the industry. However, according to the Ministry of Lands and Forestry, serious consideration is now being given to decommissioning obsolete and inefficient mills (Smith, 1997a).

4.2.5 District assemblies, traditional councils and stool\textsuperscript{8} chiefs

Since 1988, district assemblies have been the main decision making body of local government. They consist of elected representatives and some nominated members from all the towns and villages in each of the 110 districts in Ghana. In their capacity to pass local by-laws and construct development programmes, some assemblies have been active in environmental and forestry matters. Many others, however, have treated the timber industry and, increasingly, NTFP exploitation purely as a source of revenue. In some districts, the assembly has been active in preventing the continuing operation of those timber companies which have significant royalty arrears, and monitoring trucks and machinery. Assemblies are also playing an important role in the implementation of the Interim Measures to control timber exploitation off-reserve, and are becoming involved in the Forestry Department’s new approach to district-based strategic planning, particularly for the off-reserve areas (see sections 6.3 and 6.4).

Traditional councils are bodies composed around a paramount chief and consist of a number of stool chiefs. The traditional councils and stools, through a combination of customary and statutory law, are generally the landholding authorities in the high forest zone. As described earlier, government has by legislation assumed the right to exercise control of timber tree exploitation, despite customary and common law “ownership” of timber trees resting with the stools. Successive pieces of legislation have left traditional authorities with little formal decision-making powers in forest management despite their legal position as owners. Recent policy and proposed legislation is beginning to redress this situation (see sections 5 and 6).

\textsuperscript{8} The sitting stool is the symbol of chieftancy across southern Ghana.
4.2.6 Farmers and community-level institutions

Farmers in many areas are active managers of trees. Trees are preserved in the farming system primarily for their positive effects on crops or on soil conditions. Farming in southern Ghana is predominantly oriented towards a bush fallowing system which relies on the regeneration of forest through the maintenance of a root mat of pioneer forest species. The farmer is essentially concerned to manage the recycling of nutrients from soil to woody vegetation and back. Trees are integrated into the farming system through cycles of pollarding and light burning to encourage coppice regrowth (Amanor, 1996a).

There is an important difference in the perspective of foresters and farmers in that foresters are concerned with primary forest species that have economic value whilst farmers’ main focus is on pioneer forest species often with much less economic (timber) value (CFMU, 1995b). In addition, as noted above, until recently the tree ownership situation meant that it was not surprising to see farmers actively destroy or prevent the growth of timber trees on their farms.

Furthermore, entering into and carrying out any activity within reserves is unlawful without the prior written authority of the Forestry Department. This extends to the collection or extraction of NTFPs by communities living near forest reserves, national parks and game production reserves. These communities often resent their legal exclusion from resource use and largely disregard the rules.

The result of much colonial and post-colonial policy and legislation has also been to give what little rights and benefits central government was disposed to confer on local interests to the formal land and forest-holding authorities (chiefs) and to formal local government, at the expense of farmers, NTFP gatherers, other forest users and local communities nearer to the resource. There has been some breakdown in the mechanisms for ensuring transparency and accountability within the indigenous social and political structures, whilst modern local government has been given increased responsibilities and political backing. Traditional land and forest-holding authorities have tended to resent the proportion of forest and land revenue which goes to formal local government. Meanwhile the distance between those nearest to the forest and both forms of local governance has increased. These frictions have generally had a detrimental effect on the forest.

However, despite this web of disabling old policies and laws, and more recent frictions in governance, communities and local institutions can
achieve working cooperation in forest management, to the benefit of all parties (Falconer, 1991; Norton, 1991; Antwi, 1992; Mayers and Kotey, 1996). Recent policy and proposed legislation is widening the space for farmer and community participation in forest management (see sections 5 and 6).

### 4.2.7 Other stakeholders, informal networks and peer groups

The Ghanaian NGO community includes a wide spectrum of organisations ranging from single-community welfare groups to lay or church-based multi-community NGOs with a strong development orientation, as well as foreign NGOs. In recent years there has been an upsurge in NGO concern for environmental issues. However, the NGO sector is relatively young, which is likely due to a strong post-independence centralisation of social services within government, the shortage of foreign NGOs and an absence of role models (as found in other African countries). However since the 1980s, NGO development benefited from a more open government attitude, economic decline and consequent perceived need for greater community and NGO activity, and gradual development of international connections.

International NGOs have been influential with respect to donor policies in the forest sector. The World Bank and ODA (now DFID) were much criticised by the international arms of Friends of the Earth and the World Wide Fund for Nature in the late 1980s for the Export Rehabilitation Programme (see section 2.6) and related misuse of public funds (Friends of the Earth, 1992). Subsequent World Bank and ODA support to forest inventories, management and institutional change was, at least in part, stimulated by responses to criticism from these international NGOs (John Hudson, 1998. Personal communication).

Some NGOs have now been involved in forestry projects for up to 20 years: for example the Adventist Development and Relief Agency and USAID fund a substantial tree-nursery and woodlot project based essentially on a food-for-work programme. Other religious groups are also active in tree planting activities in some areas. The 31st December Women’s Movement, founded in 1988, encourages and supports its members to organise themselves at the village, zonal and regional levels, and many groups within the Movement are involved in tree-planting projects and processing of NTFPs. As it is now widespread and highly motivated in many rural areas, it appears that the Movement may become an important force for community forestry.

Until now, other “civil society” groups, such as trade unions and university departments, have not been involved in forestry and environmental issues. The fact that the Trades Union Congress has not been active in forestry
issues perhaps reflects the non-unionised nature of the labour force in the forestry sector. Some individual academics - botanists, zoologists, sociologists, applied geographers, etc - have been influential as individuals, through consulting and activities within NGOs. The influence of academics, professionals in various sectors, and civil society advocacy generally seems likely to increase as the profile of environmental and forestry issues rises.

Informal networks and groups have also played key roles at various times in shaping opinions which have influenced the development and implementation of forest policy. One such network is the annual meetings of professional foresters of the Forestry Department. Many operational policy decisions have emanated in the past from these meetings. In addition there have at various times been smaller groups of foresters within the Forestry Department, and also in academia, research bodies, the Forestry Commission and local consultancy companies, who have exercised considerable influence on policy and practice.

One informal group of note, is a peer group of individuals of similar age, education and early professional roots in the pre-independence period, whose forestry careers span the second half of this century. These individuals have been leading figures in the main forest operational institutions and have been key players in the practice of policy. For example, Johnny Francois, a product of Achimota High School and Edinburgh University, joined the Forestry Department in the 1950s and was Chief Conservator of Forests from the mid 1970s until he retired in 1995 (he is still active in consulting). A contemporary of Francois, J.G.K. Owusu, also began his professional career with the Forestry Department before becoming Principal of the Sunyani Forestry School (where most Forestry Department technical officers receive their training), then Acting Director of the Institute of Renewable Natural Resources, at the University of Science and Technology (where most professional Ghanaian foresters receive their training). He has also been a member of the Forestry Commission for the past 10 years or so. Another contemporary, Albert Ofosu-Asiedu, was director of the Forestry Research Institute of Ghana for many years up to 1993, and he returned to this job in 1996. Kwabena Tufuor, like Francois and Owusu, was among the earliest group of Ghanaian professional foresters. After a stint in academia abroad he returned in the late 1980s and became the Chief Administrator of the Forestry Commission before retiring in 1996. Others, such as Dr. E.A. Asibey, long-time head of the Game and Wildlife Department, have also been part of this influential peer group.

In the last five years, policy and institutional changes have been influenced by a relatively small number of people in the Ministry of Lands and
For forestry and at the headquarters and Planning Branch of the Forestry Department. These individuals have played instrumental roles in effecting key changes. These changes are discussed further in sections 5 and 6.

4.3 Summary

Forest reserves are owned by landholding communities - represented by their chiefs - but, by statute, they are managed by the Forestry Department on behalf of the government. The establishment and management of the forest reserves curtailed the rights of local people to both timber and non-timber forest products. Outside reserves, all timber resources are vested in the state in trust for the owners. In practice this has marginalised farmers and local communities, and has acted as a disincentive to tree planting and management of the resource. However, recent initiatives in both policy and practice have begun to substantially enhance the rights of farmers and local communities in both on- and off-reserve contexts.

Stakeholders are those who have rights and interests in, or impacts on, the forests. In Ghana those with rights and direct interests include: traditional land and forest-holding authorities, forest fringe communities, farmers, the state and its forest sector agencies, and the timber industry. Those with a less direct interest, but none the less some “stake” include civil society groups - in the churches and NGOs for example - and even the global community.

The Ministry of Lands and Forestry (MLF) is government’s central policy body, while the Forestry Department (FD) is the main operational agency in forestry. Informal networks of professional foresters have been particularly influential on the practice of forestry over the years. The FD has recently embarked on a process aimed at a change in orientation - away from a role emphasising provision of timber for the industry, towards provision of services to the landholders. The industry consists of a few large, and many small, concession operators; and a wide range of millers and processors. There is considerable over-capacity in timber milling, relative to the timber resource which MLF and FD wish to make available. Traditional and modern local governance have been sidelined in the past but are re-emerging as key players in the management of the resource. NGOs are playing increasingly positive roles. Farmers are active users and managers of trees and forest products - and if tenure and technical constraints can be overcome, have much potential for sustaining forest resources.
This section introduces the main laws and policy statements which together have made up “formal” government policy over the years. We describe some of the factors which led to changes in formal policy and the processes by which these changes have taken place.

5.1 Formal forest policy until the 1980s

There have been two formal government forest policy statements in Ghana: one formulated in 1946 and approved by the Governor in Council in 1948; and the second announced in 1994 as the Forest and Wildlife Policy.

The 1948 Policy, which remained “in force” for nearly half a century, has had a pronounced impact on forests and people. Yet many policy positions and instruments preceded it and helped to shape the formal policy at the time it was formulated.

• **Indirect Rule.** This expedient of colonial policy resulted in the colonial administration ruling through traditional chiefs, who were organised into traditional councils with powers to maintain law and order through their own courts and by-laws. They also collected revenue and taxes, sometimes for the colonial administration.

• **Land and forest ownership.** Neither the governments of the colonial administration, nor later of independent Ghana, owned any land or forest. All attempts to legislate to obtain power to create public lands were stoutly resisted by the African elite and land-owning chiefs who, incidentally, had strong support from the liberal intelligentsia of Britain. Nevertheless, forest reservation was gradually imposed in the 1920s and ’30s (see section 6.1).
• **Promotion of cocoa.** The introduction, growth and tremendous success of cocoa as a cash crop, entirely within the high forest zone, led to land use decisions which impacted enormously on the forests. Certainly there was little doubt that uncontrolled expansion of forest clearance for cocoa, supplemented ultimately by timber exploitation (see below), posed an environmental threat, serious enough to undermine the viability of the cocoa crop.

• **Introduction of timber exploitation.** Although this was at a low level in the early years, it took off before any section of the administration was in place to regulate the activity. This was at a time and in places where there was no access by either rail or road. Limited to the best mahoganies (*Khaya* and *Entandophragma* spp.), these had to be situated within man-powered hauling distance to sizeable rivers. By means of conveyance on wooden corduroy trails, these were hauled to river banks to await the monsoons, whence they were plunged into the river to begin a haphazard journey to the coast.

These factors deeply affected policy and professional forestry thinking within the colonial administration (see sections 2.2 and 6.1). By the end of the Second World War, post-war national demands for reconstruction in Europe, increased local demands, improved access to the hinterland and the relentless expansion of the cocoa frontiers, called for a formal forest policy.

The 1948 Policy sought to capture the latest forestry thinking and the accumulated colonial experience of the previous 100 years. Thus, the focus was on maintaining the protective purposes of the reserves, and the concept of productive potential and value on the basis of a sustained timber yield was introduced. From there, the preoccupation with developing scientific systems of management to increase the timber productivity of the forest, was but a short step.

**Box 5.1 Ghana’s 1948 Forest Policy**

The main objectives of the 1948 Forest Policy were:

- Conservation and protection of the forest environment i.e. protection of major water catchment areas, maintenance of a micro-climate for production of major agricultural crops
- Management of the permanent forest estate on a sustained yield basis
- Promotion of research in all aspects of scientific forestry

Emphasis was thus on protection and management of the reserves, with the implicit expectation that all forest outside the permanent forest reserves would, ultimately, be converted to agricultural land.
5.2 The legislative framework

The Forest Ordinance of 1927 is still the principal statute governing forest reserves. The Ordinance vests in central government the power to constitute reserves on all land. In theory, the constitution of an area as a forest reserve did not transfer title to the land and the forest to the state. But the management and control of the reserve is normally held by the government and exercised by the Forestry Department on its behalf. An alternative mode of management “by the owner or owners under the direction of the Forestry Department” is also provided for under the 1927 Ordinance but has never been pursued actively by the Forestry Department (see section 6.1).

The policy of this Ordinance and subsequent legislation - like the Forest Protection Decree, 1974 as amended by the Forest Protection (Amendment) Law 1986 - has been to deny local communities and villagers any meaningful rights within reserves in spite of the fact that the reserves may be subject to “Admitted rights” and to be managed “for the benefit of the owner or owners”. Local communities and villagers are therefore generally prevented from engaging in any act within the reserve without the prior written authority of the Forestry Department. These actions include: felling, uprooting, tapping or injuring any tree or timber; making a farm or erecting a building; obstructing any river, stream, canal or creek; hunting or shooting any game or wildlife; fishing, poisoning water or setting traps or snares; or collecting, processing, conveying or removing any forest produce. The penalty upon conviction of any of these offences is a fine or imprisonment. Local communities and inhabitants have tended to see reserves as a removal of their rights and benefits, and an expropriation of their land and forests.

The Forest Ordinance was modified in material respects by the Concessions Act, 1962 which provided that all timber resources, together with all land declared to be forest reserves or subject to timber concessions, have been vested in the state in trust for the communities concerned.

Royalties from timber trees are presently collected by the Forestry Department. The distribution of this revenue is spelled out in Ghana’s 1992 Constitution\(^9\):

- 10 per cent to the Administrator of Stool Lands for administrative expenses
- 55 per cent (of the remainder) to the relevant district assembly
- 20 per cent (of the remainder) to the relevant traditional council
- 25 per cent (of the remainder) to the relevant landowning stool.

\(^9\) Article 267(6) of the 1992 Constitution. In practice the Forestry Department currently retains 70 per cent of revenue received from logging in forest reserves and the balance is passed on to the Administrator of Stool Lands for distribution according to the formula noted in the text. Since taking over the administration of off-reserve resources from the Lands Commission in 1995, the Forestry Department has retained 10 per cent of the off-reserve revenue and passed the balance on to the Administrator of Stool Lands.
Table 5.1  Formal policy and legislative landmarks

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
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<tbody>
<tr>
<td>1874</td>
<td>British Colonial Office begins to develop a universal forest conservation policy to avert a perceived worldwide threat to the economic base of colonial rule from deforestation (Grove, 1994, cited in Smith, 1996)</td>
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<td>1908</td>
<td>H.N. Thompson’s Report on Forestry in the Gold Coast recommended the establishment of forest reserves, the introduction of a system of property marks and the establishment of a Forestry Department.</td>
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<td>1909</td>
<td>Establishment of the Forestry Department to spearhead the reservation effort and regulate the emerging timber industry</td>
</tr>
<tr>
<td>1909</td>
<td>Timber Protection Ordinance, 1909 provided for regulation of logging through the introduction of a system of property marks</td>
</tr>
<tr>
<td>1911</td>
<td>Forest Ordinance, 1911 provided for the establishment of forest reserves by the colonial government. It was, however, never used.</td>
</tr>
<tr>
<td>1927</td>
<td>Native Authorities Ordinance No.18 of 1927 (Cap 111) established a system of local government which revolved around a paramount chief and his traditional council of elders - “native authority”. These authorities had the power to constitute forest reserves under their by-laws.</td>
</tr>
<tr>
<td>1927</td>
<td>Forest Ordinance, 1927 (Cap. 157) provides for the constitution and management of forest reserves. It is still in force.</td>
</tr>
<tr>
<td>1939</td>
<td>Concessions Ordinance, 1939 (Cap. 136), and earlier similar legislation, provided for a system of grants of timber harvesting rights and the determination and collection of revenue over both reserve and off-reserve forest by the traditional land and forestholding authorities.</td>
</tr>
<tr>
<td>1948</td>
<td>Forest Policy. This first formal forest policy provided conservation and protection of the forest environment, management of the permanent forest estate and the ultimate liquidation of the off-reserve forest.</td>
</tr>
<tr>
<td>1949</td>
<td>Trees and Timber Ordinance, No.20 of 1949 (Cap. 158) sought to regulate and control the timber trade through the registration and issuing of property marks to concession holders and the issuing of licences and permits for the felling of forest trees.</td>
</tr>
<tr>
<td>Year</td>
<td>Law Title and Year (Act No.)</td>
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<tr>
<td>1951</td>
<td>Local Government Ordinance, 1951 (No. 29)</td>
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<td>1959</td>
<td>Protected Timber Lands Act, 1959 (Act 34)</td>
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<tr>
<td>1962</td>
<td>Administration of Lands Act, 1962 (Act 123)</td>
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<td>1962</td>
<td>Concessions Act, 1962 (Act 124)</td>
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<td>1974</td>
<td>Trees and Timber Decree, 1974 (NRCD 273)</td>
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<td>1974</td>
<td>Forest Protection Decree, 1974 (NRCD 243)</td>
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<td>1983</td>
<td>Control of Bush Fires Law, 1983 (PNDCL 46)</td>
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<td>1986</td>
<td>Forest Protection (Amendment) Law, 1986 (PNDCL 142)</td>
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<tr>
<td>1990</td>
<td>Control and Prevention of Bushfires Law, 1990 (PNDCL 192)</td>
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<td>Year</td>
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<tr>
<td>1993</td>
<td>Article 269 of the 1992 Constitution provides for the establishment, composition and functions of the present Forestry Commission.</td>
</tr>
<tr>
<td>1993</td>
<td>Forestry Commission Act, 1993 (Act 453) established the present Forestry Commission</td>
</tr>
<tr>
<td>1994</td>
<td>Forest and Wildlife Policy. The present formal policy on forest and wildlife aims at “conservation and sustainable development of the ...resources for maintenance of environmental quality and perpetual flow of optimum benefits to all segments of society”.</td>
</tr>
<tr>
<td>1994</td>
<td>Trees and Timber Amendment Act, 1994 (Act 493) makes provision for the biannual renewal of property marks and the use of levies and other forest fees in the regulation of the timber trade. Under this Act, levies have been imposed on the export of logs and the fee for the renewal of property marks substantially increased.</td>
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<tr>
<td>1995</td>
<td>Interim Measures to Control Illegal Timber Harvesting Outside Forest Reserves. This introduced a new system for the harvesting of off-reserve timber introducing the farmer’s right of veto and payment of compensation for crop damage.</td>
</tr>
<tr>
<td>1996</td>
<td>Master Plan for the Development of the Forestry Sector. Prepared by the Ministry of Lands and Forestry, this is a comprehensive plan with strategies, proposed actions, inputs, outputs and time frames for implementing the Forest and Wildlife Policy.</td>
</tr>
<tr>
<td>1998</td>
<td>Timber Resources Management Bill introduces Timber Utilisation Contracts for any timber harvesting and enhanced rights for landowners and farmers over harvesting of trees on their land&lt;sup&gt;10&lt;/sup&gt;</td>
</tr>
<tr>
<td>1998</td>
<td>Proposed Forestry Act. This proposal aims at consolidation and replacement of all existing forestry legislation. It proposes clear identification of land- and forest-holding communities as the primary clients of a proposed Forest Service, which will pursue sustainable forest management. (see section 6.3.5)</td>
</tr>
</tbody>
</table>

Section 6.2 discusses the history and impacts of the royalty system. It should be noted here that there are few direct benefits to local inhabitants from royalties.

