

**Environmental Value for
Money Audit of the
Ministry of Energy and Minerals**

Strategic Paper by
Robert Cheyo

**CCAF-FCVI INC
International Fellowship Program 2001/2002
May 2002**

Table of Contents

Acknowledgements	i
1. Introduction	1
2. Background	2
2.1 Kahama Mining Corporation Limited	3
2.2 Golden Pride Mine	3
2.3 Geita Gold Mine	4
3. Objectives of the Environmental Value-for-Money Audit	5
4. Key Features of the Value-for-Money Audit	6
4.1 Time frame	6
4.2 Audit scope	6
4.3 Audit criteria	7
4.4 Audit evidence	7
5. Phases of the Value-for-Money Audit	7
5.1 Planning	8
5.2 Examination	10
5.3 Reporting	11
5.4 Tabling	11
5.5 Post-Tabling	12
5.6 Follow-up	12
6. Conclusions and Recommendations for Successful Implementation	13
7. Detailed Steps to Carry Out the Value-for-money Audit	15
7.1 Pre-audit planning	15
7.2 Planning the overview	15
7.3 Survey	18
7.4 Examination	20
7.5 Reporting	20
7.6 Tabling	25
7.7 Post-Tabling	27
7.8 Follow-up	28

Acknowledgements

I would like to acknowledge Mr. Thomas M. Kiama, the Controller and Auditor General of Tanzania for accepting the CCAF-Fellowship Program in the National Audit Office of Tanzania and for awarding me the fellowship for the year 2001/2002. I would also like to thank Mr. Gregory Teu, Training Manager, for showing interest and keeping in touch with the CCAF management in Ottawa, which made my fellowship program possible. Appreciation is extended to Mr. Jean Pierre Boisclair, the CCAF/FCVI President, for sponsoring the program, and to all other staff at CCAF, with special mention to Ms. Marta Arnaldo, Manager, International Business and Ms. Kimberley Speek, Administrative Coordinator, International Business, for their excellent co-ordination of the program. The Fellowship Program is undertaken with the financial support of the Government of Canada provided through the Canadian International Development Agency (CIDA).

My sincere appreciation is also extended to Ms. Sheila Fraser, the Auditor General of Canada, for accommodating the program in her Office and for facilitating the training, and to Mr. Manfred Kuhnappel, Director, International Relations, and Ms. Donna Bigelow, Program Coordinator, International Relations, who worked tirelessly to ensure that the program was a success. My thanks are also extended to Mr. John Affleck, my Principal, who worked closely with me and provided me with valuable advice and input to produce this paper. I also owe a debt of gratitude to all staff of the Commissioner of Environment and Sustainable Development for their readiness to share with me their professional knowledge and values. Finally, I would like to extend my appreciation to my wife Wilhelmina, my daughter Magdalena, and my son Michael for encouraging me to undertake this fellowship program while they were at home.

1. Introduction

The profound economic reforms and structuring undertaken in Tanzania during the second half of the 1980s and 1990s have marked a clear shift in favour of private sector development and market-oriented economic management. The role of the government has shifted from that of owning and operating a business to that of providing clear policy guidelines on stimulating private investment and providing services. Given this state of affairs, the government undertook an initiative to carry out a public service reform program with a view to institutionalizing a performance management system throughout the public service. The goals of this reform were to improve quality, efficiency, and effectiveness of services and performance throughout the public service on a continuous and sustainable basis.

The objectives of the performance management system include the following:

- facilitating a backward linkage with various sector reforms by ensuring that these are factored into the formulation of the ministries', departments', and agencies' strategic plans;
- creating forward linkages to further ministry restructuring, as well as decentralization of specific services to local government by emphasizing the role of ministries in setting nation-wide public standards; and
- promoting strategic use of the available public financial resources through effective operation of the performance management system and performance budgeting in ministries and agencies.

In order to facilitate monitoring, evaluation of performance, and reporting, value-for-money (VFM) audit is to be used by the Controller and Auditor General of Tanzania, whose mandate has been stipulated in section 33 of the *Public Finance Act 2001*. VFM audit examines the extent to which public funds are expended economically and efficiently and the extent to which the related programs are effective in meeting their objectives. Generally speaking, VFM audit looks at the results achieved rather than the process followed to achieve them. This paper discusses the value-for-money audit process to be applied in measuring the environmental performance of the Ministry of Energy and Minerals.

The mining industry is a source of livelihood for well over half a million people and has the potential to stem rural-urban migration, stimulate local processing and manufacturing industries, and alleviate poverty. On the other hand, the explosion of mining activity has resulted in extensive social and environmental problems.

Case studies selected for the purpose of this paper include the following:

- Kahama mining corporation limited;
- Golden Pride mine; and
- Geita gold mine.

The selection of these three gold mines is underpinned by the fact that Tanzania has been the major focus of Africa's gold exploration and development over the past five years, and the risk for environmental degradation is very high. For example, there are reported cases of deaths of people, livestock, and wildlife at the farming community of Nyakabale just north of the Geita gold mine. The cause of these deaths is believed to be a result of gold mining waste called tailings containing sodium cyanide.

(Source: The public service reform program of the United Republic of Tanzania).

2. Background

Based on the annual gold production of major world mines, the Geita gold mine, owned jointly by Ashanti Gold Fields Company of Ghana and AngloGold of South Africa, is the 16th largest gold mine in the world. Kahama Mining Corporation, solely owned by Canadian Barrick Gold Corporation, is the 20th largest gold mine in the world, and the Golden Pride mine, owned by Resolute of Australia, is a medium size-gold mine. See Table 1 for annual gold production of the major world mines.

