

UNIVERSITY OF THE WESTERN CAPE

**POVERTY REDUCTION THROUGH SUSTAINABLE DEVELOPMENT: AN
ASSESSMENT OF WORLD BANK ENERGY STRATEGIES IN THE ENERGY
SECTOR IN UGANDA**

BY

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DECLARATION

I **HILDA THOPACU** declare that **‘Poverty reduction through sustainable development: an assessment of World Bank energy strategies in the energy sector in Uganda’** is my own work, that it has not been submitted before for any degree or examination in any other University, and that all the sources I have used or quoted have been indicated and acknowledged as complete references.

HILDA THOPACU

DATE

PROF. MS WANDRAG

SUPERVISOR

DATE.....

ACRONYMS

CDF	Comprehensive Development Framework
CDM	Clean Development Mechanism
DTC	Developing and Transitional Countries
ERA	Rural Electricity Agency
GEF	Global Environment Facility
GWh	Gigawatt Hour
HDR	Human Development Report
HIPC	Highly Indebted Poor Countries
IBRD	International Bank for Reconstruction Development
ICT	Information and Communication Technologies
IFC	International Finance Corporation
IMF	International Monetary Fund
IDA	International Development Association
LDC	Least Developed Countries
MDC	Most Developed Countries
MDG	Millennium Development Goals
MEMD	Ministry of Energy and Mineral Development
MIGA	Multi-Lateral Investment Guarantee Agency
MW	Mega Watts
NDP	National Development Plan
NEMA	National Environmental Management Authority
NRM	National Resistance Movement
OECD	Organisation for Economic Co-operation and Development
PCF	Prototype Carbon Fund

PEAP	Poverty Eradication Action Plan
PMA	Plan for the Modernisation of Agriculture
PRG	Partial Risk Guarantees
PRSP	Poverty Reduction Strategy Papers
REB	Rural Electricity Board
REF	Rural Electricity Fund
SAP	Structural Adjustment Program
UBOS	Uganda National Bureau of Standard
UEB	Uganda Electricity Board
UEDCL	Uganda Electricity Distribution Company Limited
UEGCL	Uganda Electricity Generation Company Limited
UIA	Uganda Investment Authority
UETCL	Uganda Electricity Transmission Company Limited
UNDP	United Nations Development Programme
WBG	World Bank Group
WDR	World Development Report
WENRECO	West Nile Rural Electrification Company
KWh	Kilo Watt per Hour

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CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND

Poverty is one of the key factors that cause under development in almost all developing countries manifesting itself in different dimensions, magnitude and intensity depending on the community, region or nation under consideration. Since it is multidimensional in nature, the inability to eradicate poverty sometimes triggers other social vices such as malnutrition and diseases, even to a point of causing death.¹ Efforts to reduce poverty would therefore require an understanding of its nature and careful determination of the programmes that can be efficiently implemented in that regard.² Since 1987, the government of Uganda (‘the government’) has embarked on development programs and has been able to achieve broad based macro-economic growth but this has not translated into poverty reduction.³ Civil wars have also contributed to poverty in some parts of the country. Areas such as the Luwero triangle in central Uganda, the eastern and northern regions have all suffered the wrath of civil wars, but by 1993 northern Uganda was considered to be the poorest region in the country.⁴

In order to alleviate poverty, the government formulated the Poverty Eradication Action Plan (PEAP) to guide provisions of poverty reduction programmes. With the support of multilateral institutions and donor partners, various programs were initiated towards achieving the goal of poverty reduction in the country: In 2000, the government initiated the Plan for the Modernisation of Agriculture (PMA) with a vision to eradicate poverty through a profitable, competitive, sustainable and dynamic agricultural and agro-industrial sector and its implementation began in 2001.⁵ Implementing the plan would contribute towards the fulfilment of two of the PEAP goals of increasing the ability of the poor to raise their income

¹ Africa Institute of South Africa, Francis N (ed) *The Millennium Development Goals: Achievements and Prospects of Meeting the Targets in Africa* (2008)12 (hereafter Africa Institute of South Africa (2008)).

² Francis NO, Jonathan JAOO, & Asaf A *Determinants of Regional Poverty in Uganda* (2002) (hereafter Francis NO, Jonathan JAOO, & Asaf A (2002)).

³ Ministry of finance, planning & economic development, *Millennium Development Goals Report for Uganda*(2010)7 (hereafter Ministry of finance, planning & economic development (2010)).

⁴ Francis N.O, Jonathan JAOO, & Asaf A (2002)4.

⁵ Ministry of Foreign Affairs of Denmark, *A joint evaluation of Uganda’s Plan for the Modernisation of Agriculture* (2005)3 (hereafter Ministry of foreign affairs Denmark (2005)).

and ensuring rapid and sustainable growth and structural transformation.⁶ In addition to this program, in 2000 Uganda received debt relief of US\$ two billion from the Highly Indebted Poor Countries (HIPC) initiative of the World Bank (the Bank) and the International Monetary Fund (IMF) which would therefore make it possible for the government to utilise funds (otherwise meant to service debts) for other purposes. Despite this debt relief, poverty levels did not reduce as would have been expected. For example, in 1999/2000 the population living below the poverty line was at 33.8 per cent and it increased to 38.8 per cent in 2002/2003.⁷ Considering the period from 2000-2003, it may be unjustified to assess the impact of the debt relief on poverty levels because of the short time frame from the year 2000 baseline which was insufficient to allow the realisation of the financial impact of the relief. That notwithstanding, the poverty levels did not significantly reduce even after ten years of implementation of the PEAP and northern Uganda still revelled in poverty at an increasing rate of 26.1 per cent in 1992/93 to 29.6 percent in 2002/03.⁸ With this trend of poverty levels, it would therefore be necessary for the government to align poverty reduction programmes in such a way that would bridge the regional socio-economic inequalities towards overall development of the country. In that regard, specific efforts were taken to address the horizontal inequalities in order to reduce conflicts and increase social cohesion through programmes such as the northern Uganda social action fund and the peace recovery and development plan.⁹

Coupled with the high levels of poverty was the low rate of access to electricity for economic production, despite the great energy potential available from renewable energy resources. Recognising the significant role energy plays in poverty reduction, the government considered it necessary to address the challenges facing the sector, and requested the Bank's assistance to determine the most appropriate strategies for its reform.

Considering that it is the Bank's mission to reduce global poverty and cognisant of the fact that development of energy resources plays a great role in that regard, its assessment and strategy recommendations would consequently determine the strength of the sector in reducing poverty. In that regard, in 1996 the Bank recommended reform of the legislative and institutional framework of the sector so as to allow managerial and efficiency gains through

⁶ Ministry of foreign affairs of Denmark (2005)3.

⁷ Overseas Development Institute *Uganda-Case Study for the Millennium Development Goals Gap Task Force Report* (2010)2 (hereafter Overseas Development Institute (2010)).

⁸ Overseas Development Institute (2010)2.

⁹ Ministry of finance, planning & economic development (2010)9.

private sector participation so as to create a financially viable sector that would steer economic growth and development in the country.¹⁰ While offering its assistance the Bank's strategy is to support development programmes that will encourage private sector participation, directly benefit the poor, protect the environment, good governance and lead to macro-economic stability.¹¹ It is therefore the responsibility of the member state to identify suitable programmes that would serve the needs and interests of the economy and that of the Bank.

Any measures adopted to develop the power sector would also need to contribute towards the achievement of the Millennium Development Goal (MDG) targets¹² through measures that will tackle poverty from all its multidimensional angles. It deserves to be mentioned that in the 1988 human development report, Uganda ranked at 159 out of 175 countries which categorised it as a country with a low level of human development.¹³ By 2001 only 5 per cent of the 22.6 million people and less than 1 per cent of the rural population had access to grid supplied electricity¹⁴ which meant that for the country to sustain and meet the MDG goals of poverty reduction, measures for development of energy resources would therefore need to ensure access to power by the whole population.

The government carried out legal and institutional reforms so as to promote private sector participation in all sections of the sector. The reforms have caused an increase in power production and consumption but at a low access rate of 12 per cent of the total population and only 4 per cent of the rural population, unable to create a significant impact on conditions of living. There is still high regional income inequality, and according to the human development index ranking report 2010 Uganda lies at 143 out of 169 countries which is better than its position in the 1988 report but not significant enough to shift it away from the category of countries with low human development.¹⁵

¹⁰ World Bank *Uganda Energy Sector Assessment Report* No.193 (1996)22 (hereafter World Bank (1996)).

¹¹ World Bank *Poverty Reduction, Sustainability and Selectivity* (2001)1 (hereafter World Bank (2001)).

¹² World Bank & United Nations Development Program *Energy services for the Millennium Development Goals* (2005)7. At the United Nations Millennium Summit in September 2000, world leaders adopted the Millennium Declaration from which the MDGs were later extracted. The MDGs provide concrete, time-bound objectives for dramatically reducing extreme poverty in its many dimensions by 2015-income poverty, hunger, disease, exclusion, lack of infrastructure and shelter-while promoting gender equality, education, health, and environmental sustainability available at

http://www.unmillenniumproject.org/documents/MP_Energy_Low_Res.pdf (accessed 21 January 2011).

¹³ World Bank *Poverty Assessment Report* available at

<http://www.finance.go.ug/docs/PPA1%20National%20Report.pdf> (accessed 15 February 2011).

¹⁴ World Bank, *Uganda Energy for Rural Transformation Project* report No.PID9031(2001)2.

¹⁵ United Nation Development Programme Human Development Indices (2010) available at <http://hdr.undp.org/en/statistics/> (accessed 28 February 2011).

1.2 Problem statement

Access to modern energy sources in Uganda is limited to a small section of the population consequently restricting economic productivity. The Bank supports the need for provision of sustainable and affordable energy to every person including the poor to ensure an end to poverty. This is crucial in light of the international community's commitment to eradicate extreme poverty under the MDGs. This research examines whether the Bank strategies for provision of sustainable and affordable energy and its policy recommendations are able to achieve that goal.

1.3 Research question

Have the Bank policy and strategy recommendations for the power sector in the *Uganda Energy Assessment Report 1996* ensured provision of sustainable and affordable energy sources by all people, including the poor in Uganda?

1.4 Research objectives

The main objective is to assess the impact of the Bank's strategies and policy recommendations for provision of sustainable and affordable energy services to promote poverty reduction.

The specific objectives are as follows:

- a) To explain and analyse the mandate of the Bank to reduce poverty in its member countries;
- b) To explain and analyse the Bank's strategies for poverty reduction through development of energy resources;
- c) To analyse the impact of policy and strategy recommendations for reform of the power subsector by the Bank under the *Uganda Energy Assessment Report 1996* and determine its impact on poverty reduction in the country;
- d) To critically analyse the legal framework for energy production and distribution in Uganda; and

- e) To make recommendations for effective utilisation of energy resources for poverty reduction in Uganda.

1.5 Hypothesis

This thesis is based on the hypothesis that the Bank policy and strategy recommendations for the power sector are intended solely to promote private investments and profit generation in total disregard of the Bank's mission to reduce poverty within its member countries. The private investments in the sector limit Uganda's ability to extensively exploit other energy resources within the country.

1.6 Significance of the study

Access to sustainable and affordable energy services by both the urban and rural dwellers in an economy contributes to exploitation of productive resources thereby improving the incomes and livelihood of the people. This research is therefore important since it analyses the impact and examines the appropriateness of the Bank's strategies and policy recommendations on the power sector towards poverty reduction in Uganda. It is hoped that this study will provide key recommendations suitable to guide policy makers especially in developing countries in negotiating, formulating and advocating for appropriate policies for the power sector in their effort to achieve the MDGs. A critical analysis of literature herein will provide a comprehensive source of information that reveals the level of the Bank's and the government's commitment to end poverty in the country.

1.7 Methodology

The study is based on a literature review of both primary and secondary materials. The primary resources include the international instruments, national legislations, regulations and policies on the power subsector. Secondary sources used include textbooks, journal articles, and reports to support the analysis. Considerable volume of literature has been derived from the internet. It has been a challenge to access some key documents due to the politically intricate nature of the sector therefore, in specific instances reference is made to news paper articles to supplement the arguments put forward.

1.8 Scope of the study

The central focus of the study is based on the Bank's strategies and policies for provision of sustainable and affordable energy in ensuring poverty reduction. Specifically, a critical analysis is done on the implementation of the Bank's energy for poverty reduction strategies and policy recommendations in the *Uganda Energy Sector Assessment Report 1996*, and how it has promoted the establishment of a financially viable power sector. Due to the collaboration between the International Financial Corporation (the IFC) and the Bank, specific discussion also evolves on the role of the IFC in supplementing the role of the Bank in poverty reduction through energy resources in Uganda. The discussion also includes specific Bank supported power projects to highlight their impact on accessibility towards poverty reduction. Key provisions of the Electricity Act Cap 145 (the Act) is also analysed especially in relation to their impact on efficiency in the sector.

1.9 Structure of the study

The study consists of four chapters:

1.9.1 Chapter one

This chapter provides the general framework of the study, beginning with an introduction that gives an overview of the study, followed by the significance, objectives, methodology, and scope of the research, the problem statement, and the hypothesis of the study.

1.9.2 Chapter two

This chapter explains and analyses the mandate of the Bank and its strategy on energy resources for poverty reduction. This is done by the examining its governing structure and establishing its impact on poverty reduction policy and strategy formulation, and analysing its strategies for poverty reduction through energy resources.

1.9.3 Chapter three

This chapter analyses how the government of Uganda has implemented the Bank's policies and strategies for the power sector within the context of *Uganda Energy Sector Assessment Report 1996*. Specifically, it reveals the impact of private sector participation in a newly reformed power market.

1.9.4 Chapter 4:

This chapter contains the conclusion and recommendations.

CHAPTER TWO

ANALYSIS OF THE MANDATE OF THE WORLD BANK, SUSTAINABLE DEVELOPMENT AND STRATEGIES FOR POVERTY REDUCTION THROUGH ENERGY RESOURCES

The overall objective of this chapter is to explain and analyse the mandate of the Bank and its strategy on energy resources for poverty reduction. Specifically, it will examine the governance structure against the historical background and mandate of the Bank, and establish whether it permits effective formulation and implementation of poverty reduction policies and strategies in developing countries; as well as explain and analyse the Bank's strategies for development of energy resources to determine their effectiveness in reducing poverty through sustainable development.

2.1 Mandate of the bank

The Bank is made up of two unique development institutions owned by 187 member countries: the International Bank for Reconstruction and Development (IBRD) and the International Development Association (IDA). Conceived during World War II at Bretton Woods, New Hampshire, the Bank was originally set up as the IBRD to help rebuild Europe after the war.¹⁶ The Bank itself has grown bigger and far more complex¹⁷ and is part of a group of five closely associated development institutions, namely: the IBRD, IFC, the IDA, the International Centre for Settlement of Investment Disputes (ICSID), and the Multi-Lateral Investment Guarantee Agency (MIGA)¹⁸ and collectively referred to as the World Bank Group (WBG).

The IBRD established in 1944, owned and operated for the benefit of its 187 member countries with the mandate:¹⁹

¹⁶World Bank 'History of the World Bank' available at <http://web.worldbank.org/WBSITE/EXTERNAL/EXTABOUTUS/EXTARCHIVES/0,,contentMDK:20053333~menuPK:63762~pagePK:36726~piPK:36092~theSitePK:29506,00.html> (accessed 16 December 2010).

¹⁷ World Bank 'History of the World Bank' available at <http://web.worldbank.org/WBSITE/EXTERNAL/EXTABOUTUS/EXTARCHIVES/0,,contentMDK:20053333~menuPK:63762~pagePK:36726~piPK:36092~theSitePK:29506,00.html> (accessed 16 December 2010).

¹⁸ World Bank 'History of the World Bank' available at <http://web.worldbank.org/WBSITE/EXTERNAL/EXTABOUTUS/EXTARCHIVES/0,,contentMDK:20053333~menuPK:63762~pagePK:36726~piPK:36092~theSitePK:29506,00.html> (accessed 16 December 2010).

¹⁹ Art. 1 Articles of Agreement of the IBRD (as amended effective 16 February 1989) available at <http://siteresources.worldbank.org/EXTABOUTUS/Resources/ibrd-articlesofagreement.pdf> (accessed 10 October 2010) (hereafter Articles of Agreement of the IBRD).

- (i) To encourage ‘the development of productive facilities and resources in less developed countries;’
- (ii) To supplement private investment by ‘providing...finance for productive purposes’ when private capital is not available on reasonable terms;
- (iii) To promote international trade and balance of payments equilibrium by encouraging international investment, and thereby to assist in ‘raising productivity, the standards of living and the conditions of labour’ in member countries;
- (iv) To arrange loans for the most ‘useful and urgent projects;’ and
- (v) To conduct its operations ‘with due regard to the effect of international investment on business conditions in the territories of members.’

The principle mandate is therefore to assist in reconstruction and development of its member countries by facilitating and financing productive purposes, through loans and guarantees mainly for the financing of specific projects.²⁰

The IDA was created in 1960 with the purpose to promote economic development, increase productivity and thus raise standards of living in low income member states and provides its assistance on terms more favourable to the balance of payment needs of its members which supplements the aims of the IBRD.²¹

Each of these institutions plays a different but collaborative role towards the promotion of economic development and growth of their member states through low-interest loans, interest-free credits and grants for purposes that include investments in education, health, infrastructure, agriculture, environmental and natural resource management, as well as financial and private sector development with the aim to reduce poverty and so, they do not charge any profits for their financial support.²² The IBRD focuses on middle-income and creditworthy poorer countries, while the IDA operates in the world's poorest member countries.

²⁰Shihata, F.I.I *The World Bank in a Changing World* (1995)132.

²¹ Art.1 Articles of Agreement of the IDA available at <http://siteresources.worldbank.org/IDA/Resources/ida-articlesofagreement.pdf> (accessed 20 January 2011).

²² World Bank ‘Working for a world free of poverty’ available at <http://web.worldbank.org/WBSITE/EXTERNAL/EXTABOUTUS/0,,contentMDK:20103838~menuPK:1697023~pagePK:51123644~piPK:329829~theSitePK:29708,00.html> (accessed 16 December 2010).

2.2. The governing structure of the Bank

The Bank has a governing structure that consists of a board of governors, board of executive directors, a President and such other officers and staff to perform such duties as the Bank may determine.²³ The organisational structure is set up in a hierarchical manner, with the top most position being held by the board of governors as the overall decision maker followed by the board of executive directors and then the administrative staff.

2.2.1. Composition and exercise of powers

2.2.1.1 Board of governors

The Bank's member states constitute its shareholders who exercise their powers through their ministers of finance or development ministers representing them in the board of governors.²⁴ The board holds the top most position in the Bank with the right to exercise all its powers and provide policy oversight and guidelines needed to regulate the operations of the Bank. Therefore, by the nature of their responsibility they meet only once a year during the joint annual meetings of the boards of governors of the WBG and the IMF²⁵ to assess the progress of ongoing activities, share ideas, and generate solutions on cross cutting issues affecting these institutions.

Although the board of governors has the overall power in the Bank, it can delegate the exercise some powers to the board of executive directors, where it is considered that the directors can effectively perform such duties in their day to day activities on behalf of the Bank.²⁶ However, the law has reserved exclusive jurisdiction to the board of governors to handle increase or decrease of the capital stock, suspension of a member, admission of new members and determination of conditions of their admission²⁷ because the governors are exercise powers on behalf of their member countries and according to the doctrine of non-delegation, 'delegated power may not be delegated' (*delegata potestas non potest*

²³ Art. V s.1 Articles of Agreement of the IBRD.

²⁴World Bank 'Board of governors' available at <http://web.worldbank.org/WBSITE/EXTERNAL/EXTABOUTUS/0,,contentMDK:20040582~menuPK:63000026~pagePK:34542~piPK:36600~theSitePK:29708,00.html>(accessed 13 January 2011).

²⁵World Bank 'Board of governors' available at <http://web.worldbank.org/WBSITE/EXTERNAL/EXTABOUTUS/0,,contentMDK:20040580~menuPK:1696997~pagePK:51123644~piPK:329829~theSitePK:29708,00.html> (accessed 13 January 2011).

²⁶ Art. V s.2(a)Articles of Agreement of the IBRD.

²⁷ Art. V s.2(b)Articles of Agreement of the IBRD.

delegari').²⁸ This is further justified by the fact that the powers reserved for the governors are very pertinent issues, for which they are considered technically equipped to handle due to their skills and expertise in these issues²⁹ and in the event of any abuse of power, they can be held accountable.³⁰ It goes without saying that the board of governors has the ultimate decision making powers of the Bank except in instances where the articles reserve specific rights to member states such as the requirement for a special majority needed to accept an approval for amendment of any provision of articles of agreement.³¹

2.2.1.2 Board of executive directors

The executive directors may be loosely referred to as the 'administrators' of the Bank because they carry its day to day activities in exercise of the powers given to them by the Board of governors.³² Historically, there were only 12 executive directors but the number has increased to 25 due to the bigger membership and increasing roles.³³ Out of the 25 seats, eight are occupied by the eight most economically powerful member states leaving only 17 seats for 179 members.³⁴

The directors usually perform duties such as attending regular meetings of the board so as to consider various issues concerning the Bank's operations, and also lay strategies to fulfil the its mission.³⁵ It is submitted that these meetings are necessary to share experiences, challenges and jointly brainstorm and identify solutions needed for their operations. They would also be able to strengthen the existing linkages in their activities to ensure effective use of finances and also identify means through which they can effectively coordinate with each other.

²⁸ Michael E 'Rethinking the non delegation doctrine' (1982)62 *Boston University Law Review* 259 available at http://heinonline.org/HOL/Page?handle=hein.journals/bulr62&div=13&g_sent=1&collection=journals (accessed 17 February 2010) (hereafter Michael E (1982)).

²⁹ Art. V s. 2 (b) Articles of Agreement of the IBRD.

³⁰ Michael E (1982)259.

³¹ Art. VIII(a) Articles of Agreement of the IBRD.

³² Art. V s.4(a) Articles of Agreement of the IBRD.

³³ Art. V s.4 (b) Articles of Agreement of the IBRD.

³⁴ Five executive directors are appointed by each of the five members with the largest number of shares namely United States (US), United Kingdom (UK), Japan, German, and France. China, the Russian Federation, and Saudi Arabia each elect its own executive director; the remaining seats are occupied by 17 representatives of the 179 members.

³⁵ World Bank 'Organisation' available at <http://web.worldbank.org/WBSITE/EXTERNAL/EXTABOUTUS/0,,contentMDK:20040580~menuPK:1696997~pagePK:51123644~piPK:329829~theSitePK:29708,00.html> (accessed 13 January 2011).

2.2.1.3 The weighted system of voting

The Bank uses a unique voting system referred to as the ‘weighted voting system based on a quota assigned to a member country by the IMF at the time it is joining the Fund.’³⁶ A country’s quota is derived from a specific formula established based on the level of international economic strength of the state.³⁷ Using this formula, economically small and weak states receive smaller quotas such that they are allocated a smaller share of the subscription fees as well as a smaller voting share in the Bank.³⁸ With this system therefore, the poor states have little power in the Bank despite the highly prevalent problem of poverty in their economies.

It is argued that the voting system was derived from the historical ties created between the Bank and powerful member states immediately after World War II, when the latter provided the capital highly needed to reconstruct the Bank’s poorer member states, at rates much lower than that offered in the international capital markets.³⁹ A link was therefore created between the level of financial contribution and decision making, so that the higher the contribution the greater the influence in the Bank.⁴⁰ It is submitted that the system was set up as a reward for financial contribution and it is in the interest of the Most Developed Countries (MDCs) to maintain the status quo.

