Value for Money

A preliminary audit framework for General Budget Support

Parsia D.H.H. Tayyebi-Azad

International Relations & International Organisations
Faculty of Arts
Supervisor: Prof. J. de Wilde

Key Words: general budget support; value-for-money audit; Mozambique
Acknowledgements

First of all, I would like to thank Dutch Ambassador Frans G. Bijvoet en Christine Pirenne for giving me the opportunity to conduct this research, as part of an internship programme, at the Embassy of the Kingdom of the Netherlands in Mozambique.¹

Many people have contributed to the production of this study and their contributions are gratefully acknowledged. In particular, I would like to thank Christine Pirenne for her overall supervision and guidance during my internship. I would also like to give special thanks to Prof. J. H. de Wilde for his precise and constructive feedback during the whole process. His interest in my research and dedication to my work made our cooperation very pleasant. He has been very helpful in improving this research, and has facilitated my progress greatly.

In addition, I would like to thank the following people for their contributions to the process of writing this paper. Special thanks go to Prof. Dr. Frans L. Leeuw² for his pertinent suggestions and excellent feedback. In addition, I would like to thank Jeremy G. Clarke, of the DFID Evaluation Department, for providing valuable input to this document. I am grateful to my partner Anniek Boeijinga for exchanging ideas with me on design questions. Finally, I would like to thank Muhammad A. Khan³ for giving supportive insights and documents in the final phase of this thesis.

The purpose of the research was to develop a structure that could accommodate the Netherlands Foreign Affairs to acquire insight into the diversity of perspectives regarding the concept ‘value-for-money’ in the context of general budget support. In addition, within this new structure, personal views were added where necessary, to support key points. Given the fact that perspectives on the definition, scope, and appropriate methods of value-for-money differ widely among practitioners and other stakeholders, the document should not be taken to represent a fixed method or approach to evaluate General budget Support. I recognize that there is large scope to develop the arguments made in this thesis in several key areas.

Within the restricted time available for writing this thesis – three months – I have tried to combine different complementary perspectives on value-for-money into an overall framework, in line with my own views on these topics and feedback from various specialists in relevant fields.

Although I have not included all perspectives on ‘value-for-money’ audits, an important and quite diverse selection of the thinking and practice on the subject has been incorporated. The result, I hope, represents a balance between coherence, a comprehensive structure of key issues, and diversity.

¹ It is important to mention that the findings and conclusions of this study are those of the author alone, and no responsibility should be attributed to the Dutch Ministry of Foreign Affairs.
² Prof. Dr. Frans L. Leeuw is currently a Professor of Law, Public Policy and Social Science Research at the University of Maastricht, and the Director of the National Justice Research Centre WODC in The Hague, the Netherlands.
³ Muhammad A. Khan served as the Director General of Performance Auditing in the Department of the Auditor General of Pakistan.
# Table of Contents

Acknowledgements .......................................................................................................................... 2

1 Introduction .................................................................................................................................. 5

2. General Budget Support ............................................................................................................ 8
   2.1 What is General Budget Support? ......................................................................................... 8
   2.2. Concerns ............................................................................................................................ 10
   2.3 Performance Assessment Frameworks ................................................................................. 10
   2.4 Development Assistance Committee: GBS Evaluation ....................................................... 12

3. Theoretical considerations of Value for Money .......................................................................... 14
   3.1 What is ‘Value for Money’? ................................................................................................. 14
      3.1.1 Definitions of VFM Auditing ....................................................................................... 15
      3.1.2 Value for Money VS Financial Auditing ..................................................................... 16
      3.1.3 Objectives of VFM Auditing ...................................................................................... 17
      3.1.4 Standards of VFM Auditing ....................................................................................... 18
   3.2 A Conceptual Framework of VFM on service delivery ......................................................... 19
      3.2.1 Cost-effectiveness ........................................................................................................ 21
      3.2.2 Economy .................................................................................................................... 22
      3.2.3 Efficiency .................................................................................................................. 23
      3.2.4 Effectiveness ............................................................................................................. 23
   3.3 Exploring the model of VFM in conformity with realities ....................................................... 24
   3.4. Three ‘Value for Money’ approaches ................................................................................. 26

4. A VFM approach on GBS .......................................................................................................... 29
   4.1 General Budget Support: a general note .............................................................................. 30
   4.2 Operational Performance: an evaluation of economy and efficiency ................................. 31
      4.2.1 Assessing Economy .................................................................................................... 34
      4.2.2 Assessing Efficiency .................................................................................................... 35
      4.2.3 A problem-oriented perspective on operational performance ................................. 37
      4.2.4 Quality, Equity, and Sustainability ........................................................................... 38
   4.3 Results: an evaluation of effectiveness ................................................................................ 42
      4.3.1 Indicators .................................................................................................................... 42
      4.3.2 Attribution problems .................................................................................................... 44
      4.3.3 Methodologies: a concise overview ............................................................................ 45
   4.4 Cost effectiveness: an approach to GBS ............................................................................. 49
      4.4.1 Estimating costs .......................................................................................................... 50
   4.5 PETS & QSDS: a brief note ................................................................................................. 52

5. Case study: a VFM audit of the Mozambican Water Sector ....................................................... 55
   5.1 Objectives ............................................................................................................................ 55
   5.2 Scope .................................................................................................................................... 56
   5.3 Stakeholders ......................................................................................................................... 56
   5.4 Audit Approach ..................................................................................................................... 57
   5.5 Key Findings ......................................................................................................................... 58
      5.5.1 Information problems ................................................................................................... 58
      5.5.2 Indicators ..................................................................................................................... 58
      5.5.3 Economy and Efficiency ............................................................................................ 59
      5.5.4 Effectiveness .............................................................................................................. 60
      5.5.5 Cost effectiveness ........................................................................................................ 61
      5.5.6 Institutional factors ...................................................................................................... 61
      5.5.7 Equity, Quality control and Sustainability ................................................................. 63
   5.6 Review: a critical note ........................................................................................................... 63

6. Conclusions ................................................................................................................................ 66

Bibliography ................................................................................................................................... 70
1 Introduction

Five years are left for the world to achieve the Millennium Development Goals (MDGs), and much remains to be done. Because of the economic, food, energy, and climate change crises facing the planet today, the task is now even more challenging than in 2000 – when the goals were agreed.\(^4\) The most immediate challenge is the global economic crisis: many donor countries' economies are affected, and in the coming years most of them will be mainly preoccupied with domestic policies of reducing the growing burden of government debt. Therefore, it will be demanding for many donor countries to maintain – if not increase – official development assistance (ODA).

Most developing countries have been exposed to the effects of the crisis, despite having had no role in triggering it; unofficial external finance for development contracted sharply and the shock to economic activity was felt severely throughout the developing world.\(^5\) Thus, development assistance has become more important than ever. These global challenges demand more determination from donors and the wide development community if aid is to make the headway needed in these final five years.

Donor countries are realising the importance to strengthen their adherence to deliver more effective, transparent, predictable and accountable aid. However, this is not going to be easy. The Organisation for Economic Co-operation and Development Assistance Committee (OECD/DAC) Chair Eckhard Deutscher stated clearly that:

“The combined effect of the food, energy and economic crises is presenting a major challenge to the development community, raising searching questions about the real impacts of development, how to demonstrate them, what really underlies them, and our ability to control and account for them”\(^6\).

Citizens of donor countries want assurances that ODA and budget support are working, that it provides value for money and that corrupt governments are not misusing it.\(^7\) It is not easy to demonstrate and communicate if, and to what extent aid modalities, such as budget support, are well managed and having impact. Because General Budget Support (GBS) is channelled through country systems and is done jointly, it is difficult to attribute particular results to specific donors.

Today, donors are exploring innovative ways of meeting the challenge of communicating results to their citizens. Accordingly, there is a growing interest for a systematic and critical approach that gives insight in how and where budget support is spent, and whether recipient governments achieve their national objectives regarding poverty reduction. This requires a move towards a more evidence-based evaluation of GBS; to understand the benefits that accrue to both donors and countries

---

\(^4\) OECD/DAC (2010) 16  
\(^5\) Ibid 22  
\(^6\) Ibid 15  
\(^7\) Ibid. 38
when using a variety of different country systems – from the management of technical assistance, to procurement, to sophisticated financial management systems.\(^8\)

In November 2009, there was a meeting in Accra regarding the implementation of ODA policy, with a focus on budget support. A large number of Heads of Cooperation (HoCs) and macro-economists of the Dutch Ministry of Foreign Affairs were present. The meeting ended with a session entitled: “Where to go with budget support?” It was recognised that public and political support regarding ODA in the Netherlands, and of budget support in particular, is facing serious critique. The ‘value for money’ (VFM) approach was one of the main elements of the discussions in Accra. The question was raised whether VFM audits could enhance effectiveness of, and promote support of budget support in the Netherlands. An action plan was created on the introduction of a VFM approach to budget support. The key issue behind this exercise was a logical one: do the Netherlands get enough value for money through the budget support modality?

The purpose of this research is to determine whether VFM constitutes a useful approach for Foreign Affairs to assess Dutch GBS. **The main question is:**

*To what extent is a ‘Value for Money’ audit a useful instrument to evaluate GBS in light of public service delivery?*

The goal of this study is to contribute to a possible roadmap for a VFM approach for Dutch development policy. An analysis of VFM is useful for two reasons: (1) it can provide valuable insight in the GBS modality in the host country; and (2) a VFM audit could provide important evidence, which is necessary to maintain support for aid and budget support in the Netherlands. This paper is mainly intended for Dutch Foreign Affairs but will be made available to other donor agencies. The particular target audiences are: sector specialists as well as economists and public financial management and public sector reform specialists working at the country level. The methodology will encompass the following components:

1. Theory: draw a conceptual framework of VFM from existing theories (Chapter 3).
2. Provide a preliminary VFM audit framework to GBS (Chapter 4).
3. A case study: a VFM audit on the water sector in Mozambique (Chapter 5).

Chapter 2 provides a brief introduction to the GBS modality. Chapter 3 and 4 is attempt to contribute to a sound VFM framework that can derive appropriate and well-founded recommendations for Dutch Foreign Affairs to implement VFM into their policies. The difficulty is that an established theoretic foundation for VFM is lacking. There is no “all-embracing” theory; no universal VFM approach. There are only partial theories that address certain problem areas. To cover the area of GBS, chapter attempts to provide a framework of adequate partial theories; a conceptual framework that can

\(^8\) OECD/DAC (2010) 50
provide a theoretical basis of VFM. Chapter 4 will be the first step to a VFM audit framework to GBS. It will draw on the conceptual framework of chapter 3 and assess in what form the concept VFM is suitable to audit GBS. This makes, from a methodological and practical point of view, developing such an approach a challenging undertaking.

Donors are mostly interested in present evidence of results to taxpayers, therefore, I will look solely at the main goal of GBS – poverty reduction through public service delivery. Service delivery results can be determined empirically and statistically and are, therefore, more suitable for this research. Issues related to accountability can be taken into account to some extent, as VFM has to look at the flow of funds to determine what happened with the acquired inputs. Although governance is important for effective service delivery, they will not be the focus of this research. Finally, I will look a VFM audit that was conducted in Mozambique in 2005 to explore the theoretical VFM concept in practice. Together, they will provide insight into the pro’s and con’s, the tradeoffs, and provide recommendations to both VFM auditors and policymakers.

\[^9\] Schreiber (2000) 29-31
2. General Budget Support

This chapter explores the definitions, goals, and various concepts that are associated with General Budget Support (GBS), and which are relevant for this research. I will briefly discuss the latest developments related to GBS, including developments and debates within Dutch Foreign Affairs. The focus will be on the overall goals of GBS, which should serve as a bridge to the analytical consideration of Value-for-Money.

2.1 What is General Budget Support?

As regards the official definitions of budget support, there is a relatively clear consensus of budget support as¹⁰:

“...a method of financing a partner country’s budget through a transfer of resources from an external financing agency to the partner government’s national treasury. The funds thus transferred are managed in accordance with the recipient’s budgetary procedures”.

Other forms of programme aid, including debt relief and other balance of payments support, may also be considered as budget support when they generate resources that can be used to finance the government budget, but this thesis focuses explicitly on poverty reduction, through public service delivery. Budget support is a form of programme aid in which official development assistance (ODA) that is not linked to specific project activities is channelled directly to partner governments.

There are two types of budget support: 1) Sector Budget Support (SBS) designed for sector-specific programs such as health, education or water and; 2) General Budget Support (GBS), which is provided directly to a partner government’s treasury using their own allocation, procurement and accounting systems.¹¹ This modality uses government's channels as money flows from the government's finance ministry (treasury) to the ministries, departments and/or agencies responsible for budget execution. GBS does not – unlike SBS – specifically earmark budget lines such as textbook procurement or grants for classroom construction. General budget support includes the following financial and non-financial inputs: 1) the financial contribution; 2) a performance agreement; 3) dialogue; 4) technical assistance and capacity building and; 5) the harmonisation of aid procedures among the donors the processes used in the partner country.

Budget Support is a modality that differs from other forms of assistance as it provides a wider range of inputs while sharing responsibility to achieve results. This sharing of responsibility is the

¹⁰ OECD/DAC (2006) 2
¹¹ “GBS is as good or as bad as the systems it uses and the strategy/plan it supports”
reason why the relationship between donors and recipient governments is viewed as a partnership. A partnership implies that a recipient government has the ability to express its own policy preferences, and can be regarded as the architect and executor of policy: this is referred to as ownership. Under the Paris Declaration, ownership specifically concerns a country’s ability to exercise effective leadership over its development policies and strategies, and its ability to coordinate the efforts of development actors working in the country. One important indicator of ownership is the extent to which a country has an operational development strategy with which donors can align their development assistance. Hence, mutual trust between the donor and the recipient government and the feasibility of the recipient governments’ national development strategies is an important requirement for giving GBS. This is one of the reasons why there is a continuous dialogue between donors and recipient government’s about the alignment of economic and social policies.

Although poverty reduction is the overriding goal six generic objectives can be differentiate for GBS, which would be generally accepted by all GBS providers and recipients:

<table>
<thead>
<tr>
<th>Objectives for providing General Budget Support:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To provide predictable increases in budget funding for partner governments who have demonstrated their commitment to the goal of poverty reduction and their capacity to utilize resources effectively in pursuit of that goal.</td>
</tr>
<tr>
<td>2. To promote ownership by partner governments over their development policies and processes, by making available untied resource transfers to the national budget.</td>
</tr>
<tr>
<td>3. To accelerate national development and reform processes in partner governments, which might facilitate progress towards the overarching goal of poverty reduction.</td>
</tr>
<tr>
<td>4. To improve the effectiveness of partner governments in achieving positive service delivery outcomes, by focusing attention on the results of policy and spending actions and increasing the level of scrutiny of results within governments, Parliaments and the wider civil society.</td>
</tr>
<tr>
<td>5. To strengthen national systems of planning, budgeting, control and oversight by increasing the level of reliance on national systems and by focusing dialogue, and potentially disbursement conditions, on their continuous improvement.</td>
</tr>
<tr>
<td>6. To reduce the transaction costs associated with external finance, both by aligning aid delivery systems to national policies and processes and by promoting harmonization of procedures between donors.</td>
</tr>
</tbody>
</table>

---

12 “Partner Government” as an entity does not exist: there will always be some institutions or ministries that are more supportive to policies than others.
13 An operational development strategy is defined as a prioritised result-oriented national development strategy that is drawn from a long-term vision and that shapes a country’s public expenditure.
14 OECD/DAC (2010)
2.2. Concerns

Not all countries meet the core preconditions for budget support – being on the path towards democracy, human rights and a constitutional state. States are often weak and neither macroeconomic stability nor a credible poverty reduction strategy are a given everywhere.\textsuperscript{15} Policies can be controversial: a Zambian case study showed that by emphasizing growth rather than equity in economic policies, poverty increased.\textsuperscript{16} GBS increases the size and share of budget available for discretionary spending and donors expect the recipient governments to invest the money in poverty reduction activities. But the question is if domestic resources, which are ‘freed up,’ are used in a way consistent with the development agenda. Financial statement manipulations are not an uncommon phenomenon, and it is relatively easy to counterfeit documents and receipts for non-existent assets or transactions. And a financial boost in one sector can free up money for another sector, where donors prefer not to see any investments. Funds could be spent on material and activities that have nothing to do with poverty reduction e.g. luxury goods, and the oppression of citizens. Besides the fiduciary risk of the simple misuse of money, there are also the risks of bureaucracy as money slowly dissolves when it moves through the budget lines, from the central ministries to the grassroots. These are serious and rational concerns for donors as they are accountable\textsuperscript{17} at home for the use of tax money.

2.3 Performance Assessment Frameworks

A key instrument used for GBS is the Performance Assessment Framework (PAF). The PAF is an assessment tool as well as a tool to structure the dialogue between government and donors. It entails a set of key policies, actions, outputs and outcome indicators with a three-year horizon. It serves multiple objectives, and is based on the national poverty reduction strategy (PARPA/PRSP). The agreed PAF does not add any new reform requirements; all these programmes should be part of a recipient government’s agenda, which have to be implemented anyway.

In Mozambique, the PAF is operationalised in the annual economic and social plan (PES), and fully embedded into the mechanisms of domestic accountability to parliament.\textsuperscript{18} At the annual review meeting, the agenda and focus of discussion on the Government of Mozambique’s’ (GoM) performance in the previous year is oriented around performance against indicators and targets of the PAF. The GoM is obliged to ensure in particular that its annual PES report addresses the results achieved in the past year on all the items in the PAF. Performance against the PAF is assessed in the context of performance against the wider PES, as described in the PES. In addition, the Public

\textsuperscript{15} Gerster (2005) 8
\textsuperscript{16} AFRODAD (2007) 13
\textsuperscript{17} Accountability in development may refer to the obligations of recipient governments to act according to clearly defined responsibilities, roles and performance expectations, often with respect to the prudent use of resources. For evaluators, it connotes the responsibility to provide accurate, fair and credible monitoring reports and performance assessments. For public sector managers and policy-makers, accountability is directed to taxpayers/citizens.
\textsuperscript{18} Gester (2005) 3
Expenditure and Financial Accountability (PEFA) secretariat developed a set of standard indicators to assess Public Financial Management (PFM) performance. Although PEFA indicators are a crucial basis for dialogue, influencing the priorities in the PAF, this paper will not take into account these instruments in assessing the utility of VFM nor make any comparisons with it.