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<sup>10</sup> At the time of going to press the Timber Resources Management Bill had been approved by Parliament, but Presidential Assent was yet to be received. The study team are not aware of any substantive changes made to the Bill during its passage through Parliament.
5.3 Discontent with policy and legislation in the 1980s and early 1990s

In the 1980s, government commentators increasingly drew attention to their perceptions of failings in the policy and legislation system. These included the excessive centralisation of forest management, the non-integration of rural production systems into forest management, the “acceptance” of the ultimate demise of off-reserve forests and the absence of a role for communities and industry in forest management (Smith *et al*., 1995; Tufuor, 1996). Expressed “failings” or “misdirections” can now be summarised as follows:

- Forest management excessively centralised in the state. Little or no role was accorded to the owners of the resource, the timber industry, farmers, and fringe communities who lived by and depended on the resource.

- Local economies were not integrated with the “forest economy”. This tended to foster confrontation, bitterness and resentment towards “forestry” and the Forestry Department. In many situations, logging destroyed farmers’ food and other crops without adequate compensation.

- The policy for the off-reserve forests was flawed. It sought to encourage the maximum utilisation of timber resources and the conversion of the areas not dedicated to permanent forestry to agricultural activities, and in the process accelerated deforestation.

- Wildlife conservation, management and development were not seen as an integral part of forest resource management; in some cases, productive forest reserves were expropriated as game reserves or national parks, and the divide between agencies responsible for forestry and wildlife widened.

- There were no explicit strategies for the achievement of aims and objectives.

These frustrations led to some in-house Forestry Department review exercises, beginning around 1984. These review activities also involved a few “insiders” who had gone “outside”, notably individuals such as J.G.K. Owusu, Kwabena Tufuor (see section 4.2.7) and some Ghanaian consultants. But a more concerted process of policy rethinking awaited developments in the late 1980s.
5.4 The 1994 Forest and Wildlife Policy

5.4.1 The process of policy development

The process of formal policy revision that culminated in the 1994 Forest and Wildlife was accelerated in the late 1980s. The World Bank preparatory missions for the Forest Resource Management Project (FRMP) stated that the 1948 Policy was inadequate for dealing with the problems of a dwindling forest resource, inadequate revenue and weak institutions in the closing decades of the century. Their concerns also led to the revision process being taken out of the hands of the Forestry Department, initially into a secretariat in the Ministry of Lands and Natural Resources as it then was, and later to the Forestry Commission.

The Forestry Commission, at that time set up under PNDC Law 42, consisted of persons hand-picked by the government principally to advise on policies relating to forestry and wildlife. The methodology that the Commission decided to adopt in the revision process was a reflection of:

- its membership; that is, persons neither nominated by nor representing, sector institutions;

- its nature as an advisory body; independent of the sector Ministry and its agencies, and giving government an opinion on all matters, including cross-sectoral issues relating to forests and wildlife;

- its recognition of processes such as development of the National Environmental Action Plan (which was under way in Ghana at this time) and the Tropical Forestry Action Programme under way in several countries at the time, both of which required high and visible level of public participation.

The Forestry Commission-initiated process started with a symposium held in April 1989. Of the 92 registered participants from 30 institutions, about 40 per cent were from the public forestry institutions (FD, FC, FRI, TEDB). The Universities were strongly represented as were the Forest Industries. Other institutions represented included the Ministries of Agriculture and Local Government, Lands Commission, Fire Services, the Investment Centre, the Tourist Board, the National Energy Board, Environmental Protection Council, the national bank, a mining corporation, several local and foreign NGOs, and donors.
An under-represented group in this symposium was the traditional rulers/landowners, only one of whom attended (although it is understood that more than one was invited). No one attended as a farmer or as a member of the communities living near, using and/or dependent on the forests. Thirty-two papers were presented under six sub-themes; these were later published by the Forestry Commission (Owusu, 1989).

The Commission planned wider public fora to discuss the drafts emanating from the symposium, but these did not eventuate, largely because the Ministry responsible for forestry and wildlife perceived an urgent need to place a revised policy before government. A draft policy was discussed and refined at a workshop of a relatively small number of technocrats in 1992. A number of other fora within the forestry sector were held, and together with much informal consultation over the five years it took to get a revised Policy approved, a wide range of technocrats and consultants was involved in its formulation and drafting.

However, considering a key thrust of the new policy was all about enabling wider participation (see below), the process remains notable for its lack of articulation with any “man on the farm” or woman NTFP gatherer near the forest. It remains to be seen whether this represents an “Achilles Heel” for the future.

The 1994 policy presents specific principles on rights of local access to basic natural resources, local democracy, participatory management and protection of forest and wildlife resources. Also notable is a total shift from the 1948 policy’s expectation of progressive utilisation without replacement of unreserved forest resources to one of “sustainable management of unreserved forests”.

Box 5.2 Ghana’s 1994 Forest and Wildlife Policy

The aim of the 1994 Forest and Wildlife Policy is “Conservation and sustainable development of the nation’s forest and wildlife resources for maintenance of environmental quality and perpetual flow of optimum benefits to all segments of society” (MLF, 1994).

The objectives are to:

- Manage and enhance Ghana’s permanent estate of forest and wildlife resources for preservation of vital soil and water resources, conservation of biological diversity and the environment and sustainable production of domestic and commercial produce;

- Promote the development of viable and efficient forest-based industries, particularly in secondary
Box 5.3 Consultative policy development - Ghana style: formulating a National Land Policy

It is interesting to compare the formulation process of the Forest and Wildlife Policy with the later consultative process instituted by the Ministry of Lands and Forestry (MLF) in formulating a new National Land Policy.

Ghana has never had a formal land or land use policy. Land management has been an ad hoc and reactive process. In 1993 MLF initiated a process for the formulation of a national land policy. The MLF stated that the absence of an agreed policy had made it difficult to make or justify decisions on competing policy choices, had made long-term planning difficult, had made coordination difficult, had engendered departmental and sectoral jealousies and bickering, slowed down the land delivery process and generally hampered development.

The Ministry established a National Land Policy Committee in January 1994, to undertake this task. The Committee was made up of representatives (the MLF selected the institutions but not the representatives) of:

- Lands Commission Secretariat
- Department of Town and Country Planning (under Ministry of Local Government)
- Survey Department
- Forestry Department
- Department of Wildlife
- Environmental Protection Agency (under Ministry of Environment, Science and Technology)
- Forestry Commission
- National Development Planning Commission
- Land Valuation Board
- National House of Chiefs (two representatives)
- Water and Sewerage Corporation
- Ministry of Environment, Science and Technology
• Ministry of Agriculture
• Department of Geography and Resource Development (University of Ghana)
• Faculty of Law (University of Ghana)
• Land Administration Research Centre (University of Science and Technology)
• Department of Land Economy (University of Science and Technology)
• Water Resources Research Institute
• Soil Research Institute

The full Committee elected its chairman (there was not a single woman on the Committee) and met on four occasions to determine its **modus operandi**, delineate the parameters of the assignment, assemble relevant data, information, previous studies, etc. The Committee then divided into 5 subcommittees: Ownership and Tenure, Use and Conservation, Administrative and Institutional Arrangements, Inventory and Information, and Legislation. Each subcommittee was tasked with preparing a report on the **status quo**, causes, problems, possible solutions and possible policy options available to government. Subcommittees had powers to co-opt and consult others and some did. Subcommittees deliberated and worked for about three months. Reports were modified and amended by the full committee. A small group of three was appointed to synthesise these subcommittee reports into a final report. The final report was further summarised into a draft policy document and both were approved by the full committee.

The MLF then appointed a consultant to draft a policy document as the basis of formulating a policy. The Draft was circulated to a wide number of stakeholders including those represented on the National Land Policy Committee and: the Ghana Institute of Surveyors; Ghana Bar Association; Institute of Planners; Institute of Renewable Natural Resources; all Regional Lands Commissions; all Regional Houses of Chiefs; the Parliamentary Sub-Committees on Lands and Forestry, Food and Agriculture, Environment, Science and Technology, Mines and Energy, and Local Government; the Ghana Real Estate Developers Association (GREDA); and the Ghana Cocoa, Coffee and Sheanut Association. Many stakeholders including the National House of Chiefs submitted memoranda on the Draft. A new, draft policy was then prepared by the consultant and Lands Commission staff and discussed at a three-day workshop in April 1997. The workshop was attended by the institutions represented on the National Land Policy Committee and: a representative of each regional lands commission; the President or representative of each regional House of Chiefs; NGOs; representatives of migrant farmers’ groups; representatives of GREDA; the Managing Director of the Home Finance Company; and some individual experts.

At the end of the workshop, the MLF and Lands Commission undertook to finalise a draft national land policy for submission to the President. In mid 1997, the Deputy Minister for Lands and Forestry announced that the draft would be submitted to the President for his approval soon. In practice the President would also consult with Cabinet. It is not clear whether the Land Policy will be submitted to Parliament since it is not intended to be law (the 1994 Forest and Wildlife Policy was not submitted to Parliament).
5.4.2 “Collaborative management” and the 1994 Policy

Even though of fairly recent origin in the formal forest sector, the concept of coordinated participation has undergone considerable evolution in Ghana (see section 6). In the 1980s and early 1990s “social forestry” or “rural forestry” meant Forestry Department efforts to encourage communities to establish village, communal, individual or family woodlots. Most of this effort was focused on the northern savannah zone and had considerable support from donors such as the World Bank and FAO. Although inspired in part by the reported “success stories” of Korea, Thailand, Nepal, the Philippines, and some states in India, social forestry in Ghana never made a concerted effort to build up or facilitate the village level organisations that underpinned the Eastern success stories.

In its 1992-initiated guise, collaborative management - a term which Ghana seems to have been first to popularise - could be seen as an initiative “whose time had come”. Collaboration was described by the FD in 1993 as “any form of interaction between local people and the Forestry Department which enhances the management of the resource and improves the flow of benefits to local people” (CFMU, 1993). Factors which contributed to the emergence of the approach included:

• recognition at top level that central government did not have the resources to police the forests adequately against illegal loggers or the alienated local communities; nor the resources to support effective management;

• genuine concern by the Chief Conservator of Forests about the erosion of the
Box 5.4 Principles and strategies of the 1994 Policy enabling “collaborative management”

The 1994 Forest and Wildlife Policy is an admirably brief document which gives considerable emphasis to involvement of people in forest management. “Guiding principles” include:

- “The rights of people to have access to natural resources for maintaining a basic standard of living and their concomitant responsibility to ensure the sustainable use of such resources;
- The need to incorporate traditional methods of resource management in national strategies where appropriate;
- A share of financial benefits from resource utilisation should be retained to fund the maintenance of resource production capacity and for the benefit of local communities;
- The need to develop a decentralised participatory democracy by involving local people in matters concerned with their welfare;
- In view of the importance of local people in pursuing these principles, the Government proposes to place particular emphasis on the concept of participatory management and protection of forest and wildlife resources and will seek to develop appropriate strategies, modalities and programmes in consultation with relevant agencies, rural communities and individuals” (MLF, 1994).

In pursuit of the objectives of the policy, a number of “strategies” are earmarked for development; these include:

- “Promote public awareness and involvement of rural people in forestry and wildlife conservation so as to maintain life-sustaining systems, preserve scenic areas and enhance the potential of recreation, tourism and income-generating opportunities;
- Develop effective capability at national, regional and district levels for sustainable management of forest and wildlife resources;
- Develop consultative and participatory mechanisms to enhance land and tree tenure rights of farmers and ensure access of local people to traditional use of natural products;
- Initiate and maintain a dialogue with all interests through a national advisory forum (i.e. the Forestry Commission) and related district conservation committees to ensure active public participation in forestry and wildlife matters;
- Initiation of continued contract and liaison with local authorities and communities to pursue integrated development activities related to sustainable resource management” (MLF, 1994).
Taungya is a system, first promoted in South Asia, used in plantation development in which villagers cultivate land around trees during the first few years it takes for the trees to become established. In Ghana, the system was used to try and establish plantation timber within forest reserves, often around the edges near villages. Success was generally low in terms of plantation area established, although there are some notable exceptions. Where successful, a good relationship between the Forestry Department and the participating communities was key (see Mayers and Kotey, 1996).

On-reserve, collaborative forest management to date has involved field programmes pursuing a number of experiments, and an attempt to consolidate learning within the FD on:

- the involvement of communities and user groups in the management of NTFPs;
- review of the taungya\textsuperscript{11} idea and the possibilities of local people contributing to forest reserve rehabilitation;
- the scope for community involvement in managing protected areas;
- involvement of local communities in reserve management and management planning;
- development of collaborative processes and institutions.

After a review of the nature and dynamism of the NTFP resources and the operation of the NTFP permit system, the FD’s DFID-supported Collaborative Forest Management Unit (CFMU) has recommended the gradual abolition of the permit system and the development of specific NTFP management programmes and agreements with NTFP users (CFMU, 1995a).

Another area in which the CFMU has suggested community involvement is industrial plantation development on degraded reserves (CFMU, 1995a). In the past, some good plantations were established in Ghana, often with

\textsuperscript{11} Taungya is a system, first promoted in South Asia, used in plantation development in which villagers cultivate land around trees during the first few years it takes for the trees to become established. In Ghana, the system was used to try and establish plantation timber within forest reserves, often around the edges near villages. Success was generally low in terms of plantation area established, although there are some notable exceptions. Where successful, a good relationship between the Forestry Department and the participating communities was key (see Mayers and Kotey, 1996).
foreign investment. However they were largely neglected and later over-exploited once the value of established timber stocks became apparent. In recent years there has been little concerted effort to engage the energies, and the capital investment, of non-government stakeholders in plantations. However the importance of plantation development has recently been highlighted by the Ministry of Land and Forestry’s Master Plan for Development of the Forest Sector (MLF, 1996), whilst a report by the United Nations Industrial Development Organisation in 1997 stated that “without rapid development of plantations, Ghana could well become a net importer within 30 years” (Graham Chaplin, 1998. Personal communication).

The FD conducted feasibility studies during 1996 and 1997 with a view to attracting investors to reserves in the “transitional belt” (between the high forest zone in the south and the savannah zone in the north). These studies concluded that there is considerable scope for local interest groups to participate in, and benefit from, industrial plantation. The scope certainly extends beyond the provision of labour. Conclusions from these studies on possible areas of community interest included:

- Traditional Authorities could invest in plantation projects, for example, by becoming shareholders;
- there is considerable scope for community participation in fire control;
- farmers could be involved in the establishment of plantations, planting trees on a contract basis while being permitted to farm certain crops in between the trees for one year (i.e. taungya);
- many communities were keen on the idea of an outgrower scheme in which individuals or groups are contracted by investors to produce trees;
- communities could enter into contracts with a plantation company to supply the community with seedlings;
- seasonal and/or permanent work in the reserves could be made available;
- trees planted by farmers could be used as collateral for obtaining credit (e.g. from a plantation company in an outgrower scheme); and,
- a “Community Liaison Unit” could be formed within a plantation company.
A third area of activity for on-reserve collaboration examined by the CFMU relates to the small-scale rehabilitation of degraded reserves. The CFMU has recommended community involvement in such operations and, in two pilot areas, draft agreements have been developed with local communities (CFMU, 1995a).

The CFMU has also carried out a survey of people’s attitudes in communities near those forest reserves which are proposed for different types of protection, namely: special biological protection areas, hill sanctuaries, convalescence and fire block areas. The survey showed considerable local support for the continued protection of the forest reserves, particularly for protection of drinking water supplies, rehabilitation of degraded forests and fire protection belts. Protection for biodiversity was reported to be a source of pride in some communities - an acknowledgement that their forests are special (CFMU, 1995a).

Outside forest reserves, the CFMU commissioned and published a study of trees on farms (Amanor, 1996). The book describes innovative tree and forest management techniques used by farmers. The CFMU has subsequently made proposals for district forestry officers (DFOs) to assist farmers in tree conservation on farms.

The CFMU also carried out studies around two patches of remnant forest in Assin Fosu (CFMU, 1995b). The Fosu field work aimed to explore and develop the potential for community-based management of patches of off-reserve forest. The two forests worked in were Adwenaase and Namtee Forest, belonging to the people of Assin Akropong and Worakese/Akenkausu respectively. These two forests, and others like them, were set aside a long time ago by the chiefs and elders of the area as ancestral groves - a memorial to the ancestors who first settled the area. They were seen as sacred places, maintained by community consensus, taboos and low levels of exploitation. Nowadays these patches are threatened by farming and logging. In each case, following a community decision to manage and protect their forests themselves, the CFMU was called in by the DFO to work with the DFO and the communities. The primary objective was research; the sites became field laboratories where many different aspects of local forest management have been investigated.

In order to support protection of these and other such areas, the CFMU has proposed that a forest resource category, to be known as Dedicated Forests, should be provided for under the new consolidated forest legislation (see section 6.3.5). Dedicated forest would be lands that have been committed to forest use for a period by the holder of land rights. They will not be
managed by the FD. However, management objectives and activities, once defined by the beneficiaries, could be endorsed and supported by the FD.

Other major developments focusing on off-reserve forest resources in recent years include: the “Interim Measures” (see section 6.3); new logging rules and consolidated legislation (see section 6.3.5); and moves being made to develop a national certification programme which may apply both on- and off-reserve (see section 6.4).

5.4.3 Critique of the 1994 Forest and Wildlife Policy

Today, the 1994 Forest and Wildlife Policy seems to have provided a good strategic framework for actions within the forestry sector. Compared to the situation in the 1960s and ’70s when the 1948 Policy was cited only in preambles to annual reports, almost all current initiatives within the sector, such as: the institutional reform of the Forestry Department; the revision, formulation and codification of all forestry laws; the formulation and implementation of the Interim Measures; the elaboration and adoption of a plantation strategy; the elaboration and adoption of a protection strategy; and the experimentation with collaborative management approaches, are inspired by, and explicitly refer to, the 1994 Policy.

The 1994 Policy, however, clearly shows its historical antecedents. For example, the overall aim of the policy - “.... a perpetual flow of optimum benefits to all segments of society...” could hardly have been any different if government owned the resources, which it does not. The status quo is accepted; the owners of forest reserves are recognised as having only “beneficiary rights” and are defined as “the clients” for whom the Forestry Department manages the reserves.

Yet we shall see in Section 6 that most forest reserves were, in fact, created by the owners and that the application of the Forest Ordinance to them is only a legal artefact. While it is unlikely that the owners would move strongly against government’s pre-eminent position in future, it may also be remembered that government has never been able to act effectively where the local people have decided to “vote with their cutlass”.
5.5 Summary

Government has set about the task of managing the nation’s forests on the basis of two formal policy statements and a regulatory approach founded on a collection of laws, enforced to varying degrees. The country’s first policy statement appeared in 1948. It focused on the forest reserves which it sought to protect and manage through “scientific forestry”. This policy was reasonably successful, on its own terms, since today the forest reserves, whilst degraded in many places, are generally in reasonable condition. However, mounting discontent with the policy and legislative system in the 1980s centred on: excessive centralisation of forestry in the state; lack of benefit to local economies from forest development; heavy disincentives to retention of forest and trees outside reserves; and weak integration of forestry with other sectors - leading to lost opportunities for conservation, notably with wildlife management, and to domination by other sectoral priorities, such as agriculture and mining.