Table 1 Annual gold production of the major world mines

NAME OF GOLD MINE	OWNER	QUANTITY PRODUCED IN OUNCES
Eskey Creek in British Columbia	Barrick	320,784,000
Nevada in the U.S.A.	Newmont	3,000,000
Minera Yanacocha in Peru	Newmont	1,800,000
Betze-Post in U.S.A.	Barrick	1,500,000
Western Deep in South Africa	AngloGold	1,410,000
Great Noligwa in South Africa	AngloGold	1,077,000
Pierina in South America	Barrick	911,076
Pascua-Lama in Chile & Argentina	Barrick	800,000
Kalgoorlie mine in Australia	Barrick	768,725
Meikle Nevada	Barrick	712, 688
Elandsrand mine in South Africa	AngloGold	707,000
Obuasi in Ghana	Ashanti	650,000
Bajo de la Alumbreira in Argentina	50% by Alumbreira an Australian company, 25% by North Limited, and 25% by	600,000

NAME OF GOLD MINE	OWNER	QUANTITY PRODUCED IN OUNCES
	Canada's Rio Algon	
Bambanani in South Africa	AngloGold	553,000
Sadio Hill in South Africa	AngloGold	506,000
Geita in Tanzania	Ashanti of Ghana and AngloGold of South Africa.	500,000
Uzbekistan	Newmont	498,800
Kopanang in South Africa	AngloGold	463,000
Batu Hijau of Indonesia	Newmont	450,000
Kahama in Tanzania	Barrick	400,000
Golden Pride	Resolute of Australia	180,000

(Source World Mining-Overview)

2.1 Kahama Mining Corporation Limited

The Bulyanhulu gold mine was discovered in 1974. It is located in north central Tanzania, 50 kilometres south of Lake Victoria and 1,100 kilometres northwest of the Tanzania capital city of

Dar-es-Salaam. In 1996, the Kahama Mining Corporation, a subsidiary of Vancouver Canada-based Sutton Resources Ltd, had mineral rights to the Bulyanhulu gold mine. After investing in several developments, Barrick Gold Corporation acquired 100 percent of shares of Sutton Resources, at a cost of

US \$ 281 million in March 1999, and Kahama Mining Corporation Limited became a subsidiary company of the Toronto-based Barrick Gold Corporation Limited. Barrick's core business is gold production, and it is one of the world's leaders, with mines in North and South America and Tanzania. The company now employs 900 people across the breadth of skills that are required to manage a mine of this scale. Gold reserves at Bulyanhulu have tripled to 10 million ounces since 1999 through intensive exploration, and the mine sits on an ore body now proven to extend two kilometres below the surface. The mine will produce an estimated 400,000 ounces of gold per year over a 19-year mine life, with cash operating cost projected at US \$130 per ounce.

(Source: Barrick Global Operations)

2.2 Golden Pride Mine

Resolute is a gold producer and exploration company. It operates two profitable mines in Africa: The Golden Pride mine in Tanzania and the Obotan mine in Ghana. The Golden Pride Mine is located in Tanzania East Africa, 750 kilometres northwest of the port of Dar-es-Salaam and 200 kilometres south of Lake Victoria. Resolute has 100 percent interest in the project through its Tanzania subsidiary Resolute (Tanzania) Limited. Construction of Golden Pride, the first modern gold mine in Tanzania, began in November 1997 and was completed in 12 months, on budget (US\$48 million). The mine is designed to produce an average of 180,000 ounces of gold per annum, at an average

cash cost of US \$200 per ounce .The water source is at Kilimi dam and Manonga bore field. The project life of Golden Pride is projected to be to 2008.

(Source: Resolute Mining Ltd-Tanzania Golden Pride Gold Project)

2.3 Geita Gold Mine

In 1995, the Ashanti Gold Fields Company Limited started an expansion program focussed principally on the main gold belts of Africa. Tanzania was one of the key countries of interest. In December 1995, Ashanti made an offer for Cluuf Resources Limited and completed the acquisition in January 1996 for

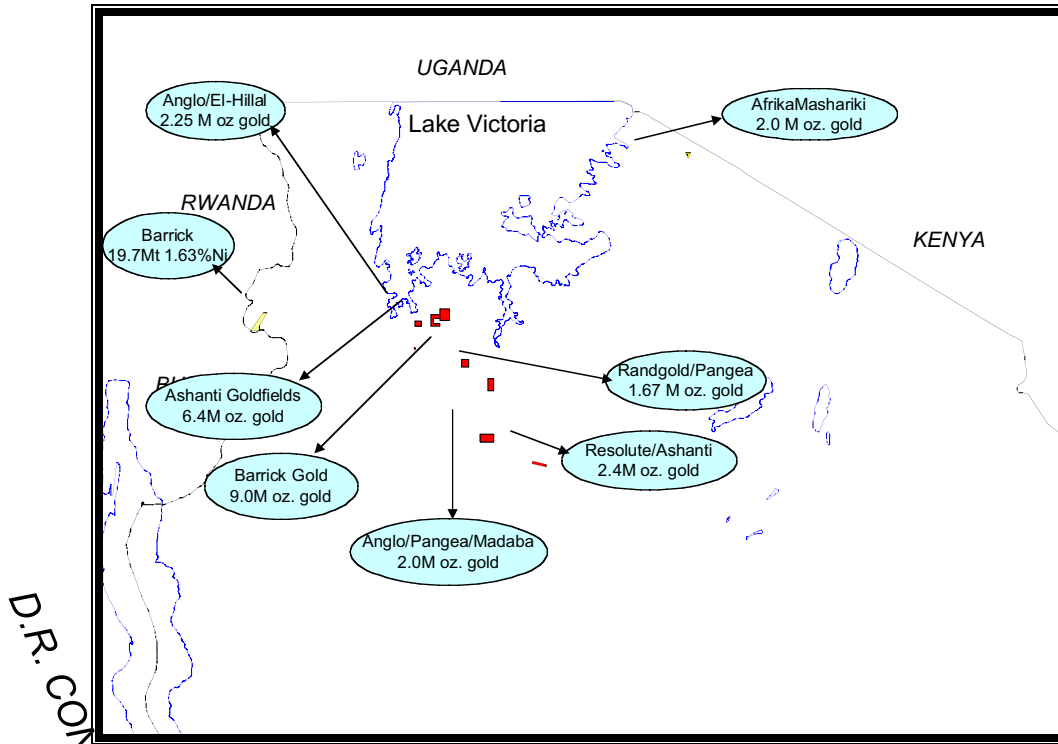
US\$180 million. Since 1996 Ashanti has undertaken a major exploration effort in Tanzania focussed largely, but not exclusively, on its Geita licences. The results at Geita were excellent, with the resource base being expanded from 0.4 million ounces at the time of acquisition to over 3.5 million ounces by the end of 1997. In early 1998, Samax Gold Company Limited announced the discovery of the Kukuluma and Matandani deposits immediately to the northeast of the Geita deposits. An engineering and business appraisal to evaluate the economic benefits of amalgamating the respective Samax and Ashanti licences was undertaken. As a result of this evaluation and discussions with Samax, Ashanti Gold Fields (Canada) Company Limited completed the acquisition of Samax Gold Company Limited in November 1998. The final consideration to Samax amounted to US\$135 million for the Kukuluma licences. With the acquisition of the Kukuluma and Matandani deposits and additional drilling at Nyankanga, the project resource expanded to more than six million ounces and feasibility was completed for an enlarged project. Board approval to implement the project was received early in 1999, and construction of a new mine at Geita, producing 400,000 ounces per annum, commenced in March 1999. It was completed more than three months ahead of schedule, and within the budgeted capital cost of US\$165 million. In April 2000, Ashanti sold an effective 50 percent interest in the Geita project to Anglo Gold, and the mine was to be managed jointly by the two African mining giants. The Geita joint venture has been strengthened by the inclusion of Anglo Gold's Nyamulilima Hill property (some 14 kilometres from the Geita process plant), adding approximately