2.2.1.4 The impact of weighted voting system

As a result of the voting system the (MDCs) have more influence in the Bank as compared to the small and poor member states as reflected by the IBRD country voting table released on 31 December 2010⁴¹ where the five MDCs have a total of 37.29 per cent voting shares compared to 0.26 per cent for five randomly selected Least Developed Countries (LDCs). The author notes that there is a big margin of 37.03 per cent voting shares between these two

³⁶ Arthur F *The Governance of the World Bank: Analysis and Implications of the Decisional Power of the G10* Working Paper (2007)20 available at <http://halshs.archives-ouvertes.fr/docs/00/23/54/36/PDF/R08007.pdf> (accessed 10 January 2010) (hereafter Arthur F (2007)).

³⁷ Bradlow D *International financial institutions and financial transactions* Working Document (2010)5

³⁸ Woods N ‘The challenge of good governance for the IMF and the World Bank themselves,’ (2000)28 No.5 *World Development* 35 available at

<http://classwebs.spea.indiana.edu/kenricha/Oxford/Courses%202010/Governance%202010/Articles/Woods%20-%20Good%20Governance.pdf> (accessed 17 April 2010) (hereafter Woods (2000)).

³⁹ Stephany GJ *Governance of the World Bank* Working Paper (2002)3 available at http://www.stephanygi.net/papers/Governance_of_the_world_Ban_Paper_prepared_for_DFID.pdf (accessed 5 February 2011) (hereafter Stephany GJ (2002)).

⁴⁰ Stephany GJ (2002)3.

⁴¹ World Bank *IBRD Subscriptions And Voting Power of Member Countries* available at <http://siteresources.worldbank.org/BODINT/Resources/278027-1215524804501/IBRDCountryVotingTable.pdf> (accessed 5 February 2011).

groups of member states. This implies that in order for LDCs to have a strong voice in the Bank, an increase of their basic votes must be by a considerably high percentage, high enough to raise their voting shares to a level equivalent to that of the MDCs. Unless that is done, MDC's will continue to have a grip on power in the Bank, which sometimes adversely impacts on formulation and implementation of on poverty reduction policies.

The higher voting shares also gives the MDC's power to veto any decisions that require a special majority of either 70 per cent or 85 per cent of the votes,⁴² if in their opinion, the approval of such a decision is detrimental to their interests. This can be in situations such as the need to amend the Articles of Agreement which would require acceptance by three fifths of members with 85 per cent of the total voting shares.⁴³ Considering the margins of voting shares stated above, it is submitted that MDCs constitute the members with 85 per cent of the total voting in the IBRD which would make it very difficult to raise the required special votes if a proposed amendment is detrimental to the interests of MDCs and the reverse is true.⁴⁴

2.2.2 Endorsing power imbalance

The IBRD Articles of Agreement permit five members having the largest shares to appoint one representative each to the board of directors and the remaining directors are to be elected in accordance with schedule B.⁴⁵ This provision creates a distinction in the mode of filling vacancies in the board of directors through appointment (on one hand) which guarantees the position of the five MDCs and on the other hand, the remaining executive directors are elected by their respective governors.⁴⁶ Although the practice is that the 17 executive directors are elected by their respective governors, it is submitted this practise cannot be understood to emanate from art. V s. 4(b) Articles of Agreement of the IBRD because of the ambiguity in the provision. According to art V.s.4 (b), it provides that there shall be 12 executive directors who need not be governors, and of whom:

⁴² Woods N, Eric H & Jonathan K (eds) *The Globalisers: The IMF, the World Bank and their Borrowers* (2006)27 (hereafter Woods N (2006)).

⁴³ Art. VIII (a) Articles of Agreement of the IBRD.

⁴⁴ Woods N (2006)27.

⁴⁵ Art. V s.4 (b) (i) & (ii) Articles of Agreement of IBRD There are now more than 12 members of this board as explained at 2.2.1.2. Art. VI s.3 (b)Articles of Agreement of the IDA provide that the executive directors of the IBRD serve as executive directors of the IDA provided they were appointed or elected by a member of the Bank. It is not an automatic right that an executive director of the IBRD shall become an executive director of the IDA. An appointed executive director must have been appointed by a member of the IBRD that is also a member of the IDA and also, for the case of an elected executive director, the votes electing him or her must be constituted by votes from at least one member of the IBRD who is also a member of the IDA.

⁴⁶ IMF & World Bank *Options Paper on Voice and Representation* Final update report (2007) 8 available at [http://siteresources.worldbank.org/DEVCOMMINT/Documentation/21289628/DC2007-0009\(E\)-Voice-1.pdf](http://siteresources.worldbank.org/DEVCOMMINT/Documentation/21289628/DC2007-0009(E)-Voice-1.pdf) (accessed 5 February 2011) (hereafter IMF & World Bank (2007)).

- (i) Five shall be appointed, one by each of the five members having the largest shares;
- (ii) Seven shall be elected according to schedule B by all the governors other than those appointed by the members referred to in (i) above.

Schedule B (1) of the Articles of Agreement provide that the executive directors shall be elected by ballot of the governors eligible to vote under art.Vs.4 (b).

The author submits that, the provision above can be interpreted to mean that all governors, including the five in para (b) (i) have rights to elect other executive directors, because the phrase '*by all the governors other than those appointed...in (i) above*' has nothing to do with the rights of other governors to elect their representatives since the subject of consideration is the election of executive directors not appointed under para (b) (i). The author submits that the provision is ambiguous and makes it difficult to ascertain the intention of the drafters and in the absence of any evidence to the contrary, the provision would inconsistent with the current practise of the Bank, an anomaly that should be clarified accordingly.

2.2.3 Constituencies, a reflection of power imbalance

Member countries have been grouped into constituencies under the direction of executive directors in such a way that the five appointed executive directors represent their respective member countries (China, Russia and the Republic of Saudi Arabia also elect one representative each) while elected representatives direct the operations of the remaining member countries.

This arrangement has led to establishment of constituencies of unequal sizes some of which are very large with member states of diverse socio-economic interests. For example, Africa Group one constituency has 21 African members under an executive director and an alternate executive director that represent all constituency members in the boards of directors of the World Bank Group⁴⁷ which is a very big responsibility. First, he is expected to perform specific duties on behalf of his constituency in the IBRD and the IDA. Secondly, he has to carefully balance his roles and avoid any likelihood of conflicts of interest as he juggles between his roles as a Bank official and also as a representative of his constituency members

⁴⁷World Bank 'Executive directors' available at <http://web.worldbank.org/external/default/main?menuPK=397339&pagePK=64099288&piPK=64099409&theSitePK=397333> (accessed 13 January 2011).

in order to achieve the required objectives.⁴⁸ With such a huge responsibility, to be effective, there is need for adequate funding, strong leadership, commitment, adequate personnel and effective coordination, without which, the executive directors of such constituencies will continuously be overworked and ineffective.

A report of the development committee of the joint board of governors of the Bank and the IMF (the development committee) attests to the impact of a large constituency on an executive director's effectiveness. Paragraph 40 and 41 of the report state that:

'an increase in the size of the current 24-member⁴⁹ Boards could be a possible way to reduce the number of country members in the largest constituencies....some members have specifically asked that the Board size be increased by one or two chairs to help the workload of large multi-country constituencies with more than 20 countries....others have expressed concerns about the impact of any increase of the Board size on Board effectiveness....⁵⁰

The author submits that this excerpt confirms that executive directors of large constituencies bear a heavy workload that affects their effectiveness. Moreover, the committee's proposal should ordinarily be applauded but since the committee plays only an advisory role in the Bank, their proposal is not necessarily binding on the board of governors, therefore it should be treated with caution.

2.2.4 Historical initiatives to improve voting powers.

In order to increase voting powers of small and poor members the Bank introduced 'basic votes.'⁵¹ The votes are awarded at the time of joining the Bank and added to a country's shares to produce its total voting power in the institution.⁵² Although basic votes are not part of the capital base, they were intended to protect the voting shares of smaller states at that time but because they do not add up to the capital base, the effect has been that an increase in capital stock of a member has not yielded increases in basic stock.⁵³ Consequently, the size of

⁴⁸World Bank 'Board of directors' available at <http://web.worldbank.org/WBSITE/EXTERNAL/EXTABOUTUS/ORGANIZATION/BODEXT/0,,contentMDK:22421219~pagePK:64020054~piPK:64020408~theSitePK:278036,00.html> (accessed 13 January 2011).

⁴⁹ This report was prepared in 2007 and in 2010 the number of executive directors was raised to 25. The explanation on the increment is in 2.2.6.

⁵⁰ IMF & World Bank (2007).

⁵¹ Griffith-Jones S (2002)5 Members of IBRD are awarded 250 basic votes while those of IDA are awarded 500 basic votes irrespective of their financial contribution.

⁵² Woods N (2000)10.

⁵³ IMF & World Bank (2007)15.

basic votes as against the total votes is very small which has reduced the voting powers of the small and LDCs⁵⁴ which has defeated the whole aim of the basic votes.

In addition to that it is submitted that grouping MDCs and LDCs within same constituencies makes it even harder for the weaker and smaller states to collectively use their basic votes and possibly veto against specific decisions⁵⁵ since the votes of the constituencies cannot be split, rather the executive directors must cast their votes as a unit.⁵⁶ By illustration, the office of executive director held by representative from Canada who represents a constituency constituted by Ireland, Antigua and Bermuda, the Bahamas, Barbados, Belize, Canada, Dominica, Grenada, Guyana, Jamaica, St. Kitts and Nevis, St. Lucia, and St. Vincent and the Grenadines.⁵⁷ The author argues that these arrangements erode the principles of 'equality' originally envisaged at concept of the concept of basic votes, as a result, the developing countries have time and again advocated for an increase in these votes to increase their influence in the Bank.⁵⁸ In addition to that, increases should be by a very big margin and discriminatively applied in favour of the small and weaker states for greater impact.

2.2.5. The call for governance reforms in the Bank

The concept of governance is not synonymous with government⁵⁹ and may be usefully applied in different contexts-global, national, institutional and community and it has been in existence for decades since it is recognised as a significant steering wheel for political and socio-economic changes in an economy.⁶⁰ The Bank identifies itself with the concept and highly advocates for its implementation in its member countries and in the same vein, the UNDP considers five core principles that underpin this concept, namely, legitimacy and voice, direction, performance, accountability and fairness.⁶¹ The author submits that when

⁵⁴ IMF & World Bank (2007)8.

⁵⁵ Woods N (2006)27.

⁵⁶ Woods N (2006)27, Article V s.4(g) Articles of Agreement of the IBRD and article VI s.4 (c) Articles of Agreement of the IDA.

⁵⁷ World Bank 'Office of the executive director EDS07' available at <http://web.worldbank.org/external/default/main?menuPK=386589&pagePK=64099288&piPK=64099409&theSitePK=386583>(accessed 13 January 2011).

⁵⁸ International development research centre & the North-south institute, Roy C & Caroline P(eds) *Development and Governance: Conference Proceedings* (1995)44 (hereafter International development research centre & the North-south institute (1995)).

⁵⁹ John G, Bruce A & Tim P, *Principles of Good Governance in the 21st Century* Policy Brief No.15 (2003)1 available at <http://unpan1.un.org/intradoc/groups/public/documents/UNPAN/UNPAN011842.pdf> (accessed 6 February 2011) (hereafter John G, Bruce A & Tim P (2003)).

⁶⁰ Commonwealth of Australia *Good Governance: Guiding Principles* (2000)1 available at http://www.aid.gov.au/publications/pdf/good_governance.pdf. (accessed 6 February 2011).

⁶¹ John G, Bruce A & Tim P (2003)3.

these principles are effectively applied, they can contribute to development and poverty reduction. Therefore, since the Bank greatly emphasises good governance, it should also realistically apply within its governance structure to effectively fight poverty.

The need for governance reform of the Bank and IMF has been an ongoing concern in the international sphere with the call for equal participation in decision making by all members. Years back, it was considered inconceivable for developing countries to demand for equality in these institutions. Stephen Z argued that developing countries should not demand equality because the governance structure reflected economic power, and any change in the status quo would open doors for ineffectiveness and poor performance.⁶²

The author submits that it has been decades ago since scholars such as Stephen Z presented such arguments, a period when the role of developing countries proved insignificant. However, the trend of events in the international economic order has changed and the role of developing countries is now remarkable and progressively improving, especially in terms of their economic strength and resource potential. Notably, during the Uruguay round developing countries made more commitments than Europe to open their markets to free trade.⁶³ In 2007, developing countries witnessed seven per cent growth which was three times more than the rate recorded in developed countries and they contributed over 40 per cent to global output growth despite the downturn in international trade.⁶⁴ These are but a few examples of the changing trend in the international community.

In light of these changes it is definite that the role of these countries in the global economy will continue to rise and with their immense resource potential, their contribution is invaluable. Bearing that in mind, the author argues that their continued exclusion from equal participation in governance matters of the Bank is detrimental to the fight against poverty. Therefore there is need to establish a platform for a development partnership that permits equal participation.

⁶² Stephen Z 'Voting in international economic organisations' (1980)74 No.3 *American Journal of International Law* 566-608 available at http://heinonline.org/HOL/Page?handle=hein.journals/ajil74&div=3&g_sent=1&collection=journals (accessed 10 February 2011).

⁶³ International development research centre & the North-south institute (1995)19.

⁶⁴ World Trade Organisation *World Trade Report* (2008)1available at http://www.wto.org/english/res_e/booksp_e/anrep_e/world_trade_report08_e.pdf (accessed 21 March 2011).

In 2002, the international community created a landmark partnership on global development at the conference on financing for development organised by the United Nations in Monterrey, Mexico in March, 2002 to address key financial and development challenges facing the global economy. Participants expressed their commitment in the Monterrey Consensus to cooperate to achieve the global development goals.⁶⁵ One significant adopted strategy was the need to increase the voices of Developing and Transitional Countries (DTCs) in the Bank and IMF for their effective participation.⁶⁶ The United Nations General Assembly endorsed the Consensus and called upon its members and agencies to implement the terms.⁶⁷ That notwithstanding, it remains to be seen how far these ambitious commitments will transform poor countries.

2.2.6 Recent voice reforms in the Bank

In response to their commitment in the consensus, the WBG shareholders agreed in fall 2008 to undertake a two phase package of reforms to enhance DTCs. The Bank, identified critical focal points to guide reforms namely increasing voting power for DTCs, establishing unique IBRD shareholding principles, based on evolving economic weight and the Bank's mission, holding periodic regular IBRD shareholding reviews every five years and adding a third director to represent member countries in Sub-Saharan Africa.⁶⁸ These focal points appear very impressive in terms of changing the governance structure but the possibility of realising these ambitious proposals depends on the will and commitment of the MDCs. In the spirit of change, the development committee approved specific voice reforms on 25 April 2010 which included:⁶⁹

1. To increase the voting power of DTC's in the IBRD by 3.13 per cent bringing it to 47.19 per cent which represents a shift of voting power from 3.13 per cent to 4.59 per cent for DTCs since 2008; and
2. To conduct a review of shareholding in 2015.

⁶⁵ IMF 'Financing for development: implementing the Monterrey consensus' available at <http://imf.org/external/np/pdr/Ffd/2002/imp.htm> (accessed 5 February 2011).

⁶⁶ Resolution F paragraph 63 of the Monterrey consensus.

⁶⁷ United Nations 'General Assembly adopts resolution endorsing Monterrey consensus' available at <http://unis.unvienna.org/unis/Pressels/2002/ga100034.html> (accessed 5 February 2011).

⁶⁸ IMF & World Bank *Voice Reform: Enhancing Voice and Participation of Developing and Transition Countries In 2010 and Beyond* (2010)1-2 available at [http://siteresources.worldbank.org/DEVCOMMINT/Documentation/22553921/DC2010-006\(E\)Voice.pdf](http://siteresources.worldbank.org/DEVCOMMINT/Documentation/22553921/DC2010-006(E)Voice.pdf) (accessed 9 February 2011).

⁶⁹ IMF & World Bank *Development Committee Final Communiqué* (2010)2 available at http://web.worldbank.org/WBSITE/EXTERNAL/DEVCOMMEXT/0,,contentMDK:22551147~pagePK:64000837~piPK:64001152~theSitePK:277473,00.html#Top_Top. (accessed 2 February 2011).

The author submits that the periodic shareholder review will be carried out after five years, which is a wide gap between the current reform proposals and the next shareholding review in 2015. Moreover, the development committee did not provide any midterm measures to guarantee the attainment of equality at the next review. Setting midterm strategies such as conditional targets to be met by developing countries in key sectors within say, two years in return for equal voting powers in 2015 would have been a more proactive step towards actual realisation of the voice reforms. It would be an incentive and motivation for developing countries to be more radical in their development processes. Short of such pro active resolutions coupled with the small percentage increases such as the 3.17 per cent basic votes increases above, the author argues that periodic reviews will be a formality and an insignificant event towards realisation of equal participation.

In order for the reforms to become effective, the Articles of Agreement for the IBRD have to be amended accordingly, and the board of governors approved the proposed amendments to increase basic votes, but awaiting acceptance by the special majority.⁷⁰ Acceptances have been received from over 80 per cent of members representing nearly 70 per cent of total voting power.⁷¹ While this meets the required three-fifths of members, more acceptances are needed to reach the 85 per cent of the total voting power required to amend the any provisions of the articles.⁷²

Sub-Saharan Africa witnessed the election of a third executive director for the region with effect from 1 November 2010 to represent South Africa, Nigeria and Angola.⁷³ This constituency is relatively small constituted by members of relatively similar development indicators which is one of the very crucial factors for effective administration. That notwithstanding, this increment does not significantly raise participation of African member countries because the majority of these countries still remain clustered within two very large constituencies. The rather bad situation is further worsened by the prevalent challenges within the continent that have proved to be a stumbling block for achieving the targets under

⁷⁰ Art. VIII (a) Articles of Agreement of the IBRD.

⁷¹ IMF & World Bank *World Bank Group Voice Reform: enhancing voice and participation of developing and transition countries in 2010 and beyond* (2010)3(accessed 9 February 2011)(hereafter IMF & World Bank (2010)) .

⁷² IMF & World Bank (2010)3.

⁷³World Bank ‘Election of third Sub-Saharan African Chair for World Bank Group board’ <http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/AFRICAEXT/CONGODEMOCRATICEXTN/0,,contentMDK:22730003~menuPK:50003484~pagePK:2865066~piPK:2865079~theSitePK:349466,00.html> (accessed 13 January 2011).

MDGs.⁷⁴ It would therefore be appropriate to elect more representatives for the region to reduce the workload and promote its effectiveness in its operations.

Although the Bank's board of governors failed to approve the second phase of proposals for voice reform by 30 September 2010,⁷⁵ on 16 March 2011 they finally approved it paving the way to effect what was agreed upon.

The author argues that even though the Bank's mission is to end world poverty, the composition and power imbalance in the governing structure adversely impacts on the effectiveness of developing countries who are most affected by the poverty scourge. Despite the reforms made, they are insignificant to raise DTCs' voices to an equal level with that of MDCs. However, on the whole, there is a glimpse of hope for equal participation in the distant future.

2.3 The concept of sustainable development

2.3.1 Defining sustainable development

The concept of sustainable development has been in existence for over 30 years since the 1972 United Nations conference on human environment in Stockholm. In 1987, the world commission on environment and development defined sustainable development as development that meets the needs of the present generation without compromising the ability of the future generation to meet their own needs.⁷⁶ In 1992, the Rio Declaration on environment and development further refined the concept in art. 2 and 4 so that any

⁷⁴ At the end of the 2007 school year, seven out of ten people in the developing world lived in countries that have achieved full primary school enrolment or are on track to do so. This leaves 72 million primary school-age children not enrolled, most of them in South Asia and Sub-Saharan Africa. The proportion of pregnant women who had at least one antenatal visit rose from 64 per cent in 1990 to 79 per cent in 2008, but the proportion who had the recommended four or more visits is still less than 50 per cent in South Asia and Sub-Saharan Africa, where most maternal and infant deaths occur. New HIV infections have fallen by 17 per cent since 2000, and wider access to antiretroviral treatment has contributed to the first decline in AIDS deaths since the epidemic began. But there are still thirty 33.4 million people – two-thirds of them in Sub-Saharan Africa – living with HIV/AIDS and most of them women reported in World Bank 'World development indicators' available at <http://data.worldbank.org/news/world-development-indicators-2010-released> (accessed 6 February 2011)

⁷⁵ IMF & World Bank *World Bank Group Reform: An Update* available at <http://siteresources.worldbank.org/DEVCOMMINT/Documentation/22723851/DC2010-0014%28E%29Reform.pdf> (accessed 9 February 2011).

⁷⁶ Rogers PP, Kazi FJ & John AB *An Introduction to Sustainable Development* (2008)22 (hereafter Rogers PP, Kazi FJ & John AB (2008)).

development must protect the environment to ensure that there is equitable satisfaction of developmental and environmental needs of the present and future generations.⁷⁷

2.3.2 Components of sustainable development

Sustainable development has three components, namely: economic, social and environmental aspects frequently referred to as the triple bottom line that is used to ascertain the success of a particular development plan.⁷⁸

The economic approach would permit exploitation of resources to its fullest potential so as to raise as much income as possible but improving the value of the resources to raise more profits from investments,⁷⁹ so that benefits can trickle down to the future generation. The environmental approach requires careful exploitation of natural resources to ensure that they are able to maintain their productivity even after a specific period of time.⁸⁰ The proponents of socio-cultural approach argue that development should maintain the stability of social and cultural systems⁸¹ and for sustainable development to be achieved it has to directly concern itself with poverty reduction and indirectly concerned with economic growth at the aggregate.⁸² The author submits that these distinct approaches establish two fundamental aspects about sustainable development: First, both the current and future generation have the right to enjoy the benefits of development. Secondly, it is duty of the current generation to protect the environment for the benefit of the future generation. It is argued that although these approaches focus on fulfilling specific interests, sustainable development would require that a balance should be struck between them and no specific interest should be maximised in disregard of the other considerations by the other approaches.⁸³

This definition was based on the need to protect the environment, but its meaning has evolved into a broader concept than just environmental protection.

⁷⁷ Rio Declaration on Environment and Development (1992) available at <http://www.un.org/documents/ga/conf151/aconf15126-1annex1.htm> (accessed 21 April 2011).

⁷⁸ Rogers PP, Kazi FJ & John AB (2008)42.

⁷⁹ Rogers PP, Kazi FJ & John AB (2008)43

⁸⁰ Rogers PP, Kazi FJ & John AB (2008)44.

⁸¹ Rogers PP, Kazi FJ & John AB (2008)44.

⁸² Rogers PP, Kazi FJ & John AB (2008)44.

⁸³ IUCN Academy of environmental law (2005)46.

2.4 The concept of poverty

2.4.1 Defining poverty

The concept of poverty has drawn global attention and raised discussions among scholars, researchers and development financial institutions including the Bank. Initially narrowly defined as an economic condition where people lack sufficient income to access minimal levels of health services, food, housing and education, generally recognised as necessary to ensure a tolerable standard of living.⁸⁴ However, the definition has evolved from this narrow perspective to broader concept.