The consultative process leading to formulation of the 1994 Forest and Wildlife Policy represented a new departure for policy development in Ghana. This type of process was later taken to a greater degree of elaboration in the development of a national land policy. The new Forest and Wildlife Policy established the government’s aim as being the conservation and sustainable development of forest resources. Its content also marked a departure from the past, for two main reasons. Firstly, for the emphasis given to management outside forest reserves, as well as inside, them. Secondly, for the emphasis given to developing the enabling conditions for sustainability - in other words, an emphasis on promotion, persuasion and incentive, rather than blunt coercion. The new policy, together with impetus provided by international forestry debates and some supportive international development cooperation, set the scene for the emergence of collaborative forest management. The last four years have seen several initiatives trying to operationalise the new policy direction, through experimentation with truly “home-grown” collaborative management approaches, and through processes to consolidate and re-orient forest legislation.
In order to examine more closely the “factors and actors” that have influenced the formulation, implementation and review of forestry policy in Ghana, we now turn to four case studies:

1. The relationship between the state and other stakeholders in the story of forest reservation, protected timber lands and “Operation Halt”
2. The setting, collection and distribution of timber royalties
3. The development and implementation of the off-reserve “Interim Measures”, and
4. The process of developing forest management certification and its prospects.

In each of these case studies we aim to highlight: the way policy themes have emerged historically; the organisational forms in which policies have been constructed and implemented; the actors involved in policies and the “stories” told about forests and people - the way problems are framed and justifications are used for actions, and the ways in which ideas become validated. From this we go on, in section 7, to draw lessons about policy content and process.

6.1 Forest reservation: from consultation to diktat and back?

In order to maintain climatic quality, protect watersheds and ensure an environment conducive to cocoa the colonial government decided that a permanent forest estate must be established. This was to be accomplished
through a process of forest reservation. Attempts to persuade chiefs and local communities to dedicate some areas of strategic forests started soon after the formal imposition of colonial rule in 1874. It had little impact.

The nineteenth century turned into the twentieth with no real advances beyond pestering the chiefs and landowners on the subject of forest reservation. The colonial government early in 1908 invited Mr H.N. “Timber” Thompson of the earlier established Nigeria Forest Services to look into Ghana’s timber trade and related matters. Thompson submitted a report, stipulating the need for enactment of forest legislation, the protection of trees and timber, and the issuance of property marks to timber operators. To give effect to the above, he recommended that a Forestry Department be established with a mandate spelled out in forest policy. His recommendations were accepted by the government and a small department was created in 1909. A Timber Protection Ordinance was passed the same year and the first Forest Ordinance was enacted in 1911\textsuperscript{12}. These provided for the reservation and protection of forests.

Little changed on the ground, however. There continued to be great opposition from the local populace to the creation of forest reserves and different approaches were considered in an attempt to remove this land or land use decisions from their control. Constant efforts by the government to persuade the chiefs to establish forest reserves under their own traditional authority by-laws achieved little success. The whole issue was shelved by the colonial administration during World War I, which took greater priority than what was perceived as some minor, local, native intransigence.

6.1.1 Consultation in the inter-war years

The Forestry Department was resuscitated after the war and its foresters continued to try and convince the chiefs and people of the necessity of protecting forests and for them to prove their conviction by reserving selected areas. Progress of forest reservation under native authority by-laws was exceedingly slow and enforcement poor, while the expansion of land area under cocoa increased forest conversion dramatically.

Even though the colonial administration did have control over forest products and production, they did not own land and had no legal power over it. On the other hand, the chiefs and people hung on tenaciously to their land but had none of the relevant expertise or incentive for the reservation process. So even where they were agreeable, the Forestry Department had to do the selection of the desired forest and then pass on

\textsuperscript{12} This Forest Ordinance was never enforced.
the details to the native authority for constitution under their by-laws. The process was slow in contrast to the rapid expansion of cocoa. Once the concept of reservation was accepted, however, it did not take long for the FD to start using the threat of a Forest Ordinance to urge the chiefs to make progress in the creation of reserves and in adhering to their by-laws. Such an Ordinance was enacted in 1927. This strengthened the Department’s ability to constitute any reserves not established voluntarily by the native authority and to administer these being poorly protected and managed.

Constitution of a reserve under the Ordinance required six months preliminary notice before the commencement of an enquiry by a Reserve Settlement Commissioner into the claims and rights of the chiefs and people in the proposed area. There was a similar time period of six months after pronouncement of the Reserve Settlement Commissioner’s judgement to allow for appeals. The process was not a speedy one.

Reservation under the Ordinance did not change land ownership. So pervasive was the mistrust and suspicion with which land legislation was viewed, that all the Forestry Department and hence the Colonial Administration had to bend over backwards to delete any clauses which would suggest a change of ownership. The Department administered Ordinance reserves on behalf of the owners, with the proviso that they could revert to owner administration if the owners showed genuine intent to manage them properly. They never did.

In effect, therefore, reserves under native authority by-laws or rules were managed by the owners under the advice and direction of the Forestry Department, while those under the Ordinance were managed by the government/Forestry Department for the benefit of the owners. The two systems ran side by side, until several years after independence.

The Ordinance reserves distinguished between stool boundaries, admitted farming rights, and rights to forest products for the consumption of the populace, and made provision for the disbursement of revenue subject to the pleasure of the Governor and obliging the Department to render accounts to the owners. In by-law reserves, the chiefs negotiated the sale of trees directly and received payments accordingly.

The targeted reservation programme was to establish some 20-25 per cent of the high forest zone as such, primarily to maintain favourable climatic conditions for cocoa-based agriculture and to protect watersheds (Foggie, 1962). The period between the two world wars saw considerable progress
in this regard as far as area was concerned (about 20 per cent of the high forest zone was by then under reserve), but the effectiveness of measures to protect, maintain, manage and develop the resource was generally weak.

### 6.1.2 The “timberisation” of forestry and the confusion of control

World War II imposed its own priorities on forestry. Selection, demarcation, settlement and reservation changed over to supplying forest products for the war effort. The products were many and varied and included timber, furniture, shingles, rubber, gums, honey, beeswax, firewood and charcoal.

Whereas, prior to World War II, the timber trade was the apogee of conservatism, the war changed that. Hitherto only *Khaya ivorensis*, *Tieghemella heckelii* and *Entandrophragma cylindricum* numbered among the exports. The war stretched the list to nine or ten but, most important of all, it included *Triplochiton scleroxylon* (Wawa) which since then has been such a tremendous resource for the timber trade and industry not only in Ghana but throughout West Africa and parts of Central Africa. Such a surge in demand called for tighter controls. Legislation was introduced on prices of trees, prices of logs, regulation of log transport and control of pit-sawyers, all aimed at ensuring adequate and stable supplies.

This period also saw the renaissance of the independence movement with rapid changes on the political scene. One change of significance was the enactment of the Local Government Ordinance in 1951. This created elected local councils, which took over the responsibilities of local governance and administration and rendered the native authorities redundant. The chiefs, however, as custodians of the stools, still retained decision-making authority over land use. Thus, while this legislation was meant to be politically progressive, it effectively separated local governance from land use decisions. This further complicated relationships between the Forestry Department, chiefs and local people and worsened problems encountered with the management of reserves constituted under by-laws. It confused sanctions and control, legal backing, concession and financial agreements. In the end, special dispensation was required from the Minister of Local Government to allow the Forestry Department and the local councils to amend the old by-laws which created the reserves, so that active scientific management and development could proceed.

The local councils did not have the power to make by-laws constituting forest reserves on land which was not their property and, with the native
authority mode of governance effectively over with the attainment of internal self-government in 1954, the references to the development of native administration forestry became meaningless. The stools, however, retained an active interest in revenues which were then shared between local councils and themselves.

6.1.3 The birth of a new nation and the emergence of diktat

The legacy of impasse in the relationship between the colonial administration and the supporters of the Aboriginal Rights Protection Society returns to haunt everyone from time to time. Presumably, the colonial administration must somewhere have committed the indiscretion of stipulating a definite reservation area figure (the 20-25 per cent target) which should or would not be exceeded. True to their word, therefore, once the extent of reservation had reached this kind of figure, Ordinance reservation dwindled thereafter.

The growth in the timber trade and industry was also recognisable as small differences in interpretation and emphasis began to creep into existing policy. Post-independence, a new conception of the state as the successor to the traditional states of the Gold Coast and theretofore owner of all lands, forests and other natural resources also emerged as the ideology of the ruling political party. References to native authority or local authority forestry were deleted and a shift from “people’s forest” to the “nation’s forests” emerged. This elevation of priority of the timber trade and industry meant a gradual decline in recognition of the original stools and people and farmers who constituted the landowners. This created a problem. No more forests were being constituted under the Ordinance but there was plenty of good forested land worthy of reservation for production. The new local councils did not have powers like the native authority councils to control farming. There was no existing legislation to cope with the situation without trampling on the rights and liberties of the individual recently reinforced by independence.

Thus was born the Protected Timber Lands Act, 1959 which sought to give the Forestry Department power to control and regulate farm expansion in heavily forested areas outside forest reserves. This was in aid of progressive utilisation, to be controlled in such a way as to make the supplies last as long as possible and to utilise the forest resources outside reserves to the utmost, prior to their destruction by farming. This engaged forestry officers in enormous protection duties not only of unfarmed areas but also of trees on farms. Sadly, in the circumstances they were viewed as agents of the national timber industry and trade, which were gradually replacing the chiefs and people as the main beneficiaries of the resource.
These perceptions were confirmed and magnified by the passage of the Administration of Lands Act, 1962 and the Concessions Act, 1962. As noted, these vested the rights to forest and forest land in the President in trust for the stools concerned, and effectively placed the government in a decision-making position over land use and revenue collection and distribution. The chief’s right to negotiate concessions on his own stool land was lost and the matter was now dealt with by the government department responsible for stool lands. The farmers felt even more alienated and saw concession holders as agents of the Government, protected and actively helped by the Forestry Department to do whatever they wanted on people’s land and farms. They could not utilise timber trees which they left standing on their farms. But concession holders could, and did so, damaging farmers’ crops and often not paying compensation.

Farmers could, however, destroy and burn timber and timber-like trees for the above reasons and this they continued to do as a silent protest. They also set about to make the administration of the Protected Timber Lands Act as difficult as possible. When government tried to save some of these good production areas by reservation under the Ordinance, reneging on colonial promises, the reactions of aggressive illegal farming effectively put paid to the PTL development and left a problem that persists today.

Forest reservation, in the sense of creating a permanent estate of legally reserved areas of forests, forest lands and lands that may be afforested, may be regarded as a technical success. The fairly even distribution (within the closed forest zone) of the network of reserves, and the consideration given to protective values in their selection, have frequently been commented upon. Recent satellite imagery confirms the existence of this network of forests within a matrix of farm lands and secondary forests. Except for the recently-created Western Region reserves (where there was an attempt to convert temporarily protected timber lands to permanent forest reserves), and a few chronic areas such as Desiri Forest Reserve and parts of the Volta Region, the reserves have also been physically maintained.
6.1.4 Protected timber lands, 
Operation Halt and the failure of diktat

As noted, the Protected Timber Lands Act was passed in 1959 with the aim of controlling and regulating farm expansion in heavily forested areas outside forest reserves. It empowered the Minister to declare areas consisting wholly or mainly of standing timber outside forest reserves to be “protected areas”. A number of activities, such as felling trees, setting fires, cultivating and erecting buildings, were prohibited and licences to carry out any of these were issued by Forestry Department on behalf of the Minister. Cocoa farming had started in the Eastern Region and had expanded in a general south-east to north-west direction of the high forest zone. Effectively, therefore, this legislation could yield best results in the areas of the Western Region bordering the Côte d’Ivoire, notably Sefwi-Wiawso district (see Figure 3.1).

The duties of forestry protection accordingly multiplied, both over unfarmed areas and over trees on farms. Thus, farm expansions in protected areas had to receive prior approval before they could be effected. The Department’s intentions were, however, honourable in the sense that logging was expected to take place first, after which the land would be released for the use of the farmers. There were, however, a number of factors which coloured matters somewhat detrimentally. Prominent among these was new legislation which reduced the authority of the chiefs and marginalised them in land use decisions.

Concurrently, the people (who are almost all farmers) sensed that, together with their chiefs, they were no longer held in high esteem as owners of the land. Competition had arrived in the form of the timber trade and industry, who were viewed as agents of government, supported by the Forestry Department, who could do as they wished on people’s lands and farms.

Rumour and speculation was rife that much more land was to be put under reservation and that the protected timber lands were only the thin end of the wedge. These increased the anxieties of the farmers and clouded their judgement and even their willingness to discuss the situation. On the other hand, there was a frenzied rush for land for cocoa farming from all corners of the country, to the Sefwi-Wiawso district in particular. The perception of migrants was that this was likely to be the last opportunity to get access to fertile land for cocoa production.

Whether this was catalysed by an unsettled chieftaincy situation pertaining at the time, is hard to say. There was an unhappy boundary between the
paramount chieftaincy of Sefwi and its neighbouring Aowins to the south. There was furious competition in grants of land in areas which each believed to be within the other’s boundaries. There was also some doubt pertaining to the validity of the Sefwi paramountcy itself and a lot of restlessness among the divisional chiefs clamouring for a higher level of control, if not total autonomy, within their areas of jurisdiction. In this situation, divisional and even sub-chiefs granted land without reference to the paramountcy, while the paramountcy alienated lands in the divisions without consulting the divisional chiefs. Sefwi Wiawso district saw a very high incidence of land alienation and land transactions with non-indigenous settlers to Sefwi.

This certainly clouded implementation of the Protected Timber Lands Act. Such was the near-chaos within which the Forestry Department was supposed to protect unfarmed forest areas, protect trees on people’s farms, license existing farms and approve farm expansion. The more the uncoordinated, unmapped alienation continued, the more chaotic the situation became.

The Department at first set out to prosecute offenders until it became quite clear that even the judiciary was not in support of the measures being taken. Minimum fines and penalties were imposed, usually on deprived-looking women who were put up as fronts for the farm owners. Most of the fines were so ridiculous they were no deterrent. On the contrary, they encouraged the conviction that they were licence fees authorising a continued stay and perpetual enjoyment of their farming rights. As the proportion of “migrant farmers”, some of whom had paid relatively large sums of money for the land, increased so also did the general militancy and the willingness by all and sundry to take on the “establishment”.

The effort by government to save some of these forests, good production forest areas, by reservation under the Ordinance, brought out the worst in everybody. What had been surreptitious, illegal farming turned aggressive
and resulted in premeditated encroachment and settlement of these areas. The Department’s attempts to enforce the law were fiercely resisted and after a while could not be achieved without police or later military assistance. The Department, despite the low fines, set out to destroy the planted cocoa, which infuriated the encroachers further.

A committee headed by Captain Nyinaku was finally set up to investigate the Sefwi grievances. The committee’s diligent work established legal and illegal farms - those which were to be retained and those which were to be destroyed and planted with timber trees. It identified accomplice chiefs who needed to be dealt with, and laid a firm basis for restoring some sanity to the area. Unfortunately, the Government White Paper which followed generally did not agree with the recommendations, and set the Forestry Department off in another direction without ever providing the wherewithal to achieve anything in that direction. The sore continued to fester as two more military interventions in government bestrode one civilian one and pushed the Sefwi affair into the background of national affairs. The cocoa farms were expanded and new farms were made, cottages grew into townships with schools and health clinics, and cocoa-buying centres were thriving in the so-called forest reserves.

In 1992 and 1993 the matter was resuscitated and dusted off for implementation. Dubbed “Operation Halt”, it was meant to cut out non-bearing cocoa in illegal farms and plant them up with timber trees. Coordinated at three levels - national, regional security council, and ministerial - and executed by the FD, there were many difficulties and everything was “too little, too late”. Positions entrenched over a decade previously were only reinforced by the latest moves; a “culture of resistance” had been established. It triggered the retaliatory response of the infuriated farmers who in turn destroyed all planted timber trees. This they did by loosening the plants within the planting holes or by pouring boiling water on them so they died _in situ_, simulating death from natural causes or bad planting. A real war situation existed at one period with gun-shot
injuries, hostage-taking and belligerent pronouncements being the order of the day.

Today, though tempers appear to have cooled down somewhat, the intractable problems associated with this saga remain. The pursuance of Operation Halt lacked conviction and sufficient resources and, in the face of high political and economic stakes (forestry versus cocoa), has ground to a halt. Relations between the Forestry Department and its original “clients” in these Western Region areas are poor, and a change of philosophy, direction and strategy will be required to make any progress in restoring them.

6.2 Timber royalties: from effective local control to weak central control

6.2.1 The participatory phase

The traditional councils set up under Indirect Rule collected their own revenue. Thus, royalties and fees on forest produce remained largely within the purview of the landowners, chiefs and people acting through their traditional councils.

Until the 1940s, very few tree species were extracted from the high forest zone, so the relative values of the chosen species were widely known. As more species came into trade, there were as many variations on royalty rates as there were traditional councils. The coming into force of the Forest Ordinance in the 1920s and the Concessions Ordinance in the 1930s did not alter this situation in practice. At a period when there were only very slight price changes in all economies, there was very little movement in royalties. In fact, the depression of the 1930s registered some downward movement.

The passage of the Local Government Ordinance in 1951 created elected local councils, which took over local governance and administration and rendered the traditional councils somewhat obsolete. The stools retained an interest in revenues however, and indeed the chiefs continued to sign every concession agreement, with royalty rates appended only when they had the chief’s concurrence. The chiefs’ revenue collectors were still the active operatives outside forest reserves in revenue collection.

Before the Concessions Act of 1962, concession agreements had been negotiated directly between the concession holder and the landowner. The
formal rates negotiated were generally low and could not realistically contribute to forest development, but it was the chiefs’ prerogative. Some chiefs tended to make little provision for revising royalty rates. There was one concession agreement over some hundred square miles where there were no royalties at all; an annual tribute of a keg of rum being regarded as absolute discharge of all obligations of the concessionaire for ninety-nine years!

The efficiency of revenue collection off-reserve has varied over the years. When the collection of the revenue was the responsibility of the Chief and his traditional authority, full or part-time revenue collectors kept pace with timber operators and initially collected quite efficiently. There were not too many operators, their equipment was painfully slow, and many villagers were aware of the felling in their area as they had to give a lot of help and assistance to the operator. No-one could really get away with unrecorded felling, unless with the connivance of many people. Even when the number of concessions increased, so long as the axe and hand-saw were the main felling implements, and the species in demand were relatively few, the revenue collectors could cope. The decentralised nature of these collections was also an incentive as they knew they were collecting for their own traditional areas.

The widening of the cocoa farming frontiers, improvements in roads and communications, improvements in felling and hauling equipment and the speed of timber evacuation, began to put the revenue collectors at a bit of a disadvantage. The system slid from being a pro-active tree count to a part tree count, part stump count. Yet whilst the traditional authority spy system of village chiefs, elders and farmers was still in place, the revenue collectors could still catch up.

6.2.2 Centralised state administration

The passage of the Administration of Lands Act and the Concessions Act in 1962 vested the rights to forests and to land in the President, in trust for the stools concerned. This led to the government inheriting many concessions with different and often contradictory royalty rates. The government eventually used an existing Standardisation Act to establish a “rational” royalty system throughout the high forest zone. The chief’s right to negotiate concessions on stool land was lost, and these matters were now dealt with by the government department responsible for stool lands: at that time, the Lands Department. The Lands Department inherited most of the revenue collectors from the traditional system and engaged some of their own.
It was not too clear whether the Lands Department, as the negotiator of concessions, was particularly interested in the level of royalties. It had no real interest or stake in forest management, silvicultural treatments, regeneration or sustainability. The impression given was that it was just supervising the liquidation of a wasting asset rather than being an active manager of stool land for national development.

The Forestry Department, however, had a stake and interest in the levels of royalty because it retained a much higher proportion of it to cover its management of the reserves. The FD had, after all, been keen to ensure that benefits to owners were sufficient to maintain their support for reservation. However, concession holders often found it difficult to fell the numbers of trees allocated by the FD, on which revenue derived was planned to support silvicultural improvement. The Department was clearly finding it difficult to finance forest management operations and attempts to share costs with the landowners, and timber operators left the owners with even less.