Four generalised approaches to GBS performance assessment have emerged in recent years – namely those of: 1) the European Commission; 2) the World Bank; 3) the IMF and; 4) the bilateral development agencies. These approaches represent not only different methods of assessment of conditions for disbursement but also different mechanisms of disbursement and different philosophies over how budget support should be used. For example, recently the European Commission (EC) has developed an innovative PAF approach: a medium-term conditionality framework or matrix based on annual fixed and variable tranches.\(^\text{19}\) It attempts a stronger linkage to measurable outcomes than a common PAF.\(^\text{20}\) The disbursement of the variable tranche depends on the recipient country’s success in meeting a set of mutually agreed targets for service delivery and PFM. The variable tranche can be explicitly linked to indicators, which are usually at the level of effectiveness of public service delivery.\(^\text{21}\) The clear link of a part of the European Commission’s GBS to outcome indicators does not leave any room for interpretation. If targets are missed, there is an automatic deduction as regards the flexible portion.\(^\text{22}\) At this stage in the general evolution of GBS, most PAFs embody a mixture of various approaches.

Using a PAF has numerous strengths and weaknesses. For example, it allows budget support to be monitored through a single harmonized framework. On the other hand, PAFs have a built-in tendency to expand in scope and complexity as they have multiple objectives involving various trade-offs, which are not always made explicit. Donors have individual preferences, which could lead to a proliferation of indicators and results in a situation where consensus is found at the lowest common denominator only, leading to a large and conceptually weak PAF.\(^\text{23}\) Sector representatives themselves are often unhappy with the PAF indicators, as the sectors’ activities go far beyond the PAF matrix.\(^\text{24}\)

In Mozambique, the Memorandum of Understanding (MoU) mentions\(^\text{25}\) as underlying principles of the provision of GBS the joint commitments of Programme Aid Partners (PAPs) and GoM to: peace; promoting free, credible and democratic political processes; independence of the judiciary; rule of law; human rights; good governance and probity in public life, including the fight against corruption, the GoM commitment to fight poverty, and its commitments to pursue sound macro-economic policies.\(^\text{26}\) Their violation is understood as being above and beyond concerns raised

\(^{19}\) The full report on which this approach is based can be found at [http://www.spa-psa.org/resources/2005/EC_GBS_VT_Review.pdf](http://www.spa-psa.org/resources/2005/EC_GBS_VT_Review.pdf).
\(^{20}\) Ibid.
\(^{21}\) EC (2005) 8
\(^{22}\) Gester (2005) 23
\(^{23}\) Ibid. 24
\(^{24}\) Ibid. 15
\(^{25}\) Mozambique MoU § 8 - 10
\(^{26}\) Ibid.
about under-performance against indicators and targets expressed in the PES/PAF. Each signatory can raise an issue and express its concern to the GoM. A violation of an underlying principle is the sole reason a donor may not disburse funds already committed.

It is important to note that PAFs are mutual assessments. In Mozambique, the PAF has been created to require and record the donors’ progress in the implementation of their obligations as well: the PAPs developed a PAF to assess their own performance in alignment, harmonisation, predictability, transparency, administrative burden, and capacity building against their MoU obligations and the Rome Declaration on Harmonisation. The PAPs’ PAF is assessed annually, and is based on reporting by independent experts. Donors are responsible for the agreed timetable of disbursements, the coordination of missions, and the contributions to building adequate capacities in the government.

The PAF is neither an exclusive monitoring framework nor the only instrument determining commitments and disbursements of donors that are used in government-donor relations. The PAF is not the only one component for performance review between government and development partners and should be conceived as one element within a wider process of performance assessment and dialogue. Although the PAF is an effective focal point for performance assessment and policy dialogue it should draw upon other assessment processes as appropriate. A serious PAF requires investment into improving the monitoring mechanisms, and it could be important to complement the PAF exercise by VFM audits as reality checks. The PAF monitoring and reporting system produces figures that have to be verified on an occasional and random basis. Mozambique started with the practice of VFM audits in the field, which are an important reality check.27

2.4 Development Assistance Committee: GBS Evaluation

In 2006, DAC concluded a broad-based evaluation of GBS. It is said to have been one of the most complex evaluations of all time. Fourteen donors in total contributed to the evaluation, which was based on case studies in seven countries (Burkina Faso, Malawi, Mozambique, Nicaragua, Rwanda, Uganda, and Vietnam) over the period of 1994-2004. The report notes: “in all but two cases, the overall assessments by the country studies were clearly positive.”28 The key results of the evaluation were the following:29

---

27 Gester (2005) 21
28 IDD and Associates (2006) 3
29 Gester (2005) 6
Based on these results I conclude that GBS, to certain extent, is a viable and effective instrument in development cooperation. However, the DAC Evaluation also clearly illustrates the limits of evaluations. Examining programme aid is far more complex than traditional project evaluations. In light of the main question of this research, it is important to note that the total costs of the DAC Evaluation amounted to more than two million Euros, and its non-financial resources cannot be compared with a VFM audit. Nevertheless, the DAC Evaluation can provide constructive soil for a scientific approach to GBS: the DAC Evaluation provides elements for a critical assessment, and can be considered as a self-service shop for a potential VFM approach to evaluate GBS. This thesis explores a possible methodology of VFM and will concurrently research if VFM is a suitable instrument to accomplish that what the DAC Evaluation could not: create a direct, causal link between poverty reduction and GBS.

<table>
<thead>
<tr>
<th>Key results:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Budget support contributed to the partner countries’ overall economic stability and strengthened the capacities of public authorities.</td>
</tr>
<tr>
<td>• Public expenditure focused increasingly on poverty reduction.</td>
</tr>
<tr>
<td>• Social services, especially in the areas of education and health, expanded – yet their quality could not keep up with the increase.</td>
</tr>
<tr>
<td>• The donors understanding of the political context in the partner countries often left much to be desired.</td>
</tr>
<tr>
<td>• The framework conditions needed for a prosperous private sector were often neglected.</td>
</tr>
<tr>
<td>• While countries such as Mozambique reported impressive rates of poverty reduction in recent years, the DAC Evaluation could not create a direct, causal link between them and budget support.</td>
</tr>
<tr>
<td>• On the one hand, budget support fortifies the partners’ ownership of their chosen path of development. On the other hand, conditions for cooperation and policy dialogue make the line between acceptance and interference a fine one.</td>
</tr>
</tbody>
</table>

Based on these results I conclude that GBS, to certain extent, is a viable and effective instrument in development cooperation. However, the DAC Evaluation also clearly illustrates the limits of evaluations. Examining programme aid is far more complex than traditional project evaluations. In light of the main question of this research, it is important to note that the total costs of the DAC Evaluation amounted to more than two million Euros, and its non-financial resources cannot be compared with a VFM audit. Nevertheless, the DAC Evaluation can provide constructive soil for a scientific approach to GBS: the DAC Evaluation provides elements for a critical assessment, and can be considered as a self-service shop for a potential VFM approach to evaluate GBS. This thesis explores a possible methodology of VFM and will concurrently research if VFM is a suitable instrument to accomplish that what the DAC Evaluation could not: create a direct, causal link between poverty reduction and GBS.
3. Theoretical considerations of Value for Money

With increasing awareness and demands of aid effectiveness and public accountability, the Netherlands Ministry of Foreign Affairs has recognized the need to provide evidence that public funds are spent efficiently, effectively, and with due financial regard. The question is if the Value for Money (VFM) audit could be a useful instrument to evaluate this. This chapter does not seek to develop and explore its own methods, but will draw its conclusions on existing theory as explained in the introduction. This chapter aims to facilitate a theoretical framework of VFM, based on the most current and key methods and practices of VFM. The function of this framework will be to identify opportunities and to establish the parameters of various problem areas; to suggest possible relationships among variables.

3.1 What is ‘Value for Money’?

Traditionally, public sector auditors investigate the legality of government operations and the correctness of financial accounts: they focussed solely on regularity and compliance aspects.\(^{30}\) Since the 1970s, public audit institutions have increasingly focused not only on auditing public sector financial accounts, but also on scrutinising whether public money has been used economically, efficiently and effectively.\(^{31}\) Value for Money (VFM) originated from USA, Canada and some countries of Europe like Sweden and West Germany.\(^{32}\) Parliaments started demanding more information, or evidence, particularly on the benefit or value of public expenditure.\(^{33}\) They were discontent on the traditional role of audit, which focused solely on compliance to rules and regularity of expenditure. Parliaments want to know if value for money has been achieved from expenditure, and expected greater accountability from public officials. VFM audits were seen as a way to reassure taxpayers and parliaments that money has been spent wisely and in line with government objectives. In 1977, the ninth congress of the International Organization of Supreme Audit Institutions (INTOSAI) drew attention in its Lima Declaration to performance auditing although only a few countries had been involved in it by then. After that several countries amended their audit laws to expand the scope of audit to include VFM examinations by their Supreme Audit Institutions (SAIs).

Performance auditing represents a trend in the development of modern audit. The last three decades have seen immense intellectual activity in methodology development and research in the field of VFM auditing, and the initial years of uncertainty are now over.\(^{34}\) States spend more attention on performance measurement and evaluation in the public sector than ever before, and administrative agencies, developmental aid organizations, and organizations such as the World Bank are all involved

---

\(^{30}\) Sterck (2007) 1
\(^{31}\) Ibid. 
\(^{32}\) Khan (2009) 12 
\(^{33}\) Kandasamy (2009) 2 
\(^{34}\) Khan (2009) 13
in producing data and information on performance, results and, if possible, impact. Gradually, consensus is emerging in the areas of scope, approach, methodology, reporting format and the role of performance auditors. INTOSAI Auditing Standards and the auditing standards issued by several individual countries incorporate standards of work for the performance auditors. SAIs of a number of countries have conducted research in the methodology of performance auditing.

### 3.1.1 Definitions of VFM Auditing

Relevant literature and international reference documentation use interchangeably “performance audit” and “value for money audit” terminology and do not mention significant differences between their definitions. According to the auditing standards of the International Organization of Supreme Audit Institutions (INTOSAI), many auditors frequently use the two terms interchangeably. Moreover, the Portuguese version of the GBS Memorandum of Understanding (MoU) of 2004 between Mozambique and various donors (among the Netherlands), referred to “auditoria de desempenho”, which stands for ‘performance audit’.

There are various definitions of VFM. Through the years, the emphasis on VFM has shifted continuously, which makes defining VFM not an easy task, mainly since answering the question on what the VFM approach is, seems to depend highly on which form of entity it is targeting. Furthermore, assessing and measuring VFM is a challenge, since elements such as value, quality, and sustainability are quite subjective, difficult to measure, intangible and can be interpreted in different ways. Various VFM definitions can be drawn from different authorities:

- **The British Audit Commission**: VFM is about obtaining the maximum benefit over time with the resources available, about achieving the right local balance between economy, efficiency and effectiveness.\(^{36}\)

- **The Canadian Comprehensive Auditing Foundation**: “an examination that provides an objective and constructive assessment of the extent to which: 1) financial, human and physical resources are managed with due regard to economy, efficiency and effectiveness; and 2) accountability relationships are served.”\(^{37}\)

- **The Auditor General of Pakistan** defines VFM as: “an independent appraisal of an audit entity to determine the extent to which resources were managed with due regard to economy, efficiency and effectiveness and in conformity with applicable regulations, rules and procedures.”\(^{38}\)

- **INTOSAI**: VFM is an independent examination of the efficiency and effectiveness of government undertakings, programs or organizations, with due regard to economy, and the aim of leading to improvements.\(^{39}\)

---

\(^{35}\) Pollitt & Bouckaert (2000) 87

\(^{36}\) British Audit Commission (2007)

\(^{37}\) CCAF (1991)

\(^{38}\) website: http://pamfinance.com/2009/12/value-for-money-audit-process/
The definition that will be used – in light of its applicability to GBS – in this paper is: “VFM auditing is a systematic and objective assessment of the accomplishments or processes of a government program or activity for the purpose of determining its effectiveness, economy, or efficiency.”

Although these definitions are somewhat different, they all seem to agree on the following: 1) that a VFM audit should be independent examinations of an entity’s’ performance in using resources over time; 2) that VFM is defined through the relationship and the local balance between the three Es; economy, efficiency, and effectiveness; and, 3) that its objective is to ensure the accountability of governments for their performance, and to help raise the quality and the benefits of public services.

3.1.2 Value for Money VS Financial Auditing

There is often misunderstanding regarding the differences between performance audits i.e. Value for Money and financial audits. They show various similarities as they both measure and explain the performance of an entity and, to certain extend, apply similar data collection methods: samples must be taken in both financial and performance audits. However, there are also striking differences between the two:

<table>
<thead>
<tr>
<th></th>
<th>Financial Audits</th>
<th>Value for Money</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Purpose</strong></td>
<td>Assesses truth and fairness in financial statements</td>
<td>Assesses the three Es in management of resources with a focus on improving management and accountability</td>
</tr>
<tr>
<td><strong>Competence</strong></td>
<td>Accounting, auditing</td>
<td>Collective competence of the team in accounting, auditing, management, law, and other disciplines depending on the nature of the auditee operations</td>
</tr>
<tr>
<td><strong>Criteria</strong></td>
<td>Applies accounting standards, rules, and regulations. Standard criteria for all audits.</td>
<td>Uses applicable rules, regulations, and generally accepted management practices, and technical standards, etc. Unique standards in every audit.</td>
</tr>
<tr>
<td><strong>Methodology</strong></td>
<td>Uniform, standardized method.</td>
<td>No standardized method: vary from audit to audit.</td>
</tr>
</tbody>
</table>

In VFM auditing, the primary concern of the auditors is not verification of assertions made in the financial statements. Instead, by using financial and non-financial data they aim to find out (1) whether resources were obtained with due regard for economy; (2) whether human and physical resources were utilized efficiently, and (3) whether the goals of the organization, program or project were achieved effectively. Financial audits on the other hand, are quite narrow as they focus primarily on figures and the accuracy and correctness of accounts; it defines transactions as being "right" or "wrong", "legal" or "unacceptable". Cases like “Enron” in the United States have shed light on the limitations of

---

39 Everard & Wolter (1989) 11  
40 Waring, Colleen & Morgan (2007) 323  
41 Khan (2009) 89
financial audit in confirming the truthfulness and legality of the economic figures. Loopholes in laws and policies can easily exploit the principle of ‘value’ as financial audits are often concerned with only confirming if funds have been spent in a “genuine and lawful manner”, but not with an examination on the goals of governments with an appraisal of their working efficiency, and actual achievements. Performance audits on the other hand, are not solely performed as a means to attest to the financial records and statements of the company. A performance audit can embrace all management levels from the point of view of economy, efficiency and effectiveness at the planning, implementing and monitoring stages. Paragraph 183 of the INTOSAI Auditing Standards states:

“In contrast to financial audits, performance audits are wide-ranging in nature and more open to judgement and interpretation; coverage is more selective and may be carried out over a cycle of several years, rather than in one financial period; and it does not normally relate to particular financial or other statements. As a consequence, performance audit reports are varied and contain more discussion and reasoned argument.”

3.1.3 Objectives of VFM Auditing

Government Auditing Standards of the GAO, Washington (2007) state the objectives of performance auditing as follows:

“VFM audit objectives may vary widely and include assessments of programme effectiveness, economy, and efficiency; internal control; compliance; and prospective analyses. Program effectiveness and results audit objectives are frequently interrelated with economy and efficiency objectives. Audit objectives that focus on program effectiveness and results typically measure the extent to which a program is achieving its goals and objectives. Audit objectives that focus on economy and efficiency address the costs and resources used to achieve program results…”

According to this definition the overall objectives of VFM are not mutually exclusive, and can have more than one objective. If the main objective is, for example, programme effectiveness; however, this does not mean that internal controls are excluded from the audit. As these might be important to determine the reasons for a program’s lack of effectiveness or how effectiveness can be improved. Assessment illustrates that VFM is more normative than an exact science. The auditors create a rapport on the basis of relevant and reliable evidence by applying appropriate auditing procedures against agreed criteria. Although the assessment is rather normative, it is important to note that these judgements are primarily based on quantified data.

The twelfth congress of INTOSAI held at Sydney in April 1986 defined the objectives of VFM auditing as a means for (1 improving management practices in the public sector and; (2

---

42 Everard & Wolter (1989) 11
43 Ibid.
44 Khan (2009) 127
sharpening the accountability process of public managers. One can say that financial accounting is not the objective of VFM, but it is important to point out that it often forms the basis. By way of checking the accounting information, VFM auditing will eventually be able to establish insight in financial revenues and expenditures. However, this is but one aspect of VFM, whereas efficiency, effectiveness and value are more important elements. When the audit cannot meet the need in establishing economic accountability, audit work will move on to a higher level focusing more on performance and achievement of results. I can conclude that VFM, by definition, brings together performance, achievement of results, and accountability as it measures ‘value’ and ‘money’. The three Es are the principal concern and, as such, constitute its theoretical basis.

Figure 1

VFM is therefore, rather forward-looking as it can provide recommendations to improve systems and practices.\(^{45}\) However, the recommendations do not have to be specific and detailed. For example, if certain controls are weak or missing auditors may point out the direction in which action is needed. They do not have to specifically describe all the details of the control, as doing so would be very time consuming and disregard the role of management.\(^{46}\) In developed countries, private sector corporations invite practicing auditors to undertake consultancy work in the field of value-for-money examination. Their objective is to get an independent assessment of their operations, systems and procedures to improve organizational effectiveness. It is important to note that these examinations, although they are similar to VFM auditing, cannot be termed as "audit" because they do not serve any accountability relationship.

