Natural resource management in Ghana: challenges to professionalism

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NATURAL RESOURCE MANAGEMENT IN GHANA: CHALLENGES TO PROFESSIONALISM

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ACRONY	MS		
AAC	Annual Allowable Cut		
AGM	Annual General Meeting		
CBAs	Community Based Associations		
CFCs	Community Forest Committees		
CREMAs,	Community Resource Management Areas		
CRNR	College of Renewable Natural Resources		
DFM	District Forest Manager		
FC	Forestry Commission		
FRMP	Forest Resource Management Programme		
FSD	Forest Services Division		
GIPF	Ghana Institute of Professional Foresters		
GoG	Government of Ghana		
GPS	Global Position System		
GWD	Ghana Wildlife Division		
HIPC	Highly Indebted Poor Country		
IRNR	Institute of Renewable Natural Resources		
KNUST	Kwame Nkrumah University of Science and Technology		
LI	Legislative Instrument		
LMCC	Log Monitoring Conveyance Certificate		
NGO's RMSC	Non-Governmental Organisations Resource Management Support Centre		
SFM	Sustainable Forest Management		
SNV	Netherlands Development Organisation		
TREC	Timber Rights Evaluation Committee		
TRM	Timber Resource Management		
TIDD	Timber Resource Wanagement Timber Industry Development Division		
TUC	Timber Hiddshy Development Division Timber Utilisation Contract		
TUP	Timber Utilisation Permit		
WD	Wildlife Division		

PREFACE

These proceedings contain the results of the discussion on 'Natural resource management in Ghana: challenges to professionalism' jointly organised by Tropenbos International—Ghana (TBI-Ghana) and the Ghana Institute of Professional Foresters (GIPF). The discussion was held as the technical part of GIPF's annual general meeting on 10th-11th July 2003 in Kumasi.

We are happy to inform you that several follow-up activities have taken place since the discussion was held. A frequently heard suggestion in the discussion was to set up customer service centres. The Forestry Commission has taken the initiative and has now established customer service centres on a pilot basis in 21 districts.

A worry expressed during the discussions was about the lack of practical experience and fieldwork in the education for our future foresters. In response to this need, TBI-Ghana has in a modest effort been running an interdisciplinary and intercultural student project, which gives an opportunity for some practical fieldwork. Kwame Nkrumah University of Science and Technology has shown interest in integrating such projects in its curriculum.

Apart from the above two examples many organisations are very active in moving the professionalism in natural resource management forward. We hope that all these efforts will eventually have the desired impact.

This document is the first in the TBI-Ghana series 'workshop proceedings'. The main part consists of the presentations submitted by the speakers. These were only edited for style and consistency, but not for content. The editors have tried to objectively represent the views of the participants that were given in the discussions. The opinions expressed in this publication are those of the authors and do not necessarily reflect the views of TBI-Ghana or GIPF.

ACKNOWLEDGEMENTS

The workshop 'Natural resource management in Ghana: challenges to professionalism' was the successful result of a collaboration between TBI-Ghana and GIPF. We wish to express our gratitude to all involved in some way or another. We trust that those who were not specifically mentioned by name will accept our thanks for their involvement and support to the workshop.

The workshop was chaired by Prof. Kwabena Tuffour who had the challenging task to keep the speakers on a tight time schedule and streamline the plenary discussion. He fulfilled his task very well.

All speakers are thanked for their presentations. Our sincere gratitude goes to the honourable Minister of Lands and Forestry, Professor Dominic Fobih for his keynote address.

We are indebted to participants for their presence and rich contributions during the group discussion.

The steering committee consisting of both GIPF members and TBI-Ghana staff is acknowledged for the good job done on organising the meeting. And to the entire staff of Tropenbos International Ghana and members of Ghana Institute of Professional Foresters, 'ayekoo' for your immense efforts in making this workshop a success.

Finally, we wish to thank all readers of these proceedings for showing interest and commitment in striving to achieve professionalism in resource management in Ghana.

SUMMARY

From all indications, sustainable forest management remains elusive for Ghanaians. Ghana's tropical forest resources are diminishing at an alarming rate while at the same time the number of professional foresters kept rising. The unfelt impact of the profession remains a challenge to the professional body, Ghana Institute of Professional Foresters.

To redeem the present situation and also to ensure that the activities of forest managers are profitable to the country, the challenges and opportunities to natural resource management were addressed in TBI-Ghana's focus group discussion during the Ghana Institute of Professional Foresters' annual general meeting. The main topics addressed in the papers and discussed in groups were: challenges to forestry practice, challenges to education and capacity building and prospects and challenges to wildlife management. Some highlights are summarised.

Challenges to forestry practice

- Political interference: In today's resource politics we see examples of government officials who have used their power to protect private interests. This manifests mainly in the area of resource allocation due to lack of clear guidelines for allocating resources.
- Corruption: It is often heard that the forestry sector is corrupt. This manifest in areas such as documentation on resources, multiple use of conveyance certificates by contractors, operations of timber task forces and granting of permits.
- Victimisation: There have been cases where professionals who refuse to give in to 'powerful' timber men are victimised.
- Multiple forest use: Professionals have been traditionally managing forest for timber and few other benefits. Practitioners are unable to formulate concrete plans to effectively manage non-traditional benefits like eco-tourism and wildlife.
- Modern concepts of forest management: Collaboration and increased participation of civil society groups make the practice of forestry no more the exclusive right of foresters. This sometimes makes some professionals uncomfortable and repulsive to the public, thus jeopardising efforts to institutionalise a system of stakeholder collaboration, generally acknowledged to be indispensable in present day forest management.
- Mistrust: Officers tend to be too sympathetic to timber contractors, thus earning the mistrust of local communities who need the protection of the professional from the abuse of contractors.
- Increased illegal activities: Due to lack of firm control, there are too many illegal activities in the timber industry.

Challenges to education and capacity building

The education and training of the professional forester are beset with shortfalls and difficulties:

- Poor lecturer-student ratio: Increases in student intake have not been matched with corresponding increase in lecturers and instructors. Currently, the lecturer-student ratio is unacceptably low in institutions offering professional training in forestry. An indication: 1:22 at the Institute of Renewable Natural Resources as against the ideal of 1:10-12.
- Curricula development: There has been a paradigm shift in the practice of forestry. It is now beyond the strict disciplines of ecology or silviculture. Law, sociology and economics, among others have all become very important. Such changes are imposing new demands. Curricula need to be updated regularly with active participation of all stakeholders.
- Weak institutional collaboration: There is some collaboration between the educational institutions, research institutions, industry and other government sectors but the links are weak and need to be strengthened.
- Practical training: There is inadequate practical training, industrial exposure and supervision of students in the field.

• Inadequate funding: Institutions are able to access only 52% of funds required for effective teaching and learning. In the mean time, forestry continues to make significant contributions to the national economy.

Prospects and challenges to wildlife management

The professional wildlife manager has numerous opportunities but numerous challenges in his profession. The survival of wildlife depends upon the uses to which it can be put. Wildlife values are commercial, recreational, biological, scientific, philosophical, and educational, aesthetic and sociocultural. The professional wildlife manager needs to convince the politician, the ordinary people and all concerned, the need to be satisfied that any sacrifices made in respect of such uses, for the cause of wildlife conservation is justified. Wildlife conservation is complicated, and requires that the professional wildlife manager share management with other profession and science. This sums up what is expected of the practicing professional wildlife manager.

1. INTRODUCTION

1.1 BACKGROUND

The forests in Ghana have enormous significance to the country and its entire population by providing diverse timber and non timber forest products. For this renewable resource to last for generations, the nation has been striving over years to achieve sustainable forest management.

As part of measures to safeguard the future of the resource, the nation has trained students in the field of natural resource management to employ science and technology in forest and wildlife management for posterity.

In spite of the large number of people trained in natural resource management and related disciplines and the subsequent inception of a professional body, the nation's forest and wildlife resources are dwindling at faster rate than ever. The professional body was established in 1988 to supervise the professional standards of members, secure the observance of strict code of ethics as well as promote public appreciation of forestry and recognition of their reliance on forest supplies for survival.

It is an open secret that political interferences in resource management have led to awarding of timber utilisation contracts and timber utilisation permits to unqualified individuals and companies at the expense of qualified ones. Forest criminals are also vindicated as a result of their political affiliations. There also appears to be conflicting cross-sectoral policies and interests; issues of equity and transparency are also not adequately addressed. The integrity of the resource manager has often been questioned owing to his involvement in shady deals for his personal gains. In the midst of these, sustainable forest management becomes an illusion.

All the issues raised above bring to bear the need to overtly discuss the related challenges that have compromised the professionalism of our resource managers with all stakeholders to develop a better governance structure and means to deal with the challenges identified.

This report is the outcome of a two day workshop organised by Tropenbos International-Ghana, a local non governmental organisation which fosters research into sustainable forest management and Ghana Institute of Professional Foresters as part of the GIPF's 11th annual general meeting activities on 10th - 11th July, 2003 at the conference hall of Wood Industries Training Centre, Akyawkrom, near Ejisu.

1.2 WORKSHOP OBJECTIVES

The objectives of the workshop were to:

- To elucidate the challenges for all stakeholders to know the realities on the ground
- To effectively challenge stakeholders to professionalism

1.3 WORKSHOP METHODS

The methods used at the workshop included presentations of technical papers and group discussions. The programme for the workshop is attached as Appendix 1. The technical papers included the following:

- Sustainable forest management in Ghana: challenges to professionalism
- Opportunities and challenges to professional forestry practice in Ghana
- Practising professional wildlife management: prospects and challenges
- Education and training of the professional natural resource manager in Ghana

During the discussion the participants were divided into four groups with each group tackling one of the issues below:

- Classification of the challenges to professionalism into key and other challenges
- Opportunities and challenges to professional forestry practice
- Challenges and opportunities in professional wildlife management in Ghana
- Current occupational requirements of sector user agencies of graduates

The results of the group discussions were presented during the second technical session for comments from participants.

2 OPENING SESSION

2.1 WELCOME ADDRESS

By Dr. E. Asare Abeney, President, GIPF Ashanti Chapter

The speaker had the opportunity to address last year's Annual General Meeting (AGM) at the same venue. He was pleased to do it this year too. Participants were welcomed on the theme "Natural Resource Management in Ghana: Challenges to Professionalism", the focus being on professionalism in forest and wildlife management.

He listed the topics to be discussed at meeting as challenges and opportunities to:

- Natural resource management in Ghana in general
- Professional forestry practice in Ghana
- Professional wildlife management in Ghana
- Education and training of the professional natural resource manager in Ghana

He emphasised that these desirable and enviable benchmarks bring about standards and code of ethics in the management of our natural resources. Participants were wished a successful meeting.

The objective of the meeting was to discuss the challenges and opportunities in natural resource management in Ghana and to come up with practical recommendations.

2.2 GUEST SPEAKER'S ADDRESS

By Honourable S.K. Boafo - Ashanti Regional Minister

He thanked the GIPF for the honour to be the guest speaker for the occasion. In his introduction he remarked that the theme for the AGM is laudable looking at the dwindling natural resources of this country.

He mentioned the need to sustain our natural resources and the forestry sector since they fulfil a lot of functions such as erosion control, provision of medicinal plants, scenic protection, global warming control, provision of foreign exchange, timber and fuel wood.