Government tried to introduce other fees to pay for forest management, including a charge-on-the-coupe which was a levy on the concessionaire to defray the costs of silvicultural improvements. Again, this failed to generate much revenue.

Why Government, after putting in place legislation that made it the sole controller of land matters, albeit in trust for the stools and people, acted so hesitatingly in raising royalty rates is difficult to understand completely. Certainly the Forestry Department was sporadically active in trying to get royalties raised. But royalties had been standardised under an Act of Parliament, and subsequent royalty amendments had to go to Parliament for approval before becoming effective. This required full clearance from the Ministry, followed by Cabinet before getting the parliamentary nod. Achieving all these levels of approval was time consuming and offered much opportunity for timber industry opponents of the increases to lobby against, even before lobbying their parliamentarians.

By the mid-1960s, indigenous concession holders and timber contractors had assumed an influence in national affairs much in excess of their contribution to national development. Before then, the timber industry was dominated by a few big companies which were largely owned by, or were subsidiaries of, European timber concerns or Asian and Lebanese businessmen. After independence, a conscious policy of “indigenisation” of

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13 The Lands Department retained 10 per cent of royalties to cover its administrative costs. This responsibility was later transferred to the Lands Commission [see footnote 7].
important sectors of the economy, including timber, was pursued. This, coupled with patronage and the desire of the Nkrumah’s CPP government to reward its supporters, resulted in a rise in the numbers of indigenous concession holders and loggers. In contrast, cocoa farmers’ collective contribution to national development towered over that of any other sector and, at the best of times, over all the sectors combined, but their spread, numbers, and perhaps their humility, meant that they were not a force to reckon with in national affairs. With small beginnings and small investment, they made a big impact on the rural scene and rural economies but did not venture much into national affairs.

The timber man, on the other hand, had a different outlook - perhaps because even at the smallest investment level he was talking of capital which the cocoa farmer could never dream about. Perhaps he was spurred on by aspirations to become like the timber “merchant princes” of the Western Region whose outlook, experience, life-style and commercial acumen were more oriented towards the corridors of power. Although their successor timber concession holders and contractors were not quite in their class, they held on fast to the attributes of political and financial clout. They could influence policies, stall legislation, and modify some working plan prescriptions, and were largely responsible for the tardy revision of royalties. No cocoa farmer could have done that.

The centralisation and standardisation of concession negotiations and the taking over of all revenue collectors, led to blanket stool land accounts and the severance of collectors’ loyalty to stool or traditional areas. Impersonally administered, centralised systems were and are less likely to be as efficient as decentralised ones with the chief showing a personal interest. During most of this period, therefore, the capture of forest fees by both the Forestry and Lands Departments was low and disbursements to land- and forest-holding authorities slow, irregular and minuscule.

The timber industry continues to be a significant lobbying group and a powerful protector of its interests. In spite of the conclusion of numerous studies (e.g. World Bank, 1988; Ahadome, 1991; FD/IIED, 1994) that royalty levels are very low, it has still not been possible to raise them significantly. This is due to inefficiencies and waste in processing which reduces the profits of the industry, and also the lobbying strength of the industry, particularly the loggers without mills, who may not be able to pass on the additional cost to the millers.

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14 Royalties are now based on a fixed percentage of Free on Board prices, which reflect the estimated risk of depletion of key species according to the star-rating species classification (see section 3.3.2)
6.3 The “Interim Measures”: collaboration at work

6.3.1 Origin of the problem

As already noted, the official practice, and later the formal policy, until quite recently was to assume that unreserved forest would be converted to other land uses, particularly agriculture. The 1948 Forest Policy stated that the objective for off-reserve forest was: “Controlled, progressive utilisation without replacement of the remainder of the forest resources not permanently dedicated to forestry ... prior to their destruction by farming”.

The FD’s response to the subsequent rapid increase in timber exploitation was an attempt to increase regulatory activity over off-reserve concessions. This increased further with the centralising and statist ideologies of the independence era.

The implementation of the policy for off-reserve forests centred on the administration and control of timber resources. Responsibilities were spread between the Forestry Department and the Lands Department (later the Lands Commission).

The Forestry Department’s control included:

- setting and application of minimum girth limits;
- marking of stumps by loggers/concession holders; and
- inspection of trees and timber.

The Lands Commission’s responsibilities included:

- grants of concessions and leases; and
- collection of royalties and rents.

This duality led to much mistrust, institutional jealousy and ineffectiveness. Little or no management took place outside the reserves. This, coupled with the absence of any meaningful rights for farmers and local communities, and the centralisation of concession allocation, revenue collection and distribution, meant that the stakeholders nearest the resource had no interest in its management and protection. Rather they had every incentive to destroy it. The result was a fast-depleting resource.

The 1994 Policy signified a major shift in off-reserve policy, from “liquidation” to “sustainable management”. It stated that “management and utilisation” of off-reserve forests shall be “under Forestry Department’s
management system for regulation of uncontrolled harvesting, expeditious collection of relevant fees and ultimate conformity with criteria for sustainable resource development\textsuperscript{15}.

However, in 1994 many of the legacies of the previous policy were still very much in place. There was excessive and often uncontrolled felling in concession areas off-reserve. This was compounded by various regulations which confused the situation. Chainsaw operators, District Assemblies, farmers, and landowners took advantage of the confusion with much unmonitored felling.

This period coincided with new Far Eastern export markets for round logs of species relatively common off-reserve. There was widespread speculative felling and trade malpractice, including illegal trading in property marks, and unauthorised subletting of concessions to illicit timber operators. The timber trade’s failure to pay royalties and other statutory fees for trees felled in both the reserve and off-reserve forests had also reached serious proportions.

Thus, there appeared to be an almost total lack of control over timber harvesting in the off-reserve areas, where production had risen to about 80 per cent of total timber production, reflecting a rate of felling which in the opinion of most commentators was not sustainable. What had been a lingering problem now assumed crisis dimensions.

In response, the Ministry of Lands and Forestry introduced a number of measures, including:

- levies on air-dried timber under the Trees and Timber Amendment Act, 1994;
- a temporary ban on the export of round logs; and,
- bi-annual renewal of property mark.

It was, however, clear that these measures were inadequate and needed to be reinforced by procedures to manage tree felling in general in the off-reserve areas. In June 1994, the Ministry of Lands and Forestry requested the Forestry Department to make recommendations on appropriate control measures, which could be implemented by district forest offices and communities, to bring levels of off-reserve exploitation down to more sustainable levels. To back this up, in September 1994, responsibility for managing and collecting off-reserve revenue was transferred to the Forestry Department.

\textsuperscript{15} Forest and Wildlife Policy 1994, Paragraph 5.3.2.
6.3.2 Developing the measures

The Forestry Department swiftly set up a Working Group on Control of Illegal Felling Outside Forest Reserves to address the problem. The group comprised 27 members covering:

- Timber industry: National Chainsawyers Association (2), timber company (1)
- Local timber task force members: District Chief Executive (1), District Assemblyman (1), FD District Forest Officers (4)
- Stool chiefs, farmers and community representatives: Traditional Council (1), Director of the Institute of African Studies who is also a chief (1), chief (1), farmers (2), community representative (1), NGO (1)
- Ministry and Forestry Department officers: MLF (1), FD staff (10)

The group identified the following as the key problems in off-reserve harvesting (FD, 1994):

- No single institution had overall responsibility to oversee exploitation, which led to confusion and collusion.

- Harvesting rights and benefits were skewed in favour of the industry. Farmers and communities had little incentive to protect the timber on their land and compensation for crop damage was derisory.

- Monitoring and regulation of off-reserve harvesting was pitiful; the permit system being full of loopholes. The Forestry Department lacked the necessary information and resources required for the job.

- Sanctions against illegal operators were ineffective; penalties were too low and prosecution too difficult. Support from the judiciary was meagre.

- Farmers, rural communities and the public were not well informed about the condition of the resource, the felling rules and the benefits to which they were entitled.

- Export contracts were being signed and endorsed without due regard for the state of the resource or the contractor’s source of logs.

In summary, the Working Group concluded that the Forestry Department

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16 FD (1994: Annex 4) lists the membership of the working group. The quantity and quality of meetings of this group, and the degree of participation of the different members, have not been reported. However, a report by the CFMU in 1995 noted that “with a focus on the role communities could play it was natural for the CFMU to coordinate the working group meetings and compile the recommendations” (CFMU, 1995b: 8).

17 The local timber task forces were established to check illegal logging during the height of the problem in 1994. They were made up of FD staff, concession holders, district assemblymen, villagers and military personnel.
should be the sole agency authorised to control exploitation off-reserve and should be able to call on the assistance of others. It noted that the farmers are best placed to assist the FD in this manner and that, in the long term, the role of the community should change from that of bystander to guardian, steward or manager. The Group concluded that the focus of FD control must shift from post-felling monitoring to open and systematic monitoring before and during felling (FD, 1994).

The Working Group proceeded to make recommendations to deal with these problems (FD, 1994). These fell into three main areas:

• New felling procedures covering the entire process of off-reserve exploitation, from pre-felling inspection to log conveyance. These procedures, the “Interim Measures”, were accepted and launched in mid-1995.

• Provision of information to district forestry officers and communities to ensure that they will be in a position to implement the proposed measures. This is discussed below.

• Revision of regulations to ensure legal backing for the proposed felling procedures and effective sanctions against forest offences. In late 1997, this third group of recommendations was incorporated into a wider effort to consolidate forestry legislation.

6.3.3 Implementation and impact of the Interim Measures

Regional and district Forestry Department field staff attended regional workshops organised to explain the new procedures. These officers then disseminated information on the measures through durbars, seminars and meetings with local timbermen, traditional rulers, district assemblies, farmers, chain saw operators and the general public. Television, radio and the print media were also used. Regional and district forestry staff were encouraged to continue with the education drive in their respective regions and districts after the national launch.

That the publicity activities prior to the launch were only partially successful was evident in a range of misunderstandings amongst these stakeholders when the measures were launched. The information and education drive was therefore intensified and subsequent review of progress (see below) suggests that outreach has been quite impressive.

Some new field equipment and motorbikes were procured by the FD, and
Box 6.1 The “Interim Measures”

The Interim Measures to Control Illegal Timber Harvesting Outside Forest Reserves, launched by the Minister of Lands and Forestry on 9 August 1995, require four steps to be carried out before and after the felling of timber trees no matter whether the logger is a concession holder, chain saw operator, farmer, or chief:

1. Before a felling permit is issued, the desired trees must be inspected by the applicant, Forestry Department and community representatives in a pre-felling inspection. After this inspection, the district forest officer, acting upon the advice of the inspection team which will note all objections raised by farmers, will indicate which trees may be felled. The approval depends on the district quota which is derived from the AAC.

2. A Forestry Department officer (described in these procedures as the approving authority, which depending on the application will be a district forest officer, a regional forestry officer or the Chief Conservator of Forests) issues a felling permit before any felling commences. Concession holders, chain saw operators, charcoal processors and canoe builders alike all need a felling permit irrespective of whether they are operating on a concession or not, or on “encumbered” or “no man’s land”.

3. A post-felling inspection must be conducted by an officer of the Forestry Department to ensure that stumps and logs are properly marked. The officer measures the logs and completes a log information form which the district forest officer will use to issue a certificate of conveyance. The post-felling inspection should be monitored by representatives of the stool and the unit committees. However, for logistical reasons, their participation is not mandatory.

4. A certificate of conveyance is issued by the Forestry Department for all logs, boards, canoes, charcoal or firewood (produced for commercial sale) before movement from the felling site. The certificate is issued for each vehicle load. A certificate of conveyance will not be issued if there are any outstanding disputes over compensation for crop damage. No log measurement certificate will be issued by the Forest Products Inspection Bureau without a certificate of conveyance.

Within a few weeks, complaints from the timber industry began to be voiced at delays from the cumbersome procedures and acute shortages of logs. Many of the complaints were coming from the big mills in urban centres which had relied on cheap logs. Pressure began to be exerted on the Ministry by the big mills for a modification or withdrawal of the Measures, but the Ministry stood its ground. The Ministry encouraged the Forestry Department to sort out the bottlenecks. More staff and motor bicycles were

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18 Unit committees are the lowest tier of local government, being elected groups at village level.
assigned to strengthen field operations staff, and special Forestry Action Groups were established\textsuperscript{19}.

Over the first two years of their implementation, the Interim Measures had a strong impact. While illegal operators and their backers continued to complain about the system, some concession holders in areas previously riddled with illegal operators reported that they could sleep at night. “For once, I have been able to spend Christmas in peace”, remarked one contractor.

The Planning Branch of the Forestry Department undertook an initial review of the Interim Measures about a year after their launch. The review was based on questionnaires and personal interviews of district forestry staff and concession holders, and structured interviews with district assemblies, farmers and landholding authorities.

Findings of the review\textsuperscript{20} show that almost all FD districts in the high forest zone made a concerted effort to implement the procedures, although in some, notably the Volta Region, the emphasis was more on charcoal, firewood and lumber than on logs. Senior officers within the FD were enthusiastic about the approach. One Regional Forestry Officer (RFO) remarked that it is the single most effective control measure that has been introduced by the Forestry Department since 1948. Another RFO said “the Interim Measures are the first time in 90 years that the FD has organised its own policy and been able to do something outside the reserves.”

**Impact on log production**

Figure 3.6 (see section 3.3) showed the decline in total log production in 1995 and 96 from the recent peak years of 1993 and 94. This may be due, in part, to the introduction of the Interim Measures, but also corresponds to a ban on export of round logs and a depression in Ghana’s key European markets. During the FD’s review, these factors were mentioned by concession holders, but most attributed individual falls in production, of between 25 per cent and 70 per cent on pre-1995 levels, to the introduction of the Interim Measures.

According to Forest Products Inspection Bureau records, the last quarter of 1995 when the Interim Measures were introduced, saw a drop in total

\textsuperscript{19} Forestry Action Groups are local groups of FD staff, concession holders, district assemblymen, community representatives and military personnel established to supervise the operation of the Interim Measures. In some cases these Groups evolved from the previously organised local timber task forces (see footnote 17)

\textsuperscript{20} The full report of the Interim Measures review has not been published. However, the Ministry of Lands and Forests has drawn on the review’s findings (Smith, 1996). Further information has been provided by one of the authors of this study, who was also part of the Interim Measures review team (see Kotey and Antwi, 1997).
production by 78 per cent on the same period in 1994. This is illustrated in Figure 6.1 which also highlights the sharp decline in logs of "unknown origin".

The origin of every log is supposed to be written on both ends of every log transported in the form a mnemonic code indicating the reserve and compartment number, or "OFR" for an off-reserve concession, plus a locality code for the district. Although this system was introduced some time ago there was a high degree of non-compliance in marking this log origin information on the part of loggers. Similarly, the FPIB was not insisting on, or recording, this information in issuing Log Measurement Certificates (LMCs). However, in 1995, before the introduction of the Interim Measures, a concerted attempt was made by the Forestry

Figure 6.1 Log Production 1994-1996: Proportion of “Unknown Origin”

Source: Forest Products Inspection Bureau records.
Notes: * Source of logs not recorded on Log Measurement Certificates issued by the Forest Products Inspection Bureau.
Department to rectify this, as it was assumed that logs of “unknown origin” were likely to be illegally sourced. The FPIB began to insist on, and record, the information on log origin. With the introduction of the Conveyance Certificates in August 1995, levels of unsourced logs fell further.

Figure 6.1 shows the dramatic decline in the proportion of logs of unknown origin: from between 80 and 90 per cent of total production during 1994, to much lower proportions in 1995, and a continued decline to well below 10 per cent of the total during most of 1996. The fact that total production fell during the 1995 period suggests that some of the previous high level of total production was indeed illegally sourced.

There is certainly a perception at the district forest office level, that the procedures have helped in the identification of illegal logs. One technical officer remarked that “if you intercept a truck carrying logs or lumber without a certificate of conveyance you know straight away that it’s illegal”.

There are reports of less waste in the system because the permit holder is billed for all that he applies for. The pre-felling inspection has also helped to reduce the felling of under sized trees. However, Figure 6.1 does not show the estimated 40-50 per cent of production which is utilised locally, since these logs do not get transported as far as a FPIB checkpoint to receive a LMC. The Forestry Department is designing measures to monitor this production.

Another startling effect of the new measures is the disappearance of logs labelled as log 5, 6, 7 and even 8 (from a given tree) from LMC records. With the current condition of the resource and the type of logging practised in Ghana, more than four logs from a tree should be a rare exception - and even four logs something of rarity - in most areas. Logs labelled as being fifth logs and above may well have indicated an attempt to pass off logs from unallocated trees as the top logs of allocated trees. Over the last quarter of 1995, the number of fourth logs in the FPIB’s LMC reports reduced from 1032 to 138 per month, and in 1996 the monthly number of fourth logs recorded averaged about one hundred (while monthly totals of all logs ranged from between 13,000 and 20,000).

**Impact on timber industry**

As mentioned above, all timber contractors who took part in the Forestry Department’s survey reported that log production has fallen since the introduction of the Interim Measures. However, the impact on particular sections of industry has differed. Loggers with timber concessions have generally supported the Interim Measures - many were keen to see the end
of illegal felling by others on their concessions - though they complained of logistic problems and expensive delay in getting logs to the mills. They claim the Measures have brought job security to genuine producers and excluded middlemen from the trade. The legal loggers are also selling their logs to the mills at higher prices.

Of the twenty-five concession holders who responded to the questionnaire, fourteen reported paying more compensation than before, while nine said there was no change in compensation payment. To the question whether the interim procedure should be abolished or allowed to stay, 76 per cent of concession holders responded that the procedures must be modified but allowed to stay. Suggested modifications included: more FD “education” of farmers about timber trees; remove the need for farmers and unit committees to be involved in pre-felling inspections; reduce the time taken to issue felling permits; and extend the period of validity of felling permits and conveyance certificates. Only one concession holder called for total abolition of the procedures. However, millers without concessions who had assumed the availability of cheap logs complain of the increased cost of production arising from higher log prices and delays in getting logs to their mills.

**Impacts noted by farmers**

Discussions were held with farmers in two locations in the high forest zone during this study. Most farmers interviewed in the process expressed satisfaction about the new developments and reported the following:

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21 For details of the locations, interviewees, etc. see Kotey and Antwi, 1997.
• **Improved recognition of farmer’s rights/wishes by concession holders.** Farmers reported that they were happy that they are more recognised by concession holders. “At least seeking our consent before exploitation is motivation to us”, said one farmer. The loggers are now more disposed to cooperate with the farmers because the farmers can veto the issuance of a conveyance certificate to them.

• **Improved relations with the FD.** Farmers remarked that relations between foresters and farmers have improved considerably in many localities. One farmer stated that, “now we see that the Forestry Department is our friend and not helping the concession holders to destroy our crops unnecessarily”. Farmers are now reporting illegal operations to the Forestry Department, thereby contributing to the efficient management of the resource. One FD forester remarked that, “the farmers are now part and parcel of us, they feel a sense of belonging to forestry, they now hold the power to stop the issuance of conveyance certificates until destroyed crops are fully compensated for”.

• **Reduced crop damage and better compensation.** Destruction of farmers’ crops has reduced and compensation payments have gone up.

• **Improved confidence to act.** It is also worthy of note that some communities have blocked permits issued by the Forestry Department because they have not been consulted. In Berekum, the district assembly has established a compensation committee which meets regularly (twice a week) to settle compensation disputes between farmers and loggers. The committee ensures that reasonable compensation payments are made to farmers whose crops have been destroyed in the process of timber extraction. The committee seems to provide a reasonable compromise between the outmoded prescribed compensation rates and the “unrealistic demands” of some farmers. Unrealistic demands stem from the farmers’ effective veto on felling. Some farmers resort to “selling” the trees on their farm to the concession holder/applicant. For example, in Offinso district, a farmer was demanding over one million cedis from a concession holder before allowing him to fell about eight trees on his fallow land.