2.1 million ounces to the current resource base. Geita Gold mine is situated next to the Nyamalembo River, which drains into Lake Victoria. It is in northwestern Tanzania, 90 kilometres from the regional capital Mwanza. Full production capacity is an average of 500,000 ounces a year, at cash cost expected to be below US \$180 per ounce. Currently, defined reserves stand at approximately

5.5 million ounces, providing a 12-year mine life even at the current low gold price. The current work force is 500 employees.

(Source: Ashanti Gold Fields Company Ltd Geita Project)

Mining Project around Lake Victoria



Source: Ministry of Energy and Minerals, Dar-es-Salaam, Tanzania)

3. Objectives of the Environmental Value-for-Money Audit

The objectives of this environmental value-for-money audit are the following:

- to verify if the Tanzania Mineral Act 1998 and other laws sufficiently cover control of pollution from minerals extraction;
- to verify if the Tanzania Mineral Act 1998 has any provisions that require the mining firms to first execute a cash bond or give financial credit assurance obliging them to close the open mines after the job is completed;
- to verify compliance with the Tanzania National Environment Management Act 1983;
- to verify compliance with the Environmental Impact Assessment Guidelines and Procedures (1997);
- to verify adherence to the National Conservation Strategy for Sustainable Development prepared by the National Environment Management Council;

- to verify if there is any system in place to monitor or control pollution in order to ensure that water surrounding the mining areas is environmentally safe; and
- to verify if there is any system to safeguard the interests of the displaced people following the opening of mines in their place of domicile.

4. Key Features of the Value-for-Money Audit

4.1 Time frame

There is no single best point at which to audit the environmental performance of the Ministry of Energy and Minerals. However, the desire for precision and confidence in audit conclusions must be balanced against timeliness and usefulness of the information generated in order to have a lower risk of audit failure. This proposed audit is estimated to take eight months to complete.

4.2 Audit scope

Value-for-money audit on environmental performance will cover only matters of potential significance. The following factors should be considered when identifying them:

- **Effect on the sustainability of the environment**

An understanding of the Ministry of Energy and Minerals' goals and how these goals /objectives affect the ecosystem is needed.

- **Visibility and public interests**

The environmental impacts of some goals/objectives are highly visible or of considerable interest to the public and Parliament, thus making them significant enough to require an audit. However, the auditor should be careful when reporting on such audits to avoid misleading the public and Parliament.

- **Adequacy of systems**

An evaluation of the Ministry of Energy and Minerals' control, management, and related systems against applicable regulations, guidelines, and directives, and against common management practices should disclose any apparent weaknesses and/or non-compliance.

- **Quality of disclosure**

The auditor should consider the adequacy of the information disclosed to Parliament through other means, including inquiries, committee hearings, and the estimates. In all cases, there should be evidence that management at the Ministry of Energy and Minerals is knowledgeable about current practices and alternative approaches both within and outside the Tanzania government and about inherent problems. There should also be evidence that management reviews all major assumptions underlying key decisions on a formal, scheduled

basis. The auditor should ask management to identify all major assumptions and should evaluate those assumptions in the context of either practices elsewhere or what would appear to be reasonable practices. These evaluations should be reviewed with auditee management to ensure that they are well-founded and reasonable.

- **Policy matters**

Sensitivity is required to ensure that auditors respond to such concerns appropriately. The Tanzania National Audit Office does not audit the merits of political decisions, rather it audits expenditures and provides Parliament with information and assurance about the exercise of due regard and the discharge of accountability.

4.3 Audit criteria

It is not possible to state the general rules that apply equally to all situations. The auditor must tailor the application of criteria to specific circumstances and this must be done at the planning stage to gain sufficient knowledge of the Ministry of Energy and Minerals. The auditor's best course of action will normally be the following:

- Consult with the Functional Responsibility Leader (FRL).
- Ensure that the FRL obtains appropriate technical advice and is equipped to use it.
- Obtain and evaluate carefully and objectively the position of the Ministry of Energy and Minerals on the applicability of criteria as early as possible in the audit.

4.4 Audit evidence

The auditor will need to be as clear as possible, when designing audit programs, about the nature and extent of evidence that will be needed to provide a basis for audit conclusions. Evidence gathered must be both sufficient and appropriate. The audit team may sometimes experience difficulty in gaining access to relevant information that is provided to the most senior levels of government, either because of its sensitivity or scarcity. Where the auditor experiences such difficulty, he/she should consult with the Functional Responsibility Leader /Principal for possible options to access the information.

5. Phases of the Value-for-Money Audit

The six phases of the value for money audit are planning, examination, reporting, tabling, post-tableting, and follow-up. Details on each phase are discussed below.

5.1 Planning

The planning phase encompasses pre-audit planning, overview, and the survey. The whole range of the planning phase is to provide the audit team with the necessary elements it needs to do the audit. These elements include the following:

- approval to do the audit;
- an audit plan explaining the audit tests that will be used during the examination phase;
- resources and time needed; and
- focus on the significance issues.

Pre-audit planning

This stage prepares/updates the long-range entity plan, which includes title, estimates of direct costs, and planned reporting dates on all value-for-money audits that would require resources in the next five years. This "rolling" plan is endorsed by the Assistant Auditor General and serves as the basis for the National Audit Office's annual planning conference and the Report Steering Committee's report planning.