He also touched on the challenges to the profession and mentioned some of the problems facing the profession as: population growth, activities of mining companies, agricultural activities, illegal chainsaw operation and the pollution of water bodies. These activities cause deforestation, which needs to be curtailed. He stated that deforestation could be halted through further research, reforestation, proper forest management practices and public education. This will help the development of the country.

Finally, he urged the institute to explore international funding opportunities to redeem the present situation and also to ensure that the activities of the forest manager are profitable to the country.

The number of professional foresters is rising but the forests are rapidly declining!

2.3 PRESIDENT'S ADDRESS

By Dr. K. Armstrong, Ghana Institute of Professional Foresters

Introduction

Mr. Chairman, before I deliver the current GIPF president's address for the 11th AGM could you please approve that we all observe a minute silence for the late John Asmah who until his death was the Chairman of the Forestry Commission, former GIPF president, a council member for the year 2003 and an active member of the Western Regional Chapter.

The representative of Otumfuo Osei Tutu II, the overlord of Ashanti Kingdom, honourable Ashanti Regional Minister, honourable Minister for Lands and Forestry, distinguished guests, colleagues of GIPF, distinguished ladies and gentlemen, on behalf of the GIPF, I wish to express my profound gratitude and appreciation for accepting the invitation and responding as well. Indeed we are grateful.

Mr. Chairman, what we shall be observing today and tomorrow is nothing new. It is the GIPF's constitutional demand and also demonstrates how constitutional members are.

Why GIPF

Mr. Chairman, it has been recorded with pain that the original 8.2 million hectares of forest have been reduced to only around 1.6 million hectares. Again depletion and degradation continue annually at alarming rates. This story is indeed sad but we should not abandon hope for the tree is only tilted towards a direction but not completely fallen.

Mr. Chairman, sound policies for sustainable natural resources management including that of land use, forestry, wildlife to mention a few have been developed and modified, however what matters is their effective implementation, monitoring and evaluation and possibly future review of such policies with inputs from a competent body. However, until the eighties few professional foresters were available locally and training in forestry profession was abroad. The result was that professional knowledge and ideas were either inadequate or scattered so to say.

Mr. Chairman, local training in natural resources management for professionals commenced from the eighties and by 1988 when GIPF was formed several professionals and semi professionals had been trained most of whom were in the country working with departments, private organisations and some as consultants.

Mr. Chairman, it therefore became necessary to have the scattered brains group together to help implement, monitor and evaluate policies and also provide guidance for the sustainable management, development, and utilisation of forest and the resources within.

Who is the professional forester?

Mr. Chairman, referring to the interpretation (Section 43) of L.I. 1649, 1998 i.e. Timber Resources Management Regulation, a professional forester is the holder of a university degree in forestry or a technical diploma of a level acceptable to the Ghana Institute of Professional Foresters. It is however worthy to mention that membership is not restricted by these conditions. We of the institute are well recognised legally and one of our values is highlighted in Section (12) Subsection 2 C of the same law.

Objectives of GIPF

Mr. Chairman, the professional forester owes duties to the Nation, the Republic, his employer as well as other agencies. The duties are reflected in the Institute's objectives, which include the following:

- To advance the science, technology and practice of professional forestry in Ghana.
- To use the knowledge and skills of the forestry profession to benefit society.
- To present the views of forestry profession to bodies, organisations and persons concerned with forestry, land use, conservation and the environment both nationally and internationally.
- To foster public understanding of forestry and the forest industry in Ghana and the dependence of the supplies of forest benefits on forest management.
- The Institute has made some modest progress and achievement in some areas of forest resources management and utilisation and environmental conservation. Key among these is forest certification project, reforestation/development, preservation and protection of environmentally sensitive areas as well as areas of biodiversity significance.

A professional forester is the holder of a university degree in forestry or a technical diploma of a level acceptable to the Ghana Institute of Professional Foresters.

Impacts on natural resources management, utilisation and protection

Forest Certification

Mr. Chairman, GIPF is actively involved in Ghana's forest certification programme through its representations at the National Working Group on forest certification. In this area GIPF has taken upon itself to:

- Provide expertise for professional assessment of forests
- Ensure international recognition of Ghana's certification' scheme and its linkages to other schemes.

Forest Development/Reforestation

Mr. Chairman, development of strategies and procedures for the modified taungya through active involvement of GIPF members for the total success of the on-going reforestation programme which was launched by His Excellency the President of the Republic of Ghana. Without these strategies and procedures we may have repeated or re-visited previous mistakes which led to the failure of the taungya system.

Resource utilisation/Maximisation

Mr. Chairman, diversification in processing and maximisation in forest resources utilisation have been observed in some timber companies with active GIPF members. Such inputs offered by our members have resulted in high recovery, considerable reduction in wastage and losses.

Mr. Chairman, as mentioned earlier some achievements have been made but much more is achievable.

Our impact on forest management is not 100% the same can be said of forest resources protection. Chiefs, NGO's and some stakeholders at organised forest and wildlife fora and workshops organised by Forest Services Division and Wildlife Division of Forestry Commission have expressed touching views and offered reasonable comments for sustainable forest management. For example stool landowners and traditional rulers have for long and persistently expressed disagreement and dissatisfaction with the mode and basis of timber royalty

disbursement. FSD/FC has made attempts to clear the ambiguity and also to justify the present proportions given to the beneficiary stakeholders. As of now, GIPF's expected contribution or version on the crucial issue remains with it alone, yet we owe a duty to our clients and the republic.

Mr. Chairman, we should be seen to be at the forefront in propagating the concept of sustainable forest management through such interest groups and stakeholders based on our professional advice and interactions. We must be more active than before as instruments of change and as a reminder, let me remark that by our constitution and code of ethics we owe our nation a duty.

Mr. Chairman, successes chalked by the institute and problems met during the tenure of office of the outgoing national executives would be presented by the secretariat during the next session.

Thank you very much for your attention.

Our forest resources have decreased from 8.2 million hectares at the beginning of the previous century to 1.6 million hectares now. What can be done? What are we doing?

2.4 KEYNOTE ADDRESS

By Prof. Dominic Fobih, Minister of Lands and Forestry,

Mr. Chairman, honourable Ashanti Regional Minister, president of Ghana Institute of Professional Foresters, Nananom, distinguished guests, members of Ghana Institute of Professional Foresters, the press, ladies and gentlemen, I take this opportunity to express my gratitude to the governing council of GIPF as well as the planning committee of the 11th Ghana Institute of Professional Foresters annual general meeting - Tropenbos International-Ghana workshop, for the special honour done me through the invitation to deliver the keynote address.

This is the first time that I am interacting with members of this august professional body since I assumed office as the sector minister a couple of months ago.

Mr. Chairman, it is an indisputable fact that there can be no "best-practice" forest and wildlife management without the active participation of professional foresters and wildlife experts like you gathered here today. By virtue of your training and having constituted a professional body, I believe your primary aim is to conserve, protect and sustainably manage forest and wildlife resources, to create wealth, provide jobs and reduce poverty, particularly, in the rural areas.

It is my wish to meet with you frequently in order to tap your rich experiences and also consult you on important matters, which affect the management, utilisation and development of forest and wildlife resources in Ghana.

The main aim of a resource manager is to conserve, protect and sustainably manage forest and wildlife resources, to create wealth, provide jobs and reduce poverty.

I consider the theme for the workshop 'Natural Resource Management: challenges to professionalism' in Ghana, as very appropriate and relevant to the current challenges confronting my ministry. The theme also falls in line with the objectives of the Forest and Wildlife Policy of 1994, which aims at conservation and sustainable development of the environmental quality and perpetual flow of optimum benefits to all segment of society.

As professional foresters, the nation's forest and wildlife resources are in your hands. You could choose to protect it or allow it to be destroyed. The issue I want you to reflect on today is how professional have we been in the development, management, utilisation and protection of the sector's resources?

Mr. Chairman, ladies and gentlemen, in recent times, some members of the public and the press have expressed grave concern over several practices in the forestry sector. These practices among others include the following:

- Lack of transparency in the granting of forest user rights
- Lack of adequate consultation with key stakeholders over the release of degraded forest reserves for conversion into plantation.
- Improper forestry management practices as some foresters do not adhere to the code of ethics of GIPF.
- Corruption in the forestry sector leading to loss of revenue at the country's ports
- Collusion with loggers on illegal felling of trees in reserve areas

How professional have we been in the development, management, utilisation and protection of the sector's resources?

In order to address these concerns, the Ministry has undertaken a series of forestry sector policy reforms. These include:

- Transparent and efficient allocation of timber resources and control of over cutting of timber
- Appropriate pricing of timber and other forestry based products in order to increase revenue and address the problem of under pricing of forest resources;
- Review of the annual allowable cut (AAC) as a transitional measure in order to salvage valuable timber being destroyed in off-reserve areas
- Mobilisation of chainsaw operators into alternative productive ventures and control of illegal logging and illegal chainsaw operations
- Maintenance of log export suspension
- Rationalisation of the timber industry and adoption of fiscal as well as market based incentives to improve the efficiency of the timber industry and encourage downstream processing
- Rationalisation of timber industry taxation regimes
- Increased stumpage fees for timber and improved revenue
- Ensuring equitable distribution of benefits to communities, resource owners and farmers
- Improved incentive structures to ensure sustainable forestry management

Mr. Chairman, permit me to state that the ban on the use of chainsaw to convert timber into lumber as provided for in the Timber Resources Management Regulation 1998, L.I.1649, still remains in force and will continue to be enforced with the right impetus it deserves. Efforts are also being made to engage illegal chainsaw operators and poachers in various alternative livelihood enterprises such as plantation development (tree seed production, land preparation, peg cutting, planting, wedding, and pruning), grass-cutter rearing and snail farming as already mentioned in the policy reforms.

Mr. Chairman, this year the President's initiative on plantation development has been given a big boost by the release of ϕ 41 billion HIPC funds to support another afforestation programme parallel to that of the Forest Plantation Fund with a wider scope. It targets our degraded forest reserves, off reserve areas and urban forestry. Aside from the environmental and economic value of the project, it is hoped to generate 20,000 jobs this year and cumulatively reach a total of 100,000 jobs by the end of next year.

Progress on bamboo plantation development, utilisation and research is progressing steadily. About 18 new species have been received from Hawaii and the seedlings are currently being nursed for multiplication and use.

All these laudable efforts being made by government to build a sustainable resource for the sector will require the support and commitment of all professional foresters. I am sure I can count on your support.

You will agree with me that the forest and wildlife resources of this country continue to decline both in quantity and quality as a result of excessive illegal harvesting of timber, uncontrolled bushfires, excessive slash and burn agriculture, surface mining and excessive collection of fuel wood.

Mr. Chairman, poaching, hunting and the unorthodox method of killing of wild animals with poison have been identified as the main cause of the fast depletion of game and wildlife species in this country. Bush meat of animals killed through this unapproved method is sold at various locations and markets throughout the country. The activities of these hunters and traders in bush meat should send frightening signals across the country; particularly to those innocent people who patronise their services.

It is the responsibility of professional bodies like yours to ensure that this trend of resource depletion is significantly reversed, and the time to act is now. Currently, the Forestry Commission is engaged in the training of community based organisations e.g. Community Forest Committees (CFCs), Community Biodiversity Advisory Groups (CBAGs), Community Resource Management Areas (CREMAs), to assist in forest protection and to influence policy formulation and implementation at community levels.

In conclusion, Mr. Chairman, colleague Minister, distinguished ladies and gentlemen, once again I commend the organisers of this workshop and as I indicated earlier, I will rely much on your professional experience and advice in the management of natural resources of this country.