• **Reduced illegal felling.** In another survey, carried out by the Planning Branch of the Forestry Department, to determine the impact of the Interim Measures in nine communities where there was previously considerable illegal felling, it was revealed that the procedures have helped in slowing down illegal logging activities and also wiping out the wayside contractors. The people of Assin Darmang reported, “hitherto,
logging activities were rampant and teachers, nurses, business men and chain saw operators could do whatever they liked even in the night without permit as well as not paying compensation. The farmers have all been briefed about the new measures by the chief of Darmang at a farmer’s forum and we are now all aware of our rights to compensation”.

The pre-felling inspection procedures thus provide a level playing field for farmers, communities, traditional authorities, district assemblies, the Forestry Department and concession holders or (applicants) to take part in the decision to fell or leave a tree. Farmers are thereby given the opportunity to know and interact with concession holders or applicants and community representatives. This decision is also guided by the technical directives of the FD’s logging manual, designed to ensure that timber harvesting follows environmental guidelines. The farmer is also effectively able to negotiate with the logger or chainsaw operator on the level of compensation payment acceptable.

Impact on District Assemblies
In this study, five out of six district assemblies surveyed were aware of the Interim Measures. There was no such awareness among the members of the environment sub committee of the sixth assembly, some of whom had been informally briefed by forest officers. Of the five district assemblies, four understood all aspects of the procedures while one did not. Only two district assemblies were actively involved in pre-felling inspection. The other three claimed they have not been involved by the forestry officers. The district forestry officers in two of these three districts, however, pointed out that all pre-felling inspection forms that came to the office were duly endorsed by assemblymen in the respective areas.

District assemblies report some dramatic reductions of illegal felling. Of the six district assemblies, five reported reductions ranging between 40 per cent and 70 per cent. One reported an increase of 10 per cent since the introduction of the procedures. One assemblyman remarked that “the chain saw machines that used to ‘cry’ all over the place have now stopped. Now if we hear a chain saw machine ‘crying’ then you can be sure he has a permit else the farmers will report him.” Five of the six district assemblies had task forces which were operating with Forestry Department staff to check illegal operations.

All the district assemblies visited reported receiving their share of revenue from off-reserve forests very promptly. A member from the Berekum district environmental committee remarked that “revenue received is much better [now it is collected by] the Forestry Department than [when it was done by]
the Lands Commission”. One Regional Forestry Officer remarked that “now there is no pressure on us from stool chiefs and assemblies because we process their revenue as soon as they come. The interim procedure forms and returns have made things simpler and easier”.

All the assemblies reported that farmers were receiving compensation for farm damage from both concession holders and chain saw operators. One assembly, however, remarked that two particular concession holders were bullies who failed to pay compensation to farmers. Records from the Forest Products Inspection Bureau revealed that one such concession holder was not collecting conveyance certificates for logs. His property mark has since been suspended as a result.

**Impact on Revenue Collection**

Perhaps the most remarkable impact of the “Interim Measures” has been on revenue collection. Although log production dropped massively in 1995, revenue from timber harvesting was quadruple the amount collected in 1994. The total revenue from royalties and fees in 1994 (both inside and outside reserves) was just over 3,262 million cedis. In 1995, the total was just over 13,228 million cedis. Other factors may have contributed to the increase, notably the transference of royalty collection from the Lands Commission to the Forestry Department, and the linking of bi-annual property mark renewal to royalty payments. However, the payment of royalty deposits before the issuance of conveyance certificates appears to be the main reason for this considerable improvement in revenue collection. The upward trend seems to be continuing (Smith, 1997a). Figure 6.2 shows the collection of forest fees by the Forestry Department in the last five years.

However, it should be noted that forest fees collected in any particular year does not necessarily correspond with the fees specifically due in that year, e.g. fees collected in 1996 may have been due in 1995 or even 1994.

**Impact on the Forestry Department**

The Forestry Department now thinks that it can control harvesting and overlogging. Morale has improved and there is a “feel-good” factor permeating the Department at central level. It thinks it has gone a long way in demonstrating that an autonomous, largely self-supporting Forestry Service is an achievable goal.

Problems, however, remain to be tackled. There has been an embargo on recruitment of new FD staff and the few engaged are under-remunerated

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22 Forestry Department Circular No. 330.v.3/39 of 24/3/97
and poorly motivated in many areas. The logistical aspects of the new felling procedures continue to be a source of concern. In the Forestry Department survey, officers complained of increased workload, little or no fuel, insufficient vehicles and motor bikes and no transport and night allowance. These factors may make some staff susceptible to improper attempts to influence their control activities. These issues are potentially serious, and will have to be resolved soon if they are not to adversely affect the implementation of the procedures.

6.3.4 The Interim Measures and the policy process

The development and use of the Interim Measures may be the beginning of wider participation in decision-making on forestry issues. The experience has shown that people tend to be committed to decisions they have participated in taking rather than those imposed on them. Indeed, the initial instruction for the development of the Interim Measures specified that “recommendations on appropriate control measures to be initiated by District Forest Officers and communities”; not by forest officers alone. One forest officer remarked that “for once in the history of forestry the views of non foresters had been sought”.

This more inclusive process enabled the stakeholders to be better acquainted with the issues and to share ideas. The timber millers started to bring out their problems and shed light on some of the unhelpful “tricks of the trade”, because they appreciated the need to conserve the resource and
ensure the future of the industry. In a few cases, loggers complained about abuse of verbal agreements, made with traditional authorities and communities, resulting in harassment of their workers. The Forestry Department explained the current state of the forest resource, the consequences of over-exploitation and the environmental and economic consequences of destruction of economic trees. The department also stated how the lack of operational funds and resources to protect and manage the forest was affecting its efficiency. Farmers explained why they were reluctant to leave timber trees on their farm for concession holders, why they preferred chainsaw operators to loggers and how they were losing out in the sharing of timber royalties. Traditional authorities spoke about timbermen who failed to honour their agreed obligations to traditional authorities and communities.

In the implementation of the Interim Measures, the extent to which different stakeholders have played their part is impressive. The new procedures have instituted some control and monitoring of the resource. District assemblies and stool landowners are using this process to monitor their expected royalty revenue. The involvement of district assembly and stool land representatives ensures that those who benefit from the resource take part in monitoring it. Since all the stakeholders seem to have broadly accepted the procedures, recommendations have been made for making them permanent.

Whilst some stakeholders are “losing” from the Interim Measures, their loss is recognised and is generally considered “proper”. Forest resources and most stakeholders are benefitting, and this includes the farmers who for years have been the losers. Whilst some extravagant compensation claims have been made by some “well-connected” wealthy farmers, these are unlikely to be met. In general, farmer claims are realistic and are serving to address the balance, which for so many years has been tipped in favour of the timber industry. Success seems to be due to the collaborative process and the way in which sound analysis was used to show the previous unsustainable way of doing things and the potential ways forward. In short, the Interim Measures provide an example of policy that has started working for both people and forests.

However, a caveat is in order here. On the one hand, participation in developing the Interim Measures was wider than any previous forest-specific policy instrument. However, it was still limited. Poor farmers, unemployed rural youth, local “strong men” marginalised by the state forestry system, and others benefiting from the previous “chaotic” situation, were the least involved. Participation in implementation, on the other hand, is expected to be even more widespread, and to include those less involved
in the formulation. Whilst initial indications are encouraging, it remains to be seen whether this model of limited participation in policy formation leads to the long-term wider participation and commitment in implementation which the policy seeks.

6.3.5 Beyond the Interim Measures

The review among the district assemblies has revealed that perhaps 35 per cent are still not well informed about the Interim Measures while others are not adequately involved in their implementation. A community-oriented handbook on tree harvesting in preparation by the FD, and its translation into the common local languages, should help in addressing this problem if it is well disseminated.

Some District Assemblies have stated the importance of channelling some of the revenue from timber to the communities where the revenue was coming from. Berekum District Assembly declared during the review that an amount of 100 million cedis has been earmarked for tree planting within the district in the year 1997. This type of initiative is a useful starting point to bargain for a tree tending grant to farmers who tend trees on their farms - a possibility which has been discussed for several years. Other initiatives may point the way to more concerted large scale plantation in seriously degraded areas. For instance, the Jaman District Assembly has a policy to reward any community which is able to protect its area from fire with a project of the community’s own.
choice. This could be expanded to embrace contracting out areas to communities to protect or plant up.

Box 6.2 describes some emerging partnerships in which timber companies are attempting to address problems of future supply by: working out agreements with farmers that motivate them to plant timber trees; or by supporting initiatives to develop forest habitat management and a sustainable forest agriculture that incorporates existing or planted timber trees.

The initiatives described in Box 6.2 are dealing with difficult issues with long time spans and are entering uncharted territory, in which the building of relations with communities is as important as technical issues of planting trees. Farmers within the moist forest areas have proven to be receptive to participatory projects initiated by timber companies when their rights to benefits in forest resources are recognised. While these forces for new modes of forest management may form a minority, they constitute an important force for change and have potential to develop innovative technologies and significant contributions to local livelihoods.

The Forestry Department meanwhile faces the central issue that it cannot, on its own, guarantee sustainable forest management in the off-reserve areas, because other stakeholders, notably landowners, have property rights. In re-thinking the FD’s role off-reserve in 1995, the CFMU posed the question, “what kind of framework can sustainably develop a resource that cannot be permanently reserved for forestry, is under phenomenal pressure from the industry, and cannot be administered realistically by anyone other than the landholders and cultivators?” (CFMU, 1995b). The CFMU went on to propose that a collaborative framework for sustaining the off-reserve resource needs to ensure:

1. a fair share of the benefits from utilisation of the resource will go to those who have tended the trees;
2. there is wide consultation during operational planning for exploitation and management of the resource;
3. people who can genuinely contribute to the achievement of operational objectives can do so, building on any comparative advantage they have;
4. field activities are linked back to the forest policy; and
5. the integrity of the resource is maintained, where that is the intention of the landholder (CFMU, 1995b).

The CFMU then proposed means of fleshing out the strategies outlined in the 1994 policy to create an appropriate framework. It was recognised that it would be very difficult to obtain a return to the pre-colonial position,
While some timber companies are complaining about the Interim Measures and its effects on their profits, a few others have realised that future supplies of timber can only be guaranteed by engaging in actions to preserve and grow timber. Initiatives are beginning to emerge which pursue this objective through arrangements involving timber companies, farmers and landowners and, to some extent, the Forestry Department. Two notable projects in Western Region are the Gwira Banso Project and Swiss Lumber Company operations around Wassa Amenfie.

Gwira Banso Project
The Gwira Banso project is a forest management and marketing project of Ghana Primewoods Products Ltd (GAP), Dalhoff Larsen & Horneman A/S (DLH) of Denmark, and the chiefs and people of Gwira Banso (Amanor, 1997). GAP’s main challenge is to secure future timber markets in Europe, in the face of changing consumer preferences for lighter coloured woods and concerns about the environmental sustainability of tropical timber harvesting. DLH is concerned with developing and promoting a new range of tropical timber species on the world market, and developing wood products that are seen to be based on a clearly-defined and sustainable environmental policy.

The Gwira Banso project, in Western Region, is being developed in a 16,000 ha off-reserve concession which includes areas of pristine wet evergreen forest (Prah, 1997). However, timber trees, by and large, are on farmers’ land. A major concern of the project is that the expansion of cocoa production threatens the stock of timber trees, and other forest goods and services. The project, therefore, seeks to encourage participation of the farming communities in the concession in sustainable forest management, as an alternative to agriculture which is considered unsustainable. Help with sustainable agriculture was also included, as early consultations made it clear that farmers’ main fears concerned being ejected by the Project from their farms. Agreements with the communities now cover:

1. The chief of Gwira Banso will stop admitting new (cocoa) farmers into the area.
2. Establishing a project steering committee of all the above stakeholders and others (including tenant farmers and the Danish aid agency which is underwriting some costs); this meets quarterly to review progress and make plans; and servicing this with a Project Coordinator.
3. It has developed a nursery that produces seedlings of native timber trees and distributes them freely to farmers for planting on their land, to produce about 40 trees per hectare.
4. The project is encouraging farmers to cultivate NTFPs that can improve local incomes. Seedlings of Garcinia spp are being nursed for distribution to farmers. The wood of this small tree is traditionally used to produce chewing sticks for sale in urban areas. The wood of the tree is highly valuable and is becoming increasingly scarce, as it is harvested by specialised urban-based gathering firms with permits from the Forestry Department.
5. The project is helping to develop a more sustainable forest-based agriculture, which enables crops to be integrated with trees e.g. by introducing more shade-tolerant crops. To date, the project has worked with the Ministry of Food and Agriculture in developing an agricultural extension unit and has introduced black pepper cultivation into the area, distributing seedlings to farmers to establish demonstration plots. The project is also experimenting with introducing new Cola varieties and income-generating activities such as fish culture, snail farming and mushroom cultivation, that can provide valuable incomes while relieving pressures to clear more forest land. Mushrooms and snails are now being promoted by the Ghana Export Promotion Council.

6. Implementing village-level development activities according to community priorities, funded by a self-imposed levy based on volume of logs harvested. So far, this has provided materials for schools, a health post, and wells.

As its activities evolve, the project will need to develop a more formal conception of rights and obligations of the farmers and of GAP and DLH. It will need to evolve a marketing structure that gives security to farmers involved in developing new forms of sustainable economic activities. The most important innovation is the attempt to pursue both sustainable forest management and sustainable agriculture, and developing support structures that enable farmers to practice both. In both fields it has entered new areas in which there are no ready off-the-shelf technology package solutions. The project’s success will be determined by the nature of the interactions it continues to develop with farmers; its ability to collaborate with local authorities, national bodies - notably the Forest Department - and research and development agencies in addressing the problems and needs that emerge; and its ability to find approaches that gain the confidence and support of farmers.

**Swiss Lumber Company**

The Swiss Lumber Company has a mill at Wassa Amenfie, but has no sizeable concession from which to source timber. Furthermore, the company is unlikely to gain any concessions in the area, since it is surrounded by some of the most influential concessionaires in Ghana. It has thus developed its own plantations. However, these will not satisfy the capacity of its sawmill. To meet its future timber needs it has developed contracts with farmers to release land for growing timber (Amanor, 1997). These arrangements emphasise:

1. Timber growing on degraded land that is providing marginal yields rather than competing with prime agricultural land.

2. Indigenous timber species rather than fast-growing exotics. The Swiss Lumber Company combines lines of faster growing medium-term forest timber species such as wawa (*Triplochiton scleroxylon*) with slow growing hardwoods such as mahogany (*Khaya ivorensis*) and Edinam (*Entadrophragma angolense*). It also carries out experiments into the cultivation of timber trees, such as trials it has conducted with the Forest Research Institute of Ghana (FORIG) into the cultivation of odum (*Melicia excelsa*). In the future the company may explore the potential of cultivating crops among the timber.
whereby control over land and trees was held by the holders of cultivation rights (rather than the stools). Given this situation, it was concluded that “at present, only rights to planted trees should be divested, and that the FD should continue to hold the ‘naturally occurring trees’ in trust [on behalf of the President] for the stools. In the very long run, virtually all trees off-reserve will be planted or nursed and full ownership can move to the cultivator.” (CFMU, 1995b)

A number of studies were initiated by the FD’s Planning Branch to explore:

- the role of trees in farming systems;
- incentives for trees in farming systems;
- incentives for tree planting by private individuals and companies;
- revision of the logging manual to include off-reserve timber harvesting operations; and,
- development of Timber Utilisation Contracts which would include social responsibility agreements.

Social responsibility agreements, planned as part of the timber utilisation contract system, aim at ensuring more accountable relationships between timber contractors and landowning communities by partially formalising hitherto verbal agreements on community benefits. This development stems from another CFMU-organised working group, comprising mostly timber contractors and chiefs. Although still to be fully worked out in operational terms, the main elements of social responsibility agreement are a code of

3. Promotion of joint ownership in the timber, which assures that the farmers have an interest in the protection of the timber from bush fires and illegal harvesting. It provides four types of payments to farmers: a lump sum down-payment, a percentage share of the timber at harvest, an annual land rent, and first option on a weeding contract on the plantation. The percentage share and the down-payment vary inversely: the larger the initial down-payment the lower the farmer’s share in the mature timber harvest. The farmers’ share in the future timber harvest varies from 20-50 per cent. Farmers are bound by their contract to give the company first option in the purchase of their share of the timber at prevailing market prices.

The Swiss Lumber Company project addresses several important problems for sustainable timber production: it seeks to bring degraded land back into production by planting forest trees on them rather than competing with farmers for the best land; it is focused on a medium-term to long-term economic venture; and, recognising that long-term investments and discounting are a problem for farmers, it provides them with short-term investments while assuring that they have long-term interests in the timber. Although this project is still in its infancy, many farmers in the area have registered interest in participating.
conduct for the TUC, agreed social responsibilities for the forest resource, and agreed contributions to infrastructural development in the area concerned.

A key legislative development, steered by the Ministry of Lands and Forestry from 1995 to 1998, is the Timber Resources Management Bill, which formalises the principles and procedures of the Timber Utilisation Contracts and gives legal backing to the logging manual. A new Forest Act is also under consideration and development. This aims to provide for effective sanctions against forest offences, eliminate contradictions between provisions in legislation, and institute the right incentives for tree planting and stewardship.

**Box 6.3 New and proposed legislation: re-allocating timber rights and creating a forest service?**

The Timber Resources Management Bill was passed by parliament in late 1997, and awaits Presidential Assent in early 1998 (at the time this study goes to press). The Bill provides for Timber Utilisation Contract (TUC) as an instrument for area-based rights allocation. TUCs will replace the former concession leases. The Bill aims to establish open competition for timber rights and a process for this, based on bids which detail work programmes to be prepared on the basis of guidelines produced by the forest authority. The Bill prohibits any person harvesting timber without a TUC, and does not distinguish between forests resources on-reserve and off-reserve.

TUCs will be between the Government, as represented by the Minister of Lands and Forestry, and the timber contractor. However, the land belongs to the stools, whose rights to be consulted must be respected. This is accommodated by contract identification procedures that put the emphasis on the community’s wishes in so far as the area, boundaries and operational specifications are concerned. Under a TUC system, a prospective holder of timber rights has to submit a Contract Operations Plan (COP) which details the type and scheduling of harvesting operations proposed, environmental concerns and social responsibility. This Plan is concerned with the proposed harvesting operations and not with the management of the resource, which is the prerogative of the FD. The introduction of COP is intended to transform the operation of timber contractors and allow FD more control over where, when and how operations are undertaken, based on the Logging Manual and the site-specific Timber Operational Specifications.

The social responsibility agreements within the TUCs aim to partially formalise mutual responsibilities of timber contractors and communities. The Bill also formalises the off-reserve timber felling procedures established through the Interim Measures and introduces the right for either the landowner or farmer to veto the harvesting of trees from their land.

A Proposed Forest Act has also been produced, following the work of another FD working group and
The proposed new Act provides a comprehensive regulation of institutional as well as substantive aspects of the forest sector. Some new innovations in the Act include:

- Recognition of the fact that most forest reserves remain the property of stools and skins. The ambiguous concept of “vestiture” of forest lands and trees in the President is therefore abandoned and replaced with a more accurate and transparent concept: forests belong to the customary landholders and the management rights of the state are clearly spelt out.

- Enhanced rights for owners of on-reserve forests including the right to be consulted on management plans.

- Encouragement of tree planting by removing inappropriate formalities.