From this long-range plan, a short-term plan is extracted to cover the next two-year period. This short-term plan is called the Plan Proposal and covers the following:

- description and objectives of the audit;
- potential for impact, especially quantifiable benefits that can be reported in the Office's performance report;
- relationship to National Audit Office mandate and priorities;
- planned start and report dates;
- name of the Assistant Auditor General; and
- estimated costs and hours;
- names of key staff and proposed consultants.

Overview

The overview is the initial part of the audit that focusses on learning about the entity or function, the environment in which it operates, and the issues it faces. The aim of the overview is to set the overall strategy for the audit, and determine how the team will approach the audit and how it will focus its resources. The output of the overview is the following:

- knowledge of the entity or function;

- lines of enquiry (issues that need to be evaluated). Normally, the focus is on the mission and objectives of the organization and determining if the organization fulfills those missions and objectives;
- initial scoping decisions; and
- identification of functional responsibility leaders to consult.

Survey

The audit team examines the lines of enquiry to determine and define the issues that are significant. These significant areas, sometimes referred to as matters of potential significance, will form the basis of the audit program. The purpose of the survey phase is to prepare an audit plan and program that will guide the audit team's work through the examination phase. The survey determines the following:

- significance, relevance, and materiality of issues
- auditability
- risk
- matters of potential significance
- scope of the audit
- objectives
- criteria

At the end of the planning phase, the audit team prepares a survey report. The report explains the work done and the results of the survey, and it includes an audit plan detailing how the audit will be conducted. Generally, the survey report should do the following:

- outline the survey findings;
- describe the issues to be looked at and why;
- include potential sources of criteria;
- define objectives;
- include milestones; and
- determine the resources needed.

This report is presented to the Report Steering Committee and the Audit Advisory Committee for comments and input.

The Executive Summary to the survey report becomes the Chapter Proposal and, once approved by the Report Steering Committee, provides the authority to conduct the examination work. The Chapter Proposal consists of the following:

- objectives
- scope
- lines of enquiry and how they would make a difference
- audit methodology
- milestones
- resources required

5.2 Examination

Before starting the detailed audit work, each audit should have an audit program that has been reviewed and approved by the audit principal responsible for determining the content and structure of the audit programs. The audit program identifies the work to be done, allowing the audit team to do the following:

- focus on doing the work;
- stay within the scope of the audit;
- co-ordinate and share information; and
- determine any problems early in gathering necessary and sufficient evidence.

During examination, the auditor has two objectives:

- to obtain sufficient, relevant, and competent evidence to support conclusions; and
- based on the evidence collected, to form a conclusion about matters of potential significance identified during the survey.

These objectives are met by the following:

- implementing the approved audit programs, which will generate appropriate information relating to matters of potential significance identified during the survey;
- gathering and documenting cross-referenced supporting evidence; and
- evaluating the evidence gathered, causes and effects, and constraints to arrive at a conclusion(s).

At the conclusion of the examination phase, there should be the following:

- a draft audit report, including the auditor's conclusions about the instances of lack of due regard for compliance, economy, and efficiency or of inaccurate, misleading, or incomplete disclosure to Parliament; and
- working paper files including all necessary evidence and substantiation material.

5.3 Reporting

This phase includes preparation of a chapter outline called the Internal Draft, with formal approval of the Principal and Assistant Auditor General. It is then updated by review and input from advisors to become the Principal Clearance Draft, which must be reviewed by the Assistant Auditor General and Auditor General. The draft chapter is then edited, reviewed again, and sent to the client (department) for clearance. After this review, it is updated to become the Transmission Draft. A copy should be sent to all the internal and external advisors and the functional responsibility leaders, including Legal Services, for review and comment before going to the Permanent Secretary for formal sign-off. Request for responses to recommendations should be included. From this Transmission Draft, the Auditor General's briefing material is prepared, including the following:

- main messages (usually two to three);
- main recommendations and summary assessment of departmental response;
- any areas of sensitivity (i.e. information not to be made public, but which the Auditor General should be aware of to avoid surprise);
- potential difference made by the audit;
- questions and answers;
- estimated cost of audit to tabling day; and
- Public Accounts Committee priority rationale (to be determined in consultation with Assistant Auditor General).

5.4 Tabling

Briefing material for the Auditor General should now be finalized and then passed to the Principal, Assistant Auditor General, and Parliamentary Liaison staff for review and comment. The briefing material is then updated by incorporating the comments as deemed appropriate. The news release is subsequently prepared, with a view to triggering the media's interest in the chapter and highlighting its most important messages. The news release comprises the following:

- main findings (main messages that will be the most important to the media);
- quote(s) from the Auditor General as to why we should care about this issue;
- background; and

- elaboration on one or two main messages.

An advance notification letter of the tabling of the Auditor General's Report is prepared and sent to the following:

- external advisors;
- consultant(s) used in the audit;
- third party references;
- stakeholders interviewed during the audit; and
- stakeholders who have expressed an interest in the chapter.

5.5 Post-Tabling

Within one month of tabling, the Accountability Report should be prepared and submitted to the Executive Committee. It reports on the following matters:

- **Objectives**

The Accountability Report tries to answer the question of whether the objectives of the audit identified in the Chapter Proposal have been achieved.

- **Making a difference**

The report addresses the challenges of whether the audit has been able to make a difference. This is measured by the departmental response, parliamentary and media reaction, and potential savings realized.

- **Scheduled times**

The report evaluates whether the deadlines were met for accomplishing various tasks within the audit cycle, such as deadlines for chapter proposal, Clearance Draft, and Transmission Draft.

- **Budget**

The report provides the variance analysis for budgeted versus actual hours, budgeted versus actual costs.

- **Lessons learned**

The Accountability Report summarizes the stakeholders' reaction (both positive and negative) to the Auditor General's Report.

5.6 Follow-up

Beginning in September 2002 at the Office of the Auditor General of Canada, continuous monitoring of the previous observations and recommendations will be conducted and

reported annually. Matters of great significance and that need further parliamentary attention will be examined in greater depth and a separate follow-up status report will be issued to Parliament.