3.1.4 Standards of VFM Auditing

There are no universally accepted standards for VFM auditing. The INTOSAI Guidelines for the Implementation of Performance Audits (2004) provide some guidance. It also set up a Performance Audit Standards Sub-Committee (2005) to develop standards in light of the Implementation Guide. But as yet it has not issued any standards for VFM.\(^{47}\) Generally, auditors should follow relevant practices that are internationally acceptable auditing standards, which can be summarized as follows:

---

\(^{45}\) OAG/CESD (2000)

\(^{46}\) Khan (2009) 17

\(^{47}\) Leclerc, Moynagh, Boisclair & Hanson (2006) 240
3.2 A Conceptual Framework of VFM on service delivery

VFM is a daily reality in our lives: we are constantly choosing which items or services to buy, and are judging the right balance between quality and cost. It works similar for other entities. VFM is optimal when costs are (relatively) low, productivity is high, and outcomes or goals have been achieved. Thus, both a high degree of economy and efficiency can be indicators of effectiveness; consequently, VFM is high when there is an optimum balance between all three Es. VFM can be seen as a process or value chain since ‘value’ can often take many years to materialise. R. Norman pointed out that the term ‘service’ is often defined as the production of value, and might well be called a value-creating system. The VFM value chain has a strong resemblance with a service system, which can be defined as:

"...an organized set of objects which process inputs into outputs that achieve an organizational purpose and meet the need of customers through the use of human, physical, and informatic enablers in a sociological and physical environment."

The VFM value chain contains key components, similar to a service system: 1) goals – aims, purposes or central meaning of the system and the organizations; 2) inputs – physical, human, financial, or information entities to be processed by the system; 3) outputs – physical, informational or human entities; and 4) customers or beneficiaries – those benefiting from, and affected by, the system. VFM differs from a service delivery system due to the fact that it considers also the effects of outputs – the short-term and medium-term effects – and impact – the long-term effects of a system. This forms a logical framework, which depicts the possible sequence of effects, and allows them to be

---

Summary of audit standards:

- A VFM audit should have a defined mandate.
- A VFM should be formally planned.
- The criteria for VFM should be made known to the auditee and if possible agreed with them.
- VFM audits should be properly supervised.
- VFM audit reports should be based on relevant, sufficient and competent evidence.
- VFM should report positive achievements along with any weaknesses and make recommendations for improvement.
- VFM auditors should share the draft findings and conclusions with the auditee and incorporate their reaction in the final audit report.
- VFM auditors should collectively have competence to audit the assignment.
- VFM auditors should be independent and have freedom to select audit areas within the mandate.
- VFM auditors should observe ethical code of integrity, objectivity, confidentiality, neutrality, and due care.

---

48 UK Government Improvement Network
49 UK Government Improvement Network
50 Normann (2004)
51 Karni and Kaner (2006) 67
52 Ibid.
systematically tested. This makes VFM suitable to look at development interventions. Figure 2 illustrates a simplified view of VFM value chain:

![Figure 2](image)

Figure 2 demonstrates a link between various variables, which should be viewed as an interdependent process in which the overarching concern is cost-effectiveness and goal attainment. There are a number of stages throughout the value chain – ranging from operations to the results achieved – that exemplify the transformation of inputs into outcomes, to impact. Inputs are the financial, human, physical, technological, and information resources. These inputs involve costs, which form the basis of the value for money approach as it considers the cost-effectiveness of an entity in reaching its goals. Through actions and work undertaken by the entity, inputs – such as funds, technical assistance and other types of resources – are mobilised that, in aggregate, produce outputs. Outputs are the products; capital, goods, and service that are the result of inputs and actions taken which are relevant to the achievement of outcomes. Examples of outputs are: trained staff, buildings or water bore holes, which have social and economic effects. Outcomes are defined as outputs adjusted to quality. These are the intended or achieved short-term and medium-term effects of outputs at the level of beneficiaries. For example, school enrolment. These outcomes should ideally be equitable across communities, and should include aspects of quantity, quality, equity, and sustainability.

This brings us to the last variable in the value chain; impact, which can be defined as: positive and negative, primary and secondary long-term effects produced by an entity, directly or indirectly, intended or unintended. These effects can be economic, socio-cultural, institutional, environmental, or technological. Impact measures the ultimate objectives – for example, poverty, literacy, or morbidity rates. Impacts may be expected to materialise in the long term as long as the expected

---

53 OECD/DAC (2006)
54 Ibid.
55 UK Government Improvement Network
56 OECD/DAC (2006)
57 Ibid.
outcomes are produced. However, at this stage changes taking place are most likely not influenced by the entity alone, but are the combined effects of various factors and trends in the environment i.e. impacts are sensitive to factors outside the value chain. Therefore, VFM should take into account attribution and exogenous effects – physical, economic, technological, social, ecological or legal factors influencing the system. These effects make outcomes and impact more difficult to measure than outputs, as they are more likely to be influenced, hence they require long-term rather than short-term assessments.

VFM involves an assessment of causality and systemic links between levels in order to understand mechanisms of change and identify determinants. The challenge is to associate inputs with outputs, outcomes and impact: VFM is a fact when the expected outputs and intended outcomes are achieved in an optimal way, with regard to the three Es. This framework shows important similarities with the five standard evaluation criteria for GBS of the OECD/DAC – relevance, effectiveness, efficiency, and impact. Specific sequences of links between individual factors across the value chain may be identified. According to the proposed methodology, it should be possible to build linear causal relationships from inputs to impacts, as the changes at each level of the framework are determined by a system of causes combining both the VFM variables and the environment – where the latter has a growing role as it advances through the various stages of the framework. When sequences of links, or “causality chains”, appear particularly significant, they need to be analysed in depth to draw out possible lessons.

3.2.1 Cost-effectiveness

One should keep in mind that understanding causality is particularly relevant when it helps to understand if value has been attained in a cost-effective way. Cost-effectiveness looks at the relationship between costs and outcomes expressed as costs per unit of output and outcome achieved. Hence, a VFM and cost-effectiveness analysis go hand in hand as they are both tools for assessing whether or not the costs of an activity can be justified by the outcomes and impacts. Cost-effectiveness studies are concerned with finding the cheapest means of accomplishing a defined objective or the maximum value from a given expenditure. A cost effectiveness study can be very useful: 1) to obtain assurance that an entity is reliable and not involved in corruptive activities; 2) to compare costs of alternatives when benefits can be assumed constant i.e. to increase value for money. Ideally, a VFM audit should result in an overall view on the cost of an entities performance – what an entity gets in terms of value for the amount spent – by determining unit costs at every possible level in the value chain. This is often not feasible; there is no generally accepted VFM standard for estimating the relation between the value of public services, and its cost. Furthermore, a service delivery system often

58 Karni & Kaner (2006) 67
59 Zibaei (2009) 3
60 Put (2006)
lacks the availability of a market mechanism to determine the relation between a unit cost and its value or effectiveness. For example, outputs of government programmes generally do not have market prices associated with them. In reality it is often only feasible to measure both inputs and outputs in monetary terms (unit costs). A cost-effectiveness analysis estimates inputs in monetary terms (unit costs) and outcomes in non-monetary quantitative and qualitative terms – with regard to equity and sustainability. The monetary cost or values of outcomes have to be estimated in certain cases.

Nevertheless, cost effectiveness studies are an important component for VFM as they are useful to evaluate the relative merits of alternative public investments. By taking costs estimations into account, VFM becomes a way of identifying and assessing the factors which need to be considered in making rational economic choices. Cost effectiveness and VFM ideally should be an amalgam concept. More in-depth studies to measure cost-effectiveness are crucial to develop a sound VFM approach. To understand the complex connection between the value of public services and their costs, auditors should be very cautious in making clear distinctions between the three Es. The next section will determine the most suitable and clear definitions of the three Es, which constitutes the theoretical fundament of VFM.

3.2.2 Economy

Economy – the acquisition of resources on the best possible terms.\(^{61}\) Economy is about the acquisition of the appropriate quality and quantity of human, financial, physical and information resources at the appropriate times and at the lower cost.\(^ {62}\) Auditors determine whether inputs have been procured in the right amount, at the right place, the right time, of right kind, and at the right cost.\(^ {63}\) It is about what goes into providing a service or the amount of public assets entering an activity i.e. the amount of schoolteachers or the costs per square metre of building a school.\(^ {64}\) It is important to note that the concept of economy is relevant only with reference to the goals to be achieved i.e. the minimization of cost for achieving the given objectives.\(^ {65}\)

<table>
<thead>
<tr>
<th>Economy relates to questions such as:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Were requirements of economy kept in view while procuring the resources (inputs)?</td>
</tr>
<tr>
<td>• How well were the inputs organised, referring to the allocation of inputs, their expected interactions, and explicit and implicit prioritisation.</td>
</tr>
</tbody>
</table>

\(^{61}\) Power (1997)  
\(^{62}\) Mahal (2000) 7  
\(^{63}\) Kandasmy (2009) 3  
\(^{64}\) UK Government Improvement Network  
\(^{65}\) Khan (2009) 30
3.2.3 Efficiency

Efficiency – achieving more for the same or less inputs. Efficiency is about the use of human, financial, physical and information resources such that the output is maximised for any given set of resource inputs, or input is minimised for any given quantity and quality of output. It measures the input-output relation and determines whether inputs are reflected into outputs in an optimal way. To optimize efficiency, one must understand how output increases with an increase in a single unit or factor. Efficiency should also take into account its influence on effectiveness – cost savings at the expense of the overall effectiveness is not an efficiency gain. This takes us to the third E of VFM, which measures outputs in terms of quantity and quality.

<table>
<thead>
<tr>
<th>Efficiency relates to questions such as:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Are human, financial, and other resources been put to optimal or satisfactory use?</td>
</tr>
<tr>
<td>• Is the entity in question getting the most output from its inputs?</td>
</tr>
<tr>
<td>• Could the same or similar output have been achieved with fewer resources?</td>
</tr>
</tbody>
</table>

3.2.4 Effectiveness

Effectiveness – the match between intentions and outcomes. Effectiveness is about the achievement of the objectives or other intended effects of activities. Unlike efficiency, effectiveness is more an overall review of an entity’s achieved results. Effectiveness tries to quantify and qualify the real value of outputs referred to as outcomes and impact, with regard to equity and sustainability. Effectiveness takes into account relationships of the entire value chain – as they can all have an effect on results – but focuses on the effects of outputs and differentiates between outcomes and impacts. Hence, Effectiveness is concerned with the relationship between objectives, outputs, outcomes and impacts. Although different authors have their own conceptions of effectiveness they, nevertheless, generally agree on the fact that effectiveness is about goal accomplishment and performance in meeting objectives from the usage of resources and organizational operations. It is not surprising that, of all the three Es, effectiveness is the most difficult to define as there is no single, generally agreed-upon methodology. Each has validity in its own context. In the end, how effectiveness is viewed depends to a large extend on the goals of the entity, and the auditor.

66 Department for Communities and Local Government (2007) 4
67 Mahal (2000) 7
69 Department for Communities and Local Government (2007) 4
70 INTOSAI (2004)
71 Power (1997)
72 Mahal (2000) 8
73 Zibaei (2007)
3.3 Exploring the model of VFM in conformity with realities

The model might appear straightforward; nevertheless, much confusion arises because VFM is: 1) context specific; 2) time-bound; 3) includes vague and contradictive definitions as the three Es are difficult to separate, which makes the VFM terminology confusing and ambiguous.

VFM is context-specific, therefore, what constitutes VFM for one entity, may not be the equivalent VFM for another. Furthermore, the concept is time-bound: what is VFM at one point time may not be a year later. It is uncertain whether the result variables are sensitive enough to capture year-on-year changes that are relevant to assessing the quality of policy. Impact generally evolves slowly and there may be long lags between a policy action and the time the effects appear on ultimate or even intermediate goals.

The main source of confusion lies in the definitions of the three Es. Many organisations and institutions distinguish the three Es in an inadequate way. One example relates to the first variable: ‘economy’, which is often so defined that efficiency and effectiveness are part of it. For example, according to INTOSAI, economy can be defined as: minimizing the cost of resources used for an activity having regard to the appropriate quality. "Minimizing the costs of resources used' and 'appropriate quality' are however, output variables. This creates a circular argument, which makes the theoretical basis of VFM weak and unpractical. Furthermore, depending on the definition, different Es often refer to a variety of aspects that conflict with each other. For example, ‘cost-effectiveness’ refers to the entire value chain of VFM, nevertheless, it is often mentioned as solely being part of the second E; ‘efficiency’.

---

74 UK Government Improvement Network
75 Ibid.
76 Booth, Christiansen, Renzio (2005)
77 Gunning (2006) 15
78 INTOSAI (2004) 15
Why are the three Es often poorly defined? It is difficult to separate the three Es because they are closely interlinked concepts. A watertight compartmentalization of economy, efficiency and effectiveness does not exist in real-life. It is particularly difficult for auditors to distinguish clearly the first 2 Es. Both are related to decision-making and internal management processes of operations. The question if the right inputs have been used in the most efficient way possible, demonstrates the strong link between economy and efficiency. In some cases, they can sometimes be used as proxies for each other. For example, input requirements could be calculated in output terms, and serve as an indicator of economy. According to its definition, efficiency is mainly restricted to the question of whether inputs have been put to optimal or satisfactory use. To address possible misunderstanding with economy, a specification of efficiency can be made in two ways: 1) whether the same quantity of outputs could have been achieved with fewer or different inputs or, 2) if the same category and quantity of inputs could have been used differently to achieve more outputs. The following figure gives a few examples of what both Es generally focus on:

![Figure 3](image-url)

These differences between the three Es are important to consider in light of possible tradeoffs: the earlier parts of the value chain that consider elements of economy and efficiency are often easier to measure than the results part of the chain – effectiveness. At the levels of effectiveness, identifying any contribution of actions is much more complex, as it is determined by the relationship between outputs-outcomes-impacts, and a multitude of external factors, of which many may be more important than the entity-related ones. According to Power (1997) there is a tension between the two concepts – efficiency and effectiveness – because they stem from different disciplines. Efficiency has its roots in

---

79 It is important to note that it should not be of concern to auditors to disintegrate economy, efficiency and effectiveness. However, for the objective of this thesis it is quite essential; there could be important tradeoffs between the three E’s, which we need to explore in the context of GBS.
80 Khan (2009) 42
81 Ibid.
82 NAO (2008)
83 NAO Providing budget support to developing countries
84 Power (1997)
Accountancy and Business Studies whereas effectiveness stems from the Social Sciences. Consequently, auditors often provide unclear definitions of outputs with outcomes and impact; which makes it impossible to empirically validate effectiveness.\(^{85}\)

This confusion could also have potential counterproductive implications on the attainment of outcomes. VFM could claim to be judging effectiveness, while it is actually emphasizing components of economy and efficiency. As a result, an audit could provide recommendations to promote measures of efficiency and economy to increase output and/or productivity but in doing so generate outcomes that threaten to undermine the actual quality, equity and/or sustainability of public service delivery. In other words, results should not be compromised in seeking greater economy or efficiency of operations. On the other hand, the auditor considers if effectiveness could increase by economy and efficiency measures.\(^{86}\) Therefore, it is important that VFM auditors identify the links between outputs-outcomes-impacts in light of the entity’s overall strategy. They should pinpoint those institutional and organisational processes, and actions that have a strong indirect causal relationship with the intermediate outcomes and ultimate impacts.

### 3.4. Three ‘Value for Money’ approaches

As explained, the essence of a VFM audit in terms of the three Es: economy in acquiring resources, efficiency in using resources and effectiveness in achieving objectives. As we have seen the three Es a method of looking at an entity’s operations and achievement of results. Generally auditors should focus on an entity’s goals and try to see whether economy or efficiency measures are supportive in achieving those goals. This general approach encompasses a large variety of issues, which often cannot all be included into an audit. Hence, VFM auditors might opt for a certain approach; suitable for the environment and the context in which they are working. In the next section three main approaches will be briefly outlined, which can be: 1) system oriented; 2) problem oriented; and 3) ends oriented.

When data on results are lacking one might focus on performance i.e. the first two Es through a control system approach\(^{87}\) and a problem-oriented approach. The system approach determines if the entity has adequate control systems to provide reasonable assurance that the intended results are achieved. The word control is taken in its widest interpretation and embraces all of the elements of management that are required to achieve an intended result. The audit is designed to carry out analysis, review and testing of the key components of the systems, to ensure that these components are appropriately designed and implemented. If the system is efficient and functioning with regard to the concept of economy, it provides a strong indication that the results will be satisfactory. Controls are

---

\(^{85}\) Elliot (2004) 24  
\(^{86}\) Khan (2009) 18  
\(^{87}\) Drawn primarily from the Canadian Performance Audit Manual
chosen for audit on the basis of their significance to the achievement of key results. The disadvantage of this approach is that in a large, complex organization the cost of detailed systems analysis is high. It is also frequently difficult to identify what effect deficiencies will have on results. Where major deficiencies are identified, the auditor takes further steps to identify the cause of the problem and its (potential) effect on intended results.