According to the United Nations committee on economic, social and cultural rights, poverty is persistent state of human life where a person or community is an unable (for one reason or the other) to exploit their resources, their potentials and or opportunities to enjoy all their rights and live a better standard of life, which leaves them powerless without the will to speak or advocate for their rights, as a result they become so vulnerable to the shocks of life.⁸⁵ The Bank also considers poverty to be a multidimensional phenomenon that is broader than just the lack of income.⁸⁶ Accordingly, ‘poverty alleviation’ is more than just increasing peoples incomes but embraces aspects such as improving peoples capabilities, rights and securities.⁸⁷

Poverty assumes different levels, depths, intensity or magnitude from and is usually deeply imbedded in people’s attitude keeping them trapped in a cycle of poverty, unless measures are taken to break that cycle, poverty will transfer from one generation to another with adverse consequences on that group of people, family or community.⁸⁸

During the United Nations millennium summit in 2000, the international community identified poverty as one of the most pressing concerns affecting development and they committed themselves under the MDGs to undertake several initiatives to inter alia, eradicate poverty. Within the MDGs, eradication of poverty and hunger were made the first goal, by this, the participants recognised the alarming proportion these had assumed globally, it therefore became imperative to give it the utmost attention and commitment it deserved.⁸⁹

⁸⁴ Gary SF *Poverty Inequality and Development* (1980)35.

⁸⁵World Bank Group & Extractive Industries *Striking a better balance* (2003)3 (hereafter World Bank Group & Extractive Industries (2003)).

⁸⁶ World Bank Group & Extractive Industries (2003)3.

⁸⁷ World Bank Group and Extractive Industries (2003)3.

⁸⁸ Africa Institute of South Africa (2008)10.

⁸⁹ Africa Institute of South Africa (2008)10.

Several targets were set and poverty reduction as the first target, the goal is to reduce by half, the proportion of people living on less than a dollar a day by 2015.⁹⁰

2.4.2 Poverty reduction through sustainable development

All too often the demands for revenue generation will necessitate development decisions that often create adverse impacts on socio-economic interests and needs of the poor. As the United Nations committee on economic, social, and cultural rights correctly put it, the poor are usually powerless to enforce their rights, weak and vulnerable to shocks.⁹¹ Conscious that poverty can transfer from generation to generation,⁹² then as the concept of sustainable development would demand, it is imperative to ensure that interests of all parties are given due consideration in every decision. Moreover where decisions are made in that regard, it is considered to be in line with the principle of equity as provided in the New Delhi Declaration on principles of international law relating to sustainable development. The principle emphasises intra generational and intergenerational equity which gives the right to *all people* in the current generation to *fairly* access the benefits of the earth's natural resources and the future generation to have a fair benefit from these resources.⁹³ 'Benefits' in this context is broad and understood to include social-economic and environmental aspects.⁹⁴

The author argues that poverty reduction fits very well within the concept of sustainable development so much so that provided the three components of sustainable development are implemented through a balanced approach, development would not in any way alienate the poor in the current generation from enjoying the fruits of investment. Consequently, there would be a positive impact on their standards of living that would progressively and eventually break off the cycle of poverty.

⁹⁰ Africa Institute of South Africa (2008)9.

⁹¹ World Bank Group and Extractive Industries (2003)3.

⁹² Africa Institute of South Africa (2008)9.

⁹³ Article 2 of the New Delhi Declaration of principles of international law relating to sustainable development 2002 (hereafter New Delhi Declaration 2002). The principle of equity refers to intra-generational and inter-generational equity and it is considered to be central to attainment of sustainable development available at http://www.cisd.org/pdf/new_delhi_declaration.pdf (accessed 30 March 2011) (hereafter New Delhi Declaration 2002).

⁹⁴ Article 2 of the New Delhi Declaration 2002.

2.4.3 The Bank and poverty reduction

Although the Bank was created to promote reconstruction and development of its member states' economies devastated by war, overtime, it expanded its mission to include poverty reduction.⁹⁵ Moreover, it broadened its view of poverty from the narrow perspective that poverty primarily concerns itself with the lack of income, to a concept that embraces more pertinent issues. Therefore, it considers poverty to be a situation where a person cannot access basic needs or social services, and is unable to exercise their power of choice for one reason or the other.⁹⁶ From the moment it began to focus on poverty reduction, the Bank has been part and parcel of the international commitment to end global poverty as required by the MDGs.⁹⁷ The WBG institutions such as the IFC and MIGA cooperate with the Bank and supplement its activities in order to end global poverty.⁹⁸

2.4.3.1 Poverty reduction policy

The IMF and the Bank formulated the HIPC initiative in 1999 to reduce the debt burden of 70 low-income countries in the hope that it would consequently lead to a reduction in poverty levels in their economies. The 70 low income countries including Uganda were under the duty to develop Poverty Reduction Strategy Papers (PRSPs) as a pre-requisite for debt relief under the initiative or concessional lending from the Bank or through the poverty reduction and growth facility from the IMF.⁹⁹ Uganda received debt relief totalling US\$ 2 billion under both the first HIPC initiative and the enhanced HIPC initiative in April 1988 and April 2000, respectively.¹⁰⁰ This initiative was considered to be a very crucial opportunity for the country since it would relieve it of debt service obligations and allow it to spend more in other

⁹⁵ Art. III s.4 (iv) Articles of Agreement of the IBRD mandates the Bank to provide loans or guarantees for specific projects of reconstruction or development because at that time, the world economy was recovering from the effect of war available at <http://siteresources.worldbank.org/EXTABOUTUS/Resources/ibrd-articlesofagreement.pdf>.

⁹⁶ World Bank Group & Extractive Industries (2003)3.

⁹⁷ World Bank 'Working for a world free of poverty' available at <http://web.worldbank.org/WBSITE/EXTERNAL/EXTABOUTUS/0,,contentMDK:20040565~menuPK:1696892~pagePK:51123644~piPK:329829~theSitePK:29708,00.html>.

⁹⁸ Art. 1 of Articles of Agreement of the IFC available at [http://www.ifc.org/ifcext/about.nsf/AttachmentsByTitle/articles.pdf/\\$FILE/articles.pdf](http://www.ifc.org/ifcext/about.nsf/AttachmentsByTitle/articles.pdf/$FILE/articles.pdf) (accessed 20 January 2011).

⁹⁹ World Bank *Poverty Reduction Strategy Paper Source Book* (2001)3 available at http://siteresources.worldbank.org/INTPRS1/Resources/383606-1205334112622/5301_overview.pdf (accessed 5 February 2010).

¹⁰⁰ IMF 'IMF and World Bank support debt relief for Uganda' Press Release No.00/34 2 May 2000 available at <http://www.imf.org/external/np/sec/pr/2000/pr0034.htm> (accessed 9 February 2011).

sectors.¹⁰¹ Whether or not this initiative reduced the poverty levels as anticipated, is not within the scope of this study.

For operations on poverty reductions, operational policy 1.00 on poverty reduction of the Bank provides guidelines in that respect.¹⁰² One fundamental feature of the policy is that provision of technical and financial assistance by the Bank to member countries must be based on the latter's poverty reduction strategy so that there would be country ownership of these strategies and overall national commitment towards any programs related thereto.¹⁰³ In essence, the policy emphasises a degree of partnership between the Bank and its recipient member countries, with each party having a contributory role to play so that development programmes are compatible with the needs of recipient countries.

2.4.3.2 Energy for poverty reduction strategy paper

The Bank recognises the significance of energy resources for socio-economic development and observes that where they are properly utilised, there will be an increase in wealth through promotion of economic productions necessary for poverty reduction.¹⁰⁴ In view of the great advantages from energy resources, the Bank in partnership with UNDP launched an energy sector assessment program in 1980 so as to establish modalities that would lead to sustainable use of these resources for development.¹⁰⁵ An assessment of the energy sector of a member country is carried out by the Bank at the initiative of the member state and the Bank provides policy recommendations considered appropriate to enable the sector steer the economy towards economic development.¹⁰⁶

In terms of energy for poverty reduction, the Bank assumed a leadership role with the publication of two strategy documents namely *Rural Energy Development: Improving Energy Supplies for Two Billion People*, 1996, and '*Fuel for Thought: Environmental Strategy for*

¹⁰¹ IMF Highly Indebted Poor Countries debt relief for Uganda increased to a total of US\$2 Billion: additional relief vital for Uganda's poverty reduction programs, Press Release No.00/6, 8 February (2000) available at <http://www.imf.org/external/np/sec/pr/2000/pr0006.htm> (accessed 9 February 2011).

¹⁰² World Bank *Operational Manual O P 1.00 Poverty Reduction* (2004) 1 available at <http://web.worldbank.org/WBSITE/EXTERNAL/PROJECTS/EXTPOLICIES/EXTOPMANUAL/0,,contentMDK:20064696~menuPK:4564185~pagePK:64709096~piPK:64709108~theSitePK:502184,00.html> (accessed 25 January 2011) (hereafter World Bank (2004)).

¹⁰³ World Bank (2004)1.

¹⁰⁴ World Bank Group (2001)14.

¹⁰⁵ World Bank (1996)14.

¹⁰⁶ World Bank *Energy Transitions in Developing Countries* (1983)4.

the Energy Sector, 2000.¹⁰⁷ The 1996 publication emphasised the connection between energy services and rural poverty alleviation and outlined action point plans for broadening energy access in rural areas. These action plans included development of regional, country, and local ownership and commitment to efforts to broaden energy access; establishment of partnerships with donors, nongovernmental organisations and other organisations; systematic inclusion of rural energy in Bank assistance programs; and implementation of special initiatives on Africa.¹⁰⁸ The 1996 publication also recognised the failure of energy market reforms to benefit the whole population and the authors recommended that the development of rural energy should be handled independently of other energy programmes due to the intricacies involved in provision of energy services for the poor communities.¹⁰⁹

The important aspect about these publications is that they set the foundation for the Bank's activities in energy programs needed to reduce poverty, and it became increasingly involved in this sector at the dawn of the new millennium.¹¹⁰ In 2001, the WBG set the tone for continued energy sector investments with a new strategic approach, which was followed by the infrastructure action plan in 2003 that clearly outlined a plan of action to re-engage in the investment in infrastructure.

It is noteworthy to mention that the strategy on energy for poverty reduction of 2001 was adopted by the WBG, and it is argued that the Bank as a member of the group subscribes to this strategy paper and relies on the guidelines enshrined therein for its operations in the energy sector.

The overall goal of this strategy document is to see an energy sector with many players to encourage efficiency and also provision of many energy services at prices affordable even by the poor consumers. In addition to that the strategy was aimed at contributing to

¹⁰⁷ World Bank *Modernising Energy Services for the Poor: a World Bank Investment Review 2000-08* (2010) 13 available <http://siteresources.worldbank.org/EXTENERGY2/Resources/EnergyForThePoor.pdf> (accessed 3 February 2011).

¹⁰⁸ World Bank *Rural Energy and Development: Improving Energy Supplies for Two Billion People* (1996)12-13. available at http://siteresources.worldbank.org/INTENERGY/Resources/Rural_Energy_Development_Paper_Improving_Energy_supplies.pdf

¹⁰⁹ World Bank (1996)3.

¹¹⁰ World Bank (2010)13.

macroeconomic stability.¹¹¹ Furthermore, environmental protection would be part and parcel of investments in the energy sector so as to ensure sustainable use of energy resources.¹¹²

It is such a rich vision that sees a world in transition from traditional use of fuel to modern use of fuel by all people including the poor, for that matter therefore, the strategy emphasised priority investment financing and technical assistance on four business lines.¹¹³

The Bank's financed projects would have to produce at least any one of the four business lines:¹¹⁴

- a) Helping the poor directly;
- b) Improving macroeconomic and fiscal imbalances;
- c) Promoting good governance and private sector development; and
- d) Protecting the environment.

Within these four business lines, lies the need to promote sustainable development and in providing its support, the Bank considers it necessary to promote poverty reduction through development of energy resources that goes hand in hand with environmental protection.

In line with the vision, the Bank has encouraged and utilised various ways to ensure that many energy services are accessible by all people. In order to achieve the four business lines, the strategy identified specific methods in use by for implementing the vision:¹¹⁵

- a) Work with the Bank's clients and partners;
- b) Carefully apply its lending instruments such as loans and guarantees;
- c) Create partnerships with stakeholders like governments, donors, utilities, nongovernmental organisations project developers and private investors in energy corporations; and
- d) Offer various services including provision of advice and knowledge.

2.4.3.2.1. Creating partnerships, providing advice and knowledge

The energy for poverty reduction strategy presents a model of operation where the Bank's operations in member states are carried out in partnership with all stake holders including

¹¹¹ World Bank Group (2001)17.

¹¹² World Bank Group (2001)17.

¹¹³ World Bank Group (2001)17.

¹¹⁴ World Bank Group (2001)1.

¹¹⁵ World Bank Group (2001)1.

recipient countries, in recognition of the significance of the latter's input in poverty reduction initiatives. This is a shift from the conventional approach used to implement the Structural Adjustment Programs (SAPs) where empowerment and inclusion of the recipient population were under looked; consequently, the SAPs had very little impact on poverty reduction.¹¹⁶ As a result of increased international criticism from various key stake holders including nongovernmental organisations, the Bank and other multilateral funders considered it prudent to adopt new strategies considered vital for poverty reduction.¹¹⁷

The new approach would therefore ensure input by citizens from recipient countries to garner country support and ownership necessary for effective program implementation. Indeed, when Bank President James Wolfensohn launched the Comprehensive Development Framework (CDF) in 1999, a new way of development assistance was established with a focus on four principles: a long term holistic framework, meeting the needs of the people, country owned strategies and country led partnerships.¹¹⁸

The Bank's conventional approach to development assistance involved transfer or transplantation of development policies from developed to developing countries.¹¹⁹ By introducing a new mode of operation, it recognised that in order to develop the economy of its poor members, it was paramount to take into account the interests and concerns of the people on the receiving end of the development process. This was an innovation that was not only profound but, also unprecedented in its history of operation.¹²⁰ In that regard therefore, poverty reduction strategies would be country owned and their implementation would be based on collaboration between the Bank and its clients and other stakeholders involved in the development process.¹²¹

In order that a member country owned its own strategies, the energy for poverty reduction strategy paper provided that while working with its clients, the Bank would offer support for

¹¹⁶ World Bank *Toward Country-Led Development: A Multi-Partner Evaluation of Comprehensive Development Framework* Synthesis Report (2003)4. available at http://siteresources.worldbank.org/IDA/Resources/OED_evaluation_of_CDF.pdf (accessed 25 March 2011) (hereafter World Bank (2003)).

¹¹⁷ World Bank (2003)4.

¹¹⁸ World Bank (2003)1.

¹¹⁹ Michael FK *Global Best Practice (s) and electricity sector reform in Uganda CSGR* Working Paper No.192 (2006) available at <http://www2.warwick.ac.uk/fac/soc/csgr/research/workingpapers/2006/wp19206.pdf> (accessed 29 January 2011).

¹²⁰ World Bank (2003)1.

¹²¹ World Bank Group (2001)20.

the development of poverty reduction strategies within the country development framework and also ensure that development of energy resources is included in the poverty reduction strategies.¹²²

This approach can be seen in the development process of the PRSPs of member countries under the HIPC initiative. In the case of Uganda, its poverty reduction strategy first appeared in the context of PEAP in 1997 which was subsequently revised and approved as its PRSP by the WBG in 2000.¹²³ In the PRSP, the State recognised the significance of renewable energy resources for socio-economic development of the rural communities and incorporated it into the PRSP,¹²⁴ despite the fact that by this time, the strategy paper on energy for poverty reduction had not yet been released. The most probable conclusion is that the wave of change at that time streamlined policy formulation processes in such a way that considerations for poverty reduction strategies took centre stage. The author argues that although Uganda's PRSP preceded the strategy paper on energy for poverty reduction, the two documents are interconnected in terms of their overall objective which is to reduce poverty and they recognise that development of energy resources plays a fundamental role in achieving that objective.

That notwithstanding, the author argues that Uganda's PRSP very little consideration was given to strategies needed to encourage extensive development of renewable energy for significant rural transformation. This is because the role of renewable energy formed a very small component of the PRSP which implied that rural electrification was not a high priority at that time since the government only made a commitment to encourage development of renewable energy.¹²⁵ The language of the PRSP regarding development of rural electrification did not create an obligation on the state. The author submits that more consideration should have been given to rural energy development on two grounds: First, the Bank was involved in the development of the PRSP and due to its comparative advantage in provision of technical assistance in that regard, a detailed and comprehensive consideration should have been given to develop renewable energy for rural transformation. Secondly, this document formed a policy framework for poverty reduction programs therefore, its nature

¹²² World Bank Group (2001)20.

¹²³ World Bank (2009) 2

¹²⁴ Ministry of Finance, Planning & Economic Development *Uganda's Poverty Reduction Strategy Paper* (2000) 15 available at <http://www.imf.org/external/np/prsp/2000/uga/01/> (accessed 26 January 2011).

¹²⁵ Ministry of Finance, Planning & Economic Development (2000) 17.

and timing was very significant. The author argues that for these reasons therefore, the strategies on development of renewable energy in rural areas should have been extensively and strongly emphasised in the PRSP.

In order to promote rural transformation in Uganda, the Bank undertook to support rural development of renewable energy under the energy for rural transformation project with the main objective of a long term program to develop Uganda's rural energy and Information and Communication Technologies (ICT) sectors, to ensure a significant contribution to towards rural transformation.¹²⁶ The 10 year project aimed at developing commercially oriented rural and renewable energy to support rural transformation in Uganda, with the private sector taking the lead to provide small-scale renewable energy power generation, which could effectively support scaling up of electricity and ICT access to underserved areas on a sustainable basis.¹²⁷ The first phase of the project was to establish a robust policy to ensure a functioning and conducive environment, an appropriate institutional framework, and adequate sector capacities upon which a large-scale program can be built.¹²⁸ It would eventually lead to institutional and policy framework for rural electrification.

This project pioneered a number of the Bank initiatives in the energy sector in developing countries.

The first phase of this project was the first Bank-wide project under the Global Environment Facility (GEF)/World Bank renewable energy strategic partnership, which aimed to support renewable energy development through a programmatic approach parallel to the Bank's adaptable program loan instrument.¹²⁹ GEF funds are vital to promote sustainable development and it becomes very significant for rural electrification projects since it would encourage consideration of environmental needs of the poor in the development process.¹³⁰ It would also highly benefit rural communities within which most renewal energy resources are

¹²⁶ World Bank *Implementation Completion and Results Report on First Phase of Energy for Rural Transformation Program*, Report No: ICR 00001288, (2009)2 available at http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2010/01/22/000334955_20100122045155/Rendered/PDF/ICR12880Revise1previous0records10111.pdf (accessed 15 December 2010) (hereafter World Bank (2009)).

¹²⁷ World Bank (2009) 7.

¹²⁸ World Bank 'Energy for rural transformation project two' available at <http://web.worldbank.org/external/projects/main?pagePK=64312881&piPK=64302848&theSitePK=40941&Projectid=P069996> (accessed 23 February 2011).

¹²⁹ World Bank (2009)7.

¹³⁰ IUCN Academy of environmental law research studies *The Law of Energy for Sustainable Development* (2005)473.

located.¹³¹ Benefits such as economic productivities and employment opportunities would consequently promote development and self reliance of these regions.¹³² The author argues that self reliance would subsequently reduce competition for financial resources from the national treasury making it possible for the state to divert resources for investment in other sectors in the effort to end poverty.

The energy for rural transformation was also the first project in the Bank's Sub-Saharan Africa region to utilise the newly launched Prototype Carbon Fund (PCF) which inter alia, funded projects that produced green gas emission reductions, vital for environmental protection.¹³³

In support of this initiative, the Bank argues that the green gas emissions reductions could in the future be traded internationally under schemes such as the Kyoto Protocol to raise revenue.¹³⁴ It is noteworthy to mention that even though prospects of generating revenue seem bright the benefits from these projects are not derived as a matter of right just because a host country has implemented such a project.¹³⁵ For a project participant (who is a Party to the Kyoto Protocol) to be entitled to certified emissions reductions under the Clean Development Mechanism (CDM) under the Kyoto Protocol, the Party has to comply with very costly and time consuming procedural requirements such as preparation of project design, validation, independent evaluation by a designated authority, registration, monitoring, verification.¹³⁶

Moreover, before the emissions reduction can be certified, the applicant must prove that the emissions reduction achieved is additional to any other that would have been achieved even without this project in issue.¹³⁷ It is argued that the procedural requirements within the project cycle are very costly and yet there is no certainty that the revenue to be generated will meet

¹³¹ In Uganda for example, renewable energy resources are located mostly in rural areas in almost all regions of the country. Small hydro power in the west include Mobuku 1 & 3, Kikagati Geothermal potential in the East African great rift valley, in the north such as Kuluva and Nyagak, high solar potential throughout the country, strong winds in the north eastern parts of the country.

¹³² Goldemberg J, Thomas BJ, Amulya KNR & Robert HW *Energy for a Sustainable World* (1988)234.

¹³³ The Kyoto Protocol to the United Nations Framework Convention on Climate Change establishes the CDM in art. 12(1) & (2) with two objectives: First it is aimed to promote attainment of sustainable development and to stabilise the greenhouse gas emission concentration in the atmospheric level that would prevent dangerous anthropogenic interference with the climatic systems. Secondly, assist developed countries (in Annex 1) to achieve compliance with their quantified emission limitation and reduction commitments in art. 3.

¹³⁴ Art. 12 (3) (a) of the Kyoto Protocol parties not included in Annex 1 (developing countries) will benefit from project activities resulting in certified emissions reductions. It is under this provision that developing countries can internationally trade emissions reduction.

¹³⁵ IUCN Academy of Environmental Law *The Law of Energy for Sustainable Development* (2005) 233.

¹³⁶ IUCN Academy of environmental law (2005)233.

¹³⁷ IUCN Academy of environmental law (2005)233.

the costs for such projects.¹³⁸ In addition to that the ‘additional requirement’ is a disincentive for participation under the CDM because even in the absence of the certified project, similar projects would have been carried out anyway.¹³⁹ The author submits that irrespective of the foreseen challenges, investments in emissions reduction projects should be encouraged provided GEF funds and additional sources of funds are available. Although the ‘additional requirement’ may be considered to be a deterrent factor in investments under the CDM, the most probable justification for the ‘additional requirement’ is to encourage the state to promote investment in as many other reductions emissions projects as possible to attain the required level of carbon emissions reductions.

Another ‘first’ achieved by the energy for rural transformation project was to place emphasis on private sector participation in rural electrification as well as incorporate cross-sectoral ministries as implementing agents.¹⁴⁰ Creation of partnerships and linkages with various ministries would provide an invaluable tool for effective coordination during program implementation.

Despite the emphasis on private sector, the participation by both local and international private sector was very limited in the initial grid extensions (the largest component of the project).¹⁴¹ Some factors such as limited technical and business skills, financial and limited publicity by the government to create awareness of the business potential of energy investments and availability of financial equity contributed to poor implementation of the project.¹⁴²

It is also clear that the government and the Bank did not carry out effective assessment of the potential of the private sector project preparation, which had an adverse impact on the success of this phase.¹⁴³ Although formal responsibility for preparation of a project brief rests with the borrower, the Bank has often been extensively involved in the process by ensuring effective preparation of project briefs¹⁴⁴ because the responsibility of preparing

¹³⁸ IUCN Academy of environmental law (2005)233.

¹³⁹ IUCN Academy of environmental law (2005)233.

¹⁴⁰ World Bank (2009)7.

¹⁴¹ World Bank (2009)29.

¹⁴² World Bank (2009)29.

¹⁴³ World Bank (2009)29 as a result of these constraints, the project design was modified so in terms of the roles to be played by the private sector and publicly funded investments in rural energy.

¹⁴⁴ Warren CB The project cycle in Bradlow DD(ed) *International Borrowing: Negotiating and Structuring International Debt Transactions* 3 ed (1994)213 (hereafter Warren CB (1994)).

project briefs is very demanding, it requires adequate resources and proper planning to carry out activities such as feasibility studies in order to determine the most satisfactory solution.¹⁴⁵

The Bank's failure to ensure proper preparation of the project brief resulted in modification of the approach for the main grid extension component with the government financing 100 per cent of the capital investments needed for grid extensions and private sector participation shifted from providing equity contribution to bidding for operation and management of the grid extensions.¹⁴⁶ The author submits that this modification further increased the financial burden on the state contrary to what had been envisaged under the program. Since commercially oriented rural electrification was the first of its kind in the country, extensive private sector input during the feasibility studies was necessary to enable the government and the Bank assess and establish the potential, willingness and overall commitment of the private sector towards rural electrification. Considering that the development of rural electrification through private sector was the first of its kind in the Sub-Saharan region, the Bank and the government should have developed and implemented a pilot scheme so that lessons learnt from there could provide the basis for subsequent actions in that regard.