- Introduction of the concept of “dedicated” forest, to increase direct landowner involvement in off-reserve forestry. Such forests are to be managed by the owner in accordance with a management plan prepared in agreement with the Forest Service. Once these forests have been dedicated, no TUCs can be issued against them.

- The concept of community rights to the use of a limited number of trees is also introduced.

- Establishment of an administrative dispute settlement mechanism. Forest offence settlement committees are recommended in each region to deal with reported forest offences.

The proposed Act is understood to give a clear endorsement of forest management systems, based on collaboration and a recognition of landowners as the primary clients of a government forest service. The role of the proposed Forest Service is described as having two main elements: protecting, managing and developing in a sustainable manner the forest reserves of Ghana in the national interest and for the benefit of the owners; and providing a management service on agreed terms to private individuals, traditional authorities, communities, companies, unit committees, District Assemblies and others outside the forest reserves.

A major assumption in the FD’s off-reserve planning is that people will start to plant trees like teak in the very near future, which will produce a new harvest of planted timber off-reserve after the present stock of naturally occurring timber is used up (see section 3.3.2). The Ministry of Lands and Forestry is preparing a Private Sector Plantation Programme to encourage farmers and companies to plant trees (FD, 1997a).

In 1997 the FD instituted discussions on developing strategic plans on a district basis. With regard to timber, these plans would involve allocation of a district quota of timber trees based on the off-reserve inventory data, and the notional AAC off-reserve. The FD has drawn up its plans for allocating such quotas according to the scarlet, red and pink star species category.
system (FD, 1997a). The development of district strategic plans will depend on the full involvement of District Assemblies.

All these developments imply a very different role for the FD off-reserve. Currently the FD collects royalties, regulates timber harvesting, supports tree planting and undertakes strategic planning. If the implications of collaborative management and the proposed new legislation are internalised, FD roles will differ for three different off-reserve contexts:

- management of patches of forest (landholders take the lead, FD supports management systems and monitors timber harvesting);
- managing trees in farming systems (farmers take the lead, FD controls felling and encourages development of new systems by farmers with other agencies); and
- planting and managing tree crops on degraded lands (FD creates enabling environment for planting and develops best practices, NGOs and private sector carry out much extension).

Much work will be needed by the FD and other stakeholders to debate and re-allocate these potential roles to suit local reality.

**Box 6.4 Initiatives for institutional reform of the Forestry Department**

The Government has invested considerably in the strengthening of sectoral institutions with assistance from donors over the last few years. The 1994 Forest and Wildlife Policy prescribes an objective for effective capacity building which states, *inter alia:* “Develop effective capacity at National, Regional and District levels for sustainable forest and wildlife resources” (Clause 4.2.5). One of the strategies envisaged by the Policy is the reorganisation of the FD and the Game and Wildlife Department as autonomous or semi-autonomous agencies to focus on up-grading of staff performance and improved monitoring, coordination and accountability.

The Forestry Department has suffered from fiscal scarcity and an excessively conservative climate of human resource management. Over time its capacity to manage even the little funding available has
been lessened by a highly centralised financial administration system. The FD is thus perceived by internal senior staff and the MLF as insufficiently effective. It is believed that the FD has to move out of the Civil Service or at least to a position where a restructured Forest Service (FS) has real influence over finance and personnel. Critical to the success of this FS, and beyond the need merely to re-train staff and develop new control systems, would be the need to establish an enterprise and managerial culture within the FS, as opposed to its present control and administrative culture (Smith, 1995).

Moves to support institutional change of this type within the FD started in 1992 with a World Bank-funded study by Ghanaian consultants, and later - in 1994 - through a DFID financed international consultancy by Touche Ross, which aimed to examine the options for institutional reform. This consultancy built on a previous DFID-funded analysis of the incentives for sustainable forest management carried out by IIED in collaboration with the FD in 1992 and 1993. DFID support for institutional change has continued under the Forest Sector Development Project (FSDP) (October 1996 to March 1998).

The process of change is designed to be guided by a Steering Committee. Initially, this Committee included members drawn from MLF and FD only. Over time, the membership has expanded to include representatives from the national Civil Service Performance Improvement Programme, the Internal Revenue Service (which has already achieved autonomy), the Ministry of Local Government, the Forestry Commission and, most recently, the Ministry of Finance and the private sector timber industry. Expansion of the Steering Committee has been found to be useful as a forum to air the wider range of sectoral and national issues and increase the level of participation by other stakeholders in the change process.

The Project Director of FSDP is a senior MLF official who is supported by a full-time expatriate forester with experience of change management. In addition a Core Implementation Group, comprising four middle-level FD officers, has been created: this is responsible, with the expatriate advisor, for implementing the project.

The initial objective of FSDP was agreed to be the creation of an efficiently-functioning FS. Only after this was established, would moves be made to address conflicts in the roles and functions of the many other organisations involved in the sector. In practice, however, progress in this strategy has constantly been hampered by these wider sectoral issues. None the less, the project has developed various plans for the new FS which are under discussion, including:

- new administrative and financial management systems
- new human resource development plan
- management and field training plans
- reployment and retrenchment of staff procedures
- new capital and infrastructure investment plan
- recommendations on amending management and regulatory controls.

In addition, consultants have been used to help draft the new legislation needed to establish the FS and to examine its financial viability.
6.4 Forest certification: collaborative policy development?

6.4.1 Origins of the process in Ghana

During the 1990s, the timber sector in Ghana became increasingly aware of the steps being taken in major markets, especially in Europe, to discriminate against timber which was not from “sustainable sources”, and recognised that this could have a negative impact on Ghana’s timber exports.

During this period, increasing interest was also developing, in the Ministry of Lands and Forestry and the Forestry Research Institute in particular, in the possibilities offered by market-based, and other economic, instruments in the pursuit of sustainable forest management. Such instruments aim to create the economic conditions for individuals to choose to modify their activities. In theory, the effective use of such instruments can complement the use of regulatory and fiscal instruments, which have been the main tools for implementing policy for forests in Ghana, as in many other countries.

Forest certification, with labelling of the product of certified forests, is one such tool in the “tool kit” for sustainable forest management. Certification is about independent verification that a forest is well-managed, or that a forest product comes from a well-managed forest. Like other market-based instruments, participation in certification programmes is voluntary. Forms of certification are increasingly becoming a reality at international level, as the demand for sustainable forest management in certain markets grows. The major market is Europe, to which Ghana exports a proportion of its timber. Yet currently, managers of forests in richer countries in Europe and elsewhere are more able to apply certification. By the mid 1990s, recognition was growing in Ghana that its timber sector may thus lose competitive edge in these markets unless it can develop appropriate and effective forest certification.

In 1995, the Ministry of Lands and Forestry began some serious analysis of the whole question of forest certification and ecolabelling and came to the conclusion that the Government had to play an active role in determining what should be done. The Ministry and its agencies were initially of the view that forest management certification was inevitable and worthy of support under the Forest and Wildlife Policy, provided there would be no government expense involved. The country was already formally committed to sustainable forest management and wished to meet the
ITTO Objective 2000\textsuperscript{23}, without surrendering any of its sovereignty through a certification requirement imposed from outside.

The timber trade associations and their members were initially reluctant to admit that certification could affect their operations. However, as discussions proceeded they increasingly voiced that they were “feeling the pinch” of the measures being adopted by their main trading partners in Europe. By mid 1996 the industry associations had stated their support for certification in order to maintain or regain market access.

Whilst landowners have always been concerned about the quality of forest management, until recently they have had few options for effecting this concern since government has been responsible for management of the resources. In recent years, with expansion of the collaborative approach, their views have been increasingly incorporated in forest management activities (see sections 5.4 and 6.3). Yet, in the early stages of debate, certification did not seem particularly relevant from their perspective as they considered main issues to be: controlling illegal forest operations; controlling damage caused by logging; ensuring the social obligations of concession holders were met; and, securing prompt payment of adequate forest revenues.

During 1995 and 1996, debate on the issues was steered by the Ministry of Lands and Forestry, whilst the Forestry Research Institute of Ghana and the International Institute for Environment and Development developed background analysis and encouraged preparation of “perspective papers” from various stakeholders, with the support of the Overseas Development Administration of the United Kingdom (now DFID) through this study. These efforts were brought together in a national workshop in June 1996 (see Box 6.5). Workshop participants agreed that certification was likely to form an important tool in improving forest management and accountability, and moreover was an essential part of a marketing strategy aimed at the environmentally discriminating markets, notably in Europe. A National Certification Committee with a Technical Working Group were proposed by the workshop.

\textsuperscript{23} The Government of Ghana, as a member of the International Tropical Timber Organisation, has committed the country to the “Objective 2000” goal to export only timber harvested from sustainable sources by 2000.
Box 6.5 Initial steps in developing a certification system in Ghana

A national-level workshop was held in Kumasi on 12-13 June 1996 on the theme “Forest Certification and Other Market-based Instruments in Ghana”. Participants included representatives of the Ministry of Lands and Forestry, the Forestry Department (FD), the Forest Products Inspection Bureau (FPIB), the Timber Export Development Board (TEDB), the Forestry Research Institute, the Forestry Commission, the Ghana Standards Board, the Environmental Protection Agency, the Furniture and Woodworkers Association of Ghana (FAWAG), Ghana Timber Millers Organisation (GTMO), Ghana Timber Association (GTA), several landowning chiefs, Friends of the Earth, the International Institute for Environment and Development (IIED), SGS Ghana (a certifier) and several academics from the University of Ghana, and University of Science and Technology.

The workshop concluded that:

- a certification scheme should be developed for Ghana;
- certification should be one of many techniques for ensuring sustainable forest management;
- the Forestry Department’s forest management system, with performance standards to be set by a national certification committee, should form the basis of a quality management system for the purpose of certification;
- a national accreditation board should be established to certify certifiers;
- a technical committee should be formed by the Ministry of Lands and Forestry to develop the scheme;
- local standards adopted should be approved by an independent, international body;
- the active participation of all stakeholders should be pursued;
- the existing cost of forest management should not be significantly increased by the cost of certification;
- beneficiaries should pay for certification, with the consumers eventually bearing the bulk of the cost;
- certification should be applied at the level of the Forest Management Unit or the concession.

The workshop recommended:

a. the creation of a National Certification Committee, chaired by the Technical Director of the Ministry of Lands and Forestry, and comprising representatives of Ghana Institute of Professional Foresters, GTMO, GTA, FAWAG, FD Planning Branch, Environmental Protection Agency, two leading environmental NGOs - Friends of the Earth and Green Forum, TEDB, FPIB, Ghana Standards Board and two chiefs representing the traditional landholding authorities.

b. the establishment of a Technical Working Group of the national committee, comprising respected professionals, to develop the options intensively over a three-month period.

Shortly afterwards, the National Certification Committee’s Working Group began its work facilitated by the Ghana Standards Board with technical input from IIED: collection and review of relevant documentation; review of the current forest management system in Ghana; drafting of a basic set of forest management standards for Ghana; and, initial outline of a certification system, i.e. assessment and accreditation consistent with draft standards.
6.4.2 Process and outputs to date

Effective dialogue, developed before and during the 1996 workshop, continued at various levels through 1997. In general, the interest groups on the Committee were proactive and mutually cooperative. The Ministry of Lands and Forests, responsible for much of the early momentum on the initiative, continued to play a motivating role. Some senior managers within the FD advocated pursuit of a national certification programme - to be in line particularly with guidelines produced by ITTO and the African Timber Organisation (ATO). However, enthusiasm for such an approach was weaker in the FD’s Planning Branch, which has represented the FD on both the Technical Working Group and the National Certification Committee. Planning Branch officers have been of the view that, if certification is deemed necessary, it should be in the form of independent auditing of FD management systems rather than certification of defined forest areas. The export-oriented Ghanaian timber industry increasingly voice the view that certification can be seen as a marketing strategy option.

The Working Group process has resulted in a number of significant outputs. Firstly, the decision taken on the purpose of certification, in effect that it should be a complementary tool for sustainable forest management although essentially, a core part of marketing strategy. Secondly, it has been understood that the types of forest and forest owner/manager to which certification will mainly apply in practice will include:

- natural high forests (reserve and off-reserve forests), managed by government for sustained timber production and contract areas (forest management units) allocated to individual timber contractors;

- plantation forests, managed by government and private owners who will be at liberty to dispose of their products on a planned basis.

In 1997 discussion also got under way on the possibilities for certification of trees and forest patches outside reserves. Whilst there is sufficient experience in the off-reserve areas to warrant examination of the potential contribution of certification in promoting trees in sustainable land use systems, there are many difficulties - many of them common to the challenges facing improved management in general off-reserve (see Box 6.6). Certification development processes may need to grapple with these challenges, and consider the potential place of certification in the light of evolving off-reserve management systems.

Thirdly, a draft standard entitled “a System for Quality Management for
Ghana’s Forests” has been produced (Ghana Standards Board, 1997). It covers all types of forest lands and provides both the minimum performance levels to be achieved and the components of a management system which have to be in place to ensure that these levels are attained. The standard would be applied to defined forest areas which are subject to uniform management (single forest reserves, groups of reserves, or groupings of individual ownerships of off-reserve land). The standard is intended to be implemented by any Forest Management Organisation (FMO) entrusted with such duties. FMOs may be the FD or its units, or organisations serving landowners in managing forest resources on their lands. The draft standard identifies:

- **Performance elements**, including national principles, criteria and indicators that describe ecological, environmental, social and economic requirements of quality forest management. Ecological criteria relate to maintenance and enhancement of ecosystem productivity, and conservation of biological diversity. Environmental criteria cover conservation of soil and water resources, and use of environmentally appropriate materials and practices. Social criteria address resource tenure and use rights, community rights and workers’ rights. Economic criteria require economic benefits to be derived in such a way that future availability of products and services is not diminished.

- **Forest management system elements**, covering: forest management policy, compliance with laws and regulations, establishment of the defined
forest area, assignment of responsibilities, identification of stakeholders and key issues, the forest management plan, objectives and targets, and elements for implementing the forest management system. Elements in the latter category include: personnel and resources, responsibilities and accountabilities, timber utilisation contractors, communication, documentation, controls, measurement and assessment, internal audit, and review and improvement.

The draft standard is intended to be compatible with existing international guidelines, notably those of ITTO, ATO, FAO and the Forest Stewardship Council (FSC). It has also been drafted using the International Organisation for Standardisation (ISO) format. In this way, the National Committee has been aiming to avoid the FSC versus ISO debate by becoming compatible with both24. The draft is designed to be hammered out by stakeholders such that, when finalised, it can be acceptable to them, appropriate to local conditions, and compatible with international principles and criteria. Field testing of the standard is planned. It is interesting to note that Ghana’s combination of a management system with performance standards mirrors that of other countries where the forest industry is important, such as Canada and Finland.

Some slowing of the pace occurred in the second half of 1997. This was inevitable as the initiative needs to take stock of other developments - such as the legislative review - and stakeholders consolidate their views. A programme of addressing some of the challenges in further developing certification in Ghana was developed by the Ministry of Lands and Forests; it is hoped that the European Commission will commence support for the programme in 1998.

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24 With respect to verification of forest management, the Forest Stewardship Council (FSC) and International Organisation for Standardization (ISO) have two very different approaches - the former emphasising forest performance standards and the latter management system standards. At present, the FSC and its accredited certifiers offer the only established international system of forest management certification. FSC operates a complete package: a forest management standard, an international accreditation programme for certifiers, a trademark which can be used in labeling products from certified forests, and a communication/advocacy programme. The main protagonists for the FSC are NGOs and some private sector “buyers’ groups”, whilst some governments still question its mandate and remain suspicious of its NGO-dominated governance. The ISO through its ISO 14000 series, offers a framework for the certification of environmental management systems (EMSs). It does not specify forest management performance standards, and does not permit a label to be attached to products (thus reducing its market potential). The EMS is certified, rather than the forest. It puts the emphasis on developing national accreditation bodies. The main ISO system advocates internationally are within the timber industry - especially large producers - and amongst governments. However NGOs are concerned that the EMS approach may not secure environmental and social performance. Hence ISO’s current forestry working group is defining the range of performance standards - including FSCs - that can be integrated into an EMS (Bass, 1997).
Transformation of the landscape outside forest reserves, from a pattern of forest and farm areas to a predominantly agricultural landscape with small forest patches and trees on farms, is almost complete. Yet the 1995 inventory shows that off-reserve tree resources are still considerable, and the timber in this landscape continues to be vital to maintain a viable timber industry and to meet even the domestic demand projected in the near future.

However, if government, the timber industry and others wish to see the off-reserve “resource base” sustained, as required by the 1994 Forest and Wildlife Policy, the conditions need to be created whereby farmers and landholders see that it is in their interests to look after naturally occurring trees, and to grow trees. The Interim Measures overcame some of the alienation of farmers from timber resources, whilst the Timber Resources Management Bill further establishes tree tenure for landowners, and enables patches of forest to be managed by landowners as Dedicated Forest Land. Yet a number of key policy and institutional challenges remain if management of off-reserve forest resources is to be significantly improved, including:

1. With empowerment of landowners over trees and forest patches, the FD role in maintenance of the off-reserve resource turns to an advisory or supporting one. Careful consideration needs to be given to the likelihood that this will increase rather than decrease the expected role of the FD. Questions include: How will provision of services off-reserve be financed? Will the units of forest be economically viable to enable communities to buy services from the FD?

2. Although the frameworks for on-reserve and off-reserve forest management incorporating collaboration, which were presented by the FD’s Planning Branch in 1995, appear to have been accepted at the time, internalisation at both local and senior levels of the FD is in its early stages.

3. The relationship between the FD and District Assemblies, with respect to supporting off-reserve management, needs to be thrashed out in the context of developing the form of the new forest service, and taking forward the idea of off-reserve district-based strategic plans.

4. With the felling procedures instituted by the Interim Measures now incorporated into practice, there is duplication of effort between FD and FPIB - both scale all logs and issue certificates. There is a need for FPIB to focus more on spot checks and endorsement of valid FD-issued Conveyance Certificates.

5. Stools receive a share of revenue as owners, but farmers - who look after the trees - do not. This remains a big disincentive to protection of trees on farms. Farmers argue that they provide a service, and like the FD, should get a share. Mechanisms for farmers to benefit need to be legitimised - probably through social responsibility agreements.

6. The rights of tenants to trees planted by them remains ambiguous with respect to the rights of landowners.

7. Settlers are often distant from landowners and remain without secure property rights. There is a need to
develop arrangements which enable forest resources to be protected in the interests of landowners as well as settlers.

8. Different areas have very different resource endowments. In the timber-poor areas, notably the dry forest zones, it may be necessary to introduce measures such as tax concessions for forest development and regenerative activities with local communities, which take account of the additional costs involved in rehabilitating this zone.

9. Trees on farms are actively nurtured, managed (coppicing, pollarding, canopy manipulation) or removed by farmers primarily for their effects in the farming system. Thus, improved tenure alone is not enough to promote and support tree management on farms. Progress in addressing the considerable technical problems of integrating timber and forest trees with agriculture has only just begun. Farmers’ knowledge and interest in trees is the key resource to build on here. Opportunities exist in some agricultural sectors to develop more forest-friendly approaches. In the key cocoa sector, increasing problems with pests require that approaches to cocoa production become more concerned with habitat management.

Many of these challenges and opportunities can be addressed only through debate and negotiation at quite local levels. With the support of farmers, it should be possible for forest managers to create stakeholder fora and linkages to raise these issues and sort out priorities and roles. Negotiation is particularly needed between three stakeholder groups - the FD, timber contractors and landowners. However, District Assemblies also need to be involved such that strategic plans at district level can take off. NGOs and agroforestry services have tended to lag behind, having mainly adopted short-term woodlot income-generating technologies, but should also be involved in the debate. Much will depend on finding ways forward based on the concrete experiences of farmers and a demand pull for research and development agencies to respond to particular problems. Experience with collaboration by the FD thus far suggests that these partners need to focus their agenda on experimentation and promotion of adaptive learning at both local and policy levels.