(Source: Office of the Auditor General of Canada)

6. Conclusions and Recommendations for Successful Implementation

- **Required Personnel**

The audit team will require an expert in the area being audited. Any audit staff at the manager or director level should be able to collect the documentation and assemble an initial picture of the audit issue(s). However, for planning, evaluation of evidence, and formation of conclusions, specialized technical expertise in the area being audited probably will be required. The level and degree of involvement of experts will vary, depending on such factors as the complexity of the previous experience of the auditor and audit staff. For this reason, the auditor should consult the Functional Responsibility Leader (Principal or Assistant Auditor General) about staffing the audit. It is preferable that the auditor bring in the required technical expertise at the earliest time possible so both staff and the experts can benefit from early contact. Each group can complement the other and more readily apply its knowledge in an appropriate context during subsequent audit phases. Throughout the audit phases, the Principal should ensure that there is sufficient expertise to complement the planned work, adding staff in areas of significance, releasing staff when their expertise is no longer required, or adjusting the scope to fit the skills available. For the purpose of continuity, staff and specialists involved at the survey stage should be available to conduct audit, lead, or advise should their expertise prove significant to the audit.

- **Long-Term Strategy**

The value-for-money audit on environmental issues will be carried out in phases for the ministries, departments, and agencies based upon risk assessment. Priority will be given to those organizations with high risk of environmental degradation and where urgent recommendations to remedy the adverse impacts will be called for.

- **Capacity of the National Audit Office of Tanzania**

To facilitate the environmental value-for-money audit, the National Audit Office of Tanzania should provide technical leadership in terms of the following:

- establishing a report steering committee;
- establishing an advisory committee;
- establishing a legal unit;

- establishing a central edit unit;
 - establishing a graphics unit;
 - appointing functional responsibility leaders as well as liaison personnel;
 - hiring professionals to be included on the audit team;
 - establishing a core group of auditors for value-for-money audit issues relating to the environment; and
 - arranging for a chapter authors media session, normally held about one to two weeks prior to tabling. This session provides an update of the “do’s” and “don’ts” of dealing with the media.
- **Training**

Auditors should be trained in value-for-money audit on environmental issues and this training should cover the following:

- an introduction course to VFM audit issues relating to the environment;
- VFM audit methodology on carrying out the six phases of the audit cycle (planning, examination, reporting, tabling, post-tabling, and follow up); and
- audit reporting techniques (for example, storyboarding).

To enhance the capability of the National Audit Office of Tanzania in environmental audit, professional study tours by the staff to SAIs that have excelled in environmental audit, such as the Office of the Auditor General of Canada, would be beneficial.

- **Budgeting**

To facilitate effective operation of the value-for-money audit on environmental performance, there should be a budget of about C\$200,000.

- **Follow-up**

As part of the training program follow-up, I urge the CCAF management to provide funds for my Principal (Mr. John Affleck) from the Office of the Auditor General of Canada under the Commissioner of the Environment and Sustainable Development to visit the National Audit Office of Tanzania and conduct the following work:

- Carry out a two-day quality audit review of the proposed VFM audit on environmental performance of the Ministry of Energy and Minerals case studies: Kahama Mining Corporation, Golden Pride Mine, and Geita Gold Mine. This review could be carried out when the audit is at the reporting stage.

- Conduct a two-day training course on the introduction to VFM environmental audit issues for the established environmental audit team in the National Audit Office of Tanzania.
- Conduct a one-day presentation on environmental audit issues to the Senior Management Group of the National Audit Office of Tanzania.

A second five-day visit by the Principal to Tanzania could take place during the second audit at its planning stage to attend one of the Advisory Committee meetings. This would enable him to assess the adequacy of such meetings and comment upon them.

7. Detailed Steps to Carry Out the Value-for-money Audit

7.1 Pre-audit planning

At the start of audit, all members of the audit team should have access to appropriate information and the department should be notified of the intention to carry out the audit. To ensure effective conduct of the audit, the following controls should be put in place: product and project codes; key milestone dates; and audit control files.

7.2 Planning the overview

In planning the overview, the following steps should be followed:

- Develop an overview plan for the audit.
- Carry out literature research to gather knowledge on the proposed audit entity and subject matter; consider the following:
 - relevant acts and regulations
 - parliamentary committee proceedings (including the standing joint committee on scrutiny of regulations, if appropriate)
 - reports on plans and priorities
 - performance reports
 - public accounts
 - departmental annual reports, if applicable
 - sustainable development strategies and plans
 - prior National Audit Office audits
 - internal auditor program evaluation reports

- internal publications
- media clippings
- reports from the Office of the Auditor General of Canada, General Accounting Office (USA), National Audit Office (UK)
- other studies or reports as appropriate.
- Begin setting up an electronic file of “quotable quotes” on background material or on (potential) audit issues; include the reference source and page number and update this file throughout the audit as new information becomes available.
- Begin setting up an electronic file of “Potential people or organizations to talk to”, including the individual’s name, title, organization, telephone /fax/ e-mail/Web site numbers, if available (update this file throughout the audit). These people may include the following:
 - potential advisors/consultants
 - relevant contacts in ministries and agencies
 - members and research staff of key parliamentary committees
 - relevant contacts in regional departments and agencies
 - associations concerned with (potential) audit issues, including key contacts with the association
 - media contacts who speak or write knowledgeably about the (potential) audit issues; a copy of the published report could be sent to all or some of these media individuals as part of the communications plan
- Following appropriate “protocol or administrative arrangements”, for each audit entity under review, contact the relevant National Audit Office principals for government-wide audits (as a minimum).
- Meet with senior departmental officials (Permanent Secretaries) to carry out the following:
 - Introduce the audit and obtain their views on the proposal/audit subject matter and what they consider to be the key issues facing the department.
 - Solicit their opinion on who their key stakeholders are, including their primary clients and pro/anti groups.
 - Obtain their advice on potential audit advisors, including previous (retired) senior management personnel.