The Bank highlights specific achievements of its support under the project including the establishment of Rural Electrification Agency (ERA) which is operational and well equipped to issue permits and licenses for project developers and new network operators; Rural Electricity Board (REB), Rural Electricity Fund (REF), creation of partnerships with several banks financing investments in phase one, health centres with electricity offering improved services.¹⁴⁷ The author submits that the establishment of these institutions provides the stepping stone for promoting access to energy and only a component of what would be required to improve the standard of living of the population through access to adequate and reliable energy.

However, in the report on the implementation completion and results of the first phase of the project, the Bank admits that the project has had very little impact in improving the life style of the people in rural areas because in most of the areas, the people's access basic needs such as clean water have not significantly improved from the baseline. In addition to that, in

¹⁴⁵ Warren CB (1994)214.

¹⁴⁶World Bank (2009) 8.

¹⁴⁷World Bank (2009)87.

situations where the report highlights a significant increase, e.g., in household incomes and improvement in health care,¹⁴⁸ the author submits that the report fails to show a comparative analysis between the baseline and current figures to reflect the extent of the impact on the communities.

2.4.3.2.2 Selective application of instruments

The Bank has three types of instruments: lending, non-lending and grants which are applied in accordance with the Bank's policies respectively. Their lending instruments include investment loans (that fund actual projects) and loan guarantees to high risk projects.¹⁴⁹

The strategy paper on energy for poverty reduction states that lending instruments such as loans and guarantees are carefully assessed and provided in a way that is intended to achieve the best results possible.¹⁵⁰ The practise by the Bank is to use its lending instruments such as loans and guarantees upon assessment of the creditworthiness of the borrower.¹⁵¹ In fulfilling its mission, the Bank is assisted in its operations by IFC's through promotion of private sector investments. Whenever private capital is insufficient and the member country is creditworthy, the IFC can issue loans and equity and MIGA provides guarantees to support private investments.¹⁵² Where it is not creditworthy, and for poor member countries, the IDA can issue Partial Risk Guarantees (PRGs) with sovereign counter guarantees to support private investments, particularly where the key risk of a project relates to concerns about government performance or policy reversals.¹⁵³

In Uganda's case, the author argues that almost all the instruments were applied in the Bujagali private power project estimated at a cost of US\$ 582 million.¹⁵⁴ It is a private public partnership (structured as an independent power project) between the private project sponsors, the government, multilateral and bilateral development agencies, and commercial lenders as beneficiaries of the partial risk guarantee.¹⁵⁵

¹⁴⁸ World Bank (2009)21-24.

¹⁴⁹ Rogers PP, Kazi FJ & John AB (2008)314.

¹⁵⁰ World Bank Group (2001)5

¹⁵¹ World Bank Group (2001)5

¹⁵² World Bank Group (2001)20.

¹⁵³ World Bank Group (2001)20.

¹⁵⁴ World Bank Group (2001) 2.

¹⁵⁵ World Bank Group (2001) 57.

In this project, the Bank applied almost all instruments: loans and equity investments by the IFC, PRGs by the IDA, and guarantees by the MIGA. This decision may have been justified by the economic indicators early 2005 that revealed a weak economic performance by the Ugandan economy and economists projected that the country's foreign debt would increase by 8.95 per cent over the previous year to shs.4.9 billion by the end of June, 2005.¹⁵⁶ As a result, the Africa development bank, the IMF and the Bank warned the government to refrain from excessive borrowing so as to prevent foreign debt from increasing unsustainably again, even after the debt cancellation initiative.¹⁵⁷ In light of these projections at the time, investing in Uganda was considered a highly risky venture, which in the opinion of the government and the Bank necessitated private sector participation who would inject huge sums of money into the sector.

According to the project proponents the aim of this project is to reduce poverty by improving the service delivery and reliability of power supply through private ownership and management, and to expand access to energy services which will in turn contribute to poverty alleviation through income and employment generation.¹⁵⁸ Since a large percentage of this project's cost is incurred in dollars, it is highly probable that the investors will suffer exchange rate risks especially if the value of Uganda's national currency continues to depreciate against the dollar as has been the trend.¹⁵⁹ The author argues that the cost implications for consumers will further increase if the value of the national currency continues to depreciate.

Heavy reliance on imported equipments expose investors to exchange risks due to high costs of the assets, the long pay back periods and also the fact that power assets often depreciate over a longer time, such that returns tend to be recovered over a long period of time exposing the investors to the risk of a currency crisis at some point in the life of the project.¹⁶⁰ It is noteworthy to mention that although the IDA provided the PRG to cover foreign exchange risks in case of restrictions on currency convertibility and transferability, the tax will meet the

¹⁵⁶ African Development Bank & OECD *African Economic Outlook* (2005-2006) 512 available at www.oecd/dev/publications/africanoutlook (accessed 16 December 2010) (hereafter African Development Bank & OECD (2005-2006)).

¹⁵⁷ African Development Bank & OECD (2005-2006) 512.

¹⁵⁸ World Bank, IFC & MIGA (2007)18.

¹⁵⁹ Bank of Uganda <http://www.bou.or.ug> (accessed 9 February 2011).

¹⁶⁰ Matsukawa T, Robert S & Joseph W *Foreign exchange risk mitigation for water and development Projects in Developing Countries.*, Energy and Mining Sector Board Discussion Paper, No.9 (2003)15. available at <http://gsbnet.uct.ac.za/mir/admin/documents/Foreign%20Exchange%20Risk%20Mitigation.pdf> (accessed 1 March 2011).

cost of any indemnity paid by the IDA under the indemnity agreement with the government. The long maturity period on the IFC loans also increase the cost impact on the state.¹⁶¹ Investors are interested in recovering their cost of supply and making profits which causes power tariffs to increase to be able to receive the desired profits.¹⁶² In that regard, it is probable that the high costs of Bujagali power project will lead to high tariffs unaffordable by many Ugandans since 31.1 per cent of the people live below the poverty line.¹⁶³

A review of the Bank's energy for poverty reduction strategy the independent energy group shows that the poor are often the last to benefit from increased access to power.¹⁶⁴

2.5 Conclusion

The Bank was established with the purpose to promote reconstruction and development of its member states, and it has now become the mission of the Bank to reduce global poverty. The Articles of Agreement of the Bank have established a governing structure that has the power to make policies and manage programs on behalf of the Bank. The weighted voting system has given so much voting power to the MDC members giving them a higher stake in the governing body of the Bank, while a weaker voting power has been assigned to DTCs because of their relatively poor economic performance on the global scene. As a result, the developing countries play a very small role in directing policy issues on poverty reduction, even though they are particularly prone to the problem. The Bank has taken some steps to increase the voices of these DTCs but the reforms do not elevate their voting power to an equal position to that of the MDCs. Further, there has been a delay in approving the resolutions on the reforms which reduce their impact. It is important that at the next shareholding review meeting in 2015, there should be an increase in basic votes for DTCs to a level that equalises their voting power to that of the MDCs for their effective participation.

The strategy on energy for poverty reduction embraces key business lines to directly benefit the poor, promote good governance, private sector participation, environmental protection and macroeconomic stability and the basis upon which the Bank will provide funding. The Bank has supported specific energy investment programs and projects in Uganda to contribute to poverty reduction, but with very little impact in that regard. One key aspect that

¹⁶¹ World Bank, IFC & MIGA (2007)14.

¹⁶² Matsukawa T, Robert S & Joseph W (2003) 16

¹⁶³ World Bank 'Country data' <http://data.worldbank.org/country/uganda> (accessed 9 February 2011)

¹⁶⁴ World Bank *New Renewable Energy: A review of World Banks Assistance (2006) 15* available at http://lnwebgo.world.org/oed/oeddoelib.nsf/DocUNIDViewForJavaSearch/4CB9516F062EDA89852571F700708348/&file/renewable_energy.pdf (accessed 10 February 2011).

deserves mention is that it endeavours to take into consideration environmental concerns in its project support, with emphasis on renewable energy that would eventually lead to provision of clean energy services. The initiative to focus on private participation in spearheading rural electrification received very minimal support from private investors, revealing the negative attitude and prejudices to rural energy investments by entrepreneurs. The failure to carry out effective preparation of project brief highly affected the success of the project. The Bank and the government should have started with a pilot project should have been the first priority option for this project.

The Bujagali independent power project is being developed at a very high cost largely financed in foreign currency. This heavy reliance on foreign currency and imported equipments will raise the cost of investments and ultimately cause an increase in the power tariffs that will be unaffordable by the majority of Ugandans. Provided the majority of Ugandans fail to access the power from this project, it becomes unrealistic to believe that this project will have significant impacts on reducing poverty levels. Although the Bank has the duty to advise its member states on the course of action to take on the available investment options and opportunities, it is also the duty of the state to exercise its power and determine the most appropriate investment options, however, it becomes impossible to draw the boundary line between the powers of the Bank and that of the state regarding the latter's right to enjoy its sovereignty while deciding on the measures for development of its energy resources.

Since the Bank is a multilateral lender with a comparative advantage over other multilateral lenders in terms of favourable lending rates and free stand-by technical assistance, member countries are indirectly obliged to accept the advice and decisions of the Bank. It is imperative that the Bank and the member states create modalities that will allow equal participation for all key stakeholders, for effective implementation of the energy for poverty reduction programs. It is only at such point that the country will witness a world free of poverty. Therefore, there is need for proactive commitments from both parties to identify effective ways to end poverty through the use of energy resources.

CHAPTER THREE

ANALYSIS OF WORLD BANK STRATEGIES FOR REFORM OF UGANDA'S POWER SECTOR UNDER THE ENERGY SECTOR ASSESSMENT REPORT

The purpose of this chapter is to analyse the impact of the Bank's policies and strategies for the power sector within the context of Uganda energy sector assessment report 1996. It provides an overview of the political and socio-economic context of the economy intended to reveal the trend of development. It describes the Bank's assessment of the power sector in the report, highlighting the challenges facing the sector at the time and specific policy recommendations necessary for the sub-sector to steer economic development. The chapter analyses whether the institutional and legal reforms have promoted a financially viable sector for poverty reduction within the context of private sector participation. It also assesses the impact of the reforms on access to modern energy by all people, including the poor in Uganda.

3.1 Political and socio-economic status of Uganda

3.1.1 Political context

Following independence from British colonial rule in 1962, Uganda experienced a decade of relative political and economic stability¹⁶⁵ but in 1971, a military coup by Idi Amin started off a trajectory of violence and mismanagement that reduced the country to a failed state and a collapsed economy. Political and economic turmoil continued between 1979 and 1985, with successive coups, and a disputed election in 1980 which led to civil conflict across the country.¹⁶⁶ When the National Resistance Movement (NRM) led by President Yoweri Museveni took power in 1986, it began a period of sustained economic and political renewal and within the first decade of NRM rule, the government focused on reconstructing the economy through pro-market reforms and increasing the legitimacy of government institutions through political liberalization, but a brutal civil war waged by the lord's resistance army in northern Uganda left thousands dead and millions displaced, constraining

¹⁶⁵ World Bank 'Uganda: political context' available at <http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/AFRICAEXT/UGANDAEXTN/0,,menuPK:374947~pagePK:141132~piPK:141107~theSitePK:374864,00.html> (accessed 8 February 2011).

¹⁶⁶ World Bank 'Uganda: political context' available at <http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/AFRICAEXT/UGANDAEXTN/0,,menuPK:374947~pagePK:141132~piPK:141107~theSitePK:374864,00.html>.

economic activity and entrenching poverty in the region.¹⁶⁷ After protracted peace efforts, the LRA was pushed out of Uganda in 2005, since then, there is relative peace and economic activity is now resuming in the region, and most internally displaced persons have left their camps and returned to their land.¹⁶⁸

3.1.2 Macroeconomic context

Uganda is a low income landlocked country in the Sub-Saharan region with 73 per cent of the population employed in the agricultural sector¹⁶⁹ and exports products such as coffee, tea, fish, electrical and electronic equipments. However, coffee is the dominant export product providing income for a large number of small scale farmers and labourers.¹⁷⁰

Since 1987, Uganda has experienced rapid economic development achieving broad based macro-economic growth and stability.¹⁷¹ According to the poverty assessment report 2000, the gross domestic product expanded in real terms at an annual rate of 6 per cent while inflation remained at 5 per cent per annum. Despite the impressive development indicators, the poverty assessment report indicated that majority of the people in the country were poor and there was high regional imbalance in terms of poverty levels with the northern region as the poorest followed by the eastern region. The western region fared poorly although it had the second highest income levels after the central region. The state of poverty in the country was also confirmed by the 1998 World Development Report (WDR). In the WDR, the UNDP classified Uganda as one of the poorest countries in the world and ranked it at 159 out of 175 countries in terms of the human development index which reflected that human development was far behind the high level of economic performance.¹⁷²

Recent data reveal that there has not been a significant change in poverty levels in the country. In the 2010 report by the overseas development institute¹⁷³ it is pointed out that strong growth within the country has coincided with falling poverty. However, reduction in

¹⁶⁷ World Bank 'Uganda: political context' available at <http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/AFRICAEXT/UGANDAEXTN/0,,menuPK:374947~pagePK:141132~piPK:141107~theSitePK:374864,00.html> (accessed 25 February 2011).

¹⁶⁸ World Bank 'Uganda: political context' available at <http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/AFRICAEXT/UGANDAEXTN/0,,menuPK:374947~pagePK:141132~piPK:141107~theSitePK:374864,00.html>

¹⁶⁹ Overseas Development Institute (2010)1.

¹⁷⁰ Overseas Development Institute (2010)10.

¹⁷¹ World Bank Poverty assessment report available at <http://www.finance.go.ug/docs/PPA1%20National%20Report.pdf> (accessed 25 February 2011)

¹⁷² Overseas Development Institute (2010)10.

¹⁷³ Overseas Development Institute (2010)1-2.

poverty level has been fluctuating within the survey period. For example in 1999/2000 the population below poverty line was at 33.8 per cent which increased to 38.8 per cent in 2002/03 and declined to 31.1 per cent in 2005/06.¹⁷⁴ The overseas development institute also noted that although the decline from 2002/03 to 2005/06 was remarkable, it could not be interpreted to mean that the country is progressing in reduction of poverty since there is a high population growth rate of 3.2 per cent per annum.¹⁷⁵

In the most recent survey of 2009/2010 shows a 7.8 per cent decline in the number of Ugandans living in absolute poverty from the last survey for 2002/03-2005/06 with reduction of 1.28 million poor persons.¹⁷⁶ It also confirmed the prevalence of regional imbalance in poverty levels with an increasing rate of poverty in the northern region, which continued to be the home for majority of the poor.¹⁷⁷

The author argues that the level of poverty in the country is still high despite the high economic growth and the poorest regions are still poor, revealing high income inequalities and prevailing historical regional imbalances in development.

3.1.3 Poverty reduction policy context

Poverty reduction is a fundamental objective of Uganda's development strategy which was initially outlined in the PEAP in 1997 that was subsequently revised and approved in 2000 by the Bank and IMF as the country's PRSP. The PEAP was based on four key pillars:¹⁷⁸

- a) To directly increase the ability of the poor to raise their income recognising and supporting rural electrification to encourage entrepreneurs to invest in power infrastructure in rural areas;
- b) To directly increase the quality of life of the poor;
- c) To create an enabling environment for economic growth and structural transformation; and
- d) To ensure good governance and security.

¹⁷⁴ Overseas Development Institute (2010)1.

¹⁷⁵ Overseas Development Institute (2010)1.

¹⁷⁶ Sarah S Household expenditures and income poverty trends for Uganda: Preliminary Findings (2010) 14. http://www.ubos.org/onlinefiles/uploads/ubos/UNHS0910/PovertyProfile_oct2010.pdf. (25 February 2010). (hereafter Sarah S (2010))

¹⁷⁷ Sarah S (2010)14.

¹⁷⁸ World Bank (2009) 2.

Uganda is richly endowed with renewable energy resources vital for developmental activities and in 2007, the Ministry of Energy and Mineral Development (MEMD) formulated the renewable energy policy for Uganda to regulate the exploitation of these resources¹⁷⁹ with the overall goal to increase the use of modern renewable energy from 4 per cent to 61 per cent of the total energy consumption by the year 2017.¹⁸⁰ The objective of the policy would be achieved through specific actions such as private and public investments in power generation from small and large hydropower schemes, rural and urban-poor electricity access programmes, modern energy services programmes, energy efficiency programmes and bio fuels programme.¹⁸¹

In 2010, the government approved the NDP that provides a general framework for economic growth and poverty eradication. The Plan recognises the significant role the power subsector plays in the economy and encourages its development through strategies and interventions considered necessary to ensure sufficient electricity generation capacity.¹⁸² It is therefore the objective of the NDP that development of energy resources will significantly contribute to socio-economic transformation of the country from a peasant to a modern and prosperous country within 30 years.¹⁸³

3.2 Reform of the power sector

The power sector is seen as a major key player in poverty reduction and its effectiveness would contribute towards overall development of the economy. Reform has been seen as a measure to promote commercialisation of the sub-sector and profit maximisation for its growth and expansion to meet the growing demand.

3.2.1 Historical background

3.2.1.1 Institutional Framework

The Ministry of natural resources was given power under the Electricity Act 1964 to formulate policy and provide operational oversight over the power sector and Uganda

¹⁷⁹ Ministry of Energy & Mineral Development *The Renewable Energy Policy for Uganda* (2007)1 available at <http://www.rea.or.ug/userfiles/RENEWABLE%20ENERGY%20POLIC9-11-07.pdf>. (accessed 31 January 2011) (hereafter Ministry of Energy & Mineral Development (2007)).

¹⁸⁰ Ministry of Energy & Mineral Development (2007)1

¹⁸¹ Ministry of Energy & Mineral Development (2007)12-12.

¹⁸² Ministry of Finance, Planning & Economic Development (2010)1.

¹⁸³ Ministry of Finance, Planning & Economic Development (2010)1.

Electricity Board (UEB) was charged with the responsibility to conduct the day to day operations of the sector.¹⁸⁴ The institutional framework created a monopolistic market structure with UEB as the sole agency mandated to carry out generation, transmission and distribution of power, including the power to license any other persons who desired to sell electricity outside their premises.¹⁸⁵ The Electricity Act 1964 did not establish an independent regulator which gave an opportunity for the government to interfere with UEB's operations.¹⁸⁶

3.2.1.2 Power production

Generation of electric power in Uganda started with production from a hydro power plant, the Owen falls dam constructed in 1954 (subsequently renamed Naluubale) with an original installed capacity of 150MW.¹⁸⁷ Uganda also had a mini-hydro plant in the country with eight small diesel generating plants in isolated systems producing less than 200kWh each.¹⁸⁸ National consumption of electricity was very low by only about 5 per cent of the population of 18 million people, the majority of the people were either not within reach of the electricity system or could not afford the service.¹⁸⁹ The demand projections indicated power consumption was increasing but at a slow pace. The level of power production was low with the larger portion of it accessible only by a small section of the population residing within the capital city and neighbouring urban centres.¹⁹⁰

Coupled with the low level of production the sector suffered major infrastructural setbacks during the civil war that plagued the country in the early 1980's and it was unable to produce adequate power needed for development. With support from donors the sub-sector was rehabilitated to increase its capacity to 180 MW capable of producing 1000-1100 GWh per year.¹⁹¹ Despite the infrastructural improvements, the government did not witness a significant increase in its productivity. Consequently, the government requested the Bank to assess the energy sector and identify strategies for its effective performance.¹⁹²

¹⁸⁴ World Bank (1996)25.

¹⁸⁵ World Bank (1996)26.

¹⁸⁶ World Bank (1996) 22.

¹⁸⁷ World Bank (1996)22.

¹⁸⁸ World Bank (1996)24.

¹⁸⁹ World Bank (1996) 24.

¹⁹⁰ World Bank (1996)26.

¹⁹¹ World Bank (1996) 22.

¹⁹² World Bank (1996) 22.

In its assessment the Bank noted that the sector was highly inefficient providing poor quality service and in a poor state of financial condition unable to earn a profit, service its debts or contribute significantly to meeting its investment needs. Indeed the sector lacked the institutional strength to play its role in the socio-economic development of the country.¹⁹³ Accordingly, the Bank proposed key strategies to reform the sector to an efficient and commercially oriented industry:¹⁹⁴

- a) *Institutional change* so as to establish institutions that would operate efficiently, provide high quality services and are financially sound;
- b) *Private sector participation* to ensure maximum exploitation of resources and efficiency;
- c) *System development* so as to meet the growing demands of the economy and export markets. In so doing, the government would need to adopt the least cost-path for expanding the sector; and
- d) Extend electrification to other areas of the country so as to increase geographical coverage of electricity through grid and or grid-connected conventional and non-conventional sources of supply.

3.2.2 The reform process

The sector faced challenges such as unreliable power supply, inadequate investment in all parts of the sector, high technical and non-technical losses exceeding 30 per cent, very poor commercial performance by UEB with collection being received for less than 50 per cent of electricity generated, low productivity and poor rate of connection of new customers.¹⁹⁵ The initiative to reform the legal, regulatory and institutional framework would therefore be seen as the most appropriate remedy to improve the commercial performance of the sector and turn it into a financially viable power provider.¹⁹⁶ Reforming such an inefficient sector would require the lead agency to be innovative and identify appropriate implementation mechanisms that can promote development of the sector.

¹⁹³World Bank (1996)22.

¹⁹⁴ World Bank (1996) 22.

¹⁹⁵ Electricity Regulatory Authority *Tariff Structure Determination in Uganda* (2006)1 available at <http://www.era.ug/Pdf/Tariff%20setting%20guide-July%2031%202007.pdf>.

(accessed 15 December 2010) (hereafter Electricity Regulatory Authority (2006)).

¹⁹⁶ Electricity Regulatory Authority(2006)1.

The reform process started with formulation of policies that paved the way for legal reforms, structural changes and privatisation of government power entities.

3.2.2.1 The power sector strategic plan

The government formulated the power sector strategic plan in 1997 to transform the sector into a financially viable electricity industry that would provide adequate, affordable and reliable power supply to meet the demands of economic growth in the economy.¹⁹⁷ The power sector strategic plan was updated in the power restructuring and privatisation strategy in 1999 with special emphasis on the promotion of private sector participation so as to encourage competition and promote efficiency within the sector.¹⁹⁸

3.2.2.2 Enactment of the Electricity Act No.6 of 1999

Under the Electricity Act 1964 UEB had the right to generate, transmit and distribute power and 'regulate' the sector, it monopolised the market and in the Bank's assessment report, this market structure was a hindrance to entry of other participants into the sector.¹⁹⁹ In that regard, the Bank recommended that the government creates an enabling environment with an independent regulator to regulate power provision and facilitate entry and participation of private sector in the market.²⁰⁰ Consequently, the Parliament of Uganda enacted the Electricity Act No.6 of 1999 that gave the legal basis for institutional and regulatory reforms to transform the sector. All the laws of Uganda were revised in 2000 and the Electricity Act No.6 of 1999 is now referred to as The Electricity Act Cap 145 (the Act).