This takes us to the second approach, which is problem oriented as it deals primarily with problem verification and problem analysis. This approach is useful when goals are vague and ill defined. Problems and bottlenecks to an optimal balance of the three Es are the starting point of the audit. A major task in the audit is to verify the existence of stated problems and to analyse their causes from different perspectives of the three Es. Auditors seek to identify where a failure to act or an inappropriate form of action appears likely to have jeopardised the quality, equity, and sustainability of results. The benefit of this approach is that it has the potential to deliver important information on how to improve VFM. Although examining inefficiencies can be a suitable approach, it is important to mention that the auditors should take a balanced view of government operations and report on the successes of the management with equal emphasis.\(^88\)

The third approach is ends oriented: auditors focus on the objectives of an entity and extend to which these are accomplished. This approach has the advantage to create a viable structure, starting with the highest-level objectives and desired effects, moving down through sublevels, sublevel components, and specific activities. The starting point of analysis is at the end of the value chain: outputs, outcomes, and impacts – including side effects and unintended effects. A focus on results should be kept regardless of whether the scope of the audit is a program, an operation, a system or a control.\(^89\) The key questions an auditor should ask himself when using this approach are if the objectives allow for the identification of measurable results. The approach is particularly appropriate where there are suitable criteria and data available to measure the quality, quantity and cost of the outputs. Ideally there are only a few objectives that are compatible, concrete, and directly related to a

---

88 Khan (2009) 18
89 Canadian Performance Audit Manual
specific means under control of an entity. If goals have been achieved, the chance of there being
serious problems of economy and inefficiency in the design or implementation of the activity or
process is minimal. Where the auditor finds the result to be unsatisfactory, the activities, processes and
the control system can be examined to the extent necessary to identify the specific causes of the
problem – using the problem oriented approach. In case information on outputs and the processes and
actions leading to them are not assessable this approach is very suitable. Nevertheless, starting with
assessment of results may provide a useful basis to determine what changes are needed in the first two
Es of the value chain. For example, by first looking at results, misbalances between inputs committed
and goals attained can be discovered.

To conclude: VFM auditors do not have to draw conclusions on all the three Es per se. They may
solely examine the effectiveness of government actions and determine to which extent objectives were
reached. However, in this case, some important VFM issues may be neglected, as it will remain
unknown whether the resources to reach objectives were spent economically and in consistency with
the intended purpose. Even though a VFM audit may not always be able to draw conclusion on all
three Es, it should, nevertheless always assess the third component: ‘effectiveness’. The sole focus on
processes and actions can jeopardise the significance of the assessment. Without the third E, VFM
cannot be determined. For example, assessing whether an action or activity is performed economically
does not proof if the action itself is connected to the outcomes.90

The assessment of the results and their determinants - deliberately reverses the direction of the
assessment from a bottom-up one (starting with inputs) to a top-down one (starting with impacts,
outcomes, or outputs). The VFM auditor could start with reviewing key factors related to changes at
the results level. It could then aim to track the most influential attributing factors to these impacts.
This chapter showed there are different audit approaches, which brings out the diversity and
complexity of VFM. One should always have in mind that trying to get exhaustive information is
likely to absorb a substantial share of the evaluation resources. And, no single approach or perspective
is best for addressing the variety of questions and aspects that might be part of a VFM audit. There is
vast room for innovation in the application of new techniques, and for any specified audit, a
combination of approaches may be used. However, depending on the specific questions or objectives,
some methods have a comparative advantage over others in analyzing a particular question or
objective. Particular methods or perspectives complement each other in providing a more complete
“picture” of VFM. Hence, a balance needs to be struck between comprehensiveness and a focus on
key elements.

90 Slovak VFM Manual (2007)
4. A VFM approach on GBS

This chapter seeks to clarify some of the abstract concepts used in chapter 3 and aims to provide more detail, and study in depth, whether VFM evaluations audits can be applied to GBS. Ideally VFM evaluates the entire value chain leading to frontline service delivery. But is this feasible? Should auditors zoom in on government operations or the results attained? Chapter 3 underlined that no single approach or method is best for addressing the variety of questions and aspects that might be part of an audit. However, I will focus on those approaches and emphasize those issues that might have a comparative advantage over others for assessing GBS. There could, for instance, be important trade-offs between the three Es. Since VFM has no analytical framework to guide VFM audits of GBS, this chapter also aims to identify the key obstacles and possible opportunities where VFM could contribute.

This VFM approach will be drawn from the conceptual framework of VFM, which is very suitable, as it shows considerable overlap with the characteristics of performance indicators that are generally used in GBS evaluations.

Performance indicators measure how an organisation performs its activities compared to its established goals. Indicators may be plain (scaling the item examined), or mixed (a combination of indicators, such as indexes, ratios, etcetera).91 Performance indicators are measures of inputs, processes, outputs, outcomes, and impacts for development interventions.92 There should be no confusion generated by the term ‘performance’: I categorise indicators into two parts: government operations and results (see figure 2). Input and output variables reflect policy choices, organisational processes, and concrete actions in government operations. Outcome and impact indicators seek to estimate the effect of outputs on intermediate or ultimate policy goals; the results.

---

92 Carin & David (2004) 12

Box 1: A glossary of terms

Attribution: the ascription of a causal link between observed (or expected) changes and a specific intervention.

Counterfactual: The situation or conditions, which hypothetically may prevail for individuals, organisations or groups, were there no development intervention.

Effect: Intended or unintended change due directly or indirectly to an intervention.

Impacts: Positive and negative, primary and secondary long-term effects, produced by a development intervention, directly or indirectly, intended or unintended.

Outcome: The likely or achieved short-term and medium-term effects of an intervention’s outputs.

Outputs: The products, capital goods or services which result from a development intervention; may also include changes resulting from the interventions, which are relevant to the achievement of outcomes.

Performance: The degree to which a development intervention or a development partner operates according to specific criteria/standards/guidelines, or achieves results in accordance with stated goals or plans.

Results: The output, outcome or impact (intended or unintended, positive and/or negative) of a development intervention.

Results chain: The causal sequence for a development intervention that stipulates the necessary sequence to achieve desired objectives – beginning with inputs, moving through activities and outputs, and culminating in outcomes, impacts and feedback.

Indicators are easier quantified for social sectors, such as health and education, than for institutional processes such as governance and public financial management (PFM). The area of governance is very broad and thus difficult to study empirically. Only a qualitative analysis is possible in which the links between inputs and impact are difficult to explore. Therefore, I will look solely at the main goal of GBS – poverty reduction through public service delivery.

4.1 General Budget Support: a general note

Before diving into the three Es and methodologies it is important to provide an overview of what, under ideal circumstances, a VFM audit of GBS could look like. In an ideal VFM-world all governments would have developed budget systems that provide information on the allocations to programmes in their public sectors. These systems would allow for calculations of the unit costs of service delivery on every level – from inputs to impacts. A VFM audit would follow funds all the way through the entire value chain. The outcome and impact of budget allocations including policies would allow for an analysis of both the money spent and the value that was achieved in return.

Hypothetically, the results of GBS would be produced fully predictably, going through a fully transparent value chain, making VFM audits perfect for the job. The auditor could start its analysis just as well at the beginning as at the end of this process. By conducting cost-benefit analyses the cost-effectiveness, cost-alternatives, and benefit-ratios would lead to clear policy and organisational recommendations on how to enhance value for money in a particular sector, programme and project. This cost-system would be complemented by an information-system which provides information to decision makers; ministers would be able to receive feedback from their decisions and demonstrate VFM to their parliament and partners. The budget would be fully accountable and the results achieved could be compared with the goals set by government.

Unfortunately this situation is very far from reality and GBS does not provide such an unambiguous ‘production process’. GBS is a complicated modality with multiple active components. VFM audits of GBS have to deal with an extensive range of activities that cut across sectors, themes, and geographic areas. Evaluators have to deal with imperfect indicators, lack of sufficient quality data, a sensitive political setting, and external elements that disturb the predictability of the system. It seems rational to recognise in advance that in practice – from the perspective of attribution – a VFM audit of GBS does not make much sense, since developing countries often do not have budget systems that provide details about programmes, and insight into project expenditures, which makes it almost impossible to track down financial flows. Moreover, resources are mixed, GBS is fungible, and there are many stakeholders actors that influence key variables – especially at the results end of the value chain.

---

93 Carin & David (2004) 8
94 NAO (2007)
Than why are VFM audits even considered? It must be recognised that from an accounting point of view it could make sense to do a VFM audit of GBS. An auditor can evaluate value for money in a broad sense by looking at results (effectiveness) of programmes, explore government operations (economy and efficiency), and estimate what has been allocated to each public sector in terms of inputs. It is possible to systematically locate and prioritize key programme components – identified and categorized on the basis of the main theme addressed. An auditor could look at programmes separately but also treat it as a package of components. Examples of specific thematic areas are infrastructure, education, and health. The general rule here is to concentrate on those components of the sector programmes that seem likely to have the most significant bearing on overall outcomes. Furthermore, an auditor can identify which generic instruments constitute and relate to the GBS modality. Rather than focusing on individual programmes, auditors concentrate on the generic tools of government that come to be used, in varying combinations in particular programs. These could be the first step of a successful approach to GBS.

4.2 Operational Performance: an evaluation of economy and efficiency

Generally, it is the responsibility of the executive departments and agencies to generate information on the effectiveness of their programmes. However, if this information is not satisfying, the auditors may examine those areas that directly contribute to the (cost-) effectiveness of the programme. In other words, in absence of information on the final outcomes and impacts of the programme, the auditors could review the processes and operations that lead to the production of outputs that form strong indicators of these results.

This approach is attractive as donors are not only interested in recipients’ government attainment of results, but also in what the recipient government has done; which actions it has undertaken to realize its objectives, and if this has been done economically and efficiently. Especially when data on results are lacking, or sufficiently assessed by other evaluations, it might be interesting for donors to zoom in on certain governmental activities. Even when poverty reduction is a fact, this does not mean that taxpayers are getting value for their money. Government actions may not have attributed to poverty reduction or have done so in a very costly, inefficient and ineffective way due to waste, leakage, corruption, and etcetera.

A government service delivery system contains interacting and functional interdependent elements, identical to the value for money value chain. By looking at governments as systems, general strategies can be broken down into sub-goals or means by ministries and executive authorities. These sub-goals

---

95 Khan (2009) 84
96 Ibid.
97 Salamon (1981) 256
98 This section draws on Khan (2009)
can be useful to assess economy and efficiency at various levels. Generally, efficiency and economy gains are made when governments make better use of their inputs or resources, hence, auditors need to identify what and how resources are being acquired and used.

For governments, the acquisition of inputs and production of outputs takes place within the framework of an administration, involving several ministries and many departments and agencies, as well as regional offices and local authorities. Administrative systems allocate resources, plan and implement activities, and monitor and evaluate progress. The organisational structure, budget frameworks and regulations and operations in production systems all form an important part of the scope of a VFM audit. Usually a VFM auditor examines whether an entity has established procedures or strategies to measure its outputs, whether organisational planning reflected the program objectives and whether the objectives were consistent with policy and management practices.

However, given the size, complexity and diversity of the government operations it is impracticable to attempt to assess the overall management performance of all departments or agencies. It is therefore important to select key government functions and activities that are influenced by a range of departments or agencies. For GBS, therefore, the main analytic effort for assessing economy and efficiency have to be directed at government management processes across a limited range of sector programmes. It is important to note that auditors should look at management issues in sectors that have a strong relationship with the ultimate goal: poverty reduction. This means that sector linkages become crucial to determining ‘inter-sectoral priorities’.

To measure economy and efficiency of GBS the costs of both inputs and service outputs in key sectors should be identified or estimated, preferably at an early stage in the audit process. Within these ‘key sectors’, auditors can examine corporate elements such as procurement, finance, HR, and information and communications technology. This helps them identify responsible authorities and the decision-centres in the organization, which would increase the relevance and scope of audit findings and recommendations. If the auditor neglects these principles, too large of a scope might be applied, which could have a negative effect on the quality of the VFM assessment. It is important to note that an auditor does not directly have to comment on the executive policies of the recipient government but point out if they lead to uneconomical or inefficient operations. That is, they look at the implementation of the policies.

99 Management includes functions such as planning, organizing, directing, and controlling. To put it simply: management perceives the need of a certain programme, which is translated into requirement, which should be met in the most economical and efficient manner.

100 Zibaei (2007) 4
101 Leeuw & Vaessen (2009) 6
102 The sectors programmes are the backbone of public service delivery and poverty reduction. For example, in Mozambique in 2003, 64% of total expenditure, excluding debt interest was passing through priority sectors: 18.5% education, 13.6% health, 13.6% HIV/AIDS, 7.3% roads, 4.1% water, 6.6% agriculture and rural development, 8.5% governance, security, judicial system, and 5.1% in other priority sectors (Gester, 2005, 19).
### Audit Criteria

Auditors first need to determine the audit criteria. Although there are no universally accepted standards for VFM, laying down audit criteria is a vital element of a VFM audit: it is almost impossible to carry out an audit in their absence. The word ‘criteria’ is derived from ‘criterion’ which means a rule, a standard or a test by which something can be examined. Auditors generally draw on government targets to form criteria. For example, an education programme might lay down targets for a certain result, for example an increase of the literacy ratio. However, these targets are often general and ill-defined and data on results is often lacking in developing countries, which cause immense difficulties for auditors, as they require quantified targets for measuring VFM.

Therefore, it might be more feasible to draw criteria from government operations, and ignore the last part of the value chain – outcomes, and impacts. They can examine tasks and activities of management and what they had planned to achieve the general objectives. A counterargument for this scope is that it is difficult to harmonize with an important goal of GBS: ‘ownership’. When VFM auditors look at government operations, for example in terms of policies formed and actions taken, it could be undermining this principle. An independent VFM audit could be questioning government actions while it is actually on track towards the ultimate objectives. Therefore, it is important that the auditors discuss criteria with management before adopting them. This may require consultation with experts. In fact, one of the auditing standards prescribes that the audit team should collectively possess the qualification and competence for an auditing assignment. Auditors can try to derive criteria from sources such as stated below:

### Keys VFM questions for an assessment of government operations in light of GBS:

- Which inputs have been provided and to what extent do they correspond to the principle of economy?
- How well were the inputs adapted to the specific political, economic and institutional context? This refers to the qualitative allocation of inputs, their expected interactions, and explicit and implicit prioritisation.
- To what extent have there been improvements in the quality of policy processes and policy implementation?
- How has the level and composition of public spending changed and what are the main consequences for the production of public goods and services?
- To what extent can changes in the access to services be related to changes in government policies or policy processes, and/or to other external or internal factors?

---

103 Gunning (2007) 12
At first glance, these sources seem to be sufficient to form suitable criteria, however, standards for output are not always possible. In fact, in most public sector activities it is difficult to lay down standards because the outputs of government organizations cannot be measured in all cases nor can their cost be determined easily. Also, a comparison with previous years is not always feasible due to price fluctuations caused by market forces, and comparing activities with similar departments is also difficult since these are not strictly comparable units. Each organization is different; as a result one might think that every key sector programme needs specific audit criteria. This can be problematic for an audit of GBS. General criteria, which can be derived from generally accepted management practices, and from common sense or general rationality, could provide a suitable alternative. A review of general management procedures may already uncover some potential areas for improvement. Nevertheless, for such a vast variety of issues, generally accepted criteria are difficult to create.

**Potential sources for VFM audit criteria:**
- Government objectives
- Performance standards (in terms of outputs) set by management
- Generally accepted management practices
- Operational manuals or guidelines of the organization
- Rules, regulations and instructions issued by the management
- Audit criteria used by other audit organizations in similar audits
- Operational standards set by international bodies
- Best practices in the area of audit
- Government policies and directions relevant to the audit assignment
- Applicable laws, rules, regulations and procedures
- Academic literature on the subject
- Academic pronouncements by professional bodies
- Past performance of the organization under audit
- Interviews with professionals

At first glance, these sources seem to be sufficient to form suitable criteria, however, standards for output are not always possible. In fact, in most public sector activities it is difficult to lay down standards because the outputs of government organizations cannot be measured in all cases nor can their cost be determined easily. Also, a comparison with previous years is not always feasible due to price fluctuations caused by market forces, and comparing activities with similar departments is also difficult since these are not strictly comparable units. Each organization is different; as a result one might think that every key sector programme needs specific audit criteria. This can be problematic for an audit of GBS. General criteria, which can be derived from generally accepted management practices, and from common sense or general rationality, could provide a suitable alternative. A review of general management procedures may already uncover some potential areas for improvement. Nevertheless, for such a vast variety of issues, generally accepted criteria are difficult to create.

**Some generally applicable audit criteria:**
- Planning: 1) objectives; 2) needs & requirements
- Internal Controls
- Performance Standards: 1) operations; 2) productivity; 3) quality of service
- Monitoring & Evaluation

### 4.2.1 Assessing Economy

As mentioned in the previous section, the auditors can adopt the generally accepted management practices as audit criteria. For 'economy' these practices have to be relevant to procurement: Auditors can determine if the right amount of resources were procured by assessing the requirements of a department. After having identified the requirements, alternatives can be analyzed to improve economy.
Furthermore, auditors can determine whether inputs, although transparent linkage with GBS is impossible, have been procured in the right amount, at the right place, the right time, of right kind, and at the right cost. At “the right time” is also linked to requirements: resources should be available to satisfy the need on a timely basis. The resource may be available at a location where it is required i.e. at “the right place”. For example, a certain company might offer material that is less expensive per unit than another company’s. However, due to high transportation costs, the more expensive company might be less costly due to its different location.

The auditors could also assess whether 1) a department has (the right) procedures in place for forecasting the time when a particular input would be required for efficient and effective implementation, and; 2) whether there are appropriate procedures and systems present for monitoring which kind of resources are necessary in different service delivery sites – ‘allocation’. Ideally systems are in place that signal gaps in the resource availability and resource use.

Furthermore, an auditor can calculate the minimum cost by estimating costs for all available alternatives. “The right cost” refers to the lowest cost in the lifecycle of a resource:

<table>
<thead>
<tr>
<th>The lowest cost of services could be determined by analysing:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• + Capital cost</td>
</tr>
<tr>
<td>• + Operating cost</td>
</tr>
<tr>
<td>• + Maintenance cost</td>
</tr>
<tr>
<td>• + Downtime cost</td>
</tr>
<tr>
<td>• - Salvage value</td>
</tr>
</tbody>
</table>

“The right kind” refers to acceptable quality in light of given objectives. Thus, ‘economy’ means spending only on those inputs that are essential for achieving outputs, which lead to the achievement of intermediate and ultimate objectives. For example, it may be most economical to buy certain supplies from the lowest bidder but if it leads to interruption in operations it is not a feasible option. VFM auditors should attempt to attribute solely those costs (inputs) that contributed to the services provided. It is important to note that these are not necessarily the activities with the highest costs. Auditors should be concerned with the added value of resources or inputs.