- Determine who the key departmental contact(s) for the audit subject will be throughout the audit and, if appropriate, the role of the departmental National Audit Office liaison person.
- Prepare a record (interview notes) of this meeting and set up an index of interviews.
- Obtain from the auditee a listing of all relevant Cabinet documents (Memoranda to Cabinet and Records of Decisions), including the document title, date, number, and if applicable, other departments/ministers signing the Memoranda.
- Once received, follow normal office procedure to request these documents from the Privy Council Office through the Legal Services Unit.
- Begin meeting with key stakeholders once sufficient basic knowledge of the subject matter has been acquired to gain a better understanding and appreciation of the issues involved.
- Set up a trip schedule for field visits.
- For field trips outside Dar-es-Salaam, inform the appropriate Regional Office of the planned visit to their region. Provide regional personnel with information on the subject matter of the audit and ask them for their suggestions of appropriate people to see.
- If deemed appropriate as part of the overview phase, prepare a list of proposed external advisors, obtain Assistant Auditor General approval, discuss the list with the department(s) under review to ensure that there is no perceived conflict of interest or bias, and issue contracts.
- Also consider who the internal advisors should be, including appropriate functional responsibility leaders.
- Prepare overview report, including the following:
 - background information on the audit entity and /or subject matter;
 - a list of potential audit issues to examine and a priority rating attached to each issue (potential audit scope, objectives, and criteria); and
 - a rough estimate of the time (National Audit Office staff and external resources and costs (travel and contracts)).
- Discuss the overview report with the Assistant Auditor General and determine the following:
 - Should the audit proceed? If so, what are the key issues?
- Consider the desirability of having a workshop or other similar venue to discuss the audit subject matter with key stakeholders, including auditees, and to help identify potential audit issues.

- If deemed appropriate, hold audit Advisory Committee meeting to discuss potential audit issues to be pursued during the survey phase.
- Prepare audit profile, if and as required (normally before the audit exceeds 500 hours of charges), for the Report Steering Committee and note that time and cost estimates are subject to change following the survey phase work.
- Provide feedback to staff at this time and throughout the audit based on the objectives set for them.

7.3 Survey

- Meet with senior and other departmental officials both at headquarters and in the regional and /or district offices, to
 - obtain their views on the proposed audit subject matter and what they consider to be the key issues facing the department, and
 - solicit their opinion on who their key stakeholders are, including their primary clients, and pro/anti groups.
- Continue consulting with key stakeholders, both within and outside the government.
- Consider meeting with selected members of Parliament, following Office procedures as established by our Parliamentary Liaison Group.
- If required and deemed appropriate, visit selected locations/sites to get a “hands-on” feel for the subject area.
- Prepare a trip schedule for field visits.
- If not done during the overview phase, select external and internal advisors and obtain entity management advice on potential audit advisors, including previous (retired) senior management personnel.
- Issue contacts to external advisors.
- Prepare a Survey Report (elements of which serve as the Chapter Proposal for the Report Steering Committee once it is approved, see below), identifying the following:
 - audit objectives;
 - an indication of how the audit will add value and make a difference for Tanzania;
 - a description of the audit scope, major considerations and the rationale for the scoping decision, the reasons for any limitations to the scope, and audit risks that may exist;

- links to office priorities;
 - a discussion of quantification plans for each line of inquiry;
 - a description of the planned audit approach and methodology, including opportunities to quantify the implications of deficiencies;
 - identification of audit staff, including regional and functional staff and the qualifications of contract staff engaged for their special knowledge or skills;
 - the estimated cost of the audit in terms of hours and contract shillings;
 - the timing of the audit, key milestones, control points, and likely timing of audit Advisory Committee meetings; and
 - how the reporting strategy relates to the direction from the Report Steering Committee.
- Hold an Advisory Committee meeting to discuss proposed audit scope lines of inquiry, objectives, criteria, and audit approach and methodology.
 - As soon as possible after this Advisory Committee meeting, meet with senior departmental officials and inform them of the final audit scope, lines of inquiry, and audit objectives, and clear or obtain departmental agreement on the audit criteria.
 - Submit a Chapter Proposal to the Report Steering Committee, which should be elements of the Survey Report and will serve as the basis for the post-audit chapter Accountability Report; the proposal should identify the following:
 - revised audit objectives;
 - proposed lines of inquiry/potential main points;
 - how each of the objectives/key issues would make a difference;
 - summary of proposed methodology;
 - list of functional responsible leaders consulted;
 - list of entities included if government-wide, sectoral, or special audit;
 - changes to the initial audit budget;
 - dates of end of field work, Principal Clearance Draft and Transmission Draft to Permanent Secretary; and
 - a brief outline of the reporting strategy for the audit, including an indication of its length.

- Issue a scope and plan document (including final audit scope, objectives, and criteria) to the Ministry of Energy and Minerals.
- Document any significant departmental concerns about criteria and decisions made and how they will be addressed.
- Once the various lines of inquiry have been agreed upon, update project codes for the Examination and Reporting Phase of the audit using standard project codes for value-for-money audits.

7.4 Examination

- Document audit program(s) developed in survey phase.
- Carry out audit program(s).
- Monitor progress to determine whether the audit will remain on time and within budget.
- Immediately report any significant deviations to superiors, with proposed options for bringing the audit back on line or for scoping down the audit, if deemed appropriate.
- If necessary, hold an audit Advisory Committee meeting at the mid-point of the examination phase to discuss audit progress and tentative findings.
- Prepare project report or “Fact Sheets” for internal and /or external use as deemed appropriate.
- Gathering evidence: Obtain sufficient, relevant, and competent evidence to support conclusions.
- Determine what is sufficient and appropriate evidence: Assess the extent to which the audit program as initially designed would produce sufficient and appropriate evidence to conclude against the audit criteria and satisfy the audit objectives.

7.5 Reporting

Internal draft chapter

- Prepare outline of chapter and obtain approval of Principal/Assistant Auditor General.
- If deemed appropriate, discuss the outline with a communications expert, using either external or internal resources to help ensure that a “story” is or will be told in a logical order.
- Prepare first draft(s) of chapter (inclusion of main points is optional at this time).
- Include preliminary graphs and exhibits and identify potential pictures.