I therefore entreat all of you to contribute significantly during this two-day workshop to come out with workable strategies to move the process forward.

Finally, I wish you a fruitful deliberation and may God bless you. Thank you.

Poaching, hunting and the use of chemical poisons in killing wild animals have contributed to the fast depletion of game and wildlife species in this country

3. TECHNICAL SESSION

3.1 THEMATIC ADDRESS: SUSTAINABLE FOREST MANAGEMENT IN GHANA: CHALLENGES TO PROFESSIONALISM

By: Emmanuel Marfo, PhD Researcher, FORIG and Samuel Kofi Nyame, SNV

Introduction

My point is not that everything is bad, but that everything is dangerous, which is not exactly the same as bad. If everything is dangerous, then we always have something to do. So my position leads not to apathy but to hyper- and pessimistic activism (Foucault, 1997a: 256¹)

Until about two decades or so ago, forest management in Ghana was dominated by the development ideology that 'science' and 'technology' are the engine of progress. This scientific myth gave rise to technical and 'traditional' forestry. This was a tradition of manipulating the trees, and the soil largely to produce sustained outputs of timber. Consequently, the traditional forestry training equipped the practitioner principally to manipulate the forest ecosystem to produce maximum continuing yields of certain goods and services (see Kotey *et al* 1998). This gave rise to formally trained 'scientific' and technologically oriented personnel to manage forest resources; those who can be called professional foresters today.

Notwithstanding the scientific, technocratic and professional myth surrounding forest management since the colonial days, there is more than enough evidence to show that the rate of forest degradation in Ghana constitutes a threat to the sustainability of the resource². Today, it is widely claimed that environmental changes are inextricably linked to social and political pressures and that social relations of production are central to an understanding of deforestation (Nygren, 2000³). Whereas we cannot underestimate the tremendous contribution of natural forces such as wildfire and socio-economic pressures such as increasing demand for fertile land for farming to degradation, we cannot turn a blind eye to the contribution of the state, its forestry agencies and professionals.

As we have consciously decided to visit the challenges to professionalism in the light of sustainable forest management in Ghana, the focus of this paper is on critical political and social factors militating against sustainable forest management, particularly isolating and highlighting those that relate to the dimension of professionalism. Without any prejudice, the objective is to stimulate discussion of these issues, in an open, fair and objective manner, so as to recommend a way forward. Today, we need ideas, 'but ideas are not innocent; they wither, reinforce or challenge existing social and economic arrangements and they do so actively as biased participants in socio-political intercourse (Schmink and Wood, 1987⁴). Therefore, our ideas will be founded on our values and ideological orientations towards the concepts of professionalism

¹ Foucault, M. 1997a. The essential works 1954-1984. vol.1. Ethics, Subjectivity and Truth (ed Paul Rabinow.New York Press

² Over 80% of total land area originally covered by humid tropical forests in Ghana has been deforested (Forest Plantation Report to Cabinet, February 2003)

³ Nygren, A. Development Discourses and Peasant-Forest relations: natural resource utilisaisaisaisain as social process. In: Doornbos M., Saith, A. and White, B. (eds.). 2000. Forests: nature, people and power. Institute of Social Studies, Blackwell Publishers.

⁴ Schminh, M and Wood, C.H. 1987. The Political ecology of Amazonia

[.] In Lands at risk in the Third World: local level perspectives (P.D. Little and M.M. Horowitz eds.) pp 38-57, London: Westview press.

and sustainable forest management. I assume that we all accept that sustainable forest management is to some extent dependent on the professionalism of forest stewards.

Whereas we recognise there are numerous challenges facing sustainable forest management and professionalism in Ghana, this paper will focus on the under listed challenges which we consider enormous.

Political interference and professionalism

Ties at the pinnacle of the State can distort policies and weaken the supervision of middle and lower level state implementers leading to a culture of corruption, cronyism and nepotism at the district level (McCarthy, 2000⁵)

While official forestry policy discourse seems to deal with a range of problems it has actually failed to face sensitive political issues (paraphrased from MacCarthy 2000)

That the State in natural resource utilisation has used its power and influence to shield and protect private interests through complex alliances and networks has a prominent place in resource politics today⁶. It is a common thing to hear both from professionals and others about political interference in forest management in Ghana. Nevertheless, this problem has not been sufficiently discussed in official fora. With the increasing call for good governance and democracy, it is argued that the time has come for us to be bold and discuss this problem openly as professionals.

Very often, the professional forester has been criticised of corruption and 'unprofessionalism' in Ghana. It is important that we do not uncritically buy into this dominant discourse but seek to understand the power play, the diverging perspectives and the tensions. As far back as 1977, in reviewing human-environment literature, Deutsch lamented that 'political processes and institutions are rarely mentioned directly and even more rarely analysed in detail. And yet, the substance of politics... is inescapably implied in almost every eco-social problem (:359⁷). Therefore, it is the dialectic between forest and politics, which must provide the context in which forest degradation is discussed.

If the state is a theatre in which resources, property rights and authority are struggled over, then state policies embody that struggle, often facilitating the interests of powerful economic elites, and inculcating both social unrest and ecological degradation (Bryant, 1992:18).

The allocation of timber rights has been perhaps the most crucial domain for political interference. According to the observation by Awudi and Davies (2001⁸), the single most significant disincentive to SFM is the persistent use of special timber permits (including more recently timber utilisation permits). They remarked that whiles this is unconstitutional according to Article 268 (1) of the 1992 Constitution; this discretionary authorisation has often come from highly political angles including the Presidency. The question that follows is why the Ministry of Lands and Forestry has turned a blind eye and why has the professional at the Forestry

⁵ McCarthy, J.F. The changing Regime: Forest Property and Reformasi in Indonesia, in: Doornbos M., Saith, A. and White, B. (eds). 2000. Forests: nature, people and power. Institute of Social Studies, Blackwell Publishers.

⁶ A good work on political ecology of deforestation by Raymond Bryant (Political Geography vol. 11, No. 1, January 1992, 12-36) and compilation of case studies by Doornbos et al. (Doornbos M., Saith, A. and White, B. (eds). 2000. Forests: nature, people and power. Institute of Social Studies. Blackwell Publishers.

⁷ Deutsch, K.W. 1977. Some problems and prospects of ecopolitical research. In Ecosocial Systems and Ecopolitics: A reader on Human and Social implications of environmental management in Developing Countries (K.W. Deustch, ed.) pp 359-368. Paris: Unesco.

⁸ Awudi, C and J. Davies. Country report on the forest revenue system and financial support for sustainable forest management in Ghana. July 2001.

Commission both at national, regional and district level not been able to challenge such 'illegal' authorisations that are professionally known to be inconsistent with SFM?

Moreover, it has been observed that private interests have been effective in mobilising and using political influence to dictate the content of policy and policy instruments. In this regard, we agree with Daniel Lev⁹ that 'the law (literally) records the structure of the state and reflects (virtually) the distribution of political, social and economic advantages.

The timber industry could influence policies, stall legislation, and modify some working plan prescriptions... The timber industry continues to be a significant lobbying group and a powerful protector of its interests' (Kotev et al $1998:69^{10}$)

For instance, Birikorang (2001¹¹) has noted that the allocation of timber rights based on competitive bidding for the concession is a fundamental feature of the forest and wildlife policy, yet this measure was thwarted in the final stages approving the Timber Resource Management Act (1997) and accompanying regulations (1998). The question that provokes scientific scrutiny is why and how was the process thwarted? Who were the actors in the process, their roles and power relations? How are policy intentions thwarted in the design of policy instruments and what factors influence this?

Corruption and professionalism

It is often heard that the forestry sector is corrupt and in fact, some recent studies have attested to this ¹². For example, a World Bank Forest Sector Review ¹³ of forest policy implementation in most developing countries has highlighted some crucial issues. The list consist of poor governance, corruption, and political alliances between parts of the private sector and ruling elite combined with minimal enforcement capacity at local and regional levels. The review further contends that the allocation of timber concessions has often been used as a mechanism of mobilising wealth to reward allies and engendering patronage. Although one can criticise political and economic elites as contributing to forest degradation, the question is 'do political and economic elites act unanimously'? Political ecology ¹⁴ studies have shown that the network of actors also involve professionals in state agencies as well as community members. Citing few observations will clarify the point.

In a recent study, Birikorang (2001:29) observes that 'the policy of chainsaw ban is unenforceable encouraging rent-seeking behaviour (corruption¹⁵) among Forestry Commission staff, local government representatives and government task forces'. He further observes that the

⁹ Lev, D.S. 1985. Colonial law and the Genesis of the Indonesian State, Indonesia 40:57-75

¹⁰ Kotey, E.N.A., Francois, J., Owusu, J.G.K, Yeboah, R., Amanor, K.S and Antwi L. 1998. Falling into Place. Policy that works for forests and people series no.4. International Institute for Environment and Development, London.

¹¹ Birikorang, G. 2001. Ghana Wood Industry and Log Export Ban Study. Final Report, Forestry Commission.

¹² Marfo, E. 2002. Final Report. Explorative study on 'effective planning, policy formulation and implementation: issues for research. Tropenbos Ghana Programme.

¹³ World Bank Forest Sector Review (New York: World Bank 1999), p.xii, Financial Times, 11 February 2000 'World Bank sees flaws in forest Policy'.

¹⁴ This analytical approach emphasises the social relations within which different categories of resource users are embedded and its effect on the ways they use the environment. It assumes that larger social structures and political-economic processes affect the actions of local resource users. Dominant forces interact with local institutions and affect policy formation and implementation. Particularly the role of the state, dominated by self-interested policy makers, becomes clear in its alliance with national elite and economic forces. Consequently, government decisions and regulations, made in a politicised environment, often result in development policies that negatively affect the forest and local people (Place, 1998)

¹⁵ Informal payment of approximately 12 billion Cedis made by chainsaw operators in 1999 was largely distributed to these beneficiaries.

presence of a de facto authority involving a triangular relationship and the lines of influences among the local stool, District Forest Officer and the community hinders forest policy through chain saw activities. Clearly, the professional forester cannot be isolated from the corruption metaphor and therefore his conduct is a critical factor to sustainable forest management. While we cannot help but follow the rhetoric of ceremonially and verbally discouraging such behaviour, it is crucial to institute mechanisms that will practically make it difficult for the professional to corrupt and be corrupted.

Clearly, the issues of political interference and corruption are both complex and challenging; they require analytical refinement as well as empirical exploration.

Clearly, the existing institutional, legal and governance¹⁶ environment is probably not effective enough to cushion the professional against such political and social pressures. The challenge is therefore to develop and advocate for an appropriate governance environment. To prepare our minds for discussion, Osborne (1997¹⁷) suggests a compromise between security and freedom, impartiality and co-operation, diversity and unity, leadership and tolerance and the need for information and privacy. Of particular importance to policy formulation and implementation, according to Corkery et al. (1997¹⁸), is the presence of:

- Accountability and transparency
- Management efficiency and effectiveness
- Decentralisation, devolution and pluralism
- Participation, partnership, empowerment and ownership
- Human rights, free speech and free association and democracy

In the present context, good governance entails strengthening democratic values and processes, ensuring freedom of 'professional' expression in the face of authoritative coercion and the rule of law, developing capacity of forestry sector institutions to enhance accountability, transparency and competence (GoG, 1994¹⁹).

The ineffectively enforced chainsaw ban has created various avenues of corruption for the staff of Forestry Commission, local government representatives and government task forces.