6.4.3 Challenges ahead for certification in Ghana

Whether or not the “off-reserve challenge” is addressed, there are a number of key questions yet to be resolved for an effective and equitable certification programme in Ghana. These include:

- How to shape a broader process of stakeholder consultation and weighting of views in clarifying the standards. To date, a consultative process has proved to be a useful way of achieving consensus amongst initially conflicting parties. The government has played a prominent role, though not a controlling one. The organisation of a broader transparent process is now a major challenge.

- Cost issues, including the concerns of small-scale producers whose operating technology may be environmentally appropriate but who may
be ill-equipped to absorb the additional costs of certification. Detailed cost estimates on certification are not available for many situations.

- The question of governance and organisation of the system, which could be facilitated by continuing with the National Certification Committee as the steering body.

- The question of accreditation of certifiers is still to be decided. The National Certification Committee would be interested to see the African Timber Organisation play a role in this regard (Smith, 1997b) which would be an important expansion of its mandate. The FSC (particularly because the “green” markets require its standards), and the ISO (because it is compatible with Ghana’s management systems approach, and allows for continual improvement), may also play a central role in this regard.

- Decisions will also have to be made as to who the certifiers will be, how the assessment systems will function and the shape of the chain-of-custody and labelling parameters.

Further workshops are anticipated to develop the standard. Field testing is then planned, possibly with the involvement of international bodies such as CIFOR. Following evaluation of the results, the need for further modifications would be worked out with the stakeholders in further fora. International recognition would then be sought, before concerted implementation.

The government has sought to play a prominent part in certification and has been active in the two main processes - of setting the standard and developing the certification approach. Given government’s current role as manager of large areas of the nation’s forest this is understandable, and strengthens the complementarity of certification as a policy instrument alongside the regulatory framework. However, it should also be noted that government has recognised that it should not exert control over either of these processes (Smith, 1997b).
Following the protectionist mandate which the colonial government gave itself in “Timber” Thompson’s 1908 report, the tactics used to establish forest reserves initially involved trying to persuade chiefs and traditional landholders that reservation was in their best interests and urging them to place the land under reserve through their own by-laws. Greeted with little enthusiasm, the government later used the threat of compulsory reservation through an Ordinance. The two systems - reserves under by-laws managed by the owners under the advice of the Forest Department, and reserves under Ordinance managed by the FD for the benefit of the owners - ran side by side until several years after independence. However, most of the target 20-25 per cent of the high forest zone under reservation was in place before the Second World War.

The War changed the nature of forest management by introducing a major emphasis on timber production. Large quantities of command-and-control legislation were introduced. The arrival of local government systems confused the decision-making between the FD and landholding chiefs. The rise of the timber trade coincided with a decline in recognition of the chiefs and farmers. It also brought a focus onto the unreserved areas of forest and their timber stocks. Protected Timber Lands were introduced as a means to try and prevent conversion of standing forest in western Ghana into farmland, at least before the timber could be removed. Whilst FD field staff were struggling with these new responsibilities, rumour was rife that these lands were going to be turned into reserves. Chiefs and farmers reacted by colonising the areas. Government did indeed then designate the areas as reserves. This exacerbated tensions and full-scale settler “invasions” took place. Sporadic government attempts to evict these farmers has failed - leaving a legacy of mutual mistrust.

Under the colonial policy of Indirect Rule, traditional councils collected their own forest revenue and, until 1962, concession agreements were made directly between timber contractor and landowner. Timber royalties paid under these agreements were often very low. The expansion of the industry, following improvement in roads, communications and equipment, meant that traditional council revenue collectors could rarely keep up. In 1962 government took normative control of land and trees - “in trust” for the chiefs and people. “Indigenisation” in the mid-1960s turned the timber industry from being controlled by a small number of foreign “merchant princes” into a plethora of local companies - many of whom had considerable influence at policy levels. They fought hard to implant the
notion into policy and planning that the timber industry could foster national development. Low royalty levels were a direct result and, although both royalty systems and the nature of the industry has changed considerably, remain so to this day.

The 1994 Forest and Wildlife Policy called for creation of the conditions under which sustainable forest management could be brought about throughout the country - a massive change of emphasis for the off-reserve areas. This coincided with a market-led surge in interest in these off-reserve resources, and widespread uncontrolled felling. The MLF called on the FD to develop a system of controls off-reserve. The resulting working group process set a new precedent for consultation. The product was the Interim Measures which introduced: pre-felling inspections - involving farmers and the FD; pre-felling permits; post-felling inspections; and the issuing of conveyance certificates before logs can be moved.

The FD was unprepared for these major new responsibilities and took some time to catch up. There are still huge logistical constraints to their full implementation. However, the impact on checking illegal felling has been considerable. Revenue collected by the FD has also risen dramatically since the Measures were launched. Logging contractors have in general been supportive of the approach, and even timber millers - some of whom were previously benefiting from cheap illegal logs - have cooperated. District Assemblies have also begun to play a more productive part in forest resource management. Farmers have reported improved recognition by concession holders, improved relations with the FD, reduced crop damage, better compensation and improved confidence generally to act. This latter effect may be the lasting legacy of the measures: the balance which for many years has been tipped in favour of the timber industry, is swinging towards management by farmers and landholders.

Meanwhile, new legislation will replace concessions with Timber Utilisation Contracts - requiring stronger environmental and social commitments - and will improve landholder and farmer rights over trees. As the rights and capabilities of landholders, farmers and District Assemblies increases the notion that the FD could, on its own, pursue sustainable resource management off-reserve has become challenged. Collaboration and partnerships have become the watchwords for good management, and a range of possibilities are being experimented with - including arrangements involving timber companies, farmers and the FD. A process is also under way to re-orient the FD as a more “client-oriented” Forest Service.
Forest certification aims to provide independent verification that a forest is well-managed, and chain-of-custody verification that a forest product comes from a well-managed forest. Momentum for a national approach to forest certification and labelling in Ghana stems from 1995 when the MLF started a process of analysis and debate. Ghana’s government is already committed to trying to achieve sustainable forest management and certification appears to be a useful tool to prove its progress and gain certain market advantages in the process. Some within the FD remain sceptical of its utility but are keen to see how it might become part of the effort to bolster FD management systems. Timber trade organisations in Ghana have become interested in the possibilities for certification since beginning to “feel the pinch” of trading partners discriminating towards certified timber. Landowners have also become interested in increasing the accountability of those who operate on their lands.

To date, the certification debate has involved a multi-stakeholder workshop which concluded that certification should be pursued, and be focused on areas of natural forest or plantations managed by government or private sector operators. A National Certification Committee with a Technical Working Group were also formed, and these have produced a first draft national standard, against which certification can apply. The draft standard includes performance elements and forest management system elements.

Significant challenges remain if an effective and equitable national system of certification is to become a reality. Foremost amongst these is shaping a transparent process of stakeholder consultation on the evolving standard and appropriate weighting of views in its modification. Other issues include those on costs equity, governance of the system, and accreditation of certifiers. The “off-reserve challenge” continues to present a range of tricky issues for policy and institutions for forest management, and the potential for off-reserve certification is just one of these. Debate and analysis on this issue have only recently begun.

These four stories - forest reservation, timber royalties, the Interim Measures and forest certification - reveal a number of lessons about the use of information and argument, about good and bad policy instruments, about the shifting ground amongst winners and losers in forest use, and about policy and institutional processes that do and do not work. These are brought to conclusion in the final section which follows.
Conclusions, lessons learned and ways forward

Our analysis, of the landmarks and case studies of policy in practice, enables us to draw a number of conclusions about policy and policy processes. From these conclusions, certain lessons are derived which in turn enable us to indicate some of the possible ways forward to policy that works for both forests and people.

7.1 Summary of influences on policy in practice

Four broad phases can be discerned in the history of forest policy in practice over the last century and a quarter:

- the consultative phase (1874 to 1939)
- the “timberisation” phase (1940 to 1953)
- the “diktat” phase (1954 to the early 1990s)
- the collaborative phase (since 1994)

In each of these phases the major concerns and pressures (“factors”), from within and outside the forest sector, which influence policy in practice can be identified. The major stakeholders and organisations (“actors”) who influence forest policy in practice can also be identified. These phases, factors and actors are illustrated in Figure 7.1. The figure attempts to show the changing influences which these factors and actors have had over the four phases. It indicates that in the current phase a greater number of factors and actors are influencing policy practice compared with earlier days. The figure also hints at a better balance between these actors and factors in the current phase.
Figure 7.1 The changing “shape” of forest policy in Ghana: four periods between 1874 and the present

1. Consultative phase 1870s to 1939

2. Timberisation phase 1940 - 1953

Notes:
- “Factors” are the major concerns and pressures from within and outside the forest sector which influence forest policy in practice
- “Actors” are the major stakeholders and organisations who influence forest policy in practice
- There is no horizontal correlation between factors and actors
3. Diktat phase 1954 - 1990s

**FACTORS**
- Agriculture/ cocoa
- Environment
- Political - ideology, patronage
- NTFPs
- Timber
- Macroeconomic factors/ SAP

**ACTORS**
- Chiefs
- Forestry Department
- Local communities
- Timber Industry
- Local government

4. Collaborative phase since 1994

**FACTORS**
- Agriculture/ cocoa
- Environment
- Political/ ideological
- NTFPs
- Timber
- Macroeconomic factors
- Mining

**ACTORS**
- Government/ MLF
- Chiefs
- Forestry Department
- Local communities
- International community/ Donors
- NGOs
7.2 Lessons and ways forward

Our analysis does not suggest that fully-fledged collaborative forest management is actually occurring. Developments of the last few years have made much progress but are yet to answer some important underlying questions fully; these include:

- What are the forests really for? What goods and services do we want from them?
- How can we prioritise and make trade-offs between incompatible goods and services? Who decides this?
- Who pays for goods and services we need but which are non-marketed?
- How do we maximise the potential for good forest management through determining appropriate roles for the various stakeholders?

However, we believe that forestry in Ghana is on the right road. With perseverance, stakeholders in her forests can fashion policies and processes favourable to both human well-being and a sustainable resource. This section attempts to shed some light on how this may be possible.

7.2.1 What does not work

Some of the current problems facing forest policy and management in Ghana stem from the history of influences on reservation, off-reserve “management” and revenue, and some of these constrain options, and create complex problems for the future.

Stakeholders who are passive onlookers in decision-making will not contribute their skills and resources

The management of forest reserves faltered because government did not support the landowners’ ability to manage. Landowners had insufficient proof or confidence that reservation was a paying concern, and consequently did not invest resources in forest protection or in organisation for management. The weakness of the landowners and the progressive decline of their influence stemmed from this fact. Similarly concession holders did not have any meaningful role in forest management. Central government and the Forestry Department sought to do it all. Further, royalties from timber harvesting were poorly collected and even more poorly distributed between 1961 and 1994, partly because implementation was centralised and did not involve local stakeholders.

Where issues are complex and uncertain - monopolising information leads to policy failure

For a long time, despite admitting that the owners and other forest resource
users had a stake in the forest and hence in the outcomes of forest policy, the Forestry Department kept data collection, identification and evaluation of alternatives, and translation of policy into field programmes, to themselves - subject to formal approval by government. The forester tried to articulate the needs and concerns of all stakeholders, including the general public or the state, and to formulate solutions for them. He saw himself as the voice of society on forestry matters. Even in the reserve settlement procedures, where some form of public enquiry was mandated by law, this was only to enable people to state and claim their rights not to object to the reservation, to suggest an alternative location or to propose alternative boundaries.

However, when the forester did not get it right, there was no one to correct and re-direct him, and stakeholders who did not agree with the forester’s plans could only “vote with their cutlass”. One example is people ignoring the request to constitute their lands as forest reserves under by-laws. Another is the later encouragement of immigrant farmers into the protected timber lands in Western Region that were to be converted into forest reserves. The attempted conversion of the PTLs to forest reserves in the 1960s did not consider sufficiently the large area already under reservation in the region, and frontier status at the time.

Poorly communicated policy can do more harm than good

If the objectives, mechanisms, and intended outcomes of policy decisions are poorly communicated to those who are supposed to implement them (let alone the wider grouping of those who are affected by them), misunderstandings, confusion and mistrust will result. The failure of Protected Timber Lands policy is partly due to the lack of communication of its objectives and intended outcomes. Forestry at the operational levels has suffered from inadequate orientation of new officers to the Forestry Department - to its procedures, its history and the rationale for doing what is done. Consequences have certainly included unwise actions taken by new district officers with inadequate experience when, for example, manuals of procedure had become out of date. (It should also be noted, however, that operational foresters with wide experience are often highly resourceful at “getting by” in the absence of communicated policy, or in circumstances where policy is contradictory. Outcomes are diverse, but not necessarily all “bad”).

7.2.2 What works, and why

Negotiation in national fora and working groups

The “success” of Ghana’s forest reserves - retention of forest in reasonable condition in over half of the system’s area - owes much to the involvement of stakeholders, limited though this was, in their establishment and early
management. Government developed model by-laws for consideration by the native authorities. Whilst joint development of these arrangements would have been inconceivable at that time, the native authorities did not merely rubber stamp the proposals made to them. They thus developed a proprietary interest in the laws and the reserves.

More recent policy developments - the Forest and Wildlife Policy, the Interim Measures, preparation of the Consolidated Forestry Bill and the certification debate - have been elaborated through relatively inclusive mechanisms for stakeholder involvement. National workshops and seminars have been effectively used to present options and debate them in an open-ended matter. Working Groups stemming from, and feeding into, these fora have thrashed out and refined policy, with some notable successes at reconciling quite divergent stakeholder views. The Interim Measures, the ongoing certification development process and the formulation of a national land policy are examples of this. These emphasise that “good policy” is more likely to emerge from negotiation and agreement than from diktat and the assertion of authority.

The linkage of involvement in policy formulation to involvement in implementation is also clear. We conclude that the possibilities of policy outcomes being “right” are increased if those who are to implement them and those who are to be affected by them contribute to their development and implementation.

Potential of collaborative approaches to address inequalities of power

A change in the overall framework for forest management and a real transfer of control to landowners has been occurring in recent times. The Interim Measures, being transposed into law through the Timber Resources Management Bill, represents an effective challenge to the status quo, which had in practice emphasised the rights of timber contractors as opposed to the rights of the landowning communities.

However, there are many difficulties and contradictions in advocating “more participation”. The implication is that everyone will cooperate when involved a bit more and given a bit more information. But stakeholders don’t have the same “stakes” - they have very different resources of capital, know-how and labour at their disposal. The results of involvement may not favour those with little power and wealth. Inequalities of power and wealth will not be dealt with simply by listening to more views or inviting more people to a meeting. Further, it has even been heard in discussion that “collaboration” is just a way of reducing government expense on forestry services and will merely force more obligations on poor people.
Inequalities must themselves be ameliorated or changed by policy processes. This is, of course, asking a lot of foresters alone. Wider changes in society are needed to enable stakeholders to look after themselves, and for the political process to be able to moderate stakeholder negotiation. However, a truly collaborative approach in forestry can begin to address problems in ways beyond the reach of other “sectors”. Foresters, because they have come to find themselves as guardians of valuable land and resources, have much to contribute in making new deals for the benefit of both forests and people.

Good information quality and flow are prerequisites for good policy
A continuous flow of information concerning the state of forest assets, the values and demands put on them, and the effects of their use, is essential for the implementation of policy. The quality of information in these areas has been one of Ghana’s comparative strengths (see section 1.1). In recent times, a number of surveys has been carried out - on the condition and “bioquality” of the forest estate, and on NTFPs - and the information made available, for example through the Forestry Department’s development of a computer database and exhibitor system on forest resources and their distribution. Various studies on forest-linked social and economic issues, formal and informal institutions and industry have also been undertaken. The Forestry Commission’s capacities for collating and disseminating forest information has also improved. Recent policy developments have thus had the benefit of a much-improved information base, which should decrease the margin for error.

Institutional structures for adaptive learning linked to policy
Put in an abstract way, policy works when the “wheel” of data collection, consultation, policy formulation, implementation, monitoring and evaluation can be continually kept in motion. This requires that the institutions involved are capable of learning from practice, and adapting in response to changing circumstances and past success and failure. At central levels, the Ministry of Lands and Forestry has increasingly shown these characteristics in the last few years. At operational levels Forestry Department staff are beginning to find space and acknowledgement for “doing the right thing” in practising such learning, without compromising strategic objectives.

A strength of the FD’s Planning Branch in recent times has been linking learning processes directly to capacity development and policy processes. The CFMU has effectively linked pilot local collaborative initiatives to improved understanding at policy levels. However, there is a need to develop capacity within the FD to implement collaborative approaches and
develop the required skills as part of the learning process. Much of the Planning Branch’s innovative work still remains to be integrated and institutionalised within the FD.

A mix of complementary instruments
Effective policy is likely to require a combination of instruments which provide some incentives (the carrot) and some regulation (the stick). Government involvement in forest reservation was a good example of the carrot-and-stick approach. Government provided personnel for protection and administration at no cost to the owners; and at one time, even paid a small grant to owners of reserved areas that were not yet earning revenue. Yet legislation also enabled government to reserve non-government lands after several years if landowners did not do so themselves.

The Interim Measures are also a mixture of instruments: regulation - inspection, permit, farmers’ veto; and incentives - compensation for farmers, conveyance certificate for the logger. Certification and labelling, on the other hand, are market-based instruments intended to offer an incentive for quality forest management. It may be noted that in many instances the standards required for certification are the same as the requirements of the law. The situation aimed for with this instrument is one in which the market incentive becomes a driving force for improving forest management, allowing the law to become the final recourse rather than the first.

Some instruments effectively enable some groups while excluding others. The legislative changes, that confer enhanced tree and forest rights on
landholders and rationalise the allocation of timber harvesting rights, effectively “pull” a group of stakeholders, who had previously been marginalised, into the sustainable forest management network. But this network still excludes significant groups of people - chainsaw operators, labourers, the rural poor, the landless and unemployed - some of whom depend on “unsustainable” practices like uncoordinated cutting of trees for their livelihood. For these groups, nothing short of rural regeneration - security of livelihoods and a diverse economy which meets the needs of the rural poor rather than export-oriented growth - would give them a stake in the system.

**Local knowledge and institutions**
Policy must be firmly linked to local reality. Reservation always required a thorough prior inspection and a report which had to be shown to the government’s political agent on the ground. The implementation of the Interim Measures has also involved local farmers, local government and local concession holders. Local Forest Action Groups have been formed from some of these bodies, and the groups which have succeeded most seem to be those which have clearly emphasised local knowledge.

**Mechanisms for dealing with conflict**
Policy processes are certain to generate conflicting views. In some cases this represents healthy tension which is a key component of processes which can learn and adapt. In other cases, conflict is destructive and mechanisms for resolving it are vital. These must be impartial, transparent and have the confidence of all stakeholders. In the process of reservation, the judicial process was chosen as the vehicle for conflict resolution. This had a historical basis. The chiefs and people were more willing to trust the courts than to trust government during the early years of the century when land matters were being argued. In the implementation of the Interim Measures local committees are being formed to settle disagreements over compensation for crop damage. Whilst the procedures arrived at may be more cumbersome for government, the solutions are likely to be more respected locally than those imposed from outside.