- Formulate recommendations (these should be results-focussed and action-oriented to facilitate future follow-up work).
- Prepare the chapter conclusion against the objectives set out in the chapter proposal.
- Submit draft chapter to Principal/Assistant Auditor General for review.
- Submit draft chapter to Central Edit for quick or copy edit before sending it to external advisors.
- For each Central Edit submission throughout the chapter-writing process, a Chapter Review Cover Sheet must be completed and included with the submission.
- Submit draft chapter to internal and external advisors and functional responsibility leaders (FRLs), including Legal Services for review and comment.
- Revise chapter, as required, as review input is received.
- Hold an end-of-fieldwork Advisory Committee meeting to discuss the draft chapter (or chapter outline with tentative findings and proposed recommendations or alternatively discuss the report with the advisors individually).
- Begin preparation of substantiation binders.
- Discuss (informally) the Table of Contents of the chapter and its general thrust with the auditee (s) to get their initial reaction.
- Also discuss (informally) with the auditee(s), especially those not previously subjected to a value-for-money audit, the National Audit Office clearance process (Principal Clearance Draft, third party clearances, Transmission Draft to Permanent Secretary for sign-off, responses to recommendations).
- Begin preparation of the Main Points and news release with the aid of the Communications Director.

Principal Clearance Draft

- Once all or most of the review input has been received on the Internal Draft, update the chapter as required to Principal Clearance Draft, including Main Points.
- To facilitate updating of the substantiation binders (cross-referencing of substantiation material), prepare a cross-referenced paragraphs for major chapter drafts used for substantiation purposes.
- Submit draft to Assistant Auditor General/Auditor General for review.
- If the draft chapter has undergone significant changes since the Internal Draft, a copy of the Principal Clearance Draft Chapter should be sent to the internal and

external advisors, functional responsibility leaders, and Legal Services for review and comment before going to the auditee.

- If graphic or word exhibits have been prepared by the audit team and incorporated in the draft chapter, send them to Graphics Services after they have been edited by Central Edit, so that they can be properly formatted in accordance with the National Audit Office requirements.
- Submit a copy of the Principal Clearance Draft in double space format to Central Edit for substantive edit (include a Chapter Review Cover Sheet).
- After the substantive edit has been completed and the Principal Clearance Draft updated as required, request Central Edit to send a copy of this draft for Central Review.
- Complete the appropriate section of the Value-for-Money Review Checklist and have it signed by the Principal and Assistant Auditor General for authorization to forward the Principal Clearance Draft to the auditee(s).
- Issue pre-numbered copies of the Principal Clearance Draft on the National Audit Office Protected Paper to the Ministry of Energy and Minerals and request departmental response (usually allow the department about three weeks to prepare a formal response).
- Arrange to meet with departmental officials after the Principal Clearance Draft has been issued to discuss any possible factual errors, omissions, new information, or contextual changes.
- If deemed necessary and with the Assistant Auditor General's approval, issue a revised Principal Clearance Draft to the auditee, incorporating agreed-to changes and ask for the departmental response to the revised Principal Clearance Draft.
- The revised Principal Clearance Draft must also be on National Audit Office Protected Paper that is pre-numbered and numerically controlled. A request must be made for the audit entity to return all copies or provide the auditor with a certificate of destruction after formal sign-off.
- Determine the relevant extracts that should be sent to third parties referred to either directly or indirectly and request the advice of Legal Services as to whether, in their opinion, all relevant extracts have been identified.
- Third party references to be "cleared" include references to other government departments/agencies/public corporations not subject to audit, and municipalities and municipal departments.
- Discuss with audit entity(ies) who should be identified as the designated departmental contact in the event that a third party wishes more information (usually of a contextual nature) about the chapter.
- Following discussion with departmental officials on the (initial) Principal Clearance Draft, finalize and issue the third party clearance letters, along with

relevant extracts as approved by Legal Services, on National Audit Office Protected Paper.

- Send a copy of the letter to the audit entity's designated departmental contact.
- Maintain a third party reference "control list" to ensure that a response (written or oral) is received for all third party references.
- Revise chapter, as required, as third party review input is received.
- Send a copy of the Principal Clearance Draft to the National Audit Office Communications Director for comment on potential questions that could be asked by the media.
- Prepare the draft news release and submit to the Communications Director.
- Submit "Principal/Assistant Auditor General approved" pictures for inclusion in the chapter to Central Edit.
- Using the general file indexing framework previously developed, begin developing a detailed file indexing system.
- Submit substantiation binder to Principal and Assistant Auditor General for review.

Transmission Draft

- Once all or most of the review input on the Principal Clearance Draft has been received, update the chapter as required to Transmission Draft (to Permanent Secretary) and incorporate pictures, exhibits, and appendices prepared by Graphics.
- Submit Transmission Draft to Assistant Auditor General and Auditor General for review.
- If the draft chapter has undergone significant changes since the Principal Clearance Draft, a copy of the Transmission Draft should be sent to all the internal and external advisors, to functional responsible leaders, and Legal Services for review and comment before going to the Permanent Secretary for formal sign-off.
- Re-submit the chapter to Central Edit for substantive edit (include a Chapter Review Cover Sheet).
- Arrange for the appropriate section of the "Value for Money Review Checklist" to be completed and signed by the Assistant Auditor General (and advising Auditor General) for authorization to forward the Transmission Draft to the auditee(s).
- Ensure, if possible, that the Transmission Draft to be submitted to the Permanent Secretary is in final chapter format, i.e. two columns with all the exhibits and pictures placed in the appropriate location within the chapter.

- Issue the Transmission Draft on National Audit Office Protected Paper to the Permanent Secretary for formal sign-off (as well as to other responsible departmental officials, e.g. directors, departmental National Audit Office liaison officer). Include request for responses to recommendations.

NOTE: At this point, the author should feel comfortable that the text will not change by more than five percent.

- Prepare Auditor General briefing material including the following:
 - main messages (usually two or three);
 - main recommendations and summary assessment of departmental response;
 - any areas of sensitivity (i.e information not to be made public but that the Auditor General should be aware of to avoid surprises);
 - question and answers;
 - potential difference made by the audit;
 - scope and objective of audit;
 - estimated cost of audit to tabling day;
 - paragraph for the Standing Committee Letter(s);
 - Public Accounts Committee priority rationale (to be determined in consultation with the Assistant Auditor General); and
 - news release.
- Keep substantiation binders up-to-date with any changes made.

NOTE: It is highly desirable to get agreement of the auditee(s) on the chapter title.

- Incorporate into the final text of the chapter the formal response(s) of the auditee(s) to recommendations and, where and if appropriate, any departmental comment on any given paragraph or any accompanying letter that is intended for publication.
- Also, include the National Audit Office's comment on how the department (s) has /have responded to the audit/recommendations (and review it with the auditee).
- Review the updated "publication format" version of the chapter, and once again ensure that all pictures and exhibits have been appropriately located in the chapter (at or near the designated paragraph).
- Arrange for the completion and sign-off of the last section of the "Value for Money Audit Review Checklist", which recommends the Permanent Secretary Reviewed Draft for printing.