Changing roles and professionalism

The working environment of the professional forester is changing in the light of increasing pressure for forest products and services, land and democratisation of society both in the rural and urban areas. New policies such as the social responsibility agreement have come to intensify the bridging of the professional to society. This means increased interaction of the professional with other forest stakeholders either to manage conflicts or collaborate to plan and implement some actions. Increasingly, the professional is faced with the challenge to play its dual role as a party to forest management conflicts (e.g. with chainsaw operators) and to facilitate negotiations between other forest users (e.g. timber operators and local communities). Although the professional forester plays a central role in forest related conflicts, its role is circumscribed by at least the fact that he or she is not an impartial observer and that he or she is often driven by conflicting

¹⁶ Following Corkery *et al* (1997), governance is the process by which diverse elements in a society wield power and authority and, thereby, influence and enact policies and decisions concerning public life and economic and social development

¹⁷ Osborne, D. 1997. Corruption as Counter-culture: attitudes to bribery in local and global society: In 'Corruption – the enemy within'. Proceedings of the 14th International Symposium on Economic Crime. Kluwer International Press.

¹⁸ Corkery J. A. Land and D. Osborne. 1997. Governance and Policy Formulation. Maastricht: ECDPM

¹⁹ Government of Ghana. 1994. National Institutional Renewal. A programme for capacity building under good governance.

interests. In some cases, the professional is confronted with satisfying the interest of his economic clique against the enforcement of regulations such as payment of compensation to farmers whose crops have been destroyed by timber operations. It is a common knowledge that some farmers had resorted to destroying commercial tree seedlings, partly because complains have not been heeded to.

Past records show that FSD has tended to protect industry to the detriment of the disadvantaged local communities' (Birikorang, 2001:37).

Client relations and professionalism

We hope we will be allowed to use some 'unscientific' observations to bring the message home. Just by the association of a timber man or traditional leader with a top forestry or public official in Accra is enough to constitute a threat to a technical officer or even a district manager to kowtow and take an action that is inconsistent with planned operations. There is a gossip that there has been an instance when a timber man had handed over the transfer letter of a forestry official after few weeks of him offending the timber man. Another common observation is that official business, especially at the district level, are transacted verbally especially between forestry officials and other stakeholders. This is unprofessional as it provides no evidential basis for legitimate action and claims by both parties. Clearly one can conclude that measures are needed to boost the confidence and professionalism of the forester in dealing with his clients.

Training and professionalism

One area that is increasingly being noted is the training and practicing of professional foresters. Globally, the realisation that forestry today is more than technical training in forest science, silviculture, inventory, logging and harvesting techniques etc has a good place in literature. Owing to increased socialisation and politicisation of forestry, other fields such as political science, law, development sociology, communication and negotiation skills, data and information management, economics, public policy and administration have become very relevant disciplines for academic and professional training of the forester. There must therefore be a paradigm shift from conventional technocratic style of training to multidisciplinary orientation that can equip the forestry professional to meet the challenges in sector today.

Professional body and professionalism

There is lack of professional commitment as a result of low remuneration. Therefore the professional may use dubious means to justify and satisfy their financial demands. Timber investment has been seen as the easiest way of making a quick return from an investment and the government and the professional have associated, supported and contributed to this notion. Therefore, there is the tendency for the professional to conduct him/her self in a order to satisfy individual and personal interests, thus compromising the professional code of conduct. The integrity and trust of the professional by the society has been eroded and cannot be guaranteed. The challenge is for us to work at redeeming the eroded integrity.

Conclusion

By way of conclusion, we hope the attempt to unravel the complexity of social and political challenges to practicing professional forest management in Ghana has at least highlighted some crucial issues and set the ground for discussion. We have no doubt that many other related issues will be brought up to supplement the ones aforementioned. It looks to us that the crux of the matter is to explore how to design dynamic forest governance structures and mechanisms to deal with the challenges identified and to be identified. The issues are complex and intriguing; nevertheless they must be faced if genuinely we all share the goals of sustainable forest

management. We believe we all have a role to play in charting the way forward. The task demands both scientific scrutiny and engineering as well as attitudinal change.

Finally, let us reiterate the crucial questions that we need to find answers to:

- What governance machinery can empower the professional against political and economic pressures?
- What capacities need to be built?
- What governance machinery can make all stakeholders including the professional, the state and industry equally accountable?

We sincerely hope that this workshop will make a history by finding answers to these and defining a course that can improve professionalism in the light of socio-political and economic realities of the day for sustainable forest management.

We thank you for your attention and cooperation.

The professional is not adequately protected by the existing institutional, legal and governance mechanisms to withstand political and social pressures.

3.1.1 GROUP DISCUSSION: CLASSIFICATION OF THE CHALLENGES TO PROFESSIONALISM INTO KEY AND OTHER CHALLENGES

The group classified the challenges to professionalism into key and other challenges. In all five challenges were listed.

Political interference

The first challenge was the political interference, which was classified as a key challenge. Group members dilated on areas where it is being manifested. Notable among these, were the areas of resource allocation where the engendering factors were: absence of clear guidelines for resource allocation on the part of the government coupled with too many interim measures on the allocation of the resources. Members also stated that, due to the influx of many processing mill, the demand for the resources is outstripping their supply. Lack of continuity of projects due to changes in political systems (ministers) was also much emphasised. Although changes in ministers do not bring about changes in policies, it was argued that ministers had their own favourites.

Remedies

- Good working plans should be in place. There should be a collective responsibility
- Downsizing of the industries, diversification / downstream processing, and whole tree utilisation were also mentioned as remedies to the challenge
- FC, GIPF and NGOs should come to the rescue of victimised officers whiles awareness should also be created to court public support
- Members also proposed GIPF to build up integrity and regional managers are to be accountable for what goes on in their region.
- The divisions of FC should be given greater autonomy and finally people should be willing to change their attitude.

Corruption

On the second challenge which is corruption, the areas of manifestation identified were: documentation of resources (stock survey, LMCC and export permits), delay in granting permits which forces contractors to buy their way through, and the multiple uses of conveyance certificates by the contractors. Corruption is also manifested in resource allocation and the operations of the timber task force. Inappropriate policies were also identified as recipe for corruption.

Remedies

- Strengthen the ethics committee of GIPF; to take-up or follow up issues of corruption that are made public and also check on 'unprofessionalism'
- Institution of sanctions both by the FC and the GIPF
- NGO's to help with monitoring
- Strengthen community forest committees in monitoring

Changing roles of forestry

Members stated that the practice of forestry is not the exclusive right of the forester. There is an increased interaction between the professional and other forest stakeholders either to manage conflicts or to facilitate negotiations between other forest users. It was emphasised that cross-sectoral relationships should be critically looked at with the view to involving other professionals into forestry. Historically, too much attention was placed on timber products. A current forester should see himself as a development partner and ensure that all resources are managed including water

Remedies

- Partnerships and collaboration in management
- Collaborative management in off-reserve areas
- Cross-sectoral relationships
- The forester to upgrade himself in terms of education and training
- The forester should consider himself as a development partner

Relationships with client

The group members mentioned that the fourth challenge, relationship with clients, manifest in resource allocation where the professional deals with the contractor. In cases where the professional refuses to give in to the 'powerful' timber man, the officer could be victimised or transferred from one district to another or one region to the other, where he is going to meet entirely different clients.

Remedies

- GIPF and NGOs are to rise up in support of victimised officials
- Sensitisation of communities to make them aware of everything that goes on in their communities (transparency)
- Measures to boost confidence of the professional foresters in dealing with his clients

Weaknesses of the professional body

The fifth challenge, the weakness of the professional body, manifests in its inability to influence policy. A typical example is the issue of mining in reserves. Group members also mentioned the inability of GIPF to ensure professionalism; poor commitment of members to GIPF and low remuneration and incentives to both FC staff and key officials of the association.

Members also mentioned that the mere association of a timber man or a traditional ruler with a top forestry or public official in, say, Accra is enough to constitute a threat to a technical officer or even a district manager. Another common observation was that official business is transacted verbally, especially between forestry officials and other stakeholders. This is unprofessional, as it provides no evidential basis for legitimate action and claims by both parties.

Remedies

- TIDD offered to strengthen the secretariat of the professional body in the areas of logistics and remuneration.
- Presidents and executives of GIPF should be motivated to enable them perform.
- The membership drive should be intensified. Student membership should be encouraged
- There should be better publicity of activities and events.

3.1.2 COMMENTS AND INTERVENTIONS FROM THE AUDIENCE

- Instead of focusing on downsizing, industries should be encouraged to diversify. We should not be obsessed with lack of raw materials but rather help companies to diversify to utilise lesser known species and also bamboo.
- The discussion talks about "the demand for the resources is outstripping their supply". Therefore resources should rather be developed through plantations, enrichment planting and promoting natural regeneration.
- If illegal chain sawing cannot be stopped it has to be legalised and controlled because it is lucrative. If this is done, chainsawn lumber could be delivered at the doorstep of the local community who cannot afford expensive lumber from the mills. Chainsaw machines should be improved in order not to waste raw materials.

Forestry is no more the exclusive right of the technical forester.

3.2 OPPORTUNITIES AND CHALLENGES TO PROFESSIONAL FORESTRY PRACTICE IN GHANA

By J.G.K. OWUSU, Ghana Institute of Professional Foresters

Introduction

The 21st century and third millennium dawned with daunting challenges in all fields. Medical science still had no answer to the world's several viral diseases, including HIV/AIDS. Wars were not only increasing: the technology of destruction had become so devastating as to challenge the world to redefine the rules of war. Starving nations faced new challenges: accept genetically modified foods or not? Freshwater was getting scarce, forests were vanishing and more marriages were ending in divorce.

Yet the challenge most symbolic of the dawn of the new millennium- the Y2K bug- taught us some lessons. The Y2K bug was a challenge that was recognised, accepted as real, met with concerted effort and consequently so effectively conquered, that already few of us cannot remember what the fuss was all about. Y2K also taught us that every challenge is an opportunity.

Refining and internalizing the system of management

In Ghanaian forestry, the 1990's were times for a fundamental rethink of the ends and purposes of forestry and of the means for reaching them. We learned a lot about the processes of policy making. We groped our way into our own made-in-Ghana system of collaborative or participatory forest management. We turned our findings into manuals of procedures. Henceforth, all was going to be well, we thought.

Nevertheless in year 2002, the Minister of Lands and Forestry could present proposals for revenue sharing to the National House of Chiefs for them to be rejected, among other reasons, for "insufficient consultation" and because the landowners considered the landowners' share (of gross revenue) to be still "too small". [Meanwhile the policy to which all stakeholders were thought to be committed was that "an adequate share of financial benefits from resource utilisation should be retained to fund the maintenance of production capacity"]. The collaborative systems obviously have not functioned sufficiently well.

In 2003, when teak exporters thought they had a problem with allocation of areas to be thinned, their resort was to press conferences and press releases, and the ministry had to fall on a committee outside the regular structure. It would appear that by Act 571, the Forestry Commission, by becoming regulator and manager, has diminished in its potential to be an instrument for conflict management within the sector.

The challenge is to refine and, more importantly, internalise the agreed system for social consultations and conflict management. With regard to the technical aspects of high forest management, a lot still remains to understand the effect of logging and to devise silvicultural systems and treatments to reflect our understanding of the dynamics of regeneration, seedling survival and growth. Savannah woodland management is still in an experimental stage. Altogether, in respect of both the science and art of forestry, we can only advise ourselves

"Seek not yet repose;

Cast thy dreams of ease away."