**Key individuals - “crusaders” for change**
This century provides ample examples of policy affecting forests being pushed along by an individual or group who are motivated about particular objectives and able to make “political space” for them. Such people are products of the time, events and circumstances. They are people with a mission - a drive to change things. Their backgrounds vary, but they are often from “outside the system” they are seeking to change, and therefore relatively uninhibited by its traditions and mores. Such people
have not always been “right”! However, in the last few years there is no
doubt that the elaboration and implementation of policy in Ghana - the Trees
and Timber Act, the Interim Measures, the reform of the Forestry
Department, the consolidated Forestry Bill - has in no small measure been the
result of the dynamic leadership of a core group of people within the system
at the Ministry of Lands and Forestry and the Forestry Department. They are
quite a diverse, and not necessarily unified, group but have tended to
demonstrate a common characteristic in the ability to identify policy issues
which are susceptible to change and to find a way to make progress on
problems perceived to be broader than them. By scoring some successes in
such “tactical battles” they are able to build stronger momentum and
alliances to tackle bigger aspects of the problem.

7.2.3 Looking ahead: challenges and dilemmas
Preparing to give ground to find common ground
Policies which impact on forests and forest stakeholders come from diverse
sources. We have described how policies in agriculture - particularly cocoa
policy - mining, timber industry reform and structural adjustment have had
more decisive impacts than “forestry” policy at various times. Furthermore,
some of the most powerful actors influencing forest policy are outside the
forest sector - in the Ministry of Finance for example. These sectoral
influences are all based on their own definitions of sustainability and
different agendas and priorities. Conflicting interests over policy design are
as likely to occur between government and other sectoral agencies as conflict
between or among rural communities. Multi-stakeholder processes which try
to integrate different sectors are clearly needed (see below).

As with participation of different groups within the forestry sector, other
sectoral agencies are only likely to become seriously interested in cross-
sectoral policy initiatives when there is something to gain. Forestry interests
and agencies will thus need to enter such initiatives in a spirit of giving up
some ground to find sufficient common ground for negotiated compromise.
The off-reserve area is the key ground on which the “territoriality” of sectoral
agencies needs to be overcome. Forest agencies need to be more explicit in
their recognition that they cannot create, single-handedly, the conditions in
which farmers and landholders see it as being in their interests to grow trees
and to look after naturally-occurring trees. Areas which require negotiation
and the development of new alliances in meeting this “off-reserve challenge”
include: the balance of tree rights and benefits between landholders and
tenants; and the provision of services and an investment climate for forest-
friendly agricultural systems.
Multi-stakeholder negotiation - engaging with sectors and levels

The development of improved relations between stakeholders is a common denominator for sustainable forest management. Mechanisms for multi-stakeholder consultation and negotiation are needed both at national and local levels. The 1994 Forest and Wildlife Policy set a bold participation agenda, yet its potential Achilles Heel - the lack of direct involvement of farmers and local forest users - may become increasingly apparent. We believe that for the immediate future the process through which stakeholder participation is fostered requires more policy attention than the substance of the negotiation (see below).

The use of multi-stakeholder working groups, seminars, workshops, Action Groups and other ad hoc or “issue” groupings have in general been immensely beneficial. A major challenge is to install more permanent inclusive processes and institutions at the local, district, and national levels for the regular evaluation of progress with, and possible adaptation of, policy. The capacity for experimentation, innovation and learning needs to be prioritised. Policy needs to be regularly refreshed in this way to stay “alive”. A key approach to achieve this “policy refreshment” is to link the levels, such that a national forum is linked to district and local institutions and processes. The experience of the Forestry Action Groups, the Environment Committees of district assemblies and local tripartite partnerships would be invaluable in this. A period of experimenting with, and learning from, various approaches and models would be beneficial.

Moves to develop strategic planning for reserves, and on a district basis outside reserves, provide the means to work out what forest goods and services are for at these levels. Recent developments mean that no longer can all priorities be handed down from above. Only through such processes at local level can the roles of state agencies be worked out - including the appropriate “shape and size” of the Forest Service.

The 1994 Policy anticipates the Forestry Commission playing the role of forum and process convenor at the national level. However, its present back-seat position in the process of forest policy development, its composition and certain dynamics in the wider political economy do not enable it to perform such a role. These constraints will have to change for there to be an effective national multi-stakeholder forum. A vehicle for forging cross-sectoral linkages may be provided by the National Development Planning process, which is not yet in full swing but has much potential. The almost complete national land policy, and the anticipated preparation of a national land use plan may also facilitate significant consensus and coordination.
Reconciling equity and environmental quality objectives

The 1994 Policy and the resulting Interim Measures suggest that a collaborative approach to implementing a more sustainable harvesting regime, regardless of the top-down nature of its origins, may be successful in reducing the threat of over-harvesting. However, the 1994 Policy has the aim not only of managing forest for the perpetual flow of optimum benefits to all segments of society, but also of managing forest resources for the maintenance of environmental quality. It is quite likely that some stakeholders (within government, some NGOs and others) will argue that the achievement of the former aim does not guarantee achievement of the latter.

Additional measures - legislation, regulation and institutional development - are likely to be proposed to secure environmental quality. Addressing these environmental quality issues is likely to be a more divisive process than that of addressing the issue of over-harvesting. The need for high quality information and well-targeted proposals on environmental and biodiversity issues will thus remain, since, at least in the short term under a system of stakeholder negotiation, organised environmental interests may be in the minority.

Fostering tripartite partnerships

Recognition of the limitations of government jurisdiction and funding has emerged as an important reason to develop new strategies. The decline of the forest and its impact on livelihoods is also compelling innovation and new approaches. Tripartite partnerships between government, local communities and private enterprises hold much promise. Examples to date include: the Gwira Banso project, Swiss Lumber Company, the formation of Forestry Action Groups, and social responsibility agreements within timber utilisation contracts. These have
the potential to develop new forest management technologies and sources of livelihood. A key lesson from these initiatives is the need for development of a social process which generates linkages with communities and extends the benefits of forest management. We recommend that forest institutions put a focus on networking amongst these initiatives and groupings to optimise the potential for sustainable forest management and its spread.

A partnership approach will also be needed to address the balance of emphasis towards the savannah zone of northern Ghana. Because “forestry” in Ghana has to date largely been concerned with the high forest zone, information on forest issues and the key policy processes which influence forests and people in the savannah environment is relatively meagre. This study has not been able to address the balance and further work needs to be undertaken to do so.

**Re-installing trust in local institutions**
Local institutions are vital in the implementation of policy. The collaborative forest management process is already emphasising their development. Many of the promising recent approaches to decentralisation of management to local communities are still at an early stage, and caution must be expressed over the extent to which re-establishing or reinforcing traditional institutions and systems of customary tenure can provide an adequate basis for sustainable management by, and for, local people. Some consider that customary systems may be as ill-prepared to cope with increased pressures of people on resources as the formal systems that displaced them. It is quite likely that the solution will vary from place to place. The essential need is the development of effective, equitable and accountable institutions, which can strengthen existing local experience and capabilities. The appropriate form of such institutions may only become apparent through processes which identify the truly motivated agencies on the ground.

**Opportunities for “socialising” forest policy - the wider political economy**
Forest policy change in Ghana has hardly ever been the direct result of “rational” analysis. It is almost always the result of compromises and trade-offs among and between various and diverse interests and players. The outcome of these power relationships is often due to the formation of alliances and other factors in the political economy. Forest policy is therefore a product of the wider political economy. Royalty policy in Ghana has over the years been shaped by the timber lobby which has managed to keep royalty levels particularly low, not by reasoned argument but by skilful and expedient politicking. Similarly, the origins and impacts of
protected timber lands policy and “Operation Halt” were the result of power politics and the perennial “fight” between forestry and agriculture.

Recent policies - the non-implementation of the Trees and Timber Act, the ban on the export of logs, the Interim Measures and their implementation, and the introduction of timber utilisation contracts and social responsibility agreements - have been shaped by changing dynamics in the political economy of Ghana and the forestry sector equally. There is, for example, increasing recognition of the limitations of state power. This is complemented by a rising belief in the capacity of district, and more local, institutions to affect actual events, sometimes in spite of state action.

We believe that a general decline in the political power of elites is observable, with a corresponding increase in the effective power of Ghanaian citizens in general. This is not unrelated to an increasing realisation that a disproportionate share of national resources has been spent in urban areas, although not necessarily on the poor in these areas, but also a recognition of the political importance of rural people25 and their overall importance in the process of national development. In other words, a process of democratisation is taking place. This has important implications for forestry and the forest policy process since meaningful multi-stakeholder participation, and forestry which is sustainable in social terms, are linked to the democratisation of Ghanaian society.

Institutionalising the collaborative approach to forestry - combining economic potential with human well-being - and rooting decision-making in places where people are really motivated to take action - none of these will happen overnight! Much remains unresolved. Yet it seems that after years of “things falling apart”, Ghanaian forestry is beginning to fall into place.

25 The 1996 elections provided further evidence of the decisive importance of the rural vote.
Bibliography


Annexes

Annex I. Data used for figures

Data used in Figure 3.3 Area of forest reserves in Ghana

<table>
<thead>
<tr>
<th>Area category</th>
<th>Hectares</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timber production area</td>
<td>762,400</td>
<td>47</td>
</tr>
<tr>
<td>Permanent protection (i.e. no logging allowed)</td>
<td>352,500</td>
<td>21</td>
</tr>
<tr>
<td>“Convalescence” (production forest temporarily put to rest)</td>
<td>122,000</td>
<td>7</td>
</tr>
<tr>
<td>“Conversion” (deforested land needing to be reforested)</td>
<td>127,200</td>
<td>8</td>
</tr>
<tr>
<td>Not inventoried, but probably needing reforestation</td>
<td>270,000</td>
<td>17</td>
</tr>
<tr>
<td>Total reserve area</td>
<td>1,634,100</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: FD/FIMP, 1995

Data used in Figure 3.4 Condition of forest reserves

<table>
<thead>
<tr>
<th>Condition Score</th>
<th>No. of forest reserves</th>
<th>Area in hectares</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: Excellent</td>
<td>3</td>
<td>34,600</td>
</tr>
<tr>
<td>2: Good to OK</td>
<td>25</td>
<td>248,500</td>
</tr>
<tr>
<td>3: Partly degraded</td>
<td>65</td>
<td>619,000</td>
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<tr>
<td>4: Mostly degraded</td>
<td>41</td>
<td>361,800</td>
</tr>
<tr>
<td>5: Very bad</td>
<td>40</td>
<td>262,600</td>
</tr>
<tr>
<td>6: No forest</td>
<td>40</td>
<td>248,000</td>
</tr>
</tbody>
</table>

Note: Total = 1,774,500 ha. This total differs from that in previous table because it includes Ankasa, Bia and Assin-Attandanso Game Production Reserves and Kakum National Park - all now under the jurisdiction of the Game and Wildlife Department. These were formerly forest reserves.

Source: Hawthorne and Abu Juam (1995)
Data used in Figure 3.6  Log production in Ghana from 1960 to 1996

<table>
<thead>
<tr>
<th>Year</th>
<th>Total volume (million m³)</th>
<th>On-reserve volume (million m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>1.635</td>
<td>0.238</td>
</tr>
<tr>
<td>1961</td>
<td>1.496</td>
<td>0.268</td>
</tr>
<tr>
<td>1962</td>
<td>1.638</td>
<td>0.487</td>
</tr>
<tr>
<td>1963</td>
<td>1.472</td>
<td>0.389</td>
</tr>
<tr>
<td>1964</td>
<td>1.731</td>
<td>0.584</td>
</tr>
<tr>
<td>1965</td>
<td>1.593</td>
<td>0.605</td>
</tr>
<tr>
<td>1966</td>
<td>1.389</td>
<td>0.552</td>
</tr>
<tr>
<td>1967</td>
<td>1.342</td>
<td>0.527</td>
</tr>
<tr>
<td>1968</td>
<td>1.389</td>
<td>0.439</td>
</tr>
<tr>
<td>1969</td>
<td>1.595</td>
<td>0.657</td>
</tr>
<tr>
<td>1970</td>
<td>1.564</td>
<td>0.772</td>
</tr>
<tr>
<td>1971</td>
<td>1.63</td>
<td>0.83</td>
</tr>
<tr>
<td>1972</td>
<td>1.86</td>
<td>1.14</td>
</tr>
<tr>
<td>1973</td>
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<td>1974</td>
<td>1.42</td>
<td>1.003</td>
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<tr>
<td>1975</td>
<td>1.33</td>
<td>1.029</td>
</tr>
<tr>
<td>1976</td>
<td>1.38</td>
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</tr>
<tr>
<td>1977</td>
<td>1.03</td>
<td>0.827</td>
</tr>
<tr>
<td>1978</td>
<td>0.99</td>
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<tr>
<td>1979</td>
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<td>0.454</td>
</tr>
<tr>
<td>1980</td>
<td>0.6</td>
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<tr>
<td>1981</td>
<td>0.42</td>
<td>0.399</td>
</tr>
<tr>
<td>1982</td>
<td>0.42</td>
<td>0.271</td>
</tr>
<tr>
<td>1983</td>
<td>0.54</td>
<td>0.304</td>
</tr>
<tr>
<td>1984</td>
<td>0.6</td>
<td>0.369</td>
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<tr>
<td>1985</td>
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</tr>
<tr>
<td>1986</td>
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<td>0.485</td>
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<tr>
<td>1987</td>
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</tr>
<tr>
<td>1988</td>
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<td>1989</td>
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<td>1990</td>
<td>1.29</td>
<td>1.056</td>
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<td>1.229</td>
<td>0.996</td>
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<tr>
<td>1992</td>
<td>1.318</td>
<td>0.587</td>
</tr>
<tr>
<td>1993</td>
<td>1.682</td>
<td>0.266</td>
</tr>
<tr>
<td>1994</td>
<td>1.682</td>
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</tr>
<tr>
<td>1995</td>
<td>0.983</td>
<td>0.124</td>
</tr>
<tr>
<td>1996</td>
<td>1.048</td>
<td>0.255</td>
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### Data used in Figure 3.7 Timber trees* per hectare outside reserves

<table>
<thead>
<tr>
<th>Vegetation Zone</th>
<th>Area in ha</th>
<th>Star species classification*</th>
<th>Scarlet</th>
<th>Red</th>
<th>Pink</th>
<th>Other</th>
<th>All Speciesb</th>
</tr>
</thead>
<tbody>
<tr>
<td>DS</td>
<td>868,296</td>
<td></td>
<td>1.04</td>
<td>3.48</td>
<td>6.20</td>
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<td>35.68</td>
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<tr>
<td>MSSE</td>
<td>1,084,702</td>
<td></td>
<td>3.14</td>
<td>3.70</td>
<td>21.72</td>
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<td>54.77</td>
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<tr>
<td>MSNW</td>
<td>1,479,746</td>
<td></td>
<td>4.41</td>
<td>4.82</td>
<td>20.48</td>
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<td>MEWE</td>
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<tr>
<td>All Zones</td>
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<td></td>
<td>3.71</td>
<td>5.32</td>
<td>23.05</td>
<td>40.55</td>
<td>72.63</td>
</tr>
</tbody>
</table>

Notes:
*a greater than 30cm dbh
*b all species refers to all star rated species (see Box 3.2)

Vegetation zones as used by the Planning Branch of the Forestry Department (following Hall and Swaine, 1981):
DS - Dry semi deciduous  MSSE - Moist semi deciduous (south east sub type)
MSNW - Moist semi deciduous (north west sub type)  MEWE - Moist and wet evergreen

Source: Yeboah, 1997 - based on information from Planning Branch, Forestry Department

### Data used in Figure 3.8 Total timber trees* outside reserves

<table>
<thead>
<tr>
<th>Vegetation Zone</th>
<th>Area in Ha</th>
<th>Star species classification*</th>
<th>Scarlet</th>
<th>Red</th>
<th>Pink</th>
<th>Other</th>
<th>All Speciesb</th>
</tr>
</thead>
<tbody>
<tr>
<td>DS</td>
<td>868,296</td>
<td></td>
<td>904,330</td>
<td>3,020,802</td>
<td>5,381,699</td>
<td>21,621,365</td>
<td>30,928,196</td>
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<tr>
<td>MSSE</td>
<td>1,084,702</td>
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<td>3,403,253</td>
<td>4,009,059</td>
<td>23,554,846</td>
<td>28,446,852</td>
<td>59,414,010</td>
</tr>
<tr>
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<td>1,479,746</td>
<td></td>
<td>6,525,680</td>
<td>7,132,376</td>
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<td>41,136,938</td>
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<td>MEWE</td>
<td>1,568,641</td>
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<td>12,421,284</td>
<td>50,054,602</td>
<td>117,533,512</td>
<td>187,740,445</td>
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<td>Total</td>
<td>5,001,385</td>
<td></td>
<td>18,564,310</td>
<td>26,583,520</td>
<td>115,296,345</td>
<td>202,788,669</td>
<td>363,232,844</td>
</tr>
</tbody>
</table>

Notes: from table above apply

Source: Yeboah, 1997 - based on information from Planning Branch, Forestry Department
Data used in Figure 3.9 How long could the outside-reserve timber resource last? Examples of the Annual Allowable Cuts which would need to be respected to give different lifespans to the timber resource

<table>
<thead>
<tr>
<th>AAC by star category</th>
<th>Number of years over which a constant supply of timber could be maintained at different AACs (m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>25 years</td>
</tr>
<tr>
<td>Scarlet</td>
<td>406,326</td>
</tr>
<tr>
<td>Red</td>
<td>348,316</td>
</tr>
<tr>
<td>Pink</td>
<td>539,117</td>
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<tr>
<td>Total AAC</td>
<td>1,293,759</td>
</tr>
</tbody>
</table>

Notes: * Assumes that all scarlet and red star species, and 50 per cent of pink star species, are utilised
b See Box 3.2 for explanation of species classification
Source: FD, 1997a

Data used in Figure 6.1 Log production 1994-96: proportion of “unknown origin”

<table>
<thead>
<tr>
<th>Year quarter</th>
<th>Total volume (m³)</th>
<th>“Unknown origin” volume* (m³)</th>
</tr>
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<tbody>
<tr>
<td>Q1 1994</td>
<td>435,749</td>
<td>387,814</td>
</tr>
<tr>
<td>Q2 1994</td>
<td>391,052</td>
<td>336,305</td>
</tr>
<tr>
<td>Q3 1994</td>
<td>451,867</td>
<td>402,162</td>
</tr>
<tr>
<td>Q4 1994</td>
<td>403,226</td>
<td>342,742</td>
</tr>
<tr>
<td>Q1 1995</td>
<td>316,069</td>
<td>47,166</td>
</tr>
<tr>
<td>Q2 1995</td>
<td>285,853</td>
<td>89,259</td>
</tr>
<tr>
<td>Q3 1995</td>
<td>291,986</td>
<td>63,180</td>
</tr>
<tr>
<td>Q4 1995</td>
<td>88,933</td>
<td>6,519</td>
</tr>
<tr>
<td>Q1 1996</td>
<td>273,303</td>
<td>34,438</td>
</tr>
<tr>
<td>Q2 1996</td>
<td>305,983</td>
<td>12,200</td>
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<td>Q3 1996</td>
<td>278,275</td>
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</tr>
<tr>
<td>Q4 1996</td>
<td>190,519</td>
<td>7,461</td>
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* Origin not indicated on Log Measurement Certificate
Source: Forest Products Inspection Bureau, 1996.
Data used in Figure 6.2  Forest fees collected by the Forestry Department from 1989 to 1996

<table>
<thead>
<tr>
<th>Year</th>
<th>Fees collected (billion cedis)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1989</td>
<td>0.34</td>
</tr>
<tr>
<td>1990</td>
<td>0.78</td>
</tr>
<tr>
<td>1991</td>
<td>0.52</td>
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<tr>
<td>1992</td>
<td>0.78</td>
</tr>
<tr>
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Source: Forestry Department records
Falling into place
Policy that works for forests and people:
Ghana country study

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