The Act repealed the Electricity Act of 1964 which is a very significant impact of the legislation.²⁰¹ The author submits that by repealing the Electricity Act of 1964 the legal basis of UEB was brought to an end, opening the door for private sector into the power market. It is noteworthy to mention that s. 123 of the Act reserved UEB's to generate, transmit, distribute and sell power except that these powers would be exercised only within the transition period under a license issued by the Minister.²⁰² The author argues that on the whole, the life and UEB had come to an end and it was only a matter time that the powers exercisable under

¹⁹⁷ Electricity Regulatory Authority (2006)1.

¹⁹⁸ Electricity Regulation Authority (2006)1.

¹⁹⁹ World Bank (1996) 39-40.

²⁰⁰ World Bank (1996) 39-40.

²⁰¹ S.130 (1) the Act.

²⁰² S.122 (1) & (2) of the Act.

s.123 would be completely divorced from it and transferred to national corporate entities and agencies established to perform those functions.

UEB was eventually unbundled into three successor companies to carry out generation, transmission and distribution of power and registered in accordance with the Companies Act as follows:²⁰³

- a) Uganda Electricity Generation Company Limited (UEGCL);
- b) Uganda Electricity Transmission Company Limited (UETCL); and
- c) Uganda Electricity Distribution Company Limited (UEDCL).

These three companies would independently carryout generation, transmission and distribution of power respectively. Moreover, disintegrating UEB's functions was intended not only to open up the market to other players but it was also intended to achieve the following specific objectives:²⁰⁴

- a) To promote greater transparency in electricity pricing, and in monitoring the efficiency of the three business segments;
- b) To ensure better corporate governance; and
- c) To introduce competition in the sector.

3.2.2.3 Privatisation of UEDCL & UEGCL

The main purpose for privatisation of state owned entities is to ensure that state utilities conduct their business based on principles of profit maximisation.²⁰⁵ Privatisation commenced with the transfer of assets of UEB to UEGCL, UETCL and UEDCL and took the form of management contracts under lease agreements between private companies and UEGCL and UEDCL respectively. The government did not privatise UETCL leaving it with the responsibility of system operation, managing the transmission network, its maintenance, and dispatch, bulk purchase and supply of electricity.²⁰⁶

²⁰³ Electricity Regulatory Authority *Constraints to investments in Uganda's electricity generation industry report* (2008) 2 available at http://www.era.or.ug/Pdf/Report_Constraints_To_Investments.pdf (accessed 1 March 2011)(hereafter Electricity Regulatory Authority (2008)).

²⁰⁴ Electricity Regulatory Authority (2006)2.

²⁰⁵ United Nations Economic Commission for Africa & United Nations Environment Program (2007)66.

²⁰⁶ UETCL has been designated by the Electricity Regulatory Authority as the bulk supplier of power and systems operator as required in s. 55 & s.56 of the Act.

In 2003, the generation concession license was won by Eskom (U) Ltd which entered into a 20 year lease agreement with UEGCL so that Eskom (U) Ltd could manage the generation assets at Naluubale and Kiira hydropower plants.²⁰⁷ Privatisation of UEDCL was completed in 2005 through an international bidding process won by Umeme Ltd to manage and operate the national grid under a 20 year concession from UEDCL. Umeme Ltd was originally a joint venture between Globeleq (56 per cent ownership) and Eskom (44 per cent) but Eskom subsequently withdrew from the partnership, which left 100 per cent ownership of Umeme Ltd by Actis.²⁰⁸

3.3 Organisational structure of the power sector

The power sector is under direct supervision of the energy resources department of the MEMD whose overall mandate is to ensure that energy resources are properly exploited to meet the socio-economic development needs of the country.²⁰⁹ According to s.17 (1) of the Act the Minister of MEMD has the power to formulate policy related to operations of the power sector.²¹⁰

The mandate of the MEMD is fulfilled through various activities carried out by its departments, the Rural Electrification Agency (REA) and parastatals such as Kilembe Mines Limited, UEGCL, UETCL, and UEDCL which operate under the oversight and supervision of the MEMD.²¹¹ The MEMD also provides policy guidelines and directives to regulate the operations of the Electricity Regulatory Authority (ERA).²¹² The development of energy resources also involves co-ordination with other institutions such as the Uganda Investment Authority (UIA), the directorate of water resources management, the Uganda National Bureau of Standards (UBOS), the National Environmental Management Authority (NEMA)

²⁰⁷ Electricity Regulatory Authority (2008) 2.

²⁰⁸ Zacune J *Globeleq: The alternative report* (2006)15 Actis is the fund management company that was demerged from Commonwealth Development Corporation in 2004 and handles the day to day management of Globeleq. The Commonwealth Development Corporation was transformed into a limited company wholly owned by Department for International Development (DFID) and Globeleq is a private company set up by the DFID.

²⁰⁹ Ministry of Energy & Mineral Development 'Mandate of the energy resources department' available at http://www.energyandminerals.go.ug/dept_energy (accessed 10 March 2011).

²¹⁰ S.17 (1) of the Act empowers the Minister to give directives with regards to policies to be followed by the authority.

²¹¹ Electricity Regulatory Authority *Developments and Investment Opportunities in Renewable Energy Resources in Uganda* (2009)4 <http://www.era.or.ug/Pdf/Developemnts%20and%20Investments.pdf> (accessed 27 January 2011) (hereafter Electricity Regulatory Authority (2009)).

²¹² S.16 of the Act.

and the private sector.²¹³ The author submits that each of these institutions forms part of the chain link in power production therefore, effective co-ordination among them significantly contributes to the success of the sector.

3.4 The electricity regulatory authority

In its assessment the Bank observed that UEB was only autonomous in principle because the Minister of natural resources had the powers to give policy directions, approve changes in tariffs and appoint its board of directors.²¹⁴ As a result the working relation between the government and UEB was characterised by lack of autonomy of UEB that eventually limited its effective operation. In that regard, it was appropriate for the government to establish an independent regulator that would operate within the ambit of an arm's length relationship with the Minister of natural resources.²¹⁵ In line with these recommendations, ERA was established under s.4 of the Act with a broad mandate listed in s.10 of the Act. For purposes of this study emphasis is placed on the following functions of ERA:

- a) To issue licenses for generation, transmission, or sale of electricity;
- b) To establish a tariff structure and investigate tariff charges, whether or not a specific complaint has been made for a tariff adjustment;
- c) To approve rates of charges and terms and conditions of electricity services provided by transmission and distribution companies;
- d) To prescribe and collect license fees; and
- e) To approve standards for the quality of electricity supply services provided.

The author submits that these are onerous duties that would require an effective regulator to be able to fulfil the required objectives.

3.4.1 Effectiveness and efficiency of ERA

Energy sector regulation is technically complex, contentious, and politically intricate even for experienced regulators let alone newly established ones in developing countries²¹⁶ and to

²¹³ Electricity Regulatory Authority (2009)6.

²¹⁴ World Bank (1996) 27.

²¹⁵ World Bank (1996) 27-28

²¹⁶ Gurcan G, Ruzanna M, Dmitry V & Michelle F *Improving regulatory agency efficiency and effectiveness: Best practices, processes and organisational structures* Working Paper (2005)6 available at <http://www.isnie.org/assets/files/papers2007/gulen.pdf> (accessed 1 March 2011) (hereafter Gurcan G, Ruzanna M, Dmitry V, & Michelle F (2006)).

function effectively and efficiently in such an environment, the Bank considers the following characteristics as desirable for a regulatory agency:²¹⁷

- a) Independence
- b) Accountability/legitimacy
- c) Competence

3.4.1.1 Institutional independence

The term ‘independence’ is subject to different interpretations some use it interchangeably with ‘autonomy’ while others perceive greater or lesser differences between the terms.²¹⁸ For purposes of this study, ‘independence’ means ‘autonomy’. For any entity to be considered independent, Warrick Smith suggests that it must satisfy the following elements:²¹⁹

- a) An arm’s length relationship with the firms that it regulates, its consumers and other private interests;
- b) An arm’s-length relationship with political authorities; and
- c) The attributes of organisational autonomy such as earmarked funding and exemption from restrictive civil service salary rules necessary to foster the requisite expertise and to underpin those arm’s-length relationships.

3.4.1.1.1 Maintaining an arm’s length relationship

Since regulation of the energy sector is complex and intricate, specific safeguards are necessary to ensure the independence of the regulator.²²⁰ Warrick Smith suggests that in order to create and maintain an arm’s length relationship with politicians, regulators should be provided with a distinct legal mandate free of ministerial control.²²¹ The author submits that the Act has provided separate roles of ERA and the Minister but it is difficult to ascertain the extent of the limit of the Ministers powers over ERA. S.10 of the Act lists the mandate of ERA (listed in 3.4 above) and s.16 of the Act provides for the independence of ERA and states that subject to the declared policy of the government and except as is otherwise

²¹⁷ Gurcan G, Ruzanna M, Dmitry V & Michelle F (2005)7.

²¹⁸ Warrick S *Utility Regulators- The Independence Debate* Public Policy for the Private Sector Note 127 (1997)1 available at <http://www.regulationbodyofknowledge.org/externalDocument/warrickUtility97/> (accessed 20 February 2011) (hereafter Warrick S (1997)).

²¹⁹ Warrick S (1997)1.

²²⁰ Gurcan G, Ruzanna M, Dmitry V & Michelle F (2005)7.

²²¹ Warrick S (1997)1.

provided in the Act ERA shall be independent in the performance of its functions and duties and shall not be subject to the direction or control of any person or authority. The author further submits that these provisions create separate functions for ERA and the Minister with the latter solely responsible for policy formulation while ERA is under the duty to regulate power provision. The author submits that the provisions of s.17 may determine whether or not it is possible to maintain an arm's length relationship between the Minister and ERA. S.17 permits the Minister to give directives *in writing* from time to time to ERA with respect to the policy to be observed and implemented except that the directive shall *not adversely affect or interfere* with the performance of the functions and exercise of powers of ERA under the Act.

The author submits that a written directive guards against arbitrary exercise of powers by the Minister. That notwithstanding, that the provision gives the Minister unlimited discretionary power because it requires that the minister's '*...directive shall not adversely affect or interfere with....*' Armed with this provision, the minister may excessively interfere with the work of ERA and limit its effective operation, especially in the absence of a definition or explanation in the Act of what constitutes '*adversely affect or interfere with.*' In the absence of a definition or explanation in that regard, the author submits that it is the discretion of the Minister to determine whether his directive will '*adversely affect or interfere with*' the operations of ERA and sometimes the discretion can be misused.

Therefore, the author submits that the provision should be amended and the qualifying phrases '*adversely affect or interfere with*' removed. In the alternative, the amendment should explain the meaning of '*adversely affect or interfere with*' so as to curtail misuse of discretionary power that may distort the intended balance of power between ERA and the Minister. While considering a similar provision in the Indian Electricity Act Subhes CB argues that the removal of qualifications '*adversely affect or interfere with*' in the Indian Electricity Act could affect regulatory independence.²²² The author submits that Subhes CB's argument is only tenable and would suffice in situations where the Act clearly explains the

²²² Subhes CB 'The Electricity Act 2003: will it transform the Indian power sector?' (2005) Vol.13 Issues 3 *Utilities Policy* 269 available at

http://www.sciencedirect.com/science?_ob=MIimg&_imagekey=B6VFT-4DGW5TK-21&_cdi=6019&_user=1378525&_pii=S095717870400075X&_origin=gateway&_coverDate=09%2F30%2F2005&_sk=999869996&_view=c&_wchp=dGLzVtb-zSkWA&_md5=da216254fa7869bda0f7b8a460b25c78&_ie=/sdarticle.pdf (accessed 1 March 2011).

specific circumstances under which certain levels of interference can be justified and the qualification is defined.

It should be noted that the power sector should serve economic and social welfare needs of the population.²²³ Therefore, the author argues that it may be necessary in certain cases for the government to actually interfere with the operations in the sector especially where any decision by the regulator is likely to threaten social coherence within a certain section of the society. Within the Ugandan context, the government has been interfering in the end-user tariff setting process through its commitment to provide subsidies and directives to the authority to ensure that power tariffs are affordable by consumers.²²⁴ The author argues that provision of distinct powers and functions of a regulator in the legislation is not always a guarantee of its independence especially where certain powers of the Minister are uncontrolled which makes it impossible to maintain an arm's length relationship between the regulator and the politicians.

3.4.1.1.2 Earmarked funding

The Bank recommended that the government should establish a financially sound institution that is able to provide high quality services.²²⁵ Adequate funding is considered an important condition for independent regulator especially when it has earmarked levies on regulated firms or consumers'.²²⁶ The Act has provided ERA with a separate fund that has a wide financial base consisting of license fees, levies, grants and loans²²⁷ over which it exercises control of its utilisation free from government interference. In the financial year that ended June 2009 ERA earned shs.2.5 billion from license fees which was a 2.5 percent rise from the shs.2.1 billion earned in the previous year.²²⁸ The author submits that ERA's ability to raise its own funds reduces the strain on, and competition for funds from the national treasury which allows the government to meet financial needs of other sectors such as health and education.

²²³ IUCN Academy of environmental law research studies *The Law of Energy for Sustainable Development* (2005) 410.

²²⁴ Reuters Africa 'Uganda to use \$212 million for power subsidy 2011' *Reuters Africa* 23 December 2010 available at 13 <http://af.reuters.com/article/idAFJOE6BM0B820101223> (accessed 30 January 2011).

²²⁵ World Bank (1996) 22.

²²⁶ Warrick S (1997) 2.

²²⁷ S. 22 of the Act.

²²⁸ Ibrahim K 'Electricity Regulatory Authority earns shs.2.5 billion from licenses' *The New Vision* 12 September 2010 available at <http://www.newvision.co.ug/D/8/220/731719> (accessed 8 March 2011).

3.4.1.2 Transparency and accountability

Transparency implies the openness of the regulatory process and decisions to stakeholders²²⁹ so that all stakeholders can access the regulatory process to participate and contribute to the decision making process.²³⁰ On the other hand accountability would require public hearings, a public record of submissions and public access to decisions and an annual report of activities including a financial audit.²³¹

The Act requires that ERA should be transparent in its operations and accountable for its decisions.²³² The author submits that openness of the regulatory process enables the regulator fulfils the requirement that the actions of the regulator are legitimate and enables it to gain the trust and confidence of stakeholders.

In its attempt to be transparent, ERA organises public forums to allow the public to consider issues that affect production, distribution and access to power.²³³ The general public is invited to submit comments on applications by power companies for review of tariff structures.²³⁴ The most important thing to note about this process is that the ultimate decision depends on the discretion of ERA that has to decide in the best interest of the sector.²³⁵ That being the case, ERA has to consider whether the revenue requirements applied for by the operators are fair and reasonable in light of the objective of continuity of supply and affordability and whether the proposed tariff regimes balance the interest of all current and potential stakeholders.²³⁶ The most important aspect about public input in the regulatory process is the recognition and weight accorded by the regulator to concerns raised by the members of the public.²³⁷

It is stated that the complexities that surround power regulation makes it imperative for ERA to be objective while exercising its discretion so as to be able to satisfy the interests of all stakeholders.²³⁸ The author points out that it is a difficult responsibility to satisfy the often

²²⁹ Gurcan G, Ruzanna M, Dmitry V & Michelle F (2005)7.

²³⁰ Gurcan G, Ruzanna M, Dmitry V & Michelle F (2005)7.

²³¹ Gurcan G, Ruzanna M, Dmitry V & Michelle F (2005)7.

²³² s.11 (f) of the Act.

²³³ Gurcan G, Ruzanna M, Dmitry V & Michelle F (2005)7.

²³⁴ Gurcan G, Ruzanna M, Dmitry V & Michelle F (2005)7.

²³⁵ Electricity Regulatory Authority Annual Energy Forum Report (2007)2 (hereafter Electricity Regulatory Authority (2002)).

²³⁶ Electricity Regulatory Authority (2007)2.

²³⁷ Gurcan G, Ruzanna M, Dmitry V & Michelle F (2005)7.

²³⁸ Electricity Regulatory Authority (2007) 2.

conflicting socio-economic interests of stakeholders, time and again, questions have been raised regarding the transparency of the tariff setting mechanism. For example, in the 2007 annual energy report, ERA pointed out that the public had raised their concern about their failure to appreciate how transparency fitted within the tariff setting mechanism.²³⁹ The annual energy report did not provide the detail and the extent of the problem²⁴⁰ consequently, it is difficult to assess the implications of the issues raised on the effectiveness and efficiency of ERA. However ERA's response to the public's concern could clarify on its level of transparency and accountability. According to ERA, the public had not previously shown interest during the review process and they would react after the tariffs have been set.²⁴¹ The author submits that the response could be implied to mean that the public is indeed not well informed about the tariff review process. On the other hand, the author argues that lack of public interest could also impute lack of public trust and confidence in the process and recommends that in order to ensure effective public participation, ERA must carry out wide media publication accessible by all key stakeholders so as to create awareness and also use it as an opportunity to demystify any misconceptions against the regulatory process. The author cautions against conducting public forums as mere act of compliance with regulatory procedures and recommends that public input should that create a positive impact on the sector's efficiency to avoid wastage of resources.

The author argues that access to relevant pieces of information would enable the public to effectively participate during any public meetings organised by ERA and the latter accountable for any decisions taken. A resource centre has been set up at ERA's office premises in the city centre, stocked with newsletters and brochures from other regulators, journals, company annual reports, textbooks, conference, seminar reports and it is open to the members of the public.²⁴² The author submits that ERA carries out its administrative duties within the only office in the city centre which implies that accessibility to the library is largely limited to the members of the public within the city centre and its surrounding neighbouring towns. In that regard majority of the population resident in other parts of the country have limited or no access to relevant pieces of information on power provision. In that regard, the author recommends that ERA should create regional offices to be able to

²³⁹ Electricity Regulatory Authority (2007) 2.

²⁴⁰ Electricity Regulatory Authority (2007) 2.

²⁴¹ Electricity Regulatory Authority (2007) 2.

²⁴² Electricity Regulatory Authority 'Resource centre' available at <http://www.era.or.ug/Resource.html> (accessed 10 March 2010).

effectively disseminate its information nationwide. In addition to that information must be provided in the various local languages in order to access a wider section of the population.

It should be noted that annual reports have not been included on the list of resources materials available in ERA's resource centre although annual reports provide a comprehensive source of information on the activities of the regulator and gives the public the opportunity to assess its activities and hold them accountable where necessary. Moreover according to s.115 of the Act ERA prepares and produces annual activity reports²⁴³ but the annual reports are not considered public documents within the context of s.117 (1) of the Act. The following are the specific public documents listed as public documents in s.117(1) of the Act: all applications for licenses and documents related to resolution of disputes, handling of cases regarding breaches of safety or technical regulations or *other matter* dealt with by the authority.

Statutory rules of interpretation can clearly show that it may not have been the intention of the drafts person to include annual reports within the meaning of s.117 (1) of the Act. According to the *Ejusdem generis* rule of statutory interpretation (which means 'of the same kind'), where a law lists specific classes of persons or things and then refers to them as general, the general statements only apply to the same kind of persons or things specifically listed.²⁴⁴ The author argues that to apply the principle in *Ejusdem generis* rule on words such as '*other matter*' within the context of s.117 (1) of the Act would mean that '*other matter*' should be understood to refer to activities that involve licensing, dispute settlement, monitoring of standards which form only a component of the activities carried out by ERA. Therefore, '*other matter*' would not include annual reports which are usually comprehensive documents comprising all activities carried out by an institution such as financial audits, staff overall performance, its achievements and it may also highlight the challenges and future plans of the institution.

Moreover sec 117(2) of the Act gives ERA the discretion to restrict access to such documents as it may prescribe to protect trade secrets. The author argues that the nature and category of the protected documents in s.117(2) of the Act further supports the view that the class of activities referred to in s.117 (1) of the Act relate to specific actions arising from ERA and

²⁴³ S. 115 of the Act.

²⁴⁴ Jyant B 'Construction ejusdem generis' available at <http://www.legalserviceindia.com/articles/edjem.htm> (accessed 6 March 2011).

licensee relationship. The author submits that s.115 and s.117 of the Act do not in any way impose a duty on ERA to ensure public access to its annual reports a lacuna in the law that contributes to lack of transparency by ERA. In that regard, the author recommends that consumers and other stakeholders should utilise the electricity district tribunal to review regulatory decisions in the event of any excesses of power or power abuses by ERA which would pave the way for transparency and accountability by ERA.

3.4.1.3 Competence

Recruiting competent staff and establishing institutional competency is necessary for the institution to be effective and efficient. The Authority has pointed out that the main problem it faces is the lack of skilled regulators.²⁴⁵ In order to attract and keep qualified personnel, salaries compatible with the private sector (usually much higher than civil service) should be provided.²⁴⁶ The Act permits the temporary employment of a consultant where the qualifications of the consultant are likely to assist the Authority.²⁴⁷ This is commendable where the Authority needs the skills, due regard should also be given to the level of expertise of the person to ensure their effectiveness.

3.5. Efficiency and commercial orientation of the sector

What makes an entity financially viable is its ability to continue to achieve its operating objectives and fulfil its mission over the long term.²⁴⁸ The Bank noted that the power sector had been performing poorly from 1990-1994 because it was operating at a loss caused by high system losses, in accurate billing, high staff costs and poor collection of revenue from about one third of the power supplied to Uganda.²⁴⁹ The poor financial situation therefore made it impossible for the sector to earn an adequate rate of return, service its debts, and contribute significantly to financing investment needs.²⁵⁰

The underlying discussion considers key aspects that analyse and ascertain whether the reform has created a sector that is financially able to fulfil its objective of providing

²⁴⁵ Round Table Africa <http://www.roundtable.net> (accessed 15 March 2011).

²⁴⁶ Gurcan G, Ruzanna M, Dmitry V & Michelle F (2005)17.

²⁴⁷ S.14 (1) of the Act.

²⁴⁸ Venture Line 'Financial viability definition' available at <http://www.ventureline.com/accounting-glossary/F/financial-viability-definition> (accessed 18 March 2011).

²⁴⁹ World Bank (1996) 26.

²⁵⁰ World Bank (1996) 26.

adequate, reliable and affordable power in a sustainable manner without any burden on state financial resources.

3.5.1 Tariff reforms

Prices play a central role in any macroeconomic policy framework whether they are determined in free markets or established by a central planning agency, or modified by government policies and they can determine a country's rate and pattern of development.²⁵¹ As to the appropriate level of prices, the basic principle is that the price of any product should reflect the marginal cost of producing the last unit sold so that resources are efficiently utilised.²⁵² Where this model of price setting is applied in the market, economists hold the view that it will be an incentive to invest and improve service delivery, ultimately, to the benefit of the consumers through fair prices and quality goods or services.²⁵³ Since prices play such a fundamental role in the level of productivity of any activity, it would demand that while setting power tariffs ERA should take into account to ensure that both investors and consumers benefit alike.

In its assessment, the Bank noted that the minister was permitted under the repealed Electricity Act of 1964 to approve the changes in power tariffs which provided the opportunity for the government to interfere with power tariffs to make it affordable because power provision was considered a social welfare than a commercial service.²⁵⁴

The role of determining a tariff structure and approving rates of charges and returns is now the mandate of ERA in s.11 (e) and (f) of the Act. The daunting task of ERA upon resumption of office was to set in motion a tariff structure in the newly reformed market. According to regulation 4(d) of the Electricity (Tariff Code) Regulations of No.23 of 2003 (Tariff Code Regulations), whatever the tariff structures ERA establishes, it should reflect reasonable costs of production to ensure a reasonable rate of return on investments. The specific costs that ERA has take into account include power acquisition related costs, operation and maintenance costs, investment related costs, return on investment, adjustment factors, system losses, inflation and foreign exchange. In the process of determining the tariff structure, regulation 4 (a) of the Tariff Code Regulations requires that ERA to ensure that the power

²⁵¹ Baum CW & Stokes MT *Investing in Development-Lessons from World Bank Experience* (1985)31(hereafter Baum CW & Stokes MT (1985)).