4.2.2 Assessing Efficiency

Efficiency has to do with government productivity. If a recipient government is efficient, auditors can assume that GBS funds have been used efficiently. Productivity is the ratio between the quantities of services produced and resources utilised i.e. ratio of inputs and outputs. Both recipient governments and donors often neglect the processes and activities that enable or constrain the transformation of

---

104 Kandasmy (2007) 6
inputs into quality service delivery.\textsuperscript{105} This is known as the problem of the ‘missing middle’ in the budget support service delivery chain.\textsuperscript{106}

<table>
<thead>
<tr>
<th>Advantages of Efficiency Measures:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Control quality and quantity of services.</td>
</tr>
<tr>
<td>• Improve budgets and plans.</td>
</tr>
<tr>
<td>• Provide a rational basis for pricing of services.</td>
</tr>
<tr>
<td>• Decide the level of service to be provided.</td>
</tr>
<tr>
<td>• Appraise the staff performance.</td>
</tr>
</tbody>
</table>

Performance indicators of efficiency can be drawn from internal or external data, and could, for example, entail: ratios of administrative cost to operational costs, ratios of overtime payments to total payroll and, time taken to process an application. If standards are not available, assessing efficiency is not an easy task. Generally, planned outputs for given inputs are available. If not, it might be a feasible strategy to make comparisons with similar activities in similar environments, implementing comparable sector programmes. Auditors could compare costs of different services provided by the same or external governmental organization at different provinces, countries or in different departments. In certain areas where private sector is also providing similar services, a comparison could be useful.

<table>
<thead>
<tr>
<th>Areas for comparison could be:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Operating expenses</td>
</tr>
<tr>
<td>• Usage of service or client population</td>
</tr>
<tr>
<td>• Unit cost of services</td>
</tr>
<tr>
<td>• Manpower levels</td>
</tr>
<tr>
<td>• Performance indicators</td>
</tr>
</tbody>
</table>

However, auditors must carefully distinguish ‘avoidable’ with ‘unavoidable’ costs, as some costs are avoidable in the private sector but not for governments. A comparison with the performance of government operations of the past years may also reveal potential areas for saving. It could be beneficial when auditors analyze the cost of output trends over a number of years.

These methods show whether a new procedure is more cost-efficient, but it remains ambiguous whether the procedure is more effective – in light of outcomes and impacts. Moreover, these methods do not evaluate the efficiency on a more aggregate level but consider only the efficiency of small changes in inputs acquirement and usage. Therefore, even though this would be a useful method on a project level to enhance outputs, it is not a viable strategy for GBS. A cost-

\textsuperscript{105} Williamson & Dom (2010) 1
\textsuperscript{106} Ibid.

36
effectiveness assessment (CEA), by using counterfactuals of what would happen in the absence of a certain programme, could successfully complement other audit methods. The advantage of using a counterfactual as the basis of the analysis is that it can identify current allocative inefficiencies as well as the efficiency opportunities, which is very suitable for GBS because findings can be generalized across sectors. This method will be further discussed in § 4.4.

4.2.3 A problem-oriented perspective on operational performance

From a problem-oriented perspective, general bottlenecks in the program can be identified. The basic strategy could be to investigate how government activities sustain or hinder program outputs. From this perspective, there can be a wide range of uneconomical practices and inefficiencies that an auditor could examine. Let's consider six examples that could be relevant in light of GBS.

First, politicians may have caused inefficiencies from the start by forming vague, ill-defined objectives. Second, the design of administrative and operating systems might be inappropriate to handle large sums of funds. Third, inefficiencies in the agricultural sector programme, for example, could have been caused by bad acquisition and usage of inputs: procurement of the wrong seeds and fertiliser and structural delays in supplying these goods. This will have negative effects on results since farmers must plant the right kind of seeds and apply the right kind of fertiliser at the right time to achieve high yields.\(^\text{107}\)

The fourth point auditors could examine is if there are any sources of inefficiency present in governments' financial policies. This has to do with allocative efficiency: the distribution of resources among different programmes in order to achieve the best results for the available inputs.\(^\text{108}\) For the education sector, for example, increasing trends in costs might be explained by recurring teacher costs, school construction costs and an inefficient utilisation of existing inputs: human resources and infrastructure.\(^\text{109}\) When the number of teachers is substantially below the optimal level, auditors could argue that a shift in allocation of funds from construction to teacher employment will increase cost efficiency.\(^\text{110}\)

The fifth point: a lack of capacity of information systems. Crucial factors in management information systems are availability, accuracy and relevance. Is there an adequate channel for communication of responsibilities? Asymmetric information can have a considerable adverse effect on the flow of funds to the frontline and on service outputs. As access and ability to acquire information differs within segments of government, the actual programmes may also have adverse equity implications. A lack of documentation could cause miscommunications. An auditor could examine

---

\(^{107}\) NAO (2007)  
\(^{108}\) Hutubessy, Chisholm, Edejer (2003) 2  
\(^{109}\) Pasha (1994) 1175  
\(^{110}\) Ibid.
management information systems to see if the necessary and correct information is distributed on a
timely basis.\footnote{There should be a probable causal relationship between these inefficiencies and the ‘effectiveness’ of the programme, if not, such an examination would be pointless from a VFM point of view.}

And finally, unclear or ineffective operational controls might provide soil for wastage and
corruption, which could lead to accumulation of excessive capital. Internal controls are important for a
VFM auditor as it determine the scope of the assessment to a large extend. Internal controls can be
defined as plan of organization and procedures to ensure that: 1) the accounting information of the
organization is recorded correctly, timely and in accordance with generally accepted accounting
principles; 2) the assets of the organization are safeguarded; 3) the policies and procedures of the
organization are followed at all levels; 4) management of the organization is carried out in the most
economical, efficient (and effective) manner. An adequate and reliable internal control system can
prevent or detect frauds or errors in the operations of an organization. For a fair assessment of the
control mechanism the auditors are expected to examine the extent to which an organization questions
the basis of its preparation of budget estimates. It should be seen whether all expenditure is regularly
justified against objectives to be achieved. Absence of such a mechanism allows an environment
where wastage and corruption can easily grow.

<table>
<thead>
<tr>
<th>For optimal economy and efficiency:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• There should be a reliable system of internal controls in place.</td>
</tr>
<tr>
<td>• The management should comply with various rules and procedures.</td>
</tr>
<tr>
<td>• The management should have a system in place to see that: 1) resource-use is cost-effective; 2) waste and duplication is avoided; 3) resource-use is planned, managed and controlled.</td>
</tr>
<tr>
<td>• The management should determine its own standards</td>
</tr>
<tr>
<td>• The management should take remedial action in case variance is noted against the expected standard.</td>
</tr>
<tr>
<td>• There should be a system in place to review various processes, methods and services</td>
</tr>
<tr>
<td>• There should be evidence of the management efforts for improving its internal efficiency and economy in resource acquisition.</td>
</tr>
</tbody>
</table>

4.2.4 Quality, Equity, and Sustainability

This section will look at three issues that on first sight seem to fall under the scope of effectiveness: quality, equity, and sustainability. However, the main interest of this section is not in measuring these issues in terms of outcomes and impacts but which operational elements lead to or affect (a lack of) these three issues.

It might be useful for an auditor to focus on elements that are relatively simple to calculate such as the substantial direct costs over which an authority has substantial control. However, by solely looking at costs, the issue of quality, sustainability, and equity of service delivery could be ignored.\footnote{Williamson & Dom (2010) 58} For example, if the main cost attributed to activities is HR – the question remains to what extend HR had
an effect on services in terms of quality, equity, and sustainability. Solely a quantitative measurement of economy and efficiency could be misleading: value may not be solely expressed financially and simply cannot be represented as a comparison of purchases within a budget limit. Therefore, both economy and efficiency cannot be considered as isolated elements: (cost) information on the quality, equity, and sustainability of service delivery is needed as well.

Quality
It is relatively easy to measure the first two Es in cases where inputs and outputs are of a quantitative and mechanical nature. It is quite difficult when they are non-repetitive and of qualitative nature. For example, the quantity of boreholes might be increased while the quality of water deteriorates. Or expensive high quality water projects could result in a lower production of water points: the output goes down because quality had to be increased. Another example: acquiring additional (inexpensive) hospital beds for a health clinic may not affect the amount of patients treated, the quality of care or the health conditions in a community. Therefore, auditors should, clearly define what is meant by ‘cost’ and ‘value’, and assess whether the values of the key parameters apply locally. A useful method to address this problem is to classify government activities into categories and appoint the inputs or resources used to these categories – a ‘value added analysis’. Activities can be classified into these simple categories below:

<table>
<thead>
<tr>
<th>Value added analysis:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <strong>Value adding</strong> – the activity adds value and is essential to the quality of the output;</td>
</tr>
<tr>
<td>2. <strong>Sustaining</strong> – the activity adds no value, but is necessary to sustain the service;</td>
</tr>
<tr>
<td>3. <strong>Non-value adding</strong> – the activity does not add value or sustains the service.</td>
</tr>
</tbody>
</table>

Auditors should, therefore, explore saving opportunities in areas that have high costs and are non-value adding. When non-value adding activities or resources are reduced, the results of service delivery should on the whole stay the same or improve. For ‘economy’ this method can be applied by distinguishing strategic resources and non-strategic resources. Examples of non-strategic inputs are high volume contracts for goods and services that are not critical to the delivery of a high quality service output – non-value adding or sustaining. Strategic inputs, on the other hand, are those essential to the achievement of quality service outputs. Generally there is more VFM when public procurement is sustainable i.e. where public procurement is seen as a lever to achieve wider policy objectives. An auditor should therefore look for evidence that better results are really the results of

---

113 Price (2001) 25-31
114 Kandasmy (2007) 4
116 Communities and Local Government. (2008) 12
117 NAO: getting VFM from procurement (2010) 3
118 OGC: Sustainable Procurement (2005) 1
economy and efficiency gains. The evaluator’s main responsibility is, therefore, to select and analyse those elements that add the most value i.e. contribute to the ultimate goals of the entity.

Equity

Sometimes, particularly in the case of public sector projects, the questions of equity form part of the audit criteria. Equity can be defined as: ‘the extent to which disadvantaged sub-populations have equitable access to results’\(^{119}\). How does the project distribute costs and benefits among different sets of people and over different periods of time? Did the allocation process attempt to incorporate measures of equity in its budgetary decisions relating to service provision in remote areas? It is important to note that ‘equity’ concerns both the distribution of service inputs and the distribution of service outputs. In other words, service delivery systems comprise two processes: allocation and distribution. Whereas allocation refers to the quantity and nature of service outputs to be provided, distribution refers to who will get how much of what is available.\(^{120}\) Auditors could assess whether distributional equity is objective in public sector decision-making.\(^{121}\) Equity is a procedural concept, hence an auditor could assess if governments implemented rules or standards about how to allocate and distribute scarce resources; has management taken equity considerations into account?\(^{122}\) Overall management should treat output and equity as distinct objectives. Auditors could assess whether management has a system or method in place to identify the trade-offs between overall output and equity.\(^{123}\)

However, there are no absolute criteria by which to judge whether a given distribution is equitable. In the end, distributional rules are based on judgements, and relate to perceptions and political decisions. Furthermore, there are no simple technical solutions for the allocation of resources. It is very difficult to assess the needs for and costs associated with providing service outputs in areas of dispersed population, and it is often a political issue requiring value judgements.\(^{124}\) In the absence of objective rules, data or theory to guide processes relating to resource allocation, the opportunities for discretionary decision-making are significant.\(^{125}\)

Therefore, it might be more suitable for an auditor to focus on the results side of the value chain to determine if principles of equity have been insufficiently addressed. Furthermore, an equitable distribution of services will eventually be visible at the beneficiary level. Beneficiaries are

\(^{119}\) Binnendijk (2000) 8
\(^{120}\) Jones (1984); Rich (1982)
\(^{121}\) Mandell (1991) 467
\(^{122}\) Humphreys (1988) 323
\(^{123}\) Mandell (1991) 467
\(^{124}\) Humphreys (1988) 323
\(^{125}\) Ibid.
fundamentally concerned with service outcomes rather than with service inputs or outputs. Therefore, it could make sense for auditors to analyse the distributional impacts of service outputs geographical patterns. Such an assessment accords with the contention that equity must be concerned with service outcomes rather than service inputs or outputs.

**Sustainability: a focus on processes and operations**

How can VFM auditors attribute government operations to the notion of sustainability? Sustainability can be defined as:

“...the continuation of benefits from a development intervention after major development assistance has been completed”.

From an operational perspective, it might be useful to *monitor operations* for sustainable development, rather than measuring the *sustainability of results*. This section provides only a limited overview and aims to address some key issues that are important. The focus will be both on operations (first part of the value chain). The sustainability of results will be briefly discussed in §4.3.3.

Sustainable development is an unending process rather than a state. VFM auditors should therefore unpack the processes by which the government addresses and contributes sustainability. Unfortunately, most evaluation frameworks focus on assessing specific result-indicators of sustainability without investigating the nature of the processes responsible for them. The most important process-oriented criteria for sustainability of development programmes are: the character of participation, the success and nature of (institutional) capacity-building efforts, and understanding and use of local knowledge, skills, initiative and constraints. Auditors could assess if government programmes gave attention to the opinions, ideas and perspectives of beneficiaries. Auditors could assess the degree of control beneficiaries have in setting goals, making decisions, planning, implementing, and evaluating the services to the community. From an operational perspective auditors can focus on issues that are observable in the short term, such as the institutionalization of practices and the development of organizational capacity. Furthermore, auditors could look at the design of programmes to assess if they effectively tap into local human resources, and then make use of the knowledge, skills, initiatives of the communities that are targeted.

126 McDoughall & Bunce (1984) 357
127 Bagheri & Hjorth (2005) 281
128 Mog (2004) 2140
129 Chambers (1997); Esman & Herring (2001); Fujisaka (1989); Krishna, Uphoff, & Esman, (1997)
4.3 Results: an evaluation of effectiveness

Evaluating effectiveness presumes existence of measurable objectives or outcomes and impacts of government programmes. The objectives of the recipient government and the expected results together form the criteria for a VFM audit. The most important reference for the criteria can be found in the official documents of the recipient government and donors. It is important to note that a VFM auditor must recognize from the start that it is impossible to separate the attribution effects of different donors providing GBS i.e. separate the value of Dutch taxpayers’ money from that of other donors’ money. Another important matter is that there are two principal levels of effects caused by GBS: the institutional level and the beneficiary level.\footnote{Leeuw & Vaessen (2009) 10} Institutional effects are driven by inputs such as dialogue, conditionalities, technical assistance and capacity building. Most policy makers and stakeholders are, however, primarily interested in results at a beneficiary level, that directly affect communities, households, and individuals.\footnote{Ibid.} This section accordingly focuses on this level: GBS will mainly be discussed as far as interventions financed through this modality aims to affect the lives of households and individuals through poverty reduction. But it should be recognized that GBS could produce results at institutional levels that can also have indirect effects at the beneficiary level – in the form of public service delivery.\footnote{Ibid.}

<table>
<thead>
<tr>
<th>Key VFM questions to consider for effectiveness assessments of GBS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How did the overall livelihoods (impact), including access to services (outcome) of the target groups change over time?</td>
</tr>
<tr>
<td>2. To what extent did GBS contribute to the achievement of the government outputs (including allocative and operational efficiency)?</td>
</tr>
<tr>
<td>3. To what extent the achievement of the development outcomes that GBS aimed to support has been favoured, hampered, or basically not influenced by the government outputs?</td>
</tr>
<tr>
<td>4. To what extent were government outputs consistent with outputs that contributed to the intended development outcomes?</td>
</tr>
<tr>
<td>5. Are the objectives realistic – they might be over-ambitious or sets in such a way to manipulate extra resources or set at a significantly low so that results are more easily attained?</td>
</tr>
<tr>
<td>6. Have objectives been based on facts and forecasts that appear reliable?</td>
</tr>
<tr>
<td>7. To which extent have the objectives been achieved?</td>
</tr>
<tr>
<td>8. Have policy instruments, chosen to carry out objectives, been based on a analysis of alternatives?</td>
</tr>
<tr>
<td>9. Can results be reasonably attributed to activities, policies, and outputs?</td>
</tr>
<tr>
<td>10. Does government have a satisfactory arrangement to monitor the effectiveness of policy instruments?</td>
</tr>
</tbody>
</table>

4.3.1 Indicators

Generally all recipient government and donors have objectives and associated indicators that measure how well it is performing as to attain its goals.\footnote{Slovak VFM Audit Manual (2007)} Donors usually specify indicators in their GBS approval documentation. Indicators can be referring to quantitative or qualitative variables that allow
the verification of changes produced by a development intervention relative to what was planned. Idealy, the variables are drawn from National Poverty Reduction Strategies (PRSPs) or other national strategy documents. PRSPs often provide implementation plans and matrixes, which are generally composed of a long list of actions across a wide range of areas. In recent years, the development community has shifted away from emphasizing only policy based indicators and toward a ‘results based approach’ that focuses on the results continuum side of the value chain: outputs, outcomes and impacts.

This approach shows striking similarities with the ends-oriented concept of VFM, which also focuses on results directly; on outputs and outcomes, and impact. Government policies, actions and processes are less central and the focus is on the results achieved in relation to those intended. As a result, the selection of indicators is critical to the success of a VFM assessment of GBS. Unfortunately, these indicators often lack specific time-bound targets, and baselines, which make assessment of VFM difficult, particularly since objectives are usually not very specific. The position of the European Commission is as follows:

“…we judge it appropriate to use a small number of results indicators, at outcome level, recognizing that this strikes the best balance between what is swift-changing enough to be meaningful annually, close enough to government control to be relevant to public decision-making, but sufficiently synthetic to capture a wide range of actions sufficiently closely linked to actual outcomes to be strong measures of poverty reduction itself.”