The challenge is to internalise the agreed system of social consultation and conflict management

Collective guidance on emergent forestry issues

The duty of a professional body is to provide guidance on issues related to the profession. This duty is not sufficiently discharged by members making (good) professional decisions as members of the Forestry Commission Board, or employees of the ministry responsible for forestry or other bodies. Nor is the urgent requirement for the institute that of taking or arriving at GIPF "positions".

The challenge is to find wider opportunity for the front staff in the Resource Management Support Centre, the Plantations Development Centre, the FC Secretariat, etc. - who are doing an excellent job making decisions on very important and urgent forestry issues to share their thoughts with professional colleagues, and for the profession to discuss, debate, exchange views on issues and to give proactive professional guidance to the sector or to issues as they arise.

One small example may suffice. The history of bidding for timber rights may be summed up as in table 1 below.

Table 1: Developments concerning competitive allocation of timber rights

1988	Competitive allocation proposed in Forest Resource Management Project Staff Appraisal Report (World Bank 1998 ²⁰); criteria partly technical (unspecified) to carry 40-50% weighting; partly market mechanism (concession rent over and above official figure) to be weighted 50-60%.
1994	Principle of competing for concessions (timber rights) embodied in revised Forest and Wildlife Policy.
1994	Concession Committee in then Forestry Department evolved elaborate criteria and scoring system
1997	Act 547 -Timber Resource Management Act, 1997: Timber Rights Evaluation Committee (TREC) to rank applicants on merit through competitive procedure to be prescribed by regulations.
1998	LI 1649 -TRM Regulations -Applicants to be evaluated and scored according to mainly technical criteria; Applicants scoring above level determined by TREC to submit proposals on (a) Reforestation Plan, (b) Social Responsibility Agreement; TREC to recommend award to highest scoring applicant
2003	LI 1721 -TRM (Amendment) Regulations: Competitive bidding introduced; basis more or less similar to 1998 extra concession rent system, now called Timber Rights Fee; 100% market mechanism.

In the 15 years the idea of competitive allocation has been in evaluation, GIPF has probably not been able to give it 5 hours of consideration.

The subject matter groups, which were proposed as the major mechanism for focused discussion, have not worked. A major constraint has been funding for research, conferencing, etc. A way out of this could be proposal writing to which the subject groups have not resorted. The Regional Chapters may more easily meet but are not always aware of the subject matter group priorities.

Opportunities Created Under Act 1649/Li 1721

The Timber Resources Management Act and Regulations require a timber utilisation contract (TUC) holder "to have at all times in respect of his operations a manager who shall be a professional forester". A window of opportunity for employment is opened through these legislations. A serious TUC holder, especially one classified as "large", would require more than one professional forester.

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²⁰ World Bank. 1998. Staff Appraisal report, Ghana Forestry Resource Management Project. World Bank, Washington, D.C.

The Act requires the TUC holder to submit to the Forestry Commission every five years a contract area plan prepared by a professional forester in accordance with the logging manual. The challenge to those training professional foresters is to ensure that their graduates are thoroughly familiar with what is required in a contract area plan and are able, after a period of orientation in the field, to prepare such a plan and carry out the management activities envisaged in the Act. The challenge to the council of GIPF is to ensure that by the time an associate member applies for ordinary membership he is able, at the minimum, to discharge satisfactorily the functions required of a professional forester under the Act.

Regulation 43 of LI 1649 defines a professional forester as "a person who holds a university degree in forestry or a technical diploma of a level acceptable to the Ghana Institute of Professional Foresters". It is up to GIPF to assert by practice and be prepared to defend if challenged that "of a level acceptable to GIPF" applies to both the university degree and the technical diploma.

GIPF should:

- Accredit university programmes in forestry in Ghana;
- As a minimum, identify core subjects (and content) that should be included in a university degree or technical diploma of other tertiary institutions acceptable to GIPF as likely to produce foresters competent to do the things required under Act 547'
- Accordingly certify persons applying to it and satisfying its criteria as "holding a university degree or technical diploma of a level acceptable to GIPF (as likely to offer competence to perform in accordance with Act 547)". The certificate could be issued to new members as part of their admission procedures while for non-members a "respectable" fee would be charged.

Act 547 does not require the professional manager to be a member of GIPF. The requirements for admission to full membership go beyond the Act 547 requirements. GIPF members are also subject to the professional discipline of the institute. The institute should market its members in this light. It should also add value to the qualifications of its members through its continuing education programme.

The Act creates opportunities also for auditing. The latest provision under Regulation 14(3) of LI 1649 as amended by LI 1721 requires the Chief Executive of the FC, at intervals of not more than five years to assign an independent organisation to undertake an audit of the activities of the TUC holder. GIPF should help to determine/refine what is to be audited, help its members to form consortia and assist in providing training. Similar opportunities would be available when the forest certification scheme becomes operational.

Opportunities under the plantation programmes

The Forest Plantation Development Programme, having become a Presidential Special Initiative, is big and offers numerous opportunities to the professional forester for employment in forest plantation development enterprises and for self-employment.

Prospective investors need to be advised on the need, not just the usefulness, to employ professional foresters, not only for the cultural activities, but also to give the professional advice that would ensure that the products would ultimately be certifiable. FC has a mandate to advise the minister on investments in the sector: this advice should include the investor's need to employ professionals. Assessment of applications for immigrant quotas under section 14G (3) of Act 571 should take into account the number of Ghanaian professionals employed. The challenge to

professional foresters is to be qualified and competent not only in terms of silviculture but also of business management to lead a private plantation programme.

One area of concern is whether the intention of LI 1721 is no longer to require reforestation by TUC holders. The merits and demerits need to be debated.

Ethical considerations

A profession is defined by Dana and Johnson (1963²¹) as "the practice of an art, based on knowledge and skill acquired through rigorous education at the college or university level, and conducted in accordance with high ethical standards of performance and service".

Professional practice is based on public trust and public confidence:

- In the competence of the professional;
- In the professional's sense of responsibility to his professional area (e.g. that the medical practitioner will respect life; that the lawyer will pursue justice; that the professional forester will exercise stewardship over and pursue sustainability of the forest at the expense of his own interest or that of a client or employer;
- Above all, that the professional's actions are rooted in integrity: personal ethical standards buttressed by the collective ethics of the profession.

Although the public and the landowners are beginning to question "How come the forests (forest reserves) have become degraded after 50 or 60 years in the hands of the foresters?" the crisis in professional forestry practice in Ghana today is not that the public does not trust in the technical competence of the professional forester. The real crisis lies in the widespread perception, publicly and privately expressed, by the politician, by the administrator in the ministry, by the traditional rulers, by the industry, by the community volunteers, that "the forester is the real problem;" "you can't trust the forestry officer,"; "If you leave it to the forestry officer....!"

A number of issues arise:

A number of issues arise:

- No complaint of unprofessional conduct has ever been laid against any member in the history of the institute. One would doubt if this is because people do not know they could complain. How does the institute proceed without such specific complaint?
- Quite a few of the complaints of non-ethical behaviour concerns persons who are not" professionals" or who do not qualify for any of the categories of membership in GIPF by virtue of their level of education. The problem thus is: "How does a professional association deal with the unprofessional behaviour of the non- professional who is giving the whole "profession" a bad name? The following measures are suggested:
 - More rigorous enforcement of discipline at work place by the professional manager in respect of subordinates, whether or not the latter are members of GIPF;
 - More vigorous effort to enrol the diploma holders, to get the Forestry Commission and the training institutions to work out schemes for upgrading the certificate holders from the School of Forestry to diploma standard, and subject our affiliate members to the discipline of the institute.

One small change we can make to our procedures for admission is suggested. Some professional associations e.g. The Ontario Professional Foresters Association requires an applicant to be sponsored by two or more members in good standing. Among other things, sponsors are required to certify that the applicant is of good character. If this requirement does nothing at all it makes

²¹ Dana, S. R and Johnson, E. W. 1963. Forestry Education in America, today and tomorrow. SAF, Washington, D.C. 402pp

the prospective member aware that he is being admitted, not only because he has a certificate from a training institution, but also because he is of good character. He can therefore be thrown out if he is no longer of good character.

Diversification of employment opportunities

At the close of the 20th century few people expected that they would stay in the same area of employment throughout their employable life. The challenge to professional foresters is to diversify into the many areas where their training qualifies them to branch into, including: ecotourism and forest recreation; urban forestry; several areas related to the environment (e.g. rehabilitation of mined out areas, climate change related activities); cultivation and export of ornamental and medicinal plants, remote sensing. Employment in information technology related areas are open to members of every profession.

Conclusion

The following quotation from Shea (1995²²) has been a real comfort to me as I contemplate the challenges facing professional forestry practice in Ghana: "The major threat to forest management progressing into an exciting era is the danger that forest managers will become weary of the critics and abdicate management decisions to those who are not accountable and who consequently can afford the luxury of doing nothing".

For those managers who may be tempted,

"It is not the critic who counts, nor the man who points out how the strong man stumbled, or where the doer of the deeds could have done better. The credit belongs to the man who is actually in the arena; whose face is marred by dust and sweat and blood who errs and comes up again and again; who at the best knows in the end the triumph of high achievement; and who at the worst, if he fails at least fails while daring greatly, so that his place shall never be with those cold and timid souls who know neither victory nor defeat (Attributed to Theodore Roosevelt in Eisenhower, JSD. 1969. The Bitter Woods)

The major threat to forest management progressing into an exciting era is the danger that forest managers will become weary of the critics and abdicate management decisions to those who are not accountable and who consequently can afford the luxury of doing nothing.

3.2.1 GROUP DISCUSSION: OPPORTUNITIES AND CHALLENGES TO PROFESSIONAL FORESTRY PRACTICE

The group looked at the opportunities and challenges to professional forestry practice by looking at four key questions.

What mechanism can GIPF devise to provide us opportunity for regular discussion on issues of professional interest?

- Members suggested that GIPF should set standards or criteria by defining issues that are of professional interest.
- There should be revitalisation of subject groups within the GIPF; these have been dormant for some time.

²² Shea, S. R. 1995. Sustainable Management of Forest for Multiple Use Benefits. Key note Address, Plenary Session II. Proc. 14th Commonwealth Forestry Conference, Kuala Lumpur, 1993: 45-62

- Chapter level minutes should be circulated nationwide; this will help in the generation of issues that constitute those that are of professional interest. E-mail addresses could be created for regional chapters to facilitate information flow.
- Regular publication and effective distribution of the GIPF newsletter.
- GIPF could write proposals and seek funding from the donor agencies. This will help in regular publication of the newsletters. It was also suggested that National Service Personnel could be contracted from the National Service Secretariat to be engaged in the activities of the GIPF; they could help with the publication and distribution of the newsletters and also carry out other actions that the executive members are not able to do because of time.

Are the systems of management worked out in recent years to involve major stakeholders in forest management planning and practice adequate? How can we operationalise them?

- Members asked whether there are tools for effective collaboration.
- There is the need for harmonisation of collaborative activities of divisions within the FC. For example the forest guards and the wildlife guards could collaborate in effective management or protection of our forest and wildlife resources instead of trying to do it on the individual bases.
- There is no legal backing for operationalising some proven or tested collaborative practices.
- There should be a national strategy and action plan for effective collaborative measures.
- For some of the collaborative practices that members are not sure of, they could be practiced on pilot basis, before implementation nationwide. Such things as alternative livelihood schemes and customer service centres could be tried on pilot basis before full implementation.