²⁵² Baum CW & Stokes MT (1985) 32.

²⁵³ World Bank, Uganda (1996) 32.

²⁵⁴ World Bank (1996) 25.

tariffs are fair and reasonable. The author submits that it is therefore incumbent upon ERA to balance the often conflicting interests of debt servicing and profit maximisation as against social welfare needs.

To fulfil its mandate ERA raised power tariffs by a 24 per cent increase in domestic tariffs in April 2005 immediately after Umeme Ltd took over distribution from UEDCL.²⁵⁵ This increment was justified on the grounds that Umeme Ltd would be making significant investment in the sector and it was entitled to a return on this investment.²⁵⁶ In 2006 ERA increased tariffs again by 37 per cent for domestic users and 57 per cent for industrial users²⁵⁷ so that the end-user tariffs were increased by a cumulative 94 per cent considered a very high increase by regional and international standards.²⁵⁸

The author notes that continuous increment of power tariffs in a newly reformed power market is likely to meet public resistance in the absence of extensive public awareness. In Uganda's case, successive increment of tariffs led to public outcry and 'resistance' through court action. About 2000 electricity customers led by African institute for energy governance, a civil society organisation, filed a civil suit in the high court of Uganda against Umeme Ltd, ERA, UEDCL and the attorney general protesting the high tariffs, faulty electricity bills and general inefficiency in the sector.²⁵⁹ Another group of discontented consumers under the umbrella of Kampala city traders association also petitioned the inspector general of government to launch an investigation into the operations of Umeme Ltd itself.²⁶⁰ The author argues that this situation would eventually provide an opportunity for the public to demand accountability from ERA for their actions, yet on the other hand, the imperfect timing of the event signalled a significant threat to the much anticipated benefits of sector reform unless the government took immediate action to salvage the situation.

The author submits that the public outcry against power increment represents the dilemma ERA is bound to face every time it tries to raise power tariffs. The dilemma could confirm the argument that implementing a market-based tariff regime is indeed challenging because to ensure financial viability of the sector, tariffs would become unaffordable for consumers at

²⁵⁵ Zacune J (2008) 3.

²⁵⁶ Zacune J (2008) 3.

²⁵⁷ Zacune J (2008) 3.

²⁵⁸ MIRREIA *Uganda: Project Investor Manual* (2007) 7 available at http://mirreia.energyprojects.net/documents/D5.4_D6.2_Project_Investor_Manual_Uganda.pdf (accessed 5 March 2011) (hereafter MIRREIA (2007)).

²⁵⁹ Zacune J (2008) 5.

²⁶⁰ Zacune J (2008) 5.

the distribution end of the electricity sector reform.²⁶¹ The author recommends that ERA should conduct extensive public awareness sessions to inform the public and promote a change of attitude of consumers. In addition to that, it is harder to set up a market-based power tariff in a low income under developed economy such as Uganda.

3.5.2 Government provision of subsidies

It has been argued that an ideal price in a free competitive market would ensure that the highest level of satisfaction of wants and needs are attained from the available resources although it is also possible that prices may not produce results with other objectives such as greater equity or social justice.²⁶² The author submits that in terms of power tariffs, setting the ideal tariffs may not actually promote equal access to power by all people including the poor due to the need to recover costs and receive a rate of return. In such situations governments can intervene to improve the distribution of incomes by means such as imposing indirect taxes or providing subsidies²⁶³ to make power affordable and accessible by the poor towards socio-economic production and income generation.²⁶⁴

Efficient resource allocation requires resources to be put to alternative use in order to satisfy unlimited wants and needs.²⁶⁵ Consequently, subsidies should be applied to satisfy the needs of the poor through activities that create employment opportunities and other benefits from energy sources easily accessible to them.²⁶⁶

The principle of efficient resource allocation in terms of subsidy provision is very crucial in Uganda to satisfy the increasing demand for power projected to increase at seven to nine per cent from 2001 to 2015.²⁶⁷ The author argues that efficient use of resources requires that the provision and application of subsidies should be committed to develop energy resources that will satisfy the increasing power demand. In 2006, the government initiated provision of subsidies for thermal power production in order to reduce the end-user tariffs. The government provided subsidies of shs.92 billion to the sector in the financial year 2006/07

²⁶¹ Michael FK (2006)15.

²⁶² Baum CW & Stokes M. Tolbert (1985) 33.

²⁶³ Baum CW & Stokes M. Tolbert (1985) 33.

²⁶⁴ Grant D, Marc L & Indra O, 'Reducing energy subsidies in China, India and Russia: dilemmas for decision makers' (2010) Vol.2 Issue 2 *Sustainability-Open Access Journal* 477 available at <http://www.mdpi.com/2071-105> (accessed 3 February 2011).

²⁶⁵ Baum CW & Stokes M. Tolbert (1985) 33.

²⁶⁶ Grant D, Marc L & Indra O (2010) 477.

²⁶⁷ Ministry of Energy and Mineral Development (2002)7.

and subsequently increased it by shs.115 in the following year due to increasing costs of fuel.²⁶⁸

3.5.2.1 Cost implication of subsidies

The provision of subsidies was intended to bring down the end-user tariffs that had risen due to the cost of thermal power production which had increased ten times the cost of hydro power production due to depreciation in the value of the national currency and increasing costs of fuel.²⁶⁹ It is noteworthy to point out that thermal power production was taken as an emergency measure to curtail further increases in end-user tariffs, and the advantage with the measure is that it readily provides power on a stop gap basis.²⁷⁰ However, this costly thermal power produces inadequate amount of energy unable to meet the demand in the economy.²⁷¹ It is worthy to mention that the Bank recommended that the government should choose the least cost-path for expanding the system capacity.²⁷² The author argues that the measure adopted by the government to expand the system through very expensive thermal power production is contrary to the Bank's recommendation and very unsustainable since it increases the tax burden on the population.

The energy crisis in Uganda in 2006 necessitated that the government takes immediate measures to provide energy and salvage the situation so to meet the demand for economic production. That notwithstanding, immediate long term plans should have been put in place to expand power production through cheaper means to meet the demand, but this measure has not been forthcoming. The delay in completion of Bujagali power project has even exacerbated the situation²⁷³ and the government is continuously providing subsidies for thermal power production.²⁷⁴ For example in December 2010 the government committed itself to increase subsidies for power companies in 2011 by a 7.2 per cent rise from \$121 in 2010 to \$212 million.²⁷⁵ The author argues that irrespective of the significant role energy is

²⁶⁸ Electricity Regulatory Authority Uganda & Ministry of Foreign Affairs Norway (2006) 7.

²⁶⁹ Electricity Regulatory Authority (2008) 7.

²⁷⁰ MIRREIA (2007) 7.

²⁷¹ Electricity Regulatory Authority (2008) 7.

²⁷² World Bank (1996) 22.

²⁷³ Electricity Regulatory Authority Uganda & Ministry of Foreign Affairs Norway (2006) 7.

²⁷⁴ Electricity Regulating Authority Facts in respect of the 2011 tariff review applications for electricity companies for electricity companies Press Statement 1December 2010). The authority announced that was no likelihood that the government would change its position on subsidy provision in 2011.

²⁷⁵ Reuters Africa 'Uganda to Increase \$212 million for power subsidy in 2011' *Reuters Africa* 23 December

2010 available at 13 <http://af.reuters.com/article/idAFJOE6BM0B820101223> (accessed 30 January 2011)

expected to play in the economy it is unreasonable for the government to continue subsidising this very expensive venture which increases tax payers burden without adequately meeting their power demand. Moreover, subsidising thermal power production has also caused misdirection of funds that would have been used to speed up development of rural electrification.²⁷⁶

3.5.2.2 Impact of energy subsidies on the poor

To achieve the poverty reduction goals set out in the MGDs, Uganda needs to ensure that it promotes access to power to as many people as possible.²⁷⁷ Although no MDG refers to the role of energy explicitly, during the millennium summit the international community projected that ensuring access to energy services by at least half of the world population (1 billion people) would be a stepping stone towards achieving the MDGs.²⁷⁸ Along the same lines, the author argues that government measures that would cause half of the Ugandan population access energy by 2015 would significantly contribute to meeting the MDG targets. Moreover, the provision of subsidies for development of energy mostly accessed by the poor or strictly aligning subsidy provision for the benefit of the poor power consumers would be one way of promoting achievement of the MDGs. According to a recent survey by UBOS, the introduction of subsidies to the sector has stabilised end-user tariffs since 2007-2009 as shown in table 1 below.²⁷⁹

Table 1: Energy Tariff rates, shs per kWh²⁸⁰

	Domestic	Commercial	Medium Industrial	Large Industrial	Street lighting
2005	216.9	208.3	182.8	73.6	205.3
2006	298.2	286.8	261.5	120.8	282.8
2007	426.1	398.8	369.7	187.2	403.0
2008	426.1	398.8	369.7	187.2	403.0
2009	426.1	398.8	269.7	187.2	403.0

²⁷⁶ Parliament of Uganda (2007) 8.

²⁷⁷ IUCN Academy of environmental law research studies (2005) 224.

²⁷⁸ World Bank & United Nations Development Program *Energy Services for the Millennium Development Goals* (2005) 8 available at http://www.unmillenniumproject.org/documents/MP_Energy_Low_Res.pdf (accessed 21 January 2011).

²⁷⁹ Uganda Bureau of Statistics (2010) 52.

²⁸⁰ Uganda Bureau of Statistics (2010) 52.

The author argues that stability in tariffs does not mean that the prices are cheap and affordable by the poor. In addition to that the author submits that the impact of subsidies on access levels depends on the mechanism of implementation. First, a subsidy of shs.160 per unit (kWh) is provided on the end-user tariff paid by every consumer.²⁸¹ Secondly, the lifeline tariff of 15kWh per month which is intended to benefit low income consumers is also enjoyed by everyone which is a poorly targeted mode of providing subsidies.²⁸²

The author notes that due to a poor mechanism of implementation that benefits all consumers, the well intended scheme of providing subsidies does not majorly benefit the poor. It is argued that a generalised manner of subsidy provision for the benefit of all consumers is a misdirection of resources²⁸³ and further perpetuates the marginalisation of the poor by denying them access to what was originally intended for them. Of the 31.8 million people in Uganda, only four per cent of the rural population have access to energy.²⁸⁴ The author notes that four per cent of the population is equivalent to 3.816 million people which is such a small fraction of the population that creates a wide gap in terms of the efforts needed to meet the MDGs by 2015. It is argued that Mauritius and Tunisia are among the few African countries that will meet and sustain the MDGs because they have achieved macro-economic stability and 100 per cent access to electrification within 30 years.²⁸⁵

By way of analogy using the success stories of electrification initiatives in Tunisia and Mauritius, the author notes that at the current access rate in Uganda the possibility of meeting the MDG targets through energy is very slim. For the sector to play a significant role to achieve the MDG goals, the author suggests that the country will need to increase its pace of

²⁸¹ Electricity Regulating Authority Facts in respect of the 2011 tariff review applications for electricity companies for electricity companies Press Statement 1 December 2010 available at <http://www.era.or.ug/Pdf/Press%20Statement.pdf> (accessed on 30 January 2011).

²⁸² Electricity Regulatory Authority Uganda Review: *Following the standard reform model, African electricity regulator peer review and learning network* (2009)11 available at <http://www.gsb.uct.ac.za/files/Uganda.pdf> (accessed 27 January 2011).

(hereafter Electricity Regulatory Authority (2009)).

²⁸³ Subhes CB 'Sustainability of the power sector reform in India: what does recent experience suggest' (2007)15 Issue 1 *Journal of Cleaner Production* 241 available at http://www.sciencedirect.com/science?_ob=MIimg&_imagekey=B6VFT-4DGW5TK-2-1&_cdi=6019&_user=1378525&_pii=S095717870400075X&_origin=gateway&_coverDate=09%2F30%2F2005&_sk=999869996&_view=c&_wchp=dGLzVib-zSkWA&_md5=da216254fa7869bda0f7b8a460b25c78&_ie=/sdarticle.pdf (accessed 1 March 2011).

²⁸⁴ Electricity Regulatory Authority (2009) 3.

²⁸⁵ World Bank Group *Energy and the Millennium Development Goals in Africa in Africa Report* Forum for energy ministers for Africa (2006) 11 available at http://siteresources.worldbank.org/EXTAFRREGTOPENERGY/Resources/Energy_and_MillenniumFEMA_Report.pdf (accessed 16 March 2011).

electrification and attain about 18 per cent annual access rate. However, author submits that that access to energy in itself will not cause the achievement of the MDGs therefore, other sectors should also step up their performances in that regard. Furthermore, it would be appropriate for the power sector to effectively coordinate their operations with the UBOS to create a consumer data base that categorises consumers according to their income levels so that provision of subsidies can be streamlined to the poor accordingly.

3.5.3 Promoting energy sustainability

In the context of the power sector, provision of sustainable energy would require that utilities promote energy efficiency, energy conservation and development of renewable energy to protect the environment.²⁸⁶ The author submits that effective implementation of these three requirements would also lead to a financially viable sector. In the underlying discussion, specific indicators have been identified and concurrently analysed to measure the level of development of the sector with a focus on energy efficiency, conservation and development of renewable energy.

3.5.3.1 Energy efficiency

Energy efficiency is achieved when the amount of energy required per unit output is reduced in a specific product, process or area of production or consumption.²⁸⁷ In order to promote energy efficiency the Bank recommended *inter alia* that all necessary measures should be taken to²⁸⁸ reduce technical losses, increase production capacity, increase load growth and ease supply constrain.²⁸⁹ It was highly recommended that the participation of private sector would ensure realisation of these objectives through options such as provision of services, decentralised power systems and independent power projects.²⁹⁰

3.5.3.1.1 System losses

The level of system losses will determine the level of profits generated by the sector. System losses refer to the unpaid for electricity injected into the transmission and distribution grids of

²⁸⁶ IUCN Academy of environmental law research studies (2005) 449.

²⁸⁷ IUCN Academy of environmental law research studies (2005) 224.

²⁸⁸ World Bank (1996) 41.

²⁸⁹ World Bank (1996) 42.

²⁹⁰ World Bank (1996) 35.

electricity during supply of power.²⁹¹ Losses are of two kinds namely: technical losses and non-technical losses. The former consists mainly of power dissipation in electricity system components such as transmission and distribution lines, transformers, and measurement systems while non-technical losses are caused by actions external to the power system and consist primarily of electricity theft, non-payment by customers, errors in accounting and record keeping.²⁹² Non-technical losses also referred to as commercial losses, can be broken down into theft and administrative losses which arise out of company inefficiencies such as incorrect metering and billing.²⁹³ When Umeme Ltd took over distribution in 2005 system losses were approximately at 38 per cent or (48 per cent including losses through UETCL's transmission network)²⁹⁴ characterised by 1 per cent connection rate from 1999-2002, poor bill collection rate with only about 47 per cent of the energy sent out was actually paid for.²⁹⁵ The task of Umeme Ltd was therefore to take measures that will progressively reduce system losses and ensure the establishment of a financial viable sector.²⁹⁶ Whether this objective has been achieved is can be ascertained from the underlying discussion.

In October 2007, the Parliamentary committee on natural resources released its report which revealed a system loss of 33 per cent.²⁹⁷ Statistical analysis by different stakeholders arrived at varying levels of system losses of 30 per cent,²⁹⁸ 35 per cent²⁹⁹ and 40 per cent in 2010.³⁰⁰ The author submits that due to the varying figures on the 2010 system losses and in the absence of data on system losses for 2008 and 2009 it may be impossible to assess and determine progressive reduction of system losses since 2005. That notwithstanding, the author argues that lack of adequate and reliable data for system losses for 2008 and 2009 do not significantly affect the conclusion that the varying system losses of 30 per cent, 35 per cent and 40 per cent in 2010 still represent high levels of losses.

²⁹¹ World Bank *Reducing Technical and Non-Technical Losses in the Power Sector* (2009)5 available at http://siteresources.worldbank.org/EXTESC/Resources/Background_paper_Reducing_losses_in_the_power_sector.pdf (accessed 10 April 2011).

²⁹² World Bank (2009) 5.

²⁹³ Electricity Regulatory Authority Uganda & Ministry of Foreign Affairs Norway (2006) 9.

²⁹⁴ MIRREIA (2007)6.

²⁹⁵ MIRREIA (2007) 8.

²⁹⁶ Electricity Regulatory Authority Uganda & Ministry of Foreign Affairs Norway (2006) 9.

²⁹⁷ Parliament of Uganda (2007)10.

²⁹⁸ Umeme Ltd 'Umeme releases performance score sheet' (2010) available at <http://www.umeme.co.ug/index.php?page=MTIG> (accessed 23 January 2011)

²⁹⁹ Ministry of Finance, Planning & Economic Development (2010)150.

³⁰⁰ Parliament of Uganda (2007) 10.

The author further submits that to determine the success of loss reduction levels, reference should be made to the difference in percentage losses from the 2005 base period when Umeme Ltd took over power distribution and current percentage losses.³⁰¹ According to the Bank, a 50 per cent reduction of system losses would be appropriate to ensure profit generation³⁰² and the internationally acceptable standard loss is between 10-12 per cent.³⁰³ In that regard, taking the 2005 base period system losses of 38 per cent³⁰⁴ and the 2010 average losses of 35 per cent (derived from the varying figures for system losses of 30 per cent, 35 per cent and 40 per cent are for 2010), the author submits that there is a very little difference of only three percent reduction losses from the base period. Furthermore, the average rate of loss of 35 per cent is over and above the internationally acceptable standard of 10-12 per cent which implies that the industry is still highly inefficient. As a result of these losses a significant amount of power is wasted³⁰⁵ and causes annual financial losses of about shs.65 billion³⁰⁶ which would have been used to expand the sector.

3.5.3.1.2 Factors contributing to system losses

Factors that contribute to the high system losses include theft, poor billing system, poor customer relations, limited staff members³⁰⁷ and non payment of electricity bills by government ministries. On two occasions, Umeme Ltd withheld lease payments totalling to US\$ 19.9 to recover unpaid electricity bills by government ministries.³⁰⁸ Moreover, minimising commercial losses through activities including effective metering and bill collection generates revenue and reduces wastage of resources due to reduction of demand caused by the obligation to pay for energy consumed.³⁰⁹

There sector also has poor distribution and transmission networks accelerated by an old distribution network of 15-20 years which is in a poor condition with very long medium

³⁰¹ Electricity Regulatory Authority Uganda & Ministry of Foreign Affairs Norway (2006) 9.

³⁰² World Bank (1996) 42.

³⁰³ United Nations Economic Commission for Africa & United Nations Environment Program (2007) 59.

³⁰⁴ MIRREIA (2007) 6.

³⁰⁵ Ministry of Finance, Planning & Economic Development (2010) 150.

³⁰⁶ Umeme Ltd 'Power theft advertorial' available at

<http://www.umeme.co.ug/index.php?page=cHJlc3M=&i=3>. (accessed 23 January 2011)

³⁰⁷ Ministry of Energy and Mineral Development Annual Report (2009) 24.

³⁰⁸ Parliament of Uganda (2007) 9, Ibrahim K 'Umeme withholds shs.24 billion payment to government' 2 November 2009 available at

<http://allafrica.com/stories/200909030521.html> (accessed 8 March 2011).

³⁰⁹ Electricity Regulatory Authority Uganda & Ministry of Foreign Affairs Norway (2006) 9.

voltage lines that lead to large voltage drops and high technical losses.³¹⁰ Renovations of the distribution networks are ongoing which should which should greatly improve the distribution network.³¹¹

The author submits that lack of competition may also be a contributory factor to the high non-technical losses since distribution of power from the national grid is only managed by Umeme Ltd.

3.5.3.2. Promoting energy efficiency

Through partnerships with the Bank and private sector, the MEMD has promoted implementation of schemes to conserve energy and reduce on losses.

3.5.3.2.1 Bulk metering and energy saving bulbs

The government has taken specific measures such as public awareness and dissemination of energy saving bulbs to promote power conservation. MEMD initiated and organised energy efficiency sensitisation workshops for small and medium scale enterprises and an energy efficiency week in 2008 to inform the public about energy efficiency practices.³¹² With the support of the Bank, MEMD also distributed 800,000 energy saving bulbs to low-income household in 2008³¹³ which was an effective approach of subsidy provision because these bulbs would improve the living standards of poor households through proper lighting services useful for study purposes. The author argues that a total of 800, 000 bulbs are insufficient to meet the lighting needs of all low income earners in the country. The government should promote more of such programs to complement other measures necessary to meet the MDG of promoting universal primary education, which would enable basis skill acquisition for productive purposes.

Umeme Ltd has also taken initiatives such as investment in bulk metering to small scale industries in different parts of the country and institutions of learning such as Makerere

³¹⁰ Electricity Regulatory Authority (2009) 10.

³¹¹ Electricity Regulatory Authority (2009)10.

³¹² Ministry of Energy & Mineral Development Annual Report (2009) 22-23.

³¹³ Umeme Ltd. 'Umeme to distribute CFLs' available at <http://www.umeme.co.ug/index.php?page=NJQ> (accessed 23 January 2011).

University which has resulted in energy and cost savings among the users and it plans to pilot pre paid metering system to reduce commercial losses.³¹⁴

It must be noted that all these reforms were recent initiatives dating as close as 2008, eight years into reform. The author submits that it would have been most appropriate if such measures were taken within three to four years of reform, having given space of one to two years for institutional adjustments. In that regard, the author does not support the view that the implications and obligations of reforms were too radical for the State³¹⁵ and argues that the delayed action and lack innovation arise due to lack of proper planning.

3.5.3.2.2 Development and distribution of improved stoves

Most of the energy consumed in Uganda for cooking and water heating in rural areas, urban households, institutions and commercial buildings is biomass and due to inability by the people to access modern sources of power due to the low level of power supply and high tariffs.³¹⁶ Biomass is also the main source of energy for rural industries.³¹⁷ The high rate of fuel wood consumption has contributed to the degradation of forests as wood reserves are depleted at a rapid rate in many regions of the country.³¹⁸

Wood biomass is also associated with significantly higher disease burden than other forms of cooking fuel due to indoor pollution,³¹⁹ collection of wood fuel wastes valuable time that would have been used for education and income generation.³²⁰ This arises because most of the traditional biomass energy technologies such as wood and charcoal stoves, ovens and kilns in Uganda are inefficient.³²¹ The renewable energy policy objective is therefore to ensure efficient use of biomass energy so as to contribute to the management of resource in a sustainable manner.³²² The specific objectives was to promote the development, adoption and utilisation of other modern fuels and technologies, such as improved wood fuel and

³¹⁴ Umeme Ltd. 'Bulk Metering' available at <http://www.co.ug/index.php?page.NJQ> (accessed 23 January 2011).

³¹⁵ Rosenzweig BM, Sarah P. Voll & Carlos PA 'Power sector reform: experiences from the road' (2004) Vol.17 Issue 9 *The Electricity Journal* 19 available at <http://www.nera.com/extImage/Electricity%20Journal%20Rosenzweig%20Voll%20%20Agudelo.article%20Nov%202004.pdf> (accessed 1 March 2011).

³¹⁶ Ministry of Energy and Mineral Development (2008)34.

³¹⁷ Ministry of Energy and Mineral Development (2008)34.

³¹⁸ Ministry of Energy and Mineral Development (2008)34.

³¹⁹ United Nations Development Program & World Bank (2005) 8.

³²⁰ United Nations Development Program & World Bank (2005)24.

³²¹ Ministry of Energy & Mineral Development (2008)34.