Evaluators should realise that these indicators are incompatible as they should both be “swift-changing enough to be meaningful annually” and entail “strong measures of poverty reduction itself”.

Poverty reduction is a slow process: effects on a reduction in poverty caused by actions of previous

---

135 Ibid.
136 Together, outputs, outcomes can be called the intermediate results and impact would be the ultimate results of service delivery.
137 Canadian VFM Audit Manual (2002)
138 EC (2005) 50
governments could be wrongly allocated to a successor. In addition, the most recently observed changes in outcomes might not be attributable to the most recent policy actions or resource inputs. Furthermore, the EC assumes that indicators at outcome level can measure or function as proxies for indicators of impacts. I will demonstrate in the following sections that assumptions like these are not always correct, and can lead to serious errors.

4.3.2 Attribution problems

Relating results indicators – outputs, outcomes, and impacts – to each other will lead to estimation problems. Details on government activities and outputs are often not available. But even if information is available, evaluators will have to deal with the fact that service delivery processes involve multiple stakeholders and chains of actors, working at different levels with different and sometimes overlapping interests. Achievements can be affected by other sectors: unclean water and poor sanitation, for example, causes diseases such as cholera and typhoid, and will impede achievements of results in the health sector. A lack of infrastructure could have serious implications on agricultural production, and investments in the education sector may be more cost-effective than treating avoidable illnesses.

The affect of factors beyond the government’s control – exogenous factors – is stronger the further the indicator is removed from operational measures. Especially result variables are affected by many factors; it is difficult to establish what part of change measured in these variables can be attributed to the project or programme one aims to evaluate. Recipient governments could be held accountable for outcomes that are subject to exogenous factors or outside their control. A VFM audit should not result penalizing recipient governments for something which they are not solely responsible: is unreasonable to penalize a government for the effects of factors outside its control, such as a drought or a collapse in the price of a key export crop. It is not very surprising that recipient governments are not very keen on results being a condition of GBS and that the focus on results can cause tensions between governments and donors. Evaluators must recognize that exogenous effects may disrupt PSRSP or PAF objectives and the indicators concerned. Therefore, indicators that are not directly within government’s control, should be chosen on issues which the government has very large leverage.

139 Koeberle, Stavreski, and Walliser (2006) 305
140 Williamson & Dom (2010) 3
141 NAO (2007)
142 Gunning (2006) 15
143 EC (2005) 49
144 Ibid.
4.3.3 Methodologies: a concise overview

Attribution is an important element that needs to be considered when selecting one or more methodologies, as an auditor needs to attribute results to a government intervention. Furthermore, to evaluate results, counterfactuals should assess what would have occurred in the absence of an intervention, and a comparison with what has occurred with the intervention.

Quantitative techniques have a comparative advantage in addressing the issue of attribution. A quantified or statistical evaluation of results presupposes that both the service delivery programme and its possible effects are well defined. Attribution problems can be addressed by isolating and accurately measuring the particular contribution of a particular service, while ensuring that causality runs through the value chain. An analysis of the attribution problem compares the situation (which is part of a government service programme) to what would have happened in the absence of an intervention (the counterfactual). The net outcome or impact is the difference between the target variable's value after the intervention and the value the variable would have had in case the intervention had not taken place i.e. the difference between the ‘treatment group’ with results of the counterfactual. We can distinguish the following methods that might be appropriate for a VFM audit to measure results: 1) randomisation; 2) the pipeline method; 3) propensity score matching and; 4) Judgmental matching.

Randomisation is a promising approach developed by Esther Duflo to measure aid effectiveness. She creates a simulation of a counterfactual by examining the situation of a ‘treatment’ group with a ‘control’ group that is not affected by service delivery. These treatment and control groups are randomly selected from the same eligible population. A simple comparison of average outcomes in the two groups solves the attribution problem and yields accurate estimates of the impact of government outputs. Evaluators can pay extra attention to ensure that there is a minimum of ‘contamination’ i.e. disturbing external effects. However, randomisation is very time consuming, and an option for smaller scale projects. It is questionable whether this method can be applied on GBS.

Another method is the ‘pipeline method’, which compares outcomes of treatment with control groups based on entire households or communities. The samples are of greater size, which makes it more challenging to make sure that both the treatment and control groups have similar characteristics. Consequently, the method also becomes more suitable for large audits such as the multiple sector programmes that are likely to be supported through GBS.

The third quantitative method is called ‘propensity score matching’, a control group is created ex post by selecting its members on the basis of observed and relevant characteristics that are similar

---

145 This section draws on Frans Leeuw, Jos Vaessen; Impact Evaluations and Development, Nonie Guidance on Impact Evaluation (2009)
146 E. Duflo (2005)
147 Ibid.
to those of members of the treatment group.\textsuperscript{148} The pairs do not match exactly, but have similar probabilities of being included in the treatment group on the basis of observable characteristics.

The fourth method is ‘judgmental matching’, which is a less precise method but is nevertheless often used for performance assessments. Here, more descriptive information is used to – such as consultations with beneficiaries and interviews with key stakeholders – identify matching characteristics, and then combining geographic information with household surveys interviews to select comparison areas with the best match of characteristics.\textsuperscript{149}

These techniques are feasible on a project and programme level but become more challenging as the audit moves to a much higher level of aggregation. When the linkage is strong it should be possible to draw a sample and apply an evaluation to each of the activities in the sample. This means that for a statistical analysis, there is no ambiguity as to who belongs to the treatment group and to the control group.

As we move towards a higher-level of ‘treatment’, the situation becomes less homogeneous and more heterogeneous. Consequently, it becomes less easy to link government sector programmes or interventions (on output level) to the intermediate and ultimate results (outcomes and impacts, respectively).\textsuperscript{150} One output can have multiple impacts. Conversely, various outputs can affect the same impact variable. For example, the ‘use of latrines’ (outcome) of a water and sanitation programme, funded by GBS, can be used as an explanatory variable for cholera incidence, while the outcome “hand washing” is not. As a result, the availability of wells affects cholera incidence through both these variables and the omission of the “hand washing” variable would lead to biased estimates.\textsuperscript{151}

\textbf{Figure 5}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure5.png}
\caption{Outputs, Outcomes, Impacts}
\end{figure}

\begin{table}[h]
\centering
\begin{tabular}{|c|c|c|}
\hline
\textbf{Outputs} & \textbf{Outcomes} & \textbf{Impacts} \\
\hline
Wells & Access to clean water & Time savings \\
Sanitation & Access to Latrines & Cholera incidence \\
Education & Hand washing & Lower mortality \\
\hline
\end{tabular}
\end{table}

\textsuperscript{148} Ibid.
\textsuperscript{149} Ibid.
\textsuperscript{150} Gunning (2006) 16
\textsuperscript{151} Ibid.
Another example: GBS funds that might have been allocated to the education sector could have been used to acquire various inputs for many activities leading to an array of outputs: schools constructed, teaching materials, teachers trained, and cash transfers. The extent to which the presence of a school in a certain location will lead to higher enrolment can depend on a variety of other outputs, such as the availability of school meals, and the distance of a school from a village or household. Different outputs could have an effect on the same outcome: enrolment. It becomes unclear which school benefited from which outputs. That is, treatment is heterogenic. As a result, auditors can no longer determine differences between treatment and control groups and have to base study on a comparison of a treatment and a control group.

In the context of GBS, it seems sensible to omit impact variables, in particular when a positive causal relationship between outcomes and impacts cannot be demonstrated. However, the risk is that this exclusion leads to ineffective policies, as governments can be held solely accountable for the outcomes achieved. For example, in education a typical indicator is enrolment, but this does not imply that children learn anything in school: in Uganda enrolment rates expanded very rapidly while educational quality deteriorated. Another working example: the number of boreholes drilled in rural areas could be considered successful outputs, and indicate high value for money, as they improve access to drinking water (outcome), but if water points are badly maintained, or contain a high level of arsenic, there is no real poverty reduction and hence no value for money at all.

What can auditors do? Heterogeneity implies variance, which makes a regression analysis very suitable as it can be used to estimate the effect of various outputs. When data are available for all possible determinants of results an auditor has information to determine changes in outcome or impact variables over time: the variable can be regressed on changes in explanatory variables. Because linking outcome with impact variables is complex, and data is often not available, evaluators might be able to collect data retroactively, i.e. by relying on data for key outputs. These key outputs variables should be ‘interaction’ or ‘instrumental’ variables, which correlate with the original endogenous variable in the equation. The coefficient of the interaction can provide evidence on whether the combination of outputs was effective in a certain environment.

For example, an auditor makes observations in a certain location that falls under the education sector – a village or region – with identical outputs e.g. a particular type of school system, material, and teachers that had a common history of training. Results are no longer analysed as a single binary variable but as a set of variables describing how a result has been affected or achieved by various government activities. With a regression analysis, effectiveness is not identified by comparison of a

---

152 In this case a government owned or supported programme that provides school meals.
153 Adam & Gunning (2002) 2050
154 Gunning (2006) 22
155 Ibid.
156 This method does not explain the question why cholera responded to the construction of the well.
treatment and a control group, but by the differences in histories between locations. This analysis would seem applicable in many situations, as there is often enormous variance in intervention histories. Ideally, stakeholders and governments – prior to the audit – collect data on location-specific “treatment histories”. But this method is more vulnerable than others due to the possible errors in the measurement of data, and good instruments are not always present, given the available data.

Quantitative methods do not provide a silver bullet methodology to measure results attained through GBS. They can run against serious limitations that go beyond the technical constraints identified above. Measuring the value of results is open to different views, as measuring quality is quite subjective and difficult to measure. Hence, auditors should complement the statistical exercise with informal, descriptive methods to assess whether output variables of service delivery have an effect on intermediate and ultimate results. Qualitative methods are often less suitable for addressing attribution problems. However, in case of large complexity they can be of great value to obtain or generate supplement data and evidence. This would make the VFM assessment more reliable.

Participatory approaches are suitable qualitative methods for GBS. There are various participation methodologies but they basically all rely on different degrees of participation. Ideally all stakeholders are involved in key stages of the audit. These methods could be very useful to determine objectives and indicators. However, the higher the degree of participation, the more costly and difficult a VFM audit becomes. Hence, they may be inappropriate for comprehensive interventions such as sector programmes. Auditors should not base too much of their findings on this method as there are serious limitations to the validity of information based on stakeholder perceptions: strategic responses, manipulation, or advocacy by stakeholders are not uncommon.

An important element that needs to be considered by auditors is if results are sustainable. VFM evaluators should identify the causal relationship between programme outputs, leading to long-term impacts. Governments may be able to produce impressive results quickly. However, these might fail soon after termination of the service intervention. How can auditors measure if outcomes of government programmes are sustainable?

To assess the sustainability of results, auditors should evaluate whether and how benefits of service delivery have continued and will continue after project closure. A well-articulated VFM strategy would addresses the time horizons over which different types of outcomes and impacts could reasonably be expected to occur. However, few VFM audits will be able to provide direct evidence of sustainability, as long-term impacts are difficult to measure with only one audit. Furthermore, the wide variety of programmes, the diversity of their objective, and the varying nature of the contexts in

---

157 Leeuw & Vaessen (2009) 14
158 Ibid.
159 Ibid.
which they operate, make such a requirement unrealistic. VFM auditors could focus on identifying short-term impacts and, where possible, indicate whether longer-term impacts are likely to occur.

However, by focusing too much on short- or intermediate-term outcomes the importance to measure effects in the long term might be undervalued. One example is an effective long-term strategy to reduce child malnutrition. Furthermore, the effects of government operations will eventually be visible at the beneficiary level. Beneficiaries are fundamentally concerned with service outcomes rather than with service inputs or outputs. Qualitative methods might provide useful information, nevertheless, I can conclude that measuring and analysing long-term impacts and sustainability is very challenging. It is therefore advisable that auditors conduct detailed preliminary surveys before formulating their actual audit plan. This could limit the scope to those key areas that are the objectives of the audit, and affect its quality in a positive way.

4.4 Cost effectiveness: an approach to GBS

In this section various approaches to measure cost-effectiveness in light of GBS are discussed (taking into account all three Es). Estimating cost-effectiveness of GBS is important for justifying this modality and for obtaining public support for official development aid in general. However, GBS requires a broad approach, taking into account the relative costs and effects for a wide range of factors, which is extremely difficult. Nevertheless, auditors could zoom in on a certain part of the VFM value chain. This section aims to suggest a starting point or strategy that auditors could follow to estimate cost-effectiveness. It is important to note that the information in this section is only a limited overview as there is no generally accepted VFM standard for measuring the relation between the value of public services, and its cost. Furthermore, it is important to note that in the case of GBS, the flow of funds is difficult, if not impossible, to track. Therefore the auditor can do only estimations. More in-depth studies to measure cost-effectiveness of GBS are crucial to develop a sound VFM approach for GBS.

The notion of cost-effectiveness denotes a comparison made between the results attained and the associated costs in order to determine if resources expended for GBS are warranted. Cost-effectiveness is an extension of cost-benefit methodology to an aggregate level. A cost-effectiveness analysis evaluates programme units at various levels. Unfortunately, they cannot necessarily be expressed in monetary values. As stated, in an ideal VFM world effectiveness would be quantified and expressed in a monetary value. Input, output, and outcome indicators would be used for a cost-benefit analysis. See the table on the following page:161

---

160 McDoughall & Bunce (1984) 357
161 In the textbox above outcomes indicators are: ‘key outputs necessary to secure certain outcomes’. These outputs deal directly with the coverage of key public services such as health care, however, they are not among the globally agreed definitions of dimensions of poverty.
<table>
<thead>
<tr>
<th></th>
<th>Economy (inputs)</th>
<th>Efficiency (outputs)</th>
<th>Effectiveness (outcomes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>Unit cost of vaccines</td>
<td>Cost per child vaccinated</td>
<td>Costs per additional successful treatment</td>
</tr>
<tr>
<td>Education</td>
<td>Unit cost of courses</td>
<td>Cost per teacher trained Cost per school</td>
<td>Cost per additional child enrolled</td>
</tr>
<tr>
<td>Agriculture</td>
<td>Unit Cost of seeds or extension</td>
<td>Cost of package per farmer</td>
<td>Agricultural yields per additional farmer</td>
</tr>
<tr>
<td>Water</td>
<td>Unit Cost of borehole</td>
<td>Cost of water supply</td>
<td>Costs (or profit) of additional access to drinking water</td>
</tr>
</tbody>
</table>

4.4.1 Estimating costs

Because there is a lack of transparency within the first parts of the value chain, costs calculation of service delivery might be more probable if the starting point for a VFM auditor is to obtain cost data from the governments budget spending. Donors could allocate these to certain services (outputs) in order to derive an estimation of the cost per ‘unit’.162 The unit costs will enable comparisons with corresponding activities in other government programmes, sectors.163 After costs information of service delivery units have been estimated from the general ledger, the transaction cost for each service is to be estimated, based on transaction volumes for each channel. This method is suitable for GBS – when information is readily available – as it provides a quick estimation. Moreover, it allows for calculations of a donor’s share of overall GBS. As a result, donors could then ‘claim’ a share of the services (outputs) of a certain sector.164 The disadvantages of this method are that ledger allocations will need to be based on arbitrary estimates and are dependant on the validity of the assumptions made.

VFM audits of one sector can also start at service level and calculate the inputs acquired by government activities – costs are then attributed to these activities or services. This approach is closely related to the first E, and has been discussed to some extend in paragraph 4.2. However, it is impossible to link the entire GBS modality with public expenditure inputs to front line service delivery outputs. Literature is abundant with attempts to separate public spending on inputs from expenditures that have no direct effect on the production of service outputs.165 Research shows that the partitioning of expenditure categories does not address the core problem that public spending data, irrespective of category, tends to be a poor proxy for actual service delivery.166 If spending is hard to link with service delivery, what can VFM auditors do? Studies by Easterly and Levine (1997) and Reinikka and Svensson (2001) show that when service outputs, such as telephones per worker, or electricity

162 Communities and Local Government. (2008)10
163 Canadian VFM Audit Manual
164 Clarke, DfID (2010)
165 Reinikka & Svensson (2008) 3
166 Ibid.
available, rather than spending is used, a positive relationship emerges. Hence it might be more feasible for auditors to neglect financial flows, and costs of inputs and solely estimate the costs of outputs.

However, in the case of GBS, the auditors often do not have a fixed budget (cost) or a fixed effectiveness requirement. If he had either, the cost analysis would be conceptually less difficult. The analyst must assume that a range of levels of effectiveness and costs might be acceptable. Therefore, a crucial issue for the auditor is that of deciding which alternatives should be considered. Comparative effectiveness can be important. The auditor estimates the cost that would be incurred and the effectiveness that would result if each of the alternative inputs were acquired or outputs produced. The cost could represent funds or physical units, and/or the value of the alternatives (opportunity costs).\footnote{Hitch (1960) 171} A series of effectiveness levels may be available at different costs. A task of the auditor, then, is to determine which (combination of) inputs and outputs need not be considered.\footnote{Fox (1964) 193} Based on these findings, a feasible method for GBS could be derived from a generalized cost-effectiveness analysis (CEA).\footnote{Drawn from a generalized cost-effectiveness analysis for national-level priority-setting in the health sector.} The costs and benefits of a set of key programmes are estimated, independently and in combination, with respect to the counterfactual case that those elements are not in place. CEA results are used to classify interventions into those that are very cost-effective, cost-ineffective, and somewhere in between.

![Costs vs Effectiveness Diagram](image)

**Figure 6**

A VFM audit that produces cost-effectiveness information can be very useful but only alongside other more qualitative assessments. Without those additional assessments, there is a danger that policy changes in line with cost benefits will promote ineffectiveness in terms of outcomes and impacts of government programmes. Cost analyses should also be complemented with caution to equity and
sustainability as the estimates of the effects and costs of alternatives are generally subject to considerable uncertainty and variability across regions. In the worst case, excluding qualitative issues could lead to serious moral hazards. For example, it could be more cost-effective to exclude the extreme poor of certain services, as they have fewer chances to climb out of the poverty trap. It could be more cost-effective to target low-income families, who are a little less vulnerable. Another example: an emergency situation, let’s say a sudden drought, could be of such a large scale and occurring in an area that is difficult to reach. A VFM audit could say that an emergency operation is too costly in relation to the value that could be attained – saving a hand full of lives. This is an exaggeration but clearly demonstrates that qualitative and ethical considerations are also important.