What mechanism do we have for conflict management in the sector?

In answering the above question, five main types of conflicts were identified as follows:

- Stool lands boundary disputes
- Revenue sharing
- Boundary disputes between timber contractors
- Compensation (farmer-contractor dispute regarding crop damage)
- Social Responsibility Agreement (between community and timber contractors)

Members identified the existing solutions as:

- Administrator of stool lands and the FC. Such conflicts should be referred to the land administration projects for arbitration.
- Extensive consultation with stakeholders
- Points 3-5 could be solved by the FC through the District Forest Manager.

However, members identified one source of conflict that has no structures in place for its arbitration: forestry as a land use and mining.

Has the FC, by becoming manager, diminished its potential to be an instrument for conflict management?

Members agreed that the FC has been active in resolving major conflicts. However, since it is also a stakeholder it may have an interest in certain cases and may not be able to resolve the conflict amicably. In such cases, the conflict should be referred to the FC Board.

There should be the formation of the customer service centres and there should be a campaign to make people aware of their duties.

The customer service centres should respond to all queries and concerns that come to them within a given time limit.

What can the professional association (GIPF) do about the unprofessional behaviour of non-professional foresters?

- It was suggested that GIPF should be involved in the recruitment of foresters in the sector. Members could act as referees for the non-professionals. This could reduce the amount of unprofessional behaviour by the non-professionals.
- GIPF should develop guidelines for best practices and effectively monitor their application.
- There should be incorporation of the code of ethics of GIPF in the schools curricula so as to make the people aware of them.

How can we motivate our members to respect the GIPF code of ethics?

- GIPF should institute awards and regular commendation of members who excel in their fields.
- GIPF should introduce in-service training, refresher courses et cetera to its practising members.
- GIPF should apply sanctions to those who act unprofessionally.
- The ethics committee should be constituted as soon as possible if not in place. If it is there, it should be up and doing.

3.2.2 COMMENTS AND INTERVENTIONS FROM THE AUDIENCE

- What we miss in the forestry sector are experts on forest soil. Soil, vegetation and climate are linked: capacity in Soil Science should be developed within GIPF.
- You talk about the encroachment of outside boundaries. However, admitted farms are growing so internal boundaries have also become an important source of conflict.
- An additional challenge to the GIPF to improve professional forestry practice: the GIPF should provide guidelines concerning the establishment of plantations.

How come the forests (forest reserves) have become degraded after 50 or 60 years in the hands of the foresters?

3.3 PRACTISING PROFESSIONAL WILDLIFE MANAGEMENT: PROSPECTS AND CHALLENGES

By Dr. Oduro W, Director, IRNR, KNUST, Kumasi

Definitions

Wildlife includes all free-ranging vertebrates in their naturally associated environments. Other definitions of wildlife are much broader and may include all plants and animals in wild ecosystems. Certainly, wildlife managers are concerned with managing habitats, including vegetation and invertebrates that are foods or disease vectors for vertebrates. But the objectives of most wildlife management programmes are to favour or control the abundance or distribution of vertebrate species.

Although many wild animals are produced on privately owned land, they cannot be taken into possession except as specified by laws and, in the cases of migratory birds, endangered species, and some marine animals, national laws. Most wildlife management programmes are, therefore, publicly funded to produce a diversity of public benefits. The discussion of management and conservation in this text refers to such public programmes. It is assumed that concepts applicable to the more complex public programs are adequate for application to the less complex problems of private wildlife management on shooting preserves and game ranches, which are absent in Ghana.

Wildlife management is the application of knowledge about wildlife and its environmental factors. The principles of wildlife management include some that are specific to the profession and many that are shared with other professions and sciences (Figure 1). Therefore, the education of a wildlife manager should include study not only of wildlife biology and management, but also of basic sciences, such as chemistry and meteorology and applied sciences related to land use, such as forestry, agriculture, and economics (King, 1938a).

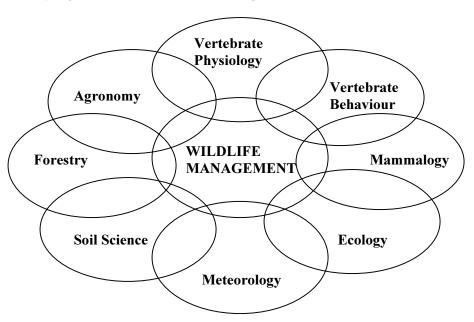


Figure 1 Wildlife management related fields

The principles of wildlife management, portrayed by the central circle, include many concepts shared with several sciences and other professions, only a few of which are shown, wildlife

management requires application of an abundance and diversity of information and is one of the most complex of occupations.

The professional wildlife manager is well presented by describing his activities in wildlife conservation process.

Wildlife Conservation

Wildlife conservation is a social process encompassing both lay and professional activities that define and seek to attain wise use of wildlife resources and maintain the productivity of wildlife habitats. Wildlife managers, research biologists, administrators, extension agents, NGOs and private sector, participate in this process. I define conservation in this way to emphasise the need for communication among participants in conservation and to emphasise the dynamics of conservation.

Ghana undertakes wildlife conservation in 18 protected areas. Together they occupy 13,048 km² or 5.5% of the country's land area, and include 7 national parks, 6 resource reserves, 4 wildlife sanctuaries and 1 strict nature reserve. These are shown in Figure 2. They are the primary focus of GWD's management programmes, with around 90% of the department's staff deployed in the field to protect and manage them. Ghana has designated five coastal lagoons (and one inland wetland) as Ramsar sites, under the Convention on Wetlands of International Importance. These coastal lagoons provide sanctuary to more than 80% of migratory water birds stopping in Ghana, and meet the 'Ramsar Convention' criteria by regularly harbouring more than 1 % of the estimated Atlantic Flyway populations of several species of long distance migrants.

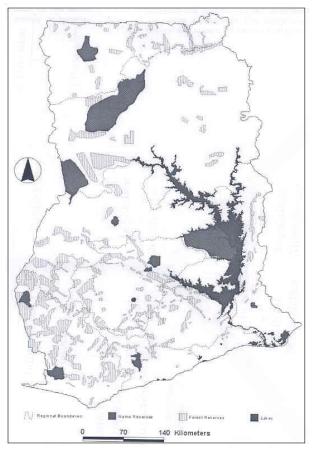


Figure 2 Map of Ghana showing parks, reserves and sanctuary

The professional activities in wildlife conservation are research, education, administration, law enforcement, and management. This is classified into the scientific, socio-economic, and management sectors of the wildlife conservation process for discussing their interrelated roles in conservation (Fig. 3).

WILDLIFE CONSERVATION **SCIENTIFIC SECTOR SOCIO-ECONOMIC SECTOR** History and culture Education Information Public Policy Produces: **Economics** Animal properties Environmental Legislation properties Interactions Administration Study of: Enforcement Wildlife Management Wildlife Research Habitat Population manipulation management MANAGEMENT SECTOR

Figure 3 Structure of wildlife management

Wildlife research involves study of animals and the environments that, through evolution, they have become adapted to and dependent on.

Results of wildlife research serve as a basis for management and administrative decisions, as well as to promote public awareness of the problems and potentials of wildlife. Taking the information to the public is a professional conservation activity. Public awareness enhances the formulation of realistic goals for using resources and the elimination of practices based on incorrect assumptions of the past or practices related to obsolete goals or former circumstances.

Professional wildlife conservationists working in the socio-economic sector are educators and administrators. Wildlife education includes the training of professionals to work in conservation and also the extension of information to the public, for purposes noted above.

Public policy determines the goals for managing public wildlife. Agencies responsible for the management of wildlife should communicate frequently with the public they serve. The agency should be aware of public sentiments and priorities. This two-way communication maintains public support for agency programmes that serve the public's will.

Awareness of wildlife problems and potentials is not the only influence on public policy. The study of history helps us understand the conservation policies of today and serves as a guide to the future. Awareness of conservation history demonstrates that priorities and practices have not always been what they are and that they can be changed again. Thus, the perspective of history can be a stimulus for change when change is needed. Without the perspective the professional conservationist finds stagnation more comfortable. The history of the land illustrates what it once was, is becoming, and could be under a different management programme. Whoever is unaware of the land's past is not aware of all its potentials.

Administration is central to the conservation process. Professionals and administrators need to communicate with other participants in the process. The participants include the general public, research biologists, wildlife managers, educators, enforcement personnel, and people in agencies responsible for resources other than wildlife.

The art of wildlife management is practiced in the third sector (Fig 2). Given a set of goals, wildlife managers strive to attain them. They use knowledge that is obtained by research yet they are limited by budgets and because knowledge of wildlife ecology is incomplete in areas and subjects needing further research. Wildlife managers must communicate their needs for more knowledge to the researchers and their needs for more financial support to the administrators. They may succeed in gaining what they need, or they may have to adjust their practices to the realities of these limitations.

Wildlife values are commercial, recreational, biological, scientific, philosophical, and educational, aesthetic, social, cultural, and negative.

Law enforcement exists on the boundary between the management and socio-economic sectors of conservation (Fig 2). Enforcement of laws to protect wildlife populations is a management-type function. But prevention of wildlife-law violations is also largely an educational process. Potential violators should be informed about wildlife laws and their purposes. An informed public may develop attitudes favourable to wildlife, and this can be the most important deterrent to violations.

This description of professional activities in the wildlife conservation process is simplified and may seem obvious. I have presented it to emphasise the dynamics of priorities and practices and

to show how these changes occur. I have seen too many wildlife managers doing what they have always done, only because they have never thought of doing anything different. I have also emphasised the need for communication among participants in wildlife conservation. Professionals have often neglected their communities. They have not explained their agencies' goals to the public, and they have not assured themselves that agency goals were in fact public goals. A well-informed and interested public is necessary, if professionals are to make their maximum contribution to society. Professionals have often neglected each other. They have not communicated with other agencies, and redundant or conflicting agency programmes have resulted. They have not communicated within their own agencies. Researchers have published results in esoteric journals, expecting managers to find them; and managers have made no effort to seek new information or to communicate their research needs. The professional -be he or she a manager, enforcement officer, or whatever should realise that wildlife conservation is a team effort. A failure anywhere in the scheme presented in Fig.3 will limit performance elsewhere. This is the wildlife manager's challenge. Communication is one key to overall performance. This includes reading scientific and management-related journals, participation in professional societies, and attendance at workshops and short courses.

Prospects

The prospects of the professional wildlife manager can also be best viewed with respect to the values of wildlife. It is important for the professional wildlife manager to exploit these opportunities. Wildlife values are (I) commercial, (2) recreational, (3) biological, (4) scientific, philosophical, and educational, (5) aesthetic, (6) social, (7) cultural, and (8) negative.

Commercial values

The commercial value of wildlife is the capitalised value of the income derived from selling or trading animals or their products, or from conducting a business based on access to wildlife populations. Wildlife and protected area make an important contribution to the Ghanaian domestic economy, notably through various kinds of direct use:

- As a source of bush meat
- As a tourist attraction
- For use in traditional medicine
- As live animals exported for the international pet trade
- As plant and animal products exported for use in the international pharmaceutical industry
- As a source of food, craft and building materials and other items used in rural households

Studies carried out (Wildlife Development Plan, 1998) indicated a total value of approximately US\$ 292 million annually as summarised in Table 2. Bush meat accounts for 94% of the estimated total value. It is estimated that 225 -385,000 tons of bush meat, worth US\$ 205 -350 million, are consumed annually in Ghana. Of this amount, at least half enters the formal monetary economy, traded in rural and urban markets throughout the country. There is substantial market in animal and plant products used in traditional medicine and cultural practices -assessed at an annual retail value of at least US\$ 13 million.