³²² Ministry of Energy and Mineral Development (2007) 18.

charcoal stoves, solar PV in order to achieve the objectives of emission reduction, protection of the environment and energy conservation.³²³

Two of the strategies adopted in the renewable energy policy to achieve this objective are:³²⁴

- a) To increase the adoption of efficient fuel wood stoves from 170, 000 currently to 4,000,000 by 2017; and
- b) Scale up the adoption of efficient charcoal stoves from 20,000 currently to 2,500,000 households by 2017.

With support from the Bank and other donors, the government has been promoting the development and dissemination of improved stoves to low income households intended to ensure use of healthy fuel by the poor. For example about 567,500 improved stoves to rural communities in 14 districts nationwide and 139 institutional stoves in 2008.³²⁵ The government also trained some ten small and medium scale enterprises owners' and over 30 artisans on how to construct institutional stoves.³²⁶

The author submits that the initiative to include both training and dissemination of improved stoves in implementation plays two key roles in terms of skills acquisition and access to modern fuel. The use of improved stoves reduces exposure to air pollution related diseases, child mortality rates, reduces the disease burden from smoke, and improves maternal health due to lower smoke exposures.³²⁷ It is argued that public and private initiatives to conserve biomass resources have started to have significant impact on the population through improved standard of living.³²⁸

That notwithstanding, very little financial resources have been devoted to the development of these modern stoves so that, very little is produced and distributed. The 567,500 stoves distributed in 2008 benefited only a few households of the 31.8 million people. Therefore, there is need to set aside funds to finance more training and development of the stoves so as to reach each many institutions and households to be able to effectively contribute to sustainable use of energy resources and environmental protection.

³²³ Ministry of Energy and Mineral Development (2007) 27.

³²⁴ Ministry of Energy and Mineral Development (2007) 27

³²⁵ Ministry of Energy and Mineral Development (2008)17.

³²⁶ Ministry of Energy and Mineral Development (2008)17.

³²⁷ United Nations Development Program & World Bank (2005)8.

³²⁸ Ministry of Energy & Mineral Development 14

3.5.3.3 Production capacity from renewable energy resources

In 2007 the government formulated the renewable energy policy for Uganda so as to ensure sustainable exploitation of renewable resources.³²⁹ According to the government, there was need to develop the renewable resources so as to diversify the power supply and ensure security of supply through energy efficiency programs, promotion of modern fuel technologies such as improved cooking stoves, development of large and small scale hydro power plants.³³⁰ Recent studies reveal that Uganda is well endowed with renewable energy resources throughout the whole country, inform of large hydro, mini/micro hydro, solar, wind, peat and biomass as shown in table two below.

Table 2: The renewable energy power potential

Item	Energy Source	Estimated Electrical Potential(MW)
1	Hydro (Mainly on the Nile)	2000
2	Mini-hydro	200
3	Solar	200
4	Biomass	1650
5	Geothermal	450
6	Peat	800
7	Wind	-
Total		5,300

³²⁹ Ministry of Energy & Mineral Development(2007) 11

³³⁰ Ministry of Energy & Mineral Development(2007) 11

The large reserves would play a big role in ensuring production of clean energy and if effectively exploited, can sustain economic productive activities by both small scale and large scale industries. According to s.10 (a) and s.39 of the Act ERA can issue as many licences for power generation, distribution, sale and ownership. With this provision the door is open for any interested investor to apply for more than one license. As a result of privatisation, the country has witnessed an increase in the capacity of power production through public and private companies involved in generation of electricity from large hydropower, mini hydro, cogeneration from biomass and thermal power.³³¹ Due to increased investment levels, the current installed capacity is 595.84MW consisting of 380 MW from the two large hydropower Nalubaale and Kiira, 28.84MW from mini hydropower plants, 17MW from cogeneration from biomass, and 170MW from four thermal plants.

The installed capacity of 595.84MW in Uganda represents only 11 per cent of the existing renewable energy potential in the country meaning that very little of the potential has been exploited. In addition to that, natural factors such as prolonged drought in 2006 significantly reduced the water level of Lake Victoria.³³² Consequently, it affected the maximum output by the two hydro power plants such that they now produce about 140-200MW only, less than their installed capacity.³³³ As a result of the draught, power supply became insufficient to meet the demand and Umeme Ltd had to introduce load shedding during most of the day in 2006.³³⁴ Since then, load shedding has persisted due to the limited supply of power. In April 2009 peak demand stood at approximately 368 MW, higher than the available production capacity of 305 MW and load shedding became inevitable.³³⁵

Regular load shedding of power indicates unreliable and inadequate power supply which is a contributory factor to government investment in expensive and financially unsustainable emergency thermal power. Despite unreliable water levels of the lake, a private investor was licensed in 2005 and is now constructing a large hydro power plant, Bujagali power plant on Lake Victoria. It should be noted that the directorate of water resources has been effectively monitoring and controlling the use of water from the lake for power generation, which justifies the limited power supply from the large hydro power plants. The author argues that if

³³¹Ministry of Finance, Planning & Economic Development (2010)150.

³³² Ministry of Finance, Planning & Economic Development (2010)150.

³³³ Ministry of Finance, Planning & Economic Development (2010)150.

³³⁴ Electricity Regulatory Authority Uganda & Ministry of Foreign Affairs Norway (2006) 8.

³³⁵ Electricity Regulatory Authority *Power supply situation in Uganda* (2009) 8 available at http://www.rura.gov.rw/docs/ERA/Uganda_power-situation.pdf (accessed 27 January 2011).

the existing hydro power plants at Nalubaale and Kiira are producing below installed capacity due to hydrological factors, it is difficult to see how the new Bujagali power plant will produce adequate and cheap power to meet the energy deficit (being its main objective) except if there is total disregard of environmental concerns. It is the author's argument that continued reliance on large hydro power highly vulnerable to adverse natural factors justifies the need for increased investment in other renewable energy resources abundant throughout the country.

3.5.4 Rate of power consumption

In 1996, the Bank noted that the per capita consumption of energy by the 18 million people was 44kWh. Recent data shows that per capita consumption of energy has increased from 44kWh to 69.5kWh.³³⁶ It is noteworthy to mention that even if per capita consumption has increased, this in itself does not mean that the sector has significantly expanded to sustain economic development. In order to ascertain the sectors capacity, indicators such as the level of actual consumption by different categories of consumers within a given period of time need to be taken into account.³³⁷ According to table 2 and 3 below, there is more consumption of energy by the domestic consumer category from 2005-2009 as compared to consumption by the commercial and industrial consumers. The overall nature and trend of consumption level could mean that the sector's capacity is still very small and unable to contain the demand by large power consumers such as the industrial and commercial categories. This position is further affirmed by the government in the NDP that the current power supply levels cannot support heavy industries like steel mills, textile mills and aluminium processing plants.³³⁸

3.5.5 Number of consumers

³³⁶ Ministry of Finance, planning & economic Development (2010)150.

³³⁷ Sharma DP, Chandramohan PSN & Balasubramanian R 'Performance of Indian power sector during a decade under restructuring: a critique' (2005) 33 Issue 4 *Energy Policy* 567 available at http://www.sciencedirect.com/science?_ob=MIimg&_imagekey=B6V2W-4B1X508-1C&_cdi=5713&_user=1378525&_pii=S0301421503002830&_origin=gateway&_coverDate=03%2F31%2F2005&_sk=999669995&_view=c&_wchp=dGLbVlb-zSkzV&_md5=97c9b82de5060f0a615eb30faf96deb4&_ie=/sdarticle.pdf (accessed 1 March 2011).

³³⁸ Government of Uganda(2010)151.

Where electric power is expensive, unreliable and of poor quality it adversely affects consumers' ability and pattern of usage and more favourable conditions encourage more connections.³³⁹ In 2010 Umeme Ltd pointed out that it had connected over 172,000 new customers to the national grid exceeding the set target in the concession license to connect 60,000 new customers in the first five years of operation.³⁴⁰ Table three and four below reflects the rate of connections to the national grid by the four consumer categories and it also raises concerns about the socio-economic impacts from the nature and trend of connections.

Table 3: Number of electricity consumers by category 2005-2009³⁴¹

	Domestic Tariff	% Change	Commercial Power & Heating	Industrial power, standard tariff	Street lighting
2005	244,169	-	24,179	107	327
2006	271,984	11.39	24,718	139	315
2007	277,393	1.99	24,602	161	334
2008	276,255	-0.41	20,484	159	291
2009	298,995	8.23	24.092	186	248

Table 4: Rate of consumer connections 2004-2008³⁴²

	Domestic	Commercial	Industrial
2004	237,830	23,231	733
2008	276,255	20,484	159

The author submits that the rate of domestic consumer connections in table three progressively increased over the baseline period which could be taken to mean improvement

³³⁹ Energy Sector Management Assistant Program *Power Sector Reform in Africa: Assessing Impact of Power Sector Reform* report No.306 (2005) 33 available at http://siteresources.worldbank.org/EXTAFRREGTOPENERGY/Resources/ESMAP_PowerSectorReform_in_Africa.pdf (accessed 30 January 2011).

³⁴⁰ Umeme Ltd. 'Umeme Releases performance score sheet' available at <http://www.umeme.co.ug/index.php?page=MTI5> (accessed 23 January 2011).

³⁴¹ Uganda Bureau of Statistics(2010) 52

³⁴² Ministry of Finance, Planning & Economic Development (2010)151-152.

in the standard of living of the new consumers. However, the author also notes that this assumption cannot be taken to be an absolute reality of the living conditions among the poor because the connection rates in table three do not distinguish the percentage connections of the low and high income consumers connected to the national grid. Consequently, it is difficult to ascertain the actual impact of the connection rates on poor people's living standard.

In addition to that in both tables there is a general decline in the rate of connections for both commercial and industrial consumers possibly due to high power tariffs because Uganda's power tariff is considered to be the highest in the East African region.³⁴³ Limited access to power by industrial and commercial consumers' category is detrimental to the development of the economy because it reduces their productivity. For example in 2004 industries cited lack of adequate energy as a key constraint to their export potential which.³⁴⁴ The commercial consumers' category consists of small scale industries, highly dominated by agro based industries that employs many people in the informal sector and accounts for 90 per cent of the manufacturing sub-sector.³⁴⁵ Consequently inadequate electric power and limited access to power adversely impacts on productivity and income generation of both the large scale and small scale entrepreneurs.

3.6 Private sector participation

The private sector was deemed the most feasible long term option for investment in operation and management of Uganda's electricity sector due to limited government funds from either domestic sources or from donations.³⁴⁶ The entry of the private sector was also seen as a means to enhance competition and promote efficiency in the competitive segments of the industry, electricity generation and distribution respectively.³⁴⁷ The Act permits any person to apply for a license to generate, distribute and transmit electricity and gives an additional power to apply and be granted any other permit, except if it the authority considers

³⁴³ Ibrahim K & Ismael K 'Government wants to cut electricity charges' *The New Vision* 30 April 2009 available at <http://allafrica.com/stories/200905010.190.html> (accessed 15 December 2007).

³⁴⁴ World Bank *Energy and the Millennium Development Goals in Africa Report* (2006) available at http://siteresources.worldbank.org/EXTAFRREGTOPENERGY/Resources/Energy_and_MillenniumFEMA_Report.pdf (accessed 16 March 2011).

³⁴⁵ United Nations Industrial Development Organisation *Studying on Local Manufacturing of Renewable Energy Technology Components in East Africa* (2010) available at http://www.unido.org/fileadm/user_media/Publications/Study_local_manufacturing.pdf (accessed 31 January 2011).

³⁴⁶ Utility reform unit UEDCL & UEGCL Privatisation-Briefing Note March (2002) 1-5.

³⁴⁷ Electricity Regulatory Authority (2008) 3.

unreasonable to do so. With this therefore, the market was opened for private investor participation and it was the intention that as many investors would enter the market and stimulate competition.³⁴⁸ It is important to mention that competition in a market arises where there is a sufficient number of participants in the market.³⁴⁹ Since the authority started operations, it has licensed four thermal power plants and only eight other generating power plants, which is insufficient to stimulate competition.³⁵⁰ However, there are specific projects of feasibility studies and construction that have been under taken by power companies as indicated in table five below.

Table 5: Status of projects under development as of 31 January, 2010³⁵¹

Energy source	application	permit	License	status
Large Hydro			1	Construction is ongoing and the project is due for commissioning in June 2011.
Mini Hydro		11		Out of the 11 permits issued, one company withdrew from the study, while two permits expired and no information has been provided regarding any actions of the applicants in that regard.
Solar	3	1		Only one permit has been granted and the three applications are in complete.
Thermal	1	-	-	An application for extension of permit has been submitted.
Peat	Non	Non	Non	non
Cogeneration	1	3		One application for licence has been approved and awaiting issue. One permit is valid, while the other two

³⁴⁸ Electricity Regulatory Authority (2006) 1.

³⁴⁹ Electricity Regulatory Authority (2008) 3.

³⁵⁰ Electricity Regulatory Authority Status of Electricity Projects under development (2010) 3(hereafter Electricity Regulatory Authority (2010)).

³⁵¹ Electricity Regulatory Authority (2010) 4.

				have expired.
Distribution	1	2		There are pending issues on the application; a license application has been approved while a permit has been issued for one applicant.

The author submits that from this table it can be deduced that few private power companies have entered into the electricity market, most of which are still carrying out feasibility studies. Considering the small number of applications and approvals of permits and licenses as against the large renewable potential in the country, the author makes three observations: First, the limited interest of private sector in the sector is partially responsible for under exploitation of the energy resource base. Secondly, the creation of a regulator and promoting private sector participation cannot on its own lead to a financially viable sector. Thirdly, for restructuring to be fruitful there is need for a multi-thronged approach involving all key sectors so as to be able to address the stumbling blocks that are likely to inhibit financial growth of the sub-sector.³⁵² Unless these issues are given due regard, the author argues that very little will be achieved from reforming the sector.

3.7 Rural electrification

In order to improve rural access to energy, the Bank recommended the application of alternative, non conventional or complementary approaches other than through grid connections, because of the peculiar challenges that surround development of rural energy.³⁵³ Under the PEAP, development of rural energy was considered as an important contribution towards poverty reduction.³⁵⁴ Recognising this pressing need, the government encouraged the development of energy sources through programs aimed at increasing access to electric power by the rural population.³⁵⁵

3.7.1 Objectives of rural electrification programs

In view of the government strategy to promote prosperity for all through poverty reduction strategies, the Parliament mandated the minister under s.62 of the Act to promote, support

³⁵² IUCN Academy of environmental law studies (2005) 413.

³⁵³ World Bank Uganda (1996) 46.

³⁵⁴ Ministry of Finance Planning and Economic Development *Poverty Reduction Strategy Paper* (2000) available at <http://www.imf.org/external/np/prsp/2000/uga/01/> (accessed 26 January 2011)

³⁵⁵ World Bank (1996) 48.

and provide rural electrification through public and private sector participation. The aim of supporting rural electrification was to:³⁵⁶

- a) Achieve equitable regional distribution access to electricity;
- b) Maximise the economic, social and environmental benefits of rural electrification subsidies;
- c) Promote expansion of the grid and development of off-grid electrification; and
- d) Stimulate innovations within suppliers.

3.7.2 Institutional organisation

The Electricity (Establishment and Management of Rural Electrification Fund) Regulation 75 of 2001 established three inter-related institutions for management of Uganda's rural electrification program namely, the Rural Electrification Fund (REF), REB and REA. These bodies are all supervised by the Minister responsible for energy. REA serves as the secretariat to the Board whose principle responsibility is to ensure management of the fund for equitable promotion of rural electricity access and connectivity.³⁵⁷

3.7.3 Rural electrification strategy and plan

The Ministry of MEMD formulated the rural electrification strategy and plan in 2001 for the period 2001-2010 to provide the policy framework and guidelines for rural electrification programs. The strategy had the following key aspects:³⁵⁸

- a) To increase rural electrification rate from 1 per cent in 2001 to 10 per cent in 2010;
- b) To promote private sector led rural electrification programs through nongovernmental organisations, community based organisations and local investments;
- c) To adopt a multi disciplinary approach through grid extension, off grid systems, solar photovoltaic's and renewable energy projects;
- d) To increase exploitation of rural electrification transmission and renewable energy from 20MW in 2001 to 100 MW in 2012; and

³⁵⁶ S.62 of the Act.

³⁵⁷ Rural Electrification Agency *Strategic Plan 2005/06-2011/12* available at <http://www.rea.or.ug/userfiles/Strategic%20Plan.pdf> (7 January 2011).

³⁵⁸ Ministry of Energy and Mineral Development, *The electricity industry reforms in Uganda & the rural electrification programme (2008)*14-18.

- e) To promote a joint implementation strategy involving key sectors such as health, education, agriculture, water and internet and communications network.

The ministry delayed to initiate programs to implement the rural electrification programs as a result the REB/REA formulated a new strategic plan 2005/06-2011/12, to ensure inter alia one per cent access annually over the plan period.³⁵⁹ Martin R provides a warning against the assumption that ‘better targeting’ implies larger impacts on poverty reduction or more cost effective interventions for fighting poverty and advises analysts and policy-makers to focus on the estimable outcome measures most directly relevant to their policy problem because a number of factors cloud the relationship between targeting performance and total impact on poverty, including aspects of program design, implementation and the context in which the program operates.³⁶⁰

3.7.4 Implementing the rural electrification programs

The REA has been able to carry out rural electrification through programs such as:

- a) Extension of the main grid;
- b) Installation of isolated photovoltaic systems;
- c) Decentralised power generations.

This section analyses the progress of developing rural electrification to establish whether they have been able to achieve the objectives in (a), (b) and (c) of section 62 of the Act. Overall, it analyses implementation of these programs in terms of increasing access by the rural population and its impact towards achieving the MDGs.

3.7.4.1 Grid extension

Grid extension has been a major approach taken by the ministry with donor support, government funds and private public partnership schemes,³⁶¹ mainly targeting district headquarters, institutions, agro processing industries and fish landing sites.³⁶² Under this program, REA has successfully implemented a number of grid expansion projects resulting in

³⁵⁹ Rural Electrification Agency Strategic Plan 2005/06-2011/12 (2006) 17.

³⁶⁰ Martin R ‘How relevant is targeting to success of antipoverty program’ (2009) Vol. 24 No.2 *Oxford Journals* 206-207 available at <http://wbro.oxfordjournals.org/content/24/2/205.full.pdf+html> (accessed 1 February 2011) (hereafter Martin R (2009)).

³⁶¹ Ministry of Energy and Mineral Development (2008)11.

³⁶² Ministry of Energy and Mineral Development (2008)11.

over 3,000 km of new electric distribution lines since 2006.³⁶³ Table six below reveals the extent of grid connections in rural areas.

Table 6 shows the status of grid extension projects connecting to economic activities and services³⁶⁴

Funding Agency	Project name	Project type	Status	District	Region
GoU	Kagadi-Muhororo-Muziziz	Grid Extension	Commissioned February, 2009.Provides Electricity to Muzizi Tea Factory	Kibaale	Western
	Kanungu- Ruyeyo	Grid Extension	Commissioned in January 2009.To connect Ruyeyo tea factory	Kanungu	Western
	Kyabugimbi-Buhweju	Grid Extension	Commissioned in 2009.Connects two tea factories	Bushenyi	Western
	Bugiri-Wakawakafish landing sit	Grid Extension	Commissioned October 2007	Bugiri	Eastern
SIDA	Katuna-Ryakarimira-Rubaya	Grid extension	Connects Health centre IV, Rubaya sub-county headquarters and a number of trading centres to the Uganda/Rwanda border	Kabale	Western
	Namayemba-Namuntere	Grid extension	Commissioned July 2009 connects trading centres in the district	Bugiri	Eastern

³⁶³ NRECA International Assessing the Impact of rural electrification transformation in Uganda available at <http://www.nrecainternational.coop/Projects/Uganda/Pages/defaults.aspx> (accessed 10 February 2011).

³⁶⁴ Rural Electrification Agency Status of Projects (2010) 2 available at <http://www.rea.or.ug/userfiles/Project%20Status.pdf>. (accessed 14 March 2011) (hereafter Rural Electrification Agency (2010))

ERT	Kyotera-Mutukula with a T-off to Kasensero fish landing site	Grid extension	Commissioned in March 2009	Kyotera	Western
	Kikorongo-Bwera-Mpondwe in Kasese District and Kyambura-Katerera(Bunyaraguru) in Bushenyi district	Grid extension	Commissioned in April, 2009	Kasese and Bushenyi	Western
	Connected to Nabugabo resort	Grid extension	Operational	Masaka	Central
	Munteme-Kagadi scheme(Kibaale/Hoima)	Grid extension	Operational	Kibaale/Hoima	Western
	Nabitende-Namungalwe (Iganga) and Bugeso-lwemba (Bugiri)	Grid extension		Iganga and Bugiri	Eastern

Table 7: Grid extension connecting to district headquarters³⁶⁵

Funding agency	Project name	Project type	Status	District	Region
Consolidated fund	Kakumiro-Kibaale-kagadi	Grid extension	Commissioned in January, 2007	Kibaale	Western
	Rukungiri-Kanungu	Grid extension	Commissioned in May 2007	Rukungiri and Kanungu	Western
	Mbirizi-Matete-Sembabule	Grid extension	Commissioned in 2003	Sembabule	Central
Office of the Prime Minister	Oyam District Headquarters	Grid extension		Oyam	Northern
	Soroti(Katine)-Kaberamaido(Lwala)	Grid extension	Pre-commissioned in October 2009		Eastern

³⁶⁵ Rural Electrification Agency (2010) 2

SIDA	Fortportal-Bundibugyo Nyahuka	Grid extension	Commissioned in September 2009	Kyenjojo and Bundibugyo	Western
	Rugombe-Kyenjojo- Katooke	Grid extension	Commissioned in April 2009 and operational	Kyenjojo	Western
	Corner Kilak-Pader- Patongo-Abim with a T-off to Kalongo	Grid extension	Not yet commissioned	Pader and Abim	Northern
	Kyabirikwa-Kikagati- Kitwe-Ntungamo	Grid extension	Not yet commissioned		Western

The author notes that the ministry has adopted a holistic approach in implementing this program by connecting agro based factories, administrative units and health centres, as planned within the strategy. The author argues that the multi-disciplinary approach brings immediate benefits in terms of opportunities and services due the linkage between the sectors. In addition, each service provider complements each other and contributes to the overall development of the community because healthy community members are able to work and raise income and the opposite is true.

In addition to the approach adopted, it is also observed that the majority of these projects have been commissioned and are in operation, which could imply that there is the political will to promote rural development. That notwithstanding, what has been carried out so far falls short of meeting the requirement of equitable regional distribution access to electricity in s.62 (a) of the Act. The facts in table six and seven show that majority of the grid extensions have been carried out either in western region of the country but very limited extensions in the northern and eastern regions of the country. It would be in the interest of MDGs of poverty reduction to increase the pace of development of electrification in the northern and eastern. The need to step up transformation of these areas especially northern Uganda is because it is the most marginalised region as noted by the household income survey 2009/10 that it is the poorest region. Although there have been rebel activities by the lord's resistance army for over twenty years in this region, it is argued that since peace has now returned in the area, the government should step up its involvement in transforming it through development of rural electrification. Cognisant of the fact that development of electricity in itself is not an

end to poverty; it is noteworthy to mention that as electrification stimulates development in other sectors, it would consequently lead to reduction of poverty levels.³⁶⁶

3.7.4.2 Isolated grids

Isolated grids continue to be the other approach taken by the ministry to promote rural electrification program in areas which are far from the main grid. It is vital to promote non grid electrification because it stimulates rural development where the national grid cannot reach due to the high cost of connection.³⁶⁷ The government has encouraged the development of independent grids through government funded projects and public-private partnerships in different parts of the country.