4.5 PETS & QSDSs: a brief note

There are two instruments that have a striking resemblance with the VFM approach discussed in this chapter. These are the public expenditure tracking survey (PETS) and the quantitative service delivery survey (QSDS). VFM audits and PETS and QSDSs could complement each other, and together provide a comprehensive evaluation of GBS. This section gives a brief overview on these instrument to illustrate the complementarily with VFM. More studies are needed to establish how VFM differs from these instruments, what their relative comparative advantages are, and how they could complement each other in evaluations of GBS.

Through the application of known survey techniques to the evaluation of frontline public expenditure the QSDS explores provider behaviour that underlies service outcomes. In the QSDS, the facility or frontline service provider is typically the main unit of analysis. QSDSs collect quantitative data through interviews and directly from the service provider’s records. The compilation of facility level quantitative data typically requires much more effort than, say, a perception survey of service users, which makes the QSDS both costly and time consuming than other qualitative alternatives.

As information on actual public spending is seldom available in many developing countries, the PETS could provide the missing information from different government organisations and frontline service facilities. The PETS can be conducted in conjunction with the QSDS. Their combination allows a direct evaluation of the effect of wider institutional and resource-flow problems on frontline service delivery. They provide primary data on service providers for empirical research. Precious sections showed that empirical evidence is difficult to attain. These surveys may thus provide the necessary data to undertake a VFM audit.

Both instruments focus on public expenditure and follow data that are particularly interesting for VFM auditors: the quantity and quality of service outputs, inputs, resource allocations within

---

170 This section draws on Reinikka & Svensson (2002)
facilities and lower tiers of government, financing (including user fees and donor financing), management systems and incentives, community participation, and staff attendance. Another important potential contribution of the PETS and the QSDS to VFM lies in the fact that they also establish qualitative facts about service provision. Such facts can then be used as benchmarks for cross-country studies, as well as baselines for monitoring the effectiveness of policy changes within individual countries. Furthermore, the PETS and the QSDS can be used to diagnose and quantify problems of inefficiency, low quality of services, leakage of resources, and capture manifestations of moral hazard in public service, such as shirking and ghost workers, asymmetric information, ineffective management and supervision systems, as well as distributional issues. Important research questions that the PETS and the QSDS can answer include the following:

<table>
<thead>
<tr>
<th>PETS and QSDS research questions:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• How to design institutions that can generate the “right” incentives within the public sector, compatible with increasing the quantity and improving the quality of basic services?</td>
</tr>
<tr>
<td>• How does ‘decentralization’ impact public expenditure outcomes and the quantity and quality of basic services?</td>
</tr>
<tr>
<td>• What is the optimal role of various tiers of government and under which circumstances?</td>
</tr>
<tr>
<td>• How to strengthen voice mechanisms for service users in developing countries and counter problems created by asymmetric information?</td>
</tr>
<tr>
<td>• What type of accountability and oversight arrangements between various tiers of government can help improve basic service delivery?</td>
</tr>
</tbody>
</table>

These issues are quite similar to issues related to economy, efficiency, and effectiveness and answers to these questions above would be very useful for a VFM audit. Information provided by these instruments would promote VFM's objective to improve transparency and increase public sector accountability as it gives citizens access to information on the workings of government spending.

We have seen in the previous section that VFM auditors or evaluators can apply various methods – ranging from randomisation, to regression analysis, participatory approaches, and cost-effectiveness studies. We can conclude that quantitative methods – especially regression analyses – are preferable for a VFM audit, as attribution problems should be addressed as much as possible. However, qualitative techniques should be used to audit important issues for which quantification is not suitable or practical and to develop complementary and in-depth perspectives the affects induced by interventions. Outputs must be carefully chosen, based on government leverage related to clear goals, based on quality data, within a logical timeframe, taking into account external effects and exogenous shocks such as natural disasters. Changes at an impact level will generally be only partly caused by programme outputs. External factors, overlapping activities, and other interventions that are out of control of recipient governments will often interact and strengthen/reduce the effects of service delivery. Hence, to bring the most realistic expectations or targets to the surface, auditors may need to have additional informal or qualitative consultations with donor and government groups or use a
participatory evaluation. To estimate cost-effectiveness the starting point for an auditor should be based on the service outputs, as other data is difficult to assess. I can conclude that there will always be a gap between the best possible method, and what is reasonable. Therefore auditors do not have to insist on generation of results information. They could be satisfied with existing data, and base their methodology on what is reasonably possible.
5. Case study: a VFM audit of the Mozambican Water Sector

Within the scope of the MoU for GBS, the Inspectorate General of Finance of the Republic of Mozambique (IGF) carried out a VFM audit in the period of 2005-2006. This audit to the Water Sector was funded by the Royal Netherlands Embassy of The Netherlands and focused on the issues of Water Supply and Water Resources Management. Sanitation was left out of the audit as the two mentioned fields already covered a broad range of activities, projects, programmes and stakeholders.

In June 2005, IGF has started its activities relating to the water sector, which focused on the financial management of the sector, taking into account policies and strategies based on the existing documents, as prepared by the Ministry of Public Works and Housing (MOPH) and its key Directorate for Water (DNA), on the Government’s Poverty Reduction Strategy Paper (PARPA). In the country’s PARPA two objectives on water have been established: 1) the promotion of sustainable use of water; and 2) increasing the supply of safe water and the provision of low-cost sanitation to urban areas. According to these documents, urban areas should cover 50 % of the population with safe water supply and rural areas with 40 % coverage. According to the MDGs the country should by 2015 have coverage of 65 % for urban and 67 % for rural water supply.

5.1 Objectives

To audit the technical side of the water sector, IGF prepared Terms of Reference and wrote out a tender for consultancy services for the engineering, management, contract and procurement activities in the sector. DHV BV, based in Amersfoort, The Netherlands, won this tender. The general and specific objectives of the audit as specified in the ToR were (next page):

---

171 In this cases study findings that were irrelevant in light of service delivery or value-for-money were left out, such as water resources protection, and a lot of descriptive information regarding activities and actors in the sector.
5.2 **Scope**

The auditors focused on the technical side of the water sector, and assessed the efficiency and effectiveness of the following issues.

### General Objectives:

1. To contribute to the strengthening of the public sector, for the management of the programmes undertaken;
2. To create routines which will allow for regular assessments of the performance of the public sector’s programmes;
3. To provide information to donors needed for decision-making, on future cooperation actions.

### Specific Objectives:

1. Compliance with PARPA’s objectives at national, provincial and district levels and analyse any problems in this regard;
2. The reliability of the information on the coverage of urban and rural water supply;
3. The appropriateness of programmes, projects and activities to achieve PARPA’s objectives;
4. The management by results system, including the assessment of whether the performance indicators and quality of information are appropriate to measure the efficacy, efficiency and cost-effectiveness of the performance and to analyse any deviations to the plans, norms and expectations;
5. The strategic and operational planning and control processes, including the funding and tariff system for executing short- and long-term programmes, projects and activities.
6. The coordination, communication and information between the various participants in the water sector;
7. The procurement processes at national and provincial level;
8. The quality, sustainability and efficiency of the programmes, projects and activities.

---

5.3 **Stakeholders**

The water sector is different from other sectors because there are more stakeholders and various sub-sectors. Many of the main stakeholders are operating in several of the four sub-sectors of urban water supply, rural water supply, small piped systems and water resources management. The stakeholders have been selected by the auditors on the basis of their active role in the sub-sector i.e. both in planning, decision-making, execution of projects, monitoring and control. The stakeholders in the water sector which focus on urban and rural water supply and water resources management are:
5.4 Audit Approach\footnote{This approach leads to various questions in light of this thesis, which shall be discussed in the following sections.}

The audit aimed to make a comparison between “what should be” (laws, strategies, objectives, professional practices, expectations) and “what is” (reality) in order to obtain indications of problems in terms of a lack of correspondence between ideal, norms, expectations and reality. After obtaining the initial information, the auditors identified the monetary flows, the actors, and the results and production. Furthermore, the auditors assessed compliance with the PARPA’s objectives: based on programmes, projects and funding. According to the ToR they assessed whether there was: 1) appropriate, timely and reliable information; 2) compliance with the established laws and rules; 3) compliance with the norms and good practices; 4) comparison with plans, expectations and analysis of deviations; and 5) management by results (three Es) and performance indicators. Furthermore, interviewing the water sources’ beneficiaries was mentioned as an important component in order to understand the impact these sources have on their lives. The figure below was given to clarify their strategy.

![Value for Money Audit, Water - Approaches diagram](image-url)

### Key stakeholders

1. The Ministry of Public Works and Housing (MOPH) with its provincial Departments of Water and Sanitation (DAS)
2. The National Directorate of Water (DNA)
3. Regional Water Administrations (ARAs – 3 in existence, 2 being established)
4. The Water Supply Investment and Asset Fund (FIPAG)
5. The Water Supply Regulation Board (CRA)
6. The Municipalities (urban)
7. Rural Authorities (Districts)
8. NGOs and Donors.
5.5 Key Findings

5.5.1 Information problems

The auditors found that the information needs at central level, regarding physical and financial progress, are not adequately met. The auditors did not examine the annual reports: they did not allow physical and financial examination because there was no evaluation of the planned activities and budgets against the realized ones.

Furthermore, coverage figures at provincial levels were unreliable. DPOPH applied the norm of 500-pp/water point in reporting and not the real figures. They also applied a ratio of 5% breakdowns per year. According to the auditors the national average in percentage of total access to potable and reliable drinking water did not present a very reliable estimate due to pertinent monitoring/measurement problems and problems in the definition of coverage. The auditors concluded that reliable information of the ground situation did not exist.

Large provincial-level programs often contained a monitoring and evaluation unit or activity that produced information only for those water points pertaining to that programme and not for the whole province or the whole district(s) where the programme was active. The auditors concluded that a regular flow of basic data is required from the district levels if the rural water sector wishes to improve management and results.

5.5.2 Indicators

The performance of the rural water sector is the consequence of the interplay between the government, the private sector and the user communities. According to the auditors standard indicators should be developed for the water sector. The various stakeholders kept different standards and reporting methodologies, which was the main difficulty for the auditors.

The performance indicators at national and regional level originated from the five year plan, the yearly Economic-Social Plan (PES), the PNUD/DNA planning document 1999-2006, and the legal mandates and principles. Unfortunately, no documents were found that stipulated monitoring of results attainment regarding the objective stated in these plans. The criteria that the auditors used referred to the ‘process of water supply delivery’ and the ‘final outcomes’. The operational criteria were based on the following questions: 1) do the actors in the sector follow the principles of the demand driven approach; 2) is the data information bank operational and; 3) do the actors in the sector produce within time limits; is there a practice of project planning and time management?

The auditors examined the operational performance of institutions from a legal perspective, and investigated the planning activities undertaken in this sector. According to the auditors “performance indicators for small piped systems were not satisfying”. For instance, the number of staff per 1000 connections was not a realistic indicator for small systems.
5.5.3 Economy and Efficiency

The auditors sought to answer the following question: “does the new demand driven approach result in better operation and maintenance?” The auditors estimated the total integrated costs per water point and per water point user, and recommended that the life cycle cost should be incorporated in the data bank of the rural water points. However, coverage figures for small piped schemes were found not reliable, as neither the Department of Urban Water nor the Department of Rural Water within DNA compiled data on these issues.

Reliable data on cost recovery was not available, but it was clear that not all consumers are charged for the water supplied. The auditors said it was due to political reasons that strict fee collection rules were applied and kept hidden in the total administration budget. The auditors have encountered various cases of small town systems where the costs could be easily compensated by the income from billing according to the tariffs set by the administration. The auditors determined an average per capita capital cost of a hundred dollars, including supervision and other miscellaneous costs. Costs per connection were high due to the generally small number of connections and the heavy system running costs. The auditors concluded that the majority of the administrators do understand and support the policy, and that the majority of people are willing and forthcoming to pay.

There was a problem of input allocation as the availability of spare parts lacked near the water users’ communities. Auditors reported that DAS staff arranged intensive training and education actions before, during and after the construction of water supply facilities. Examples of other findings were inoperative databases of dispersed water points, and a lack of hardware and capable staff. The auditors gave clear recommendations how to tackle some of these resource problems. According to the auditors, the costs of the management should, in principle, be borne by the water users through a tariff system. The tariffs should gradually increase from a low level initially, covering the costs of operation and maintenance until the tariffs include recovery of all costs.

The auditors determined the price formation and unit cost of rural water points (costs of outputs). The auditors gave the following recommendation: “prices can become more economic if the tenders are on certain scale and geographical concentration, lowering the mobilisation costs and a competitive local/regional market can probably bring the price down on this lower level.” They observed that the provincial water managers were not very concerned about the water prices. They determined opportunities for cost savings per unit by: 1) lowering variations in quotations for the gravel pack and the closing of the borehole; 2) lowering investments costs of drilling machines; 3) lowering mobilisation costs, and; 3) replacement of afridev pumps with rope pumps.

In the five-year plan 2000-2005 of DNA an overall of 830 water points per year were planned. In 2005, 1250 water points were planned by all the DAS’s together while only a number of 800 were reported having been realised, 30 % less then planned for. The auditors made a distinction between the water points directly coordinated by DAS and the ones implemented by the NGO sector.
The auditors showed the number and percentage of existing and non-functioning rural point sources by province, and observed that there is an improvement in the ratio of non-functioning water points in the last five years from 35% to 30%. They wanted to know if this is due to the government strategy i.e. the demand driven approach. They could not confirm if there was an increase in coverage by number of planned water sources due to a lack of data, but estimated that production was 30% less than the planned outputs. Unfortunately, no cause of this lack of production was given.

It was observed that the staff situation and composition at the provincial level ‘improved’ in the last five years. As for time management, the auditors looked at behavioural aspects. For example it was observed that most DARs took a relaxed attitude toward contractors who did not meet deadlines. The finance for future output was secured. However, annual planning was often not realistic due to the multitude of donors per province. Unpredictable funds available and disbursement was considered as a major problem in the planning and execution of the water projects. The auditors reasoned that the main constraint will probably lie in the manpower required for contracting. Especially technical manpower was limited in light of the planned outputs.

### 5.5.4 Effectiveness

Coverage in the rural water sector was compared with the criteria as determined by the MDGs. Will the norm of 64% coverage in 2015 be met? The auditors looked at how many people were served with potable water within 500 meters distance, and at observable trends. They calculated the coverage figure on the basis of a fixed number per connection used: 500 people per stand-post. In 2005 AdM again carried out surveys to establish the numbers of people benefiting from piped supply, unfortunately the results were not attained during the audit.

#### Water supply coverage percentages in eleven cities of Mozambique:

<table>
<thead>
<tr>
<th>City</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maputo/Matola</td>
<td>33</td>
<td>37</td>
<td>38</td>
<td>37</td>
<td>No increase</td>
</tr>
<tr>
<td>Beira/Dondo</td>
<td>22</td>
<td>23</td>
<td>21</td>
<td>23</td>
<td>No increase</td>
</tr>
<tr>
<td>Quelimane</td>
<td>9</td>
<td>9</td>
<td>8</td>
<td>10</td>
<td>No increase</td>
</tr>
<tr>
<td>Nampula</td>
<td>19</td>
<td>20</td>
<td>17</td>
<td>17</td>
<td>No increase</td>
</tr>
<tr>
<td>Pemba</td>
<td>54</td>
<td>66</td>
<td>49</td>
<td>44</td>
<td>Steady decrease</td>
</tr>
<tr>
<td>Xai-Xai</td>
<td>72</td>
<td>29</td>
<td>28</td>
<td></td>
<td>Dramatic decrease due to flash floods</td>
</tr>
<tr>
<td>Chokwé</td>
<td>30</td>
<td>50</td>
<td>53</td>
<td></td>
<td>Increase due to EU-project 2003</td>
</tr>
<tr>
<td>Inhambane</td>
<td>14</td>
<td>36</td>
<td>40</td>
<td></td>
<td>Increase?</td>
</tr>
<tr>
<td>Maxixe</td>
<td>37</td>
<td>8</td>
<td>8</td>
<td></td>
<td>Decrease?</td>
</tr>
<tr>
<td>Chimoio</td>
<td>5</td>
<td>8</td>
<td></td>
<td></td>
<td>Insignificant</td>
</tr>
<tr>
<td>Tete</td>
<td>38</td>
<td>82</td>
<td></td>
<td></td>
<td>Increase due to continuous Danida-support</td>
</tr>
</tbody>
</table>
Although much information is lacking, this table showed if coverage of water supply services improved or decreased. According to FIPAG external factors – flash floods of 2002 – were responsible for a general lack of outcomes.

According to the correspondence between DNA and Ministry of Finance, the norm of 64% coverage in the year 2015 would be reached. Also the donor community in the aide memoir of May 2005 accepted the figure as reality. However, the auditors concluded that data from the field denied this picture, due to the fact that realistic coverage norm/water points were inappropriate. According to the auditors there was sufficient evidence from the field that showed that the existing norm 500m/500 people/water point was far from reality. The National norm was purely theoretical. The auditors suggested a more realistic national norm of 200-250 persons serving one water point.