Recreational value

There has been a general belief that wildlife can never be significant in terms of tourism for Ghana. This well-known theory has done a lot of harm to wildlife conservation, which will continue as long as the tourist value of wildlife constitutes the dominant justification for the expenditure of public funds and private investment in wildlife conservation. The Kakum National Park experiment indicates that there is high tourist potential provided that Ghanaian government starts in time to protect wildlife, so as to ensure that the number of animals can increase.

Table 2: Estimated annual value US\$ of wildlife use in Ghana.

Category of use	Units	Annual	Unit value	Total value
Bush meat	Tons	305,000	900	275,000,000
Medicinal etc -animal				6,500,000
Medicinal etc -plants				6,500,000
Park visitors -domestic	Visitors	16,000	10	160,000
Park visitors -	days	18,000	50	900,000
International	Visitors	120,000	2	240,000
Zoo visits	days			600,000
Live animal export	Visits			2,000,000
Pharmaceutical product				
Export				
TOTAL				291,900,000

Biological value

The biological value of wildlife is the contribution of wild animals to productive ecosystems. Wildlife is part of the complex biotic "machinery" of ecosystems that we rely on for food, water, fertilizer, and aesthetic and recreational values. The activities of wildlife in enhancing the productivity and stability of eco-systems are enormous services to man. Often these services cannot be replaced by present technology. These services include soil tillage; pollination; seed dispersal and planting; natural regulation of plant and animal populations, including culling of diseased or inferior animals by predators; regulation of water resources; nutrient concentration, transport and recycling; and sanitation through scavenging.

Scientific, philosophical, and educational value

The scientific value of wildlife is the value of wild populations as objects of scientific study. Ecologists, ethologists, physiologists, pathologists, demographers, sociologists, and anthropologists have used studies of wild animals to extend knowledge in their disciplines. The results are valuable to science and also to philosophy because wildlife ecology is the study of life and serves as one basis for speculation on human purposes, values, ethics, and destinies. The educational value of wildlife is realised in the use of wildlife examples in schools and at nature centres and park exhibits to enhance people's understanding of their environment.

Aesthetic value

The value of wildlife and their habitats as objects of beauty or historical significance, and as they become part of literature, poetry, art, and music is the most personal and variously conceived of wildlife values.

Social value

Through the multiplier effect, the community as a whole improves its economic base when money is spent on wildlife-oriented outdoor recreation. This economic base provides for community programs such as schools, libraries, medical facilities, and recreation centres.

Rural communities and less-developed states cannot compete with cities and heavily populated states in salary offerings to doctors, teachers, surveyors, and other professionals. Yet they can attract competent people who are willing to forgo some income for the privilege of living in a less-developed area with access to hunting, fishing, and other outdoor activities.

Cultural value

Wildlife has always played an important role in Ghanaian culture and traditions, and wildlife conservation has been practiced for centuries through popular acceptance of community values, reinforced by rituals, oral histories and social sanctions. For example, Buabeng-Fiema (in Brong-

Ahafo Region) and Tafi-Atome (in Volta Region) Monkey Sanctuaries, where local communities live in harmony with their ancestors the Mona and Black and White Monkeys. The most visibly testimony to traditional conservation practices is provided by the continued existence of sacred (fetish) groves throughout the country. There are probably well in excess of 2000 groves in Ghana, established by different communities for a wide variety of reasons. These original forests should provide an opportunity for the professional wildlifer to establish community-based ecotourism as a job.

Negative value

The negative values of wildlife are the costs of wildlife damages to crops and other property and the costs of controlling those damages. There are many forms of negative values. Browsing antelopes may kill tree seedlings and retard forest growth. This may significantly affect a forest industry. Large ungulates, small mammals, and birds damage orchards, consume standing livestock forage, stored hay, and agricultural crops. Roosting birds may be nuisances because of noise and the effects of concentrated guano on desirable vegetation. Beaver may flood stream sides, killing desired trees and jeopardizing cabin sites. Coyote predation can diminish numbers of livestock. The costs of controlling these damages include fencing, poisoning, trapping and removal, use of aversive agents, and extra labour to protect property from potentially damaging wildlife.

Institutional linkages

National and international NGOs are active in the wildlife sector, providing conservation services on contract; raising funds to support ongoing programmes; and implementing their own wildlife conservation activities. Their traditional strengths lie in areas where GWD is at its weakest raising public awareness and developing popular participation in wildlife activities -thereby providing a strong basis for collaboration. The best known examples of this collaboration is between GWD and Ghana wildlife Society to implement the public education component of the coastal wetlands management project, Conservation International to provide a broad range of services to assist in the establishment and development of Kakum National Park, and the World Conservation Union to provide technical assistance on two major programmes (FRMP and PAMWCP). Contracting out conservation services in this way is a growing trend internationally, that is set to continue. This opportunity is also available to the professional wildlife manager to provide conservation services through the establishment of NGOs or as an individual to local and international government agencies and international NGOs.

Challenges

Wildlife conservation is as complicated as agriculture, forestry, veterinary and allied applied sciences and requires equally specialised knowledge. The complexity of wildlife conservation is only just beginning to be accepted.

There is hardly any encouragement that is commensurate with the risks, skills and knowledge that the job demands. The few dedicated staff in service are constantly discouraged and frustrated by conditions, apathy and attitude of their countrymen who are supposed to be knowledgeable.

Law enforcement

The administration of the Wild Animals Preservation Act is the duty of the Chief Executive Officer but he is helped, legally, by the Police Service in the enforcement of the laws pertaining to wildlife. It is very rarely that the police make arrests connected with offences under the Act on their own initiative. This situation is largely due to ignorance. This poses a challenge to the professional wildlife manager to ensure that the police do get to know the animals of the country: only then are enforcement measures effective. Naturally, at present, the Police Service concerns itself primarily with crime, law and order and considers wildlife offences as of minor

significance. Law enforcement is therefore very weak indeed and the understaffed division is not able to give effective protection to the few protected areas, let alone the wildlife of the country in general.

Conclusion

The professional wildlife manager has numerous opportunities but numerous challenges in his profession. The survival of wildlife depends upon the uses to which it can be put. The professional wildlife manager therefore needs to convince the politician, the ordinary people and all concerned, the need to be satisfied that any sacrifices made in respect of such uses, for the cause of wildlife conservation is justified. I agree with Asibey (1971) "Game must be controlled and harvested. There must be laws and people and money to administer the laws". Wildlife conservation is complicated, and requires that the professional wildlife manager share management with other profession and science. This sums up what is expected of the practicing professional wildlife manager.

It is uncommon to see a policeman making an arrest for wildlife offences because they are considered minor.

3.3.1 GROUP DISCUSSION: CHALLENGES AND OPPORTUNITIES IN PROFESSIONAL WILDLIFE MANAGEMENT IN GHANA

The group discussion on challenges and opportunities in professional wildlife management in Ghana was based on three main questions.

How can the Wildlife Division be improved?

- We need to look at the staffing of the Wildlife Division at the technical level
- Training of professionals must have business like orientation at the various academic institutions especially the IRNR and CRNR
- Training must be consistent with the revenue generation strategy of the new Forestry Commission charter.
- Improving the conditions of service of rangers and the field staff of the division
- Special allowance to cover risk should be given to the worker as motivation
- Adequate mobility and logistics such as radios, fire arms, and telephone should be made available
- Adequate social services, like schools, hospitals, and clinics should be provided at the duty stations of the field staff.
- Regular training of the staff to improve their skills and outlook
- Possibility to interchange staff within the Wildlife and the Forestry Divisions within the Forestry Commission
- Training in wildlife management should include issues relating to all possible values of wildlife including tourism
- The Wildlife Division should have a proper mode of regulating the number of animals that are taken from the various reserves
- Encourage research and uptake of scientific information on wildlife status, maximum sustainable yields, etc for efficient management
- Improve inter-sectoral relations within the Forestry Commission
- The management approach within forest reserves should include concerns for wildlife resources.

- Develop strategies to harmonise CREMAS within collaborative forest management and committees
- Further training of Forestry Commission staff must be oriented towards making staff capable to adapt to both wildlife and forestry management techniques

How can the private sector get involved in wildlife management to create jobs and wealth?

- Adopt the practice of giving out user right to private individuals in parks and reserves using the "concession" concept. This should however be on condition that the numbers are ripe for sustainable harvesting; scenic and other ecological concerns should also be favourable.
- Improve awareness creation and sensitise the general public about the potential of wildlife sector to seek private sector involvement.
- Include traditional authorities to identify potential recreational areas.
- Extend management plans to include wildlife resources in forest reserves, these wildlife resources can be then given out for harvesting where sustainable harvesting is necessary.
- Forestry Commission must provide opportunities for private sector involvement in protected areas development and marketing to generate wealth.

Are the graduates from IRNR and other higher institutions well trained to take up the challenges in the wildlife sector?

- The curriculum of the institute should regularly be reviewed to reflect current trends such as production and marketing aspects of management.
- Compulsory attachment of students to Wildlife Division for practical training, especially those who choose the wildlife option
- Improve equipment supply status for training e.g. GPS, Rifles (short) and compasses.
- Wildlife Division must provide opportunities to include students in their programme implementation.
- Forestry Commission and IRNR must liaise to come out with areas and programmes for practical training, including national service personnel.
- The Forestry Commission through the Wildlife Division must come out with potential research areas for student research.
- IRNR and GIPF should come together to undertake consultancies and include students e.g. species and conservation research.
- GIPF must take interest in the nature and quality of courses in natural resource management and seek to provide inputs to fill the gap in knowledge and expertise.
- GIPF/IRNR should engage in exchange programmes (local and international) to improve quality of teaching and training.

3.3.2 COMMENTS AND INTERVENTIONS FROM THE AUDIENCE

- In order to train the students better, consultants should involve students in their projects.
- The Forestry Commission included wildlife resources when they were taking their present inventory and are thinking of including the wildlife resources in their management planning. So there is a lot of information on wildlife resources at the disposal of the Forestry Commission.

3.4 EDUCATION AND TRAINING OF THE PROFESSIONAL NATURAL RESOURCE MANAGER

By Samuel Afari (Samartex)

Mr. Chairman, Nananom, honourable Minister, invited guests, fellow foresters, it is a great honour for me and the forest industry as a whole to be given an opportunity to contribute and share our experiences in natural resources management in Ghana, especially challenges that confront the professional forester.

Professional foresters may be found in government institutions, NGOs, private sector, self-employment, and other related fields. All noble members of this profession thus owe a duty to landowners and communities, employers, clients and the nation as whole to:

- Use scientific knowledge and skill to promote public understanding of forest policies, land use, conservation, the environment and the practice of forestry as a whole
- Ensure that forest resources are sustainably managed and used with optimum' efficiency
- Maintain high standards of conduct and professional work.

Mr. Chairman, these mentioned tasks therefore call for adequate education and training of the professional natural resource manager. Presently, the Institute of Renewable Natural Resources (IRNR), College of Renewable Natural Resources (CRNR), and the Wood Industry Training Centre (WITC) offer education and training in natural resource management in Ghana. The curricula in these institutions are intended to equip the resource manager to have a holistic approach to renewable natural resource management and utilisation. Among the resources (land, human, machinery and equipment), the human resource component is considered the most vital for the growth or destruction of the sector. Therefore, the quality of knowledge and skills placed on human resources should not be compromised.