- Ensure substantiation binder materials match the final text.
- Since the Main Points for the Follow-Up Chapter are usually developed by the Central Follow-Up Team (often only after Permanent Secretary sign-off), it is necessary to inform the auditee about any extracts of the Main Points relevant to their entity. The same would apply to the news release and video material, if any.
- Send the chapter to the auditee (s) for review.
- Review all proposed changes for reasonableness and to ensure consistent use of terminology throughout the chapter, especially between the Main Points and conclusions.
- Retrieve the pre-numbered copies of the Principal Clearance Draft (and if applicable the Transmission Draft) that the department no longer needs to retain and /or obtain a certificate of destruction (written confirmation from the auditee as to which pre-numbered copies have been destroyed or shredded).
- If necessary, prepare a management letter for issues not included in the chapter but that should formally be brought to the attention of senior management.

NOTE: Since the management letter may contain one or more direct or indirect references to the related chapter, it should not be issued before the related chapter/report is tabled in Parliament. However, if possible, the management letter should be ready for issuance to the auditee(s) immediately following tabling of the related chapter/report.

- Prepare employee appraisals or assignment review forms for all staff members who spent at least 400 and 100 hours respectively on the audit. This should be in addition to the feedback provided to staff throughout the audit based on the (clear) objectives set for them.
- Ensure all audit working papers have been put in appropriate files for transmittal to National Audit Office Records Management.

NOTE: Where a file contains information that is classified at a level higher than “Protected”, ensure that the file cover is labelled with the appropriate classification (Protected, Confidential, Secret, or Top Secret).

- Prepare notes on the variance in hours and shillings between the (revised) budget and the actual figures.

7.6 Tabling

- Prepare notes on the variance in hours and shillings between the (revised) budget and the actual figures.
- Prepare and /or review input for the Notice to Speaker that is sent about six weeks before the Report tabling date.

- Finalize the Auditor General briefing material.
- Submit briefing material to Principal, Assistant Auditor General, and National Audit office parliamentary liaison staff for review and comment.
- Review any suggested changes to the Auditor General briefing material and update as required.
- Prepare material for the National Audit Office staff briefing presentation.
- Prepare news release distribution list and provide to the Communications Group the names of potential media contacts as well as their address, telephone, fax, and e-mail address, if available, from the electronic file of "Potential people or organizations to talk to."

Of particular interest are specialty magazines that are known (or are likely) to have significant interest in the chapter, such as those that had, or expressed, an interest in a recent chapter on a similar topic.

About four weeks prior to tabling of the Report, provide the Permanent Secretary (and departmental National Audit Office liaison officer) with a copy of the "Notice to Speaker of the National Assembly," which contains a brief description of the subject matter of all chapters to be reported.

About two to five business days prior to tabling day, inform the auditee(s) of the contents of the news release.

NOTE: The news release is not formally cleared with the auditee(s).

NOTE: If a copy of the news release is to be left with the auditee(s), then it should be on National Audit Office Protected Paper.

- When requested, obtain information from the key auditee(s) on the number of copies required of the subject chapter, other chapters, or the entire report in its various formats (hard copy, diskette, CD).
- Prepare an advance notification letter of the tabling of the Report to the following:
 - external advisors;
 - consultants used in the audit;
 - third party references, including those who provided pictures that were included in the chapter;
 - stakeholders interviewed during the audit;
 - participants at any symposium, workshop, etc. held by the Office on a subject related to the audit;
 - stakeholders who have expressed an interest in the chapter or audit subject matter; and

- departmental sustainable development contacts, if applicable.
- If an advance notification has not been provided, identify any people or organizations that have requested or will likely require a copy of the chapter as soon as possible following tabling (for example, a significant third party reference), create a mailing list, and prepare appropriate covering letters (post-tabling notification).
- Make arrangements with appropriate National Audit Office staff to have copies of the chapter couriered, as soon as possible after the Report is tabled, to those selected people or organizations requiring an immediate copy of the chapter, and mailed to all other people on the distribution list.
- Chapter authors should pick up a copy of their chapter /Report as soon as it is available, usually two to three business days prior to tabling.

NOTE: Using the cross-references developed at the time of the Transmission Draft, it may be useful to transcribe these cross references to the published copy of materials that one takes into the media lock-up and MPs preview. This will enable one to quickly direct the media, MPs, and others to the related areas of the chapter. (It may also be desirable to cross-reference the Questions and Answers prepared for the Auditor General briefing material for the chapter.

- On tabling day, attend the media lock-up and MPs preview, as required /requested.
- In the event that MPs, the media, or the public wish additional information about the department or audit subject matter that is not included in the chapter, give them the name and telephone number of a departmental official provided for that purpose.
- Respond as appropriate to inquiries from the media and the public.

7.7 Post-Tabling

- Continue to respond as appropriate to inquiries from the media and public.
- Monitor the media's reporting on the chapter and promptly advise the Communications Director and/or the Auditor General of any misinformation communicated in the media to determine what, if any, response should be made to correct or counter this misinformation.
- Prepare chapter Accountability Report to be submitted to the Assistant Auditor General within one month of tabling. The contents should include the following:
 - a comparison of audit objectives in the Chapter Proposal to those included in the published chapter, noting whether the original objectives have been achieved or providing an explanation for any differences;
 - a note on whether the audit has made a difference;

- a comparison of budgeted hours and costs (contract and travel shillings) to actuals and an explanation for any significant variances; and
 - a “lessons learned” section (highlight good practices and /or identify areas for improvement in future audits).
- If called, prepare for Public Accounts Committee, Environment and Sustainable Development Committee or other parliamentary committee hearings.
 - Respond, as appropriate, to requests to present results of the audit at various venues, such as conferences, seminars, and workshops.

7.8 Follow-up

- Under the current proposal, continuous monitoring of the implementation of the past recommendations will be carried out. Significant matters that require further parliamentary attention will be examined in detail as part of the new follow-up, and a separate status report will be issued to Parliament.

(Source: Office of Auditor General of Canada)