5.5.5 Cost effectiveness

To enhance cost-effectiveness, the auditors advised that districts should consult with DPOPH-DAS to determine the planning norm in coverage per water point. Districts should determine what they want to spend on capita costs per water point within an annual district budget. According to the auditors this would lead to more economic allocations, and would have the following consequences: 1) more people will get safe water within shorter time; 2) the coverage will increase faster; 3) the planning will be done with real figures and real outcomes; and 4) the O&M costs per head will be less and will enhance the sustainability

5.5.6 Institutional factors

DNA – sector coordination

DNA has a coordination responsibility of the sector, including policy and strategy preparation and high-level assistance to stakeholders in need. DNA is working in all sub-sectors of the water sector with studies, investments, planning and control. According to the auditors, DNA often operated in a very centralistic way, with little involvement of stakeholders in the sub-sector or at the administrative level.

Furthermore, the auditors found that DNA relied heavily on information supplied by stakeholders at local and provincial levels. There was no protocol to arrange for regular reporting from those levels to DNA. As a result DNA had no good overview of the actual water supply situation in the country. This was aggravated by the fact that at local level there was no capacity in terms of resources – manpower, equipment and skills – for physical monitoring of the status of water points and other water facilities.

Decentralization is part of the government strategy. According to the auditors, in Mozambique, the benefits of user participation and of decision-making at decentralized levels
outweigh the efforts and costs to be paid during the process. The auditors made some of the following recommendations to DNA: 1) implementation and regulation should be passed on to other bodies e.g. provinces, municipalities, FIPAG and CRA respectively; 2) monitoring of the performance of the sector and consequently fund-raising and reporting should also remain with DNA; 3) DNA should be on the forefront of stimulating and guiding technology developments.

CRA – urban water supply
The CRA works on the coordination of the sector, and functions as the regulatory body. Its mandate is limited to the urban water supply sub-sector. The auditors recommended that the working sphere or jurisdiction of CRA should be enlarged to encompass all cities as well as all municipalities and towns where small piped systems are supplying water. This would enhance transparency, accountability and comparability of all urban water services providers throughout the country.

According to the auditors, CRA should not only regulate by means of tariff approval but should also carry out benchmarking studies on a number of agreed parameters like coverage, reliability, supply hours, collection ratio, stand-post management, complaints handling, and customer care. For this purpose the CRA should: 1) prepare definitions of the indicators; 2) carry out workshops and trainings for the water service providers and; 3) prepare annual business plans and reports.

FIPAG – market operations
According to the auditors FIPAG was in the process of changing from a reactive asset holder into a proactive market operating organization. They observed that FIPAG had the capacity to manage water supply assets and infrastructure in five cities. New investment projects might be overstretching the organisation’s capacities. A long-term strategy should be developed by FIPAG as well as the investment and staffing development plans. Urbanisation will continue to increase in Mozambique and small towns would grow into bigger ones. The auditors feel that it might be worthwhile to study the feasibility and possibility of organizing FIPAG on a provincial level in the future, where it would take care of all the urban-type water supply and perhaps even sanitation infrastructure.

DPOPHs
Being the provincial body for infrastructural planning, management and implementation of projects, DPOPH has already many years of experience with tendering of works and projects. With the recent shift from budgeting at provincial level towards district level, districts are now allowed to plan and tender for works in their areas. However, the capacity building efforts for the districts did not keep up with the pace of decentralization. The auditors were of the opinion that more powers should be delegated from the central level to the DPOPHs in terms of controlling large programmes, monitoring and regulation.
5.5.7 Equity, Quality control and Sustainability

The auditors addressed briefly the issue of in/equity by giving numbers of point sources over the provinces. Some provinces had excess in coverage of rural population with adequate water supply facilities. However, the auditors did not make an attempt to link (in-) equities with allocation policies or other elements that could be attributed to the government.

The auditors concluded that sudden increases of production to 200-300 water points per year would be difficult to supervise for DAS and would lead to quality problems, which the auditors already observed during field visits. In Sofala, the water point (borehole) stopped giving water two days after delivery. In Zambezi, they noted that a shallow well did not have water due to the drought situation at that time. Deepening of the well was not possible due to the risk of salt-water intrusion.

The auditors concluded that sudden increases of production to 200-300 water points per year would be difficult to supervise for DAS and would lead to quality problems, which the auditors already observed during field visits. In Sofala, the water point (borehole) stopped giving water two days after delivery. In Zambezi, they noted that a shallow well did not have water due to the drought situation at that time. Deepening of the well was not possible due to the risk of salt-water intrusion.

The most important element in the national strategy was the principle of procurement based on a demand driven approach. This meant that supply is based on: 1) initiatives from water users by expressing their interest in addressing their water problem, 2) that users become the actual owner of the water supply system and; 3) that users manage the system themselves. The auditors based their finding on field visits and aimed to answer the following questions: 1) are the water users organised to manage their water facility? Is there a committee and have they appointed a care taker(s); 2) do they collect water from the users for regular operational and maintenance, and 3) do they address the maintenance problems when they occur? The auditors expected that the demand responsive approach will result in a longer lifetime of rural water points then was known in the old system. However, they could not give an ultimate answer on this issue and pointed out that conclusions can be drawn once facts are stored in the database of the rural water points. This was a weak point according to the auditors. The auditors were looking at various rapports, such as the ASNANI approach to sustainability, which baseline studies made it possible to select areas where there is the most chance of sustainability in respect to the demand responsive approach.

5.6 Review: a critical note

As we have seen in chapter 3, VFM audits clearly deviate from financial audits by looking further than compliance. However, in this audit there appears to be a strong emphasis on compliance: the Tor states that they focused on objectives, problems, and deviations. This is not a violation of VFM in terms of standards but it does raise some questions. First of all, the auditors could have given more emphasis on a specific VFM approach; it was not clear on which part of the value chain or which of the three Es they were focussing. I can conclude that the auditors made recommendations partly based on a problem-oriented approach. The auditors considered bottlenecks that could hamper attainment of the sectoral objectives. However, they did not assess the attainment of results nor did they clearly link operational elements to the third E: ‘effectiveness’. It is often not clear from the audit what the
relevance of information is in the light of the audit objectives. It seems that the auditors focused on systems and processes, and to a large extent neglected the third E. The auditors made no attempt to isolate or determine the effects of external factors from government-actions attribution to coverage. Furthermore, ‘cost-effectiveness’ was mentioned briefly, but was not used as a method of analysis, and was not really part of the audit. Outcomes measurement stranded as coverage indicators lacked precision. But no attempt was made to examine the intermediate and ultimate results by the auditors themselves. Elements of quality, equity, and sustainability were taken into account, although in brief. One can conclude that although an analysis of effectiveness is a priority for a VFM assessment, the auditors nevertheless neglected it: the performance indicators could not be verified nor fully completed by the auditors in the time given for the audit. This means that the auditors failed to include the most essential elements of a VFM audit.

Another important question relates to the scope of examination. The whole sector was analysed; a very comprehensive scope. Many actors and stakeholders were involved, including NGOs and the private sector. Did the auditors examine and report on all the deficiencies that might have existed in the sector or did they report only those deficiencies that they came across? The former case is justified but is extremely difficult as apparent in this report. The auditors should have recognized that they cannot examine everything in all cases. They could have specified their scope; this could have made their findings more scientific. The auditors assessed a range of elements – which they called ‘sub processes’ – which were not clearly linked to the three Es. The sub-processes could have been structured as follows:

<table>
<thead>
<tr>
<th>Economy</th>
<th>Efficiency</th>
<th>Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Funding</td>
<td>- Choice of projects and activities</td>
<td>- Execution</td>
</tr>
<tr>
<td></td>
<td>- Procurement</td>
<td>- Quality Control</td>
</tr>
<tr>
<td></td>
<td>- Production</td>
<td></td>
</tr>
</tbody>
</table>

More emphasis on criteria, methodology, sources of evidence and areas for recommendation could have improved the audit to a large extend. Considering issues such as, how to design recommendations, might have been useful as well, as governments need specific and action-orientated recommendations – focusing on the results and how these can be improved.

A VFM assessment can be regarded successful when its recommendations lead to, for example: 1) financial savings; 2) improvement in service provided; 3) improved financial control and forecasting and; 4) better planning and use of resources. Although I do not consider if the recommendations have been useful its general nature can be determined. The recommendations that were given by the auditors were not focusing on improving the three Es directly. They were formulated in a general way, not considering the definitions of the three Es.
How far should the auditors have gone in determining the causes of a lack of VFM? This raises the issue of attribution: 1) no clear linkage between input-output-outcome is showed; 2) impact is left out, without argument; 3) goals are based on government objectives, but the auditor’s methodology does not solely focus on government operations. The auditors restricted themselves to general and broad suggestions and got into many specifics. This had mainly to do with a lack of time and practical constraints.

On the other hand, the auditors acted wisely as they did not try to do more than was realistic. The search for locating causes could have been an endless and infinite process. It is common practice that auditors write a long audit report that comments on various aspects of the sector. Unfortunately, the auditors did not pursue certain matters enough to be able to make suitable direct recommendations to management. It is interesting to note that INTOSAI Auditing Standards endorse the position that VFM auditors need not express an over-all opinion. Para 157 of the INTOSAI Auditing Standards say:

“The auditor is not normally expected to provide an overall opinion on the achievement of economy, efficiency and effectiveness by an audited entity in the same way as the opinion on financial statements. Where the nature of the audit allows this to be done in relation to specific areas of an entity’s activities, the auditor should provide a report, which describes the circumstances and arrives at a specific conclusion rather than a standardized statement. Where the audit is confined to consideration of whether sufficient controls exist to secure economy, efficiency or effectiveness, the auditor may provide a more general opinion”.

Auditors have the freedom to choose the subjects or approach that they find feasible. This particular audit had a very wide scope and left space for judgement and interpretation but gave an interesting overview and useful recommendation regarding an array of issues. Nevertheless, it is highly questionable if the rapport directly contributed to the improvement of management processes and provided information on the accountability of the public managers. What were the lessons learned? What were the key issues that government departments and agencies could learn from? Better scoping, choosing a certain approach based on clearly defined Es could have changed the audit completely. Scoping needs consideration early in the design and planning stage to ensure the accomplishment of the audit objectives. The auditors could have improved the assessment greatly if they had undertaken a detailed preliminary survey before formulating the actual audit plan, which could have guided the audit process.
6. Conclusions

The main question of this research is: To what extent is ‘Value for Money’ a useful instrument to evaluate GBS in light of public service delivery? In answering this question, this thesis brought out the diversity and complexity of VFM. It has not been easy to present the ideas and theories underlying VFM in a succinct and transparent fashion. This may be due to my lack of experience with the subject. However, I suspect that it also reflects the complexity of the concept. VFM is not as straightforward as it appears; there is much confusion with reference to this concept, and its capabilities are often unclear. I hope that this thesis offers some help in navigating the conceptual and analytic jungle of VFM measurement, and that it contributes to the development of a VFM approach on GBS.

The main reasons for an interest in a VFM approach on GBS relates to accountability: to reassure donors, in particular taxpayers, that their money is being spent wisely, with regard to the principles of economy, efficiency, and effectiveness. This thesis is a profusion of partial theories that together form a first step to a VFM approach on GBS, while illustrating the difficulty of providing definitive measures that capture the whole value chain in the form of a cost-effectiveness measure. The conceptual framework, in its abstract form, is straightforward: it represents the ratio of some measure of valued service delivery system outputs to the associated expenditure, and only few would argue that its pursuit is not a worthy goal. However, in practice, the measurement of VFM is challenging and gives rise to some important methodological questions. Efforts to measure VFM have been piecemeal and partial. Performance indicators based on the three Es are both helpful and suggestive, but tell only a part of the VFM story, and can lead to inappropriate responses and adverse consequences if not used with care. Technical analytic efforts have to be directed at developing a more comprehensive VFM theory to complement the approaches and methods shown in this research.

VFM analyses offer an understanding of how resources (inputs) are successfully transformed into valued service delivery system outputs. But there are several stages to that transformation, each of which can be measured with different degrees of accuracy and ease. The concept is straightforward if causal relations are strong: the outputs are known to lead to eventual outcomes and there is known to be little variation, and heterogeneity. Inputs represent the ‘money’ component of the VFM analysis, and can be readily identified if the units are discrete organisations. However, they are extremely difficult to identify if the unit of analysis is larger. In case of GBS auditors have to take into account inputs and activities of different donors, several government departments and programmes: this makes it difficult to estimate which resources and activities are devoted to producing the relevant service outputs that contribute to ultimate results (value). One can state that VFM auditors will not be able to separate the value of Dutch taxpayers’ money (GBS) from that of other donors.

In undertaking a VFM audit of GBS, the essential first step is to decide on the nature of the entity under scrutiny, and the context in which it operates. As a result the auditor would be able to
zoom in on either the first or the last stage of the service value chain. Are objectives well defined and susceptible for quantitative measurement? Are reliable data available? Which standards should be utilised to measure the three Es, and what approach would be most suitable? A fundamental decision is whether to seek out a comprehensive measure of the cost-effectiveness of GBS. VFM auditor of GBS should consider two main stages: 1) government operations – through an assessment of economy and efficiency – and 2) the service level results – effectiveness. At one extreme, auditors might evaluate the entire modality. At the other extreme, it might be more appropriate to zoom in on an area of interest through a certain VFM approach. VFM auditors could try to determine unit costs of the entire entity, or rely on partial indicators of some aspects of VFM. In the latter case, some aspects of the transformation from resources to valued results are omitted. However, it is important that, no matter which VFM approach is chosen, an effectiveness analysis is considered as part of a VFM audit.

Although no single approach or perspective seems best for addressing the variety of questions and aspects that might be part of a VFM audit of GBS, some methods do have a comparative advantage over others in analyzing the three Es. In theory, the earlier parts of the value chain – that consider elements of economy and efficiency – are often easier to measure than the results part of the chain: effectiveness. The problem-oriented perspective appears to be very appropriate to assess key bottlenecks in government operations, in particular as regards to: 1) bad acquisition and usage of inputs; 2) financial policies/management; 3) information systems and; 4) operational controls. By analysing economy and efficiency, auditors can prevent or detect frauds, and errors in the operations, and conclude whether expenditures are justified against objectives to be achieved. However, a VFM auditor of government operations in light of GBS is likely to run into serious difficulties as:

**Key problems:**

- GBS is a complicated modality with multiple active components.
- GBS does not provide a suitable mechanistic ‘service production process’.
- Indicators often lack sufficient quality data.
- Auditors have to work in a sensitive political setting.
- VFM is difficult to harmonize with ‘ownership’.
- External factors disturb the predictability of the service value chain.
- Financial flows are almost impossible to track down.
- Resources and outputs are mixed and causalities are difficult to determine.

Therefore, choosing a top-down approach might be more suitable for VFM audits of GBS. In the case of GBS a large array of causalities has to be considered which clearly can be seriously misleading. It seems impossible to track financial flows from inputs to outputs. Because data is often lacking auditors do not get sufficient insight in government operations. Auditors could encounter severe methodological challenges and lack of data in key operational domains. As a result, they are forced to rely solely on outputs rather than the eventual outcomes, and impacts on beneficiaries and society. In practice auditors often have to deal with incomplete indicators, and standards, the complexity of
attribution, and overlapping factors. Furthermore, since there are no clear standards yet, the quality of a VFM audit will depend highly on the context, and the quality of the auditors themselves. Until now, there has been a reliance on partial indicators of VFM. These can act as useful diagnostic tools, but can also give misleading signals if used carelessly. Especially since donors are mainly interested in poverty reduction, there is a need to adopt a longer time perspective when analysing the VFM of some services (although, the adoption of a longer time horizon is very difficult). I can conclude that, in the case of GBS, the best option for a VFM auditor would be to start at outputs stage of the value chain. Hence, auditors zoom in on the results. However, it is up to the auditor to decide how far he wants to move towards the beginning and end of the chain.

What are the benefits of this ends oriented approach? A VFM auditor has the advantage to focus on results by including the key outputs of government programmes. As a result, a link can be created from those outputs that are the direct result of government operations, with outcomes and impacts. Depending on the context, and the availability of data and standards, auditors could choose to move to the beginning of the value chain: to assess key areas of government operations that are strongly linked with results and potentially can increase VFM by raising economy and efficiency. Another benefit of this approach is that it allows for a quick estimation of monetary values of key outputs.

This thesis shows that when the focus is on effectiveness quantitative methods – especially regression analyses – are preferable for a VFM audit of GBS. However, quantitative methods do not provide a silver bullet methodology to measure results attained through GBS, and auditors should not undertake an audit without also involving qualitative methods. Without, cost-effectiveness information can become inoperative. The quantitative and qualitative methods complement each other in providing a more complete ‘picture’. This can be regarded as a strong asset of the VFM audit. In the end, it is the responsibility of the auditors to successfully make a balance between comprehensiveness and key elements to come up with useful findings and recommendations; a successful VFM audit of GBS dependents highly on the quality of the auditors, as the selection or formulating of standards is critical to the success.

I can conclude that, in theory, a VFM audit of GBS can provide useful benefits. GBS evaluations offer a comprehensive view of government’s activities in relation to the results attained. A VFM audit is equipped to offer the same, but in addition, can also identify serious failings in some parts of government operations, and can provide useful recommendations to enhance economy, efficiency, and effectiveness. They offer a diagnostic tool for identifying what to attribute poor performance to, and therefore what remedial action to take, and may be a useful option when there is opaque data in some areas. Although there are many challenges, embedding a VFM approach into the scrutiny and improvement of government systems would be a considerable step forward in making ODA more effective.
A VFM audit is just one tool within the available toolkits of monitoring and evaluation, but it is particularly well suited to answer important questions about whether GBS does or does not work, whether the modality makes a difference, and how cost-effective it is. The development community is moving toward a ‘results based’ approach. VFM auditors can provide crucial information that Performance Assessment Frameworks cannot provide. Moreover, a VFM audit could become an ideal tool to create accountability relationships between donors and taxpayers. For development practitioners, A VFM audit could play a key role in the drive for better evidence on government performance and development effectiveness. Over time, the concept could contribute to the development of cost systems for developing countries, which in the long term could prove to be very valuable for policymakers.
Bibliography


NAO. (2008, February 8). Department for International Development - Providing budget support to developing countries.

NAO. (sd). Getting value for money from procurement - How auditors can help.