The human resource

The quality of human resource lies in the fact that:

- It creates value: through cost cutting and provides or creates some uniqueness
- Human resource is rare: people are sources of competitive advantage when their skills, knowledge and abilities are not equally available to other competitors
- Human resource is difficult to imitate: that is if others cannot copy their knowledge and skills.

The question to ask ourselves this afternoon is, do the education and training acquired from these institutions equip us adequately to meet the requirements of the public and our various clients?

Resource owners

- Have we really been able to improve tenure security as it affects landowners, farmers and forest fringe communities as a way of ensuring sustainable forest management?
- Have we ensured a fair and equitable benefit sharing between government, resource owners and local communities in the management and utilisation of the resources?
- What has been our contribution to the government's initiative on poverty alleviation in the rural areas, especially forest fringe communities?
- What practical solutions have we provided for the inappropriate farming systems which are a major cause of deforestation?

Industry

- Has the training given us enough skills to prepare and execute plans of resource development and optimum flow of raw materials to meet industrial capacity?
- Does our education and training prepare us sufficiently enough to address the negative impact of .industrial activities on the forest ecosystems through logging, mining, construction of dams and urban roads, air and water pollution?
- Have we trained and developed highly skilled human resource capable of efficient production of quality products and services that can satisfy sophisticated consumer demand
- Are we adequately equipped with our knowledge to ensure increased mill recovery, value addition techniques, processing and marketing of non timber forest products?
- What has been the impact of our training and education in the development and promotion of lesser used species to replace scarce supplies of traditional scarlet species?

Government

Do we acquire the necessary education and training to advise government on appropriate legislative and regulatory instruments to -?

- Ensure transparent and efficient allocation of the resource
- Ensure appropriate pricing of forest products to increase revenue and reinvestment in forest activities
- Promote investment and incentives in the processing of downstream tertiary products

Notwithstanding the enormous tasks and expectations from the public, landowners, employers and our clients, the education and training of the professional forester are beset with shortfalls and difficulties.

These include:

- Inadequate funding
- Poor student/lecturer ratio
- Lack of collaboration between the educational institutions and research institutions, industry and other government sectors
- Non involvement of all stakeholders in the development of the curricula
- Inadequate practical training, exposure and supervision of students

Current trends

Mr. Chairman the aforementioned problems confronting the training of the resource manager invariably affects the quality of human resource turned out from these institutions to meet the requirements of the job market.

Fundamentally, how is the newly trained resource manager effectively equipped to handle current resource management problems that affect society? This could be looked at in the context of:

- The role of the forester in ensuring food security and soil conservation
- Watershed management for instance, how is the newly trained forester able to effectively fulfil the role of solving the periodic drying up of water bodies, especially the Volta Lake which is a main source of hydroelectric energy in this country
- Does the education offer the newly trained manager the necessary skills to manage recreational facilities such as eco-tourism boost?

Mr. Chairman, my experience as a human resource manager in the timber industry has exposed me to the weaknesses inherent in the education and training of professional natural resource managers in Ghana. It would interest you to know that a reasonable number of newly trained managers who passed out from our institutions are limited:

• With basic skills such as identification of common tree species

- Wood scientist who can not differentiate sliced veneer from rotary cut veneer
- Resource managers who can not undertake feasibility studies on plantation/agroforestry schemes
- Resource managers who can not identify or use GPS as a planning tool in resource management
- Resource managers experiencing for the first time machinery involved in forest operation as well as processing

As a consequence Mr. Chairman, it is no wonder that we find a high number of expatriates in our industries, ministries, the Forestry Commission, NGOs and other related fields. This is why I personally initiated a programme aimed at recruiting fresh graduates from various institutions. They are then put on a management-training programme and offered on the job training for a period of two years. The program has achieved success, as currently fifteen products of IRNR are managing various key sections within the Samartex set-up.

There is therefore the need for an effective review and emphases in the education and training of the natural resource manager. The review should consider the following:

- Development of target tailored courses to address the special needs of diverse stakeholders
- Intensive and extensive practical training periods of not less than six months in the field
- An effective interaction and feedback system between the educational institutions and user agencies in curricula development
- Extra funding from commercialisation of research findings
- The knowledge should be packaged as a commodity to be purchased to improve traditional systems and aim at promoting desirable changes in human attitudes and behaviour, compatible with sustainable forest practices.

Above all Mr. Chairman, the current changes are imposing new demands and competitive levels for all stakeholders, therefore training should be constantly monitored to reflect changes in occupational profile of natural resource managers.

Adequate education and training of the professional natural resource manager is vital for the achievement of sustainably managed forest resources in Ghana.

3.4.1 GROUP DISCUSSION: EDUCATION AND TRAINING OF THE PROFESSIONAL NATURAL RESOURCE MANAGER IN GHANA

The discussion was based on user agencies requirements of fresh graduates. The current occupational requirements of sector user agencies of graduates were found to be inadequate. In addressing the situation, four questions were discussed.

What knowledge and skills are required from current natural resource students?

The learning institutions, the user agencies/stakeholders and the students constitute the components of education and training.

The expectations of the user agencies of the graduate were knowledge and skills (experience). These were listed to include: tropical forestry and ecology, basic measurement skills, tree identification, forest certification, plantation silviculture with emphasis on practical work. The graduate is also expected to be computer literate, have good communication and interpersonal

skills, report writing and development of project proposals, environmental impact assessment, conflict resolution, business management, basic accounting and analytical thinking.

What activity should be undertaken to acquire these skills and knowledge?

- Involvement of resource persons to share field experiences; exposure of students to practical and fieldwork for about three to six months present curriculum should be reviewed with inputs from stakeholders to reflect current occupational requirements.
- Monitoring and evaluation of field work, collaboration between training and user agencies (technology transfer and feedback)
- There should be a memorandum of understanding signed between training and user agencies.

It was realised that the image of the profession should be enhanced to attract students; the standard of admission to the various institutions should also be raised. The need for a post graduation training scheme (internship) was found to be necessary. Resources for the structure and facilities to promote this scheme should come from GIPF, the industry, universities and other stakeholders.

Whose responsibility should it be to ensure the acquisition of these skills and knowledge?

- The universities and training institutions: the primary source
- The GIPF: to ensure high standards of professionalism.
- User agencies
- Government

What are the dynamics of the learning environment?

On the dynamics of education and training environment, the following factors were identified:

- Funding (finances)
- Facilities (infrastructure)
- Lecturer to student ratio,
- Sector policies
- Job market.

Varying any of the above affects the quality of education.

3.4.2 COMMENTS AND INTERVENTIONS FROM THE AUDIENCE

There is the need for an introduction to all areas of forestry and natural resource management in the first-degree programme. There should be a conscious effort to integrate forestry and wood science and for that matter all other areas in natural resource management. Sponsorship is needed for the postgraduate scheme since the university only undertakes projects they can fund.

There is the need for a sponsorship package for postgraduate studies to train more students to become researchers and lecturers in the various needed subject areas

4 CLOSING REMARKS

By Workshop Chairman, Prof. Kwabena Tuffour

Since Rio 1992, there have been conscious efforts by society to take bold political decisions to develop new civil society institutions including GIPF so as to improve governance and accountability regarding forest use. There is the need to reposition forest management in the context of sustainable livelihood and restoration of degraded forest.

From all indications, sustainable forest management remains elusive for Ghanaians. Sustainable forest management was a vague and abstract notion at the beginning of 1990s – TUP, TUC, salvage felling and convalescent management. The idea of criteria and indicators has helped to raise global awareness and understanding of the concept of forest management standards.

The criteria and indicators were developed as an instrument for guiding the choices made by forest managers in the direction of sustainability. Sustainable forest management is no longer the mandate of a mono-actor of a forest manager/professional. It should now be multi-actor. The integrity of the professional forester in Ghana is eroding badly. Socio-political pressure on the professional forester is phenomenal. Public perception of a forester can only be raised through attitudinal change.

Societal values are expressed through the political system. Stakeholders look up to professionals for leadership. We need to activate the public and social groups including politicians.

When you go to Takoradi you can find logs that are imported from other West African countries

Training of professionals is crucial for enhancement of capabilities to achieve sustainable forest management. Academic institutions in the African Region need to review their curricula and adapt their progress to emerging needs of the region.

The new forest resource manager must be equipped in the areas of:

- Decentralisation and participatory processes
- Management of forest resources for multiple uses
- Cross-sectoral planning.
- Business management and business accounting
- Conflict resolution
- Communication and public relation skills
- Diversifying the forestry training and enlargement of professional job opportunities

Forest management should be looked at in the context of sustainable livelihoods and restoration of degraded forest.

APPENDIX 1

GHANA INSTITUTE OF PROFESSIONAL FORESTERS 11TH ANNUAL GENERAL MEETING & TROPENBOS INTERNATIONAL - GHANA WORKSHOP

Theme: Natural resource management in Ghana: challenges to professionalism

Date: 10th and 11th July, 2003

Venue: WITC, Akyiawkrom, Ejisu-Kumasi

Thursday 10 July

OPENING SESSION

08.00-09.00	Arrival and registration, Cultural dance - RENARSA drama
09.00-09.05	Opening prayer
09.05-09.15	Introduction of chairman and dignitaries
09.15-09.25	Welcome address - Dr. E. Asare Abeney, President, GIPF Ashanti Chapter
09.25-09.40	Fraternal greetings
09.40-09.55	Address by guest speaker, Hon. S.K. Boafo, Ashanti Regional Minister
09.55-10.05	National President's address – Dr. K. Armstrong-Mensah
10.05-10.35	Thematic address - Natural resource management in Ghana: challenges to
	professionalism – Mr. S. K. Nyame, Advisor, SNV
10.35-11.00	Cultural performance by RENARSA drama
11.00-11.15	Keynote address by Prof. Dominic Fobih, Minister, Ministry of Lands and
	Forestry
11.15-11.30	Chairman's remarks – Otumfuo Osei Tutu II, Asantehene
11.30-11.35	Vote of thanks
11.35-12.30	Snack break, group photograph and cultural dance

TECHNICAL SESSION I

12.30-13.00	Challenges and opportunities to professional forest management in Ghana –
	Mr. J.G.K. Owusu, former director, IRNR – KNUST
13.05-13.35	Challenges and opportunities of professional wildlife management in Ghana –
	Dr. William Oduro, director, IRNR – KNUST
13.40-14.10	Education and training of professional foresters in Ghana –
	Mr. Samuel Afari, HRM, SAMARTEX

14.10-15.10 Lunch

15.20-17.00	Group discussion
17.00	Closing and snacks

Friday 11 July

TECHNICAL SESSION II

11.15-11.45	Snack Break
11.00-11.15	Summary and closing remarks – Workshop Chairman
09.05-11.00	Group presentations and discussions
09.00-09.05	Opening remarks –Workshop Chairman

BUSINESS SESSION

11.45-12.00	Address by Chairman – National President, GIPF
12.00-13.00	Election of new GIPF executives
13.00-14.00	Stewardship reports

14.00-15.00 Lunch

15.00-17.00	Business session
17.00-17.10	Chairman's closing remarks

19.00 GRAND DINNER

Fellowship awards Induction of new members Presentation of membership certificate