In the West Nile region of Uganda, the West Nile Rural Electrification Company (WENRECO) was established to supply 18 hours of electricity a day from the 1.5 MW heavy oil thermal power plant.³⁶⁸ However, the author argues that the power is only accessible by a small section of the population in the region. In order to increase the level of energy supply, a license was granted still to WENRECO to develop a 3.5 MW hydro-power project on River Nyagak in Nebbi district.

Although the license was issued in 2003, construction started in 2006 three years after, which has delayed the completion of the project.³⁶⁹ The author argues that the delay impedes the exploitation of the industrial potential in the region because it produces cash crops such as tobacco and coffee. In addition to that, the region produces large quantities of sesame variety one, which is very vital for export in because it is highly sought after in the Middle East and East Asia.³⁷⁰ Since Uganda is currently the third largest world producer of sesame it would be in the interest of this region and the country at large to exploit that comparative advantage.³⁷¹ The author further argues that the presence of adequate electric power would stimulate the

³⁶⁶ Wolsey B *Non-Grid Electricity Regulations: Toward Sustainable Development*. EU synergy workshop SCIR-Pretoria (2001) 2 available at <http://uneprioe.org/RETSouthAfrica/NonGridRegulation.pdf> (12 December 2010) (hereafter Wolsey B (2001)).

³⁶⁷ Wolsey B (2001).

³⁶⁸ Ibrahim K 'Nyagak power dam ready by mid 2010' *The New Vision* 1 November 2009 available <http://www.newvision.co.ug/D/8/220/699780> (accessed 14 March 2011).

³⁶⁹ Ministry of Energy & Mineral Development (2008)13.

³⁷⁰ Noorani A, Karen Khan, Payal Patel, & Jean-Marc Gorelick *Moving the Learning forward to Transformational Impact on Empowering Small Holder Farmers and Women. Impact Assessment of the Agricultural Marketing Initiative in West Nile* Capstone Report (2009)13-14 available at http://elliott.gwu.edu/assess/docs/acad/ids/capstone/c09_uganda_na_kk_pp_jg.pdf. (accessed 13 December 2010) (hereafter Noorani A, Karen K, Payal P, Jean-Marc G (2009)).

³⁷¹ Noorani A, Karen K, Payal P, Jean-Marc G (2009)13-14.

need to develop oil refineries for value addition to this product for export purposes in form of vegetable oil, further increasing the incomes of the farmers.

Other off grid projects have been developed in other regions of the country through government funding such as Kisiizi mini-grid in Rukungiri district that serves the hospital and rural communities, a 250 kw generator in Kalangala district installed to connect the district headquarters, the town and tourist facilities, the 60 KW generator in Nakaseke that has stimulated the installation of several milk cooling plants in the area and more demand is anticipated.³⁷² It may be pre-mature to ascertain the actual socio-economic impact of these projects, since majority of the projects were recently developed and commissioned.

3.7.4.3 Solar power provision

The Uganda photovoltaic pilot project for rural electrification was designed as a three-year pilot project, funded by UNDP-GEF, with a goal of promoting the use of solar photovoltaic technology in Uganda. In the first two years of implementation, solar companies installed 576 solar home systems and 42 institutional systems.³⁷³ The project was generally targeted towards individuals, communities, and government institutions with ability and willingness to pay market prices for solar photovoltaic services.³⁷⁴ It therefore meant that low income earners would meet the challenges to acquire these services. However, the program was linked to two financial institutions that had been successful on provision of loans to low income earners and the women.³⁷⁵ The target of the initiative was to involve the women in the project. As a result, of the program, living conditions improved because of better health conditions, better quality and effectiveness in income generating activities, greater conservation of natural resources and greater opportunities for income generation.³⁷⁶ The program included training for both men and women in design improvement and management training and a total of seven women and 50 male were trained respectively.³⁷⁷

The author notes that inclusion of women into the program would promote the efforts towards gender equity, although the gender gap between is very big as illustrated from the

³⁷² Rural Electricity Agency (2010) 3.

³⁷³ Ssendo MC *Photovoltaic Project for Rural Electrification-Uganda* (2001) 14 available at http://www.energia.org/fileadmin/files/media/EN112001_sengendo.pdf (accesses 21 April 2011) (hereafter Ssendo MC (2001)).

³⁷⁴ Ssendo MC (2001) 14.

³⁷⁵ Ssendo MC (2001) 14.

³⁷⁶ Ssendo MC (2001)15.

³⁷⁷ Ssendo MC (2001)15.

attendance in this training. There is need to encourage more women to join this field. The author submits that although rural electrification is being promoted through grid extension and off-grid connections their positive impacts are likely to unfold many years from now. Generally, the rate of rural access to power is very low because out of the 31.8 million people only 12 per cent have access to grid power with rural access at only 4 per cent ³⁷⁸ which is less than the ministry's target rate of 10 per cent that should have been met by 2010. In addition to that there is limited electric grid connection to health centres and limited prioritisation of rural electrification of health centres so that about only 24 per cent of health facilities have electricity or a backup generator with fuel routinely available during service hours.³⁷⁹ Martin R rightly emphasised that targeting alone in the fight against poverty is not adequate in the success of a program.³⁸⁰ The inability of REA to achieve the set targets could imply that there is limited interest and limited prioritisation of rural electrification by the government. This is because the degree of commitment of the utility responds to the degree of commitment to rural electrification by the government³⁸¹ since rural electrification is complex and less profitable.

Although s.39 of the Act permits a holder of a license to apply and be entitled to obtain *any other* license under the Act, the development of rural electrification through grid extension, decentralised power systems and solar photovoltaic's have not been able to fully exploit the abundant renewable energy resources in Uganda. The legislative and policy provisions cannot be but a framework just to guide operations. The missing link in the programs is the inability of the government and all key stakeholders to effectively implement the policies unless the government shows more commitment and becomes more aggressive in rural electrification programs, the private sector will not deliver the required results.

In other words although targeting is good for policy makers, the crux of the matter is not to focus only on setting targets but to focus on identifying and adopting appropriate policies and implementation mechanisms to achieve the objectives of poverty reduction.

3.8 Challenges faced by the electricity sector

The following factors are considered to be contributing to the failure of the sector:

³⁷⁸ Electricity Regulatory Authority (2009) 3

³⁷⁹ Ministry of Energy and Mineral Development (2008)39.

³⁸⁰ Martin R (2009) 206-207.

³⁸¹ Mbeive A, Hailu GM, Ben R, Lucy K, & Isse AA *Rural Electrification in Africa* (1992)123.

3.8.1 Weak legal provision on time lines for specific actions

ERA has been considered by some developers to be ineffective in handling applications for licence and permits which is a setback to the progress of investment programs. It should be mentioned that the Act provides for specific time frames within which ERA should act on applications to establish a project or application for a licence.

Where allegations of inefficiency have been raised against the staff of ERA, it probably has its roots in the legal provision which have not clearly specified time lines for specific actions giving room for unnecessary delays on applications. For example, on the provisions regarding receipt and processing of permits and licenses, the word “*after*” is inserted in between an action taken and the next action required to be taken. This can be best understood from the context of the following provisions of the Act: S.30 (1)“....authority shall within thirty days *after* receipt of a notice...cause the notice to be published,” s.30 (3) “....public agencies to make comments within a fixed period of not less than thirty days *after* publication of the notice,” s.31(1)“....Authority may, not more than thirty days *after* the receipt of the comments....” it is argued that the use of “*after*” as it appears in the legislation creates room for unnecessary delay because of the ambiguity that arises as to the actual date when time begins to run, without which it is difficult to determine the level of efficiency. In that regard, the author argues that the appropriate phrase to be inserted therein should be “*from the date of*” instead of “*after*” to remove the ambiguity in these provisions.

3.8.2 Lack of skilled manpower

The sub-sector faces the challenge of limited skilled man power in hydropower construction and ERA lacks adequately trained and experienced regulators.³⁸² The Act requires that consideration of an application should be made within a minimum of 60 days from date of receipt of application to date of issue.³⁸³ The provision gives a minimum period but there is no limitation on the maximum period within which the matter should have been completed. Secondly, the time limitation is generally applicable to all energy development projects irrespective of the complexities that may arise from the different energy development technologies. It is vital to note that ERA takes a longer time to issue permits on new

³⁸² Electricity Regulation Authority (2008) 7-15.

³⁸³ S. 29-31 of the Act 1999.

technologies for renewable energy sources such as biomass³⁸⁴ implying inter alia that the staff lack relevant skills in new technologies.

3.8.3 Limited funds

The highly risky market conditions in the Ugandan economy has also played a key role in limiting the possibility for access to funds by both local and foreign private investors and reduced profit maximisation in the sector as a whole, leaving the government with no other option but to guarantee and make payments where need be. For example, the developers for Bujagali power project were unable to close funding until two years after they signed a power purchase agreement with UETCL, and this was made possible with government of Uganda guarantee and a partial risk guarantee from the IDA.³⁸⁵ In addition to that the government had to meet the debt obligations of UETCL (which was corporatized for profit maximisation) when the latter failed to satisfactorily service its annual debt obligations of US\$17 million between 2002 and 2003.³⁸⁶ The author argues that the government did not take necessary measures to adequately prepare the economy for power supply under the new principles of profit maximisation, as a result, reforms have not relieved financial burden of the state in this sector.

Furthermore REA also lacks adequate funds to support development of rural electrification.³⁸⁷ It should be mentioned that despite the crucial role REA plays in eradicating poverty through development of energy resources, it does not have its own vote (to be able to receive its own funds directly from the national treasury) therefore it depends on resource allocations and priorities of the ministry.³⁸⁸ It is argued that although the REF was created to ring fence rural electrification funds, the centralised administration of funds by the ministry and lack of autonomy of REA limits the ability of the latter to effectively carry

³⁸⁴ Electricity Regulation Authority (2008) viii.

³⁸⁵ SG Bujagali Holdings Ltd. *Sithe Global Power and Industrial Promotions Services establish a new hydroelectric station in Uganda* (2007) 1 available at <http://www.sitheglobal.com/press/Sithe%20Global%20and%20IPS%20establish%20a%20New%20Hydroelectric%20Station%20in%20Uganda.pdf> (accessed 29 January 2011)

³⁸⁶ Michael FK (2006) 17.

³⁸⁷ Rural Electrification Authority 'Rural electrification lights up life in Uganda: new generating plant incorporating participation from the private sector is transforming life in rural Uganda. But there is a long way to satisfy all' available at http://goliath.ecnext.com/coms2/gi_0199-7953961/Rural-electrification-lights-up-life.html (accessed 14 March 2011)

³⁸⁸ Musoke C 'Rural electrification program lacks funds' *The New Vision* 24 March 2009 available at <http://allafrica.com/stories/200903250100.html> (accessed 14 March 2011) (hereafter Musoke C(2009))

out its mandate.³⁸⁹ In that regard REA should be granted autonomy to run its own operations, with power to source and have control over funds for rural electrification.

The high interest rates and lack of security for collaterals has limited the ability by low income consumers and entrepreneurs in rural areas from accessing credits from financial institutions, to purchase solar photovoltaic.³⁹⁰

3.8.4. Ineffective coordination and lack of co-operation among stakeholders

The provision of electric power requires key input from other institutions such as NEMA, UBOS, UIA, directorate of water resources management and the private sector regarding issue of licenses and monitoring of standards but they have not been effectively coordinating their functions, and it has complicated the progress with the process of electrification.³⁹¹ In a recent study by the MEMD and ERA, some developers pointed out the following challenges; The inability of the directorate of water resources to quickly respond to enquiries on permits which causes a delay with the overall process of obtaining a license from ERA; limited coordination between ERA and UETCL during negotiation of power purchase agreements. In addition to that the local community leaders in rural areas have also been uncooperative in mobilising financial contribution from community members.³⁹²

3.9. Conclusion

The Bank recommended structural reforms in the sector to promote the establishment of a financially viable sector able to meet the energy needs of the growing economy. In line with the recommendation, the government carried out legal, institutional and policy reforms and opened the power market to private sector participation. An agency was established to regulate power provision as required by the Act.

Although reform was intended to promote private sector participation very few participants have entered into the market with very limited interest in rural electrification. The entry of the private sector was expected to contribute to the development of the sector and impart

³⁸⁹ Musoke C (2009)

³⁹⁰ Ssendendo MC (2001) 14

³⁹¹ Electricity Regulatory Authority (2008)9

³⁹² Musoke C (2009)

managerial skills and efficiency but despite their entry the sector is still highly inefficient, tariffs are very high, and power supply is unreliable, inadequate and only accessible by a small section of the population. Specific measures have been taken to promote efficiency but they are insufficient to meet the MDGs of poverty reduction.

The financial burden on the State has taken a broader dimension through risk guarantees and subsidies increasing the financial burden on the national treasury. Private investors are more concerned about profit generation, and it is not enough to make laws and guidelines. At the same time the sector should be able to serve the needs of the population. In that regard, for restructuring to positively impact the economy and contribute to poverty reductions, the government needs to assess its activities and adopt a more rational approach that targets massive exploitation of energy resources with special emphasis on the very poor regions. It would be appropriate to encourage a more dynamic multi-disciplinary approach involving all stakeholders and strengthening the linkages between them to ensure maximum utilisation of resources.

Development of rural electrification has been under taken through public and private initiatives with a focus on the private sector as the leading player in the development process. With the support of the Bank and other donors, the government has had to subsidise grid extension, supply of solar Photovoltaic's, off-grid power generation due to the limited interest of the private sector in investing in rural areas. REA the body established to oversee rural electrification is not autonomous and lacks adequate funds to effectively carry out its work. It is right to conclude that there is little government prioritisation of rural electrification further retarding the pace of rural transformation. There has also been poor prioritisation of regional electrification such that, the marginalised regions are still less electrified, which is partly responsible for high income inequalities between regions and high levels of poverty in these regions.

Overall, the poverty levels have been reducing in specific regions of the country especially those areas where socio-economic services including electricity are easily accessible. Although measures have been taken to reduce poverty through energy services, very little has been felt in that regard especially in the north and eastern parts of the country and it is inconceivable that the country will attain the goals required of it under the MDGs by 2015.

CHAPTER FOUR

CONCLUSION AND RECOMMENDATIONS

4.1 Conclusion

This research has established that development of, and access to reliable and adequate sources of energy plays a fundamental role towards the fight against poverty.

The Bank has the mission to end global poverty and supports the need to establish the necessary legislative and institutional frameworks to ensure that the MDGs can be achieved by its member states and considers development of energy resources as an important aspect in that regard. The research has established that although the Bank desires to see a world free of poverty, its governing structure significantly limits effective participation by the Bank's small and often poor member states that are unable to effectively influence the adoption of poverty reduction related policies and strategies most relevant in the context of their socio-economic conditions.

In an effort to improve the voices and power of the DTC's, the Bank approved reforms to increase their voting powers. However, the reforms are not significant to enable the DTC's effectively influence decision making in the Bank.

In view of its mission and being cognisant of the significant role its member states play in ending poverty, the Bank adopted a new approach for offering development assistance to its members based on the principles of country ownership of poverty reduction strategies developed through a consultative process so as to achieve results in terms of reduction in the poverty levels. In essence, poverty reduction should be a joint and collaborative effort between the Bank and its recipient member state. In that regard, having realised the vital role

energy resources play in reduction of poverty the Bank has partnered with its member states and other international financial institutions and aid agencies to develop energy resources to directly benefiting the rural population. Its strategy for poverty reduction through development of energy resources is to ensure that investments in energy resources contribute to sustainable development by directly benefiting the poor, protecting the environment, involving the private sector and leading to macroeconomic stability in the economy.

The study has also revealed that the Bank recommended reform of Uganda's power sector to allow entry of the private sector in the market and promote its development that would be derived from private sector participation in form of managerial skills, efficiency and private capital. In that regard, Uganda's electricity sector witnessed institutional, legislative and policy reforms and the entry of the private sector into the market to enable the sector to generate revenue and provide reliable and affordable power. A regulator was established to issue licenses for generation, transmission and distribution of power, determine the tariff structure and monitor the standards and quality of services provided by the power companies. The government has also encouraged the development of renewable energy resources to increase the power supply.

The study has revealed that despite the enabling legislative provisions that opened the market to private sector participation, there are very few participants whose contribution has not significantly increased exploitation of renewable energy resources, the power supply is unreliable and inadequate to meet the growing demand. The small number of entrants in the market has limited competition in provision of energy services. Consequently, the sector is still highly inefficient reflected by high system losses that are over and above the internationally acceptable standard and high power tariffs. Since the entry of the private sector, the rate of access rate to power has increased by only seven percent from five per cent in 2005 to 12 per cent in 2010, because the power tariffs are unaffordable by the majority of the population.

The government established an agency to oversee and manage the rural electrification programmes. Measures have been taken to develop rural electrification through grid extension, supply of solar photovoltaic's and off-grid power generation. In order to promote the use of modern fuels by low income households, the government has also been promoting the development and dissemination of improved stoves through public and private participation. According to the study, emphasis on private sector oriented rural electrification

has not registered significant success in the exploitation of the abundant renewable resources especially in the northern and eastern regions. Coupled with high tariff prices, the sector has witnessed a very small percentage increase in the rate of rural access to electric power from one per cent in 2001 to only four per cent in 2010.

A major challenge facing the implementation of rural electrification programs is lack of funds to effectively finance the operations of REA and private investments and it has adversely impacted on the process of rural electrification. This study shows that limited funding to finance REA's activities indicates that the government has not highly prioritised rural electrification. Consequently, REA cannot be expected to fulfil its objectives effectively.

Development of energy resources has not led to a significant reduction in poverty levels from the 2005/2006 base year. The most recent survey of 2009/2010 revealed only a 7.8 per cent decline in the number of Ugandans living in absolute poverty from the last survey for 2002/03-2005/06 with reduction of 1.28 million poor persons. Despite the reduction in poverty levels, northern Uganda has remained the poorest region and registers a trend of increasing poverty levels. Although northern Uganda was found to be the poorest region by the Bank over a decade ago, the government and private sector investments in the development of renewable energy resources in the area has been very limited confirming that private investors are profit motivated therefore less interested in investing in rural and poverty stricken areas.

Although sustainable development requires that development should ensure that a balance is maintained between social, economic and environmental needs, the mechanisms used to implement the reform strategies failed to achieve that balance. The reform emphasises the protection of the environment and raise revenue however, very minimal steps have been taken to reduce poverty levels through access to energy.

Overall, institutional and legal reforms in the sector have not yielded significant results which confirm that these reforms alone do not warrant the development of a financially viable sector. The sector faces serious challenges such as lack of adequate funds for private investment and rural electrification, ineffectiveness of the regulator, lack of adequately skilled staff, poor co-ordination of activities among the government institutions involved in the process of development of energy resources and government interference with setting end-user tariffs. In addition to that the financial burden on the state has taken a new

dimension through risk guarantees and subsidies contrary to the anticipation that private sector would relieve the state from financing the development in the sector. The current level of investments in the sector will not drive the economy to meet the MDG's of poverty reduction unless more drastic actions are taken by the government; otherwise the country will need over 50 years to attain 100 per cent electrification.

The Bank and the government have a fundamental role to play but the greatest burden is on the state to identify and adopt mechanisms that best suits the interest of the poor people and the nation at large. The development of energy resources alone cannot cause development, the state should be more committed towards promoting the provision of adequate, reliable and affordable power.

4.2 Recommendations

Although the Bank recommended the entry of the private sector into the market, the research has established that it was not the best option in the context of the socio-economic conditions in Uganda. It is therefore in the interest of all stake holders that the government carries out damage control measures to address the prevalent problem in the sector to enable the sector to expand and support the cause for poverty reduction.

The following recommendations are considered appropriate to address the institutional and legislative challenges affecting the effective performance of the sector:

4.2.1 Building staff capacity

Through a long term plan, the authority should set aside funds to recruit more staff to build on their capacity. As regards the current staff members, there is a need to carry out periodic training. It would be very advantageous for the sector to create in-house training partnerships with member countries in Africa having successfully reformed the sector such as Mauritius and Tunisia. Where such training is conducted periodically, the staff would get the opportunity to acquire skills from practical experience.

ERA should hire specific internal consultants on long term contracts placed under its direct supervision until the requisite skills have been acquired by the staff. Taking into consideration the consultants remuneration fees, the contract should be based on terms negotiated in accordance with the required guidelines and procurement policies.

4.2.2. Effectively utilising institutional linkages

Where linkages exist between the energy sector and other sectors, the ministry should effectively utilise them to develop energy resources and to use them identify common strategies that will contribute to energy efficiency. Such linkages include holding of joint meetings, strategic plans, research and trainings with sectors such as health, education, housing, so as to identify and solve cross cutting issues that could lead to efficiency in the sector should be devised to develop local manufacturing industries to limit the level of importation of expensive equipment and payment of taxes to reduce the resultant costs of power production. There should be a partnership in research with the housing sector to encourage construction of buildings that promote natural ventilation and lighting systems, since the country enjoys good climatic conditions. This initiative would avoid wastage of energy through unnecessary air conditioning and lighting of buildings. With the assistance of UBOS, ERA should develop a consumer data base that clearly categorises consumers according to their incomes so that subsidies can be provided directly to the poor. It would be appropriate to encourage a more dynamic multi-disciplinary approach involving all stakeholders to contribute towards maximum utilisation of resources.

4.2.3 Strongly support community credit schemes

The ministry should encourage the creation of community based credit schemes set up specifically to periodically raise funds from members to purchase solar panels, ensure connection or reconnection to other sources of electricity. The scheme would work in such a way that with the help of the consumer data base, members of a community would form credit schemes based on their financial capabilities and periodically raise money to purchase power for a member or two within a given period. The government would have to provide incentives such as subsidising three quarters of the purchase price. In this way, there is a more pro active approach by the government and community members to uplift standard of living of the poor.

4.2.4 Conducting country wide periodic awareness campaigns

The ministry should plan annual country wide campaigns to create awareness about the role of energy and the community in development. This would require adequate funds and proper planning to enable extensive publicity through means that can garner wide community support. These awareness sessions should be conducted regularly in local languages to inform

the population about the need to conserve energy resources, the role of the regulator, tariff review processes and how the public can be involved. There is need to set up regional offices to be able to effectively disseminate information to the community members.

ERA should give adequate time to the public to study applications for review of the tariff structure so that the public is well informed of the issues at stake and can effectively participate during the review process. ERA should use easily accessible mediums of communication so that it can reach as many members of the public as possible and be able to gain the public trust and confidence of the public.

4.2.5 Amendment of the Electricity Act

The Act should be amended to provide for the specific matters upon which the minister can make directives. The provision should further indicate the extent of the measure but should be in line with the mandate of the authority, to ensure that the new market structure can work effectively. The provisions on time lines should be amended to explicitly and with certainty provide for when the limitation period begins to run. This would be a measure to improve on the effectiveness of the regulator.

4.2.6 Granting autonomy to the rural electrification agency

There is need to highly prioritise development of rural electrification to harness the productive potential in these areas. The midterm plan should be to realign the development programmes in favour of a shift in focus to implement electrification of the marginalised regions. Secondly, the rural electrification board should initiate the process for the autonomy of the agency so that it is able to plan and direct its operations, raise and control its own funds under the rural electrification fund, and be accountable directly to the Parliament.

4.3 Conclusion

Provision of adequate and reliable power at affordable prices contributes significantly to poverty reduction. Considering that Uganda is well endowed with renewable energy resources throughout the country, it is possible that with proper planning and use of effective implementation and monitoring tools, energy resources can stimulate economic production throughout the country and reduce poverty levels in a sustainable manner. The challenge right now is for the government to evaluate its activities in light of the MDG targets and make the

necessary adjustments so that the good policies yield the required fruits through poverty reduction.

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